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Remedial Investigation and Feasibility Study Work Plan – Final
1032 West Marine View Drive
Everett, Washington

Stantec Project No.:
212302667

Submitted to:

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The RI/FS Work Plan provides definitions of key terms used commonly in RI/FS reporting. The purpose of this section is to assist personnel in the implementation of this plan. The sources of these definitions are for the most part 40 CFR 260, WAC 173-303: these sources should be consulted both for the complete definitions of the terms below and for the definitions of other terms not included here.

Abbreviations

ASTM	American Society for Testing and Materials
BGS	Below Ground Surface
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
DNAPL	Dense non-aqueous phase liquid
DOT	Department of Transportation
DRO	Diesel- and/or Oil-range organics (e.g. diesel- or extended-range petroleum hydrocarbons)
Dx	Diesel- and Diesel-range extended petroleum hydrocarbons
ECOLOGY	Washington State Department of Ecology
EIM	Environmental Information Management
EPA	Environmental Protection Agency
FS	Feasibility Study
HASP	Health and Safety Plan
HSWA	Hazardous and Solid Waste Amendments
GRO	Gasoline-range organics (e.g. gasoline-range petroleum hydrocarbons)
GWMW	Groundwater Monitoring Well
Gx	Gasoline- and gasoline-extended range petroleum hydrocarbons
LNAPL	Light Non-aqueous phase liquid
mg/kg	Milligrams per kilogram (e.g. parts per million in solid)
mg/L	Milligrams per liter (e.g. parts per million in liquid)
µg/kg	Micrograms per kilogram (e.g. parts per billion in solid)
µg/L	Micrograms per liter (e.g. parts per billion in liquid)
MRL	Method Reporting Limits
MTCA	Model Toxics Control Act
MW	Monitoring Well

Abbreviations - continued

NAPL	Non-aqueous phase liquid
PCB	Polychlorinated biphenyl
QA/QC	Quality assurance/quality control
PPE	Personal Protective Equipment
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
SAP	Sampling and Analysis Plan
SVOC	Semi-volatile organic compounds
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
TSS	Total Suspended Solids
TOC	Total organic carbon
TSD	Treatment, Storage, and Disposal Facility
UST	Underground Storage Tank
VOC	Volatile organic compounds
WAC	Washington Administrative Code

1.0 Introduction

The TC Systems property consists of two tax parcels (Parcel Numbers 29051800200700 and 29051800201300, or 'Property'), located at 1032 West Marine View Drive in Everett, Washington (Figures 1 and 2). The Property is alternately addressed at 1032 and 1104 10th Street. The Property is located in an industrial and commercial area in northwest Everett near Port Gardner Bay. According to historical records, the Property has been in use since approximately 1910. The Property lay beneath the waters of Port Gardner Bay prior to filling that began in the 1960s and continued into the 1970s.

A portion of the Jamison Shingle Mill occupied the Property from approximately 1910 until the 1960s and appeared to contain the mill's steam-dry kilns. In the mid-1960s the Port of Everett began a dredge and fill operation that eventually filled the Property and surrounding properties with soil.

Cruise-A-Home purchased the Property in the mid-1970s and constructed the buildings (i.e. Buildings B and C) occupying the Property between 1978 and 1980. Buildings B and C were occupied by Marpac Products Inc. and Tri-Coatings, Inc. (or Tri-Coatings, later known as TC Systems, Inc. or TC Systems). The businesses reportedly painted and coated metals. The Property went through a series of ownership changes in the early 1980s and was purchased by Norton Properties (aka Norton Industries, Inc., or Norton) in 1983. In 1989 TC Systems leased both buildings and occupied the buildings until 2010.

In 1989 Hehr International Inc. (Hehr) purchased Marpac Products and Tri-Coatings and extended the lease of buildings B & C through December 31, 2009. Marpac Products and Tri-Coatings began operating as TC Systems in the early 1990s. TC Systems operated at the Property until May 13, 2010.

Tri-Coatings and TC Systems both have documented compliance violations for various practices spanning from the late 1980's until present day. On August 5, 2010, Washington State Department of Ecology (Ecology), TC Systems, Inc., and Norton Industries, Inc. entered into Agreed Order (Order) No. DE 7818. The Order names TC Systems and Norton collectively as the potentially liable parties (PLPs) and requires them to conduct a Remedial Investigation and Feasibility Study (RI/FS) per WAC 173-340-350 and develop a draft Cleanup Action Plan per WAC 173-340-350 through 173-340-380 addressing both potential upland and in-water (i.e., nearby marine environment) contamination for the Site[1].

1.1 SCOPE OF WORK

This RI/FS Work Plan[2] is to present the background, rationale, and methodologies for conducting the initial phases of site characterization for the Site. Due to the lack of historic

[1] For the purposes of this report, the Property refers to the physical property as defined by the tax parcel boundaries. The Site is meant to mean the vertical and lateral limits of contamination which may have been released as a result of activities on the Property, as defined under MTCA.

[2] The RI/FS Work Plan was originally drafted by Kane Environmental, Inc. (Kane Environmental). The finalized version is being edited and printed by Stantec Consulting Corporation at client request.

investigations conducted at the site previously, the initial RI will focus on characterizing the soil and groundwater at the Site. Based upon the results of the initial RI as well as the conceptual site model, addenda to this RI/FS work plan may be necessary to more comprehensively address potential impacts to surface water and/or marine sediment.

The overall goal of the RI process is to generate a FS which can be used in developing the Cleanup Action Plan (CAP) in accordance with the requirements outlined in the Agreed Order (Appendix P).

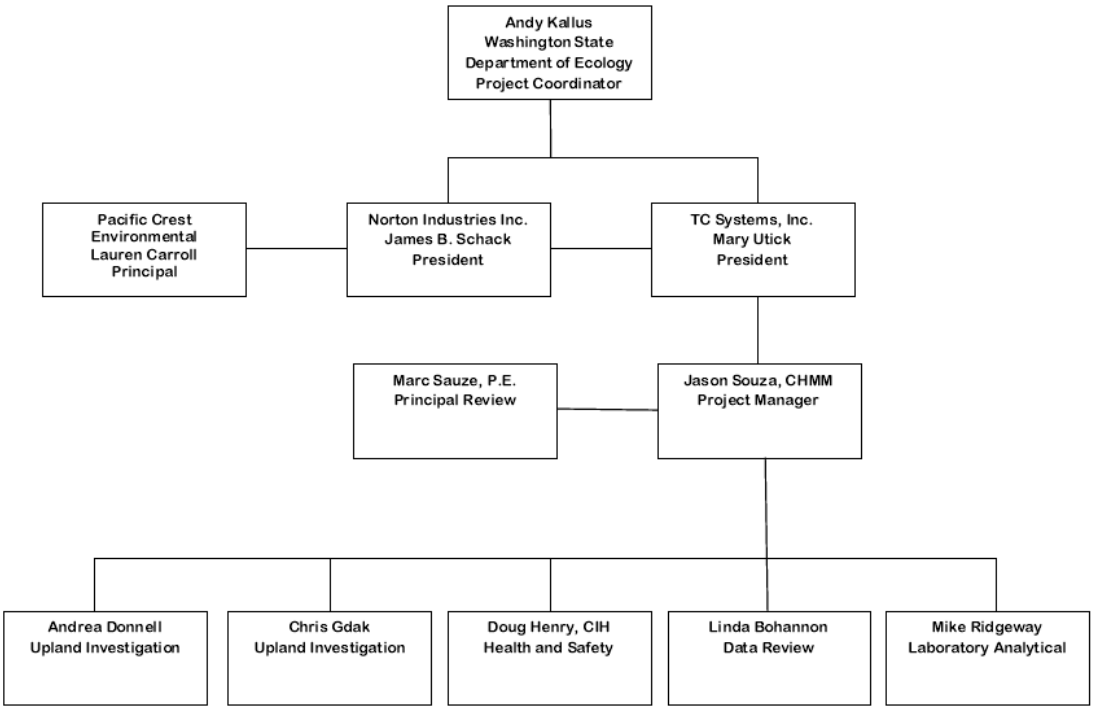
1.2 PROJECT MANAGEMENT

The following sections describe the personnel, organization, and overall preliminary project schedule for this RI/FS project.

1.2.1 Project Organization Chart

The figure below is an organization chart of the key personnel involved with the RI/FS project.

Organization Chart



1.2.1 Project Schedule

Table 1: Project Schedule

Reference No.	Document Submittal / Review	No. of Days to Complete	Date of Completion
#1	**RI/FS Work Plan Submittal**		
1a	Draft RI/FS Work Plan	(75 days from end of public comment for Agreed Order)	10/13/10
1b	Ecology Review - Draft RI/FS Work Plan	(30 days)	11/12/10
1c	Draft Final RI/FS Work Plan - addressing comments / suggestions from Ecology	(45 days after Ecology provides comments[1b])	12/27/10
1d	Ecology Review - Draft Final RI/FS Work Plan	(20 days)	01/16/11
1e	Final Document: RI/FS Work Plan	(20 days after Ecology provides comments [1d])	02/05/11
#2	**Field RI/FS**		
2a	RI/FS Field Activities Commence	(within 30 days of submittal of the final RI/FS work plan [1e])	03/07/11
2a-1	Assumed Field Work	15 days	03/22/11
2a-2	Assumed Analytical - Labs	21 days	04/12/11
2a-3	Assumed Data Validation	15 days	04/27/11
2b	Field RI Results to Ecology	(30 days after validation of all RI/FS analytical data [2a-3])	05/27/11

2c	Additional RI/FS Field Activities	Not Applicable	Not Applicable
2d	Environmental Data Submittals	(45 days after new data has been validated [2a-3])	06/11/11
#3	**RI/FS Report Submittal**		
3a	Draft RI/FS Report	(120 days after receipt of all final analytical data collected [2d])	10/09/11
3b	Ecology Review - Draft RI/FS Report	(30 days)	11/08/11
3c	Draft Final RI/FS Report	(60 days after receipt of Ecology comments)	01/07/12
3d	Public Comment Period	(30 days)	02/06/12
3e	Final RI/FS Report	(30 days after Ecology's response to public comment [3d])	03/07/12
#4	**Cleanup Action Plan (CAP) Submittal**		
4a	Draft CAP	(45 days after the draft final RI/FS Report is finalized and ready for public comment [3c])	02/21/12
4b	Ecology Review - Draft CAP	(30 days)	03/22/12
4c	Draft Final CAP	(30 days after submittal of Ecology's comments [4b])	04/21/12

2.0 SITE DESCRIPTION AND BACKGROUND

2.1 PROPERTY DESCRIPTION

The Property consists of two tax parcels (Parcel Numbers 29051800200700 and 29051800201300), located at 1032 West Marine View Drive in Everett, Washington. The Property is alternately addressed at 1032 and 1104 10th Street. It's noted that from the 1980s until 2002, the address for the facility was identified as 1028 West Marine View Drive, Everett, Washington. The Property is located in an industrial and residential area in northwest Everett near Port Gardner Bay.

2.2 PROPERTY BACKGROUND INFORMATION

During operation, TC Systems specialized in finishing metal surfaces for powder-coating primarily in support of the aviation and boating industries. Their activities included preparing metal surfaces for powder coating, applying powder coating to metal parts in accordance with the specifications of the customers. Parts were prepared for powder coating by removing the previously-applied finished surfaces (through means of peen-blasting parts in Building C) and/or preparing the metal surfaces to be powder coated through means of immersing the parts in dip tanks (located in Building B). Powder coatings were applied in both Buildings B and C. The powder-coated parts were cured in drying ovens located in areas of both Buildings (see Figure 3).

2.2.1 Previous Environmental Reports

A Phase I Environmental Site Assessment (Phase I ESA) for the Property, completed by E3RA, Inc. and dated May 31, 2009 (Appendix A) was reviewed by Kane Environmental as part of the RI/FS Work Plan scope of work. The Phase I ESA was completed in accordance with American Society for Testing and Materials (ASTM) Standard E1527-05 and included a review of historical documents, environmental regulatory records, interviews with persons knowledgeable about the Property, and site reconnaissance to determine if any Recognized Environmental Conditions (RECs) were present. The site reconnaissance was performed on April 28, 2009. At the time of the site reconnaissance, the Property was occupied by TC Systems and was reportedly in active use as a metal finishing plant. Dye penetrant was documented to be leaking from application tanks in the northeast corner of Building B and in direct contact with the concrete slab. A sump cut into the concrete to collect and re-use the penetrant was also observed. The dye penetrant in contact with the floor was considered a REC. Several above ground storage tanks (ASTs) were observed inside and outside the TC Systems buildings, including the process dip tanks and batch tanks for waste water processing, and acid and base bulk storage. At the time of the reconnaissance, the ASTs appeared to be in good condition with no leaks observed, however the ASTs were considered a REC. No underground storage tanks (USTs) were observed at the Property. Compressor oil from a continuing compressor leak was observed on the pavement between Buildings B and C. At the time of the reconnaissance, TC Systems reported that their environmental permits included an annual emissions report to Puget Sound Clean Air Agency and discharged industrial wastewater through a permit with the City of Everett. Mr. Charles

Souder, general manager for the TC Systems facility, stated he was not aware of any violations related to the industrial wastewater permit or other environmental violations[3]. The environmental regulatory records review documented that an adjacent site, the North Marina Ameron/Hulbert site, was listed in multiple databases and had confirmed soil, sediment, and groundwater contamination. The North Marina Ameron/Hulbert site was considered a potential REC. The ESA did not document any activity use limitations or environmental liens for the Property. According the historical documents review, Buildings B and C were constructed on the Property in 1978 and 1980, and the Property had been in commercial use since at least 1947. The Phase I ESA documented three RECs at the Property: multiple ASTs on the Property, the compressor oil leak between Buildings B and C, and dye penetrant in contact with the concrete slab in Building B.

2.2.2 History of Property Use

The Property history summary is based on the following sources: historic Sanborn Fire Insurance Maps (Appendix B), historic aerial photographs (Appendix C), historic Polk and Cole City Directories, historic Kroll Maps, Department of Ecology records (Appendix D), historic Port of Everett documents (Appendix E), an interview with Mr. Jim Schack (the Property owner), historic Everett Public Works documents (Appendix F), historical real estate appraisals of the Property (Appendix G), prior environmental reports for the Property and adjacent properties (Appendix H), and historic Snohomish County Assessor records (Appendix I).

The Property has been in use since approximately 1910, and a portion of the Jamison Shingle Mill occupied the Property from at least 1910 until the mid-1960s; however the Jamison Shingle Mill reportedly stopped operations at the Property in approximately 1960. The Jamison Shingle Mill appeared to be constructed on a pier that extended over Port Gardner Bay. The shingle mill's drying kilns and wood storage sheds appeared to be located over the present day Property. No additional information regarding Jamison Shingle Mill's operations was available for review. It is noted that a portion of the shingle mill (its office) was reportedly destroyed in 1956 as part of the fire that destroyed the adjacent Hulbert Mill. Ownership of the Property passed to Saginaw Shingle Company in the mid-1960s. The properties in the vicinity of the Property were also in use as shingle mills or other lumber related businesses during the same period. From 1914 until sometime between 1957 and 1967, the Property appeared to be an unfilled portion of Port Gardner Bay. By 1967, the southern portion of the Property (the area that was not beneath the shingle mill) had been filled with material of an unknown origin. Records at the Port of Everett indicated that unknown fill material, including industrial refuse, had been dumped in the vicinity of, and potentially on, the Property between 1960 and 1974 (*Port of Everett Trailer Boat Launch Facility, Water Gate Boat Launch, Final Environmental Impact Statement,* Section B.2, portions included in Appendix J).

Part 32 of a lease for the Property that included the Property between Saginaw Shingle Company (Lessor) and Aretco, Inc. (Lessee) dated April 1, 1969 stated the following: "Lessee will not interfere with, nor shall this Lease restrict, Scott Paper Company's dumping on the said entire premises, except dumping on the demised portion thereof or on the said road." The lease term was from May 1, 1969 until April 30, 1974. Aretco Inc. reportedly used the Property for boat and general construction and sales. A lease extension dated June 8, 1970

[3] Mr. Souder's statements as reported in the E3RA Phase I ESA are not consistent with the documented record obtained as part of this study.

was agreed to between Saginaw Shingle Company (Lessor) and Cruise-A-Home (Lessee). According to the document, Cruise-A-Home was formerly Aretco, Inc. The lease extension added two additional years to the prior lease, extending the lease until April 30, 1976. In approximately 1975 Cruise-A-Home apparently purchased a parcel of land near Port Gardner Bay that included the Property.

In the mid-1970s the Port of Everett, in conjunction with the US Army Corps of Engineers, the City of Everett, and Snohomish County, began a dredge and fill operation that eventually completed the filling of the Property. The area to the west of the Property was diked and filled as part of the same project and was completed as a boat launch facility. The dredge material from the navigation channel in Port Gardner Bay was reportedly used as fill for the boat launch project. In the 1976 aerial photograph, the Property appeared to be undeveloped except for a small, rectangular structure near the southern boundary. Several potential debris piles and several dirt pathways were visible.

Cruise-A-Home purchased the Property in the mid-1970s and constructed two buildings occupying the Property (Buildings B & C) between 1978 and 1980. Cruise-A-Home Inc. designed, and tooled fiberglass mobile houseboats and other surface craft. In 1980, Buildings B and C were occupied by Marpac Products Inc. and Tri-Coatings (later known as TC Systems). Tri-Coatings reportedly painted and coated metals and Marpac reportedly made windows and railings for boats. Numerous apparent boats were visible around the buildings in the 1981 aerial photograph.

The Property went through a series of ownership changes in the early 1980s. Cruise-A-Home went out of business in approximately 1980 and ownership of the Property and two adjacent parcels apparently passed to Polaris Marine Corporation (Polaris). In approximately 1983, Polaris went out of business and ownership of the Property passed to William Boeing Jr. Norton Properties purchased the Property and adjacent parcels in 1983 and continued the leases of Marpac Products and Tri-Coatings. In 1984 and 1985 additions to buildings B & C were completed by Norton Properties that brought the buildings to their present day square footage. The buildings and Property appeared to remain unchanged between 1985 and the present day.

In 1989 Hehr International Inc. (Hehr) purchased Marpac Products and Tri-Coatings and extended the lease of buildings B & C through December 31, 2009. Marpac Products and Tri-Coatings began operating as TC Systems in the early 1990s. TC Systems operated at the Property until May 13, 2010. It's noted that Tri-Coatings also operated a maintenance and mechanics shop in the northeast portion of the North Marina Ameron/Hulbert Site to support their main facility located on the adjacent property to the north (i.e., TC Systems current location). A 1991 Phase I ESA report prepared by Kleinfelder, Inc. on the adjacent property south of TC Systems indicates that the maintenance and mechanics would soon be moved to the main facility.

2.2.3 Historic and Cultural Resources

Ecology is working with landowners/stakeholders including local Indian tribes to clean up contaminated sites and sediments in the vicinity of the Port Gardner Bay area and the Snohomish River Estuary. Port Gardner Bay is identified as a high-priority, "early-action", cleanup area under the PSI. The Ameron/Hulbert Site has been identified as a cleanup site

under the PSI. Local tribes that have been actively engaged by Ecology under the PSI at Port Gardner include the Tulalip, Suquamish, Swinomish, and Lummi. Ecology has worked with a tribal liaison to assist in developing contacts and early engagement with cultural and natural resource sections within each of the aforementioned tribes. Engagement with the tribes has consisted of meetings to discuss PSI cleanup sites and cultural resources, providing the Tribes with draft work products for early input, and providing them with updates containing the current status of each PSI site, near-term work products for tribal review, project schedules, and a summary of tribal engagement for the Port Gardner PSI sites.

Based on Ecology's discussion with the Tribes and information provided in a 1973 Historical Survey of Everett (Dilgard and Riddle 1973), people have inhabited the Port Gardner Bay area for thousands of years. For centuries, the northwest point of the peninsula (i.e., Preston Point) was the site of Hebolb, the principal village of the Snohomish Tribe. Its location near the mouth off the Snohomish River and next to Port Gardner Bay provided both abundant food and transportation. Native tribes used the Everett shoreline in part for subsistence activities such as shellfish collection, hunting, plant gathering and fishing. According to local tribes, native long houses were located up and down the Everett waterfront. Local tribes have communicated to Ecology that the Everett waterfront is a culturally sensitive area. With that in mind, the procedures to be used in the event cultural resources are encountered during Site activities are presented in Section 3.1 of the Sampling and Analysis Plan (SAP). However, the likelihood of finding cultural artifacts is low given that the Site was tideland and filled for industrial development during the mid- to late 20th century.

2.2.4 Regulatory Compliance History

For Sections 2.2.3 through 2.2.6, The EDR Radius Map Report (Appendix N) was used as a reference.

2.2.4.1 Stormwater

Permit S03-000762 records an issuance date of November 18, 1992 and a coverage date of March 10, 1993 (expiring on November 18, 1995). The permit identifies the Port of Everett as the owner of the storm sewer system and Port Gardner Bay as the receiving waters. (The stormwater conveyance system at the Property is conveyed through a tight, six-inch PVC system into the 12th Street Yacht Basin.) The permit stated that TC Systems was required to develop a Stormwater Pollution Prevention Plan (SWPPP) and implement Best Management Practices (BMPs). In July 1995, TC Systems requested a renewal of their stormwater permit from Ecology and in the renewal request stated they had not completed a SWPPP or implemented any BMPs. On August 9, 1995, Ecology sent a notice of non-compliance to TC Systems due to the lack of a SWPPP. On August 29, 1995 TC Systems wrote a memo to Ecology indicating that a SWPPP had been written in July 1993 and BMPs had been implemented.

On January 10, 1996, Ecology renewed the stormwater permit, effective from December 18, 1995 through December 18, 2000. In June 2000 TC Systems requested a stormwater permit renewal. Ecology renewed the stormwater permit, effective from November 18, 2000 until November 18, 2005. On April 20, 2004 Ecology conducted a stormwater compliance inspection at the TC Systems facility and multiple violations of the stormwater permit were documented. The violations included the following:

- Hoses lying across driveways with open storm sewers and no BMPs in place;
- No containment for oil leaking from a compressor pump onto the pavement;
- Vehicle-wash water was being discharged to the storm sewer;
- Paint chips were near a storm drain and not contained;
- The outdoor secondary containment area was not fully covered from rainwater, waste materials were outside with no cover or containment, and ;
- No SWPPP was available at the time of inspection.

In December, 2004 Ecology modified the industrial stormwater general permit for all facilities.

The TC Systems stormwater permit was renewed for the period from August 21, 2002 until January 31, 2008. On September 17, 2007 Ecology conducted a stormwater compliance inspection at the TC Systems facility and multiple violations of the stormwater permit were documented. The violations included the following:

- No quarterly discharge monitoring reports (DMRs) had been submitted from 2004 until the date of the inspection, except the 1st and 3rd quarters of 2004;
- The zinc concentration in the 3rd quarter DMR exceeded the allowable concentration under the stormwater permit;
- The SWPPP was inadequate and incomplete;
- Failure to retain records to document compliance with the stormwater permit;
- An oily sheen was discharging from the compressor shed to a storm drain;
- Housekeeping BMPs were not implemented for chemical drums, and;
- Carts with powder coating were observed outside and uncovered in locations that could impact storm water during a rain event.

On September 16, 2009 a stormwater compliance inspection was conducted by Ecology. As part of the stormwater inspection, Ecology inspected each of the storm drains and met with Charles Souder. In addition, Ecology collected a sample of solids accumulated from a catch basin located in the area between Buildings B and C. The results of the catch basin sampling have been discussed later in the document under Section 2.2.7, Historic Sample Locations.

On November 6, 2009, Ecology issued TC Systems a Notice of Violation indicating that Ecology's records indicate that (since 12/31/2004) no stormwater sampling has been conducted at the facility. According to Ecology records, stormwater monitoring was conducted twice in 2004[4] (1st and 3rd quarters) as well as in twice in 2010 (2nd and 3rd quarters). Stormwater was monitored for lead, copper, zinc, oil and grease, pH, and turbidity. Zinc exceeded permit limits in July 2004 (630 µg/L). In March of 2010, laboratory analytical records indicate that two samples (apparently a primary sample collected on March 11, 2010 and a re-sample event on March 25, 2010) were reported to contain zinc concentrations of 120 µg/L and 210 µg/L, respectively. Kane Environmental sampled the effluent in the stormwater catch basin (located near the mid-line and immediately south of Building C, as shown on Figure 4); the results indicate that the sample contained 17 µg/L of copper, in excess of the permit value

[4] The Ecology database shows that DMRs had only been submitted for the 1st and 3rd quarters of 2004. Mr. Souder said that they had stopped stormwater sampling after the lab they were using had been shut down. The Ecology inspector told Mr. Souder that not sampling stormwater as required by condition "S4" is a violation of the permit.

of 14 µg/L. These results were submitted as the second-quarter Discharge Monitoring Report (DMR) for the property.

2.2.4.2 Dangerous or Hazardous Waste

According to Ecology records, the U.S. Environmental Protection Agency (EPA) notified Ecology that TC Systems (then known as Tri-Coatings) had applied to be Resource Conservation and Recovery Act (RCRA) hazardous waste generator on January 13, 1986. On June 30, 1992 Ecology was notified that Tri-Coatings changed their name to TC Systems. No detailed information prior to 1996 was available for review. Based on dangerous waste reports submitted to Ecology, TC Systems was considered a Large Quantity Generator (LQG) in 1990, 1993, 1994, 1996, 1998, 2000, 2002, 2005, and 2007 and a Small Quantity Generator (SQG) in 2003 and 2008. Hazardous materials generated by TC systems since 1995 included the following described waste streams:

- Blast media with chromium and zinc;
- Paint powder with metals;
- Waste chromic acid solution; ARA
- Chromium hydroxide sludge;
- Spent solvent and paint solids;
- Sludge contaminated with metals;
- Paint solids with mineral spirits;
- Sludge debris with metals;
- Metal finishing rinsate;
- Waste paint;
- Waste cleaner;
- Waste 1,1,1, trichloroethane and oil;
- Paint booth filters, tank cleaning waste;
- Waste water with chrome;
- Waste water from evaporator;
- Waste water from outside tank;
- Waste oil and gasoline;
- Strip tank waste;
- Etch tank clean waste;
- Oakite stripper, and;
- Waste paint acetone chromium.

Ecology has performed eight hazardous waste & toxics reduction compliance inspections at TC systems in March 1997, June 1998, August 1998, May 2003, August 2006, November 2007, July 2008, and August 2008 (Appendix K). Six of the seven inspection documented violations of hazardous waste regulations. The August 1998 inspection was a follow-up inspection to the June 1998 inspection. The August 1998 inspection did not document any violations and was to confirm that TC Systems had completed all required actions as stated in their compliance certificate.

The March 20, 1997 hazardous waste & toxics reduction compliance inspection documented the following violations:

- Failure to properly label, date, and close containers of hazardous waste;
- Failure to file an amended 1995 annual report to include an estimation of wastewater generation;
- Failure to maintain adequate aisle space between rows of hazardous waste containers;
- Failure to prepare a written inspection schedule for monitoring and safety equipment;
- Failure to maintain a general facility inspection log;
- Failure to develop and maintain a personnel training plan;
- Failure to meet satellite accumulation standards;
- Failure to update and revise the contingency plan;
- Failure to maintain a weekly inspection log of dangerous waste storage areas, and;
- Failure to provide secondary containment for containers of liquid hazardous waste.

The facility returned to compliance on May 26, 1997 by submitting the required compliance certificate.

The June 2, 1998 hazardous waste & toxics reduction compliance inspection documented the following violations:

- Failure to properly label, date, and close containers of dangerous waste;
- Failure to designate wastes;
- Failure to meet satellite accumulation standards, and;
- Failure to use proper manifest tracking procedures.

The facility returned to compliance by submitting the required compliance certificate and other requested documentation. A follow-up inspection on August 6, 1998 indicated that TC Systems had completed all the necessary actions and remained in compliance with hazardous waste regulations.

The May 13, 2003 hazardous waste & toxics reduction compliance inspection documented the following violations:

- Failure to properly label, date, and close containers of hazardous waste;
- Failure to dispose of waste within the 90 day accumulation time limit;
- Failure to develop and maintain a personnel training plan and training records;
- Failure to meet satellite accumulation standards, and;
- Failure to maintain a weekly inspection log of dangerous waste storage areas.

The facility returned to compliance by submitting the required compliance certificate and other requested documentation.

The August 6, 2006 hazardous waste & toxics reduction compliance inspection documented the following violations:

- Failure to properly label, date, and close containers of hazardous waste;
- Failure to develop and maintain a personnel training plan and training records;
- Failure to meet satellite accumulation standards;
- Failure to develop and maintain a contingency plan;
- Failure to maintain a weekly inspection log of dangerous waste storage areas, and;

- Failure to provide secondary containment for containers of liquid dangerous wastes.

No records were available that indicated that TC Systems had submitted any compliance documentation or responded to the inspection report.

The November 6, 2007 hazardous waste & toxics reduction compliance inspection documented the following violations:

- Failure to properly label, date, and close containers of hazardous waste;
- Failure to develop and maintain a personnel training plan and training records;
- Failure to meet satellite accumulation standards;
- Failure to develop and maintain a contingency plan;
- Failure to maintain a weekly inspection log of dangerous waste storage areas;
- Failure to provide secondary containment for containers of liquid dangerous wastes;
- Failure to respond to a release of used oil;
- Failure to offer dangerous waste to a treatment, storage, and disposal facility (TSD);
- Failure to designate wastes;
- Failure to meet spent antifreeze management requirements;
- Failure to label used oil containers; failure to keep containers of used oil closed;
- Failure to remove product labels; failure to meet the 90-day accumulation time limit;
- Failure to provide adequate emergency response equipment;
- Failure to properly store and label universal waste;
- Failure to conduct general facility inspections, and;
- Failure to submit the annual report by the due date.

The compliance due date was January 28, 2008. TC Systems submitted a portion of the requested compliance items on January 30, 2008. A memo from Ecology to TC Systems dated February 26, 2008 requested additional documentation for delinquent compliance items. All delinquent requested compliance items were submitted to Ecology by TC Systems on April 30, 2008.

The July 8, 2008 hazardous waste & toxics reduction compliance inspection documented thirteen repeat violations and three additional violations. The violations were for the following:

- Illegal disposal of hazardous waste;
- Failure to respond to a release of used oil;
- Failure to properly designate waste as dangerous waste or extremely hazardous waste;
- Failure to keep containers of dangerous waste closed;
- Failure to properly identify containers of dangerous waste with the words “Hazardous Waste” or “Dangerous Waste” and/or the major risk(s) associated with the waste;
- Failure to mark containers with accumulation start date;
- Failure to meet satellite accumulation area standards;
- Failure to properly manage universal waste;
- Failure to properly store and label universal waste;
- Failure to conduct general facility inspections;
- Failure to submit a Dangerous Waste Annual Report according to Instructions on the form;

- Failure to develop and maintain a contingency plan;
- Failure to develop and maintain a personnel training plan and training records;
- Failure to keep appropriate signed manifests;
- Failure to comply with permit by rule requirements for totally enclosed facility, elementary neutralization or waste water treatment units, and;
- Failure to remove leaked waste or precipitation from secondary containment in a timely manner.

A follow-up meeting and inspection occurred on August 19, 2008 and fifteen violations were noted. All the violations were repeat violations. On September 16, 2008 TC Systems submitted an incomplete return-to-compliance packet, leaving four violations unresolved.

On March 3, 2009 Ecology wrote a "Recommendation for Enforcement for TC Systems" memo. The memo noted that fifty-nine violations of Dangerous Waste Regulations were observed during compliance inspections over the previous eleven years. Ecology chose to pursue formal enforcement of six of the violations:

- Illegal disposal of waste;
- Failure to properly designate waste as dangerous waste or extremely hazardous waste;
- Failure to keep containers of dangerous waste closed;
- Failure to properly identify containers of dangerous waste with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste;
- Failure to mark containers with accumulation start date, and;
- Failure to develop and maintain a personnel training plan and training records.

TC Systems was identified as a Significant Non-Complier as defined by the Hazardous Waste & Toxics Reduction Program. Ecology recommended issuing an Administrative Order for TC Systems to:

1. Reduce immediate risk to human health and the environment by properly managing and disposing of dangerous waste;
2. Make management responsible for bridging the gap of turnover with timely training and expedient hiring and replacement;
3. Train employees in proper waste management procedures, and;
4. Demonstrate over time that employees remain vigilant and well-trained regarding dangerous waste management as demonstrated by showing that dangerous wastes are properly managed at TC Systems to prevent future repeat violations.

Four actions were outlined by Ecology for Completion by TC Systems and included implementing a training program, implementing a monitoring program, revising and submitting Dangerous Waste Annual Reports, and meeting waste water treatment system requirements to utilize permit by rule. A monetary penalty of $24,000 was recommended.

2.2.4.3 Industrial Wastewater

TC Systems discharged waste water to the City of Everett sanitary sewer system under Industrial Waste Discharge Permit #7708. As part of the permit, Everett Public Works (EPW)

required monthly monitoring of the waste water discharge, at the effluent weir for the following parameters: total arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, zinc, Total Fats, Oils and Grease (FOG), non-polar FOG; twice yearly monitoring of cyanide, Total Toxic Organics (TTO), and Closed Cup Flashpoint; and the daily monitoring of pH. Effluent limitations for each of the monitoring parameters were established by EPW and a self monitoring report was required to be submitted to EPW by the last day of each month following self monitoring. The earliest records could be found was 1990, however it appears that monitoring may have occurred at the facility prior to 1990.

On April 6, 1990 EPW sent TC Systems (at the time referred to as Tri-Coatings) a Notice of Violation (NOV) letter, indicating that pH and heavy metal concentrations exceeded allowable limits for the previous self-monitoring period. EPW noted that Tri-Coatings may need an automated ph neutralization system. On March 19, 1991 EPW sent TC Systems (at the time referred to as Tri-Coatings) a NOV letter, indicating that zinc and copper concentrations exceeded allowable limits for the previous self-monitoring period. This violation resulted in Tri-Coatings being in Significant Noncompliance. On July 30, 1992 EPW sent TC Systems a NOV letter, indicating that the zinc concentration exceeded allowable limits for the previous self-monitoring period. On February 16, 1995 EPW sent TC Systems a NOV letter, indicating that zinc and copper concentrations exceeded allowable limits for the previous self-monitoring period. TC Systems also failed to notify the City of Everett of the discharge limit violation within 24 hours as required by their permit. On April 7, 1995 EPW sent TC Systems a NOV letter, indicating that zinc exceeded allowable limits for the previous self-monitoring period. TC Systems also failed to notify the City of Everett of the discharge limit violation within 24 hours as required by their permit. This violation resulted in TC Systems being in Significant Noncompliance. On April 26, 1995 EPW sent TC Systems a NOV letter, indicating that the zinc concentration exceeded allowable limits for the March and June, 1994 monitoring periods. On June 21, 1995 EPW sent TC Systems a NOV letter, indicating that zinc and copper concentrations exceeded allowable limits for the previous self-monitoring period. In addition, it was noted that TC Systems failed to include analysis for FOG and pH. A letter from EPW to TC Systems dated August 29, 1995 indicated that a fine of $1,000 would be assessed for TC Systems being in Significant Noncompliance.

On January 26, 1996 EPW sent TC Systems a NOV letter, indicating that the pH exceeded allowable limits for two days during the previous self-monitoring period. On January 1, 1997 EPW sent TC Systems a NOV letter, indicating that zinc exceeded allowable limits for the previous self-monitoring period. On January 3, 1997 EPW sent TC Systems a NOV letter, indicating that arsenic, calcium (not part of TC Systems required monitoring, this may have been meant to refer to cadmium), chromium, copper, lead, mercury, nickel, silver, zinc, and FOG were not sampled during October 1996, resulting in eleven violations of the permit requirements. On January 30, 1997 EPW sent TC Systems a NOV letter, indicating that FOG was not sampled in November 1996, resulting in two violations of the permit requirements. A $250 fine was assessed. On May 19, 1997 EPW sent TC Systems a NOV letter, indicating that the zinc concentration exceeded allowable limits for the previous self-monitoring period. This violation resulted in TC Systems being in Significant Non-Compliance. Additional sampling for zinc was required by EPW to determine the reason for the violations. On June 5, 1997 EPW sent TC Systems a NOV letter, indicating that the zinc concentration exceeded allowable limits for the previous self-monitoring period. This violation resulted in a $1,000 fine.

On July 31, 1997 EPW sent TC Systems a NOV letter, indicating that the zinc concentrations exceeded allowable limits for the previous self-monitoring period. This violation resulted in TC

Systems remaining in Significant Non-Compliance. On September 12, 1997 EPW sent TC Systems a NOV letter, indicating that the required installation of a "primary device and approved flow meter" had not occurred by the August 7, 1997 deadline. An updated timeline of the installation was requested by EPW.

On February 18, 1998 EPW sent TC Systems a NOV letter, indicating that the zinc concentration exceeded allowable limits for the previous self-monitoring period. This violation resulted in TC Systems being in Significant Non-Compliance. Additional sampling for zinc was required by EPW to determine the reason for the violations. On March 17, 1998 EPW sent TC Systems a NOV and Compliance Order letter, indicating that the zinc concentration exceeded allowable limits for the previous self-monitoring period. This violation resulted in TC Systems being in Significant Non-Compliance. TC Systems was ordered to install an acceptable flow meter and to provide EPW with a Compliance schedule for a pretreatment system within 30 days of receipt of the letter. On March 27, 1998 EPW sent a response letter to TC Systems stating that EPW would need to approve any changes to the pretreatment system. On May 15, 1998 EPW sent TC Systems a Determination of Significant Noncompliance and Penalty Assessment letter, indicating that the zinc concentration exceeded allowable limits for the six month period from October 1997 through March 1998. TC Systems was assessed a penalty of $3,650.

On July 28, 1998 EPW sent a letter to TC Systems stating the requirement to provide a Corrective Action Report of the pretreatment system had been fulfilled. The Corrective Action Report (Appendix L), completed by Mr. David Johnson, P.E., and dated May 29, 1998 documented that the chemical used in the alkaline cleaning process at TC Systems, Oakite 166, was the source of the zinc concentrations that resulted in the permit violations. Mr. Johnson recommended replacing the Oakite 166 with a non-zinc containing substitute, Oakite Inpro-Clean 3000.

TC Systems was issued a renewed Industrial Waste Discharge Permit on April 16, 1999, that was effective from April 23, 1999 until April 30, 2004. On August 8, 1999 TC Systems reported that a power outage the previous night caused a spill of diluted chromic conversion coating to their wastewater treatment system. No spill was apparent beyond the treatment system and the City of Everett assisted in the cleanup of the spill.

On August 19, 1999 EPW sent TC Systems a NOV letter, indicating that the non-polar FOG concentration exceeded allowable limits for the previous self-monitoring period. In addition, TC Systems did not notify EPW within 24 hours of the violation, resulting in two additional violations. A letter from EPW dated October 20, 1999 indicated that during an inspection of TC Systems on October 1, 1999 deficiencies in the flow measurement system were noted. EPW stated the weir plate was too thick and needed to be replaced or reworked within 45 days, and the level measurement system was out of calibration and needed to be recalibrated within 5 days.

On April 18, 2000 EPW sent TC Systems a NOV letter, indicating that the pH level was below allowable limits for two days the previous self-monitoring period. In addition, TC Systems did not notify EPW within 24 hours of the violation, resulting in two additional violations. On May 12, 2000 EPW sent TC Systems a NOV letter, indicating that the pH level was below allowable limits for several days during the previous self-monitoring period. On October 17, 2001 EPW sent TC Systems a NOV and Administrative Fine letter, indicating that the self

monitoring report for the previous self-monitoring period was received twelve days late. EPW imposed a fine of $30 per day, for a total fine of $360.

On April 8, 2002 EPW sent TC Systems a NOV and Administrative Fine letter. EPW personnel were compliance sampling at the TC Systems facility on March 21, 2002 and observed that a sampler hose had been removed from the waste stream and that the waste stream contained large amounts of floc and foam. The removal of the sampler hose was a violation of the Industrial Pretreatment Discharge Permit. Additional training of plant personnel and the installation of a cage around the sampling weirbox to secure against tampering were required by EPW and a $360 fine was assessed. On September 30, 2002 EPW sent TC Systems a NOV letter, indicating that TC Systems reported the pH level was below allowable limits for 1.5 hours on August 14, 2002. The violation was properly reported and corrective action had been taken, therefore no further action was required by the NOV.

On March 24, EPW sent TC Systems a letter indicating there were new requirements for Self-Monitoring Reports. A copy of the laboratory chain of custody and laboratory analytical report was required to be included with the self-monitoring report beginning in May 2002. In addition EPW indicated it would be analyzing samples for FOG using a different analytical method. On October 22, 2003 EPW sent TC Systems a letter granting their request to reduce monitoring frequency. Effective immediately all regulated pollutants other than flow, pH, flashpoint, cyanide and TTO were only required to be monitored on a quarterly basis. Flow and pH were required to be monitored continuously. Cyanide, TTO, and flashpoint were required to be monitored on a semi-annual basis.

TC Systems was issued a renewed Industrial Waste Discharge Permit on April 30, 2004, that was effective from April 29, 1999 until April 29, 2009. On May 19, 2004 EPW sent TC Systems a NOV and Discharge Permit Suspension letter, indicating that TC Systems was $4,382.78 in arrears on utility bills, including pretreatment fees. Effective at 11:59 pm, May 31, 2004, TC Systems was not authorized to discharge pretreated wastewater to the City of Everett sewer system. The suspension was to remain in effect until the overdue charges were paid or a payment plan was agreed to. On September 21, 2004 EPW sent TC Systems a NOV letter, indicating that TC Systems reported a pH level both below and above allowable limits on July 27, 2004. The violation was properly reported and corrective action had been taken, therefore no further action was required by the NOV. On October 26, 2004 EPW sent TC Systems a NOV letter, indicating that TC Systems reported a pH level both below allowable limits on October 14, 2004. The violation was properly reported and corrective action had been taken, therefore no further action was required by the NOV. On December 27, 2004 EPW sent TC Systems a NOV letter, indicating that the lead concentration for the sample collected on September 30, 2004 exceeded allowable limits. TC Systems was ordered to perform weekly discharge sampling for total lead for four weeks, investigate for the source of lead in the discharge, and submit a letter summarizing the data and investigation.

On September 20, 2005 EPW sent TC Systems a NOV and Administrative Fine letter, indicating that the self monitoring report for the previous self-monitoring period was received five days late. In addition, the laboratory report showed a Closed Cup Flashpoint of 136°F, lower than the allowable amount. The self-monitoring report filled out by TC Systems indicated a Closed Cup Flashpoint of 158°F, not in agreement with the laboratory report. TC Systems was required to investigate the cause of the transcription error, institute corrective actions to ensure proper transcription and report the findings to EPW within 30 days. In addition, TC Systems was fined $60 per day for the overdue report, for a $300 fine.

On January 31, 2008 EPW sent TC Systems a NOV, Administrative Fine, Notice of Significant Non-Compliance, and Administrative Order letter, indicating that TC Systems had failed to conduct required discharge monitoring or to submit discharge reports for the first three quarters of 2007. TC Systems was required to investigate the reasons for failure to monitor and report, institute corrective actions, and report the findings to EPW within 30 days. The failure to monitor discharge and submit self-monitoring reports placed TC Systems into Significant Non-Compliance with pretreatment requirements. EPW also imposed the minimum fine of $1,000 and increased required monitoring frequency from quarterly to monthly for at least 12 months. On June 17, 2008 EPW sent TC Systems a NOV and Administrative Fine letter, indicating that the self monitoring report for the previous self-monitoring period was received eleven days late. TC Systems was fined $60 per day for the overdue report, for a $660 fine.

2.2.5 Historic Releases

On-Property Releases – Three on-Property releases were listed in the Department of Ecology SPILLS database.

- A memo written on December 13, 1991 by Fred Owen of Tri-Coatings described a chemical spill on December 9, 1991. While a chromic acid solution was being pumped from the anodizing tank to the exterior holding tank the hose became dislodged and approximately seven gallons of anodized solution spilled and entered the storm sewer catch basin. Tri-Coatings stopped pumping and notified the appropriate authorities immediately. The catch basin was vacuumed out to retrieve the spilled material (figures documenting the exact location were not available as part of the reviewed documents). The storm sewer system was temporarily plugged to prevent water from leaving the Property and water and sediment in the storm water system was pumped out into a storage tank. The storm water catch basin was pumped out daily for a week. On December 12, 1991 a titration test (detection limit, methodology, or other information pertaining to the titration test were not available as part of the documents reviewed). of water removed from the storm water system did not detect any concentrations of chromium. Tri-Coatings received permission from the City of Everett to treat the water through their pre-treatment system.
- On August 4, 1999 a 200 gallon chemical spill was reported by TC Systems. No additional information was available for review. On August 10, 1999 a 200 gallon chemical spill was reported by TC Systems. No additional information was available for review. On October 10, 2005 a petroleum sheen was reported by an unknown source. No additional information was available for review.
- Another on-Property release was listed in the Department of Ecology – Environmental Report Tracking System. The release report was received on October 13, 2009 and occurred on an unknown date sometime after September 16, 2009. Spills beneath the chemical line were being cleaned up at TC Systems and the plant manager, Mr. Charles Souder, reportedly told employees that the spilled material be pressure washed into a “storm drain”. According to an interview with Mr. Charles Souder about the incident by Mr. Michael Papa of EPW, one of the process tanks was being drained and a metal plate on the tank developed a leak and material spilled onto the concrete floor beneath the plate. The material was then washed into a drain (located near the middle of the dry penetrant area), but the drain was part of the containment/treatment

system and did not lead off-site (see Figure 3, Area D for area location of spill). Mr. Robert Deatherage, a former TC Systems employee, was interviewed by Kane Environmental regarding this incident. Mr. Deatherage stated that he was unaware of any time when spilled material was washed into a storm drain.

During Department of Ecology site inspections on November 6, 2007 and July 8, 2008 for the Dangerous Waste Program (see section 2.2.3.2), oil was observed leaking from a compressor and draining to a storm water catch basin.

Appendix M, *Potential Drain Features Inspection, June 29, June 30, and July 1, 2010,* provides a summary of an inspection conducted by Kane Environmental to characterize the features on the Property which suggest a potential surface to substrate pathway.

Off-Property Releases Affecting RI/FS – According to a technical memorandum prepared by Landau Associates, Ameron International Leasehold, Environmental Investigation of Oil Affected Area, and Port of Everett, Washington, dated June 20, 2005. The investigation was performed at the Ameron International Leasehold (the site) in response to potential petroleum impacted soil and groundwater observed during the repair of a stormwater line. The stormwater line was located along the northern Property boundary of the site, adjacent to the southern boundary of the TC Systems Property. Soil samples were collected on November 12, 2004 from the stormwater repair excavation stockpile. Concentrations of carcinogenic polycyclic aromatic hydrocarbons (cPAHs), polychlorinated biphenyls (PCBs), zinc, and copper were reported above MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses in two samples. At the time of the soil sampling the excavation was approximately ten feet wide and six feet deep. Groundwater was observed at approximately four feet below ground surface (bgs). A subsurface Geoprobe investigation was conducted on January 20, 2005 in the vicinity of the excavation to delineate the extent of affected soil and groundwater observed in November 2004. Eight soil borings were advanced to the east, west, and south of the stormwater excavation. No analytes (TPH as diesel, VOCs, SVOCs, PCBs, arsenic, cadmium, copper, lead, mercury, and zinc) were detected above MTCA Method A Soil Cleanup Levels from samples collected in the subsurface investigation. Two groundwater samples were collected and no analytes, except arsenic and Bis(2-ethylhexl)phthalate (BEHP), were detected above their respective and applicable MTCA Groundwater Cleanup Levels. The BEHP concentration may have been the result of laboratory contamination. The petroleum impacted subsurface was believed to be limited in lateral extent.

2.2.6 Permitted Point Sources

The TC Systems facility is permitted for industrial stormwater discharge (Permit #WAR000762). The storm drains at the Property are piped to the southern portion of the Property. The stormwater system then connects to a stormwater pipe located on the southern Property boundary and shared with the southern adjacent Property. The shared stormwater pipe drains to the west, into Port Gardner Bay through a tidal flux valve. The valve prevents marine water from entering the stormwater pipe when the tide in high.

2.2.7 Historic Sample Locations

Very little sampling has occurred at the TC Systems Property. Although no report was generated, E3RA, Inc. reportedly advanced four subsurface borings on the Property (Figure 4). Three of the borings were between Buildings B and C, in the vicinity of the stormwater drain and wastewater treatment areas. The other boring was advanced near the northeast corner of Building B. A fifth soil boring was advanced to the east of the building B on the adjacent property. A groundwater sample collected on the Property near the northeast corner of Building B reported concentrations of TPH-diesel and –oil that exceeded the MTCA Method A groundwater cleanup level for diesel and oil range organics.

The Department of Ecology collected one sample from solids accumulated in a storm drain between Buildings B and C on the Property during an inspection on September 9, 2009 (Figure 4). Concentrations of cadmium, chromium, copper, lead, zinc, PCBs (Aroclor-1228 & -1254), benzoic acid, and BEHP in the sample exceed Sediment Quality Standards (SQS). In addition, a concentration of 3,800 mg/kg of total petroleum hydrocarbons (TPH) as lube oil was reported.

2.3 VICINITY BACKGROUND INFORMATION

The Property vicinity history summary is based on the following sources: historic Sanborn Fire Insurance Maps, historic aerial photographs, historic Polk and Cole City Directories, historic Kroll Maps, Department of Ecology records, historic Port of Everett documents, an interview with Mr. Jim Schack (the Property owner), historic Everett Public Works documents, historical real estate appraisals of the Property, prior environmental reports for the Property and adjacent properties, and historic Snohomish County Assessor records.

From at least 1935 until the mid-1960s the properties in the vicinity of the subject Property were also in use as shingle mills. Port Gardner Bay was present directly to the north, and C-B Lumber and Shingle Company was beyond. Several other companies also occupied the area to the north of the Property during this time, including Pacific Timber Company., American Tug Boat Company, Pilchuck Shake and Lumber Company, and Summit Mill Company. The property to the east of the Property was part of the Jamison Shingle Mill Operation until the 1960s and included a railroad spur and sheds. Port Gardner Bay was present directly to the south, with the Hulbert Mill Company beyond during this period. Piers and wood rafts for the Jamison Shingle Mill were present to the west during this period.

The areas to the north, east, south of the Property began to be filled in the mid to late 1960s. By 1967 an undeveloped, filled area was present to the south and the Hulbert Mill Company was no longer present. The other areas in the vicinity remained similar.

In 1976, the area to the north of the Property was primarily filled, with some apparent debris also present. A rectangular, commercial building was present to the east of the Property and was reportedly occupied by Cruise-A-Home. A large, L-shaped commercial building was present to the south of the Property and was reportedly occupied by Centrecon, a manufacturer of concrete poles and pilings. The area directly west of the Property had been filled and the area farther west had been diked in preparation for construction of the 10th Street Boat Launch.

In 1981, 10th Street was adjacent to the north of the Property, with area further north primarily unchanged. The area to the east appeared unchanged from 1976. The L-shaped building to the south remained and a long rectangular, commercial building was also present. The buildings at the associated address were occupied by Centrecon Inc, Collins Casket Co. Inc., a casket manufacturer, Hulbert Wm Mill Co, although no mill operations were observed in the aerial photograph, Polaris Products, a boat window manufacturer, and Weathermaster, an insulated glass manufacturer. A parking area was visible to the west of the Property. The 10th Street Boat launch, consisting of a vacant, filled area and paved area were present farther to the west.

In 1985, the areas to the north and south appeared similar to 1981. A rectangular, commercial building was adjacent to the east, and has been occupied by Dunlap Industrial Hardware until the present day. A square, commercial building was visible, under construction to the west. Upon completion, the building was occupied by O & W Glass. O & W Glass occupied the building until the present day.

In 1989 a rectangular, commercial building was present to the northeast of the Property. This building has been occupied by Performance Marine from at least 1991 until the present day. The other areas in the vicinity of the Property appeared similar to 1985.

The areas in the vicinity of the Property have remained similar from 1989 until the present day. Additional paved parking was added to the 10th Street Boat Launch to the north and east. The building to the south was occupied by Ameron Inc. sometime between 1984 and 1991. Ameron has occupied this building until the present day.

2.4 PROPERTY CONDITIONS

The Property is approximately 2.57 acres and is currently occupied by two industrial buildings (Buildings B and C) and asphalt-paved parking areas and bound by a chain-link fence. Building B is approximately 20,000 square feet and Building C is approximately 28,000 square feet. The parking areas are sloped to drain into storm drains, which discharge to Port Gardner Bay. Wooden pilings from former buildings are visible in portions of the parking areas, and cracks and staining are present. The buildings are approximately 30 years old.

Kane Environmental performed a Potential Drain Features Inspection at the Property on June 29, June 30, and July 1, 2010 (Appendix M). The potential drain features consisted primarily of cracks in concrete in (or near) chemical storage or process areas, as well as storm sewer drains. Potential drain features of note included the storm sewer drain down-slope of the compressor shed, a bare patch of soil to the south of the compressor shed, a small area of unpaved soil between the exterior secondary containment walls of the wastewater treatment area and the siding on the western side of Building B, the drum storage area in Building C, the hand cut sump in the dye penetrant test area of Building B, the concrete floor of the entire dye penetrant test area, and the sumps and concrete containment area around the process plating dip tanks in Building B.

A small, unpaved area approximately 50 square feet in size is present between buildings B and C, small patch of grass directly south of building B, and a vegetated strip approximately two feet in width are present along the southern boundary of the Property. The unpaved areas are estimated to be less than 1,000 square feet in size. The Property was formerly

occupied by a manufacturing facility and is severely disturbed by human activity. No surface water or vegetation, except for the small areas mentioned above, are present, making it unlikely that wildlife would be attracted to the Property. Human activity at the Property is considered high and includes manufacturing activities and associated traffic. The adjacent properties are also primarily paved and in industrial/commercial use. The nearest suitable terrestrial habitat to the Property is located approximately 350 feet to the east, across West Marine View Drive and the railroad tracks, and consists of a small, forested area on a steep hillside adjacent to a residential area. No threatened or endangered species are known to use the Property as habitat.

The Property is located on the eastern side of Port Gardner Bay, the nearest aquatic environment. Port Gardner Bay is part of Possession Sound and is influenced by tidal cycles and by the Snohomish River, which discharges into the northern end of the Bay. The area of Port Gardner Bay nearest the Property is protected from the open marine environment by Jetty Island. Due to the discharge of the Snohomish River, sediment is deposited along the base of the Bay. According to the Everett Shoreline Master Program (last updated December 2009) the Property lies within Ecological Management Unit (EMU) 5 of the Snohomish River and Port Gardner Bay (Snohomish Estuary). EMU 5 is characterized by highly modified or artificially created habitats and contains the industrialized area of the Everett waterfront. Prior to the construction of Jetty Island the area was an extensive mud and sand flat. The area has been modified by hard structures such as rock riprap, docks and concrete bulkheads and has been extensively dredged and filled since the 1800s. There is little to no undisturbed aquatic habitat in the vicinity of the Property. The Snohomish River and Port Gardner Bay support numerous marine species. Anadromous salmonids (including the threatened Chinook and bull trout) use the Bay for migration and physiological transition. Other fish species found in the EMU include flounder, peamouth chub, the Pacific staghorm sculpin, sticklebacks, lampreys, and perch, among others. Invertebrate species include, but are not limited to: snails, mussels, clams, cockles, barnacles, marine worms, Dungeness crab, and shrimp.

Everett is located in the western portion of Snohomish County in the Puget Sound Convergence Zone. Based on data compiled between 1894 and 2004, the climate is relatively moderate, with average winter (December through February) low temperature of approximately 34°F and an average summer (June through August) high temperature of approximately 71°F. Everett receives approximately 35 inches of precipitation yearly, with the majority received between October and March. Average snowfall is approximately 7 inches, with approximately 3 inches received in January and approximately 1.5 inches received both December and February. Winds are moderate (5-7 mph), with the winter months being the windiest (Western Regional Climate Center, 2010).

2.5 VICINITY PROPERTY CONDITION

The area in the vicinity of the Property is primarily developed with industrial buildings and/or asphalt-paved parking areas. The parking areas typically are sloped to drain into storm drains, which discharge to Port Gardner Bay. Some areas are sloped to drain directly to unpaved soils or Port Gardner Bay. The buildings in the vicinity are typically 20 to 30 years old.

2.6 GEOLOGY, HYDROGEOLOGY AND PROPERTY SOIL

The Property is located in the Puget Sound Basin, which had the majority of the solid deposits and land features deposited during the Pleistocene Epoch which began approximately 1.5 million years ago. Soil characteristics in the Puget Sound Basin and, therefore, in vicinity of the site, generally consist of glacial till deposited by the Vashon Glacier. Glacial till is a mixture of sand and gravel with silt and clay. The Property is within the tidal flats of Port Gardner Bay, where depositional deposits of sands and silts are expected.

The site lies within the central Puget Lowland. The lowland is part of a regional north-south trending trough that extends from southwestern British Columbia to near Eugene, Oregon. North of Olympia, Washington, this lowland is glacially carved, with a depositional and erosional history including at least four separate glacial advances/retreats. The Puget Lowland is bounded to the west by the Olympic Mountains and to the east by the Cascade Range. The lowland is filled with glacial and non-glacial sediments consisting of interbedded gravel, sand, silt, till, and peat lenses.

The Geologic Map of Washington, Northwest Quadrant (2002), indicates that the site is near the contacts of Vashon Advance Outwash (Qga) and Modified Land (Qml). Vashon Advance Outwash consists of sand and gravel with local interbeds of silt and clay deposited in front of the advancing glacier. These materials are generally dense to very dense and typically have a moderate to high rate of permeability. Modified Land consists of fill placed within the past 100 years during development of urban centers. This unit is variable in density and composition and can be over 30 feet thick in places.

Interpretations from the provided documents referenced above/below are generally consistent with the mapped geologic units for the area of the site. In general, a variable thickness of fill overlies Vashon Advance Outwash. Locally, beach deposits and reworked fill and/or glacial deposits were encountered in these explorations.

Soils at the Property consist primarily of fill from multiple sources. As described in Section 2.2.2, fill at the Property may have originated during dredging operations in Port Gardner Bay, from activities at the Jamison Shingle Mill, and from dumping by Scott Paper.

2.6.1 Geologic Investigations Conducted by Others

According to a *Foundation Investigation for the proposed New Cruise-A-Home Facility, Everett, Washington* by Cascade Testing Laboratory, Inc. (dated January 12, 1978), two test borings were placed along a small gravel road to determine the quality of the "man-made fill which covers the entire site." At the time of the investigation, building waste and various types of debris were observed and "it is understood that the area has been used as a dump area for many years, and that large quantities of organic waste have been dumped in the area by local paper and pulp processing plants." The boring logs attached to the report indicated that the approximate upper one foot was "grey rubbly soil". The soils in the first boring consisted of the following: from 1 to 7.5 feet bgs consisted of organic silty sands containing wood fragments; from 7.5 to 12 feet bgs consisted of wood debris, with the sand containing wood fragments from 12 to 17 feet bgs; silty sand was present from 17 to 25 feet bgs with density increasing with depth. Groundwater was encountered at approximately 7 feet bgs. The soils in the second boring consisted of the following: wood chips and organic waste from the

surface soil to approximately 12.5 feet bgs, with a strong methane gas odor; sand from 12.5 to 19 feet bgs; and silty sand from 19 to 25 feet bgs. Groundwater was encountered at approximately 3 feet bgs. The report recommended the use of pile supported foundation and floor slab.

According to a report sent to Mr. John Schack referring to *Norton Property, 1028 Grand Avenue, Everett, Washington* by Cascade Testing Laboratory, Inc. and dated May 2, 1984, two test borings were installed in order to provide recommendations for foundation support. The borings were advanced east of the Property, in the present day location of the Dunlap Industrial Hardware building. The first boring encountered 18 feet of fill material consisting of sand to 7.5 feet bgs and sandy silt/silty sand from 7.5 to 18 feet bgs. The fill was underlain by fine to coarse sand from 18 to 21.5 feet bgs. Groundwater was encountered at approximately 6 feet bgs. The second encountered 15.5 feet of fill material consisting of sand with trace sawdust to 2.5 feet bgs and sandy silt/silty sand from 2.5 to 15.5 feet bgs. The fill was underlain by fine to medium sand from 15.5 to 21.5 feet bgs. Groundwater was encountered at approximately 2.5 feet bgs.

Landau Associates prepared a technical memorandum, *Ameron International Leasehold, Environmental Investigation of Oil Affected Area, Port of Everett, Washington*, dated June 20, 2005. According to the memorandum, Ameron International Leasehold is located adjacent to the south of the Property and the investigation was performed near the southern property boundary. Soils that had been excavated were observed to be brown to black, gravely sand, mixed with green, red, and orange silty sands and concrete material. Groundwater was observed in the excavation at approximately 4 feet bgs. Eight soil borings were advanced as part of a subsurface investigation. Four of the soil borings encountered white and green sands and silty sands with dark green and black mottling near the surface, to depths ranging from 3 to 6 feet bgs. Underlying this material in four of the borings and directly beneath the surface in the other borings was a fill material consisting of sand with silt. Several of the boring locations also encountered wood or concrete debris in this material. Groundwater was encountered at depths from 4 to 6 feet bgs.

No on-site soils reports were available for review. Site soils are expected to be similar to those observed on adjacent properties and groundwater is expected to be at a similar depth. Groundwater is expected to flow in a generally northerly or westerly direction, toward Port Gardner Bay.

2.7 TIDAL INFLUENCE

The Property is located in the former tide flats of Port Gardner Bay and is constructed on man-made fill. The northern Property boundary is approximately 150 south of Port Gardner Bay and the southwest Property boundary is approximately 475 feet east/northeast of Port Gardner Bay. Based on the history of the site and the proximity to the current boundaries of Port Gardner Bay, tidal influence of site hydrogeology is expected. Tides are diurnal, with two high tides and two low tides in a 24-hour period. There are currently no groundwater monitoring wells or piezometers on the Property, therefore measurements of tidal influence cannot be conducted at this time.

To determine tidal influence, tidal efficiency and tidal lag-time must be calculated. Groundwater levels at the site are dependent on tidal fluctuations, area land use, up-gradient

recharge by surface water infiltration, seasonal variations in precipitation, among other factors. Tidal efficiency measures the amount of tidal influence on a groundwater monitoring well and tidal lag-time measures the time between a tidal peak and the corresponding peak in the groundwater monitoring well. A suitable methodology to determine the changes in groundwater levels over time includes the installation and monitoring of two or more vibrating wire piezometers in installed groundwater monitoring well borings[5].

A vibrating wire piezometer converts water pressure to a frequency signal via a diaphragm, a tensioned steel wire, and an electromagnetic coil. The piezometer is designed so that a change in pressure on the diaphragm causes a change in tension of the wire. When excited by the electromagnetic coil, the wire vibrates at its natural frequency. The vibration of the wire in the proximity of the coil generates a frequency signal that is transmitted to the readout device. The readout device processes the signal, applies calibration factors, and displays a reading in the required engineering unit. The piezometers may be pre-set to measure groundwater levels at varying time intervals to provide accurate results.

This method would include placing the piezometers at strategic locations in order to provide a representative cross section or cross sections through the presumed groundwater gradient at the Property. Fluctuations of groundwater levels may be determined using the results from the piezometers in conjunction with weather data and tide charts. Vibrating wire piezometers may be grouted directly in the drilled borehole with bentonite-cement slurry or in a casing.

The hydraulic conductivity of each groundwater monitoring well and across a given area can vary depending on conditions encountered in the field at the time of monitoring well installation. Preliminarily, we recommend the installation of a minimum of two piezometers at the Property. The groundwater level must be continuously monitored and recorded in each monitoring well for a minimum period of 72 hours to calculate tidal efficiency and tidal lag-time. The measurement intervals for data-logging will vary depending on conditions encountered in the field.

[5] Alternatives to this technology may be implemented based upon availability and the conditions encountered in the field.

3.0 REGULATORY AGENCY RESEARCH

3.1 REVIEW OF PUBLISHED REGULATORY AGENCY LISTS

Current regulatory agency database information was obtained from the EDR Radius Map Report (Appendix N), which maps and lists sites in government and state environmental databases with existing conditions or statuses that may have the potential to impact the Property. The EDR report provided a list of the regulated sites using the ASTM E1527-05 recommended search distances. Some of the sites in the EDR report are not mapped due to poor or inadequate address information, and are referred to as "orphan sites." No orphan sites were identified in the vicinity of the Property.

Databases of regulated sites in Washington State that were reviewed as part of the EDR report include, but were not limited to:

- Underground Storage Tank (UST) Sites – Resource Conservation and Recovery Act (RCRA) registered USTs.
- Leaking Underground Storage Tank (LUST) Sites – reported LUSTs
- Confirmed and Suspected Contaminated Sites List (CSCSL)
- No Further Action (NFA) Sites List - sites that have received a No Further Action ruling.
- Activity and Use Limitations (AUL) list – sites with Activity and Use Limitations, which may include both engineering and institutional controls.
- Resource Conservation and Recovery Information System (RCRA) – registered Conditionally Exempt Small Quantity Generators (CESQGs), and Small and Large Quantity Generators (RCRA-SQG/ RCRA-LQG). CESQGs generate less than 100 kilograms (kg) and/or less than 1 kg of acutely hazardous waste per month. SQGs generate between 100 kg and 1,000 kg of hazardous materials per month. LQGs generate more than 1,000 kg of hazardous materials per month.
- Voluntary Cleanup Program (VCP) list - sites participating in the Voluntary Cleanup Program.
- Independent Cleanup Reports (ICR) – sites that have submitted remedial action reports to the Washington State Department of Ecology (Ecology). These actions have been conducted without Ecology oversight. This database is no longer updated.
- Reported Spills (SPILLS) lists sites reported to the Spill Prevention, Preparedness and Response Division.
- Facility Index System/Facility Registry System (FINDS) – Contains facility information and "pointers" to other information sources and includes a number of other databases.
- Facility/Site Identification System Listing (ALLSITES) – Information on facilities and sites of interest to the Department of Ecology.
- National Pollutant Discharge Elimination System (NPDES) list – sites with permitted wastewater facilities.
- Washington-Department of Ecology Facility/Site Identification System (WA-DOEFSIS) provides a means to query and display data maintained by the Department of Ecology.
- WA MANIFEST provides hazardous waste manifest information.
- National Priority List (NPL) sites – Sites included in the federal "Superfund" program.
- Solid Waste Facilities and Landfill Sites (SWF/LF).

- Hazardous Sites List (HSL) – A subset of the CSCSL and includes sites which have been assessed and ranked using the Washington Ranking Method (WARM).

The Property is listed in the RCRA, FINDS, CSCSL, ALLSITES, MANIFEST, NPDES, and SPILLS regulatory databases. These listings are discussed in detail in Sections 2.2.3, 2.2.4, 2.2.5 and 2.2.6. Five regulated sites were identified in the vicinity of the Property (Table 2). Other sites identified in the EDR report, are not discussed based on either their geographic location in relation to the Property, distance from the Property, and/or regulatory status.

No groundwater monitoring wells are currently installed at the Property, therefore the groundwater flow gradient is unknown. Topographical position is referenced in the table below, cross-slope indicates that the site is approximately at the same elevation as the Property.

Table 2: Regulated Sites

Site Name	Approximate Distance/ Direction From Subject Property	Topography	Regulatory Program
Ameron Inc PPD 1130 W Marine View Dr Everett, WA	Adjacent to the South	Cross-slope	RCRA, FINDS, UST, MANIFEST
North Marina Ameron Hulbert Everett, WA	Adjacent to the South	Cross-slope	CSCSL, ALLSITES, HSL
Sunset Body Works Inc. 1130 W Marine View Dr Ste B Everett, WA	Adjacent to the South	Cross-slope	RCRA, FINDS, ALLSITES, MANIFEST
OW Glass 10847 1st Ave S Everett, WA	Adjacent to the west	Cross-slope	RCRA, FINDS, ALLSITES
Performance Marine Inc 10847 1st Ave S Everett, WA	90 feet North	Cross-slope	RCRA, FINDS, ALLSITES

Ameron Inc PPD – The site is listed in the RCRA, FINDS, UST, and MANIFEST databases. The site is listed as a small-quantity generator (SQG), which is a site that generates more than 100 and less than 1000 kilograms (kg) of hazardous waste during any calendar month and accumulates less than 6,000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any one time. The types of hazardous waste listed for the site included: non-listed ignitable waste and acetone. There are seven hazardous waste violations at the site from June 2009. The site is in compliance with all of the violations as of June 23, 2009. The violations were in the following areas: records/reporting, container use and management,

pre-transport, used oil, and state statutes and regulations. One diesel UST is listed for the site and was reportedly installed in 1964 and removed on December 19, 1988, and was reportedly 12,000-gallons in size. The UST was reportedly located approximately 275 feet south of the southwestern Property corner. This site is included within the North Marina Ameron Hulbert site discussed below.

North Marina Ameron Hulbert – The site is listed in the CSCSL, ALLSITES, and HSL databases. According to a Landau Associates report, *Interim Action Report, North Marina Ameron/Hulbert Site, Everett, WA* (dated April 7, 2010, Appendix O), the site was originally part of the North Marina Redevelopment site (cleanup conducted under the VCP), however the site was removed from the North Marina Redevelopment VCP and cleanup is being conducted under the Puget Sound Initiative (PSI). According to the report, environmental investigations have occurred at the site beginning in 1987. Analytes with detected concentrations in soil and groundwater exceeding regulatory criteria, include, but are not limited to: arsenic, copper, lead, cPAHs, and TPH as diesel and as lube oil. The soil samples collected nearest to the Property have reported concentrations of arsenic and copper exceeding regulatory criteria. The groundwater samples collected nearest to the Property have reported concentrations of arsenic and BEHP. It is unknown if this site is a potential source of contaminants.

Sunset Body Works Inc. – The site is listed in the RCRA, FINDS, ALLSITES, and MANIFEST databases. The site has been listed as a non-generator, a large-quantity generator (LQG), and SQG. No violations were listed for the site. No hazardous waste types were listed. The site is not considered to be a likely source of any contamination migrating onto the Property.

OW Glass – The site is listed in the RCRA, FINDS, and ALLSITES databases. The site is listed as a handler and non-generator of hazardous waste. No violations were listed for the site. The site is not considered to be a likely source of any contamination migrating onto the Property.

Performance Marine Inc. – The site is listed in the RCRA, FINDS, and ALLSITES databases. The site is listed as a conditionally exempt small quantity generator and SQG. A compliance assistance visit was performed on November 15, 1995 and no violations were reported. No violations are listed for the site. The site is not considered to be a likely source of any contamination migrating onto the Property.

4.0 CONCEPTUAL SITE MODEL

This section present a preliminary conceptual site model that identifies the potential contaminants expected to be encountered at the Site, the media where contaminants are expected to be found, the potential contaminant migration pathways, and the potential contaminant receptors and exposure pathways.

4.1 SITE CONTAMINANTS

As described in Section 2.2.3 Regulatory Compliance History, the Site was notified by Ecology for a series of violations of their stormwater permit regarding inadequate Best Management Practices, inadequate record keeping, and potential discharge of oils (e.g., from the compressor shed), heavy metals and other potential contaminants into the storm drains.

One groundwater sample collected at the Property by E3RA, Inc. (see Exhibit B, Figure 1) had detectable TPH-diesel and -oil concentrations of 1,200 µg/L and 860 µg/L, respectively. The Department of Ecology collected one sediment sample from a storm drain between Buildings B and C on the Property during an inspection on September 9, 2009. Concentrations of cadmium, chromium, copper, lead, zinc, PCBs (Aroclor-1228 & -1254), benzoic acid, and BEHP in the sediment sample exceed Sediment Quality Standards (SQS). In addition, a concentration of 3,800 mg/kg of total petroleum hydrocarbons (TPH) as lube oil was reported.

Dye penetrant in contact with the concrete floor was identified during a Phase I Environmental Site Assessment conducted in 2009. Several ASTs were observed inside and outside the TC Systems buildings, including the process dip tanks and batch tanks for waste water processing, and acid and base bulk storage. At the time of the Phase I site visit, the ASTs reportedly appeared to be in good condition with no (reported) leaks observed. No USTs were reportedly observed at the Property. Compressor oil from a continuing compressor leak was observed on the pavement between Buildings B and C. At the time of the Phase I ESA site visit, TC Systems reported that their environmental permits included an annual emissions report to Puget Sound Clean Air Agency and discharged industrial wastewater through a permit with the City of Everett. The environmental regulatory records review documented that an adjacent site, the North Marina Ameron/Hulbert site, was listed in multiple databases and had confirmed soil, sediment, and groundwater contamination. It is not currently known if this adjacent Property has impacted media.

Based on dangerous waste reports submitted to Ecology, TC Systems was considered a Large Quantity Generator (LQG) in 1990, 1993, 1994, 1996, 1998, 2000, 2002, 2005, and 2007 and a Small Quantity Generator (SQG) in 2003 and 2008. Hazardous materials generated by TC systems since 1995 included the following described waste streams: blast media with chromium and zinc, paint powder with metals, waste chromic acid solution, chromium hydroxide sludge, spent solvent and paint solids, sludge contaminated with metals, paint solids with mineral spirits, sludge debris with metals, metal finishing rinsate, waste paint, waste cleaner, waste 1,1,1, trichloroethane and oil, paint booth filters, tank cleaning waste, waste water with chrome, waste water from evaporator, waste water from outside tank, waste oil and gasoline, strip tank waste, etch tank clean waste, oakite stripper, and waste paint acetone chromium.

Due to the lack of historic investigations conducted at the site previously, the initial RI will focus on characterizing the soil and groundwater at the Site. Based upon the results of the initial RI, addenda to this RI/FS work plan may be necessary to more comprehensively address potential impacts to surface water and/or marine sediment. The RI fieldwork analytical list is provided in the SAP.

4.2 POTENTIAL CONTAMINANT SOURCES

Four primary potential sources have been identified for the Site: 1) former industrial activities and associated waste materials, 2) potentially contaminated fill material, 3) ASTs and/or USTs, and 4) releases from industrial operations on adjacent parcels and/or on the Property.

Commercial/Industrial Activities, Waste Products and Fill Material – From 1914 until sometime between 1957 and 1967, the Property appeared to be an unfilled portion of Port Gardner Bay. Since approximately 1910, a portion of the Jamison Shingle Mill occupied the Property from at least 1910 until the mid-1960s. The Jamison Shingle Mill reportedly stopped operations at the Property in approximately 1960. The Jamison Shingle Mill appeared to be constructed on a pier that extended over Port Gardner Bay.

By 1967, the southern portion of the Property (the area that was not beneath the shingle mill) had been filled with material of an unknown origin. Records at the Port of Everett indicated that unknown fill material, including industrial refuse, had been dumped in the vicinity of, and potentially on, the Property between 1960 and 1974.

In the mid-1970s the Port of Everett, in conjunction with the US Army Corps of Engineers, the City of Everett, and Snohomish County, began a dredge and fill operation that eventually completed the filling of the Property.

Cruise-A-Home purchased the Property in the mid-1970s and constructed two buildings occupying the Property (Buildings B & C) between 1978 and 1980. The buildings were occupied by Marpac Products Inc. and Tri-Coatings (later known as TC Systems). Tri-Coatings reportedly painted and coated metals and Marpac reportedly made windows and railings for boats. Cruise-A-Home went out of business in approximately 1980 and ownership of the Property and two adjacent parcels apparently passed to Polaris Marine Corporation (Polaris). Norton Properties purchased the Property and adjacent parcels in 1983 and continued the leases of Marpac Products and Tri-Coatings. In 1989 Hehr International Inc. (Hehr) purchased Marpac Products and Tri-Coatings and extended the lease of buildings B & C through December 31, 2009. Marpac Products and Tri-Coatings began operating as TC Systems in the early 1990s. TC Systems operated at the Property until May 13, 2010.

ASTs and USTs – ASTs on the Property were reportedly used as process dip tanks and batch tanks for wastewater processing, and acid and base bulk storage. It is not currently known if the ASTs contained other chemicals. There are currently no known USTs on the Property.

Adjacent Industrial Operations – The Phase I ESA environmental regulatory records review documented that an adjacent site, the North Marina Ameron/Hulbert site, was listed in multiple databases and had confirmed soil, sediment, and groundwater contamination. Other up-

gradient properties may also have impacted the Site. Hazardous substances from adjacent properties may have migrated onto the Site via groundwater.

4.3 CONTAMINANT MIGRATION PATHWAYS/MEDIA OF POTENTIAL CONCERN

Subsurface soil at the Site is expected to generally consist of varying thicknesses of non-dredge fill material and hydraulic fill which is then underlain by native marine sediment. The saturated portion of the fill may represent a shallow, relatively low-permeability hydrostatigraphic unit. The depth to water is expected to range from four to six feet below ground surface, dependent on season variations and proximity to the shoreline. The shallow hydrostratigraphic unit may discharge to the marine surface water. Other potential discharges to marine surface water may include stormwater discharge from the Site (discharges to marine surface water include surface water runoff from the Site that is collected in catch basins and discharged via an outfall to the 12th Street Yacht Basin).

Based on the potential occurrence of groundwater discharge to marine surface water, discharge of upland stormwater to marine surface water, the shallow nature of groundwater beneath the Site, and the presence of an unsaturated soil zone, the potential pathways for contaminant migration at the Site include leaching of contaminants from:

- Transport of contaminants from soil to groundwater;
- Transport of contaminants in groundwater to stormwater;
- Transport of contaminants in groundwater to marine surface water;
- Transport of contaminants from stormwater to marine surface water;
- Transport of contaminants from marine surface water to sediment;
- Re-suspension and mixing of marine sediment via bioturbation, marine vessels coming in and out of the area, and/or tidal currents,
- Volatilization of contaminants from soil and groundwater to indoor air, and;
- Transport of contaminants in soil to outdoor air via wind or fugitive dust.

Based on potential migration pathways, the Site media of concern consist of soil, groundwater, marine surface water, sediment and indoor/outdoor air.

4.4 CURRENT AND FUTURE USES

It is not anticipated that the zoning will change in the future. Drinking water for the Site is currently supplied by the City of Everett Water District. Groundwater at or potentially affected by the Site is not currently used for drinking water. It is not considered to be a reasonable future source of drinking water due to its proximity to marine surface water, its limited productivity, and the likelihood that it would have a high salinity content following extended periods of groundwater extraction making it unsuitable as a domestic water supply.

4.5 POTENTIAL RECEPTORS AND EXPOSURE PATHWAYS

4.5.1 Potential Receptors

Potential receptors of Site contaminants could be human and terrestrial receptors including but not limited to wildlife, soil biota, plants, and aquatic organisms. Each of these were evaluated based on the future land use of the Site:

Humans – The Site is zoned maritime services which allows for commercial and industrial use, humans are considered to be potential receptors. Zoning also allows for limited residential use by watchmen or caretakers' quarters.

Terrestrial Ecological Receptors – The Site is currently entirely covered with buildings and asphalt pavement, which will remain under anticipated future Site uses. Landscaping on the Site will be contained in planters or isolated from the underlying existing soils, therefore, terrestrial ecological receptors (e.g., wildlife, soil biota, and plants) are not considered to be potential receptors. Because the Site is mostly covered with buildings and pavement, the Site meets the exclusion for a terrestrial ecological evaluation. Ecology's Terrestrial Ecological Exclusion form is included as Appendix R.

Benthic and Aquatic Organisms – Benthic and aquatic organisms in marine sediment and aquatic organisms in Port Gardner Bay are considered to be potential receptors due to the Site's proximity to marine surface water.

4.5.2 Potential Exposure Pathways

Potential exposure pathways were identified for receptors and are presented by media below.

Soil – The potential human health exposure pathways for Site soils include incidental ingestion and dermal contact with contaminants, exposure through particulate inhalation of soil contaminants that have migrated to air as windblown or fugitive dust, and exposure through soil vapor inhalation of soil contaminants that have migrated to air via soil vapor intrusion into occupied buildings.

Groundwater – Site groundwater on or potentially affected by the Site is not currently used for drinking water and is not considered a future source of drinking water due to its proximity to marine surface water, zoning as maritime services, and availability of a municipal water supply. The shallow hydrostratigraphic unit may discharge to the nearby surface water. The potential for this exposure pathway will be assessed further during the RI based on the results of RI characterization.

Sediment – The potential exposure pathways for sediment include benthic and aquatic organisms, which may result in acute or chronic effects to hazardous substances released from the Site in the biologically active zone of sediment (the upper 10 centimeters (cm) below the mudline). Potential pathways to marine sediment include groundwater to surface water discharge and stormwater runoff. This may result in the uptake and bioaccumulation of contaminants in these organisms. Higher trophic level organisms in the food chain, including but not limited to foraging fish, aquatic birds, and marine mammals, may ingest contaminated aquatic organisms as prey. Human ingestion of contaminated marine organisms by Site

hazardous substances that have migrated to sediment may serve as a potential exposure pathway. The potential for this exposure pathway will be assessed further during the RI based on the results of RI characterization.

Surface Water – The potential exposure pathways for surface water include exposure of aquatic organisms, which may result in acute or chronic effects to hazardous substances released from the Site to surface water. This may result in the uptake and bioaccumulation of contaminants in these organisms. Higher trophic level organisms in the food chain, including but not limited to foraging fish, aquatic birds, and marine mammals, may ingest contaminated aquatic organisms as prey.

Human ingestion of contaminated marine organisms by Site hazardous substances that have migrated to surface water may serve as a potential exposure pathway. The potential for this exposure pathway will be assessed further during the RI based on the results of RI characterization.

The potential receptors that may be exposed to the Site contaminants, and the potential exposure pathways, depend primarily on the current and future land uses for the Site. This section identifies potential receptors and exposure pathways for the receptors based on the future land uses.

Discharges to marine surface water include surface water runoff from the Site that is collected in catch basins and discharged via an outfall to the 12th Street Yacht Basin.

4.5.3 Approach for Preliminary Screening Levels

As part of the RI report, validated soil and groundwater samples which indicate concentrations of COCs exist in excess of the PSL will be considered an area of concern. The results of initial RI activities may result in identifying additional characterization requirements. Currently, due to the lack of historic information for the Site, no aspect of the Site characterization can be considered complete. Additional areas, medias, vertical and/or lateral limits, and/or contaminants of concern may be added to follow-on field investigation and sampling. As such, follow-on investigation activities may also require amendments to this or other RI/FS documents.

Upon completion of the RI, the Feasibility Study will be completed in accordance with the Order. The preliminary Screening Levels (PSLs) for soil, groundwater, and sediment will be based upon contaminants encountered, media impacted, and Property use in accordance with WAC 173-340-700 through 173-340-740 as well as applicable Sediment Management Standards (SMS, WAC 173-204) as well as other applicable Federal, State and local standards. The following sections discuss the applicable regulatory benchmarks for soil, groundwater, and sediment which will be used to determine the PSLs at the Site as part of the FS and CAP at their respective conditional points-of-compliance (CPOC).

Soil – The PSLs for soil were determined by selecting the most restrictive levels for each of the following criteria (see Tables 3 through 9):

- **Human Health Direct Contact** – PSLs were developed based on protection of human health direct contact with soil using MTCA Method B (340-740(3)(b)(i)). MTCA Method

B PSLs for direct contact are based on an excess cancer risk level of 1 x 10^{-6} or a hazard quotient of 1 (the minimum value was selected as the PSL), Note that MTCA Method A values (340-740 (2)(B)(II)) were used in the absence of an applicable MTCA B value, or when established ARARs or background concentrations were considered..

- **Protection of Groundwater** – Soil values protective of groundwater as marine surface water were based upon Ecology's 3-phase model per WAC 173-340-747(2) using default equation values. Because groundwater is not a current or likely future source of drinking water and because it discharges to marine surface water, groundwater PSLs were developed based on marine surface water cleanup levels protective of human health and aquatic organisms in accordance with WAC 173-340-730. However, in the absence of an applicable marine surface water cleanup level, MTCA Method B potable groundwater PSLs were used for screening. The three-phase model provides a conservative estimate of the concentration of a contaminant in soil that is protective of groundwater

To develop a single preliminary soil cleanup level for each constituent, the lowest protective criterion was selected as the PSL, with the following exception:

- Soil cleanup screening levels may be adjusted to be no less than the practical quantitation limit (PQL) in accordance with WAC 173-340-730(5)(c) and/or no less than natural background levels in accordance with WAC 173-340-740(5)(c). The PQL (identified as the method reporting limit in the screening level tables) and background concentrations for metals, based on Puget Sound 90th percentile values (*Natural Background Soil Metals Concentrations in Washington State*, Ecology Publication 94-115, 1994), were compared to the soil PSLs protective of human direct contact and groundwater.

Groundwater – Groundwater at the Site is not considered potable due to the proximity of the Site to the marine environment (WAC 173-340-720(2)(b)(ii)). However, due to the proximity of the Site to the marine environment, surface water standards are considered applicable to the Site. As such, the PSLs for groundwater were determined by selecting the most restrictive benchmark for of each of the following criteria (see Tables 10 through 16):

Surface water standards as described in MTCA Method A (WAC 173-340-730(2)) and Method B (WAC 173-340-730(3)).
Potable drinking water standards (if an applicable surface water standard was not available) as described in MTCA Method A (WAC 173-340-720(3) and Method B (WAC 173-340-720(4)).

Marine Sediment – Due to the proximity of the Site to the North Marina, the potential exists for contaminants to be transported to the marine environment. The cleanup standards for sediments located within the Puget Sound area include the Marine Sediment Quality Standards (SQS, WAC 173-204-320) as well as the Sediment Cleanup Screening Level criteria (CSL; WAC 173-204-520)). SQS values correspond to a sediment quality that will result in no adverse acute or chronic adverse effects on biological resources. The CSL values correspond to a sediment quality that will result in minor adverse effects on biological resources. Currently, insufficient data exists to determine whether the evaluation of sediment data will be necessary. Sediments in the 12th Street Yacht Basin, where storm water from the site discharges; are being sampled and evaluated as part of the adjacent Ameron/Hulbert

cleanup site. The need for sediment sampling as part of the TC Systems Site will be determined during the course of the RI/FS investigation.

5.0 REMEDIAL INVESTIGATION APPROACH

Historically, the TC Systems Property has had very limited soil and groundwater characterization performed. The investigation areas are listed below (as originally described in the Order). The locations were selected based upon the historic operations of the facility. The sampling approach is designed to identify impacted media, if any, in those areas where contamination is considered most likely to be present. If initial sampling and analysis indicates that media is impacted, additional characterization will be necessary in order to ascertain the vertical and horizontal limits of the affected media. The characterization process will only be considered complete when all transport mechanisms and impacted media have been accounted for.

5.1 INVESTIGATION AREAS

Due to the uncharacterized nature of the Site, initial characterization efforts are based largely upon the known activities at the Property during recent operations as TC Systems. Areas of Concern (AOCs) for the Site include:

- Characterizing subsurface conditions near the northeast corner of building B; this is the area where TC Systems used a dye-penetrant in their operations.
- Characterizing subsurface conditions in the area between buildings B and C; this is the area where several material handling violations were documented by Ecology.
- Characterizing subsurface conditions in the process area of building B; this is the area where several above-ground tanks and subsurface sumps operated for metal surface treatments.
- Characterizing subsurface conditions in the area along the southern boundary; this is the area where oil-impacted soil was documented by Landau in 2004 -2005.
- Characterizing subsurface conditions along Property boundaries.

The following boring locations were listed in Exhibit B of the Order (Appendix P). Please note that the Order labels some of the locations with the designation of 'SB' in reference to strata-probe. Per the Order, either direct push or hollow-stem auger may be used for advancing the borings. If hollow-stem auger borings are selected, the designation in the RI may be changed to avoid confusion.

Borings TC-SB-1 to TC-SB-5 – Five boring locations between Buildings B and C. These locations were selected to characterize conditions near and associated with the wastewater treatment/chemical storage and discharge areas (TC-SB-1 and TC-SB-2), near the compressor shed (TC-SB-3), in an unpaved area adjacent to Building C (TC-SB-4), and in the vicinity of a paint booth area (TC-SB-5).

Borings TC-SB-6 to TC-SB-8 – Three boring locations along the southern Property boundary between the North Marina Ameron/Hulbert Site and the TC Systems Property. These locations were selected to characterize conditions adjacent to the Ameron/Hulbert Site and in the vicinity of the oil affected area. Currently, the Port of Everett is planning on advancing two

borings in this area. Based upon the results of their sample collection and analysis, the locations of our borings may be relocated.

Boring TC-SB-9 – One boring at the southwest corner of the Property. This location was identified to characterize conditions near the downstream end of the Property's stormwater drainage system.

Borings TC-SB-10 and TC-SB-11 – Two borings located west of Building C. These locations were selected to characterize conditions down-gradient and in the vicinity of Building C which is used for painting, storage of hazard waste, and sand blasting. This building also formerly housed operations from Cruise-A-Home Inc.

Borings TC-SB-12 and TC-SB-13 – Two borings located north of Buildings B and C. These locations were selected to characterize conditions north of these buildings. The groundwater flow direction at the site has not been characterized.

Boring TC-SB-14 – One boring located inside Building B in the penetrant testing area. This boring was selected to characterize conditions where penetrant oils have been used inside the building and near a sump. The penetrant oil was in regular contact with the floor of the facility during operations.

Boring TC-SB-15 – One boring located inside Building B in the containment area underneath the process tank lines. This boring was selected to characterize conditions underneath the containment floor which was observed to be pitted and in need of resealing based on observations made by Ecology during a September 14, 2009 Dangerous Waste Compliance Inspection at the facility.

Boring TC-MW-1 – One soil boring/monitoring well located in the northeast portion of the Site and just north of Building B. This boring/well location was selected to characterize conditions where groundwater contamination was identified during the 2009 Phase II ESA. A groundwater sample collected at this location (see Exhibit B, Figure 1, of the Order-Appendix P) had TPH-diesel and -oil at concentrations of 1,200 µg/L and 860 µg/L, respectively.

5.2 METHODOLOGY

As previously discussed, the historic site characterization data available is limited. As such, initial RI work will focus on determining the extent to which soil and groundwater media is impacted at the limits of the Site[6]. For those locations where soil and/or groundwater samples are impacted above screening levels, transport mechanisms will be evaluated in accordance with the conceptual site model for the location, media, and contaminant in question. The scope of the initial phase of the RI field work was determined largely by the requirements set forth in Exhibit B of the Order-Appendix P. Additional sampling requirements (based upon the preliminary results) will be based upon the initial results of the RI (presented first in the form of a technical memorandum to Ecology). Additional field investigation (if any) will be conducted to further define the nature and extent of contamination based upon the findings during the initial investigation. The specific soil and groundwater sampling protocol and analytical

[6] When the word 'Site' is used in conjunction with a remedial investigation, it refers to the vertical and lateral limits of the contamination under MTCA.

decision tree for sampling soil and groundwater at the prospective boring locations is present in section 5 of the SAP.

5.3 DATA GAPS

As previously discussed, historic characterization of the Site is limited to two isolated sampling events. This section will briefly discuss each of the sampling events and their relevance to the RI/FS process.

In August of 2009, E3RA, Inc., performed a limited Phase II Environmental Site Assessment (ESA) at the Site[7]. The ESA was performed by using a direct-push drilling rig to advance five borings to shallow depths and collect soil and groundwater samples. Three borings (SB-1, -2 and -3) were advanced near the compressor shed in the area between buildings B and C. This location was selected to document the impacts of oil (leaking from an air compressor) to soil and groundwater in that area. Two additional borings were advanced near the northeast corner of building B. This location was selected to document the impacts of dye-penetrant (used inside building B near that area) to soil and groundwater in that area. Soil samples were analyzed for TPH-Dx and chromium; groundwater samples were analyzed for TPH-Dx. Laboratory analytical data was reported at concentrations of diesel (1,200 µg/L) and oil (860 µg/L) in the groundwater sample collected from boring SB-4. The information gathered from this sampling event is limited and further investigation is warranted at both locations where previously sampling was conducted.

In the fall of 2009, Ecology collected a grab sample of solids accumulated in the bottom of a stormwater catch basin located on the asphalt-paved area between buildings B and C, near the area of the former wastewater treatment and utilities area of TC Systems. Laboratory analytical data indicate that the sample exceeded SMS and CSL thresholds for heavy metals (including cadmium, chromium, copper, lead and zinc), two polychlorinated biphenyl (PCB) Aroclors (1248 and 1254), total petroleum hydrocarbons (in the lube-oil range) and various semi-volatile organic compounds including some polycyclic aromatic hydrocarbons. The analytical data is not considered representative of on-site soil or groundwater conditions. However, the analytical data does indicate that further investigation of on-site material handling, engineering practices, as well as soil and groundwater conditions may be warranted.

Due to the lack of historic information available for the Site, a detailed evaluation of the current data gaps is not feasible. A detailed data gap evaluation will be conducted after the initial RI has been completed and presented as part of each technical memorandum (after the initial and subsequent field RI work) as well as in the finalized RI report.

5.4 REMEDIAL INVESTIGATION REPORT

At the completion of all RI field investigation activities, the RI report will present the overall findings of the sampling activities. The intent of the RI report is to document the full extent and nature of hazardous substances released to the environment, as well as the impact to the media and potential impact to sensitive receptors. The finalized RI report will include a complete description of the field activities, the identification and distribution of all hazardous

[7] No formal report was generated for this work. As such, the information presented is limited in scope and quality.

substances identified as part of the RI, and potential migration pathways and receptors. A summary of all analytical data (tabular as well as plotted geographically) will also be presented and an explanation of any variance to the preliminary screening levels (PSLs) will be provided. In accordance with the Order, the goal of the RI report will be to provide sufficient characterization information such that a FS of remedial options can be conducted.

6.0 FEASIBILITY STUDY APPROACH

The goal of a comprehensively-conducted RI is to generate a sufficient quality and quantity of data that all hazardous materials impacting a site can be delineated and the site can be characterized for cleanup. Prior to a cleanup being conducted, a FS needs to be conducted. The FS includes evaluating the analytical data against regulatory cleanup standards and other applicable regulations, determining the areas requiring cleanup based upon the selected cleanup standards, determining the goal of cleanup actions, evaluating various cleanup options, evaluating the impact to natural resources, and writing a formal FS report. The following sections describe how the FS will be approached at the Site in accordance with the Order.

6.1 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

In the event that cleanup of the Site is required, the remedial actions must comply with a variety of Federal, State and local regulations. Specifically, MTCA (WAC 173-340-710(1)) requires cleanup actions satisfy all applicable or relevant and appropriate regulations (ARARs). MTCA encompasses some of the ARARs. During the implementation of the selected remedial option (if required), other ARARs may include:

- Federal Water Pollution Control Act (FWPCA) Amendments, or the Clean Water Act (CWA, USC, Title 33, Chapter 26, § 1251;
- EPA Water Quality Standards (National Toxics Rule, 40 CFR 131);
- Federal Endangered Species Act for listed species and/or habitat, locally;
- Applicable Puget Sound Clean Air Agency Standards;
- Water Quality Standards for Surface Waters of the State of Washington (WAC 173-201A)
- Washington State Shoreline Management Act;
- Washington State Water Pollution Act (Chapter 90.48 RCW);
- Washington State Sediment Management Standards (WAC 173-204);
- Washington State Clean Air Act (WAC 70.94);
- Federal and State worker protection guidelines and regulations (OSHA and WISHA, respectively);
- Federal, State, and local drinking water regulations which establish the maximum contaminant levels (MCLs) for supplied drinking water, and;
- Other applicable and relevant local regulations, as required.

6.2 DELINEATION OF MEDIA REQUIRING REMEDIAL ACTION

Upon completion of the RI, the qualified laboratory analytical data will be compared against the applicable cleanup standards. Areas of soil, groundwater, and/or sediment requiring remedial action will be delineated for remedial action both laterally and vertically as part of the FS. The delineation of areas requiring remedial action will be as a result of the analytical data generated during the RI process. In addition, remedial areas delineated will also consider the current and future Property and nearby property uses as well as all of the contaminant

migration pathways identified. It should be noted that the areas may change during the course of cleanup action as field activities progress.

6.3 DEVELOPMENT OF REMEDIAL ACTION OBJECTIVES

The Remedial Action Objectives (RAOs) establish the goals of the overall planned remedial actions. The overall goal of clearly identifying RAOs prior to beginning any cleanup of a site is to ensure that the planned remedial actions satisfy the ARARs and provide a solution to the Site which is considered adequately protective of human health and the environment. Due to the fact that very little characterization of the Site has been completed to-date, migration pathways must be carefully and comprehensively evaluated as part of the RAOs. Should the evaluation of contaminant migration and exposure pathways and subsequent RI sampling activities reveal that marine sediment (or other media) has been impacted, the RAOs must encompass such media. RAOs must also be protective of ecological receptors, if applicable.

Portions of the Site which are delineated as requiring remedial action will each have specific RAOs designed specifically for the media and contaminant encountered in that delineated area. In addition, the RAOs must be based upon the planned current and future Property use. Potential exposure routes to public as well as employees must be satisfied by the RAOs. The selected cleanup alternative must satisfy the RAOs with applicable cleanup standards for all media including soil, groundwater, surface water, and marine sediment (MTCA and SMS, if necessary) as the benchmark for performance. The RAOs will be finalized during the preparation of the FS in accordance with the Order.

6.4 CLEANUP ALTERNATIVE EVALUATION

As part of the FS, one or more cleanup alternatives will be evaluated in order to determine their functionality and applicability to the overall goals at the Site. Under MTCA (WAC 173-340-360) some of the cleanup alternative evaluation criteria are specified. The MTCA minimum requirements include evaluating the alternatives on their abilities to protect human health and the environment, comply with cleanup standards, and satisfy the requirement of long-term monitoring to ensure that the alternatives are compliant over an extended period of time. The option must satisfy fate and transport criteria of the site, as well as the current and intended use of the Property, as well as all ARARs. Practicality and disproportionate cost analysis will also be considered during the evaluation. As part of the FS, the remedial options will be evaluated against each other for their effectiveness in satisfying MTCA as well as their practical application of implementation by the PLPs.

6.5 HABITAT RESTORATION ALTERNATIVES

In accordance the Governor's Puget Sound Initiative (PSI) and the Order, the RI/FS process is required to evaluate the potential for site work associated with the Order to demonstrate efforts to provide restorative improvements to the near-shore environment. As such, part of the FS will focus on crafting remedial options which coincidentally improve the resources of the shoreline and the marine environment. The Property is fully developed in a manner which inherently limits the potential for on-site habitat enhancement beyond the removal of contaminant migration potential, should they exist. However, options will be discussed with the

PLPs and Ecology as the FS develops and based upon the cumulative results of the overall RI/FS efforts.

6.6 FEASIBILITY STUDY REPORT

The FS report will be generated at the completion of the evaluation of the information described in section 6 of this RI/FS Work Plan. The scheduled time of the completion of the FS may change as field activities proceed. The FS report will include an executive summary, a description and confirmation of the finalized preliminary screening levels (including any additional or alterations to impacted media), a review of ARARs, the delineation of media requiring remedial action, a complete assessment of available and reasonable remedial options, and an evaluation of cleanup alternatives. In addition, the FS report will incorporate the plans for remedial action to incorporate aspects of natural habitat restoration, as appropriate. The report will be generated in cooperation with Ecology and in accordance with the Order.

7.0 DRAFT CLEANUP ACTION PLAN

As the RI/FS process reaches completion, work will begin on preparing a Draft CAP, to be submitted to Ecology within 45 days of the finalization of the Draft Final RI/FS. The Draft CAP will address public comments received (as part of the Draft RI/FS process). The Draft CAP along with a second Agreed Order (or Consent Decree) will be available for public comment prior to finalization and implementation of the CAP. The Draft CAP will include a description and rationale for the selected cleanup solution, as well as a discussion of those cleanup methodologies not selected as part of the FS. In addition, the Draft CAP will provide a discussion of how the proposed action (or institutional controls) will satisfy both MTCA, as well as other ARARs for the impacted media at the Site. Finally, the Draft CAP will provide an updated schedule of work, as well as an evaluation of scenarios which could extend or alter the overall timeline of the cleanup action. The CAP may also evaluate the completeness and effectiveness of any interim actions performed at the Site. Upon receipt and incorporation of public comments into the finalized CAP, cleanup actions will begin.

8.0 PUBLIC PARTICIPATION PLAN

In accordance with WAC 173-340-600, as well as Exhibit D of the Order-Appendix P, Public Participation is a key aspect of the RI/FS and CAP for the Site. Involving the public shareholder in the process allows the community to better understand the current status of the project, as well as the overall cleanup and planned use of the Property. During the process (as outlined in the Order), documents will be available for public review and comment. Feedback on draft documents will be incorporated into the overall investigation and cleanup of the Site and provide the community an assurance that their input is considered in the decision-making process.

Throughout the RI/FS and CAP process, public can review documentation associated with the Site at two separate locations; the locations and their hours are listed below:

Everett Public Library
2702 Hoyt Ave.
Phone: (425) 257-8010
Hours: Mon.-Wed. 10 a.m.-9 p.m.,
Thurs.-Sat. 10 a.m.-6 p.m., Sun. 1-5 p.m.

WA Department of Ecology Headquarters
300 Desmond Drive SE
Lacey, WA 98503
By appointment.
Please contact Carol Dorn at
(360) 407-7224 or cesg461@ecy.wa.gov

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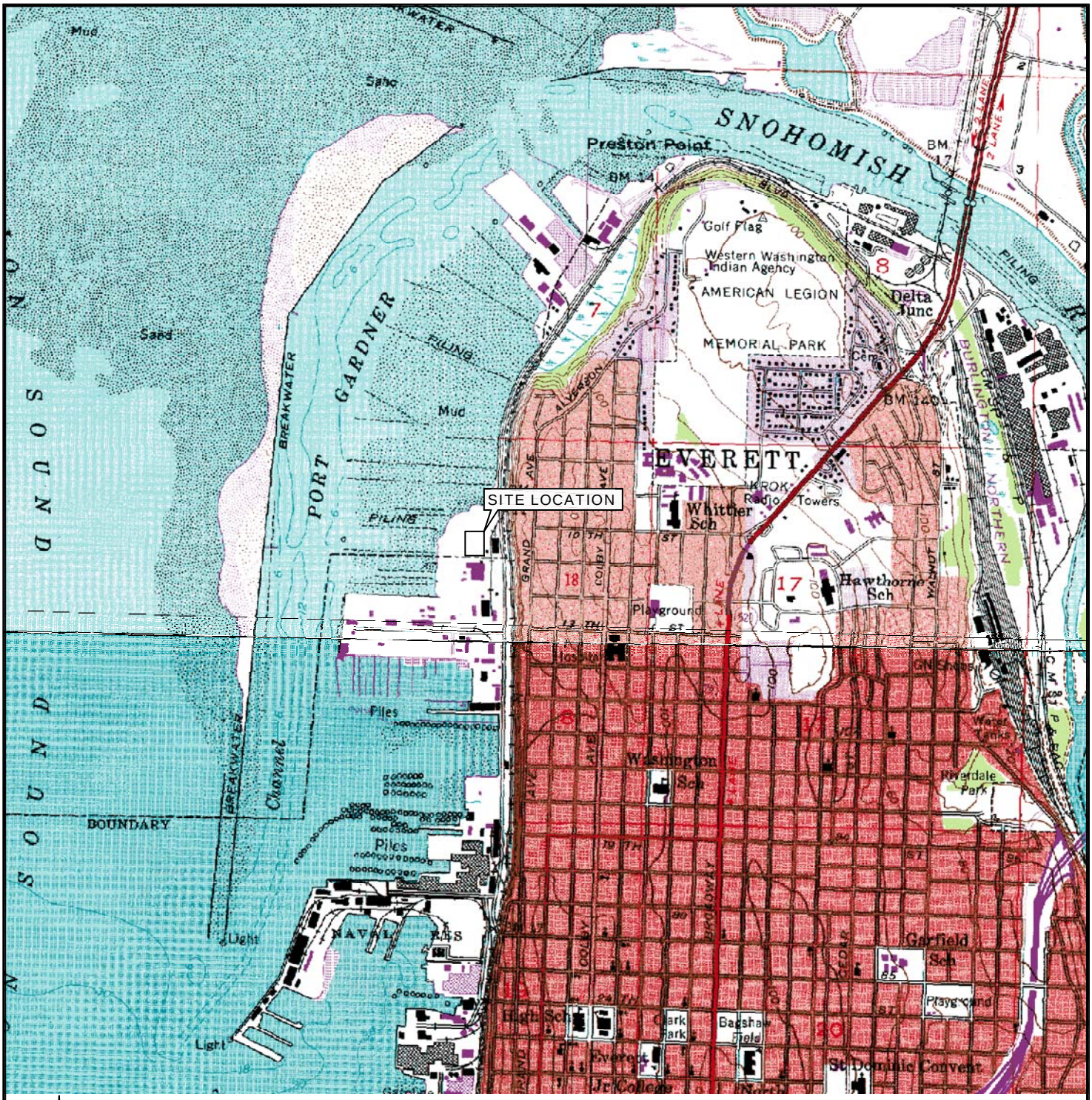
Tri Coating Chemical Spill Cleanup; Tri-Coatings; 12-16-1991.

Warning Non-Compliance – With Industrial Stormwater General Permit at TC Systems, Inc., Permit# SO3-000762D, on 9/17/07 (TO: TC Systems), with Enclosure: Storm water Compliance Inspection Report; Department of Ecology; Date Unspecified.

Waste Manifest & Related; Department of Ecology; 1995 – 2009.

Water Quality Program Corrections Required (Department of Ecology); TC Systems; 9-16-2009.

FIGURES



N

WASHINGTON

1 1/2 0 1

SCALE IN MILE

1000 0 1000 2000 3000 4000 5000 6000 7000

SCALE IN FEET

REFERENCE: WA Digital Raster Graphics(http://rocky2.ess.washington.edu/data/raster/drgclip/index.html)
7.5 Minute Series, NAD27 WA State Planes, N Zone,Trimmed
Block o47122h2 & o48122a2, Downloaded 5/22/02

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REDMOND, WASHINGTON 98052
PHONE: (425) 298-1000 FAX: (425) 298-1020

FOR:
REMEDIAL INVESTIGATION / FEASIBILITY STUDY
TC SYSTEMS
1032 WEST MARINE VIEW DRIVE
EVERETT, WASHINGTON

SITE LOCATION MAP

FIGURE: 1

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212302667	JR			1/28/11

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SITE MAP

FIGURE: **2**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212302667	JR			1/28/11

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LEGEND

- PROPERTY BOUNDARY
- STORM DRAIN CATCH BASIN
- SD STOM DRAIN LINE
- SA SANITARY SEWER LINE
- OIL AFFECTED AREA
- FACILITY FEATURE

0 50 100

APPROXIMATE SCALE IN FEET

- A PROCESS PLATING TANKLINE
- B SLUDGE PRESS FILTER CAKE STORAGE
- C CHEMICAL STORAGE
- D PENETRANT TEST AREA
- E BOILER SHED
- F PAINT BOOTH / PAINT AREAS
- G WASTE
- H COMPRESSOR SHED
- I WASTEWATER TREATMENT AREA
- J OVEN
- K OFFICE
- L MAINTENANCE AREA
- M SHOT PEEN
- N POWDER COATING

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FACILITY FEATURES

FIGURE: **3**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212302667	JR			1/28/11

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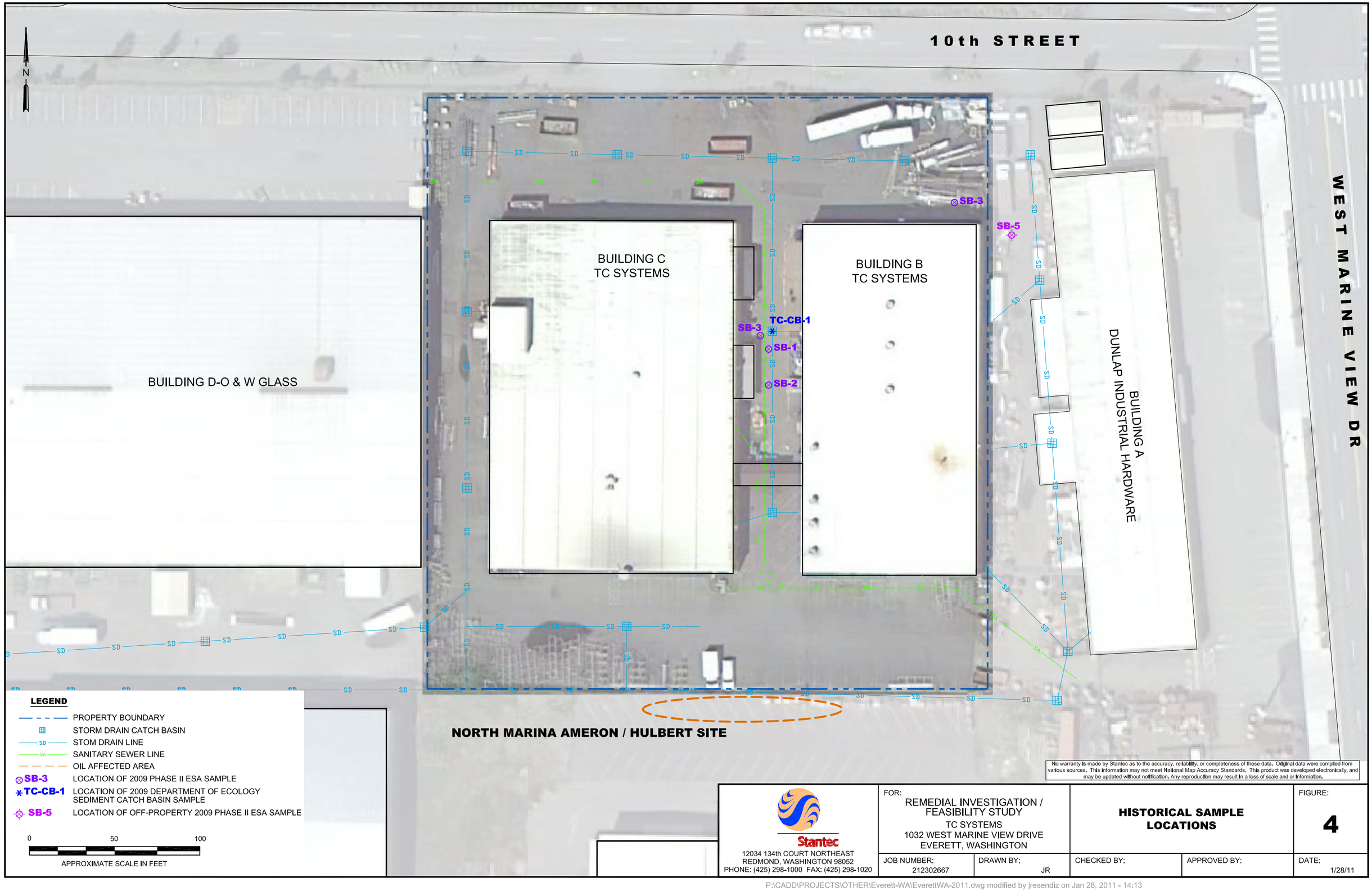

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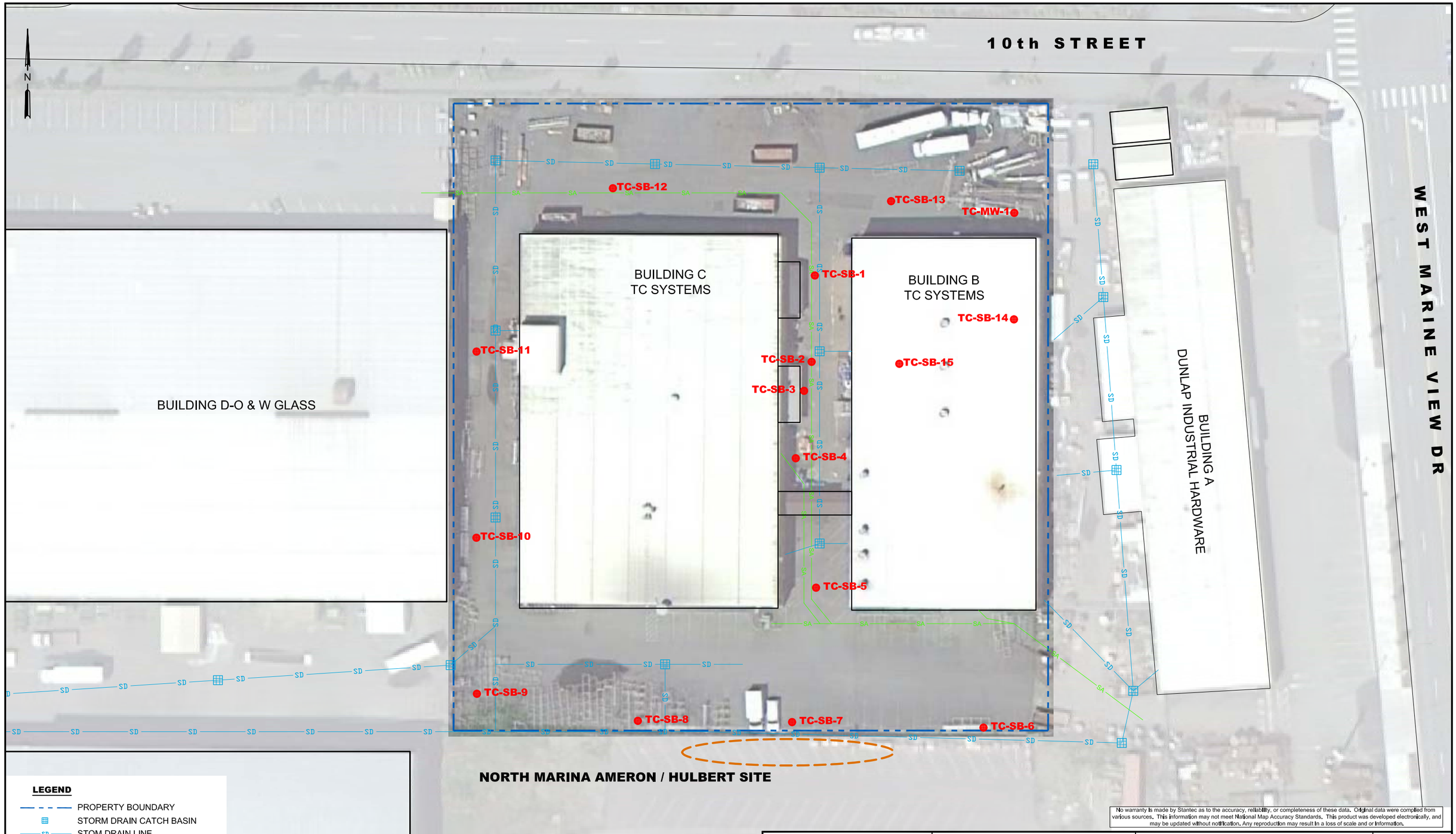
EVERETT, WASHINGTON

HISTORICAL SAMPLE LOCATIONS

FIGURE: 4

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212302667	JR			1/28/11



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1032 WEST MARINE VIEW DRIVE
EVERETT, WASHINGTON

PROPOSED SAMPLE LOCATIONS

FIGURE: **5**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212302667	JR			1/28/11

TABLES

Table 3, Laboratory Preliminary Screening Levels (PSLs) for Soil
Volatile Organic Compounds - EPA Method 8260

Analyte	Target Concentration used in the 3-Phase Model (µg/L)[1]	Basis for the selected 3-Phase Model Target Concentration[2]	MTCA Soil Levels Protective of Groundwater as Surface Water (3-phase model, mg/kg)[3]	MTCA Method B (direct contact, mg/kg)[1,4]	Soil MRL mg/kg	Soil MDL mg/kg	Preliminary Screening Level (mg/kg)[5]
Dichlorodifluoromethane (CFC-12)	1,600.000	Groundwater Cleanup Level	NC	16,000.000	0.06	0.0017	16000
Chloromethane	132.953	MTCA B Surface Water - Carc.	NC	76.900	0.06	0.0016	76.9
Vinyl chloride	2.400	Marine Human Health Protection - 304	0.015	0.667	0.002	0.0013	0.015
Bromomethane	967.901	MTCA B Surface Water - Non-Carc.	4.480	112.000	0.09	0.0011	4.48
Chloroethane	15.100	Groundwater Cleanup Level	NC	345.000	0.06	0.0002	345
Trichlorofluoromethane (CFC-11)	2,400.000	Groundwater Cleanup Level	NC	24,000.000	0.05	0.0004	24,000
1,1-Dichloroethene	3.200	Marine Human Health Protection - NTR	0.023	4,000.000	0.05	0.0003	0.05
Methylene chloride	590.000	Marine Human Health Protection - 304	2.570	133.000	0.02	0.0000	2.6
trans-1,2-Dichloroethene	10,000.000	Marine Human Health Protection - 304	54.300	1,600.000	0.02	0.0002	54.3
1,1-Dichloroethane	1,600.000	Groundwater Cleanup Level	8.730	16,000.000	0.02	0.0002	8.7
2,2-Dichloropropane	NA	---	NC	NA	0.05	0.0005	0.05
cis-1,2-Dichloroethene	70.000	Groundwater Cleanup Level	0.350	800.000	0.02	0.0006	0.35
Chloroform	470.000	Marine Human Health Protection - 304	2.500	164.000	0.02	0.0022	2.5
1,1-Dichloropropene	NA	---	NC	NA	0.02	0.0038	0.02
Carbon tetrachloride	1.600	Marine Human Health Protection - 304	0.015	7.690	0.02	0.0038	0.02
1,1,1-Trichloroethane (TCA)	926,000.000	MTCA B Surface Water - Non-Carc.	7,340.000	160,000.000	0.02	0.0002	2
Benzene	51.000	Marine Human Health Protection - 304	0.287	18.200	0.02	0.0002	0.3
1,2-Dichloroethane (EDC)	37.000	Marine Human Health Protection - 304	0.179	11.000	0.03	0.0002	0.18
Trichloroethene (TCE)	30.000	Marine Human Health Protection - 304	0.198	11.000	0.03	0.0003	0.2
1,2-Dichloropropane	15.000	Marine Human Health Protection - 304	0.077	14.700	0.02	0.0001	0.07
Dibromomethane	80.000	Groundwater Cleanup Level	NC	800.000	0.04	0.0003	800
Bromodichloromethane	17.000	Marine Human Health Protection - 304	0.086	16.100	0.02	0.0003	0.09
cis-1,3-Dichloropropene a	21.000	Marine Human Health Protection - 304	0.122	5.560	0.02	0.0002	0.12
Toluene	15,000.000	Marine Human Health Protection - 304	109.000	6,400.000	0.02	0.0008	109
Trans-1,3-Dichloropropene a	21.000	Marine Human Health Protection - 304	0.122	5.560	0.03	0.0001	0.12
1,1,2-Trichloroethane	16.000	Marine Human Health Protection - 304	0.089	17.500	0.03	0.0003	0.09
Tetrachloroethene (PCE)	3.300	Marine Human Health Protection - 304	0.035	1.850	0.02	0.0003	0.04
1,3-Dichloropropane	NA	---	NC	1,600.000 c	0.05	0.0001	1600
Dibromochloromethane	13.000	Marine Human Health Protection - 304	0.069	11.900	0.03	0.0002	0.07
1,2-Dibromoethane (EDB)	0.050	Groundwater Cleanup Level	NC	0.500	0.005	0.0002	0.5
Chlorobenzene	1,600.000	Marine Human Health Protection - 304	14.000	1,600.000	0.02	0.0002	14
1,1,1,2-Tetrachloroethane	1.683	Groundwater Cleanup Level	NC	38.500	0.03	0.0002	38.5
Ethylbenzene	2,100.000	Marine Human Health Protection - 304	18.100	8,000.000	0.03	0.0003	18.1
m,p Xylenes b	1,600.000	Groundwater Cleanup Level	14.600	16,000.000	0.03	0.0003	14.6
o Xylene	16,000.000	Groundwater Cleanup Level	147.000	160,000.000	0.03	0.0003	147
Total Xylenes	1,600.000	Groundwater Cleanup Level	14.600	16,000.000	0.03	0.0003	14.6
Styrenes	1.458	Groundwater Cleanup Level	0.033	33.300	0.02	0.0003	0.03
Bromoform	140.000	Marine Human Health Protection - 304	0.918	127.000	0.02	0.0009	0.92
Isopropylbenzene	800.000	Groundwater Cleanup Level	NC	8,000.000	0.08	0.0003	8,000
1,2,3-Trichloropropane	0.006	Groundwater Cleanup Level	NC	0.143	0.02	0.0005	0.14
Bromobenzene	NA	---	NC	300.000 c	0.03	0.0002	300
1,1,2,2-Tetrachloroethane	4.000	Marine Human Health Protection - 304	0.022	5.000	0.02	0.0003	0.02
n-Propylbenzene	NA	---	NC	NA	0.02	0.0003	0.02
2-Chlorotoluene	160.000	Groundwater Cleanup Level	NC	1,600.000	0.02	0.0004	1,600
4-Chlorotoluene	NA	---	NC	5,500.000 c	0.02	0.0003	5500
1,3,5-Trimethylbenzene	400.000	Groundwater Cleanup Level	NC	4,000.000	0.02	0.0004	4,000
tert-Butylbenzene	NA	---	NC	NA	0.02	0.0003	0.02
1,2,4-Trimethylbenzene	400.000	Groundwater Cleanup Level	NC	4,000.000	0.02	0.0004	4,000
sec-Butylbenzene	NA	---	NC	NA	0.02	0.0004	0.02
1,3-Dichlorobenzene	960.000	Marine Human Health Protection - 304	NC	NA	0.02	0.0002	0.02
4-Isopropyltoluene	NA	---	NC	NA	0.02	0.0004	0.02
1,4-Dichlorobenzene	4.857	MTCA B Surface Water - Carc.	0.080	41.700	0.02	0.0002	0.08
1,2-Dichlorobenzene	1,300.000	Marine Human Health Protection - 304	15.230	7,200.000	0.02	0.0003	15.23
n-Butylbenzene	NA	---	NC	NA	0.02	0.0004	0.02
1,2-Dibromo-3-Chloropropane	0.200	Groundwater Cleanup Level	NC	0.714	0.03	0.0002	0.71
1,2,4-Trichlorobenzene	70.000	Marine Human Health Protection - 304	2.610	800.000	0.05	0.0004	2.6
Hexachloro-1,3-butadiene	18.000	Marine Human Health Protection - 304	19.414	12.800	0.10	0.0003	12.8
Naphthalene	4,938.272	MTCA B Surface Water - Non-Carc.	137.552	1,600.000	0.03	0.0003	137
1,2,3-Trichlorobenzene	NA	---	NC	49.000 c	1.0	0.0002	49

Notes:

[1] Preliminary screening levels and target concentrations used in the 3-phase model were identified in Ecology's On-Line CLARC database (searched on 9/8/10)

[2] The minimum applicable surface water protection criteria were used in the 3-phase model if available. Otherwise, the target concentration was based on applicable minimum potable groundwater standards. Note, the target concentration used in the model was based on an established ARAR if it was less than the calculated MTCA B risk-based cleanup level adjusted to a 1E-05 cancer risk.

[3] Soil concentrations protective of groundwater as surface water were calculated using Ecology's fixed parameter three-phase partitioning model. Ecology default values were used in the modeling.

[4] The minimum cancer or non-cancer based MTCA B value was selected.

[5] The preliminary screening level is based on the minimum value between MTCA B and the groundwater as surface water protection value. The MRL was selected as the screening level if it was greater than the minimum screening level.

a = 1,3-Dichloropropene was used as a surrogate.

b = Total xylenes was used as a surrogate.

c = In the absence of a MTCA A or B value, the EPA Region 9 preliminary remediation goal (PRG) for residential soil was used (May 2010 EPA Region 9 PRG Table).

ARAR = Applicable or Relevant and Appropriate Requirements

CLARC = Cleanup Levels and Risk Calculation. The CLARC online database was searched on 9/8/10.

MDL = Laboratory Method Detection Limit

MRL = Laboratroy Method Reporting Limit

MTCA = Model Toxics Control Act

NC = No cleanup level protective of groundwater was calculated using Ecology's 3-phase partitioning model due to lack of available chemical-specific data or an applicate target concentration.

NA = Not available

Groundwater Cleanup Level = Minimum value between applicable groundwater ARARs and MTCA B groundwater ingestion risk-based values.

MTCA B Surface Water - Carc. = MTCA B surface water cleanup level based on carcinogenic risk.

MTCA B Surface Water - Non-Carc. = MTCA B surface water cleanup level based on noncancer effects.

Marine Human Health Protection - 304 = EPA National Recommended Water Quality Criteria identified in CLARC for the consumption of organisms.

Table 4, Laboratory Preliminary Screening Levels (PSLs) for Soil Tributyl Tin Ion (as Tributyl Tin Oxide) by EPA Method SW-846-8270D							
Analyte	**Surface Water Target Concentration used in the 3-Phase Model (µg/L)[1]**	**Basis for the selected Surface Water Target Concentration[4]**	**MTCA Soil Levels Protective of Groundwater as Surface Water (3-phase model, µg/kg)[2, 3]**	**MTCA Method B (direct contact, µg/kg)[4]**	**Soil MRL**	**SOIL MDL**	**Preliminary Screening Level (µg/kg)[5]**
					µg/kg	**µg/kg**	
Tributyl Tin (as TBT Ion)	0.010	Marine Chronic AWQC - 304	7,400	23,400.000	1.773	4.000	7400

Notes:

[1] Soil and surface water preliminary screening levels were identified in Ecology's On-Line CLARC database (searched on 9/8/10)

[2] Soil concentrations protection of groundwater as surface water were calculated using Ecology's fixed parameter three-phase partitioning model. Ecology default values were used in the modeling.

[3] TBT ion value calculated a recommended by Ecology a using marine surface water standard of 0.01 ug/l for TBT oxide; the TBT ion value is based on the weights of one mole of TBTO and two moles of TBT ion.

[4] The screening level in CLARC is for tributyl tin oxide (TBTO) and was calculated using an oral RfD of 0.0003 mg/kg-day. A TBT Ion value was calculated as recommended by Ecology based on weights of one mole TBTO and two moles of TBT ion.

[5] The preliminary screening level is based on the minimum value between MTCA B and the groundwater as surface water protection value. The MRL was selected as the screening level if it was greater than the minimum screening level.

CLARC = Cleanup Levels and Risk Calculation. The CLARC online database was searched on 9/8/10.

Marine Chronic AWQC - 304 = EPA National Recommended Water Quality Criteria identified in CLARC for the protection of marine water aquatic organisms.

MDL = Laboratory Method Detection Limit

MRL = Laboratroy Method Reporting Limit

MTCA = Model Toxics Control Act

Table 5, Laboratory Preliminary Screening Levels (PSLs) for Soil Semi-volatile organic compounds by EPA Method 8270							
Analyte	Target Concentration used in the 3-Phase Model (µg/L)[1]	Basis for the selected 3-Phase Model Target Concentration[2]	MTCA Soil Levels Protective of Groundwater as Surface Water (3-phase model, mg/kg)[3]	MTCA Method B (direct contact, mg/kg)[1,4]	Soil MRL	SOIL MDL	Preliminary Screening Level (mg/kg)[5]
					mg/kg	mg/kg	
1,2,4-Trichlorobenzene	70.000	Marine Human Health Protection - 304	2.610	800.000	0.1	0.005	2.6
1,2-Dichlorobenzene	1,300.000	Marine Human Health Protection - 304	15.230	7,200.000	0.1	0.003	15.2
1,2-Dinitrobenzene	6.400	Groundwater Cleanup Level	NC	32.000	0.1	0.005	32
1,3-Dichlorobenzene	960.000	Marine Human Health Protection - 304	NC	NA	0.1	0.003	0.1
1,3-Dinitrobenzene	1.600	Groundwater Cleanup Level	NC	8.000	0.5	0.009	8
1,4-Dichlorobenzene	4.857	MTCA B Surface Water Carc.	0.080	41.700	0.1	0.003	0.1
1,4-Dinitrobenzene	6.400	Groundwater Cleanup Level	NC	32.000	0.5	0.009	32
1-Methylnaphthalene	NA	---	NC	NA	0.1	0.005	0.1
2,3,4,6-Tetrachlorophenol	480.000	Groundwater Cleanup Level	NC	2,400.000	0.1	0.005	2400
2,3,5,6-Tetrachlorophenol	NA	---	NC	NA	0.1	0.006	0.1
2,4,5-Trichlorophenol	3,600.000	Marine Human Health Protection - 304	129.385	8,000.000	0.2	0.011	129.4
2,4,6-Trichlorophenol	2.400	Marine Human Health Protection - 304	0.028	90.100	0.2	0.010	0.2
2,4-Dichlorophenol	191.100	MTCA B Surface Water Non-Carc	1.326	240.000	0.2	0.004	1.3
2,4-Dimethylphenol	552.792	MTCA B Surface Water Non-Carc	4.522	1,600.000	0.1	0.003	4.5
2,4-Dinitrophenol	3,456.790	MTCA B Surface Water Non-Carc	13.828	160.000	0.2	0.009	13.8
2,4-Dinitrotoluene	3.400	Marine Human Health Protection - 304	0.020	160.000	0.1	0.005	0.1
2,6-Dinitrotoluene	16.000	Groundwater Cleanup Level	0.086	80.000	0.1	0.005	0.1
2-Chloronaphthalene	1,026.769	MTCA B Surface Water Non-Carc	NC	6,400.000	0.1	0.004	6,400
2-Chlorophenol	96.739	MTCA B Surface Water Non-Carc	1.140	400.000	0.1	0.005	1.1
2-Methylnaphthalene	32.000	Groundwater Cleanup Level	NC	320.000	0.1	0.006	320
2-Methylphenol (o-cresol)	400.000	Groundwater Cleanup Level	2.330	4,000.000	0.1	0.005	2.3
2-Nitroaniline	NA	---	NC	NA	0.5	0.004	0.5
2-Nitrophenol	NA	---	NC	NA	0.2	0.006	0.2
3-Methylphenol (m-cresol)	400.000	Groundwater Cleanup Level	NC	4,000.000	0.1	0.005	4,000
3-Nitroaniline	NA	---	NC	NA	0.5	0.006	0.5
4,6-Dinitro-2-methylphenol	NA	---	NC	4.900 c	0.2	0.012	4.9
4-Bromo phenyl phenyl ether	NA	---	NC	NA	0.1	0.007	0.1
4-Chloro-3-methylphenol	NA	---	NC	6,100.000 c	0.5	0.004	6100
4-Chloroaniline	32.000	Groundwater Cleanup Level	0.170	320.000	0.5	0.005	0.5
4-Chlorophenyl phenyl ether	NA	---	NC	NA	0.1	0.007	0.1
4-Methylphenol (p-cresol)	40.000	Groundwater Cleanup Level	NC	400.000	0.1	0.005	400
4-Nitrophenol	NA	---	NC	NA	0.5	0.005	0.5
Aniline	7.700	Groundwater Cleanup Level	NC	175.000	0.2	0.004	175
Azobenzene	0.800	Groundwater Cleanup Level	NC	9.090	0.1	0.002	9.1
Benzoic Acid	64000.000	Groundwater Cleanup Level	257	320000	0.2	0.013	257
Benzyl alcohol	2,400.000	Groundwater Cleanup Level	NC	24,000.000	0.1	0.005	24,000
Benzyl Butyl phthalate	1260.000	MTCA B Surface Water Non-Carc	351	16,000	0.1	0.004	351
bis (2-Ethylhexyl) adipate	400.000	Groundwater Cleanup Level	NC	833	0.1	0.007	833
bis (2-Ethylhexyl) phthalate	2.200	Marine Human Health Protection - 304	4.9	71.4	0.1	0.005	4.9
Bis(2-chloroethoxy)methane	NA	---	NC	180.000 c	0.1	0.004	180
Bis(2-chloroethyl)ether	0.530	Marine Human Health Protection - 304	0.003	0.990	0.2	0.005	0.2
Bis(2-chloroisopropyl)ether	41,985.305	MTCA B Surface Water Non-Carc	NC	3,200.000	0.1	0.018	3,200
Carbazole	4.400	Groundwater Cleanup Level	0.314	50	0.5	0.004	0.5
Dibenzofuran	32.000	Groundwater Cleanup Level	NC	160.000	0.1	0.003	160
Diethylphthalate	28,411.974	MTCA B Surface Water Non-Carc	160.244	64,000.000	0.1	0.004	160.2
Dimethylphthalate	72,016.461	MTCA B Surface Water Non-Carc	NC	80,000.000	0.1	0.005	80,000
Di-n-butylphthalate	2913.025	MTCA B Surface Water Non-Carc	103	8,000	0.1	0.004	103
Di-n-octyl phthalate	320.000	Groundwater Cleanup Level	532,000	1,600	0.1	0.004	1,600
Diphenylamine	2,160.494	MTCA B Surface Water Non-Carc	NC	2,000.000	0.5	0.003	2,000
Hexachlorobenzene	0.00029	Marine Human Health Protection - 304	0.0005	0.625	0.1	0.004	0.1
Hexachlorobutadiene	18.000	Marine Human Health Protection - 304	19.414	12.800	0.1	0.005	12.8
Hexachlorocyclopentadiene	1,100.000	Marine Human Health Protection - 304	4,406.516	480.000	0.1	0.008	480
Hexachloroethane	3.300	Marine Human Health Protection - 304	0.132	71.400	0.1	0.004	0.1
Isophorone	600.000	Marine Human Health Protection - NTR	2.962	1,050.000	0.1	0.002	3
Nitrobenzene	448.545	MTCA B Surface Water Non-Carc	2.862	40.000	0.2	0.004	2.9
N-Nitroso-di-n-propylamine	0.510	Marine Human Health Protection - 304	0.002	0.143	0.1	0.003	0.1
Pentachlorophenol	3.000	Marine Human Health Protection - 304	0.048	8.330	0.2	0.003	0.2
Phenol	1,100,000.000	MTCA B Surface Water Non-Carc	5,084.476	48,000.000	0.2	0.004	5084.5

Notes:

[1] Preliminary screening levels and target concentrations used in the 3-phase model were identified in Ecology's On-Line CLARC database (searched on 9/8/10)

[2] The minimum applicable surface water protection criteria were used in the 3-phase model if available. Otherwise, the target concentration was based on applicable minimum potable groundwater standards. Note, the target concentration used in the model was based on an established ARAR if it was less than the calculated MTCA B risk-based cleanup level adjusted to a 1E-05 cancer risk.

[3] Soil concentrations protective of groundwater as surface water were calculated using Ecology's fixed parameter three-phase partitioning model. Ecology default values were used in the modeling.

[4] The minimum cancer or non-cancer based MTCA B value was selected.

[5] The preliminary screening level is based on the minimum value between MTCA B and the groundwater as surface water protection value. The MRL was selected as the screening level if it was greater than the minimum screening level.

ARAR = Applicable or Relevant and Appropriate Requirements

CLARC = Cleanup Levels and Risk Calculation. The CLARC online database was searched on 9/8/10.

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MRL = Laboratroy Method Reporting Limit

MTCA = Model Toxics Control Act

NC = No cleanup level protective of groundwater was calculated using Ecology's 3-phase partitioning model due to lack of available chemical-specific data or an applicate target concentration.

NA = Not available

PAH = Polycyclic Aromatic Hydrocarbons

Groundwater Cleanup Level = Minimum value between applicable groundwater ARARs and MTCA B groundwater ingestion risk-based values.

MTCA B Surface Water - Carc. = MTCA B surface water cleanup level based on carcinogenic risk.

MTCA B Surface Water - Non-Carc. = MTCA B surface water cleanup level based on noncancer effects.

Marine Human Health Protection - 304 = EPA National Recommended Water Quality Criteria identified in CLARC for the consumption of organisms.

Marine Human Health Protection - NTR = EPA National Toxics Rule Criteria identified in CLARC for the consumption of organisms.

Table 6, Laboratory Preliminary Screening Levels (PSLs) for Soill Hydrocarbonsby NWTPH Methods					
Diesel range petroleum hydrocarbons by NWTPH-Dx					
Analyte	**MTCA Method A (mg/kg)**	**MTCA Method B (direct contact, mg/kg)**	**Soil MRL**	**Soil MDL**	**Preliminary Screening Level (mg/kg)**
			mg/kg	**mg/kg**	
Diesel (Fuel Oil)	2,000	NR	20	9.6	2,000
Heavy Oil	2,000	NR	50	16	2,000
Mineral Oil	4,000	NR	50	16	4,000
Gasoline range petroleum hydrocarbons by NWTPH-Gx					
Analyte	**MTCA Method A (mg/kg)**	**MTCA Method B (direct contact, mg/kg)**	**Soil MRL**	**MDL**	**Preliminary Screening Level (mg/kg)**
			mg/kg	**mg/kg**	
Gasoline	100	NR	5.0	0.405	100
Gasoline (benzene present)	30	NR	5	0.405	30

[1] Preliminary screening levels and target concentrations used in the 3-phase model were identified in Ecology's On-Line CLARC database (searched on 9/8/10)

[2] The minimum applicable surface water protection criteria were used in the 3-phase model if available. Otherwise, the target concentration was based on applicable minimum potable groundwater standards. Note, the target concentration used in the model was based on an established ARAR if it was less than the calculated MTCA B risk-based cleanup level adjusted to a 1E-05 cancer risk.

[3] Soil concentrations protective of groundwater as surface water were calculated using Ecology's fixed parameter three-phase partitioning model. Ecology default values were used in the modeling.

[4] The minimum cancer or non-cancer based MTCA B value was selected.

[5] The preliminary screening level is based on the minimum value between MTCA B and the groundwater as surface water protection value. The MRL was selected as the screening level if it was greater than the minimum screening level.

ARAR = Applicable or Relevant and Appropriate Requirements
CLARC = Cleanup Levels and Risk Calculation. The CLARC online database was searched on 9/8/10.
MDL = Laboratory Method Detection Limit
MRL = Laboratroy Method Reporting Limit
MTCA = Model Toxics Control Act
NC = No cleanup level protective of groundwater was calculated using Ecology's 3-phase partitioning model due to lack of available chemical-specific data or an applicate target concentration.
NA = Not available

Groundwater Cleanup Level = Minimum value between applicable groundwater ARARs and MTCA B groundwater ingestion risk-based values.
MTCA B Surface Water - Carc. = MTCA B surface water cleanup level based on carcinogenic risk.
MTCA B Surface Water - Non-Carc. = MTCA B surface water cleanup level based on noncancer effects.
Marine Human Health Protection - 304 = EPA National Recommended Water Quality Criteria identified in CLARC for the consumption of organisms.

Table 7, Laboratory Preliminary Screening Levels (PSLs) for Soil Polychlorinated biphenyls (PCBs) by EPA Method 8082							
Analyte	**Target Concentration used in the 3-Phase Model (µg/L)[1]**	**Basis for the selected 3-Phase Model Target Concentration[2]**	**MTCA Soil Levels Protective of Groundwater as Surface Water (3-phase model, mg/kg)[3]**	**MTCA Method B (direct contact, mg/kg)**	**Soil MRL** mg/kg	**MDL** mg/kg	**Preliminary Screening Level (mg/kg)[4]**
Aroclor 1016	0.006	MTCA B Surface Water Non-Carc.	NC	5.6	0.1	0.051	Total PCBs
Aroclor 1221	NA	---	NC	NA	0.1	0.043	Total PCBs
Aroclor 1232	NA	---	NC	NA	0.1	0.008	Total PCBs
Aroclor 1242	NA	---	NC	NA	0.1	0.067	Total PCBs
Aroclor 1248	NA	---	NC	NA	0.1	0.044	Total PCBs
Aroclor 1254	0.002	MTCA B Surface Water Non-Carc.	NC	1.6	0.1	0.088	Total PCBs
Aroclor 1260	0.03	Marine Chronic AWQC-NTR	NC	NR	0.1	0.051	Total PCBs
Total PCBs	0.000064	Marine Human Health Protection 304	NC	0.5/1 a	0.1	0.088	1

Notes:

[1] Preliminary screening levels and target concentrations used in the 3-phase model were identified in Ecology's On-Line CLARC database (searched on 9/8/10)

[2] The minimum applicable surface water protection criteria were used in the 3-phase model if available. Otherwise, the target concentration was based on applicable minimum potable groundwater standards. Note, the target concentration used in the model was based on an established ARAR if it was less than the calculated MTCA B risk-based cleanup level adjusted to a 1E-05 cancer risk.

[3] Soil concentrations protective of groundwater as surface water were calculated using Ecology's fixed parameter three-phase partitioning model. Ecology default values were used in the modeling.

[4] Selected cleanup standard is based on the federal criteria because it represents an acceptable risk less than $1x10^{-5}$, consistent with WAC 173-340-740(3)(b)(i).

a = MTCA direct contact cleanup level/federal Toxics Substance Control Act (TSCA; 40 CFR Part 761.61) cleanup standard for high occupancy areas.

ARAR = Applicable or Relevant and Appropriate Requirements
CLARC = Cleanup Levels and Risk Calculation. The CLARC online database was searched on 9/8/10.
MDL = Laboratory Method Detection Limit
MRL = Laboratroy Method Reporting Limit
MTCA = Model Toxics Control Act
NA = Not available

NC = No cleanup level protective of groundwater was calculated using Ecology's 3-phase partitioning model due to lack of available chemical-specific data or an applicate target concentration.

MTCA B Surface Water - Non-Carc. = MTCA B surface water cleanup level based on noncancer effects.
Marine Human Health Protection - 304 = EPA National Recommended Water Quality Criteria identified in CLARC for the consumption of organisms.
Marine Chronic AWQC-NTR = EPA National Toxics Rule Criteria identified in CLAR for the protection of aquatic organisms

Table 8, Laboratory Preliminary Screening Levels (PSLs) for Soil
Metals in soil by EPA Method 6020/200.8

Analyte	Target Concentration used in the 3-Phase Model (µg/L)[1]	Basis for the selected 3-Phase Model Target Concentration[2]	MTCA Soil Levels Protective of Groundwater as Surface Water (3-phase model, mg/kg)[3]	MTCA Method B (direct contact, mg/kg)[1,4]	90% Percentile Background	Soil MRL	MDL	Preliminary Screening Level (mg/kg)[5]
						mg/kg	mg/kg	
Antimony	640	Marine Human Health 304	578.56	32	NA	0.2	4.1	32
Arsenic	0.14	Marine Human Health Protection - 304	0.08	24/20 a	7.3	0.1	93.7	20
Beryllium	272.904	MTCA B Surface Water Non-Carc.	4312.982	160	0.61	0.2	21.4	160
Cadmium	8.8	Marine Chronic AWQC - 304	1.2	80	0.77	0.2	21.7	1.2
Chromium III	243055.556	MTCA B Surface Water Non-Carc.	4862083.333	120000	48	0.1	57.0	120,000
Chromium VI	50	Marine Chronic AWQC - 201A WAC	19.2	240	NA	1	1.0	19
Copper	2.4	Marine Chronic AWQC - NTR	1.066	3000	36.4	0.2	36.0	36
Lead	8.1	Marine Chronic AWQC - 201A WAC	1620.32	250 b	24	0.2	19.4	250
Mercury	0.025	Marine Chronic AWQC - 201A WAC	0.026	24	0.07	0.2	5.2	0.2
Nickel	8.2	Marine Chronic AWQC - 201A WAC	10.693	1600	47.8	0.1	37.9	47.8
Selenium	71	Marine Chronic AWQC - 201A WAC	7.384	400	RND	0.5	370.5	7.4
Silver	25925.926	MTCA B Surface Water - Non-Carc.	4407.407	400	RND	0.1	3.6	400
Thallium	0.47	Marine Human Health 304	0.669	5.6	RND	0.2	2.9	0.7
Zinc	81	Marine Chronic AWQC - 201A WAC	100.764	24000	85.1	0.4	114.2	100.8

Notes:

[1] Preliminary screening levels and target concentrations used in the 3-phase model were identified in Ecology's On-Line CLARC database (searched on 9/8/10)

[2] The minimum applicable surface water protection criteria were used in the 3-phase model if available. Otherwise, the target concentration was based on applicable minimum potable groundwater standards. Note, the target concentration used in the model was based on an established ARAR if it was less than the calculated MTCA B risk-based cleanup level adjusted to a 1E-05 cancer risk.

[3] Soil concentrations protective of groundwater as surface water were calculated using Ecology's fixed parameter three-phase partitioning model. Ecology default values were used in the modeling.

[4] The minimum cancer or non-cancer based MTCA B value was selected.

[5] The preliminary screening level is based on the minimum value between MTCA B and the groundwater as surface water protection value. The MRL was selected as the screening level if it was greater than the minimum screening

a = Arsenic level is based on direct contact based upon MTCA Method A parameter criteria.

b = Lead level is based upon MTCA Method A parameter criteria.

ARAR = Applicable or Relevant and Appropriate Requirements
CLARC = Cleanup Levels and Risk Calculation. The CLARC online database was searched on 9/8/10.
MDL = Laboratory Method Detection Limit
MRL = Laboratroy Method Reporting Limit
MTCA = Model Toxics Control Act
NC = No cleanup level protective of groundwater was calculated using Ecology's 3-phase partitioning model due to lack of available chemical-specific data or an applicate target concentration.
NA = Not available

Groundwater Cleanup Level = Minimum value between applicable groundwater ARARs and MTCA B groundwater ingestion risk-based values.
MTCA B Surface Water - Carc. = MTCA B surface water cleanup level based on carcinogenic risk.
MTCA B Surface Water - Non-Carc. = MTCA B surface water cleanup level based on noncancer effects.
Marine Human Health Protection - 304 = EPA National Recommended Water Quality Criteria identified in CLARC for the consumption of organisms.

Table 9, Laboratory Preliminary Screening Levels (PSLs) for Soil
Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270

Analyte	Target Concentration used in the 3-Phase Model (µg/L)[1]	Basis for the selected 3-Phase Model Target Concentration[2]	MTCA Soil Levels Protective of Groundwater as Surface Water (3-phase model, mg/kg)[3]	MTCA Method B (direct contact, mg/kg)[1,4]	Soil MRL	SOIL MDL	Preliminary Screening Level (mg/kg)[5]
					mg/kg	mg/kg	
Acenaphthene	642.792	MTCA B Surface Water Non-Carc	65.546	4,800.000	0.1	0.006	65.5
Acenaphthylene	NA	---	NC	NR	0.1	0.004	0.1
Anthracene	25925.926	MTCA B Surface Water Non-Carc	12285.379	24000	0.1	0.007	12285.4
Benzo(a)anthracene	0.018	Marine Human Health Protection - 304	0.129	TEQ	0.08	0.007	TEQ
benzo(a)pyrene	0.018	Marine Human Health Protection - 304	0.349	0.14	0.08	0.004	0.14
benzo(b)fluoranthene	0.018	Marine Human Health Protection - 304	0.443	TEQ	0.08	0.005	TEQ
Benzo(g,h,i)perylene	NA	---	NC	NR	0.08	0.004	0.08
benzo(k)fluoranthene	0.018	Marine Human Health Protection - 304	0.443	TEQ	0.08	0.006	TEQ
Chrysene	0.018	Marine Human Health Protection - 304	0.143	TEQ	0.08	0.003	TEQ
Dibenzo(a,h)anthracene	0.018	Marine Human Health Protection - 304	0.644	TEQ	0.08	0.003	TEQ
Fluoranthene	90.177	MTCA B Surface Water Non-Carc	88.9	3,200	0.1	0.005	88.9
Fluorene	3,456.790	MTCA B Surface Water Non-Carc	546.672	3,200	0.1	0.004	546.7
Indeno(1,2,3-cd)pyrene	0.018	Marine Human Health Protection - 304	1.25	TEQ	0.08	0.004	TEQ
Naphthalene	4,938.272	MTCA B Surface Water Non-Carc	137.552	1,600.000	0.1	0.004	138
Phenanthrene	NA	---	NC	NR	0.1	0.004	0.1
Pyrene	2592.593	MTCA B Surface Water Non-Carc	3,540	2,400	0.1	0.002	2,400

Notes:

[1] Preliminary screening levels and target concentrations used in the 3-phase model were identified in Ecology's On-Line CLARC database (searched on 9/8/10)

[2] The minimum applicable surface water protection criteria were used in the 3-phase model if available. Otherwise, the target concentration was based on applicable minimum potable groundwater standards. Note, the target concentration used in the model was based on an established ARAR if it was less than the calculated MTCA B risk-based cleanup level adjusted to a 1E-05 cancer risk.

[3] Soil concentrations protective of groundwater as surface water were calculated using Ecology's fixed parameter three-phase partitioning model. Ecology default values were used in the modeling.

[4] The minimum cancer or non-cancer based MTCA B value was selected. The cleanup level for carcinogenic PAHs will be based upon toxicity equivalency criteria as compared to benzo(a)pyrene per WAC 173-340-708.

[5] The preliminary screening level is based on the minimum value between MTCA B and the groundwater as surface water protection value. The MRL was selected as the screening level if it was greater than the minimum screening level.

ARAR = Applicable or Relevant and Appropriate Requirements

CLARC = Cleanup Levels and Risk Calculation. The CLARC online database was searched on 9/8/10.

MDL = Laboratory Method Detection Limit

MRL = Laboratroy Method Reporting Limit

MTCA = Model Toxics Control Act

NA = Not available

NC = No cleanup level protective of groundwater was calculated using Ecology's 3-phase partitioning model due to lack of available chemical-specific data or an applicate target concentration.

PAH = Polycyclic Aromatic Hydrocarbons

TEQ - Toxicity Equivalents

MTCA B Surface Water - Non-Carc. = MTCA B surface water cleanup level based on noncancer effects.

Marine Human Health Protection - 304 = EPA National Recommended Water Quality Criteria identified in CLARC for the consumption of organisms.

Table 10, Preliminary Screening Levels for Water

Volatile Organic Compounds by EPA 8260

Analyte	Applicable Surafce Water ARAR (µg/L)[1]	Basis for Surface Water ARAR	Surface Water, MTCA Method B Standard Formula (µg/L)	MTCA B Groundwater (if surface water standards are absent only (µg/L)[2]	Water MRL µg/L	Water MDL µg/L	Preliminary Screening Level (µg/L)[3]
Dichlorodifluoromethane (CFC-12)	NA	NAA	NA	1,600.000	1.0	0.833	1,600.0
Chloromethane	132.953	MTCA Method B Surface Water - Carc.	132.953	NA	1.0	0.816	133.0
Vinyl chloride	2.400	Marine Human Health Protection - 304	3.690	NA	0.2	0.670	2.4
Bromomethane	967.901	MTCA Method B Surface Water - Non Carc.	967.901	NA	1.0	0.550	967.9
Chloroethane	NA	NAA	NA	15.100	1.0	0.101	15.1
Trichlorofluoromethane (CFC-11)	NA	NAA	NA	2,400.000	1.0	0.209	2,400.0
1,1-Dichloroethene	3.200	Marine Human Health Protection - NTR	23,100.000	NA	1.0	0.130	3.2
Methylene chloride	590.000	Marine Human Health Protection - 304	960.000	NA	1.0	0.015	590.0
trans-1,2-Dichloroethene	10,000.000	Marine Human Health Protection - 304	32,800.000	NA	1.0	0.113	10,000.0
1,1-Dichloroethane	NA	NAA	NA	1,600.000	1.0	0.120	1,600.0
2,2-Dichloropropane	NA	NAA	NA	NA	2.0	0.255	2.0
cis-1,2-Dichloroethene	NA	NAA	NA	70.000	1.0	0.294	70.0 d
Chloroform	470.00*	Marine Human Health Protection - 304	283.343	NA	1.0	1.106	470.0 c
1,1-Dichloropropene	NA	NAA	NA	NA	1.0	1.896	1.0
Carbon tetrachloride	1.600	Marine Human Health Protection - 304	2.660	NA	1.0	1.896	1.6
1,1,1-Trichloroethane (TCA)	926,000.000	MTCA Method B Surface Water Non-Carc.	926,000.000	NA	1.0	0.080	926,000.0
Benzene	51.000	Marine Human Health Protection - 304	22.663	NA	1.0	0.125	51.0 c
1,2-Dichloroethane (EDC)	37.000	Marine Human Health Protection - 304	59.400	NA	1.0	0.084	37.0
Trichloroethene (TCE)	30.000	Marine Human Health Protection - 304	6.700	NA	1.0	0.172	30.0 c
1,2-Dichloropropane	15.000	Marine Human Health Protection - 304	23.200	NA	1.0	0.073	15.0
Dibromomethane	NA	NAA	NA	80.000	1.0	0.134	80.0
Bromodichloromethane	17.000	Marine Human Health Protection - 304	27.900	NA	1.0	0.137	17.0
cis-1,3-Dichloropropene a	21.000	Marine Human Health Protection - 304	18.852	NA	1.0	0.095	21.0
Toluene	15,000.000	Marine Human Health Protection - 304	18,900.000	NA	1.0	0.415	15,000.0
Trans-1,3-Dichloropropene a	21.000	Marine Human Health Protection - 304	18.852	NA	1.0	0.059	21.0
1,1,2-Trichloroethane	16.000	Marine Human Health Protection - 304	25.300	NA	1.0	0.154	16.0
Tetrachloroethene (PCE)	3.3*	Marine Human Health Protection - 304	0.387	NA	1.0	0.140	0.4
1,3-Dichloropropane	NA	NAA	NA	NA	1.0	0.072	1.0
Dibromochloromethane	13.000	Marine Human Health Protection - 304	20.600	NA	1.0	0.119	13.0
1,2-Dibromoethane (EDB)	NA	NAA	NA	0.050	0.01	0.010	0.05 e
Chlorobenzene	1,600.000	Marine Human Health Protection - 304	5,030.000	NA	1.0	0.112	1,600.0
1,1,1,2-Tetrachloroethane	NA	NAA	NA	1.680	1.0	0.122	1.7
Ethylbenzene	2,100.000	Marine Human Health Protection - 304	6,910.000	NA	1.0	0.170	2,100.0
m,p Xylenes	NA	NAA	NA	16,000.000	1.0	0.162	16,000.0
o Xylene	NA	NAA	NA	16,000.000	1.0	0.167	16,000.0
Total Xylenes b	NA	NAA	NA	1,600.000	1.0	0.162	1,600.0
Styrenes	NA	NAA	NA	1.460	1.0	0.126	1.5
Bromoform	140.000	Marine Human Health Protection - 304	219.000	NA	1.0	0.432	140.0
Isopropylbenzene	NA	NAA	NA	800.000	2.0	0.169	800.0
1,2,3-Trichloropropane	NA	NAA	NA	0.006	1.0	0.225	1.0
Bromobenzene	NA	NAA	NA	NA	1.0	0.104	1.0
1,1,2,2-Tetrachloroethane	4.000	Marine Human Health Protection - 304	6.480	NA	1.0	0.162	4.0
n-Propylbenzene	NA	NAA	NA	NR	1.0	0.162	1.0
2-Chlorotoluene	NA	NAA	NA	160.000	1.0	0.209	160.0
4-Chlorotoluene	NA	NAA	NA	NA	1.0	0.166	1.0
1,3,5-Trimethylbenzene	NA	NAA	NA	400.000	1.0	0.199	400.0
tert-Butylbenzene	NA	NAA	NA	NR	1.0	0.173	1.0
1,2,4-Trimethylbenzene	NA	NAA	NA	400.000	1.0	0.194	400.0
sec-Butylbenzene	NA	NAA	NA	NR	1.0	0.194	1.0
1,3-Dichlorobenzene	960.000	Marine Human Health Protection - 304	NA	NA	1.0	0.121	960.0
4-Isopropyltoluene	NA	NAA	NA	NA	1.0	0.179	1.0
1,4-Dichlorobenzene	4.857	MTCA Method B Surface Water Carc.	4.857	NA	1.0	0.121	4.9
1,2-Dichlorobenzene	1,300.000	Marine Human Health Protection - 304	4,200.000	NA	1.0	0.142	1,300.0
n-Butylbenzene	NA	NAA	NA	NR	1.0	0.210	1.0
1,2-Dibromo-3-Chloropropane	NA	NAA	NA	0.200	1.0	0.085	1.0 e
1,2,4-Trichlorobenzene	70.000	Marine Human Health Protection - 304	227.000	NA	2.0	0.198	70.0
Hexachloro-1,3-butadiene	18.000	Marine Human Health Protection - 304	29.900	NA	4.0	0.130	18.0
Naphthalene	4,938.272	MTCA Method B Surface Water - Non-Carc.	4,938.272	NA	4.0	0.160	4,938.0
1,2,3-Trichlorobenzene	NA	NAA	NA	NA	4.0	0.105	4.0

NOTES:

1 = Preliminary screening levels and target concentrations used in the 3-phase model were identified in Ecology's On-Line CLARC database (searched on 9/8/10)

2 = The minimum between carcingoen or non-carcinogen number was selected

3 = The preliminary screening level is based upon protection of surface water. The minimum between the surface water ARARs for marine surface water and surface water method B value was selected. If no value was presented in CLARC for these parameters, then the minimum between MTCA Method A and B was selected.

a = 1,3-Dichloropropene was used as a surrogate.

b = Total xylenes was used as a surrogate.

c = Value based upon Surface Water ARAR - Human Health – Marine – Clean Water Act §304 (µg/L) per Federal ARAR because it is considered sufficiently protective of human health for carcinogens as described in WAC 173-340-730(3)

d =Value based upon Federal Maximum Contaminant Drinking Water Levels or Goals ARAR

e = Value selected because the MTCA B value, when adjusted to 1e-05 risk is less than the MCL; the MCL was selected

ARAR = Applicable or Relevant and Appropriate Requirements

CLARC = Cleanup Levels and Risk Calculation. The CLARC online database was searched on 9/8/10.

MDL = Laboratory Method Detection Limit

MRL = Laboratroy Method Reporting Limit

MTCA = Model Toxics Control Act

NAA = No applicable surface water ARAR for this parameter was reported in the CLARC database research

NA = Not applicable due to other ARAR taking precedent

MTCA B Surface Water - Carc. = MTCA B surface water cleanup level based on carcinogenic risk.

MTCA B Surface Water - Non-Carc. = MTCA B surface water cleanup level based on noncancer effects.

Marine Human Health Protection - 304 = EPA National Recommended Water Quality Criteria identified in CLARC for the consumption of organisms.

Table 11, Preliminary Screening Levels for PSLs for Water Tributyl Tin Ion by EPA Method SW-846-820D								
Analyte	**Applicable Surafce Water ARAR (µg/L)[1]**	**Reference for Surface Water ARAR**	**Surface Water, MTCA Method B Standard Formula (µg/L)**	**MTCA A Groundwater (if surface water standards are absent only)**	**MTCA B Groundwater (if surface water standards are absent only (µg/L))[2]**	**Water MRL µg/L**	**Water MDL µg/L**	**Preliminary Screening Level (µg/L)[3]**
Tributyl Tin Ion (as TBT Ion)	0.010	Marine Chronic AWQC - 304	NR	NA	NA	0.2	0.103	0.2

NOTES:

1 = Preliminary screening levels and target concentrations used in the 3-phase model were identified in Ecology's On-Line CLARC database (searched on 9/8/10)

2 = The minimum between carcingoen or non-carcinogen number was selected

3 = The preliminary screening level is based upon protection of surface water. The minimum between the surface water ARARs for marine surface water and surface water method B value was selected. If no value was presented in CLARC for these parameters, then the minimum between MTCA Method A and B was selected.

ARAR = Applicable or Relevant and Appropriate Requirements

CLARC = Cleanup Levels and Risk Calculation. The CLARC online database was searched on 9/8/10.

MDL = Laboratory Method Detection Limit

MRL = Laboratroy Method Reporting Limit

MTCA = Model Toxics Control Act

NAA = No applicable surface water ARAR for this parameter was reported in the CLARC database research

NA = Not applicable due to other ARAR taking precedent

NR = Data was not researched in this database

MTCA B Surface Water - Carc. = MTCA B surface water cleanup level based on carcinogenic risk.

MTCA B Surface Water - Non-Carc. = MTCA B surface water cleanup level based on noncancer effects.

Marine Chronic AWQC - 304 = EPA National Recommended Water Quality Criteria identified in CLARC for the consumption of organisms.

Table 12, Preliminary Screening Levels for PSLs for Water
Semi-volatile organic compounds by EPA Method 8270

Analyte	Applicable Surafce Water ARAR (µg/L)[1]	Reference for Surface Water ARAR	Surface Water, MTCA Method B Standard Formula (µg/L)	MTCA B Groundwater (if surface water standards are absent only (µg/L))[2]	Water MRL	Water MDL	Preliminary Screening Level (µg/L)[3]
					µg/L	µg/L	
1,2,4-Trichlorobenzene	70.000	Marine Human Health Protection - 304	227.420	80.000	1.0	0.021	70.0
1,2-Dichlorobenzene	1,300.000	Marine Human Health Protection - 304	4,200.000	NA	1.0	0.014	1,300.0
1,2-Dinitrobenzene	6.400	Groundwater Cleanup Level	NA	6.400	1.0	0.021	6.4
1,3-Dichlorobenzene	960.000	Marine Human Health Protection - 304	NA	NA	1.0	0.014	960.0
1,3-Dinitrobenzene	1.600	Groundwater Cleanup Level	NA	1.600	5.0	0.035	5.0
1,4-Dichlorobenzene	4.857	MTCA B Surface Water Carc.	4.857	NA	1.0	4.9	4.9
1,4-Dinitrobenzene	6.400	Groundwater Cleanup Level	NA	6.400	5.0	0.038	6.4
1-Methylnaphthalene	NA	NAA	NA	NR	0.5	0.019	0.5
2,3,4,6-Tetrachlorophenol	480.000	Groundwater Cleanup Level	NA	480.000	1.0	0.020	480.0
2,3,5,6-Tetrachlorophenol	NA	NAA	NA	NA	1.0	0.025	1.0
2,4,5-Trichlorophenol	3,600.000	Marine Human Health Protection - 304	NA	NA	2.0	0.045	3,600.0
2,4,6-Trichlorophenol	2.400	Marine Human Health Protection - 304	3.930	NA	2.0	0.041	2.4
2,4-Dichlorophenol	191.100	MTCA B Surface Water Non-Carc	191.100	NA	2.0	0.016	191.1
2,4-Dimethylphenol	552.792	MTCA B Surface Water Non-Carc	552.792	NA	1.0	0.014	552.8
2,4-Dinitrophenol	3,456.790	MTCA B Surface Water Non-Carc	3,456.790	NA	2.0	0.036	3,456.8
2,4-Dinitrotoluene	3.400	Marine Human Health Protection - 304	1,360.000	NA	1.0	0.020	3.4
2,6-Dinitrotoluene	16.000	Groundwater Cleanup Level	NA	16.000	1.0	0.018	16.0
2-Chloronaphthalene	1,026.769	MTCA B Surface Water Non-Carc	1,026.769	NA	1.0	0.016	1,026.8
2-Chlorophenol	96.739	MTCA B Surface Water Non-Carc	96.739	NA	1.0	0.018	96.7
2-Methylnaphthalene	32.000	Groundwater Cleanup Level	NA	32.000	0.5	0.023	32.0
2-Methylphenol (o-cresol)	400.000	Groundwater Cleanup Level	NA	400.000	1.0	0.020	400.0
2-Nitroaniline	NA	NAA	NA	NR	5.0	0.016	5.0
2-Nitrophenol	NA	NAA	NA	NA	2.0	0.024	2.0
3-Methylphenol (m-cresol)	400.000	Groundwater Cleanup Level	NA	400.000	1.0	0.019	400.0
3-Nitroaniline	NA	NAA	NA	NA	5.0	0.025	5.0
4,6-Dinitro-2-methylphenol	NA	NAA	NA	NA	2.0	0.046	2.0
4-Bromo phenyl phenyl ether	NA	NAA	NA	NA	1.0	0.028	1.0
4-Chloro-3-methylphenol	NA	NAA	NA	NA	5.0	0.015	5.0
4-Chloroaniline	32.000	Groundwater Cleanup Level	NA	32.000	5.0	0.019	32.0
4-Chlorophenyl phenyl ether	NA	NAA	NA	NA	1.0	0.026	1.0
4-Methylphenol (p-cresol)	40.000	Groundwater Cleanup Level	NA	40.000	1.0	0.019	40.0
4-Nitrophenol	NA	NAA	NA	NA	5.0	0.019	5.0
Aniline	7.700	Groundwater Cleanup Level	NA	7.680	2.0	0.014	7.7
Azobenzene	0.800	Groundwater Cleanup Level	NA	0.795	1.0	0.010	1.0
Benzoic Acid	64,000.000	Groundwater Cleanup Level	NA	64,000.000	2	0.05	64,000.0
Benzyl alcohol	2,400.000	Groundwater Cleanup Level	NA	2,400.000	1.0	0.021	2,400.0
Benzyl Butyl phthalate	1,260.000	MTCA B Surface Water Non-Carc	1,260.000	NA	1	0.016	1,260.0
bis (2-Ethylhexyl) adipate	400.000	Groundwater Cleanup Level	NA	72.900	1	0.028	400.0
bis (2-Ethylhexyl) phthalate	2.200	Marine Human Health Protection - 304	3.560	NA	1	0.02	2.2
Bis(2-chloroethoxy)methane	NA	NAA	NA	NA	1.0	0.018	1.0
Bis(2-chloroethyl)ether	0.530	Marine Human Health Protection - 304	0.854	NA	2.0	0.021	2.0
Bis(2-chloroisopropyl)ether	41,985.305	MTCA B Surface Water Non-Carc	41,985.305	NA	1.0	0.072	41,985.3
Carbazole	4.400	Groundwater Cleanup Level	NA	4.380	5	0.015	5.0
Dibenzofuran	32.000	Groundwater Cleanup Level	NA	32.000	1.0	0.014	32.0
Diethylphthalate	28,411.974	MTCA B Surface Water Non-Carc	28,411.974	NA	1.0	0.016	28,412.0
Dimethylphthalate	72,016.461	MTCA B Surface Water Non-Carc	72,016.461	NA	1.0	0.021	72,016.5
Di-n-butylphthalate	2,913.025	MTCA B Surface Water Non-Carc	2,913.025	NA	1	0.015	2,913.0
Di-n-octyl phthalate	320.000	Groundwater Cleanup Level	NA	320.000	0.1	0.014	320.0
Diphenylamine	2,160.494	MTCA B Surface Water Non-Carc	2,160.494	NA	5.0	0.012	2,160.5
Hexachlorobutadiene	18	Marine Human Health Protection - 304	29.891	NA	4.0	18.0	18.0
Hexachlorocyclopentadiene	1100	Marine Human Health Protection - 304	3,580.000	NA	1.0	0.031	1,100.0
Hexachloroethane	3.300	Marine Human Health Protection - 304	5.330	NA	1.0	0.016	3.3
Isophorone	600.000	Marine Human Health Protection - NTR	1,560.000	NA	1.0	0.010	600.0
Nitrobenzene	448.545	MTCA B Surface Water Non-Carc	448.545	NA	2.0	0.018	448.5
N-Nitroso-di-n-propylamine	0.510	Marine Human Health Protection - 304	0.819	NA	1.0	0.012	1.0
Pentachlorophenol	3.000	Marine Human Health Protection - 304	4.910	NA	2.0	0.013	3.0
Phenol	1,100,000.000	MTCA B Surface Water Non-Carc	1,110,000.000	NA	2.0	0.017	1,110,000.0

NOTES:

1 = Preliminary screening levels and target concentrations used in the 3-phase model were identified in Ecology's On-Line CLARC database (searched on 9/8/10)

2 = The minimum between carcingoen or non-carcinogen number was selected

3 = The preliminary screening level is based upon protection of surface water. The minimum between the surface water ARARs for marine surface water and surface water method B value was selected. If no value was presented in CLARC for these parameters, then the minimum between MTCA Method A and B was selected.

ARAR = Applicable or Relevant and Appropriate Requirements
CLARC = Cleanup Levels and Risk Calculation. The CLARC online database was searched on 9/8/10.
MDL = Laboratory Method Detection Limit
MRL = Laboratroy Method Reporting Limit
MTCA = Model Toxics Control Act
NAA = No applicable surface water ARAR for this parameter was reported in the CLARC database research
NA = Not applicable due to other ARAR taking precedent

MTCA B Surface Water - Carc. = MTCA B surface water cleanup level based on carcinogenic risk.
MTCA B Surface Water - Non-Carc. = MTCA B surface water cleanup level based on noncancer effects.
Marine Human Health Protection - 304 = EPA National Recommended Water Quality Criteria identified in CLARC for the consumption of organisms.
Groundwater Cleanup Level = Minimum value between applicable groundwater ARARs and MTCA B groundwater ingestion risk-based values.

Table13, Preliminary Screening Levels for Water Hydrocarbons by NWTPH Methods								
Diesel range petroleum hydrocarbons by NWTPH-Dx								
Analyte	**Applicable Surafce Water ARAR (µg/L)[1]**	**Source for calculation**	**Surface Water, MTCA Method B Standard Formula (µg/L)**	**MTCA A Groundwater (if surface water standards are absent only (µg/L))**	**MTCA B Groundwater (if surface water standards are absent only (µg/L))[2]**	**Water MRL**	**Water MDL**	**Preliminary Screening Level (µg/L)[3]**
						µg/L	**µg/L**	
Diesel (Fuel Oil)	NA	NAA	NA	500	NA	50	38.4	500
Heavy Oil	NA	NAA	NA	500	NA	100	64	500
Mineral Oil	NA	NAA	NA	500	NA	100	64	500
Gasoline range petroleum hydrocarbons by NWTPH-Gx								
Analyte	**Applicable Surafce Water ARAR (µg/L)[1]**	**Source for calculation**	**Surface Water, MTCA Method B Standard Formula (µg/L)**	**MTCA A Groundwater (if surface water standards are absent only (µg/L))**	**MTCA B Groundwater (if surface water standards are absent only (µg/L))**	**Water MRL**	**Water MDL**	**Preliminary Screening Level (µg/L)**
						µg/L	**µg/L**	
Gasoline	NA	NAA	NA	1000	NA	50	8.1	1000
Gasoline (benzene present)	NA	NAA	NA	800	NA	50	8.1	800

1 = Preliminary screening levels and target concentrations used in the 3-phase model were identified in Ecology's On-Line CLARC database (searched on 9/8/10)
2 = The minimum between carcingoen or non-carcinogen number was selected
3 = The preliminary screening level is based upon protection of surface water. The minimum between the surface water ARARs for marine surface water and surface water method B value was selected. If no value was presented in CLARC for these parameters, then the minimum between MTCA Method A and B was selected.

ARAR = Applicable or Relevant and Appropriate Requirements
CLARC = Cleanup Levels and Risk Calculation. The CLARC online database was searched on 9/8/10.
MDL = Laboratory Method Detection Limit
MRL = Laboratroy Method Reporting Limit
MTCA = Model Toxics Control Act
NAA = No applicable surface water ARAR for this parameter was reported in the CLARC database research
NA = Not applicable due to other ARAR taking precedent

MTCA B Surface Water - Carc. = MTCA B surface water cleanup level based on carcinogenic risk.
MTCA B Surface Water - Non-Carc. = MTCA B surface water cleanup level based on noncancer effects.
Marine Human Health Protection - 304 = EPA National Recommended Water Quality Criteria identified in CLARC for the consumption of organisms.

Table 14, Preliminary Screening Levels for Water Polychlorinated biphenyls (PCBs) by EPA Method 8082							
Analyte	**Applicable Surafce Water ARAR (µg/L)[1]**	**Source for calculation**	**Surface Water, MTCA Method B Standard Formula (µg/L)**	**MTCA B Groundwater (if surface water standards are absent only (µg/L))[2]**	**Water MRL**	**Water MDL**	**Preliminary Screening Level (µg/L)[3]**
					µg/L	**µg/L**	
Aroclor 1016	0.006	MTCA B Surface Water Non-Carc.	0.00582	NA	0.1	0.051	0.1
Aroclor 1221	NA	NAA	NA	NA	0.1	0.043	0.1
Aroclor 1232	NA	NAA	NA	NA	0.1	0.008	0.1
Aroclor 1242	NA	NAA	NA	NA	0.1	0.067	0.1
Aroclor 1248	NA	NAA	NA	NA	0.1	0.044	0.1
Aroclor 1254	0.002	MTCA B Surface Water Non-Carc.	0.00166	NA	0.1	0.088	0.1
Aroclor 1260	0.03	Marine Chronic AWQC-NTR	NR	NA	0.1	0.051	0.1
Total PCBs	0.000064	Marine Human Health Protection 304	0.000105	NA	0.1	0.088	0.1

1 = Preliminary screening levels and target concentrations used in the 3-phase model were identified in Ecology's On-Line CLARC database (searched on 9/8/10)
2 = The minimum between carcingoen or non-carcinogen number was selected
3 = The preliminary screening level is based upon protection of surface water. The minimum between the surface water ARARs for marine surface water and surface water method B value was selected. If no value was presented in CLARC for these parameters, then the minimum between MTCA Method A and B was selected.

ARAR = Applicable or Relevant and Appropriate Requirements
CLARC = Cleanup Levels and Risk Calculation. The CLARC online database was searched on 9/8/10.
MDL = Laboratory Method Detection Limit
MRL = Laboratroy Method Reporting Limit
MTCA = Model Toxics Control Act
NAA = No applicable surface water ARAR for this parameter was reported in the CLARC database research
NA = Not applicable due to other ARAR taking precedent
NR = Data was not researched in this database

MTCA B Surface Water - Carc. = MTCA B surface water cleanup level based on carcinogenic risk.
MTCA B Surface Water - Non-Carc. = MTCA B surface water cleanup level based on noncancer effects.
Marine Human Health Protection - 304 = EPA National Recommended Water Quality Criteria identified in CLARC for the consumption of organisms.
Marine Chronic AWQC-NTR = EPA Water Quality Criteria based upon chronic toxicity of marine organisms

Table 15, Preliminary Screening Levels for Water Metals in water by EPA Method 6020/200.8							
Analyte	**Applicable Surafce Water ARAR (µg/L)[1]**	**Source for calculation**	**Surface Water, MTCA Method B Standard Formula (µg/L)**	**MTCA B Groundwater (if surface water standards are absent only (µg/L))[2]**	**Water MRL µg/L**	**Water MDL µg/L**	**Preliminary Screening Level (µg/L)[3]**
Antimony	640.000	Marine Human Health 304	1,040.000	NA	0.2	0.008	640.00
Arsenic	0.140	Marine Human Health Protection - 304	0.098	0.058	1.0	0.187	5*
Beryllium	272.904	MTCA B Surface Water Non-Carc.	272.904	NA	0.2	0.043	273.00
Cadmium	8.800	Marine Chronic AWQC - 304	20.300	NA	0.2	0.043	8.80
Chromium III	243,055.556	MTCA B Surface Water Non-Carc.	243,055.556	NA	0.5	0.114	243,055.00
Chromium VI**	50.000	Marine Chronic AWQC - 201A WAC	486.000	NA	0.5	0.200	50.00
Copper	2.400	Marine Chronic AWQC - NTR	2,660.000	NA	0.5	0.072	2.40
Lead	8.100	Marine Chronic AWQC - 201A WAC	NR	NA	1.0	0.039	8.10
Mercury	0.025	Marine Chronic AWQC - 201A WAC	NR	NA	0.3	0.010	0.30
Nickel	8.200	Marine Chronic AWQC - 201A WAC	1,100.000	NA	0.5	0.076	8.20
Selenium	71.000	Marine Chronic AWQC - 201A WAC	2,700.000	NA	1.0	0.741	71.00
Silver	25,925.926	MTCA B Surface Water - Non-Carc.	25,925.926	NA	0.2	0.007	25,926.00
Thallium	0.470	Marine Human Health 304	1.560	NA	0.2	0.006	0.50
Zinc	81.000	Marine Chronic AWQC - 201A WAC	16,500.000	NA	1.5	0.228	81.00

NOTES:

1 = Preliminary screening levels and target concentrations used in the 3-phase model were identified in Ecology's On-Line CLARC database (searched on 9/8/10)

2 = The minimum between carcingoen or non-carcinogen number was selected

3 = The preliminary screening level is based upon protection of surface water. The minimum between the surface water ARARs for marine surface water and surface water method B value was selected. If no value was presented in CLARC for these parameters, then the minimum between MTCA Method A and B was selected.

*Arsenic value is based upon background concentrations of this metal in groundwater per MTCA, WAC 173-340-900; Table 720-1

** Chromium VI in water is analyzed by EPA Method 7196

ARAR = Applicable or Relevant and Appropriate Requirements
CLARC = Cleanup Levels and Risk Calculation. The CLARC online database was searched on 9/8/10.
MDL = Laboratory Method Detection Limit
MRL = Laboratroy Method Reporting Limit
MTCA = Model Toxics Control Act
NAA = No applicable surface water ARAR for this parameter was reported in the CLARC database research
NA = Not applicable due to other ARAR taking precedent

MTCA B Surface Water - Carc. = MTCA B surface water cleanup level based on carcinogenic risk.
MTCA B Surface Water - Non-Carc. = MTCA B surface water cleanup level based on noncancer effects.
Marine Human Health Protection - 304 = EPA National Recommended Water Quality Criteria identified in CLARC for the consumption of organisms.
Marine Chronic AWQC-201A = State Water Quality Criteria based upon chronic toxicity of marine organisms
Marine Chronic AWQC-NTR = EPA Water Quality Criteria based upon chronic toxicity of marine organisms

Table 16, Preliminary Screening Levels for PSLs for Water Polycyclic Aromatic Hydrocarbon (PAH) compounds by EPA Method 8270							
Analyte	**Applicable Surafce Water ARAR (µg/L)[1]**	**Reference for Surface Water ARAR**	**Surface Water, MTCA Method B Standard Formula (µg/L)**	**MTCA B Groundwater (if surface water standards are absent only (µg/L))[2]**	**Water MRL**	**Water MDL**	**Preliminary Screening Level (µg/L)[3]**
					µg/L	**µg/L**	
Acenaphthene	642.792	MTCA B Surface Water Non-Carc	642.792	NA	0.5	0.024	642.8
Acenaphthylene	NA	NAA	NR	NR	0.5	0.017	0.5
Anthracene	25,925.926	MTCA B Surface Water Non-Carc	25,925.926	NA	0.5	0.026	25,925.9
Benzo [a] anthracene	0.018	Marine Human Health Protection - 304	NR	NA	0.1	0.027	0.1
benzo [a] pyrene	0.018	Marine Human Health Protection - 304	0.030	NA	0.1	0.016	0.1
benzo [b] fluoranthene	0.018	Marine Human Health Protection - 304	NR	NA	0.1	0.021	0.1
Benzo [g,h,i] perylene	NA	NAA	NR	NA	0.5	0.015	0.5
benzo [k] fluoranthene	0.018	Marine Human Health Protection - 304	NR	NA	0.1	0.026	0.1
Chrysene	0.018	Marine Human Health Protection - 304	NR	NA	0.1	0.013	0.1
Dibenzo [a,h] anthracene	0.018	Marine Human Health Protection - 304	NR	NA	0.1	0.013	0.1
Fluoranthene	90.177	MTCA B Surface Water Non-Carc	90.177	NA	0.5	0.022	90.2
Fluorene	3,456.790	MTCA B Surface Water Non-Carc	3,456.790	NA	0.5	0.016	3,456.8
Indeno [1,2,3-cd] pyrene	0.018	Marine Human Health Protection - 304	NR	NA	0.1	0.015	0.1
Naphthalene	4938.272	MTCA B Surface Water Non-Carc	4938.271605	NA	0.1	0.004	4,938.0
Phenanthrene	NA	NAA	NR	NR	0.5	0.016	0.5
Pyrene	2,592.593	MTCA B Surface Water Non-Carc	2,592.593	NA	0.5	0.006	2,592.6

NOTES:

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2 = The minimum between carcingoen or non-carcinogen number was selected

3 = The preliminary screening level is based upon protection of surface water. The minimum between the surface water ARARs for marine surface water and surface water method B value was selected. If no value was presented in CLARC for these parameters, then the minimum between MTCA Method A and B was selected.

ARAR = Applicable or Relevant and Appropriate Requirements
CLARC = Cleanup Levels and Risk Calculation. The CLARC online database was searched on 9/8/10.
MDL = Laboratory Method Detection Limit
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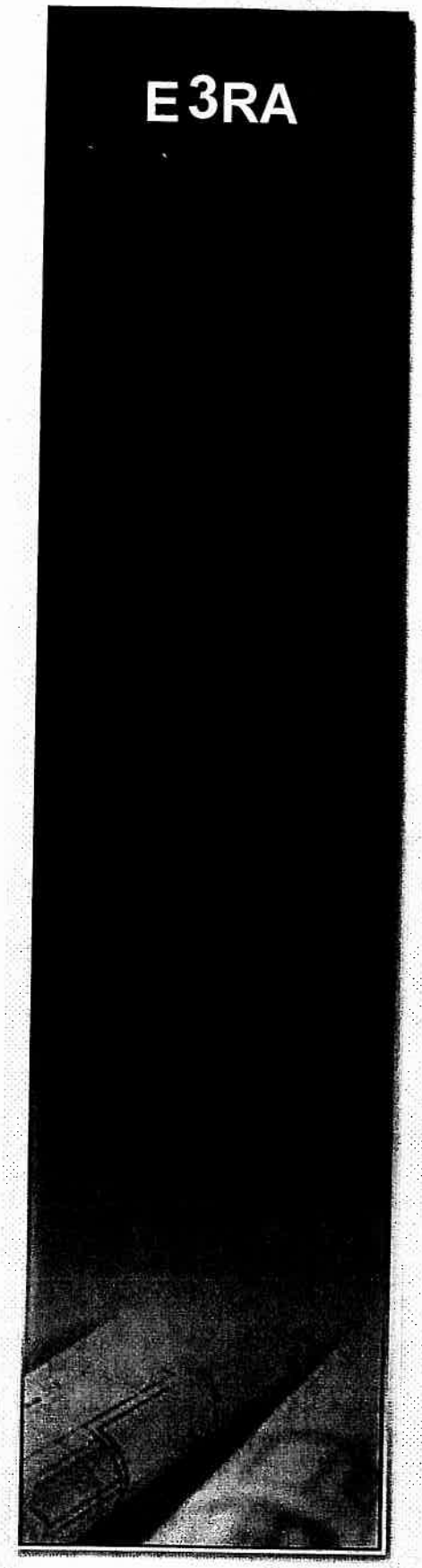
NA = Not applicable due to other ARAR taking precedent
NR = Data was not researched in this database

MTCA B Surface Water - Carc. = MTCA B surface water cleanup level based on carcinogenic risk.
MTCA B Surface Water - Non-Carc. = MTCA B surface water cleanup level based on noncancer effects.
Marine Human Health Protection - 304 = EPA National Recommended Water Quality Criteria identified in CLARC for the consumption of organisms.

APPENDIX A

PHASE I ESA, E3RA 5-31-09



PHASE I ENVIRONMENTAL SITE ASSESSMENT

TC SYSTEMS
1032 WEST MARINE VIEW DRIVE
EVERETT, WASHINGTON

Submitted to:

TC Systems, Inc.
Attention: Ms. Mary Utick
1032 West Marine View Drive
Everett, WA 98201

Submitted by:

E3RA, Inc.
9802 29th Ave. W. Ste. B102
Everett, Washington 98204

May 31, 2009
Job No. E09042

9802 29th Avenue W
Everett, WA 98204
425-356-3372
425-356-3374 fax

E3RA

May 31, 2009
E09042

TC Systems, Inc.
1032 West Marine View Drive
Everett, Washington 98201

Attention: Ms. Mary Utick

Subject: **Phase I Environmental Site Assessment Report**
TC Systems, Inc.
1032 West Marine View Drive
Everett, Washington 98201

Dear Ms. Utick:

E3RA, Inc. (E3RA) is pleased to submit this summary report detailing the findings of the Phase I Environmental Site Assessment (ESA) of the subject property located at 1032 West Marine View Drive in Everett, Washington. This Phase I ESA was prepared in general accordance with the American Society of Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation: E1527-05).

The purpose of this Phase I ESA was to identify, to the extent feasible, recognized environmental concerns in connection with the subject property. This assessment included a site reconnaissance, as well as research and interviews with representatives of the public, property management representatives and regulatory agencies.

If you have any questions or require further clarification of the report findings, please contact the undersigned at your convenience. Thank you for the opportunity to be of service.

Respectively submitted,

E3RA, Inc.

Chad Kean, CHMM
Project Scientist
electronically signed 053109

Doug Henry, CIH
Principal Scientist
electronically signed 053109

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PHASE I ENVIRONMENTAL SITE ASSESSMENT
TC SYSTEMS
1032 WEST MARINE VIEW DRIVE
EVERETT, WASHINGTON

EXECUTIVE SUMMARY

TC Systems, Inc. engaged E3RA, Inc. (E3RA) to conduct a Phase I Environmental Site Assessment (ESA) of the subject property located at 1032 West Marine View Drive in Everett, Washington (Site, subject property). This assessment was prepared in general accordance with the American Society of Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation: E1527-05).

The subject property is composed of two parcels totaling 2.57 acres at the above referenced address in Everett, Washington. The area in the vicinity of the subject property is characterized primarily by commercial/industrial development. At the time of the site reconnaissance on April 28, 2009, the subject property was occupied by TC Systems which consists of two buildings connected by an enclosed walkway surrounded by asphalt parking and storage areas.

The subject property buildings were constructed in 1978 and 1980 according to Snohomish County Assessor Office records. Based on the aerial photograph review it appears the subject property has been utilized for commercial purposes since at least 1947.

Three recognized environmental conditions (RECs) were identified within this Phase I ESA scope of work. The three RECs include the multiple above-ground storage tanks observed on the subject property, the compressor oil leak observed in the north alcove between the buildings, and the dye penetrant in direct contact with the concrete slab. In addition, the North Marina Ameron/Hulbert site located directly to the south of the subject property is considered a potential REC for the Site due to the confirmed sediment, soil and groundwater contamination. There were no data gaps that significantly affected E3RA's ability to identify RECs associated with the subject property.

PHASE I ENVIRONMENTAL SITE ASSESSMENT
TC SYSTEMS
1032 WEST MARINE VIEW DRIVE
EVERETT, WASHINGTON

1.0 INTRODUCTION

TC Systems, Inc. (TC Systems) engaged E3RA, Inc. (E3RA) to conduct a Phase I Environmental Site Assessment (ESA) of the subject property located at 1032 West Marine View Drive in Everett, Washington, hereafter referred to in this report as the "Site" or "subject property". This assessment was prepared in general accordance with the American Society of Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation: E1527-05).

1.1 Purpose and Objective

The purpose of the Phase I ESA was to identify, to the extent feasible, recognized environmental conditions (RECs) in connection with the subject property. This assessment included a site reconnaissance, as well as research and interviews with representatives of the public, property management representatives, and regulatory agencies. A recognized environmental condition (REC), as defined by ASTM Standard E1527-05, "...means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws." The term is not intended to include "de minimis" conditions that generally do not present a material risk of harm to public health or the environment that generally would not be the subject of an enforcement action if brought to the attention of appropriate government agencies. This report includes information gathered from federal, state and local agencies and a subject property inspection by an E3RA representative.

1.2 Scope of Services

E3RA was retained by TC Systems to conduct a Phase I ESA of the subject property in accordance with the scope of work detailed in E3RA's proposal dated April 23, 2009.

Authorization to perform the work was provided by TC Systems on April 23, 2009.

1.3 Significant Assumptions

This Phase I ESA was conducted in accordance with ASTM Standard Practice ASTM E 1527-05 to insure that methodologies used constitute appropriate inquiry into the prior uses of the subject property and were consistent with good commercial and customary practice in order to identify and analyze environmental conditions that represent existing, past or potential environmental risks associated with the Site.

Performance in accord with these standards is intended to reduce, but not eliminate, uncertainty with respect to the potential for RECs associated with the subject property.

This report is designed to partially satisfy the all appropriate inquiry requirements defined in 42 U.S. Code §9601(35)(B). An all appropriate inquiry is one of the necessary requirements that allow a property

owner to qualify for certain landowner liability protections under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), including innocent landowner, contiguous property owner, or bona fide prospective purchaser liability protections.

1.4 Limitations and Exceptions

The report has been prepared in accordance with generally accepted environmental methodologies referred to in ASTM 1527-05 and contains all of the limitations inherent in these methodologies. No other warranties, expressed or implied, are made as to the professional services provided under the terms of our contract and included in this report.

Limitations and exceptions of the assessment at the subject property include, but are not necessarily limited to, the following:

- Sampling of sediment, soil or groundwater or an evaluation of vapor intrusion.
- Sampling or identification of asbestos, lead-based paint or other regulated and/or hazardous material associated with Site improvements.
- An assessment of radon, mold or general indoor air quality.

The conclusions of this report are based in part on the information provided by others. The possibility remains that unexpected environmental conditions may be encountered at the Site in locations not specifically investigated. Should such an event occur, E3RA should be notified so we may determine if modifications to our conclusions are necessary.

The services performed and outlined in this report were based, in part, upon visual observations of the Site and attendant structures if present. Our opinion cannot be extended to portions of the Site that were unavailable for direct observation beyond the reasonable control of E3RA.

The objective of this report was to assess environmental conditions at the Site within the context of our contract and existing environmental regulations within the applicable jurisdiction. Evaluating compliance of past or future owners with applicable local, provincial and federal government laws and regulations was not included in our contract for services.

Our observations relating to the condition of environmental media at the Site are described in this report. It should be noted that compounds or materials other than those described could be present.

1.5 Special Terms and Conditions

There were no special terms or contractual conditions for this assessment.

1.6 User Reliance

This report may be distributed and relied upon by TC Systems, its successors and assigns. Reliance on the information and conclusions in this report by any other person or entity is not authorized without the written consent of E3RA.

2.0 SITE DESCRIPTION

A site reconnaissance was performed by E3RA representatives Mr. Chad Kean, Mr. Doug Henry and Mr. Adam Stauffer on April 28, 2009. The observations noted in this Section apply to the Site as it appeared

on that day. Site maps and plans showing general Site layout are provided in Appendix A (Property Maps and Site Plans).

2.1 Location and Legal Description

The subject property is located at 1032 West Marine View Drive in Everett, Washington and according to the Snohomish County Assessors Office reported to consist of two parcels totaling 2.57 acres. The legal description for the subject property is included in the Nationwide Environmental Title Research, LLC (NETR) Environmental Lien Search Report (Appendix D). The parcel numbers, addresses, taxpayer and improvements (as listed by the Snohomish County Assessor) are provided in Table 1.

Table 1
Snohomish County Assessor's Office Information

Parcel Number	Address	Taxpayer	Improvements
29051800200700	1104 10th Street	Norton Industries	Commercial Manufacturing Building
29051800201300	1032 10th Street	Norton Industries	Commercial Manufacturing Building

2.2 Site and Vicinity General Characteristics

The subject property is currently zoned as Southwest County UGA. The general area surrounding the subject property is characterized primarily by commercial/industrial development.

2.3 Current Use of the Subject Property

The subject property is currently used by TC Systems as a metal finishing facility.

2.4 Structures, Roads and Other Improvements on the Site

The subject property is accessible from the east via West Marine View Drive. Improvements observed on the subject property at the time of the April 28th site reconnaissance consisted of two buildings connected by an enclosed walkway surrounded by asphalt parking and storage areas.

2.5 Current Uses of Adjacent Properties

Table 2 summaries the current uses of adjoining properties:

Table 2
Current Uses of Adjacent Properties

Direction	Development Type	General Site Use(s)	Adjoining Street
North	Commercial	Performance Marine – Boat Sales, Storage and Repair	10th Street
East	Commercial	Dunlap Industrial Hardware – Hardware Sales and Service	Not Applicable
South	Commercial	Ameron International – Pole Products (Power/Lighting)	Not Applicable

Table 2 Current Uses of Adjacent Properties			
Direction	**Development Type**	**General Site Use(s)**	**Adjoining Street**
West	Commercial	Oldcastle Glass – Glass Products Manufacturer	Not Applicable

3.0 USER PROVIDED INFORMATION

The following information was provided by TC Systems or readily available as public record.

3.1 Title Records

Procurement and/or review of chain-of-title information were not included within E3RA's scope of services for this Phase I ESA.

3.2 Valuation Reduction for Environmental Issues

The subject property is not being purchased at his time.

3.3 Owner, Property Manager, and Occupant Information

According to the Snohomish County Assessors Office, the subject property is currently owned by Norton Industries.

3.4 Reasons for Performing the Phase I ESA

This Phase I ESA was prepared by E3RA at the request of TC Systems. The Phase I ESA was requested by TC Systems as part of an overall valuation of the company.

3.5 Other

Ms. Mary Utick (TC Systems) does not have any other knowledge or experience with the subject property that may be pertinent to the environmental professional.

4.0 RECORDS REVIEW

The purpose of the records review was to obtain and review records that will help identify potential RECs in connection with the subject property. Some records reviewed pertain not only to the subject property, but also to properties within a specified minimum search distance in order to assess potential impacts to the Site from migrating regulated and/or hazardous substances.

4.1 Standard Environmental Records Review

Current regulatory agency database information was obtained from the Environmental Data Resources, Inc. (EDR) Report (Appendix D) which maps and lists sites in government and state environmental databases with existing conditions or status that may have the potential to impact the subject property. The EDR report provided a list of the regulated sites using the ASTM E1527-05 recommended search distances. Databases of regulated sites in Washington State that were reviewed as part of the EDR report include:

- Underground Storage Tank (UST) Sites – Resource Conservation and Recovery Act (RCRA) registered USTs.
- Leaking Underground Storage Tank (LUST) Sites – reported LUSTs.
- Confirmed and Suspected Contaminated Sites List (CSCSL).

- No Further Action (NFA) Sites List – sites that have received a No Further Action ruling.
- Activity and Use Limitations (AUL) List – sites with Activity and Use Limitations, which may include both engineering and institutional controls.
- Resource Conservation and Recovery Information System – registered Conditionally Exempt Small Generators (CESQGs), and Small and Large Quantity Generators (RCRA-SQG/RCRA-LQG). CESQGs generate less than 100 kilograms (kg) and/or less than 1 kg of acutely hazardous waste per month. SQGs generate between 100 kg and 1,000 kg of hazardous materials per month. LQGs generate more than 1,000 kg of hazardous materials per month.
- Voluntary Cleanup Program (VCP) List – sites participating in the Voluntary Cleanup Program.
- FINDS List – contains both facility information and 'pointers' to other sources that contain more detailed information.
- MANIFEST List – hazardous waste manifest data.
- NPDES List – water quality permit system data.

The subject property was listed in the EDR report under the RCRA-SQG, FINDS, MANIFEST and NPDES databases. The subject property is listed on the RCRA-SQG, FINDS and MANIFEST lists due to the onsite use and storage of hazardous chemicals related to metal finishing. The subject property is listed on the NPDES list due to its wastewater permit. None of the subject property listings are considered a potential REC for the subject property.

E3RA identified 32 sites located in the vicinity of the subject property within the ASTM recommended radius distances listed in the EDR report. The North Marina Ameron/Hulbert site listed in Table 3 below is considered a potential REC for the subject property due to the confirmed contamination and its location directly adjacent to the subject property. None of the other sites listed in the EDR report are considered a potential REC for the subject property based on distance/gradient from the Site and/or regulatory status.

Table 3
Regulated Sites

Site Name	Approximate Distance and Direction From Subject Property	Topography	Regulatory Program	Environmental Concern/ Reason
North Marina Ameron/Hulbert 1130 West Marine View Drive Everett, WA 98201	<1/8 mile, southeast	Up-slope	CSCSL, RCRA-SQG, UST, FINDS, MANIFEST	Yes / Confirmed Sediment, Soil and Groundwater Contamination

4.1.1 Unmapped "Orphan" Sites

Unmapped facilities are those without sufficient address or location information to evaluate the listed facilities' location relative to the Site. The EDR report listed 26 facilities in the unmapped section. None of the orphan sites identified are considered environmental concerns to the subject property either because they have been reportedly cleaned up or are at a sufficient distance from and/or down gradient from the subject property.

4.2 Environmental Liens and Activity Use Limitations (AULs)

E3RA ordered an Activity Use Limitation (AUL) and Environmental Lien Report (Appendix D) for the subject property from NETR. According to the NETR provided report, there are no AUL's or Environmental Liens associated with the subject property.

Ms. Utick is not aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the Site and/or have been filed or recorded in a registry.

4.3 Snohomish Health District

According to Ms. Ellen Kennaugh of the Snohomish Health District, there were no records on file for the subject property regarding hazardous material usage/spills, environmental violations or other environmentally pertinent information.

4.4 Snohomish County Planning and Development Services

E3RA searched the Snohomish County Planning and Development Services website for permits or code violations issued to the subject property and found no permits listed.

4.5 Everett Fire Department

E3RA contacted the Everett Fire Department (EFD) for records related to underground storage tank removals/installs, hazardous material storage/usage or spill/hazardous material responses for the Site. Personnel from EFD informed E3RA that no such records existed for the subject property.

4.6 Physical Setting Sources

4.6.1 Topography

The current US Geological Survey (USGS) Topographic Map, 1973 Marysville, WA 7.5 Minute, was reviewed to determine the physical setting of the subject property. Topography across the subject property is relatively flat and approximately 11 feet above mean sea level (MSL). Groundwater in the vicinity of the subject property is assumed to flow west towards Port Gardner Bay and to be under tidal influence. A copy of the topographic map can be found in the EDR report.

4.6.2 Site Geology, Hydrogeology, and Soils

E3RA's understanding of subsurface conditions is based upon familiarity with the area through other projects in the vicinity, as well as supporting documentation concerning regional, local, and on-site subsurface conditions. The subject property is located on soil classified as Urban Land. Urban Land is soil that has been modified by disturbance of the natural layers with additions of fill material several feet thick to accommodate large industrial and housing installations.

4.7 Historical Use Information

E3RA reviewed historical Site and adjacent property uses to assess whether prior owners or tenants of the subject property and/or adjacent properties conducted activities that could pose environmental concerns to the subject property. Historical uses for selected years between 1914 and 2004 are listed in Table 4. Sources of historical information included:

- Polk City Directories for 1965, 1970, 1975, 1980, 1985 and 1990;

- Selected Aerial photographs from 1947, 1955, 1967, 1976, 1981, 1985, 1993, 1997, 2001 and 2004;
- Sanborn Maps from 1914, 1950, 1957, 1968, and;
- Snohomish County Assessors Office records.

EDR provided a City Directory Abstract and copies of the Sanborn maps included in Appendix C. Historic aerial photographs were reviewed at Aero-Metric, Inc. in Tukwila, Washington.

EDR provided historical topographic maps for the subject property for the years 1947, 1956, 1968 and 1973. The EDR topographic maps did not add relevant information to that already provided by the Sanborn Maps, city directories and aerial photograph review; therefore the maps are not summarized in the Table 3 but are included in Appendix C.

Table 4
Historical Summary

Year	Observations/Findings	Source
1914	**Subject Property** The subject property appears to be part of Port Gardner Bay. **Adjacent Property** The north adjacent property appears to contain two structures, a shingle mill and drying kiln labeled "Jamison Mill Co's Shingle Mill". The areas to the west and south appear to be part of Port Gardner Bay. The area to the east appears undeveloped.	Sanborn Maps
1947	**Subject Property** The subject property appears to be occupied by a large multi-building complex that is surrounded by log booms. **Adjacent Property** The north, south, east and west adjacent properties appeared to be part of the same complex as the subject property.	Aero-Metric Black and White Aerial Photograph 1"=1,000'
1950	**Subject Property** The subject property appears to be filled in now and has fire hydrants installed. It is labeled as part of the Jamison Mill Company shingle mill. **Adjacent Property** The north and east adjacent properties appear to contain multiple structures, including a shingle mill, drying kilns and multiple shingle sheds. The entire area appears to be part of the Jamison Mill Company shingle mill. The adjacent property to the south is a mixture of Port Gardner Bay and an office structure. The area to the west appears to be part of Port Gardner Bay.	Sanborn Maps

Table 4
Historical Summary

Year	Observations/Findings	Source
1955	**Subject Property** The subject property appears to be occupied by a large multi-building complex that is surrounded by log booms. Some of the building shapes have changed since the 1947 aerial photograph. **Adjacent Property** The adjacent properties appeared similar to the 1947 aerial photograph.	Aero-Metric Black and White Aerial Photograph 1"=1,000'
1957	**Subject Property** The subject property appears similar to the 1950 Sanborn map. The subject property is now labeled "Watchman with clock power, steam fuel, refuse, lights, elec. I.E.P". **Adjacent Property** The adjacent properties appeared similar to the 1950 Sanborn map except that the office structure to the south is no longer visible.	Sanborn Maps
1965	**Subject Property, West Marine View Drive** 1032: Address not listed **Adjacent Property, West Marine View Drive** 930: Address not listed 1018: Address not listed 1020: Vacant 1028: Address not listed 1100: Wm Hulbert Mill Co (wood prods mfr) 1130: Address not listed 1200: Collins Casket Co, Jamison Cedar Products Co (whol lbr) 1210: Address not listed	Historical City Directories
1967	**Subject Property** The subject property appeared similar to the 1955 aerial photograph. **Adjacent Property** The adjacent properties appeared similar to the 1955 aerial photograph with some increased fill areas to the south and west.	Aero-Metric Black and White Aerial Photograph 1"=1,500'
1968	**Subject Property** The subject property appears to be occupied by multiple buildings including a lumber shed, lumber storage and chip bins. The entire area appears to be part of Washington Timber Products, Inc. **Adjacent Property** The adjacent properties appeared similar to the subject property and also appeared to be part of Washington Timber Products, Inc.	Sanborn Maps

Table 4
Historical Summary

Year	Observations/Findings	Source
1970	**Subject Property, West Marine View Drive** 1032: Address not listed **Adjacent Property, West Marine View Drive** 930: Address not listed 1018: Address not listed 1020: Address not listed 1028: Address not listed 1100: Address not listed 1130: Address not listed 1200: Collins Casket Co, Wm Hulbert Mill Co (wood prods mfr) 1210: Address not listed	Historical City Directories
1975	**Subject Property, West Marine View Drive** 1032: Address not listed **Adjacent Property, West Marine View Drive** 930: Address not listed 1018: Address not listed 1020: Address not listed 1028: Cruise-A-Home Inc (mfg house boats) 1100: Address not listed 1130: Address not listed 1200: Collins Casket Co, Centrecon Inc. (concrete poles & piling) 1210: Address not listed	Historical City Directories
1976	**Subject Property** The subject property appeared to be vacant. **Adjacent Property** The adjacent properties to the north and west appear vacant. The adjacent properties to the south and east are occupied by buildings.	Aero-Metric Black and White Aerial Photograph 1"=1,500'
1978	**Subject Property** The building located on parcel #29051800200700 was constructed.	Snohomish County Assessor Office

Table 4
Historical Summary

Year	Observations/Findings	Source
1980	**Subject Property, West Marine View Drive** 1032: Address not listed **Adjacent Property, West Marine View Drive** 930: Address not listed 1018: Address not listed 1020: Address not listed 1028: Cruise-A-Home Inc (mfg house boats) 1100: Address not listed 1130: Address not listed 1200: Collins Casket Co (mfr), Centrecon Inc. (concrete poles & piling), Polaris Products Co (Div of Cruise A Home), Weathermaster (insulated glass mfgs), William Hubert Mill (sawmill) 1210: Address not listed	Historical City Directories
	Subject Property The building located on parcel #29051800201300 was constructed.	Snohomish County Assessor Office
1981	**Subject Property** There are two buildings visible on the subject property. The east building appears to be the current building and the west building appears to be about half size as compared to current. **Adjacent Property** The adjacent properties appeared similar to the 1976 aerial photograph.	Aero-Metric Black and White Aerial Photograph 1"=1,500'
1985	**Subject Property** The subject property appeared similar to the 1981 aerial photograph except that the west building appears as it does today. **Adjacent Property** The adjacent properties appeared similar to the 1981 aerial photograph.	Aero-Metric Black and White Aerial Photograph 1"=1,500'

Table 4
Historical Summary

Year	Observations/Findings	Source
	Subject Property, West Marine View Drive 1032: Address not listed **Adjacent Property, West Marine View Drive** 930: Address not listed 1018: Address not listed 1020: Address not listed 1028: Dunlap Industrial Hardware Inc., Marpac Products Inc., Norton Industries (property investments) 1100: Address not listed 1130: Besco Inc, Centrecon Inc. (concrete poles), Churchill Brothers, Performance Marine 1200: Collins Casket Co (mfr), Randy Hammer Logging Co Inc, Tajica Northwest (timber export), William Hubert Mill (investments/real est) 1210: Address not listed	Historical City Directories
1990	**Subject Property, West Marine View Drive** 1032: Address not listed **Adjacent Property, West Marine View Drive** 930: Performance Marine 1018: Vacant 1020: Address not listed 1028: Dunlap Industrial Hardware Inc., Hehr International Inc (alum prods mfg) 1100: Address not listed 1130: Ameron Inc (concrete poles), Bearing Engineering & Supply Co (Besco Inc), Churchill Brothers (marine sup & equip), Sunset Body Works (trk auto body pntg) 1200: Excel Transport 1210: Collins Casket Co (mfr), W Hubert Mill (casket mfr)	Historical City Directories
1993	**Subject Property** The subject property appeared similar to the 1985 aerial photograph. **Adjacent Property** The adjacent properties appeared similar to the 1985 aerial photograph.	Aero-Metric Color Aerial Photograph 1"=2,000'
1997	**Subject Property** The subject property appeared similar to the 1993 aerial photograph. **Adjacent Property** The adjacent properties appeared similar to the 1993 aerial photograph.	Aero-Metric Color Aerial Photograph 1"=2,000'

Table 4 Historical Summary		
Year	**Observations/Findings**	**Source**
2001	**Subject Property** The subject property appeared similar to the 1997 aerial photograph. **Adjacent Property** The adjacent properties appeared similar to the 1997 aerial photograph.	Aero-Metric Color Aerial Photograph 1"=2,000'
2004	**Subject Property** The subject property appeared similar to the 2001 aerial photograph. **Adjacent Property** The adjacent properties appeared similar to the 2001 aerial photograph.	Aero-Metric Color Aerial Photograph 1"=1,680'

4.8 Historical Use Summary of the Subject Property

The subject property buildings were constructed in 1978 and 1980 according to Snohomish County Assessor records. Based on Sanborn maps and aerial photographs it appears the subject property has been used for commercial purposes since at least 1947.

4.9 Historical Use Summary on Adjacent Properties

Based on Sanborn maps, the adjacent properties appear to have been utilized exclusively for commercial purposes with the area to the north in continuous use since 1914.

4.10 Data Gaps

Documentation of subject property prior to 1914 does not exist or was not readily available during the historical research associated with this Phase I ESA. However, because the Site has been reportedly used for commercial purposes since it was created, the absence of property use information prior to 1914 is considered to have a low potential to represent a REC for the Site.

5.0 SITE RECONNAISSANCE

The purpose of the site reconnaissance was to obtain information that would assist in identifying RECs in connection with the subject property. Photographs of the subject property are included in Appendix B.

5.1 Methodology and Limiting Conditions

A site reconnaissance was performed by Mr. Chad Kean, Mr. Doug Henry and Mr. Adam Stauffer, on April 28, 2009. The observations noted in Section 5.0 apply to the subject property as it appeared on that day.

5.2 General Site Setting

The subject property is composed of two parcels totaling 2.57 acres zoned as Southwest County UGA. The Site is occupied by TC Systems and currently contains two commercial buildings surrounded by asphalt parking and storage areas.

5.2.1 Utilities

Potable water and electricity is supplied by Snohomish County PUD and sewer service by the City of Everett. Puget Sound Energy supplies natural gas to the subject property.

5.2.2 Storm Water

The Site contains numerous stormwater catch basins located throughout the Site. The final termination of the stormwater system was not known by TC Systems.

5.3 Interior Observations

Improvements observed on the subject property at the time of the April 28th site reconnaissance included two commercial buildings housing TC Systems. The interior of the buildings were inspected and found to be in current use as a metal finishing plant. As part of the metal finishing process numerous chemicals are used and stored onsite. This includes, but is not necessarily limited to, coatings, solvents, oils, acids and bases. A dye penetrant called "DUBL-CHECK PENETRANT HM-430" was observed to be leaking from application tanks located in the northeast corner of the east building. To collect and reuse the penetrant, a sump has been cut in the concrete floor near the application tanks. At the time of the site reconnaissance, it did not appear that the penetrant was escaping the sump area but penetrant was in direct contact with the concrete slab. The dye penetrant in direct contact with the concrete slab is considered a REC for the Site.

In addition, multiple above-ground storage tanks were located within the building, including large dip tanks used for surface preparation prior to coating. The above ground storage tanks represent a REC for the Site; however, at the time of the inspection the interior above-ground storage tanks appeared to be in good condition with no leaks observed.

5.4 Exterior Observations

Exterior observations were conducted during the April 28th site reconnaissance.

5.4.1 Access to the Property

The subject property is accessible from the east via West Marine View Drive.

5.4.2 Stained Soil or Pavement

One small area located next to the air compressors in the north alcove between the buildings did have compressor oil on the concrete and asphalt from ongoing compressor leaks. This is considered to represent a REC for the Site. No other areas of stained soil or pavement were observed on the subject property.

5.4.3 Stressed Vegetation

No areas of stressed vegetation were observed on the subject property.

5.4.4 Underground and Above-Ground Storage Tanks

No underground storage tanks were observed on the subject property. Multiple above-ground storage tanks were located in the north alcove between the buildings. These included batch tanks for waste water processing and bulk acid and base storage tanks used for neutralizing the process waste water. The above ground storage tanks represent a REC for the Site; however, at the time of the inspection the above-ground storage tanks appeared to be in good condition with no leaks observed.

5.4.5 Obvious odors

No obvious odors were identified on the subject property.

5.4.6 Landfills, Dumping or Burial Activities
No landfills, dumping or burial activities were observed on the subject property.

5.4.7 Surface Impoundments or Holding Ponds
No evidence of surface impoundments or holding ponds was observed on the subject property.

5.4.8 Air Emissions or Wastewater Discharge
TC Systems conducts spray coating operations and provides Puget Sound Clean Air Agency (PSCAA) with an annual emissions report. Mr. Charles Souder (TC Systems) stated that TC Systems does have an industrial wastewater discharge permit through the City of Everett and that they routinely test their wastewater for compliance with the permit. Mr. Souder also stated that he was not aware of any violations related to the wastewater permit.

5.4.9 Monitoring Wells or Remedial Activities
No evidence of monitoring wells or remedial activities was observed on the subject property.

5.4.10 Evidence of Leachate or Seeps
No evidence of leach or seeps was identified on the subject property.

5.4.11 Evidence of Chemical Spills or Releases
No evidence of chemical spills or releases was observed on the subject property with the exception of the dye penetrant and compressor oil leaks discussed previously.

5.4.12 Evidence of Groundwater and Surface Water Contamination
No evidence of groundwater and surface water contamination was observed on the subject property.

5.4.13 Discharges, Leachate, Migration, or Runoff of Potential Contaminants from Off-Property Sources
No evidence of discharges, leachate, migration or runoff of potential contaminants from off-property sources was observed on the subject property.

5.4.14 Other Known or Observed Environmentally Sensitive Conditions
No other known or observed environmentally sensitive conditions existed on the subject property.

5.4.15 Transformers and PCB Equipment
One pad-mounted oil-filled transformer was observed along the south side of the west building. The oil-filled transformer appeared to be in good condition with no discernable leaks or spills. This is not considered a potential REC for the subject property.

5.4.16 Regulated substances
No other regulated substances were observed on the subject property besides those discussed above.

6.0 INTERVIEWS

An interview was conducted with the current general manager of TC Systems, Mr. Charles Souder. The interview was conducted to determine an awareness of recognized environmentally related problems or concerns at the Site. Specific information obtained from the noted individual appears in the appropriate sections of this report.

6.1 Interview with the Owner's Representative

Mr. Souder has worked at the subject property since 2003 and stated that according to his knowledge, no environmental liens, USTs, known environmental violations and spills or releases have been associated with the subject property. Mr. Souder stated that they do have a Washington State Department of Ecology stormwater permit on file and was not aware of any violations. Mr. Souder also stated that he had no specialized knowledge of the subject property prior to 2003.

Mr. Souder also supplied E3RA with a copy of letter from the Washington State Department of Ecology, Hazardous Waste & Toxics Reduction Program, regarding their most recent inspections conducted on November 6, 2007 and July 8, 2008. The report mentions numerous record keeping, training and waste storage problems but the only REC noted in the letter is the previously mentioned compressor oil leak.

7.0 FINDINGS AND OPINION

Three RECs were identified in this Phase I ESA scope of work. The three RECs include the multiple above-ground storage tanks observed on the subject property, the compressor oil leak observed in the north alcove between the buildings, and the dye penetrant in direct contact with the concrete slab. In addition, the North Marina Ameron/Hulbert site located directly to the south of the subject property is considered a potential REC for the Site due to the confirmed sediment, soil and groundwater contamination. There were no data gaps that significantly affected E3RA's ability to identify RECs associated with the subject property.

8.0 DEVIATIONS

E3RA has performed this Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527-05 for the subject property located at 1032 West Marine View Drive in Everett, Washington. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report.

9.0 ADDITIONAL SERVICES

No additional services beyond the scope of the ASTM Standard 1527-05 were conducted as part of this assessment.

10.0 REFERENCES

The following documents, maps or other publications may have been utilized specifically in the preparation of this Phase I ESA or generally in the development of the report format. References to specific documents are also provided in appropriate sections of this report.

American Society of Testing and Materials, E1527-05 Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process, 2005.

Environmental Data Resources, Inc., Radius Map with GeoCheck / Site Assessment Reports

Real Estate Research & Information, Environmental Lien Search Report

1947, 1956, 1968 and 1973 United States Geological Survey, Topographic Maps.

United States Department of Agriculture, Soil Conservation Service, Soil Surveys

1965, 1970, 1975, 1980, 1985 and 1990 Polk City Directories

1947, 1955, 1967, 1976, 1981, 1985, 1993, 1997, 2001 and 2004 AERO-METRIC, Inc. Aerial Photographs

1914, 1950, 1957 and 1968 Sanborn Maps

The following web sites may have been accessed to obtain information used in the preparation of this Phase I ESA:

Soils Reference - http://www.soils.usda.gov/

State and Local Government Records - http://web5.co.snohomish.wa.us/propsys/asr-tr-propinq/

Tax and Property Records - http://web5.co.snohomish.wa.us/propsys/asr-tr-propinq/

Ecology Facility/Site Atlas GIS - http://apps.ecy.wa.gov/website/facsite/viewer.htm

Snohomish Health District- http://www.snohd.org/

11.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312. We have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

E^{3}RA, Inc.

Prepared by:

Chad Kean, CHMM
Project Scientist
electronically signed 053109

Reviewed by:

Doug Henry, CIH
Principal Scientist
electronically signed 053109

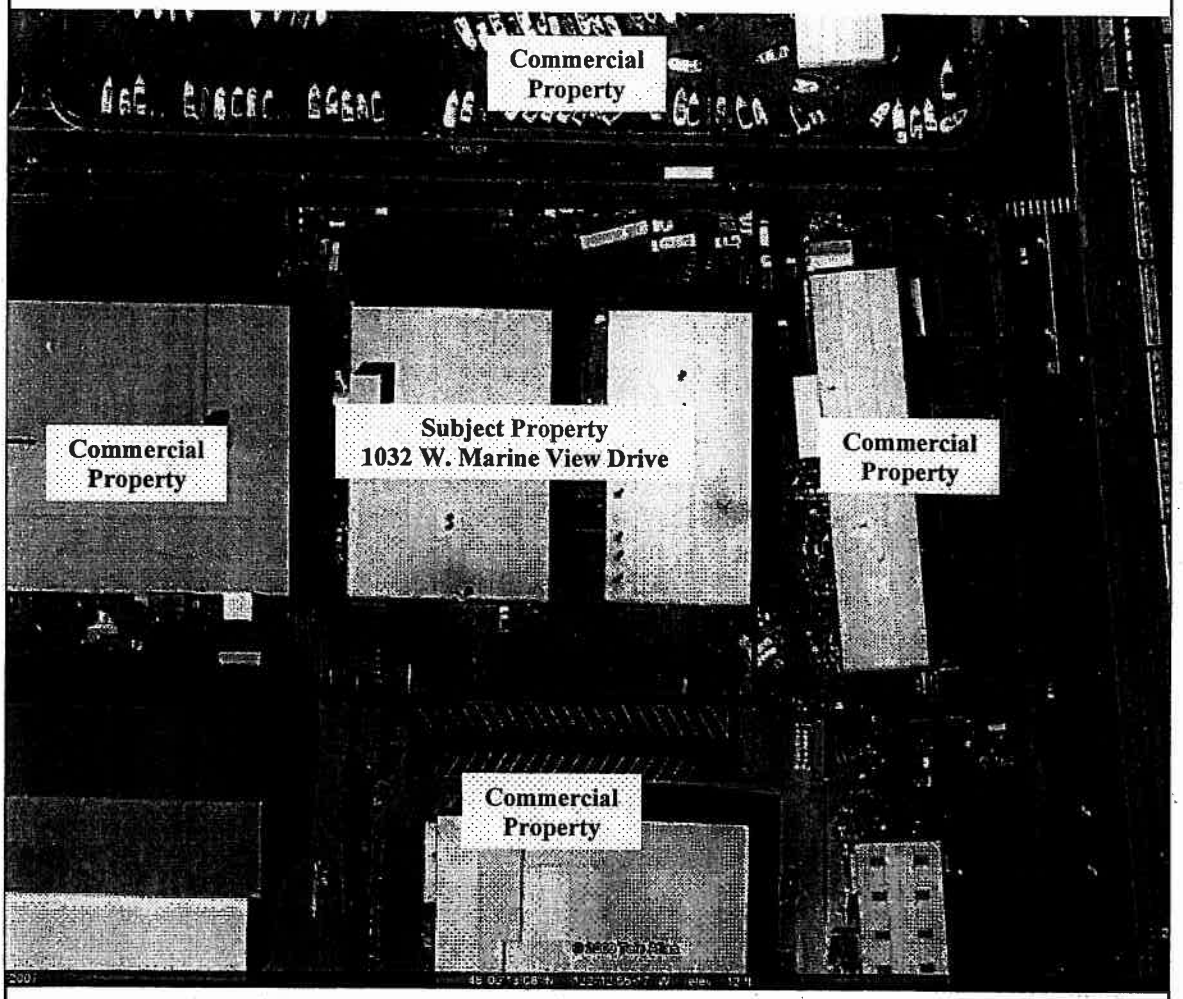
12.0 QUALIFICATION(S) OF ENVIRONMENTAL PROFESSIONAL(S)

The qualifications of the environmental professional(s) and personnel conducting the site reconnaissance and interviews are provided in Appendix F.

APPENDIX A

PROPERTY MAPS AND SITE PLANS

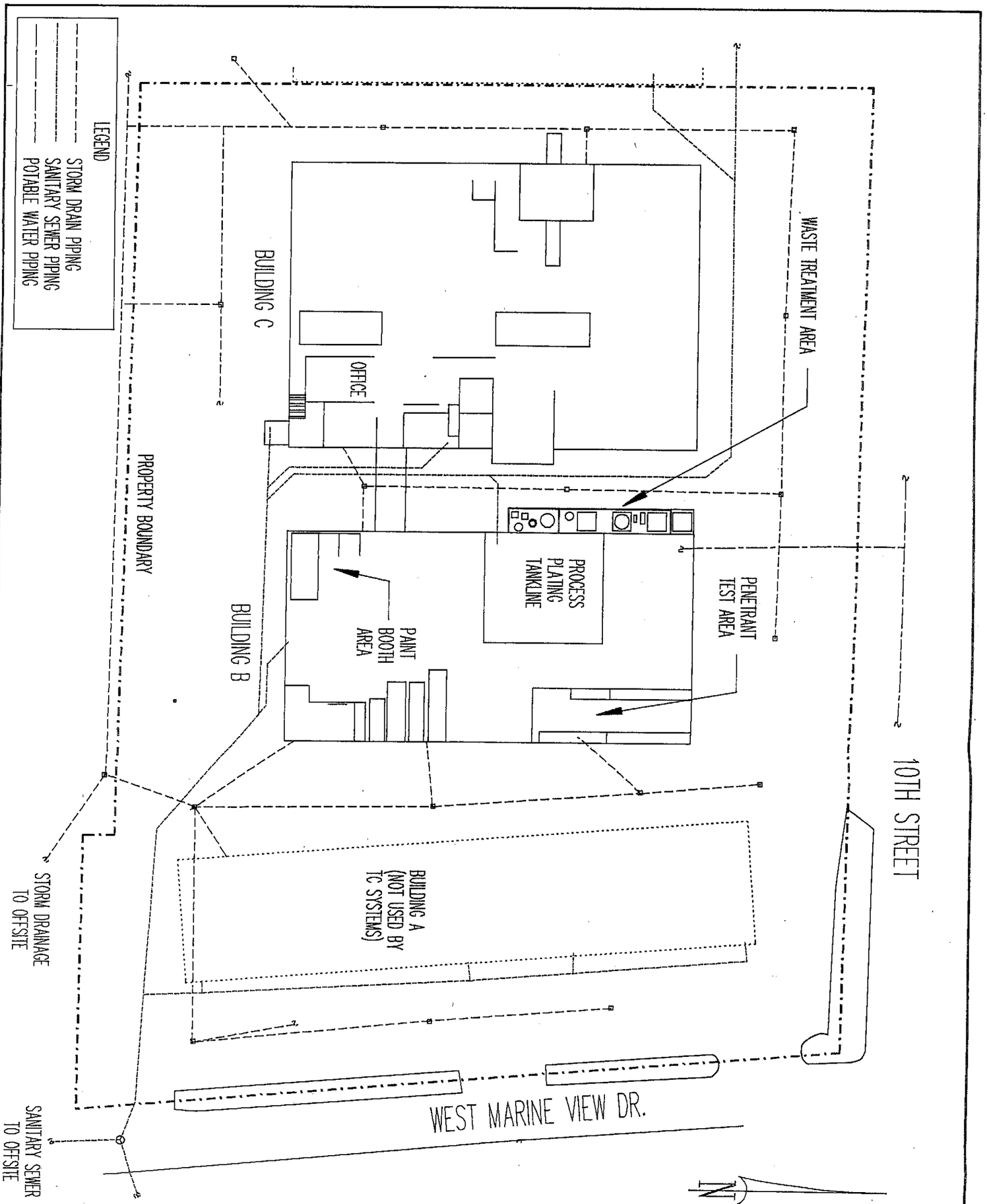
E3RA, Inc. P.O. Box 44840 Tacoma, WA 98448 253-537-9400 253-537-9401 fax	**Phase I ESA** **1032 West Marine View Drive** **Everett, Washington**	**FIGURE 1** **SITE LOCATION MAP**



E3RA, Inc. P.O. Box 44840 Tacoma, WA 98448 253-537-9400 253-537-9401 fax	**Phase I ESA** **1032 West Marine View Drive** **Everett, Washington**	**FIGURE 2** **SITE PLAN**

APPENDIX B

SANBORN FIRE INSURANCE MAPS



0 25 50 100

SCALE: 1" = 50'

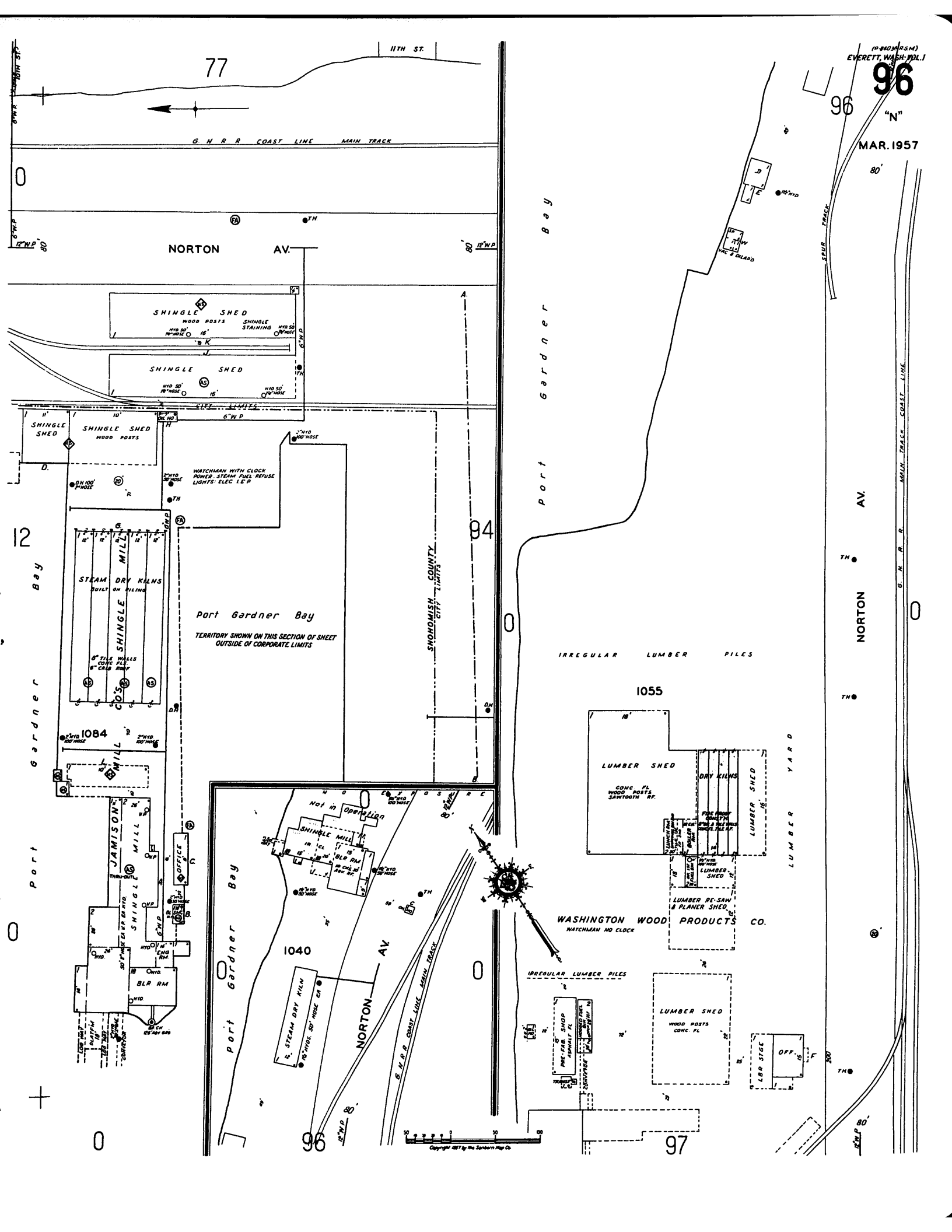
98019-1-1

DRAWN: DTJ

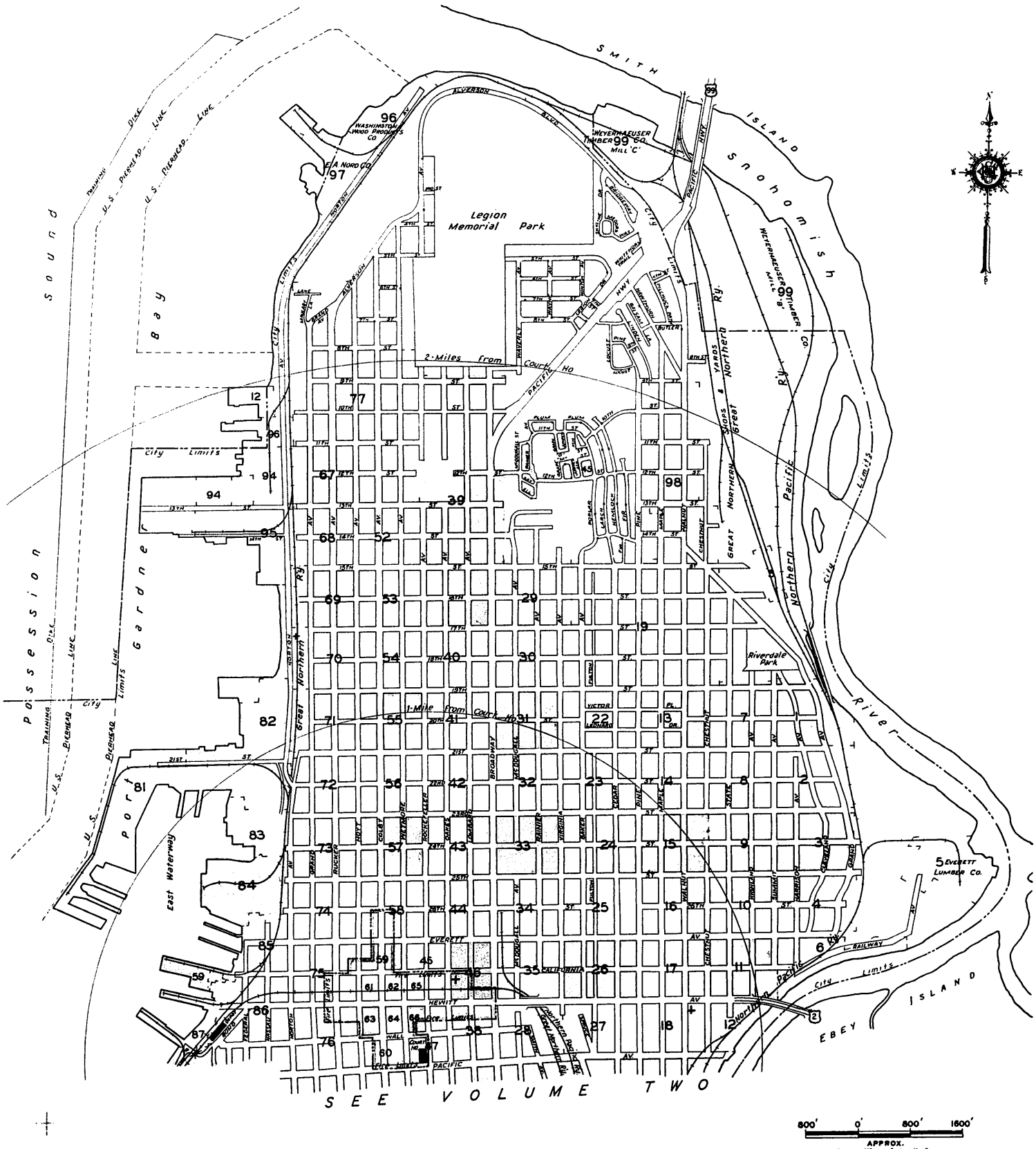
DATE: 20 AUGUST 1998

David T. Johnson Engineering
Chemical Engineering - Water Treatment - Waste Processing
14966 NE 31st Circle, Redmond, WA 98052
TEL: (425) 883-6043 FAX: (425)556-9547

FIGURE 1-1
TC SYSTEMS INC. GENERAL SITE MAP
1028 W. MARINE VIEW DRIVE
EVERETT, WA 98201


(To 1403 R.S.M.)
EVERETT, WASH. VOL. I
96
"N"
MAR. 1957
11TH ST.
77
G N R R COAST LINE MAIN TRACK
NORTON AV.
SHINGLE SHED
WOOD POSTS
SHINGLE STAINING
SHINGLE SHED
SHINGLE SHED
SHINGLE SHED
WOOD POSTS
CITY LIMITS
WATCHMAN WITH CLOCK
POWER: STEAM FUEL: REFUSE
LIGHTS: ELEC. I.E.P
STEAM DRY KILNS
BUILT ON PILING
8" TILE WALLS
CONC. FL.
CRIB RAMP
CO'S SHINGLE MILL
1084
JAMISON MILL
SHINGLE MILL
BLR RM
ENG RM.
OFFICE
THRU-OUT
Port Gardner Bay
TERRITORY SHOWN ON THIS SECTION OF SHEET
OUTSIDE OF CORPORATE LIMITS
SNOHOMISH COUNTY
CITY LIMITS
94
12
Port Gardner Bay
Not in Operation
SHINGLE MILL
BLR RM
1040
STEAM DRY KILN
NORTON Av.
G.N.R. COAST LINE MAIN TRACK
IRREGULAR LUMBER PILES
1055
LUMBER SHED
CONC. FL.
WOOD POSTS.
SAWTOOTH RF.
DRY KILNS
FIRE PROOF
LUMBER SHED
BOILER
LUMBER SHED
LUMBER RE-SAW
& PLANER SHED.
WASHINGTON WOOD PRODUCTS CO.
WATCHMAN NO CLOCK
IRREGULAR LUMBER PILES
PRE-FAB SHOP
ASPHALT FL.
LUMBER SHED
WOOD POSTS
CONC. FL.
LBR STGE
OFF.
LUMBER YARD
Port Gardner Bay
NORTON AV.
G.N.R. MAIN TRACK COAST LINE
SPUR TRACK
96
97
0
Copyright 1957 by the Sanborn Map Co.

(P.B403ᵃRSM)
EVERETT, WASH.-VOL.1
KEY MAP
"N"
MAR. 1957



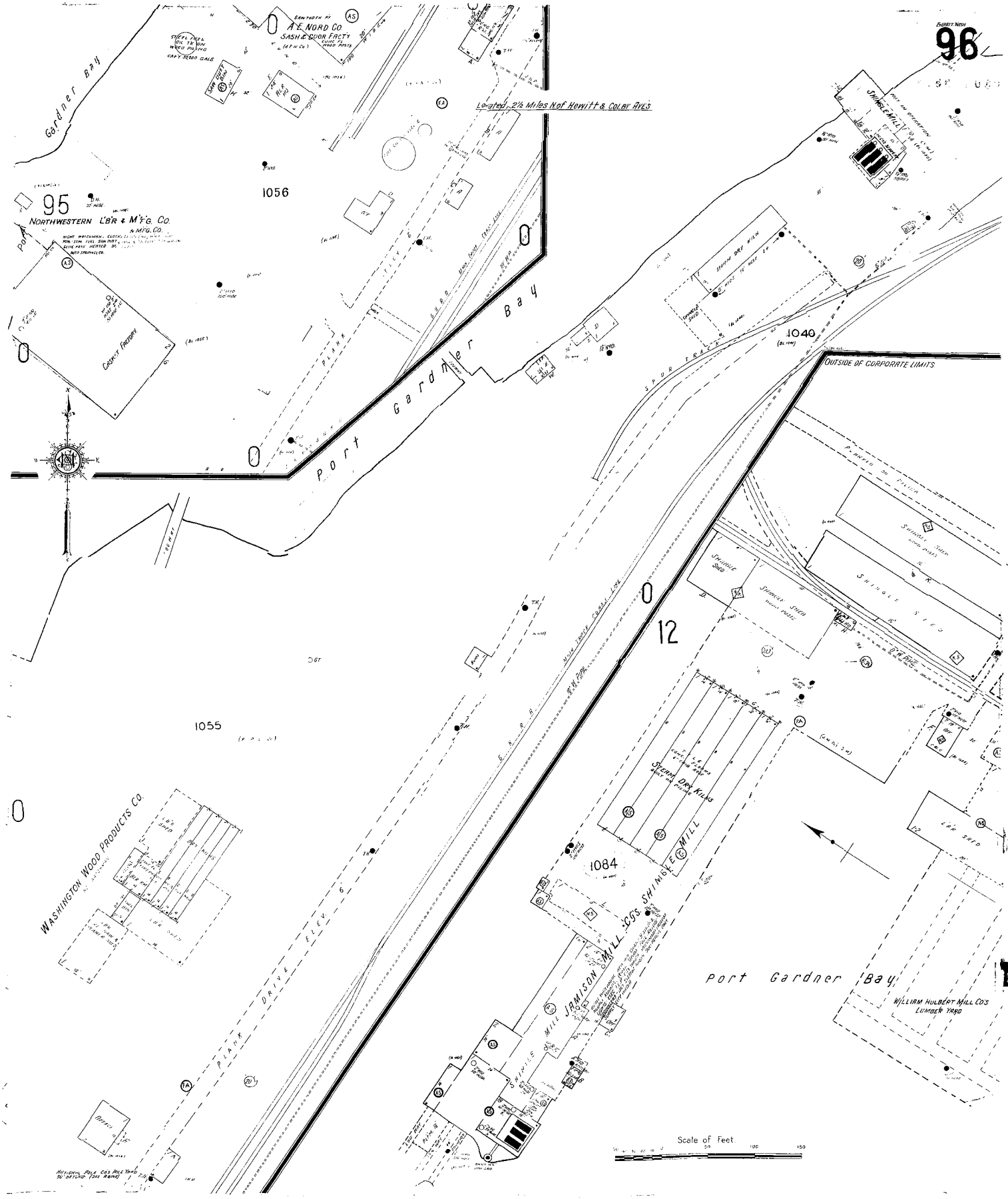


EXHIBIT NINTH
96
Gardner Bay
A.E. NORD CO
SASH & DOOR FACTY
Located 2½ Miles Nof Hewitt & Colby Aves
1056
95
NORTHWESTERN L'BR & M'F'G. CO.
& MFG. CO.
CASKET FACTORY
Port Gardner Bay
SHINGLE MILL
STATION DRY KILN
SPUR TRACK
1040
OUTSIDE OF CORPORATE LIMITS
12
SHINGLE SHED
SHINGLE SHED
SHINGLE SHED
1055
WASHINGTON WOOD PRODUCTS CO.
STEAM DRY KILNS
1084
JAMISON MILL CO'S SHINGLE MILL
PLANK DRIVE ELEV. 6
Port Gardner Bay
WILLIAM HULBERT MILL CO'S LUMBER YARD
Scale of Feet
50
100
150

WASH..009

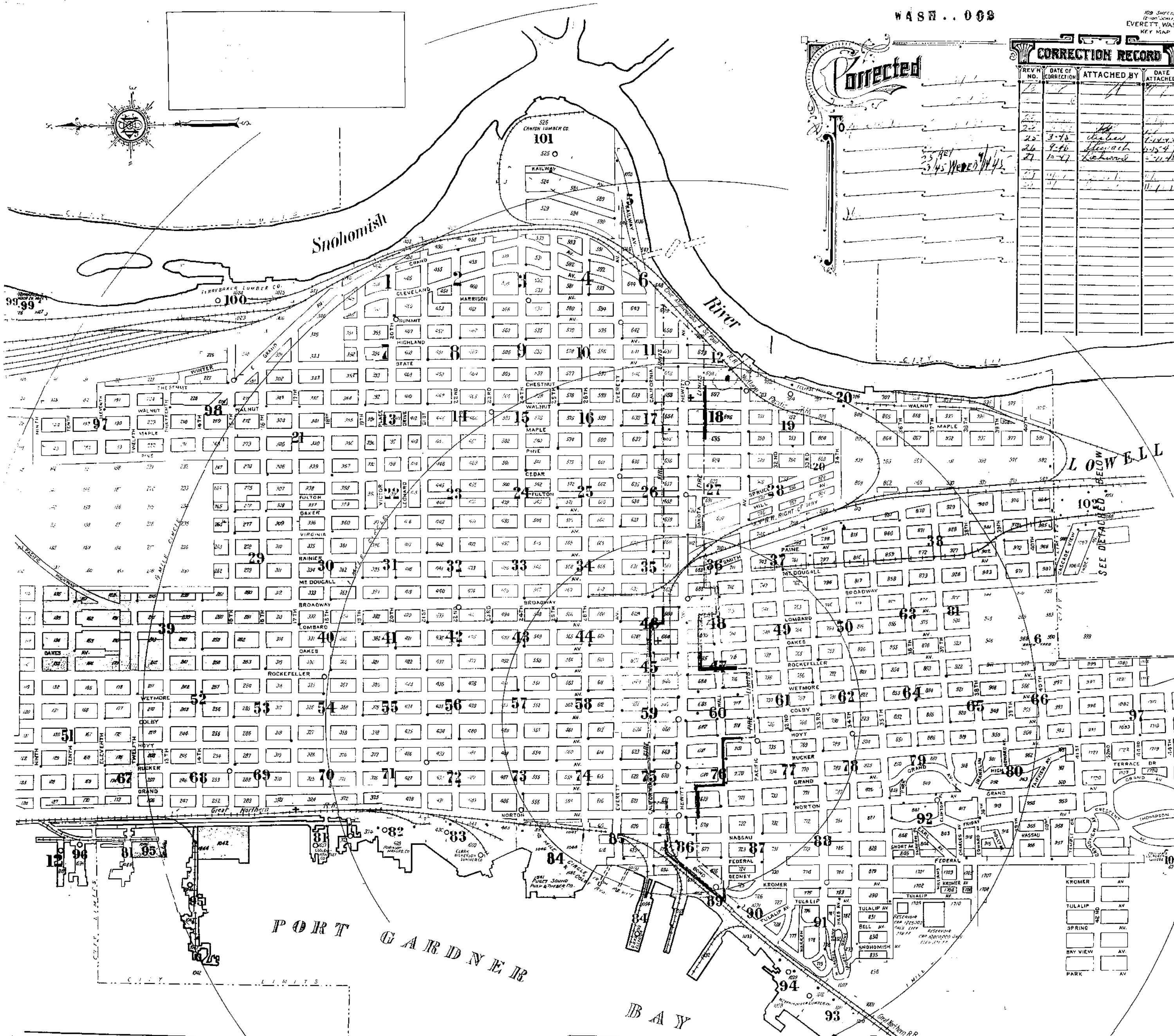
109 SHEETS (2-100' SCALE)
EVERETT, WASH
KEY MAP

Corrected To

23 REV 3/45 WEBER 9/14/45

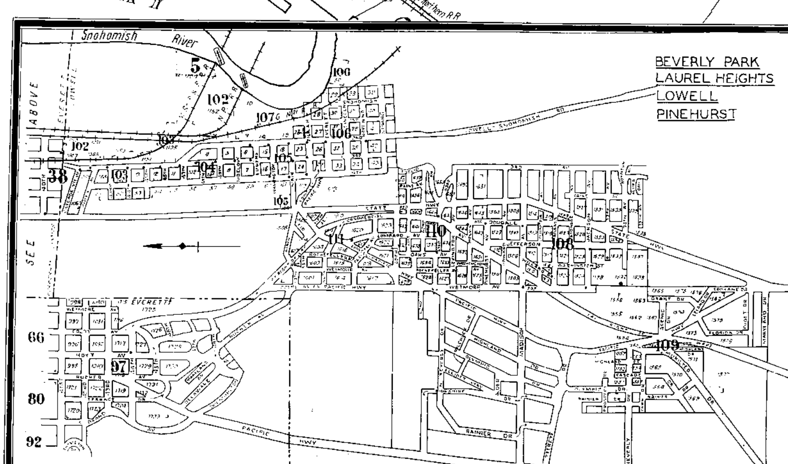
CORRECTION RECORD

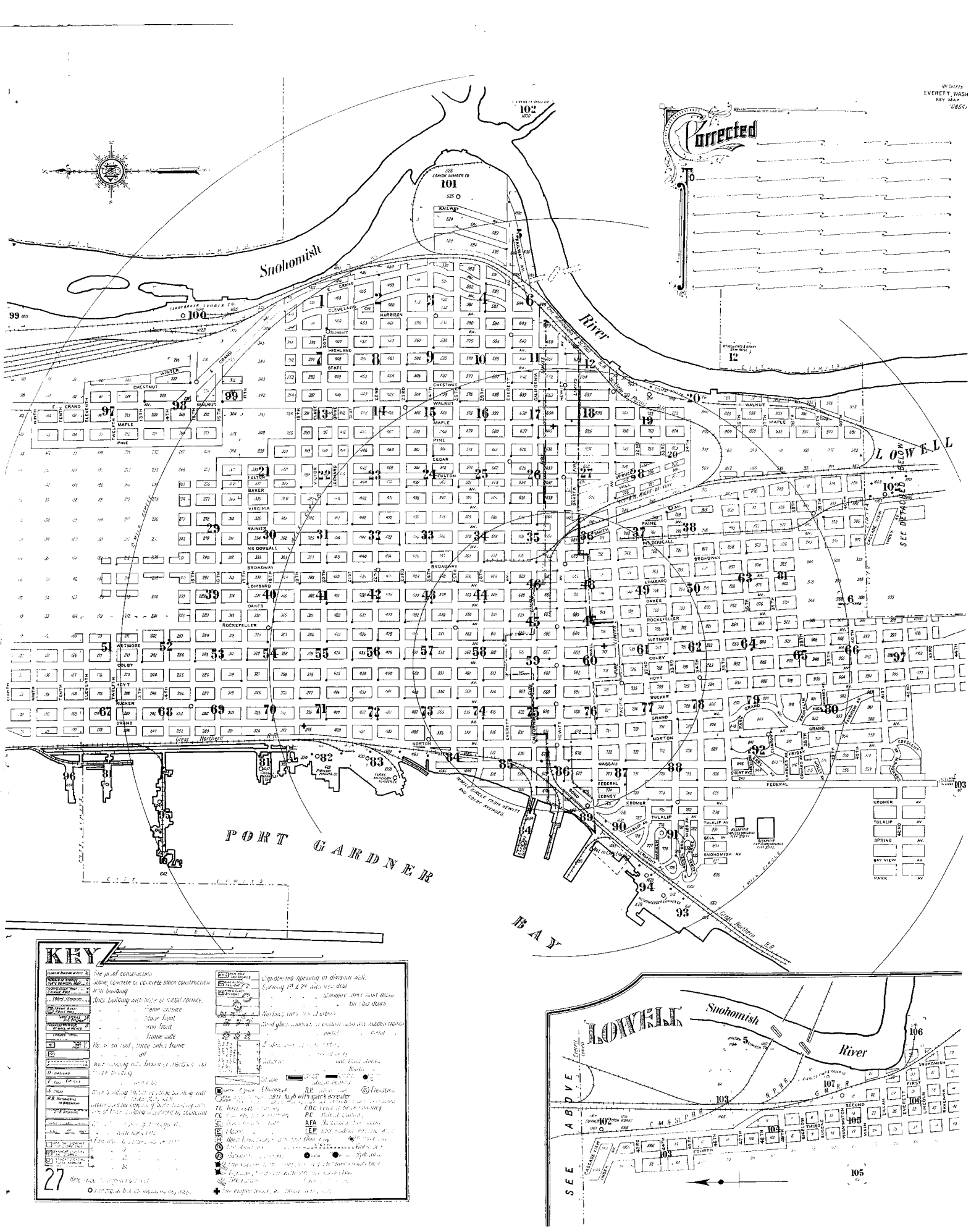
REV'N NO.	DATE OF CORRECTION	ATTACHED BY	DATE ATTACHED
22			
23			
24			
25	3-45	Weber	7-14-45
26	9-46	Stewart	2-15-47
27	10-47	Lockwood	2-11-48

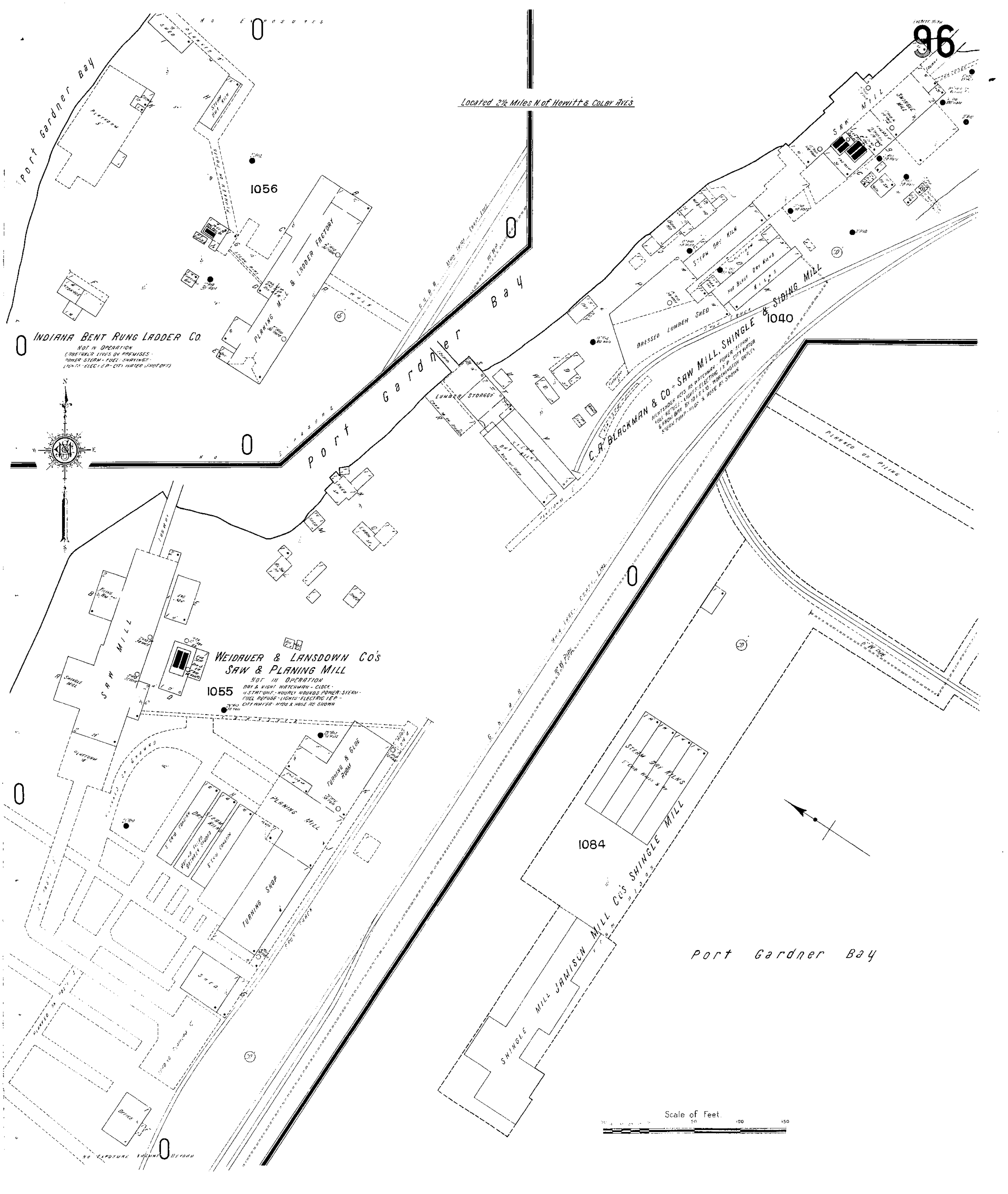


KEY

Fire proof construction
Stone, concrete or concrete block construction
Brick building
Brick building with brick or metal cornice.
Brick building with frame cornice
Brick building with stone front
Brick building with iron front
Brick building with frame side
House on roof, three sides frame
House on roof, all frame
Brick building with french or mansard roof
Frame building
Frame building iron clad
Unprotected opening in division wall.
Standard steel fire doors
Tin clad doors
Windows with iron shutters
Wired glass windows in wooden sash and wooden frames
Wired glass windows in metal sash and metal frames
Stable
Steam boilers.
Chimneys
S.P. Stove pipe
Elevation
Iron Chimney 50 ft. high with spark arrester
(All buildings on which chimney marks are not shown, have standard chimneys)
TC Terra cotta chimney
CC Not standard cone chimney
CBLC Concrete block chimney
PC Patent chimney
Open elevator shaft
Closed elevator shaft
Hoist from basement to first floor only
AFA Automatic fire alarm
IEP Independent electric plant
Fire alarm box
Water pipe
Automatic sprinklers
Hydrants
Fire escape with stand pipe and steamer connection
Outside stand pipe with steamer connection.
Fire escape
27 Reference to adjoining sheet
Fire alarm box as shown on key map.
Fire engine house, as shown on key map.




Corrected
Snohomish River
LOWELL
PORT GARDNER BAY
SEE DETACHED DIAGRAM
SEE ABOVE
KEY
LOWELL
Snohomish River
27


Located 2½ Miles N. of Hewitt & Colby Aves
Port Gardner Bay
1056
Indiana Bent Rung Ladder Co.
Not in Operation
Caretaker lives on premises
Power: Steam - Fuel: Shavings
Lights: Elec. I.E.P. - City Water (shut off)
Planing M. & Ladder Factory
Steam Dry Kiln
Platform
Storage
Planked on posts
Walk
No Exposures
1040
C. A. Blackman & Co. - Saw Mill, Shingle & Siding Mill
Saw Mill
Shingle Mill
Steam Dry Kiln
Hot Blast Dry Kilns
Dressed Lumber Shed
Lumber Storage
Steam Dry Kilns
Planked on Piling
10" W. Pipe
G.N.R.R. Main Track Coast Line
1055
Weidauer & Lansdown Co's
Saw & Planing Mill
Not in Operation
Day & Night Watchman - Clock
Power: Steam
Fuel Refuse - Lights: Electric I.E.P.
City Water: Hyds & Hose as shown
Saw Mill
Shingle Mill
Filing Rm.
Platform
Turning & Glue Room
Planing Mill
Turning Shop
Shed
Office
No Exposure Vacant Beyond
1084
Jamison Mill Co's Shingle Mill
Shingle Mill
Steam Dry Kilns
Port Gardner Bay
Scale of Feet
50
100
150


1955 Aero-Metric/Seattle

1967 Aero-Metric/Seattle


1976 Aero-Metric/Seattle


1981 Aero-Metric/Seattle


1985 Aero-Metric/Seattle


1989 Aero-Metric/Seattle


2001 Aero-Metric/Seattle

APPENDIX D

DEPARTMENT OF ECOLOGY RECORDS

SO3000762

0000010845

TC SYSTEMS INC
EVERETT
WQ 9.0

C

TAB 458041/04235TQ

KARDEX

THE Leader In Filing Sys

1-800-234-3654

SPECIFY COLOR & FASTENE

MADE IN U. S. A.

CAT. NO. 2610003F

RECYCLABLE MATE

B-94-12

S03 000762

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

December 28, 1992

Mr. Orin Smith
TC Systems Inc.
1028 West Marine View Dr.
Everett, WA 98201-1579

Dear Mr. Smith:

RE: Notice of Intent (NOI) for Coverage Under the Storm Water Baseline General Permit

Facility\Site Name: TC Systems Inc.
Address: 1028 West Marine View Dr.
Everett, WA 98201-1579

The Washington Department of Ecology has received your application (NOI) for coverage under the Storm Water Baseline General Permit. After reviewing the application, we have determined that the following clarification is needed before we can grant coverage:

Please complete the following circled Section(s) of the NOI:

I II III IV V (VI) VII VIII IX X

Refer to the instructions for proper completion of the NOI, or call us at (206) 438-7614 if you need assistance. Return the completed NOI by February 18, 1993 to:

Washington Dept. of Ecology
Industrial Storm Water Unit
P.O. Box 47696
Olympia, WA 98504-7696

Sincerely,

Edward O'Brien

Edward O'Brien, Supervisor
Industrial Storm Water Unit
Water Quality Program

Enclosure

Department of Ecology
Water Quality Program

NOTICE OF INTENT

SEP , 1992

For
Baseline General Permit to Discharge Stormwater Associated with Industrial Activity

Mark only one item
1. ☒ Existing Facility
2. ☐ New Facility
3. ☐ Construction Activity
4. ☐ Change of Information

Permit No. _____

I. OPERATOR or CONTRACTOR

Name: TC Systems Inc.	
Mailing Address: 1028 West Marine View Dr.	
City: Everett, WA.	Zip + 4: 98201-1579
Contact Person: Orin Smith	Phone #: (206) 258-4055

II. OWNER/REPRESENTATIVE OF SITE OR FACILITY

Name: TC Systems Inc.	
Mailing Address: 1028 West Marine View Dr.	
City: Everett, WA	Zip + 4: 98201-1579
Contact Person: Orin Smith	Phone #: (206) 258-4055

III. FACILITY/SITE ADDRESS

Facility Name: TC Systems Inc.		
Street Address: 1028 West Marine View Dr.		
City: Everett, WA.	Zip + 4: 98201-1579	Phone #: (206) 258-4055
County: Snohomish		

IV. BILLING ADDRESS:

☐ Owner ☐ Operator ☒ Facility/Site ☐ Other (below)

Name: TC Systems Inc.		
Address: 1028 West Marine View Dr.		
City: Everett, WA.	Zip + 4: 98201-1579	Phone #: (206) 258-4055

V. RECEIVING WATER INFORMATION

A. Does your facility's storm water discharge to: (check all that apply)

1. ☒ Storm sewer system—Owner of storm sewer system (name): Port of Everett
2. ☐ Directly to surface waters of Washington (e.g., river, lake, creek, estuary, ocean)
3. ☐ Indirectly to waters of Wash
4. ☐ Directly to ground waters ☐ dry well ☐ drainfield ☐ other

B. Name(s) of receiving water(s):

Initial discharge is to an unnamed r ☐ Yes ☒ No

3471 Plating/Pol 3479 Metal Coating Allied Serv

VI. INDUSTRIAL ACTIVITY INFORMA

A. SIC Code(s)
1. 3471 2. 3479 3. ____

e of business: Metal Finishing

C. Industrial activities at facility: (check all that apply)

1. ☒ Manufacturing
2. ☐ Material Handling
3. ☐ Material Storage
4. ☐ Hazardous Waste Treatment, Storage, or Disposal Facility (RCRA Subtitle C)
5. ☐ Vehicle Storage
6. ☐ Vehicle Maintenance
7. ☐ Municipal Sewage Treatment
8. ☐ Steam Electric Power Generation
9. ☐ Scrapyard, salvage, auto recycling, battery reclaimer
10. ☐ Landfill or Land Application
11. ☐ Mining
12. ☐ Other

D. Additional Information

	Industrial Facility	Construction Activity
1. Total size of site, acres	N/A	
2. Total impervious area (including rooftops), acres		
3. Total area to be disturbed, acres		
4. Projected construction startup and completion dates (Month, Year)		
5. Has a storm water pollution prevention plan been developed? Yes/No		
6. Are storm water discharge data available? Yes/No		
7. Are data available on impact of storm water on water quality or sediments? Yes/No		

VII. MATERIAL HANDLING/MANAGEMENT PRACTICES

A. Types of materials handled and/or stored outdoors: (check all that apply) N/A

1. ☐ Solvents
2. ☐ Scrap Metal
3. ☐ Petroleum or Petrochemical Products
4. ☐ Plating Products
5. ☐ Pesticides
6. ☐ Hazardous Wastes
7. ☐ Acids or Alkalies
8. ☐ Paints/Coatings
9. ☐ Woodtreating Products
10. ☐ Other Toxics (Please list)

B. Identify existing management practices employed to reduce pollutants in industrial storm water discharges: (check all that apply)

1. ☐ Oil/Water Separator
2. ☒ Containment
3. ☒ Spill Prevention
4. ☐ Surface Leachate Collection
5. ☒ Overhead Coverage
6. ☐ Recycling/Source Reduction
7. ☐ Detention Facilities
8. ☐ Infiltration Basins
9. ☒ Management BMPs
10. ☐ Vegetation Management
11. ☐ Other (Please list)

VIII. REGULATORY STATUS (check all that apply)

A. ☐ NPDES Permit
Permit No. N/A

B. ☒ State Waste Discharge Permit
Permit No. WAD088722947

C. ☐ Air Notice of Construction, Permit, or Order
Agency: N/A

D. ☐ RCRA Permit
Permit No. N/A

IX. STATE ENVIRONMENTAL POLICY ACT (SEPA)

Has SEPA review been completed? ☐ Yes ☐ No N/A
Lead agency issuing SEPA document: _____
Type of SEPA document: _____ Date of SEPA document: _____

X. CERTIFICATION OF PERMITTEE(S)

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

For new industrial facilities and for construction activities:
"I also certify that the public notice requirements of RCW 90.48.170 have been met."

Operator's Printed Name: Fred Owen
Signature: Fred Owen
Title: Manager Date 9-11-92

Owner's Printed Name: _____
Signature: _____
Title: _____ Date _____

STATE USE ONLY:

NPDES Permit Number:	Region	Date NOI Received	Coverage Date

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. BOX 47600 • Olympia, Washington 98504-7600 • (206) 459-6000

March 10, 1993

CERTIFIED MAIL

Mr. Orin Smith
TC Systems Inc.
1028 West Marine View Dr.
Everett, WA 98201-1579

Dear Mr. Smith:

RE: Coverage Under the Storm Water Baseline General Permit

Permit Number: **SO3-000762**

Facility\Site Name: TC Systems Inc.
Address: 1028 West Marine View Dr.
Everett, WA 98201-1579

The Washington Department of Ecology has reviewed your application for coverage under the Storm Water Baseline General Permit. We are granting coverage under the permit as of the date indicated on the cover page of the enclosed permit.

Please note your Permit Number on this letter and on the cover page of the enclosed permit. Use this number in any future correspondence (e.g., submitting a Notice of Termination, or a Notice of Intent because of a change of information) with Ecology.

Please read the enclosed permit carefully. As a permittee, you are legally obligated to comply with its terms and conditions. A document called a Fact Sheet has been prepared by Ecology which helps to explain the permit. You may request a copy of the Fact Sheet by calling (206) 438-7034.

The most significant requirement of the permit is the development of a Storm Water Pollution Prevention Plan. Plan requirements for industrial facilities are given in Special Condition S9. The purpose of Storm Water Pollution Prevention Plans is to reduce, eliminate, or prevent the pollution of storm water through the application of Best Management Practices. Such plans are to be implemented within the time frames identified in Special Condition S1.

There is currently no fee associated with this permit. According to state law, Ecology must charge an annual fee for its discharge permits. Ecology will hold public meetings and hearings in 1993 to establish a fee(s) for this permit through amendment to its wastewater discharge permit fee regulation. Ecology will notify permittees of permit fee charges by mailed billing statements. Fees for coverage under this permit will be collected semi-annually beginning in the state's 1994 fiscal year (July 1993 - June 1994).

You, or a third party, may appeal this decision to cover your facility/ site. An appeal may be filed with the Pollution Control Hearings Board, P.O. Box 40903, Olympia, Washington 98504-0903 within thirty days of receipt of this notification. In addition, a copy of the appeal must be served on the Department of Ecology, P.O. Box 47696, Olympia, Washington 98504-7696. Enclosed is a copy of RCW 43.21B.310 which lists the procedures and requirements for the appeal process.

This permit expires on November 18, 1995. Unless otherwise notified by Ecology, a new Notice of Intent must be submitted to the Department of Ecology at least 180 days prior to that date.

Please call (206) 438-7614 if you have any questions.

Sincerely,

James D. Krull, Supervisor
Point Source Management Section
Water Quality Program

Enclosures

P 118 821 818

Receipt for Certified Mail
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

Mr. Orin Smith
TC Systems Inc.
1028 West Marine View Dr.
Everett, WA 98201-1579

Permit No. SO3-000762

Coverage Date: MAR 1 0 1993

POSTED

Issuance Date: November 18, 1992
Effective Date: December 18, 1992
Expiration Date: November 18, 1995

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM AND STATE WASTE DISCHARGE BASELINE GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504-7696

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Until this permit expires, is modified or revoked, permittees that have properly obtained coverage under this permit are authorized to discharge to waters of the state in accordance with the special and general conditions which follow.

Michael T. Llewelyn
Water Quality Program Manager
Department of Ecology

Department of Ecology
Water Quality Prog

FEB 11 1993

Department of Ecology
Water Quality Program

SEP 6 1992

NOTICE OF INTENT
For
Baseline General Permit to Discharge Stormwater Associated with Industrial Activity

Mark only one item
1. ☒ Existing Facility
2. ☐ New Facility
3. ☐ Construction Activity
4. ☐ Change of Informatio

Permit No. _____

POSTED

I. OPERATOR or CONTRACTOR

Name: TC Systems Inc.

Mailing Address: 1028 West Marine View Dr.

City: Everett, WA. Zip + 4: 98201-1579

Contact Person: Orin Smith Phone #: (206) 258-4055

POSTED

II. OWNER/REPRESENTATIVE OF SITE OR FACILITY

Name: TC Systems Inc.

Mailing Address: 1028 West Marine View Dr.

City: Everett, WA Zip + 4: 98201-1579

Contact Person: Orin Smith Phone #: (206) 258-4055

POSTED

III. FACILITY/SITE ADDRESS

Facility Name: TC Systems Inc.

Street Address: 1028 West Marine View Dr.

City: Everett, WA. Zip + 4: 98201-1579 Phone #: (206) 258-4055

County: Snohomish

nod
289

IV. BILLING ADDRESS:

☐ Owner ☑ Operator ☑ Facility/Site ☐ Other (below)

Name: TC Systems Inc.

Address: 1028 West Marine View Dr.

City: Everett, WA. Zip + 4: 98201-1579 Phone #: (206) 258-4055

V. RECEIVING WATER INFORMATION

A. Does your facility's storm water discharge to: (check all that apply)

1. ☒ Storm sewer system—Owner of storm sewer system (name): Port of Everett
2. ☐ Directly to surface waters of Washington state (e.g., river, lake, creek, estuary, ocean)
3. ☐ Indirectly to waters of Washington state
4. ☐ Directly to ground waters of Washington state: ☐ dry well ☐ drainfield ☐ other

B. Name(s) of receiving water(s): Port Gardner Bay

Initial discharge is to an unnamed receiving water? ☐ Yes ☒ No

VI. INDUSTRIAL ACTIVITY INFORMATION

A. SIC Code(s) 1. 3471 2. 3479 3. ____ 4. ____

B. Type of business: Metal Finishing

C. Industrial activities at facility: (check all that apply)

1. ☒ Manufacturing
2. ☒ Material Handling
3. ☒ Material Storage
4. ☐ Hazardous Waste Treatment, Storage, or Disposal Facility (RCRA Subtitle C)
5. ☒ Vehicle Storage
6. ☒ Vehicle Maintenance
7. ☐ Municipal Sewage Treatment
8. ☐ Steam Electric Power Generation
9. ☐ Scrapyard, salvage, auto recycling, battery reclaimer
10. ☐ Landfill or Land Application
11. ☐ Mining
12. ☐ Other

POSTED

D. Additional Information:	Indus. Facility	Construction Activity
1. Total size of site, acres	2.6 Acres	
2. Total impervious area (Including rooftops), acres	2.6 Acres	
3. Total area to be disturbed, acres		
4. Projected construction startup and completion dates (Month, Year)		
5. Has a storm water pollution prevention plan been developed? Yes/No	No	
6. Are storm water discharge data available? Yes/No	No	
7. Are data available on impact of storm water on water quality or sediments? Yes/No	No	

VII. MATERIAL HANDLING/MANAGEMENT PRACTICES

A. Types of materials handled and/or stored outdoors: (check all that apply)

POSTED

1. ☒ Solvents
2. ☐ Scrap Metal
3. ☐ Petroleum or Petrochemical Products
4. ☐ Plating Products
5. ☐ Pesticides
6. ☐ Hazardous Wastes
7. ☒ Acids or Alkalies
8. ☒ Paints/Coatings
9. ☐ Woodtreating Products
10. ☐ Other Toxics (Please list)

B. Identify existing management practices employed to reduce pollutants in industrial storm water discharges: (check all that apply)

1. ☐ Oil/Water Separator
2. ☒ Containment
3. ☒ Spill Prevention
4. ☐ Surface Leachate Collection
5. ☒ Overhead Coverage
6. ☐ Recycling/Source Reduction
7. ☐ Detention Facilities
8. ☐ Infiltration Basins
9. ☒ Management BMPs
10. ☐ Vegetation Management
11. ☐ Other (Please list)

VIII. REGULATORY STATUS (check all that apply)

A. ☐ NPDES Permit Permit No. _____	C. ☐ Air Notice of Construction, Permit, or Order Agency: _____
B. ☐ State Waste Discharge Permit Permit No. _____	D. ☒ RCRA Permit Permit No. WAD088722947

IX. STATE ENVIRONMENTAL POLICY ACT (SEPA)

Has SEPA review been completed? ☐ Yes ☒ No

Lead agency issuing SEPA document: _____

Type of SEPA document: _____ Date of SEPA document: _____

X. CERTIFICATION OF PERMITTEE(S)

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

~~*For new industrial facilities and for construction activities:*~~

~~*"I also certify that the public notice requirements of RCW 90.48.170 have been met."*~~

Operator's Printed Name: Fred Owen

Signature: F Owen

Title: Manager Date 2-9-93

Owner's Printed Name: _____

Signature: _____

Title: _____ Date _____

STATE USE ONLY:

NPDES Permit Number:	Region	Date NOI Received	Coverage Date

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Request r Renewal of Coverage nder Ecology's Baseline General Permit for Discharge of Stormwater Associated with Industrial Activity

DEPARTMENT OF ECOLOGY
JUL 2 1 1995
WATER QUALITY PROGRAM

Current Information On File For Your Facility

Permit No: SO3000762I

I. OPERATOR		II. OWNER/REPRESENTATIVE OF FACILITY	
Name: [redacted]		Name: TC SYSTEMS INC.	
Mailing Address: 1028 WEST MARINE VIEW DR.		Mailing Address: 1028 W. MARINE VIEW DR.	
City: EVERETT	Zip + 4: 98201-1579	City: EVERETT	
Contact Person: Orin Smith	Phone No.: 2062584055	Zip + 4: 98201-1579	
III. FACILITY ADDRESS		Contact Person:	Phone No.:
Facility Name: TC SYSTEMS INC.			
Street Address: 1028 WEST MARINE VIEW DR.			
City: EVERETT	Zip + 4: 98201-1579		
County: SNOHOMISH	Phone No.: 2062584055		

TC Systems, Inc.
1028 W. Marine View Dr.
Everett, Washington 98201

Update Informa

***MANDATORY:* Please complete section IV. BILLING ADDRESS, below.**
(PLEASE PRINT IN INK OR TYPE)

If there is a *change of information* or *corrections* to sections I, II, or III above, enter the correct data in the appropriate section below. Place an "X" in the No Change box only if all the information above is correct.

No Change: ☐

I. OPERATOR		II. OWNER/REPRESENTATIVE OF FACILITY	
Name:		Name:	
Mailing Address:		Mailing Address:	
City:	Zip + 4:	City:	Zip + 4:
Contact Person: ROB HOWARD	Phone No.:	Contact Person:	Phone No.:
III. FACILITY ADDRESS		**IV. BILLING ADDRESS**	
Facility Name:		Name:	
Street Address:			
City:	Zip + 4:	Address:	
County:	Phone No.:	City: Zip + 4:	Phone No.:

Note: Please complete back side of this form even if you have no changes or corrections above.

POSTED

Permit No. SO3000762I

Complete the Following:

1. Has the Primary Standard Industrial Classification (SIC) for your facility changed? ☐ Yes ☒ No If yes, new SIC: _____

2. Type of Business: METAL FINISHER

3. Unified Business Identifier Number (UBI): 338395

4. A. Have you written a *Stormwater Pollution Prevention Plan (SWPPP)*?
   ☐ Yes (Go to next question)
   ☒ No (Go to the Certification Statement at the bottom)

   B. Have you completed implementation of all *operational Best Management Practices (BMP's)* and all applicable *source control BMP's* which do not require capital improvements?
   ☐ Yes ☒ No

   C. Are *Capital Improvements* included in the SWPPP?
   ☐ Yes ☒ No

5. What is the total size of the industrial area of your site in acres? 3

Certification of Permittee(s)

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

	(If Co-Permittee)
Operator's Printed Name: ROBERT HOWARD	Owner's Printed Name: _____
Signature: Robert J Howard	Signature: _____
Title: PURCHASING MGR. Date: 7-20-95	Title: _____ Date: _____

Please sign and return this document to the following address by May 23, 1995.

Washington Department of Ecology
Water Quality Program
Stormwater Unit
PO Box 47696
Olympia, WA 98504-7696

The Department of Ecology is an equal opportunity agency and does not discriminate on the basis of race, creed, color, disability, age, religion, national origin, sex, marital status, disabled veteran's status, Vietnam Era veteran's status or sexual orientation.

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

August 9, 1995

TC Systems Inc.
1028 West Marine View Dr.
Everett WA 98201-1579
SO3000762I

Rob Howard
TC Systems Inc.
1028 W. Marine View Dr.
Attn Rob Howard
Everett WA 98201-1579

Dear Rob Howard:

RE: ***NOTICE OF NON-COMPLIANCE WITH THE BASELINE GENERAL PERMIT TO DISCHARGE STORMWATER ASSOCIATED WITH INDUSTRIAL ACTIVITIES***

Failure to write and implement a Stormwater Pollution Prevention Plan (SWPPP) represents non compliance with the permit and may result in your facility not being covered under the reissued permit. Non compliance or discharge without a permit may result in compliance actions by Ecology or citizen suits under the Clean Water Act.

Thank you for submitting your 180 day renewal notice to renew the stormwater permit for your facility. In reviewing the information you submitted, it was noted that you indicated a stormwater pollution prevention plan (SWPPP) has not been written or implemented. Preparation and implementation of a SWPPP is a key requirement of your permit. If you have not done so, you are in violation of your permit and subject to appropriate compliance actions by Ecology and to citizen suits under the federal Clean Water Act.

If our information is in error, please call (360) 407-6437 or (360) 407-6436 immediately. If you are not in compliance with the permit, you need to ***NOTIFY ECOLOGY IN WRITING*** by **August 30, 1995** with the following information:

- Completion date of SWPPP.
- Whether or not **operational** and **source** control Best Management Practices were implemented.
- If any capital improvements are included in your SWPPP, will they be completed by November 18, 1995? If you are unable to meet the November 18, 1995 deadline for implementing capital improvements, explain why, provide the anticipated completion date, and request an extension.

NOTE:

DO NOT submit your SWPPP to Ecology. Retain the plan on site or within reasonable access to the facility. Should an inspector visit your site, they will request to see the plan.

If you would like assistance in attaining compliance, Ecology can provide the following:

A guidance document, **Stormwater Pollution Prevention Planning for Industrial Facilities (WQ-R-93-015)** should have been included with your permit. The document will guide you through the process of developing a stormwater prevention plan for your facility. If you do not have a copy of the guidance document, please call our request line at (360) 407-7156.

Regional Assistance

If you still have questions after reviewing the reference material cited above, select from the following list the county where your facility is located and call the Ecology staff person assigned to that county:

NORTHWEST REGIONAL OFFICE IN BELLEVUE

Bob Newman (206) 649-7046

Island, San Juan, Skagit, Whatcom

Bob Wright (206) 649-7060

Snohomish and Kitsap

Ron Devitt (206) 649-7028

King County

SOUTHWEST REGIONAL OFFICE IN OLYMPIA

Dick Schroeder (360) 407-6273

Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum

EASTERN REGIONAL OFFICE IN SPOKANE

Paul Turner (509) 625-5181

Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla, Whitman

CENTRAL REGIONAL OFFICE IN YAKIMA

Steve Huber (509) 575-2680

Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima

If you have any questions concerning this letter, call Linda Matlock at (360) 407-6437 or Glenn Pieritz at (360) 407-6436.

Send your letter of response by *AUGUST 30, 1995* to:

Department of Ecology
Water Quality Program
Stormwater Unit
P.O. Box 47696
Olympia, WA 98504-7696

Thank you for your cooperation in coming into compliance with the stormwater permit.

Sincerely,

James D. Krull, Manager
Permit Management Section
Water Quality Program

JDK:lm

TC Systems, Inc.
1020 W. Marine View Dr.
Everett. Washington 98201
Fax 206-252-6855
206-258-4055

-1557

DEPARTMENT OF ECOLOGY

AUG 3 0 1995

WATER QUALITY PROGRAM

August 29, 1995

Department of Ecology
Attn: Linda Matlock
Water Quality Program
Stromwater Unit
PO Box 47696
Olympia, WA 98504-7696

POSTED

Re: Stormwater Pollution Prevention Plan
Permit# SO32000762I

Dear Ms. Matlock:

This letter is to inform you that TC Systems, Inc. completed a stormwater pollution prevention plan in July 1993. Source controls Best Management Practices and capital improvements were implemented and made part of the our SWPPP.

If you have any questions, please do not hesitate to call me at 206-258-4055.

Sincerely,

Robert L. Howard
Environmental Administrator.

January 10, 1996

TC SYSTEMS INC.
1028 W. MARINE VIEW DR.
ATTN ROB HOWARD
Everett, WA 98201-1579

Industrial Activity:

Permit No.	SO3000762
Site Name:	TC SYSTEMS INC.
Location:	1028 WEST MARINE VIEW DR Everett, WA 98201-1579

Dear Stormwater Permittee:

RE: Stormwater Baseline General Permit for Industrial Activity

The Washington Department of Ecology has reviewed your renewal application for coverage under the new Stormwater Baseline General Permit for Industrial Facilities. We are granting you coverage under the new permit effective December 18, 1995.

We're using the same permit number as you previously had for this permit. Please verify the permit number on the cover page of the enclosed permit. Use this number on any future correspondence (e.g., submitting a Notice of Termination or any notification of a change of information for your facility) with Ecology.

Read the enclosed document carefully. As a permit holder, you are legally obligated to comply with its terms and conditions.

Summary of Changes to the Industrial Stormwater Permit

- Increasing the term of the permit to five years;
- Use of discharge targets as guidance for permittees [S9.D.3] (page 23 of permit);
- Addition of stormwater runoff quantity control requirements [S9.D.2.d] (page 20 of permit);
- Addition of coverage and schedule requirements for primary auxiliary facilities, regardless of the Standard Industrial Classification code of the facility ownership or the parent company, including Special Condition S12 which gives Ecology the authority to make this coverage determination [S1.A.4 & S1.B.2] (page 8 of permit);
- Addition of schedule requirements for significant contributors [S1.A.2 & S1.B.2] (page 8 of permit);

- Addition of conditional coverage and schedule requirements for facilities which have not complied with Stormwater Pollution Prevention Plan (SWPPP) requirements and facilities which have not obtained required National Pollutant Discharge Elimination System (NPDES) permit coverage [S2.C] (page 10 of permit);
- Inclusion of prohibitions of illicit discharges including spills of oils and hazardous substances [S4.C] (page 13 of permit);
- Application of future editions of the Ecology Stormwater Management Manual (SWMM) [S9.B.4] (page 16 of permit);
- Coordination with local governments [S9.B.6] (page 16 of permit);
- Application of "Discharges of Significant Amounts of Pollutants" [S9.D.3] (page 20 of permit);
- An allowance of extensions of up to 12 months beyond the November 18, 1995 deadline for completion of capital improvements by existing permittees (including vehicle recyclers) [S1.B.3.c] (page 9 of permit); and
- Application of BMP selection guidance documents for vehicle recyclers and log yards [S1.B.3] (page 8 of permit).

A Fact Sheet has been prepared by Ecology which helps to explain the permit. You may request a copy of the Fact Sheet by calling (360) 407-7156.

Stormwater Pollution Prevention Plan

A vital requirement of the permit is the maintenance of your SWPPP (refer to Special Condition S9 of the permit). A condition of coverage is that you have already developed a SWPPP. You are required to keep your plan current through semi-annual review of the SWPPP and updates as necessary.

The purpose of the SWPPP is to reduce, eliminate, or prevent stormwater pollution through the application of Best Management Practices (BMPs). Retain your SWPPP on or near the facility site. Should an inspector visit your site, they will request to review the SWPPP. The public may access your SWPPP by submitting a request to Ecology. If you discharge to a municipal storm sewer system, the operator of the storm sewer system may also request a copy of your SWPPP.

DO NOT submit your SWPPP to Ecology unless you receive a specific request from Ecology to do so.

Permit Fees

State law (RCW 90.48.465) requires that all permit holders pay an annual permit fee. Billing notices are processed through the Permit Fee Unit of the Department of Ecology. If you would like more information on the fee process, contact Bev Poston at (360) 407-6425.

If you already hold another discharge permit for water quality from the Department of Ecology for which you are paying fees, Ecology will not charge you an additional fee for coverage under this permit.

Appeal

You, or a third party, may appeal this decision to cover your facility. An appeal may be filed with the Pollution Control Hearings Board, P.O. Box 40903, Olympia, Washington 98504-0903, within thirty (30) days of receipt of this notification. In addition, a copy of the appeal must be served on the Department of Ecology, P.O. Box 47696, Olympia, Washington 98504-7696. Enclosed is a copy of RCW 43.21B.310 which lists the procedures and requirements for the appeal process.

Renewal Notice

This permit expires on November 18, 2000. If you will be discharging stormwater associated with industrial activity from your site after November 18, 2000, you must continue coverage under the next permit which will be issued. Unless otherwise notified by Ecology, the Renewal Application included in the enclosed permit as Appendix 4 must be submitted to the Department of Ecology at least 180 days prior to expiration date. Do not submit the Renewal Application prior to April 23, 2000.

Ecology Regional Assistance

If you have questions on how to meet the requirements of the permit, need assistance in how to interpret the guidance manual provided to you earlier, or clarification on stormwater pollution prevention, select the county where your facility is located and call the Ecology staff person assigned to that county:

Northwest Regional Office in Bellevue	
Bob Newman (206) 649-7046	Island, San Juan, Skagit, Whatcom
Bob Wright (206) 649-7060	Snohomish and Kitsap
Ron Devitt (206) 649-7028	King County

Southwest Regional Office in Olympia	
Dick Schroeder (360) 407-6273	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum

Eastern Regional Office in Spokane	
Paul Turner (509) 625-5181	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman

Central Regional Office in Yakima	
Steve Huber (509) 575-2680	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima

Notice of Termination (NOT)

If your facility has ceased all industrial activity and no significant materials remain exposed to stormwater or snow melt, or the operation has been moved to a new location, Ecology must be notified by your submission of a Notice of Termination form. The form is located in the back of your permit. Permit fees continue to accumulate until Ecology receives the NOT.

Please call (360) 407-6437 or 407-6436 if you have questions regarding this letter. Thank you for your cooperation and continued support in protecting the waters of Washington State.

Sincerely,

James D. Krull, Manager
Permit Management Section
Water Quality Program

JDK:ss
Enclosures: Stormwater Permit and RCW 43.21B.310

TC SYSTEMS INC - NWRO

SO3-000762

Industrial Stormwater General Permit
Coverage Date: November 18, 2000
Expiration Date: November 18, 2005

Facility Location

Address: 1028 W MARINE VIEW DR
EVERETT

Acres: 2.6

***WRIA:** 07 – SNOHOMISH

County: SNOHOMISH COUNTY

Contact Person: TONY KRAMER
(206) 258 4055

Mailing Address

TC SYSTEMS INC
1028 W MARINE VIEW DR
EVERETT, WA 98201-1557

Billing Address

TC SYSTEMS INC
DONNA NICHOLSON
1028 W MARINE VIEW DR
EVERETT, WA 98201-1557

**Primary SIC

3471 – PLATING AND POLISHING

*WRIA, Water Resource Inventory Area
**SIC, Standard Industrial Code

Melodie Selby

Melodie A. Selby, P.E.
Section Manager
Water Quality Program

WASHINGTON STATE DEPARTMENT OF ECOLOGY

REQUEST FOR RENEWAL of Coverage Under the General Permit to Discharge Stormwater Associated with Industrial Activity

DEPARTMENT OF ECOLOGY
JUL 03 2000
WATER QUALITY PROGRAM

POSTED

Permit # SO3 - 000762B

DO NOT SUBMIT THIS FORM SOONER THAN APRIL 23, 2000, OR LATER THAN MAY 23, 2000

Duty to Reapply:
General Condition G15 of the industrial baseline general stormwater permit requires permittees to reapply for coverage under the industrial general permit, at least 180 days prior to the expiration date of the permit or November 18, 2000. This form is being provided as a convenient reminder and method to accomplish this requirement.

I. Permittee Information (Please print in ink or type)

(All correspondence Will Be Mailed Here)			(If different than Representative)	
Operator/Representative's Name: Charles Souder			Billing Contact Name: Donna Nicholson	
Title: General Manager	Phone No.: (425)258-4055		Phone No.: (425(258-4055	
Company Name: TC Systems			Company Name: Same	
Street Address or P.O. Box: 1028 W. Marine View Dr.			Mailing Ad	
City: Everett	State: WA	Zip + 4: 98201-1557	City	4

TC Systems, Inc.
1028 W. Marine View Dr.
Everett, Washington 98201-1557

II. Facility Information

Name of Facility	Facility Contact Name	Phone No.
TC Systems	Tony Kramer	(425)258-4055

Facility Street Address (or Location Description): 1028 W. Marine View Dr.

City	State	Zip + 4	County
Everett	WA	98201-1557	Snohomish

III. Certification of Permittee(s)

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

	(If Co-Permittee)
Charles C. Souder	
Operator/Representative's Printed Name	Co-Permittee's Printed Name
Operator/Representative's Signature	Co-Permittee's Signature
6/30/00	
Date	Date

(Continued on Back Page)

Please sign and return this document to the following address:

Washington Department of Ecology
Water Quality Program
Stormwater Unit
PO Box 47696
Olympia, WA 98504-7696

QUESTIONS: If you still have questions after reading the instructions for completing this form, call the Department of Ecology at (360) 407-6437

The Department of Ecology is an equal opportunity agency and does not discriminate on the basis of race, creed, color, disability, age, religion, national origin, sex, marital status, disabled veteran's status, Vietnam Era veteran's status, or sexual orientation.

CWQ 9.4

State of Washington Department of Ecology
Northwest Regional Office

STORMWATER COMPLIANCE INSPECTION REPORT

WADOE Stormwater Compliance Inspection Form (last file update 4-04.)

Facility Type:
☒ Industrial ☐ Boatyard
☐ Construction ☐ S & G

Section A: General Data

Inspection Date	NPDES Permit #	County	Receiving Waters
4/20/04	SO3-000762	King	Puget Sound

Discharges to: Surface Water ☒ Ground Water ☐ | Weather at time of inspection: Overcast/showers

Section B: Facility Data

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
TC Systems 1028 West Marine View Drive Everett, WA 98201-1557	10:30	11/18/2000
	Exit Time	Permit Expiration Date
	12:00	11/18/2005

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)	Other Participants:
Mike Farnham 1028 W Marine View Drive Everett WA 98201-1557	

Name, Address of Responsible Official/Title/Phone and Fax Number.		Yes	No
Charles Souder General Manager 1028 Wset Marine View Drive Everett, WA 98201-1557 Phone Number 425-258-4055 Fax Contacted? ☐Yes ☒ No	Samples Taken?	☐	☒
	Photos Taken?	☒	☐

Section C: Areas Evaluated During Inspection.

☒	NPDES Permit Available	☐	Wet & Dry Season Inspection Reports	☐	Operations & Maintenance	☐	Effluent/Receiving Water
☒	Storm Water Pollution Prevention Plan Available	☐	Employee Training Records	☐	Oil/Water Separator	☐	Pretreatment
☐	SPCC Plan & Equipment	☐	Compliance Schedules	☐	Solid Waste Disposal	☐	Laboratory
☒	Erosion and Sediment Control Plans	☐	Monitoring Plan	☐	Catch Basins	☐	0.5 inch Inspection Logs
☐	DMR Submittals	☐	Fuel/Chemical Storage	☐	Track out / Wheel wash	☐	
☐		☐		☐		☐	
☒		☐		☐		☐	

Section D: Summary of Findings/Comments

A site visit was made to this facility because a phone call were received from Snohomish PUD that the company was not keeping up on their electric bills and the power would be turned off. Therefore, there could be some implications for hazardous waste and storm water. This facility is a plating, painting and polishing facility for aircraft parts. Issues arose with outside storage of chemicals and waste which have a potential to discharge to the storm sewer. Specifically, their waste goes through a press and is then pumped through a rubber hose across the driveway between two adjacent buildings to an outside container. (Photo #4) The water has the potential to contain chromium and is treated at this container. It is then again pumped through a hose across the same driveway to a container inside the building. It is tested here for pH and chromium. The water is either discharged to sanitary sewer or stored for hauling. It was also found that the company is washing their vehicles in the parking lot which discharges to storm. According to Joyce Smith, DOE Industrial Permit Coordinator, the facility is behind on DMR reporting for the quarter. These issues were addressed with Mike Farnham the Environmental Facility Manager.

The following violations were identified at this facility:

RCW 90.48.120
Notice of department's determination that violation has or will occur -- Report to department of compliance with determination -- Order or directive to be issued -- Notice.

(1) Whenever, in the opinion of the department, any person shall violate or creates a substantial potential to violate the provisions of this chapter or chapter 90.56 RCW, or fails to control the polluting content of waste discharged or to be discharged into any waters of the state, the department shall notify such person of its determination by registered mail.

1. Photo # 4 shows hoses which are used to transport waste across a driveway with open storm sewers. A substantial potential to discharge to the storm sewers is shown here and adequate Best Management Practices have not been employed.
2. Photo #7 shows oil leaking from a compressor with no containment.

RCW 90.48.080
Discharge of polluting matter in waters prohibited.

It shall be unlawful for any person to throw, drain, run, or otherwise discharge into any of the waters of this state, or to cause, permit or suffer to be thrown, run, drained, allowed to seep or otherwise discharged into such waters any organic or inorganic matter that shall cause or tend to cause pollution of such waters according to the determination of the department, as provided for in this chapter.

1. Washing vehicles and discharging to storm sewer.
2. General housekeeping
   Containment of paint chips
3. Containment area collects storm water which is siphoned off by a sump. No generator back up present if power goes off.
4. Containment space is not adequate. (See photo #3&4) Containment should hold 110% of largest container.
5. Cover and containment not adequate. (Photo#6 &#10)

S9 Stormwater Pollution Prevention Plan (SWPPP)
All facilities covered under this permit must have a Stormwater Pollution Prevention Plan (SWPPP) specifically developed for their facility .....

1. No SWPPP available at the time of this inspection.
2. Include the procedures to follow when electricity is not available.

S4. Monitoring Requirements
All facilities under this permit that discharge to surface water are required to conduct quarterly monitoring.....

1. No first quarter DMR submitted at the time of this visit.

Name(s) and Signatures of Inspector(s)	Agency/Office/Telephone	Date
Cynthia J. Callahan Cynthia J Callahan	WA Dept. of Ecology/ NW Regional Office/ 425-649-3190 160th Ave SE, Bellevue, WA 98008-5452	6/7/04
Signature of Management Q A Reviewer Donald A Sealy	Agency/Office/Phone and Fax Numbers WA Dept. of Ecology/NWRO/ (425) 649-7000 Fax (425) 649-7098	06/08/04

UNANNOUNCED Inspection

The following photos were taken by C. Callahan on 4/20/04 at TC Systems Inc.

Photo #:1

Description:
Berm around outside containers show paint chips which need to be cleaned up Due to proximity of storm drains.

Photo # 2

Description:
Outside area where waste containers and product containers are stored is only partially covered by a roof. Therefore storm water deposits and is siphoned off by a sump when a certain level is reached. Water is sent back into the system.

Photo #:3

Description:
Aladine rinse tank pictured which is a product has no roof but is burmed. Tank should be covered by a roof or tarp. Also please note a rule of thumb for the containment space is 110% of the largest container which is not true here.

Photo # 4

Description:
Water from sludge press pumped through a hose across driveway to this tank. The water is treated here and pumped through another hose across the driveway into a holding tank which is situated within the building the concern here is related to the exposed hose across the driveway and storm drains with the potential to discharge.

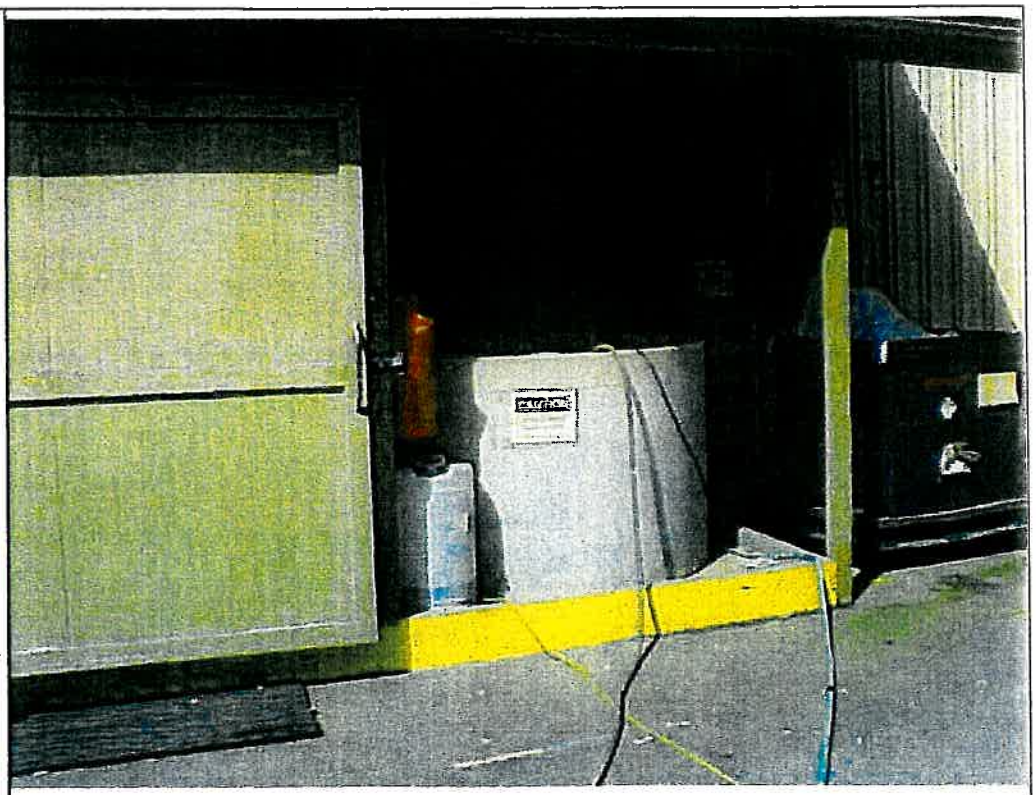


Photo #: 5

Description:
Sludge press where hose and waster water initiate.

Photo # 6

Description:
Garbage bin where cover has a permeable surface and storm water can enter. A solid cover is considered optimal so storm water does not enter and leach any pollutants on to road and storm drains.

Photo #: 7

Description:

Compressor in shed adjacent to driveway with storm drains. The pump is leaking oil and fluids.

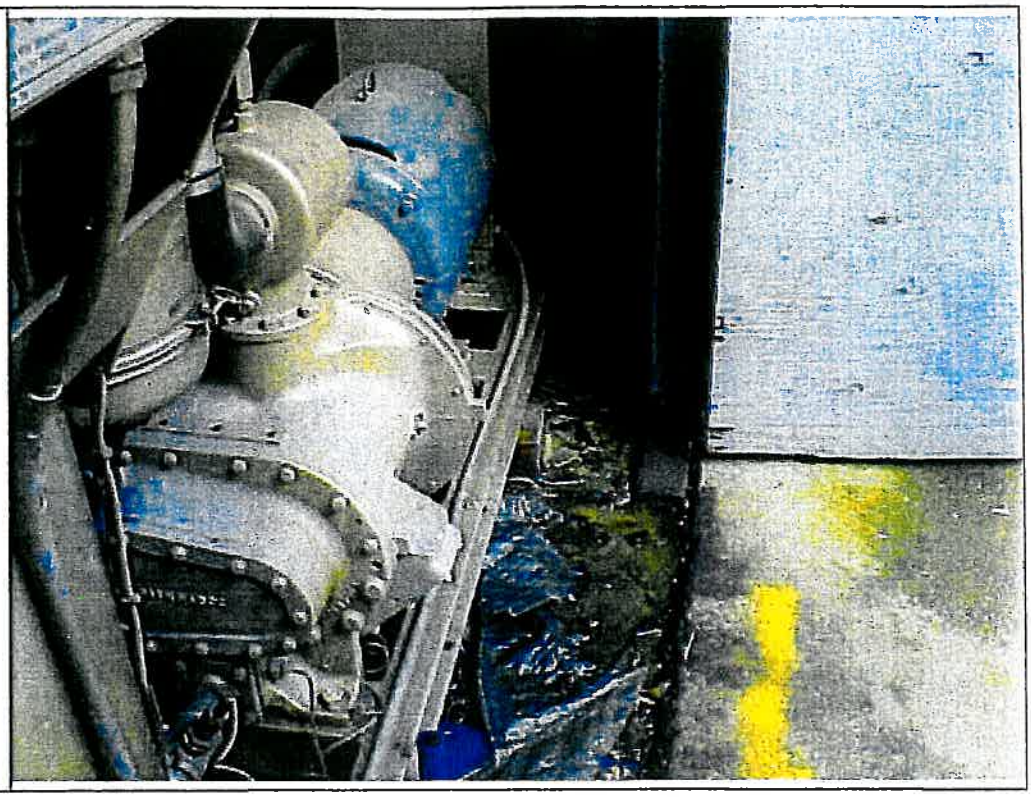


Photo # 8

Description:
Shed where previous pump is housed shows oil and fluids leaking onto open pavement under shed.

Photo #: 9

Description:

Leaking oil not in a contained area.

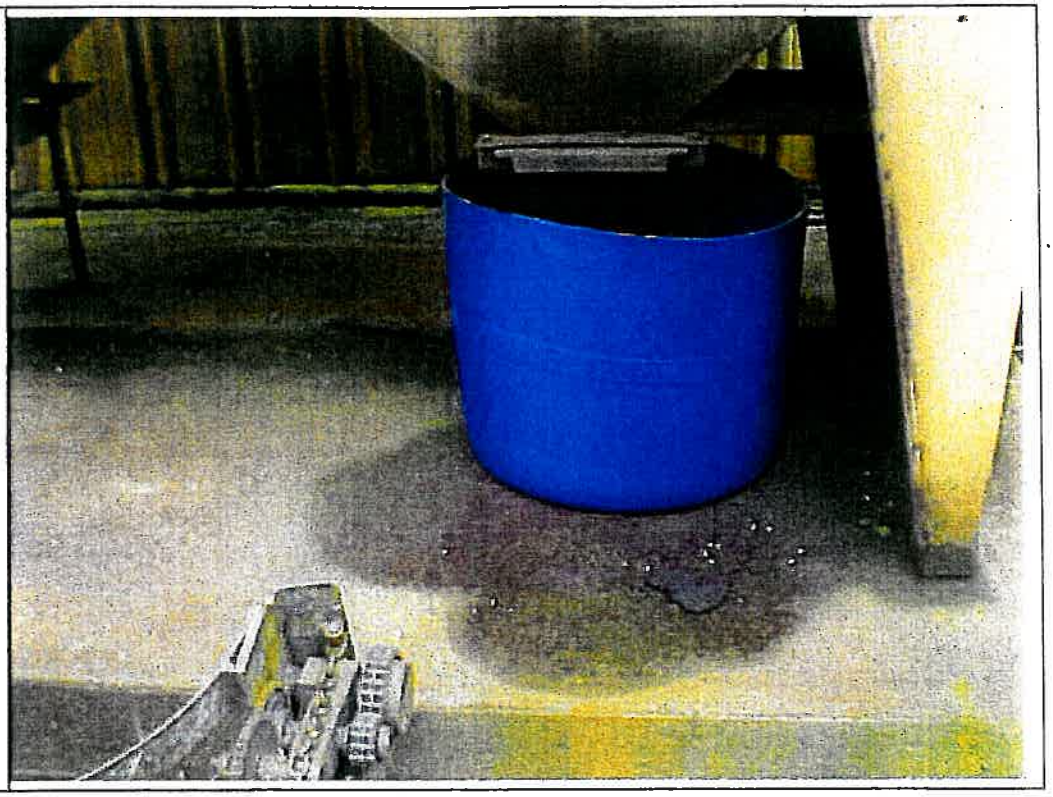


Photo # 10

Description:

Waste materials outside with no cover or containment.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
TTY 711 or 800-833-6388 (For the Speech or Hearing Impaired)

December 1, 2004

TONY KRAMER
TC SYSTEMS INC
1032 W MARINE VIEW DR
EVERETT, WA 98201

Site Information:
SO3000762D
TC SYSTEMS INC
1028 W MARINE VIEW DR
EVERETT
SNOHOMISH

Dear: Industrial Stormwater Permit Holder

The Washington State Department of Ecology (Ecology) has modified the Industrial Stormwater General Permit. This letter will explain some of the new requirements in the modified permit and other important changes. Please take time to read the new permit included with this letter. The modified permit replaces the current permit. Please keep the new permit and this letter with your Stormwater Pollution Prevention Plan (SWPPP).

New Stormwater Sampling Parameters
If your facility discharges into an impaired water body on the 303(d) list you are now required to comply with new stormwater sampling parameters. On October 7, 2004 Ecology notified these facilities about the new parameters.

Ecology will send a new Discharge Monitoring Report (DMR) form to these owners before the end of December. If the new form doesn't arrive before the April 15, 2005 reporting time, we ask these owners to include the new parameters at the bottom of their current DMR. Due to the difficulty in getting stormwater samples, the sampling requirements have been left at quarterly, we will not be requiring monthly samples. Discharge Monitoring Reports (DMRs) are still required to be submitted on a quarterly basis.

New Requirements for Monitoring Results
If your monitoring results are above the benchmark values, you are required to take appropriate action. The new permit establishes three levels of response. Each response is based on two things; the frequency that your results are above the benchmark, and by how much your results are above the benchmark. Please see special permit condition S4.C on page numbers 24-27 of the permit for more details.

Criteria for Collecting Stormwater Samples
The new permit allows you to submit data even if you didn't meet all the sampling criteria. You can now explain how your method is different than the criteria. The DMR form provides a comment box where you are required to add information about your sample. For example: "this sample was taken two hours after the start of the rain storm instead of one hour after the start of the rain storm." To help you with this requirement, Ecology will update the publication *"How to do stormwater sampling – A guide for Industrial facilities"* (#02-10-017) and make it available to you as soon as possible.

Mixing Zones
Because the Pollution Control Hearing Board decided that mixing zones requested by the Permit Holder in 2002 were illegal; no Industrial Stormwater Permit Holder is allowed to have a

mixing zone until their facility meets the registration requirements in the new permit. (See section S3.F of the permit, pg. 21)

SWPPP

The new permit continues to emphasize the importance of the SWPPP requirement. It is always important to evaluate and update your SWPPP to show any changes in your best management practices for operational or source control. Your SWPPP must explain how you manage the stormwater from your facility. Failure to keep your SWPPP up-to-date is a permit violation. The new permit requires you to:

- Provide copies of the SWPPP to the public who make a written request.
- Tell the public who want to view the SWPPP where and when they can view it.
- Provide a copy to Ecology upon request.

Notice of Termination

If your facility is sold, stops operating or there is a change in ownership, you must submit a Notice of Termination (NOT) to Ecology. If you do not submit a NOT to Ecology the permit will remain active and you will remain responsible for permit compliance and permit fees.

Permit Number

Your permit number has not changed. Your permit number is shown above as part of your site information. Please use this number on any future correspondence with Ecology, including change of information for your facility.

Questions

Ecology is expecting many calls about the new permit, and we are committed to providing all the assistance we can. Please read the material included with this letter and check out our web page at http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html. If you still have questions, please call Joyce Smith at (360) 407-6858.

Appeals

Pursuant to RCW 43.21.B.310, the modified terms and conditions of the permit may be appealed within 30 days of receipt of the modified general permit. An appeal must be filed with the Pollution Control Hearings Board, P.O. Box 40903, Olympia, Washington, 98504-0903. In addition, a copy of this appeal must be served on the Department of Ecology, P.O. Box 47600, Olympia, Washington, 98504-7600. The procedures and requirements for the appeal process are contained in chapter 43.21.B RCW.

The terms and conditions of a general permit, as they apply to an individual discharger, are appealable within 30 days of the effective date of coverage of that discharger, in accordance with chapter 43.21B RCW. This appeal is limited to the general permit's applicability or nonapplicability to a specific discharger.

Sincerely,

Donald A. Seeberger., Acting Manager
Program Development Services
Water Quality Program

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
TTY 711 or 800-833-6388 (for the speech or hearing impaired)

September 1, 2005

TONY KRAMER
TC SYSTEMS INC
1032 W MARINE VIEW DR
EVERETT, WA 98201

Site Information:
SO3000762D
TC SYSTEMS INC
1028 W MARINE VIEW DR
EVERETT
SNOHOMISH

Dear: Industrial Stormwater Permittee:

Now you can submit your Discharge Monitoring Reports (DMR) electronically!

Ecology is pleased to announce that your facility is eligible for electronic DMR reporting. Sign up now to submit your quarterly DMR on-line by registering at http://apps.ecy.wa.gov/edmr/. You will need to complete a registration form, security process, and set up passwords before you can begin using the new electronic DMRs. We have staff standing by to help guide you though the process. If you want to take advantage of this new electronic option, it is important that you register as soon as possible. The steps in the registration process are outlined in the attached brochure. Please be aware that the registration process can take up to two weeks; therefore, it is important to plan accordingly to meet DMR compliance due dates. Submitting your DMR electronically will:

- Save paper
- Save mailing expenses
- Save time and energy
- Reduce data entry errors.
- Allow you to receive confirmation of DMR submittal

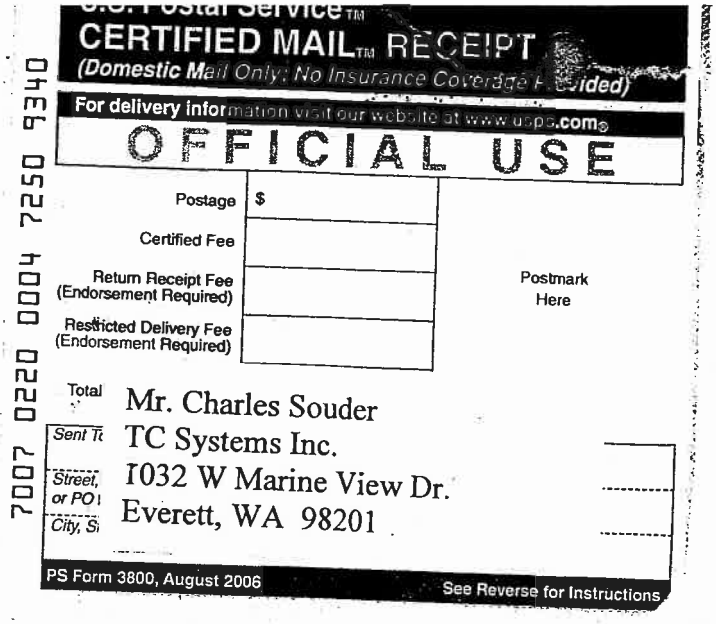
Please remember that you must work with Ecology prior to changing your sampling location. To assure that we get the best data possible the sampling location that you identify must match the sampling location in our database.

If you have any questions about this process please call Charles Gilman at (360) 407-7451 or Anne Van Sweringen at (360) 407-6203.

Sincerely,

Joyce M. Smith

Joyce M. Smith
Industrial Stormwater Permit Manager
Program Development Services Section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Restricted Delivery Fee (Endorsement Required)
Postmark Here
Total
Sent To Mr. Charles Souder
Street, or PO TC Systems Inc.
City, St 1032 W Marine View Dr.
Everett, WA 98201
7007 0220 0004 7250 9340
PS Form 3800, August 2006
See Reverse for Instructions

Certified M[illegible] Provides:

- A mailing [illegible]
- A unique identifier for your mailpiece
- A record of delivery kept by the Postal Service for two years

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- For an additional fee, delivery may be restricted to the addressee addressee's authorized agent. Advise the clerk or mark the mailpiece with endorsement *"Restricted Delivery"*.
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IMPORTANT: Save this receipt and present it when making an inquiry

PS Form 3800, August 2006 *(Reverse)* PSN 7530-02-000-9047

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

OCT 2 4 2007

CERTIFIED MAIL
7007 0220 0004 7250 9340

Mr. Charles Souder
TC Systems Inc.
1032 W Marine View Dr.
Everett, WA 98201

Dear Mr. Souder:

RE: Warning Non-Compliance – with Industrial Stormwater General Permit at TC Systems Inc, Permit# SO3-000762D, on 09/17/07

The purpose of this inspection was to determine compliance with your Industrial Stormwater General Permit (NPDES and State Waste Discharge Permit). Under this permit you are authorized to discharge stormwater associated with industrial activity to surface waters of the state contingent upon the compliance with Permit terms and conditions.

There were areas not in compliance with the Industrial Stormwater General Permit at TC Systems Inc. These areas are listed in the enclosed Compliance Report. To correct them, please complete the actions listed in the compliance/recommendation section of the report (section F). Please be aware that failure to correct the areas that were out of compliance may result in the issuance of an administrative order and/or civil penalties of up to $10,000 per day per violation.

Sincerely,

Christopher Wheeler
Industrial Stormwater Inspector
Water Quality Program

CW:ll

Enclosure

STORMWATER COMPLIANCE INSPECTION REPORT

State of Washington Department of Ecology
3190 – 160th Avenue SE, Bellevue, WA 98008-5452

WADOE Stormwater Compliance Inspection Form Last updated (01/06)

Phone: (425) 649-7000
FAX: (425) 649-7098

Section A: General Data

Inspection Date	NPDES Permit #	County	Receiving Waters	Inspector	Facility Type
9-17-07	SO3000762D	Snohomish	Possession Sound (North)	Christopher Wheeler	Industrial

Discharges to: Surface Water ☒ Ground Water ☐ **ANNOUNCED** Inspection

Section B: Facility Data

Name and Location of Site inspected
TC Systems Inc
1028 W. Marine View Dr
Everett, WA 98201-1557

Entry Time 10:00 am
Exit Time 10:40 am
Permit Effective Date 9/20/2002
Permit Expiration Date 9/20/2007

On-Site Representative(s): Name(s)/Title(s)/Contact number(s) or E-mail
Charles Souder / General manager / 425-258-4055 / ccsouder@hotmail.com

Additional Participants:

Responsible Official(s):
Attn: Charles Souder
TC Systems Inc
1032 W Marine View Dr
Everett, WA 98201
Phone: **(425) 258-4055**

	Yes	No
Samples Taken?	☐	☒
Photos Taken?	☒	☐

Section C: Discharge Monitoring Reports (DMRs)

		2004			2005				2006				2007			
	Max	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
pH	6-9	M	6.26	M	M	M	M	M	M	M	M	M	M	M		
Zinc (µg/L)	117	M	629.9	M	M	M	M	M	M	M	M	M	M	M		
Oil & Grease (µg/L)	15	M	4.7	M	M	M	M	M	M	M	M	M	M	M		
Turbidity (NTU)	.25	M	5	M	M	M	M	M	M	M	M	M	M	M		

M = Missing (not submitted); NQ = No Qualifying Event; Err = Lab Error;

Section D: Summary of Findings/Comments

BACKGROUND

TC Systems Inc is covered under the General Stormwater Industrial NPDES / State Waste Discharge Permit (the General Permit). Ecology's stormwater unit has conducted an inspection at this Industrial site in the past. The purpose of this inspection is to conduct a compliance inspection per the requirement of the Revised Code of Washington (RCW) 90.48.560 and to provide technical assistance as appropriate.

INSPECTION/OBSERVATIONS

Upon arrival I met Charles Souder the General Manager for the facility. Mr. Souder was able to produce the facility's coverage letter and Stormwater Pollution Prevention Plan (SWPPP). The SWPPP was inadequate and incomplete. Much of the information within the SWPPP needed updating to reflect current onsite conditions. The SWPPP was missing several required sections including a monitoring plan, a facility map, visual monitoring logs, and a designated stormwater pollution prevention team. I told Mr. Souder to refer to condition S9 of the Permit, and have an adequate SWPPP prepared for the facility. Mr. Souder was unable to find any Discharge Monitoring Reports (DMRs) filed with the SWPPP. The Ecology database shows that DMRs had only been submitted for the 1st and 3rd quarter of 2004. Mr. Souder said that they had stopped stormwater sampling after the lab they were using had been shut down. I told Mr. Souder that not sampling stormwater as required by condition S4 is a violation of the permit.

TC Systems Inc. paints and powder-coats metal parts for manufactures such as Boeing. Much of the industrial activity is conducted inside. The facility consists of two buildings on a paved lot which drains to multiple storm drains. Empty drums are stored throughout (photos P9170023 & P9170032). Some of these drums were heavily rusted and had degraded significantly. Some of these drums were also not properly sealed and were collecting stormwater. I told Mr. Souder that all empty drums stored outside should be sealed as to not collect and contaminate stormwater.

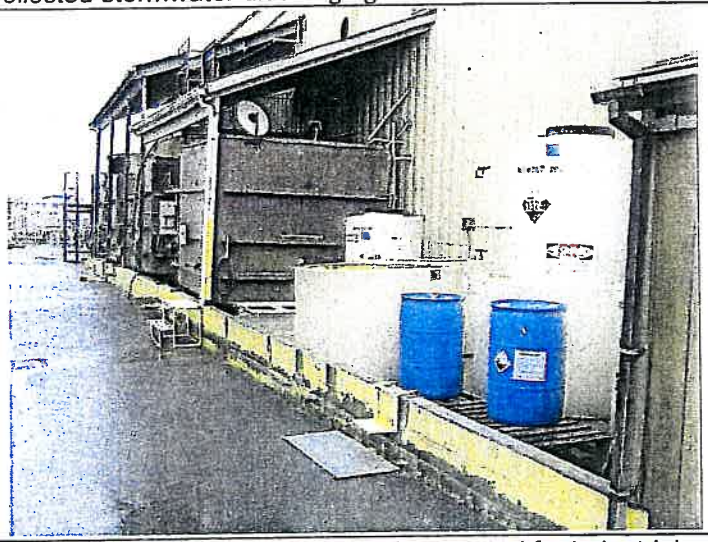
Extra carts, used for supporting metal parts during the powder-coating process, are stored outside on the facility's lot (photo P9170031). These carts are encrusted in powder-coating that is capable of crumbling off. I told Mr. Souder that I was concerned that during a rain event, the loose powder-coating could wash-off and contaminate stormwater.

Between the facility's two buildings is a dead end alley, with a partially covered containment pad for chemicals used during

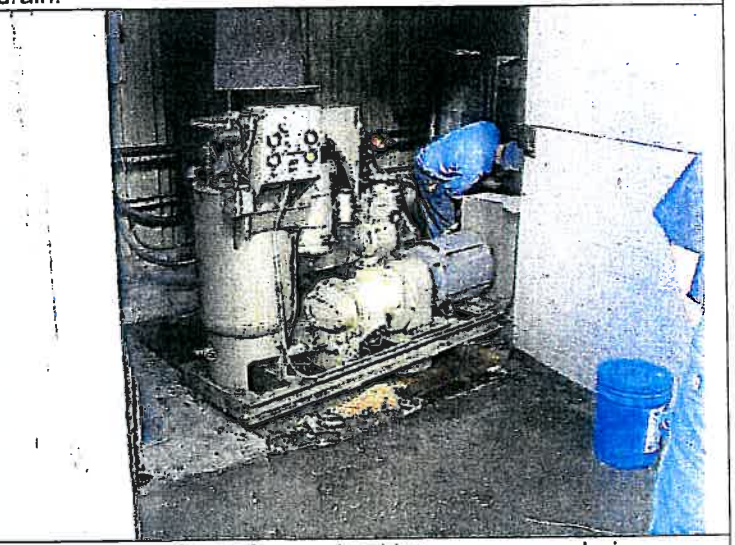
Photo Addendum – TC Systems Inc / 9-17-2007

P9170023.jpg **Description:** Rusty drum not properly sealed. Collected stormwater discharging.

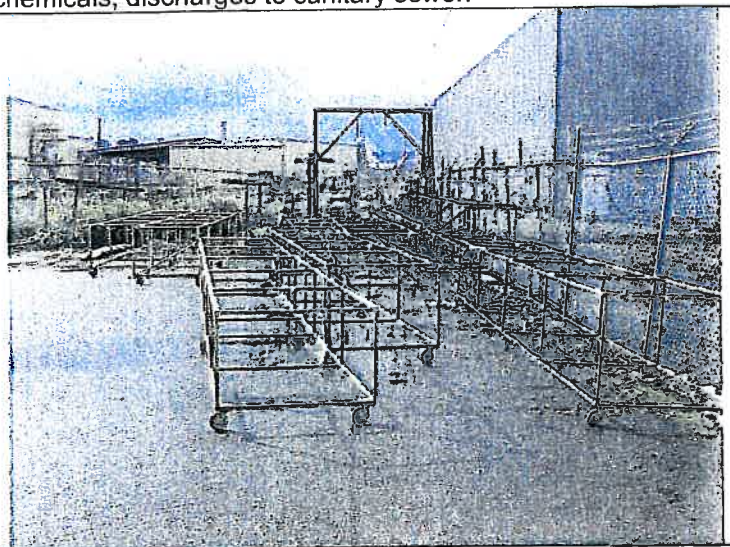
P9170027.jpg **Description:** Oily sheen discharging to storm drain.



P9170029.jpg **Description:** Containment pad for industrial chemicals; discharges to sanitary sewer.



P9170030.jpg **Description:** Leaking compressor being repaired.



P9170031.jpg **Description:** Powder-coat encrusted carts stored outside on facility's lot.

P9170032.jpg **Description:** Numerous, empty, chemical drums stored outside in varying states of decay.

Photo Addendum – TC Systems Inc / 9-17-2007

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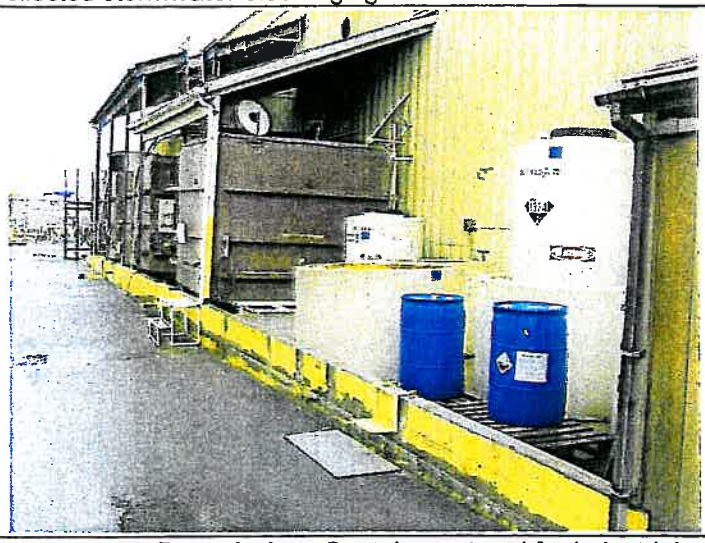

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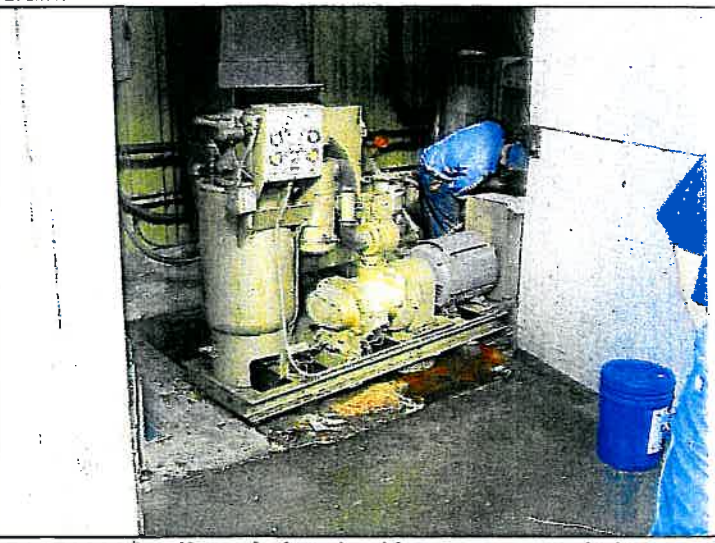

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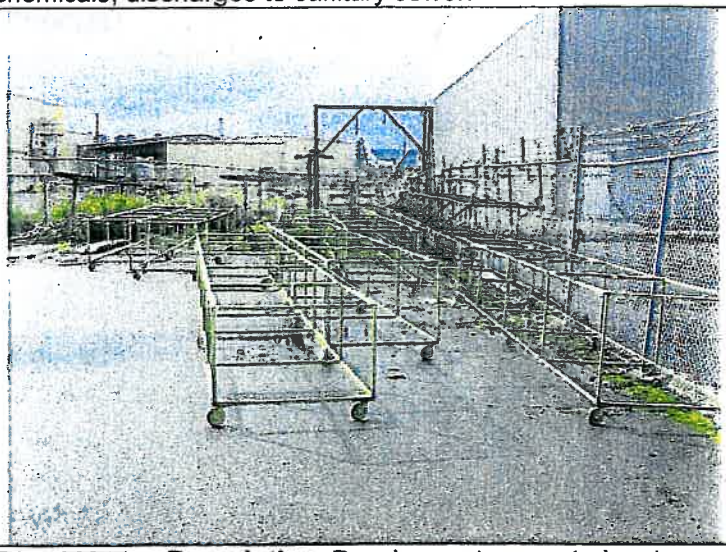


P9170031.jpg **Description:** Powder-coat encrusted carts stored outside on facility's lot.

P9170032.jpg **Description:** Numerous, empty, chemical drums stored outside in varying states of decay.

Summary Doc.
Prepared by Ecology

TC Systems has an industrial stormwater permit (Permit# S03-000762D) issued by Ecology. Ecology files show that the permit expired on May 31, 2008. The permit indicates that industrial stormwater from the site discharges to Port Gardner. A 1996 map of North Marina showing the location of utilities indicates that industrial stormwater from TC Systems discharges to the 12th Street Marina (**Exhibit 3**). Based on discussions during Ecology's July 23, 2009 meeting with TC Systems (see Section 5), TC Systems personnel currently do not know where the discharge point is for their facilities industrial stormwater. The compliance history (based on available files from Ecology's Northwest Regional Office [NWRO]) associated with the industrial stormwater permit is presented below.

- **December 28, 1992** – Ecology received TC Systems application for coverage under the stormwater baseline general permit.
    - Regulatory status shows a state waste discharge permit number of WAD088722947. Mr. Fred Owen signed the notice of intent for Baseline General Permit to Discharge Stormwater Associated with Industrial Activity on September 11, 1992.
- **March 10, 1993** – Ecology sent a letter to Orin Smith of TC Systems providing instructions related to coverage under the stormwater baseline general permit (SO3-000762). The most significant requirement of the permit is the development of a Stormwater Pollution Prevention Plan (SWPPP). Coverage date for the stormwater permit began March 10, 1993. This permit expires on November 18, 1995. The permit contains the following information:
    - Fred Owen signed the permit on 2/9/93.
    - The discharge receiving water is Port Gardner Bay.
    - Port of Everett is identified as the owner of the storm sewer system.
    - Business Type – Metal Finishing
    - Industrial activity information show the following SIC codes:
        - 3471 Electroplating, Plating, Polishing, Anodizing, and Coloring.
        - 3479 Coating, Engraving, And Allied Services, Not Elsewhere Classified.
    - Industrial activity includes manufacturing, material handling, material storage, vehicle storage, vehicle maintenance.
    - Size of site – 2.6 Acres.
    - Materials handled and/or stored outdoors:
        - Solvents, acids or Alkalies, paints/coatings.
- **July 21, 1995** – Request for renewal of the stormwater permit (Permit No: SO3000762I).
    - TC Systems acknowledged that they had not written a SWPPP.

- TC Systems acknowledged that they had not completed implementation of all operational best management practices (BMP's) and all applicable source control BMP's which do not require capital improvements.
- TC Systems identified that the total size of the industrial area at TC Systems is 3 acres.

- **August 9, 1995** – Notice of non-compliance letter from Ecology. Failure to write and implement a SWPPP.
- **August 30, 1995** – TC Systems sent a letter informing Ecology that they completed a SWPPP in July 1993. Source controls, BMPs, and capital improvements were implemented and made part of the SWPPP.
- **January 10, 1996** – Ecology granted TC Systems coverage under the new permit effective 12/18/95.
- **Permit Renewal** – TC Systems permit SO3-000762 – Permit coverage beginning 11/18/00 to 11/18/05.
- **April 20, 2004** – Stormwater Compliance Inspection Report. Ecology conducted a site visit to this facility because a phone call was received from Snohomish PUD that the company was not keeping up on their electric bills and the power would be turned off. Issues arose with outside storage of chemicals and waste, which have a potential to discharge to the storm sewer. It was also found that the company is washing their vehicles in the parking lot which discharges to the storm sewer. According to Joyce Smith, Ecology Industrial Permit Coordinator, the facility is behind on discharge monitoring reporting (DMRs) for the quarter. These issues were addressed with Mike Farnham the Environmental Facility Manager. Ecology inspectors observed the following:
  - Paint chips were visible next to the secondary containment berm. This is in close proximity to the storm drains.
  - The outside area where waste containers and product containers are stored is only partially covered by a roof.
  - The aladine rinse tank should be covered.
  - The pump associated with the compressor shed is leaking oil and fluids.
  - The shed where the previous pump is housed shows oil and fluids leaking onto open pavement under the shed.
  - Leaking oil was noted in a place lacking containment.
  - Waste materials were noted outside with no cover or containment.
- **December 1, 2004** – Ecology made modifications to the industrial stormwater general permit.
- **Permit Renewal** – SO3000762D – 08/21/2002 05/31/2008.
- **October 24, 2007 Letter from Ecology** – Violations as identified in the September 17, 2007 inspection (10-24-07 Informal Action/Warning Letter from Ecology) are presented below.

- Failed to perform quarterly sampling and visual monitoring of the facility's discharge.
    - Monitoring was conducted twice in 2004 (1st and 3rd Qtrs.). No other monitoring exists. Monitored for lead, copper, zinc, oil and grease, pH, and turbidity. A zinc exceedance (630 ug/L) occurred in July 2004.
    - The Ecology database shows that DMRs had only been submitted for the 1st and 3rd quarters of 2004. Mr. Souder said that they had stopped stormwater sampling after the lab they were using had been shut down. The Ecology inspector told Mr. Souder that not sampling stormwater as required by condition "S4" is a violation of the permit.
- Failed to produce and has not been implementing an adequate SWPPP.
    - The SWPPP was inadequate and incomplete. Much of the information within the SWPPP needed updating to reflect current onsite conditions. The SWPPP was missing several required sections including a monitoring plan, a facility map, visual monitoring logs, and a designated stormwater pollution prevention team.
- Failed to retain adequate records to document compliance with the general permit.
- Good Housekeeping practices should be implemented on-site to reduce stormwater pollution potential from items such as stored leaky drums collecting stormwater onsite. Ensure that all chemical drums (including empty drums) are properly sealed and clean on their exteriors.
- Monitor, maintain, and cover machinery and parts stored outdoors to make certain fluid leaks and powders are not contaminating soils or stormwater.
- Picture of an oily sheen discharging to a storm drain (9/17/2007).

It is noted that Mr. Charles Souder (TC Systems) stated in the May 2009 Phase I ESA that he was not aware of any violations associated with their Ecology stormwater permit. A selection of photos from the 2004 and 2007 Ecology stormwater inspections are provided below.

Photo 7 (4/20/04 Ecology Inspection; pain chips around secondary containment)

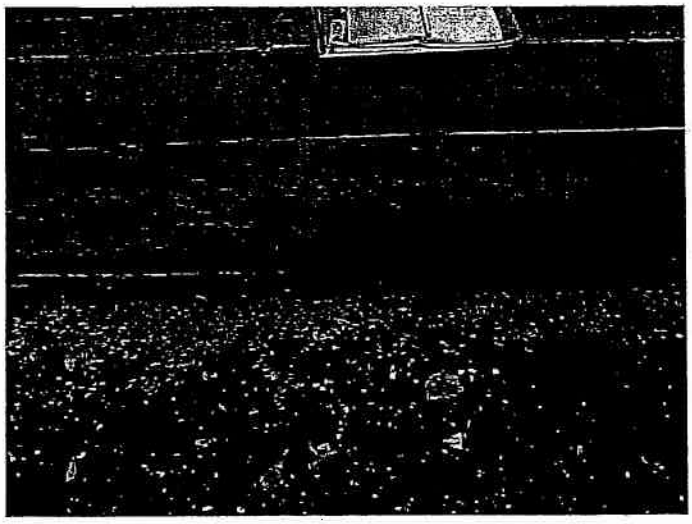


Photo 8 (4/20/04 Ecology Inspection; compressor oil leak)

Photo 9 (4/20/04 Ecology Inspection; oil and fluids leaking onto open pavement under shed)

Photo 10 (4/20/04 Ecology Inspection; leaking oil not in a contained area)

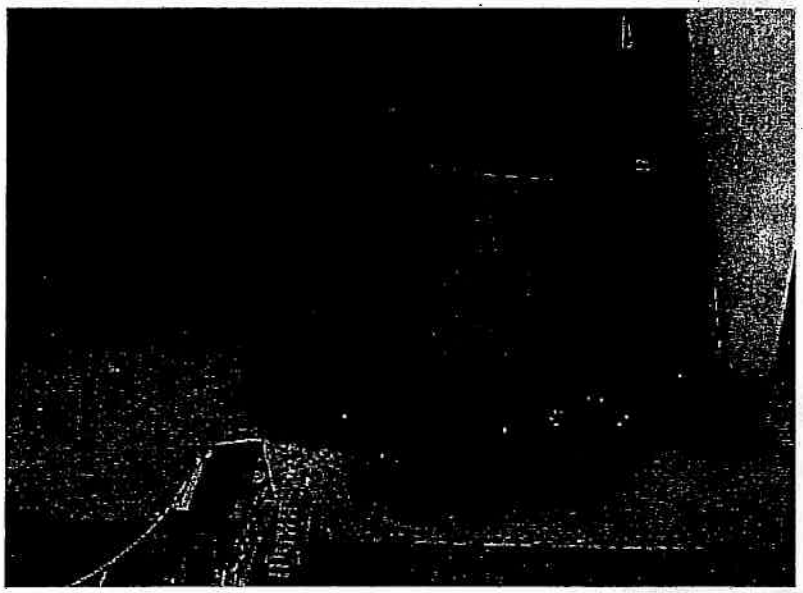


Photo 11 (4/20/04 Ecology Inspection; Waste materials outside with no cover or containment)

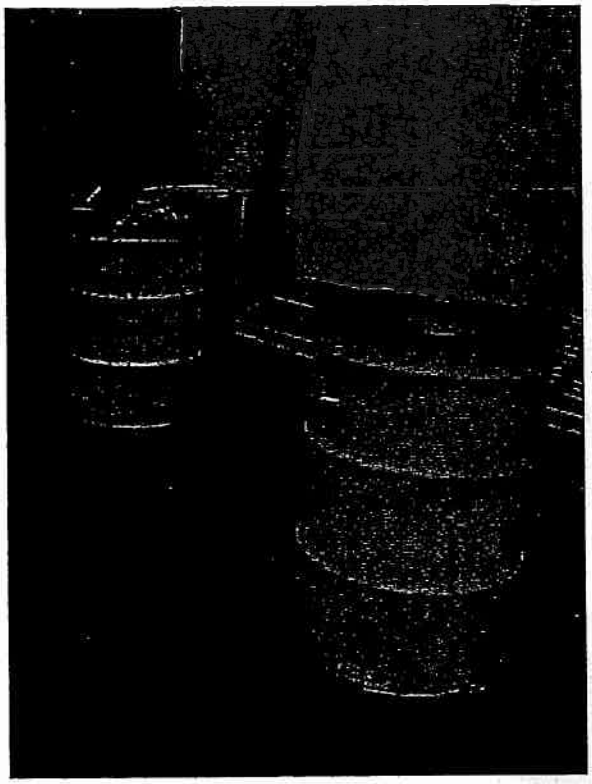
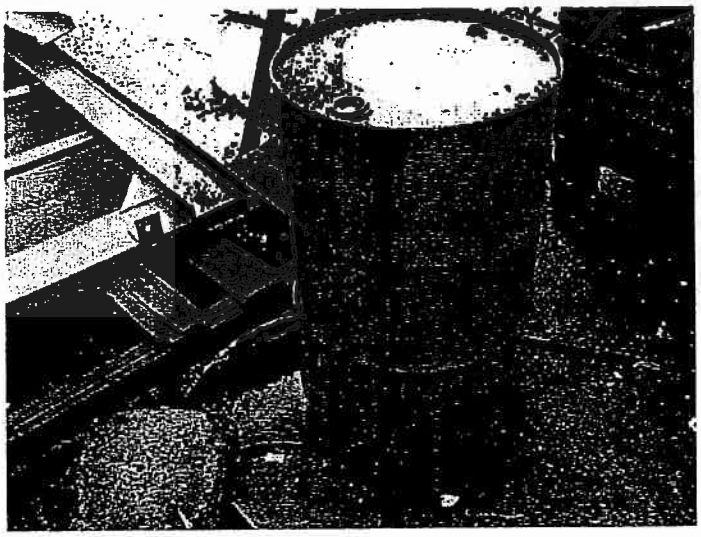


Photo 12 (9/17/07 Ecology Inspection; Rusty drum not properly sealed. Collected stormwater and was discharging.)



9/16/09

DEPARTMENT OF ECOLOGY
State of Washington

Water Quality Program
Corrections Required

Construction Stormwater General Permit (CSGP) ☐	Industrial Stormwater General Permit (ISGP) ☒	Sand and Gravel General Permit (S&G) ☐

Site name and location Charles Souder TC Systems, Inc. 1028 W. Marine View Dr. Everett, WA 98201	Mailing address - *(if different than site) address)* Certified Mail No.: 7007 3020 0000 3068 6493
Site contact: Charles Souder	Site contact phone: 425-258-4055 Permit #: SO3000762
Ecology inspector(s): Greg Stegman	Inspection date: 9/16/2009
Inspector phone: 425-649-7019 FAX: 425-649-7098	E-mail: gste461@ecy.wa.gov
Notice of Penalty Issued ☐ Yes ☒ No Field Citation # N/A	Latitude and longitude *(if available)*:

The Department of Ecology (Ecology) is responsible for overseeing environmental laws that protect human health and the environment in Washington. Ecology observed violations of Chapter 90.48 of the Revised Code of Washington (RCW), Chapter 173-226 of the Washington Administrative Code (WAC), Waste Discharge General Permit Program during this site visit. Violations observed are checked below.

Violation No	Violation	Reason	Permit Condition
1	RCW 90.48.080, WAC 173-226-070	Since December 31, 2004, no stormwater sampling has been conducted at the facility.	S4.D.2 (pg. 28)
2			
3			
4			
5			
6			
7			
8			
9			
10			

Violation No	Action(s) required to achieve compliance - (see permit conditions)	Complete or Submit Date
1	During the fourth quarter 2009 (October-December 2009) sample (see permit condition S4.D) your facility's stormwater, at the storm drain adjacent chemical tank containment area, for the parameters listed on the enclosed Industrial Stormwater General Permit –Site Coverage sheet. Submit a Discharge Monitoring Report (DMR) (see permit condition S5) no later than February 15, 2009 to the addresses below.	**Sample before the end of December 2009** **Submit DMR by February 15, 2009**

Water Quality Program Corrective Action Requirements continued.

Instructions:

- These corrective action requirements are not an enforcement order and are **not appealable.**
- If a penalty accompanies these corrective action requirements, **the penalty is appealable.**
- **Appeal directions are on the back of the penalty.**
- Failure to comply with these corrective action requirements may result in enforcement action.

1. To comply with the water quality regulations, complete the actions identified in the table above.
2. If you have questions, contact Greg Stegman, Ecology inspector, at 425-649-7019 or gste461@ecy.wa.gov.
3. To request an extension, **send a written request** to the Ecology inspector within 14 days of the date you received this document.

   Ecology will notify you if an extension is granted. Please include all of the following:
   - Reason extension is needed.
   - Steps already taken.
   - Description of work that remains to be completed.
   - Anticipated completion date.

Send required document(s) to:

Industrial Stormwater Unit
Department of Ecology
Water Quality Program
PO Box 47696
Olympia, WA 98504-7696

and

Greg Stegman
Department of Ecology
Northwest Regional Office
3190 160th Ave SE
Bellevue, WA 98008-5452

Ecology Inspector (signature): Gregory P. Stegman Date: 11-6-09

If you need this publication in an alternate format, call the Water Quality Program at 360-407-6722. Persons with hearing loss call 711 for the Washington Relay Service. Persons with a speech disability call 877-833-6341

Industrial Stormwater General Permit - Site Coverage

Facility Name : TC SYSTEMS INC
Permit ID : SO3000762D

Coverage Date: September 20, 2002
Expiration Date: May 31, 2008

Facility Location

Address: 1032 W MARINE VIEW DR
EVERETT
Acres: 2.6
WRIA: 07 - SNOHOMISH
County: SNOHOMISH
Contact Person: GUY DONALSON
4252584055

Mailing Address

TC SYSTEMS
1032 W MARINE DR
EVERETT, WA 98201

Primary SIC 3471 - PLATING AND POLISHING

Discharge Information

Receiving Water	Latitude/Longitude	Impaired
POSSESSION SOUND (NORTH)	48 0 18 / 122 12 58	NOT LISTED

Conveyance System: NONE
Point of Discharge: 48 0 18 / 122 12 47

Stormwater Sampling Requirements

Minimum Sampling Frequency: DMR (QUARTERLY)

Parameter	Unit	DCHG Min	DCHG Max	Value Type
OIL & GREASE	MG/L		15	SINGLE SAMPLE
TURBIDITY	NTU		25	SINGLE SAMPLE
PH	STANDARD UNITS	6	9	SINGLE SAMPLE
COPPER	UG/L		63.6	SINGLE SAMPLE
LEAD	UG/L		81.6	SINGLE SAMPLE
ZINC, TOTAL	UG/L		117	SINGLE SAMPLE

****At the point where you discharge, the receiving water is listed as impaired under Section 303(d) of the Clean Water Act, for parameter(s) marked with an asterisk. ****

Bill H. Moore, Section Manager
Program Development Services
Water Quality Program

September 16, 2009

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

November 4, 2009

Charles Souder
TC Systems
1032 W Marine View Dr
Everett, WA 98201

RE: Dangerous Waste Compliance Inspection at TC Systems
RCRA ID# WAD 088 722 947 on September 14, 2009

Dear Mr. Souder:

Thank you for submitting your response to the inspection report dated September 21, 2009. However, *one item still remains delinquent*. This is outlined below:

> Item 283 – PBR Performance Standards – Failure to (re)seal containment floor and keep it dry.

As stated in the inspection report, the containment area under the tank lines must be resealed. During the September 14, 2009 inspection, we observed that the floor is pitted and the seal is peeling in places.

Your response of "We are not aware of where this requirements comes from" is not an acceptable resolution to this problem. Please refer to the Dangerous Waste Regulations at: http://www.ecy.wa.gov/programs/hwtr/reg_comp_guide/173-303.HTM and see section 283 for more details regarding meeting performance standards.

TC Systems is already past the October 21st deadline for returning to compliance. A schedule for sealing the floor and berms must be submitted to Ecology no later than November 20, 2009.

Please do not hesitate to contact me at Daylin.Davidson@ecy.wa.gov or (425) 649-7090 should you have questions or require clarification of any items in this letter.

Sincerely,

Daylin Davidson, Hazardous Waste Compliance Inspector
Hazardous Waste and Toxics Reduction Program

DD:SA

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000
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October 28, 2009

Mr. Charles Souder
TC Systems
1032 W Marine View Dr
Everett, WA 98201

RE: Delinquent Dangerous Waste Compliance Certificate
Dangerous Waste Compliance Inspection at TC Systems
RCRA ID# WAD 088 722 947 on September 14, 2009

Dear Mr. Souder:

During the inspection on September 14, 2009 there were several areas of non-compliance with the Dangerous Waste Regulations at TC Systems. A list of the conditions not in compliance was provided to you in the Compliance Report which was mailed to you on September 21, 2009. You were required to correct these items of non-compliance within the specified timeframes and to return the compliance certificate by October 21, 2009. As of the date of this letter, your compliance certificate has not yet been received.

Please submit the Compliance Certificate portion of the Compliance Report, along with any requested documentation, to Daylin Davidson at 3190 160th Ave SE, Bellevue, WA 98008 by ***November 15, 2009*** so that our records properly reflect your compliance status. Your facility is subject to re-inspection and immediate enforcement action if violations listed in the Compliance Report have not been corrected.

Please be advised that failure to correct these items of non-compliance may result in the issuance of an administrative order and/or penalty as provided by the Revised Code of Washington, Sections 70.105.080 and/or .095 (Hazardous Waste Management Act). Persons who fail to comply with any provision of this chapter or rules adopted thereunder are subject to penalties of up to ten thousand dollars per day per violation.

Please do not hesitate to contact me at Daylin.Davidson@ecy.wa.gov or (425) 649-7090 should you have questions or require clarification of any items in the Compliance Report.

Sincerely,

for Daylin Davidson, Hazardous Waste Compliance Inspector
Hazardous Waste and Toxics Reduction Program

DD:SA
By certified mail: 7009 1410 0002 4171 0485

Digital Camera Photolog

Camera: Sony FD Mavica (MVC-FD75) **Lead Inspector: Daylin Davidson**
Photographer: Warren Walton **Initials: WJW**

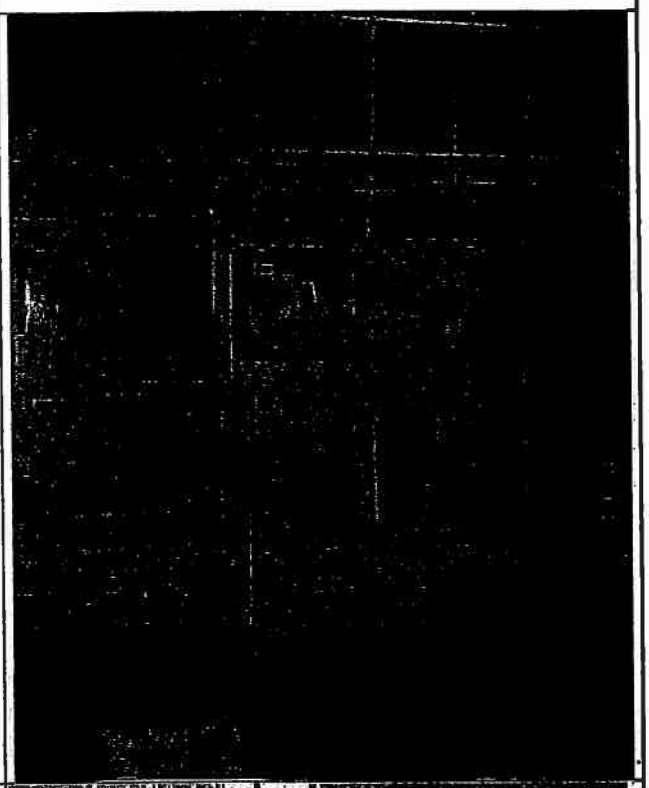
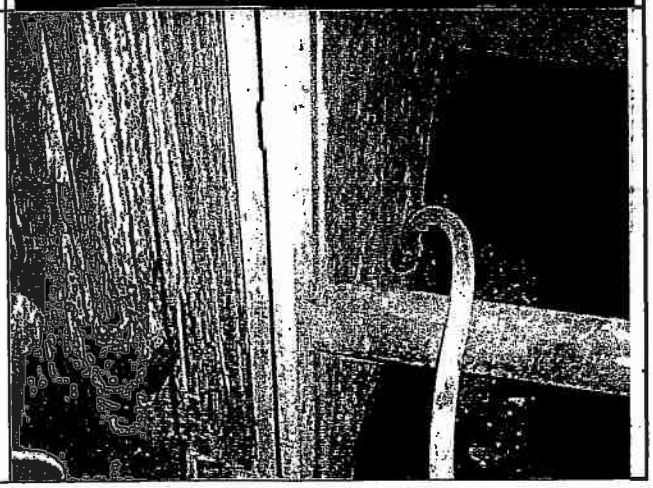
Photo # Area	Notes/Descriptions	Photographs
Photo 1 of 13 8:59 a.m.	The alodine tank behind the control panel leaked recently sending between 2,000 and 3,000 gallons into containment.	
Photo 2 of 13 9:00 a.m.	Looking at north face of alodine tank and at containment between tanks. There is some standing liquid here and there in containment.	

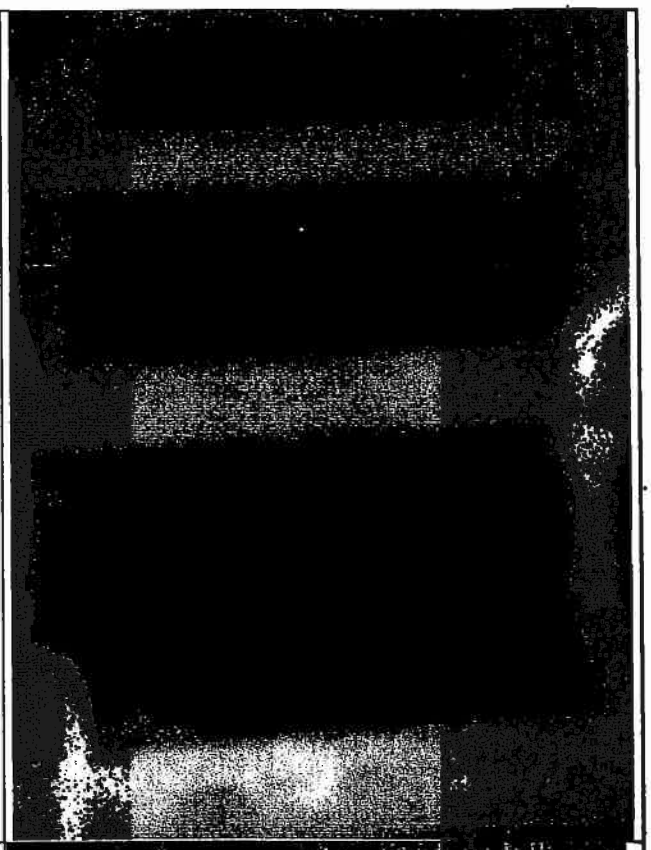
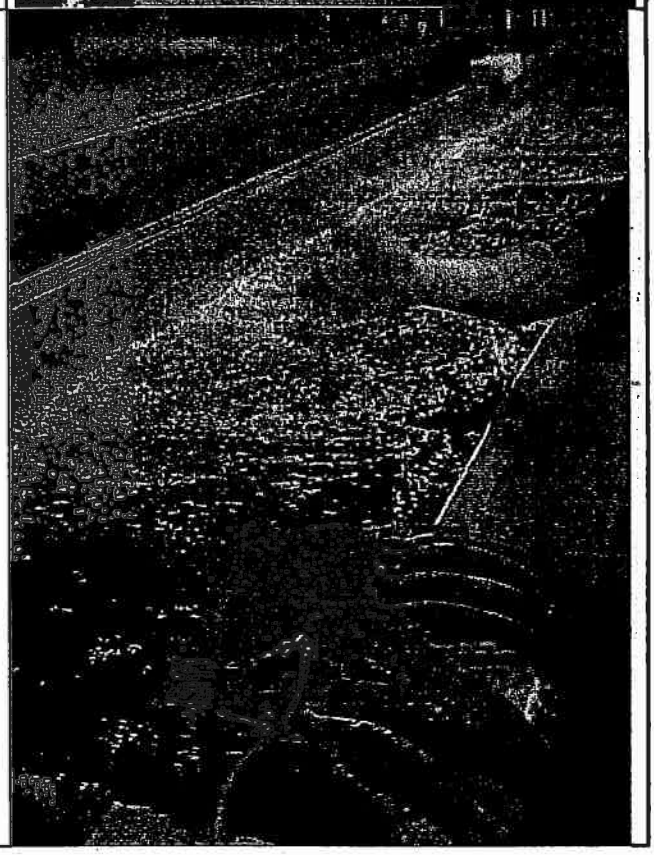
Photo 3 of 13 9:00 a.m.	Unfocused photo of standing liquid between tanks – looking west to east between tanks.	
Photo 4 of 13 9:01 a.m.	Robert explains how a certified welder replaced 1/8" panels on both sides of inside of tank. Areas approximate were between the electrical connection and the block on the opposite wall to back of photo.	

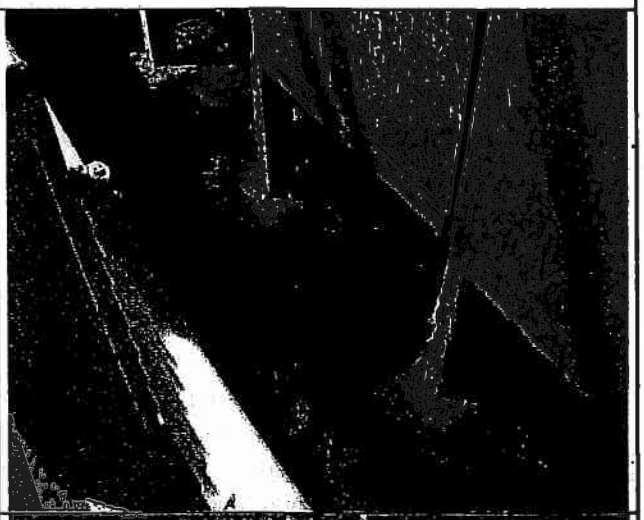
Photo 5 of 13 9:03 a.m.	Looking at the south end of the containment area floor. Almost center in the photo is a broken piece of flooring to bare concrete.	
Photo 6 of 13 9:04 a.m.	Looking west about 10 feet from photo 6 location. Note the metal breakdown of the tank supports.	
Photo 7 of 13 9:07 a.m.	A self made sump area collects rinse waters off parts with dye penetrant. Randall told us the dye penetrant was water soluble.	

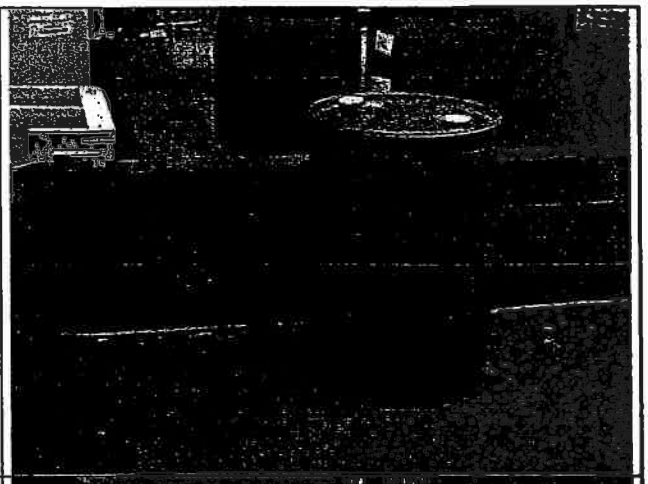
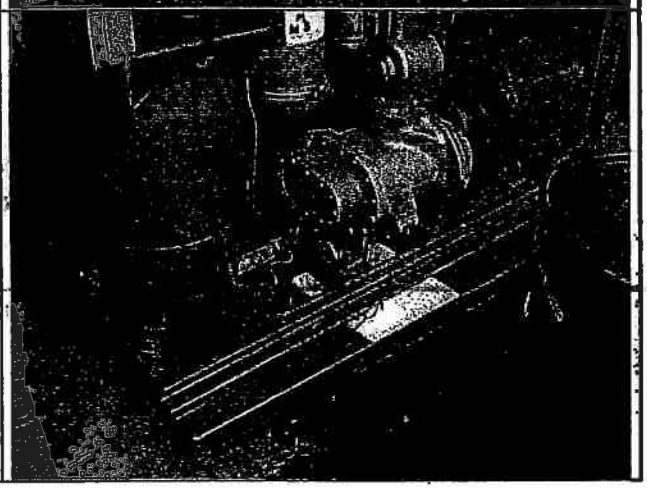
Photo 8 of 13 9:12 a.m.	Looking at sealed and repainted outside containment wall. Note some efflorescence low on the wall between poly drums. Efflorescence indicates a poor seal against moisture. Moisture leaches mortar materials to cause the white staining on concrete.	
Photo 9 of 13 9:13 a.m.	Farther south along same wall as in photo 8. A couple of instances of efflorescence seem to follow a line. White stain next to down spout is from inside the room with the wooden door.	
Photo 10 of 13 9:15 a.m.	TC Systems got rid of the oil leaking compressor and put the system in place into its own containment pan.	

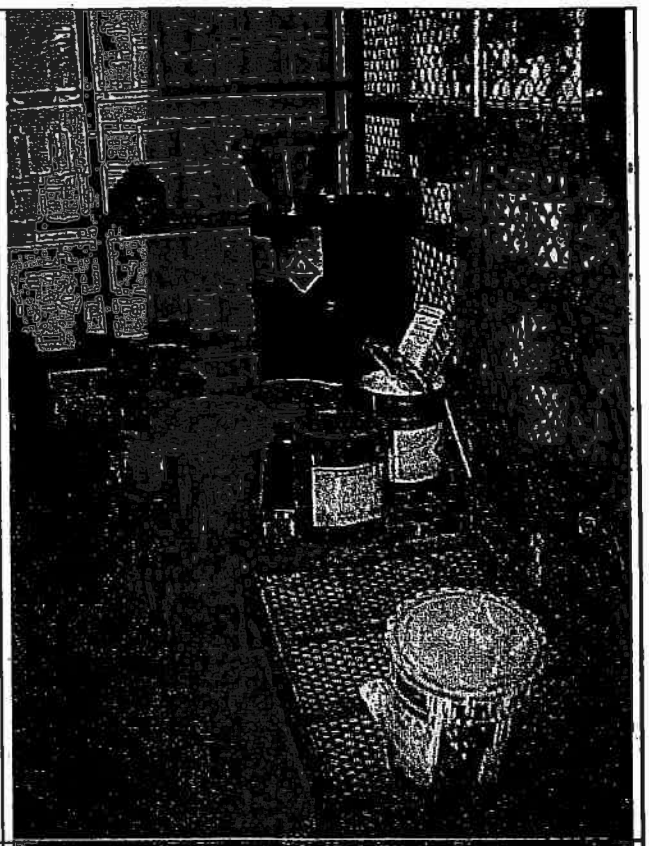
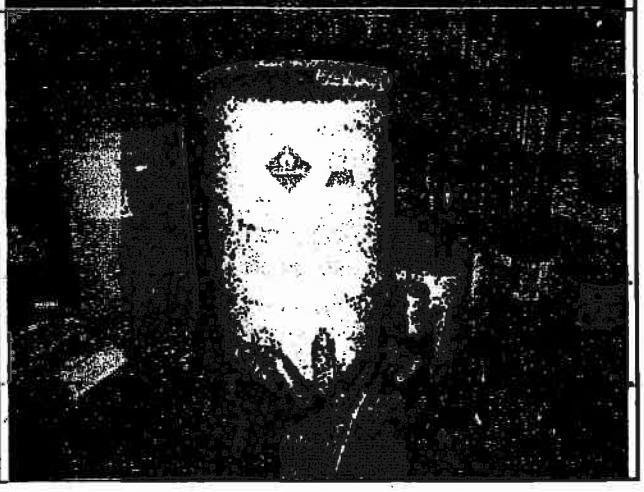
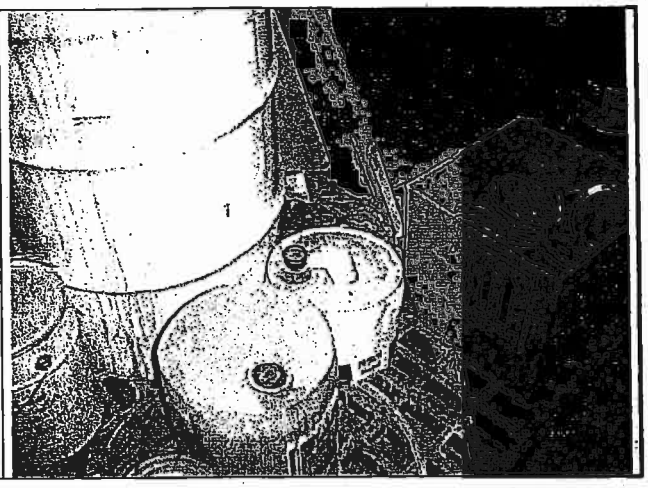
Photo 11 of 13 9:36 a.m.	In the Paint Room. Several containers of paint related waste wait to be combined into the 55 gallon drum. The 55 gallon drum had a start date on it.	
Photo 12 of 13 9:36 a.m.	On the spill pallet and on the floor adjacent sit old(er) chemicals that TC Systems needs to determine a use for or dispose of .	

Photo 13 of 13 9:36 a.m.	Another photo of the contents on the spill pallet in the cage adjacent to the 55 gallon drum in photo 11.	

March 25, 2009

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

IN THE MATTER OF PENALTY ASSESSMENT AGAINST TC Systems	)))	NOTICE OF PENALTY INCURRED AND DUE No. DE 6460

To: Mr. Charles Souder
TC Systems
1032 W Marine View Dr
Everett, WA 98201

For the site located at:
1032 W Marine View Dr., Everett
RCRA ID# WAD 088 722 947

Notice is given that the Department of Ecology (Department) has assessed a penalty against you in the amount of $24,000 for violation of Chapter 70.105 RCW at the location known as TC Systems located at 1032 W Marine View Dr., Everett.

The penalty is based on the following Department findings:

TC Systems has received six inspections from Ecology's Hazardous Waste and Toxics Reduction Program over the course of the last eleven years, during which a total of fifty-nine violations were cited. Inspectors have repeatedly observed many of the same violations of the Dangerous Waste Regulations. Inadequate performance of regulatory responsibilities at TC Systems directly led to violations for illegal disposal, failure to designate, and numerous repeat violations for improper waste management.

The Department's determination that a violation has occurred is based on the following facts observed during the dangerous waste inspections conducted on November 6, 2007 and July 8, 2008:

(1) WAC 173-303-141(1): Illegal disposal of dangerous waste.

- Spilled compressor oil (not being recycled) has been allowed to migrate into the soil and the nearby storm drain. The spill residue was disposed of as used oil per the definition in WAC 173-303-515. *(2007 & 2008)*

- Paint wastes containing acetone & methyl ethyl ketone (MEK) solvents have been routinely allowed to evaporate. *(2008)*

(2) WAC 173-303-070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes.

- The designation status had not been determined for the drum of "blasting dust" in satellite area of Building B: the paint contaminated tape, gloves, filters, and other debris in the trash can in the paint locker; the cart full of expired materials in the paint locker; the white drum that is ¼ full, possibly of diesel fuel, outside behind the buildings; and the blue drum and blue bucket outside Building C. *(2007)*

- The designation status has not been determined for the bucket of unknown material that had hardened in the former satellite area of Building C. *(2008)*

The facility subsequently determined through testing that only the paint contaminated debris designated as dangerous waste for Chromium (D007). None of the other wastes designated as dangerous wastes.

(3) WAC 173-303-630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste.

- Containers of dangerous waste paint wastes in the paint booths and paint storage room were not kept closed. *(2007,2008)*
- Cans and totes used to accumulate previously designated dangerous waste (mastic, sticks, gloves, and paint cans); the two drums of berm cleanout sludge declared to be dangerous waste by Environmental Coordinator Robert Deatherage; the drum of soap sludge declared to be dangerous waste by Les Deatherage; and the tote of sludge designated as dangerous waste outside between buildings B & C were not kept closed. *(2008)*

(4) WAC 173-303-630(3): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste.

Numerous containers of dangerous waste throughout the facility were lacking proper labeling or labels were not visible. These include: buckets of paint/solvent waste in the paint booths; bagged paint booth filters; all three 55-gallon drums of paint waste (and floor sweepings) in the paint locker; all the buckets of paint solids in the paint locker; and the box of sludge between Buildings B & C. *(2007)*

One can of mastic waste in Paint Booth #4; box of paint booth filters in Hazardous Waste Accumulation Area (HWAA); two totes and three bags of mastic debris in the HWAA; two drums of berm cleanout sludge in the HWAA; and two buckets of paint solids in the paint locker. Additionally, the box of sludge between Buildings B & C was labeled and the drum in the mezzanine for mastic waste was labeled, but these labels were not visible. *(2008)*

(5) WAC 173-303-200(1)(c): Failure to mark each container with the accumulation start date.

Numerous containers of dangerous waste throughout the facility were lacking start dates. These include: bagged paint booth filters; all three 55-gallon drums of paint waste (and floor sweepings) in the paint locker; all the buckets of paint solids in the paint locker; one drum of liquid paint wastes in the "Satellite Area" in Building B; and the box of sludge between Buildings B & C. *(2007)*

Two totes of mastic/solid debris in the HWAA; two bags of mastic/solid debris in the HWAA; one box of paint booth filters in the HWAA; two drums of berm cleanout sludge in the HWAA; one drum of soap sludge in the filter cake shed between building B & C; and two buckets of paint waste in the paint locker. *(2008)*

(6) WAC 173-303-330: Training requirements were not met. The facility should have a training program, a written training plan, and keep training records.

No training program was available for this facility. (A plan was subsequently created.) *(2007)*

The training plan had not been implemented and training records (other than one certificate for Robert Deatherage) were not provided to Ecology. Mr. Deatherage told Ecology that TC Systems had not been keeping up with this requirement. *(2008)*

The penalty is due and payable by you within thirty (30) days of your receipt of this Notice.
Please send the payment to:

Department of Ecology
Cashiering Unit
PO Box 47611
Olympia WA 98504-7611

You have the right to submit an **Application for Relief to Ecology.** You also have the right to **Appeal** this penalty to the Pollution Control Hearings Board immediately without exercising the option of filing an Application for Relief to Ecology.

If you file a timely Application for Relief to Ecology within thirty (30) days of your receipt of this notice of penalty, Ecology will respond with a "Notice of Disposition Upon Application for Relief." You will then have a right to appeal Ecology's "Notice of Disposition Upon Application for Relief" to the Pollution Control Hearings Board.

NOTICE: If you do not submit a timely Application for Relief or Appeal, this Penalty will become due and owing and will not be subject to further administrative or judicial review.

To submit an Application for Relief from an Assessed Penalty: Pursuant to chapter 43.21B RCW, your Application for Relief must be submitted in writing to the Department of Ecology within thirty (30) days of the date of receipt of this document.

To apply for relief you must

Mail your Application for Relief to:

The Department of Ecology
Appeals & Application for Relief Coordinator
PO Box 47608
Olympia WA 98504-7608

OR

Deliver your Application for Relief in person to:

The Department of Ecology
Appeals & Application for Relief Coordinator
300 Desmond Dr SE
Lacey WA 98503

To Appeal this Notice of Penalty you must:

- File your appeal with the Pollution Control Hearings Board within 30 days of the "date of receipt" of this document. Filing means actual receipt by the Board during regular office hours.
- Serve your appeal on the Department of Ecology within 30 days of the "date of receipt" of this document. Service may be accomplished by any of the procedures identified in WAC 371-08-305(10). "Date of receipt" is defined at RCW 43.21B.001(2).

Be sure to do the following:

- Include a copy of the Notice of Penalty that you are appealing with your Notice of Appeal.
- Serve and file your appeal in paper form; electronic copies are not accepted.

(1) To file your appeal with the Pollution Control Hearings Board

Mail appeal to:

The Pollution Control Hearings Board
PO Box 40903
Olympia WA 98504-0903

OR

Deliver your appeal in person to:

The Pollution Control Hearings Board
4224 – 6th Ave SE Rowe Six, Bldg 2
Lacey WA 98503

(2) To serve your appeal on the Department of Ecology

Mail appeal to:

The Department of Ecology
Appeals & Application for Relief
Coordinator
PO Box 47608
Olympia WA 98504-7608

OR

Deliver your appeal in person to:

The Department of Ecology
Appeals & Application for Relief
Coordinator
300 Desmond Dr SE
Lacey WA 98503

(3) Send a copy of your appeal to:
Daylin Davidson
Department of Ecology
Northwest Regional Office
3190 160th Ave SE
Bellevue, WA 98008

For additional information visit the Environmental Hearings Office Website: http://www.eho.wa.gov/
To find laws and agency rules visit the Washington State Legislature Website:
http://www.leg.wa.gov/CodeReviser

DATED this 25th day of March, 2009 at Bellevue, Washington.

Julie Sellick, Section Manager
Hazardous Waste & Toxics Reduction Program
Northwest Regional Office

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

IN THE MATTER OF THE ASSESSMENT OF PENALTY AGAINST TC Systems	)))	APPLICATION FOR RELIEF FROM PENALTY No. DE 6460

To: Department of Ecology
State of Washington
Northwest Regional Office
3190 160th Ave SE
Bellevue, WA 98008

TC Systems has received your "NOTICE OF PENALTY INCURRED AND DUE," which states that TC Systems has incurred a penalty of $24,000.

I have further read and understand RCW 9A.72.030 (which is included with this document) which prescribed penalties for the making of false statements. I hereby make, under oath and on behalf of TC Systems, application for mitigation or remission of the penalties for the following reasons:

I swear that the foregoing is a true, full and complete statement of the facts of this case.

By:_____

Title:_____

SUBSCRIBED AND SWORN to before this_____ day of _____, 200_.

_____
NOTARY PUBLIC in and for the State of Washington.

My commission expires:_____

RCW 9A.72.030 Perjury in the second degree.

(1) A person is guilty of perjury in the second degree if, with intent to mislead a public servant in the performance of his duty, he makes a materially false statement, which he knows to be false under an oath required or authorized by law.

(2) Perjury in the second degree is a class C felony.

[1975 1st ex.s. c 260 sec. 9A.72.030]

March 25, 2009

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

IN THE MATTER OF AN ADMINISTRATIVE ORDER AGAINST: TC Systems	))))	ORDER No. DE 6459

TO: Mr. Charles Souder
TC Systems
1032 W Marine View Dr
Everett, WA 98201

For the site located at: 1032 W Marine View Dr., Everett
RCRA ID# WAD 088 722 947

This is an Administrative Order requiring TC Systems to comply with Chapter 70.105 RCW Hazardous Waste Management Act and Chapter 173-303 WAC, Dangerous Waste Regulations, by taking certain actions which are described below. Chapter 70.105 RCW authorizes the Department of Ecology (Department) to issue Administrative Orders requiring compliance whenever it determines that a person has violated any provision of Chapter 70.105 RCW.

The Department's determination that a violation has occurred is based on the following facts observed during the dangerous waste inspections conducted on November 6, 2007 and July 8, 2008:

(1) WAC 173-303-141(1): Illegal disposal of dangerous waste.

- Spilled compressor oil (not being recycled) has been allowed to migrate into the soil and the nearby storm drain. The spill residue was disposed of as used oil per the definition in WAC 173-303-515. *(2007 & 2008)*
- Paint wastes containing acetone & methyl ethyl ketone (MEK) solvents have been routinely allowed to evaporate. *(2008)*

(2) WAC 173-303-070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes.

- The designation status had not been determined for the drum of "blasting dust" in satellite area of Building B; the paint contaminated tape, gloves, filters, and other debris in the trash can in the paint locker; the cart full of expired materials in the paint locker; the white drum that is ¼ full, possibly of diesel fuel, outside behind the buildings; and the blue drum and blue bucket outside Building C. *(2007)*

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The facility subsequently determined through testing that only the paint contaminated debris designated as dangerous waste for Chromium (D007). None of the other wastes designated as dangerous wastes.

(3) WAC 173-303-630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste.

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- Cans and totes used to accumulate previously designated dangerous waste (mastic, sticks, gloves, and paint cans); the two drums of berm cleanout sludge declared to be dangerous waste by Environmental Coordinator Robert Deatherage; the drum of soap sludge declared to be dangerous waste by Les Deatherage; and the tote of sludge designated as dangerous waste outside between buildings B & C were not kept closed. *(2008)*

(4) WAC 173-303-630(3): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste.

Numerous containers of dangerous waste throughout the facility were lacking proper labeling or labels were not visible. These include: buckets of paint/solvent waste in the paint booths; bagged paint booth filters; all three 55-gallon drums of paint waste (and floor sweepings) in the paint locker; all the buckets of paint solids in the paint locker; and the box of sludge between Buildings B & C. *(2007)*

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(5) WAC 173-303-200(1)(c): Failure to mark each container with the accumulation start date.

Numerous containers of dangerous waste throughout the facility were lacking start dates. These include: bagged paint booth filters; all three 55-gallon drums of paint waste (and floor sweepings) in the paint locker; all the buckets of paint solids in the paint locker; one drum of liquid paint wastes in the "Satellite Area" in Building B; and the box of sludge between Buildings B & C. *(2007)*

Two totes of mastic/solid debris in the HWAA; two bags of mastic/solid debris in the HWAA; one box of paint booth filters in the HWAA; two drums of berm cleanout sludge in the HWAA; one drum of soap sludge in the filter cake shed between building B & C; and two buckets of paint waste in the paint locker. *(2008)*

(6) WAC 173-303-330: Training requirements were not met. The facility should have a training program, a written training plan, and keep training records.

No training program was available for this facility. (A plan was subsequently created.) *(2007)*

The training plan had not been implemented and training records (other than one certificate for Robert Deatherage) were not provided to Ecology. Mr. Deatherage told Ecology that TC Systems had not been keeping up with this requirement. *(2008)*

For these reasons and in accordance with RCW 70.105.095 it is ordered that TC Systems take the following actions. These actions are required at the location known as TC Systems located at 1032 W Marine View Dr., Everett. (Items 1A & C must be completed again whenever there is turnover in the Environmental Coordinator position, which must remain filled at all times):

(1) Training Program

A. Within 30 days of the date of the Order, TC Systems must identify an employee to be responsible for dangerous waste management and training (Environmental Coordinator) at TC Systems. Within 35 days of the date of the Order, submit notice and contact information for the identified employee to Ecology.

B. Within 45 days of the date of the Order, TC Systems must hire an outside contractor to provide all employees and managers with site specific hazardous waste management training, on-site and the course content and attendance sheet must be submitted to Ecology

C. Within 60 days of the date of the Order, the Environmental Coordinator must attend the McCoy and Associates RCRA training seminar or an equivalent training approved by Ecology. Within 75 days of the date of the Order, a copy of the certificate of completion must be sent to Ecology.

D. Within 90 days of the date of the Order, the following plan, including course content, must be submitted to Ecology, subject to approval by Ecology: TC Systems must create a site specific training plan (or revise any existing plan) for all employees and managers at TC Systems to cover initial training on standard operating procedures for all of the following topics: proper chemical storage, disposal of all dangerous wastes, spill response, treatment by generator, dangerous waste determinations, storage of compatibles, dangerous waste container management (labeling, dating, closing containers), universal waste management, secondary containment, and storage of flammables. Within 10 days of the date of approval notice from Ecology, the approved plan must be implemented and initial training conducted.

E. Beginning 20 days from the date of plan approval notice from Ecology and for a period of fifteen months from the date of this Order, TC Systems must conduct monthly refresher training on hazardous waste management to all employees and provide training records to Ecology by the 1st of each month.

(2) Monitoring

A. Beginning within 45 days of the date of the Order to continue until the same end date as the monthly training records (1E above), TC Systems must submit copies of weekly inspection logs to Ecology by the 1st of every month.

B. Beginning within 45 days of the date of the Order to continue until the same end date as the monthly training records (1E above), TC Systems must conduct and log general facility inspections at least monthly and submit copies of the logs to Ecology by the 1st of every month.

(3) Revise and Submit Dangerous Waste Annual Reports

Within 15 days of the date of the Order, submit to the Department a revised Dangerous Waste Annual Report for the year 2007 to correct generator status from MQG to LQG and file the 2008 report (with LQG generator status). Call the Annual Reporting Hotline at 1-800-874-2022 for assistance in completing this action correctly.

(4) Waste Water Treatment System Requirements to Utilize Permit-by-Rule

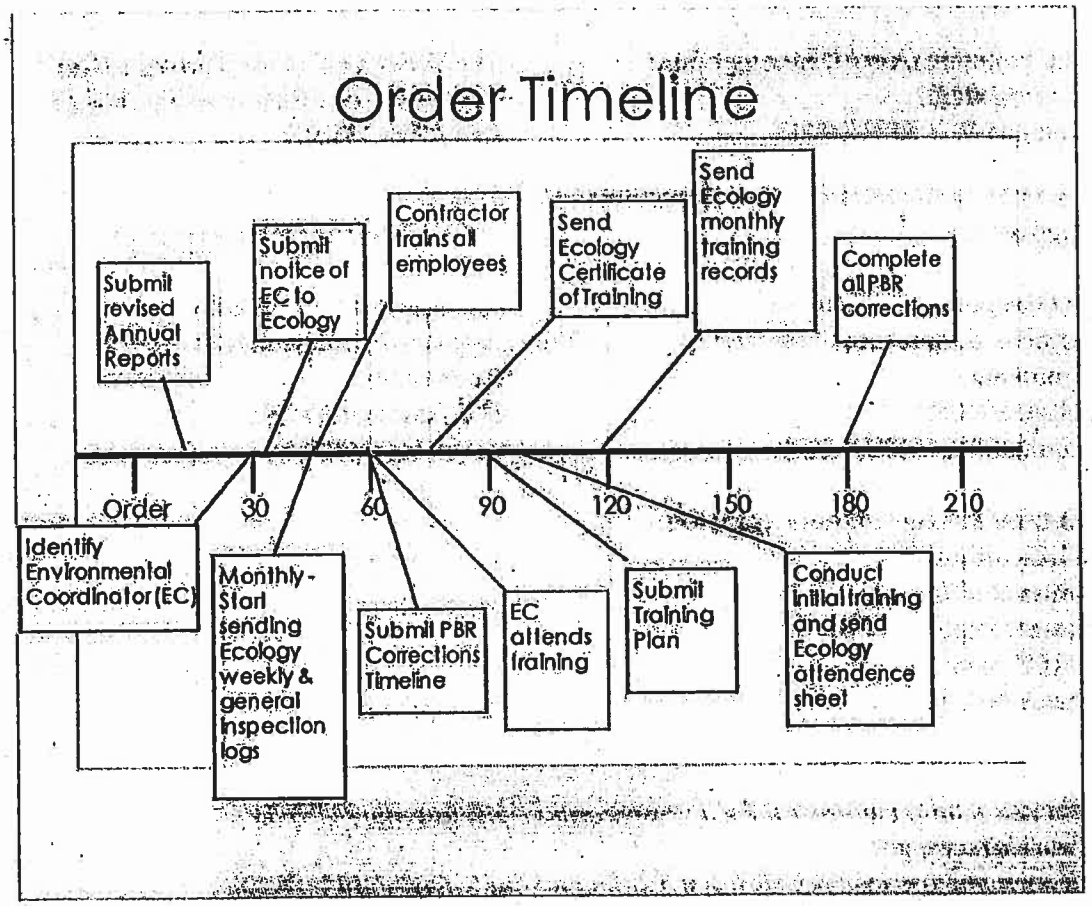
TC Systems has the option to operate their wastewater treatment system under permit by rule (PBR) if all of the conditions found in WAC 173-303-802 are met. This allowance lets the facility treat dangerous waste without being required to submit an application for a dangerous waste facility permit. However, if these conditions are not met, TC Systems is subject to violations and subsequent penalties for treating dangerous waste without a permit. Conditions include WAC 173-303-283 (Performance Standards) requirements that all generators must design, construct, operate, and/or maintain the facility in a manner that prevents degradation of groundwater, surface water, and/or air quality.

TC Systems did not comply with the standards found in WAC 173-303-283(3)(c) or with the City of Everett Public Works Department Waste Discharge Permit No.7708-04 VI(B) – which requires in part, that process tanks shall be located in a bermed, roofed, secured area capable of containing 110 percent of the volume of the largest tank. TC System's tanks are only partially covered with a roof, and have inadequate containment. Therefore, the facility does not currently meet the criteria to qualify for PBR because: 1) WAC 173-303-802(5)(a)(iii) requires compliance with the conditions of the permit; and 2) WAC 173-303-802(5)(a)(iv)(C) requires compliance with performance standards. TC Systems must correct the following deficiencies to meet the criteria for PBR:

A. Volume of secondary containment for waste treatment system tanks is not adequate to hold 110% of the largest tank or 10% of the total volume;

B. Treatment system and secondary containment system is not totally enclosed – only partially covered, allowing rainwater to compromise system and reduce available containment volume;
C. Tanks have not been integrity tested or certified by an engineer;
D. Daily tank inspections are not being conducted or logged;
E. Secondary containment berm is not sealed; and
F. Secondary containment system has not been maintained, and has already failed in several places.

Within 60 days of the date of the Order, TC Systems must submit a timeline for resolving the problems listed above, subject to approval by Ecology. In order to avoid the requirement to submit an application for a dangerous waste facility permit; and to address violations for past treatment without a permit, TC Systems must comply with PBR requirements by correcting all of the deficiencies noted above within 180 days of the date of the Order.



You have a right to appeal this Order. To appeal this you must:

- File your appeal with the Pollution Control Hearings Board within 30 days of the "date of receipt" of this document. Filing means actual receipt by the Board during regular office hours.
- Serve your appeal on the Department of Ecology within 30 days of the "date of receipt" of this document. Service may be accomplished by any of the procedures identified in WAC 371-08-305(10). "Date of receipt" is defined at RCW 43.21B.001(2).

Be sure to do the following:

- Include a copy of this document that you are appealing with your Notice of Appeal.
- Serve and file your appeal in paper form; electronic copies are not accepted.

(1) To file your appeal with the Pollution Control Hearings Board

Mail appeal to:

The Pollution Control Hearings Board
PO Box 40903
Olympia WA 98504-0903

OR

Deliver your appeal in person to:

The Pollution Control Hearings Board
4224 – 6th Ave SE Rowe Six, Bldg 2
Lacey WA 98503

(2) To serve your appeal on the Department of Ecology

Mail appeal to:

The Department of Ecology
Appeals & Application for Relief Coordinator
PO Box 47608
Olympia WA 98504-7608

OR

Deliver your appeal in person to:

The Department of Ecology
Appeals & Application for Relief Coordinator
300 Desmond Dr SE
Lacey WA 98503

(3) And send a copy of your appeal to:

Daylin Davidson
Department of Ecology
Northwest Regional Office
3190 160th Ave SE
Bellevue, WA 98008

For additional information visit the Environmental Hearings Office Website:
http://www.eho.wa.gov
To find laws and agency rules visit the Washington State Legislature Website:
http://www.leg.wa.gov/CodeReviser

Your appeal alone will not stay the effectiveness of this Order. Stay requests must be submitted in accordance with RCW 43.21B.320.

DATED this 25th day of March, 2009 at Bellevue, Washington.

Julie Sellick, Section Manager
Hazardous Waste & Toxics Reduction Program
Northwest Regional Office

May 28, 2009

CERTIFIED MAIL
7007 3020 0000 3068 4895

Mr. Charles Souder
TC Systems
1032 W Marine View Dr
Everett, WA 98201

Dear Mr. Souder:

RE: Delinquent Compliance with Administrative Order No. DE 6459
issued March 25, 2009 RCRA ID# WAD 088 722 947

Chapter 70.105 RCW authorizes the Department of Ecology (Ecology) to issue Administrative Orders requiring compliance whenever it determines that a person has violated any provision of Chapter 70.105 RCW.

An Administrative Order was issued on March 25th to requiring TC Systems to comply with Chapter 70.105 RCW Hazardous Waste Management Act and Chapter 173-303 WAC, Dangerous Waste Regulations, by taking certain actions which were described in the Order.

You were required to correct these items of non-compliance, within the specified timeframes identified in the Order. Your employee Robert Deatherage has informed me that TC Systems will not be able to meet the due dates for compliance with the Order for the following items:

(1) Training Program

- TC Systems must hire an outside contractor to provide all employees and managers with site specific hazardous waste management training, on-site and the course content and attendance sheet must be submitted to Ecology
- The Environmental Coordinator (Robert) must attend the McCoy and Associates RCRA training seminar or an equivalent training approved by Ecology.

(4)TC Systems must submit a timeline for resolving the problems listed above, subject to approval by Ecology. Robert has submitted an outline of the timeline, but details need to be provided before Ecology can approve the timeline.

Within seven days from the date of receipt of this letter, please send me an update on the status of these three items along with the dates you propose to have these items completed.

Failure to comply with this Order may result in the issuance of additional civil penalties of up to ten thousand dollars per day per violation, or other actions, whether administrative or judicial, to enforce the terms of this Order.

Please contact me at dayd461@ecy.wa.gov or (425) 649-7090 should you have questions.

Sincerely,

Daylin Davidson, Hazardous Waste Compliance Inspector
Hazardous Waste and Toxics Reduction Program

DD:SA

cc: Mary Utick

August 13, 1998

Mr. Douglas Miracle, General Manager
TC Systems, Inc.
1028 West Marine View Drive
Everett, WA 98201

Dear Mr. Miracle

Re: Dangerous waste compliance follow-up inspection at TC Systems, Inc. (WAD088722947) on August 6, 1998.

Thank you for your time during our recent inspection. The purpose of this inspection was to determine the facility's level of compliance with the Washington State Dangerous Waste Regulations (Chapter 173-303 WAC), and, in particular, to verify compliance with a Notice of Correction that was issued on June 12, 1998. These regulations establish a system for safe and responsible management of dangerous waste. As indicated on the enclosed checklist, no hazardous waste violations were found during our visit and no response is required.

Please contact me at (425) 649-7072 if you have any questions regarding this letter, or if you have future questions concerning the dangerous waste management requirements specified in Washington's dangerous waste regulations.

Sincerely,

Elliott Zimmermann
Hazardous Waste & Toxics Reduction Program

Enclosure: checklist

cc: HZW 3.1:8/6/98

Date: 08/06/98

DANGEROUS WASTE COMPLIANCE CHECKLIST

TYPE OF VISIT: Technical Assistance **Compliance Inspection** Complaint Other: _____

OPENING CONFERENCE: Yes / No SITE TOUR: **Yes** / No RECORDS REVIEW: Yes / **No** CLOSING CONFERENCE: Yes / **No**

SITE

SITE NAME: TC Systems, Inc. WAD088722947

SITE CONTACT(S): Lisa Patterson Douglas Miracle

TITLE(S): Environmental Coordinator General Manager

PHONE: (425) 258-4055 (425) 258-4055

ADDRESS: 1028 West Marine View Drive

MAILING ADDRESS: _____

CITY: Everett COUNTY: Snohomish ZIP: 98201

YEARS ON SITE: _____ SIC#: 3471

GENERATOR/FACILITY STATUS: SQG MQG **LQG** TSD RECYCLER OTHER _____

TYPE OF BUSINESS: Metal preparation, Anodizing and Painting

ECOLOGY

LEAD CONTACT: Elliott Zimmermann PHONE: (425) 649-7072 FAX: (425) 649-7098

OTHER REPRESENTATIVES: Barb Smith, NWRO Hazardous Waste Program

TIME ON SITE: 10:50 **AM** / PM TIME OFF SITE: 11:30 **AM** / PM

REPORT DATE: 8/6/98 REPORT BY: Elliott Zimmermann

PROCESS INFORMATION

PROCESSES THAT GENERATE WASTES: Metal preparation, Anodizing and Painting

WASTE STREAMS (DESCRIPTION OR CODES): corrosive wastes; metal-bearing sludges; waste paint related materials(e.g., paint booth sludge); waste solvent

POLLUTION PREVENTION SUGGESTIONS, TECHNICAL ASSISTANCE REFERRALS

Information and assistance on the following environmental programs is available from:

SITE NAME: TC Systems, Inc. WAD088722947 Date: 08/06/98

CONDITIONS NOT IN COMPLIANCE	See Line #. Below
No violations found.	

LINE NO.	VIOLATION	WAC 173-303	LINE NO.	VIOLATION	WAC 173-303
	WASTE MANAGEMENT			WASTE MANAGEMENT CONT:	
1	Waste Designation	-070(3)	20	Notification & Identification #s	-060(2)
2	Failure to Offer Waste to TSD	-141	21	Manifesting	-180
3	Spills/Discharges	-145	22	Large Quantity Generator Plans	-200(1)(e), -320 to –360
4	Treatment-by-Generator	-170(3)	23	Recordkeeping Retention Times	-210
5	Accumulation Time Limits	-200(1)(a)	24	Annual Report/Exception Report	-220
6	Accumulation in Containers/Tanks	-200(1)(b), see 630/640	25	Personnel Training Requirements	-330
7	Container/Tank Labeling	200(1)(c)(d)	26	Preparedness & Prevention	-340
8	Secondary Containment	-200(1)(b)	27	Contingency Plan	-350
9	Satellite Accumulation	-200(2)	28	Emergencies	-360
10	Medium Quantity Generator	-201(c)	29	Permit-by-Rule	-802(5)
11	Ignitable/Reactive/Incompatible Wastes	-395		OTHER DANGEROUS WASTE VIOLATIONS	
12	Used Oil Burned for Energy	-515	30	Requirements for generators of dangerous waste	-170(1)(a)
13	Use/Mgmt. of Containers	-630	31	Requirements for accumulating dangerous waste on-site	-200(xx)(xx)
14	- Condition of containers	-630(2)	32		
15	- Compatible containers	-630(4)		OTHER ENVIRONMENTAL LAWS/CONCERNS	
16	- Closed containers	-630(5)(a)	33		
17	- Container handling	-630(5)(b)	34		
18	- Weekly Inspections	-630(6)	35		
19	- Secondary Containment	-630(7)	36		

Reminder: Ecology will provide a copy of the text of regulations for which violations are cited.

QUESTIONS, CONCERNS, COMMENTS

ECOLOGY WILL:

OWNER/OPERATOR WILL:

SITE NAME: TC Systems, Inc. WAD088722947 Date: 08/06/98

COMPLIANCE ACTIONS REQUIRED

Instructions: **NA** ~~The actions identified below are necessary in order to be in compliance with Washington Dangerous Waste Regulations (Ch. 173-303 WAC), or other environmental laws or regulations. Please indicate the date an action is completed and initial each item. If an action is not completed, please note in the "Date Completed" column and explain on back of this page.~~

Return Completed Form or Request for Extension -- **NA** ~~Upon completion of all actions listed above, please mail a copy of this form to the Washington Department of Ecology at the address listed below. An extension of the deadlines to achieve compliance may be requested. Please make a request in writing, including the reasons an extension is necessary and proposed date(s) for completion, and send it to the Ecology Lead Contact by XXX XX, 199X. Ecology will provide a written approval or denial of your request.~~

No.	Action(s) Needed to Achieve Compliance	By When?	Date Completed	Initial
	No violations found.			

Ecology Lead Contact: _____ *Date:* _____

Address: _____

Received By: _____

This checklist serves as a notice of deficiency for technical assistance visits or a notice of correction for other site visits as provided for in the Washington State Law "Implementing Regulatory Reform" , Chapter 403, Laws of 1995.

FOLLOW-UP BY ECOLOGY: PHONE LETTER REVISIT **NONE**

PHOTOS TAKEN: Yes / **No** SAMPLES TAKEN: Yes / **No** SPLITS OFFERED: Yes / No

DOCUMENTS LEFT: REGULATIONS STEP-BY-STEP TIMS FOCUS SHEETS
ADDITIONAL:

ASSISTANCE/ENFORCEMENT PROGRAMS EXPLAINED: YES / **NO**

If you have any questions about information in this Checklist, please call the Ecology Lead Contact. The Department of Ecology is an equal opportunity agency. If you have special accommodation needs, contact Felicia Curtis at (360) 407-6721 or Julie Carrasco at (360) 407-6199 (Voice), or (360) 407-6006 (TDD).

Please address any correspondence to your Ecology lead contact at:

Washington Department of Ecology
Northwest Regional Office
Hazardous Waste and Toxics Reduction
3190 160th Avenue SE
Bellevue, WA 98008-5452

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

March 25, 2009

CERTIFIED MAIL
7007 0220 0004 7250 0880

Mr. Charles Souder
TC Systems
1032 W Marine View Dr
Everett, WA 98201

Dear Mr. Souder:

RE: 1032 W Marine View Dr, Everett
RCRA ID # WAD 088 722 947

Enclosed is a Notice of Penalty Incurred and Due No. DE-6460 which is being issued for violations of Chapter 70.105 RCW and an Application for Relief from Penalty form. Also enclosed is Order No. DE-6459 requiring TC Systems to take the actions listed to comply with Chapter 70.105 RCW Hazardous Waste Management Act and Chapter 173-303 WAC, Dangerous Waste Regulations. If you have any questions concerning the content of the document, please call Daylin Davidson, at (425) 649-7090. If you wish to formally contest the penalty, you must follow the procedures described in the Notice of Penalty. The notice of appeal shall contain a copy of the penalty or decision appealed from, and if the penalty or decision followed an Application for Relief, a copy of the Application.

Sincerely,

Julie Sellick, Section Manager
Hazardous Waste & Toxics Reduction Program
Northwest Regional Office

Enclosures

cc: Leann Ryser, Fiscal Office

Washington Department of Ecology
Hazardous Waste & Toxics Reduction Program
Compliance Report

Site: TC Systems, Inc. **RCRA ID#: WAD 088 722 947**

Inspection Date: **May 13, 2003**

Site Contacts: Charles Souder, General Manager
Mike Farnham, Purchasing
Phone: (425) 258-4055

Site Location: 1028 W. Marine View Drive
Everett, WA. 98201

At This Site Since: 1976 SIC Code: 3471, 3479

Generator/Site Status: LQG NAICS Code: 332813

Ecology

Lead Contact: Warren Walton- NWRO Phone: (425) 649-7216 FAX: (425) 649-7098

Other Representatives: Hasina Wong, Snohomish Health District (425) 339-5250 ext 4060

Report Date: June 13, 2003

Report and Photos By: Warren Walton

_____ _____

(Signed) (Date)

Facility Background:

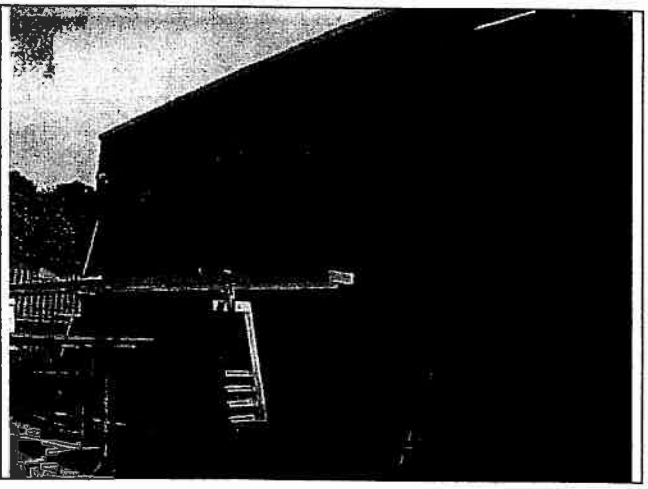
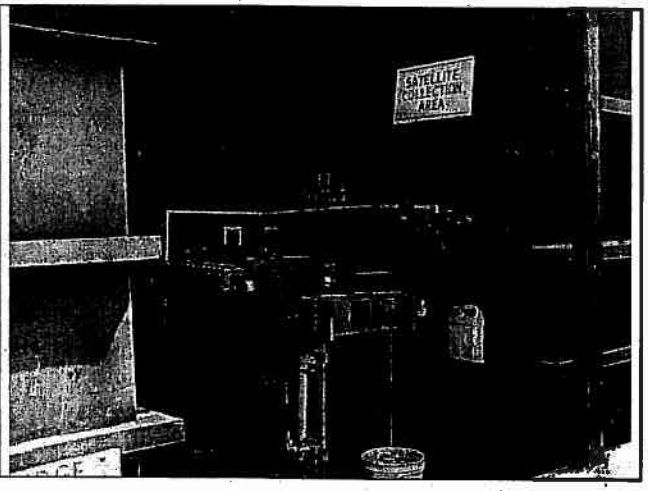
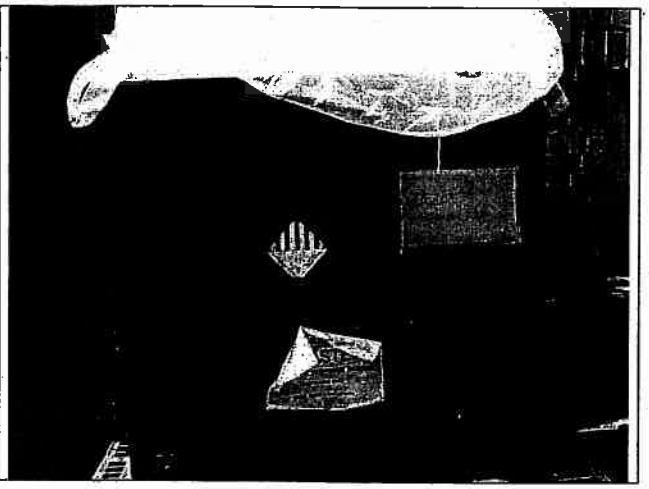
TC Systems is located near the Everett Marina on West Marine View Drive. Twenty five people are employed working the day shift five days a week. TC Systems supports the aviation and boating industries chemically treating and painting metal parts across their chemical line and in their paint booths. Wastewater is pre-treated and discharged according to local discharge limits. Limited sand blasting is done here with the majority of off site sand blasting contracted to Alternative Blasters in Marysville.

Inspection Summary:

We arrived at 1:10 p.m. asking for the person in charge of the hazardous waste program. Lisa Patterson had done it for several years, but departed TC Systems recently. Mr. Mike Farnham introduced himself to us; we identified ourselves, and the purpose of our visit. At the in-briefing, we outlined what we wanted to see during a site walk-through and the records we wanted to see at the end of the tour. Mike said he had been the acting hazardous waste manager for less than a year and that he is responsible for several work areas simultaneously.

We went to Building B (photo 1) where the chem line is located. He explained the processes as items traveled from one end of the line to the other. He showed us records in the upstairs office of continuous effluent monitoring and frequent effluent testing of the wastewater being pre-treated prior to discharge.

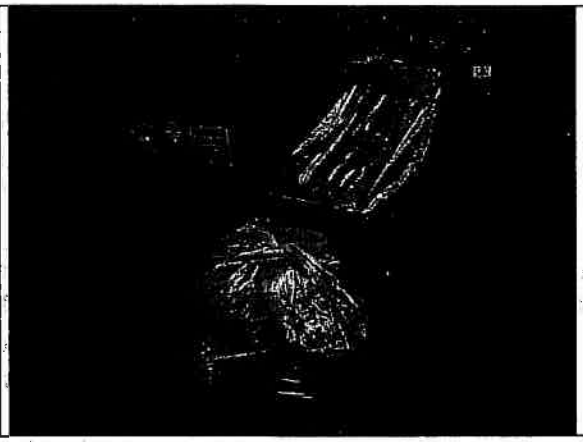
We went to the alley way between Buildings B and C (photo 3) where the sludge from the wastewater treatment process is collected and batch processed in the filter press. Solids containing heavy metals (chromium – D007 specifically) are dropped into a tray and accumulated in a bulk solids container (photo 2). The bulk solids container is on a skid pallet and stored under cover against Building C.

#1 (of 13) MVC-001F 1:40 pm	Reference photo of company name. This is Building B where the chemical line is located.	
#3 (of 13) MVC-003F 1:51 pm	The filter press dewaters treatment sludge containing chromium (DOO7) from chemical line in Bldg. B. An open pan collects solids that are placed in the bulk container nearby (photo 2).	
#2 (of 13) MVC-002F 1:48 pm	Photo of bulk solids container located adjacent to Building C. Bulk solids are generated from filter press (photo 3).	

We returned to Building C to the first floor and went to one of two hazardous waste accumulation areas (HWAA) in the building. This site is being referred to as HWAA # 1.

#5 (of 13) MVC-005F 1:56 pm	HWAA # 1 - This is one of two hazardous waste storage areas on site. The bagged solid debris is shown for reference.	

The area is clearly marked for hazardous waste storage and as we looked at items in the area, we found a few things that need to be addressed.

#4 (of 13) MVC-004F 1:54 pm	Bagged paint filters and what appear to be sorbent socks in HWAA #1. They were to be placed in the box.	

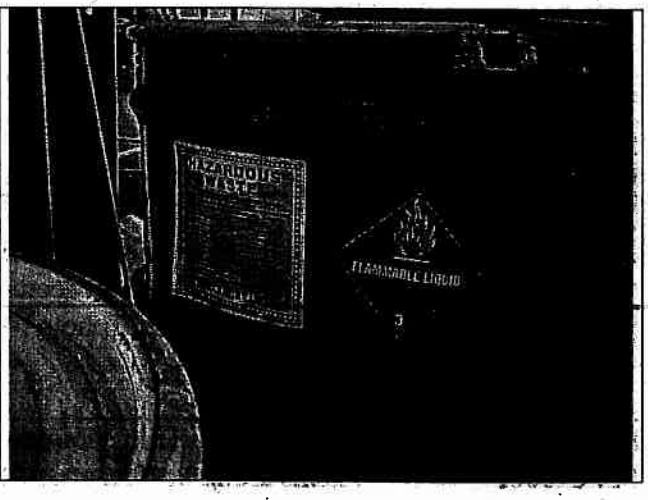
The paint booth filters should have been put directly into the open box with risk label nearby. Because they were not, there was waste without an accumulation start date and not labeled. Along the left wall of this area was used oil to be recycled (photo 6). Though properly stored on spill pallets, two of the containers were open.

#6 (of 13) MVC-006F 2:00 pm	HWAA #1 - This photo shows items along the left wall when facing the sign in photo 5. All drums were labeled as containing used oil.	

We moved to the flammable paint storage locker which is an accumulation area for drums of paint. Slopped paint going into the drums may have obliterated existing labels. There are no labels identifying each drum as a hazardous or dangerous waste, there are no labels, there are no accumulation start dates on any container, and it appears that more than 55 gallons of a single waste stream are being accumulated here.

#7 (of 13) MVC-007F 2:02 pm	Area marked 'Hazardous Waste' and 'Accumulation Only?' in the flammable paint locker. This is in Building C. Note condition and number of drums.	

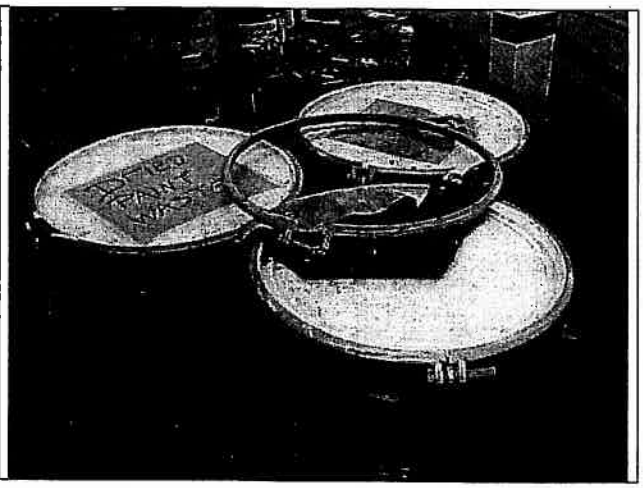
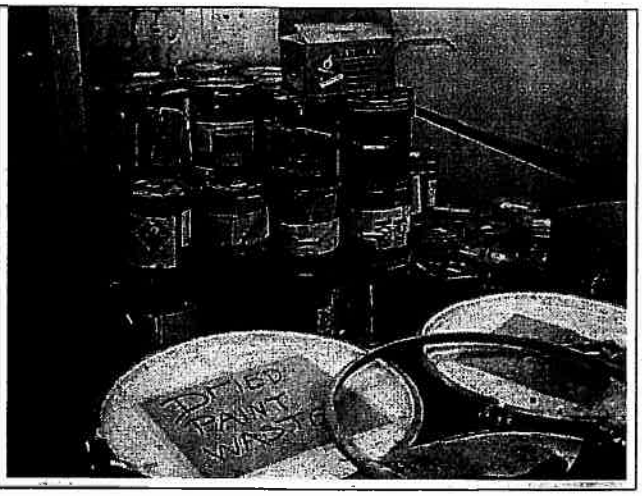
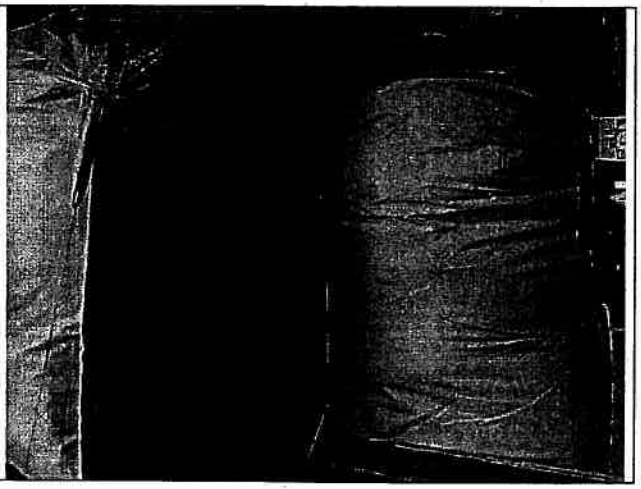
We went across the building to the second hazardous waste accumulation area referred to as HWAA #2. Looking at yellow markings and labels on containers, we noticed one drum (photo 8) had an accumulation start date of October 2002, which was well past its 90 day storage limit prior to shipment.

#8 (of 13) MVC-008F 2:11 pm	Located in the second (90-day) hazardous waste accumulation area (HWAA #2) was this drum with a start date of October 2002. It is properly marked and labeled, but beyond shipment date.	

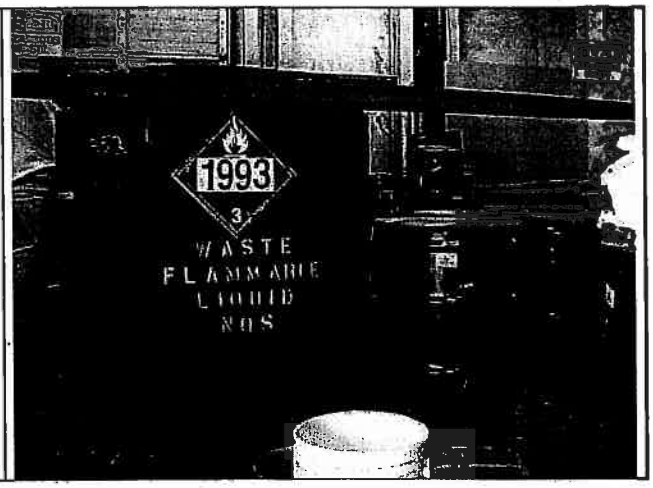
We looked at three drums on one pallet (photo 9). Two had paper signs on the top saying dried paint waste, but neither had a risk label. The third drum on the pallet had no labeling.

Photo 10 shows a pallet of mostly five gallon metal paint cans. Some are shelf expired paint, some cans are labeled, but many are not. There is no accumulation start date evident on any of the containers, nor for the entire pallet as there should be in a 90-day accumulation area. We were told the hazardous waste contractor for TC Systems, Univar USA, Inc. was going to come to the site and handle these five gallon containers for proper disposal.

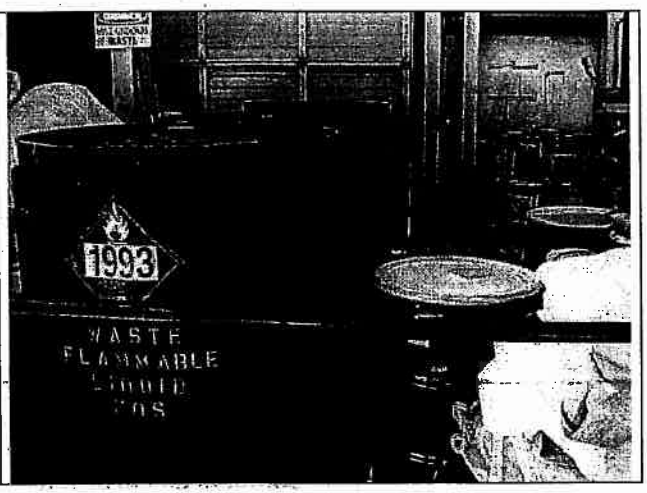
We were told the bulk bags in photo 11 contain the solid sludge collected from the filter press operation, but other than solids, the waste is not identified and there is no risk label. Remember in photo 2, the bulk solids box is marked with contents and has a risk label. The photo 11 items should be labeled the same as the outer box in photo 4 and there is no accumulation start date on either solids bulk container.

#9 (of 13) MVC-009F 2:12 pm	HWAA #2 - Two of the three drums indicate what is in them, but there are no risk labels on any of them.	
#10 (of 13) MVC-010F 2:13 pm	HWAA #2 - There was no accumulation start date on any of these containers and none were marked as dangerous or hazardous waste. Many containers did not have a risk label. *We were told the paint and paint related material was going to be bulk packed – poured into common drums for better handling.	
#11 (of 13) MVC-011F 2:14 pm	HWAA #2 - Bulk bag identifies the contents as hazardous waste, but does not say what it is and neither bag has a risk label.	

We asked if the yellow crayon markings on the bulk containers related to a start date and were told these bulk waste flammable liquid containers were received with the writing on them. The UN 1993 number in conjunction with the 'waste flammable liquid, n.o.s.' properly labels the container, but there is no accumulation start date.

#12 (of 13) MVC-012F 2:15 pm	HWAA #2 - The bulk container is properly marked, but missing the accumulation start date.	

All three tanks are identically marked. None of these bulk tanks has an accumulation start date, which is key to controlling waste shipments within time frames.

#13 (of 13) MVC-013F 2:15 pm	HWAA #2 - Three bulk tanks are identically marked and none have an accumulation start date.	

We returned to the office conference room where we requested review of manifests, weekly HWAA inspection sheets or logs, the contingency plan, the training plan, and training records.

The manifests were in good order save for manifest # 01686 date December 4, 2002 which did not have the signed returned original manifest copy. We requested Mike contact Univar USA, Inc. to get the required copy. He did so the next day, faxing a copy to me at the Bellevue Ecology Office.

The contingency plan met plan requirements. There were no inspection sheets for either HWAA, there was no training plan, and no training files.

Mike showed us a May 2003 internal training calendar with respirator and fork lift training listed to indicate TC Systems is addressing training. We said it was a good start, but for compliance purposes it was inadequate to document what training the employees handling hazardous waste have had or are scheduled to attend.

Inspection concerns:

- Recommend removing extraneous marks such as yellow crayon not having to do with current handling from the three "waste flammable liquid, n.o.s." bulk containers or any drum received to accumulate hazardous waste.
- Recommend an SOP change to deliver paint filters to HWAA #1 so that filters go directly into a lined box that is properly labeled.
- As part of TC Systems in-house training, recommend employees receive instruction on the requirements at a satellite accumulation site and that the accumulation start date applies to a waste that has reached a 55 gallon volume for individual waste streams.
- Recommend becoming familiar with exception reporting for manifests not returned in 35 days of waste shipment date from the receiving facility. Reference WAC 173-303-220(2), exception reports.
- Recommend generator become fully familiar with designation, marking, and labeling requirements for generated wastes.

COMPLIANCE PROBLEMS

*The following conditions identified during the inspection on **May 13, 2003** were not in compliance with Dangerous Waste and/or other environmental laws. Each problem is covered in three parts: (1) the **citation from the regulations**, (2) the **specific observations** from the inspection that highlight the problem, and (3) the **corrective measures** needed to fix the problem and achieve compliance. On the last page(s) of this report is a 'Compliance Certificate' which again lists these compliance citations and directives in a table. That certificate also lists the deadlines for the corrective measures to be completed. The certificate explains how to complete the form and return it to the Department of Ecology.*

1) WAC 173-303-200(1)(a) – Accumulation over 90 days (LQG): WAC 173-303-200(1)(a) as referenced by -170(3): Accumulated waste has remained on site for more than 90 days.

There was one drum in HWAA #2 (as illustrated in photo #8) that had exceeded its 90 day shipment requirement. It had a start date of October 2002.

***Within 60 calendar days** of the receipt of this letter, provide copies of manifests for waste disposal of all waste which has been on site longer than 90 days.*

2) WAC 173-303-200(1)(c) – Accumulation start date on container: WAC 173-303-200(1)(c) as referenced by -170(2): Failure to mark each container with the accumulation start date.

All areas may not be mentioned here, but photos 4, 7, 9, 10, 11, and 13 above illustrate bulk and non-bulk containers that do not have an accumulation start date.

Immediately upon receipt of this letter, ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Provide photographs of properly labeled containers.

3) WAC 173-303-200(2)(a) – Satellite Accumulation – container standards: WAC 173-303-200(2)(a) as referenced by -170(2): Failure to meet the satellite accumulation area standards for containers.

Photo 7 above shows four drums of paint related wastes. Satellite accumulation allows one waste stream of 55 gallons total be accumulated at a satellite point. There appear to be at least three drums of the same material being collected at this site in the flammable paint locker.

Immediately comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date; (c) ensuring containers are in good

condition, handled safely, and compatible with waste stored; and (d) keeping containers closed at all times. Provide photos to document TC Systems' return to compliance with this regulation.

4) WAC 173-303-630(5)(a) – Containers closed: WAC 173-303-630(5)(a) as referenced by -200(1)(b): Failure to assure container is closed (except when actively adding or removing waste).

Photos 7 and 6 show containers open; one drum is without its lid and the used oil drums are missing a bung and have an open funnel.

Immediately upon receipt of this letter, ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5). Provide photos to document TC Systems' return to compliance with this regulation.

5) WAC 173-303-200(1)(d) – Label with risk and as either dangerous waste or hazardous waste: WAC 173-303-200(1)(d) as referenced by -170(2): Failure to label container as "Hazardous Waste" or "Dangerous Waste", and/or failure to provide a label that identifies the major risk(s) associated with the waste in the containers.

Photos 4, 7, 9, 10, and 11 show unlabeled paint booth filters, paint drums, five-gallon containers, and solid bulk containers that have missing or incomplete labels.

Immediately upon receipt of this letter adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d). Provide photos to document TC Systems' return to compliance with this regulation.

6) WAC 173-303-630(6) – Container weekly inspections: WAC 173-303-630(6) as referenced by -200(1)(b): Failure to conduct weekly inspections of dangerous waste accumulation areas and containers.

There were two Hazardous Waste (90 Day) Accumulation Areas (HWAA) identified on site. Each will require its own weekly inspection sheet or log. Similar logs may be used at each site and each should be specifically identified. The example of a weekly inspection sheet may be used as a starting point to design a sheet or log suitable for your facility.

Within 7 days of receipt of this letter, institute an inspection schedule for areas where containers of dangerous waste are stored. These areas must be inspected at least on a weekly basis. Maintain an inspection log that includes: the date and time of the inspection, the printed name and signature of the inspector, a notation of the observations mad and the date and nature of any corrective measures taken. ***Submit a copy of the proposed inspection log within 7 work days.***

7) WAC 173-303-330(2) – Written training plan: WAC 173-303-330(2) as referenced by -200(1)(e): Failure to prepare and maintain a written personnel training plan.

I was given a copy of a TC Systems in-house training schedule for May 2003. It indicates respirator training and fork lift training on two dates, but is not part of a formally written training plan. "How to Develop a Written Personnel Training Plan" shall be enclosed with this inspection report for your use.

Within 60 calendar days of the receipt of this letter, prepare and begin to maintain a written training plan. ***Submit a copy of the plan to the department within 60 days.***

8) WAC 173-303-330(3) – Training Records: WAC 173-303-330(3) as referenced by -200(1)(e): Failure to maintain personnel training records.

Step 5 from the "How to Develop a Written Training Plan" gives an example of an individual training record. Keeping individual training records is preferred to keeping sign up sheets for each training course, though the latter method would satisfy the training record requirement.

Within 30 calendar days of the receipt of this letter, establish and institute use of proper training records.

RCRA ID #: WAD 088 722 947

COMPLIANCE CERTIFICATE

Instructions: **Return this Completed Form or Request an Extension** -- Use this form to report if the action(s) needed to achieve compliance, identified during the inspection on **May 13, 2003**, have been completed. Complete the shaded portion of the table and mail a copy of this form to Warren Walton by ***August 18, 2003*** at the following address: Washington Department of Ecology, Hazardous Waste and Toxics Reduction Program, Attention: Warren Walton, 3190 160th Avenue SE, Bellevue, WA 98008-5452 .

An extension of the deadlines to achieve compliance may be requested. Please make a request in writing, including the reasons an extension is necessary and proposed date(s) for completion, and send it to ***Warren Walton*** before the date specified above. Ecology will provide a written approval or denial of your request.

If you have any questions about information in this Compliance Report, please call:
Warren Walton – 425 649-7216

The problems identified below must be corrected in order to be in compliance with Washington Dangerous Waste Regulations (Chapter 173-303 WAC), or other environmental laws or regulations. Please indicate the date each action is completed and initial each item. Include any comments explaining the actions taken on a separate piece of paper.

1) WAC 173-303--200(1)(a) – Accumulation over 90 days (LQG): WAC 173-303-200(1)(a) as referenced by -170(3): Accumulated waste has remained on site for more than 90 days.

Within 60 calendar days *of the receipt of this letter, provide copies of manifests for waste disposal of all waste which has been on site longer than 90 days.*

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(a)	August 18, 2003		

2) WAC 173-303-200(1)(c) – Accumulation start date on container: WAC 173-303-200(1)(c) as referenced by -170(2): Failure to mark each container with the accumulation start date.

Immediately upon receipt of this letter, ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(a)	June 18, 2003		

3) WAC 173-303-200(2)(a) – Satellite Accumulation – container standards: WAC 173-303-200(2)(a) as referenced by -170(2): Failure to meet the satellite accumulation area standards for containers.

Immediately comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date; (c) ensuring containers are in good condition, handled safely, and compatible with waste stored; and (d) keeping containers closed at all times.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(2)(a)	June 18, 2003		

4) WAC 173-303-630(5)(a) – Containers closed: WAC 173-303-630(5)(a) as referenced by -200(1)(b): Failure to assure container is closed (except when actively adding or removing waste).

Immediately upon receipt of this letter, ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5).

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-630(5)(a)	June 18, 2003		

5) WAC 173-303-200(1)(d) – Label with risk and as either dangerous waste or hazardous waste: WAC 173-303-200(1)(d) as referenced by -170(2): Failure to label container as "Hazardous Waste" or "Dangerous Waste", and/or failure to provide a label that identifies the major risk(s) associated with the waste in the containers.

Immediately upon receipt of this letter adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d).

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(d)	June 18, 2003		

6) WAC 173-303-630(6) – Container weekly inspections: WAC 173-303-630(6) as referenced by -200(1)(b): Failure to conduct weekly inspections of dangerous waste accumulation areas and containers.

Within 7 days of receipt of this letter, institute an inspection schedule for areas where containers of dangerous waste are stored. These areas must be inspected at least on a weekly basis. Maintain an inspection log that includes: the date and time of the inspection, the printed name and signature of the inspector, a notation of the observations mad and the date and nature of any corrective measures taken. ***Submit a copy of the proposed inspection log within 7 work days.***

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-630(6)	June 24, 2003		

7) WAC 173-303-330(2) – Written training plan: WAC 173-303-330(2) as referenced by -200(1)(e): Failure to prepare and maintain a written personnel training plan.

Within 60 calendar days of the receipt of this letter, prepare and begin to maintain a written training plan. ***Submit a copy of the plan to the department within 60 days.***

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-330(2)	August 18, 2003		

8) WAC 173-303-330(3) – Training Records: WAC 173-303-330(3) as referenced by -200(1)(e): Failure to maintain personnel training records.

Within 30 calendar days of the receipt of this letter, establish and institute use of proper training records.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-330(3)	July 18, 2003		

The Department of Ecology is an equal opportunity agency and does not discriminate on the basis of race, creed, color, disability, age, religion, national origin, sex, marital status, disabled veteran's status, Vietnam Era veteran's status or sexual orientation. If you have special accommodation needs or require this document in alternative format, please call Warren Walton at *425 649-7216* (Voice) or **Washington State Relay Operator/Service: 711 and 1-800-833-6388 (TTY).**

Issuance Date: April 30, 2004
Expiration Date: April 29, 2009

CITY OF EVERETT
INDUSTRIAL WASTE DISCHARGE PERMIT

In compliance with the provisions of The Federal Clean Water Act,
The State of Washington Water Pollution Control Law, as amended
(Chapter 90.48 Revised Code of Washington) and
The City of Everett Industrial Pretreatment Ordinance No. 2034-95 (as amended)
An Industrial Waste Discharge Permit is Issued to:

TC Systems
1032 West Marine View Drive
Everett, WA 98201

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Permit Number:	7708-04
Authorized Rep:	Charles Souder
Plant Location:	1032 West Marine View Drive, Everett, WA 98201
Receiving Water:	Everett Water Pollution Control Facility
Industry Type:	Metal Finisher — SIC No. 3471 40 CFR 433.17 (PSNS)
Sample Site:	Sample box on waste treatment outlet (Effluent weir)

TC Systems is authorized to discharge pretreated industrial wastewater to the City of Everett sewer system in compliance with the City's Ordinance, any applicable provisions of Federal or State law or regulation, and in accordance with discharge point(s), effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit is granted in accordance with the permit application form filed on February 4, 2004, in the office of the City of Everett Department of Public Works, and in conformity with plans, specifications, and other data submitted to the City in support of the above data disclosure form.

Tom Thetford, P.E.
Utilities Director

Date

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I. EMERGENCY NOTIFICATION

A. In the event that a petroleum or other hazardous material spill reaches the sewer system, the Everett Water Pollution Control Facility shall be notified immediately.

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Hours 7:30 AM to 4:00 PM Monday - Friday	(425) 257-8240
After Hours, Weekends and Holidays	(425) 257-8200

B. In the event that a spill of oil or hazardous material reaches the storm sewer or the waters of the State, Everett Surface Water Management and the Department of Ecology shall be notified immediately.

Everett Surface Water Management Hours 7:30 AM to 4:00 PM Monday - Friday	(425) 257-8800
After Hours, Weekends and Holidays	(425) 257-8200
Washington State Dept. of Ecology 24 hours	(425) 649-7000

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Limitations and Monitoring Requirements

After issuance and lasting through midnight April 29, 2009, the Permittee is authorized to discharge treated industrial wastewater to the City of Everett sanitary sewerage system subject to the following limitations and monitoring requirements.

Sample location: Sample box on waste treatment outlet (Effluent weir) DRAFT

REQUIREMENTS	EFFLUENT LIMITATIONS		MONITORING	
Parameter	Daily[a] Maximum	Monthly[b] Average	Minimum[c] Frequency	Sample Type
NONCONVENTIONALS				
Arsenic (T)	0.50 mg/L[k]	NA[d]	1/Quarter	Composite[g]
Cadmium (T)	0.11 mg/L[j]	0.07 mg/L[j]	1/Quarter	Composite
Chromium (T)	2.77 mg/L[j]	1.71 mg/L	1/Quarter	Composite
Copper (T)	3.00 mg/L[k]	2.07 mg/L	1/Quarter	Composite
Lead (T)	0.69 mg/L[j]	0.43 mg/L	1/Quarter	Composite
Mercury (T)	0.10 mg/L[k]	NA	1/Quarter	Composite
Nickel (T)	2.83 mg/L[k]	2.38 mg/L	1/Quarter	Composite
Silver (T)	0.43 mg/L[j]	0.24 mg/L	1/Quarter	Composite
Zinc (T)	2.61 mg/L[k]	1.48 mg/L	1/Quarter	Composite
Cyanide(T)	0.65 mg/L[j]	0.65 mg/L	2/Year	Composite[h]
TTO[i]	2.13 mg/L[j]	NA	2/Year (Jun/Dec)	Grab[n]
Process Flow	No Limit		Daily	Metered
CONVENTIONALS				
pH	5.0 - 10.0[e,k]	NA	Daily	Recording pH Meter
Total FOG	NA[f]	NA	1/Quarter	Grab[o]
FOG/Nonpolar	200 mg/L[k]	NA	1/Quarter	Grab[o]
Closed Cup Flashpoint	140°F[l]		2/Year	Grab[p]

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS (continued)

B. Sample Site/Dilution

All samples shall be collected at an approved sample site at the point of discharge from the treatment system, prior to mixing with any other dilution stream. The effluent limits apply to industrial wastewater prior to dilution with wastewaters other than those generated by the regulated process. The Permittee shall not use dilution to meet the limitations. See Sections VI.H. and VI.I.

C. Footnotes

a. The daily maximum is defined as the greatest allowable value for any calendar day.

b. The monthly average is defined as the arithmetic mean of samples collected during a calendar month.

If self monitoring is performed only once per month, then the daily maximum will become as stringent as the monthly average. The Permittee may choose to monitor more frequently than is required by this permit, with the understanding that all sampling and analytical data shall be submitted with the monthly report.

c. The City may reduce or increase the frequency of sampling based on compliance history, including analytical results.

d. NA means not applicable.

e. pH is measured in standard units. See Section V.C.

f. If Total FOG (fats, oils and grease) is greater than 50 mg/L, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged FOG interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge, the Permittee for the cost of treatment.

g. Composite shall mean a flow-proportioned sample taken during the hours of discharge using an automatic sampler approved by the City or at least four grab samples taken in accordance with City of Everett Sampling Guidelines and composited according to flow. See Section V.D.

h. Each of four (4) grab samples for cyanide shall be immediately preserved with NaOH to a pH of >12.0 then combined and refrigerated until analyzed. Analysis shall occur within fourteen (14) days of taking the sample.

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

C. Footnotes (continued)

i. TTO (Total Toxic Organics) is the summation of all values greater than 0.01 mg/L for each of the Toxic Organics specified in 40 CFR 433.11(e), where reasonably expected to be present. Results are due in June and December and shall contain the calculated TTO value defined above. If the Permittee is in compliance with the TTO limit, it may develop a solvent management plan. See Sections III.B. and V.E.

j. These limits based upon limitations contained in 40 CFR 433.17, Pretreatment Standards for New Sources (PSNS).

k. These limits based upon local limitations contained in Everett City Ordinance No. 2034-95 (as amended).

l. Any wastewater with a closed cup flash point of less than 140°F or 60° Celsius using the test methods specified in 40 CFR 261.21 is prohibited from discharge. See Section VII.A.3.

m. If TSS (Total Suspended Solids) or BOD_5 (5-day Biochemical Oxygen Demand) exceeds 250 mg/L, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged TSS or BOD_5 interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge the Permittee for the cost of treatment and any additional maintenance costs incurred by the City.

n. A minimum of four grab samples must be taken during the sampling event for TTO's. Semi volatiles are then composited in the field for sample analysis, volatiles are composited in the laboratory when analyzed.

o. A minimum of four individual grab samples to be taken during the sampling event for FOG. The samples are to be taken and contained in separate containers and not to be composited or split.

p. A single separate grab sample must be taken and analyzed for Flash Point.

III. SUMMARY OF REPORTS

The Permittee shall submit reports to the City according to the schedule listed below.

A. Reserved

B. Accidental Spill Prevention Plan

Frequency:	Once, update as needed.
Due Date:	Submit 90 days following the commencement of discharge or permit issuance whichever is later. Implement within 6 months.
Content:	Strategy for spill prevention, including training and emergency response. See Section IV.B.

C. Solvent Management Plan (SMP)

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Frequency:	Once, update as needed.
Content:	Regulated Toxic Organics on site, disposal method and spill prevention procedures. See Section V.E.

D. Notification of Hazardous Waste Discharges

Frequency:	Once only for each hazardous waste (HW)
Due Date:	Within 90 day of permit issuance
Content:	HW name, EPA HW Number & type of discharge. See Section IV.C.

E. Notification of New Hazardous Waste Discharges

Frequency:	Whenever new regulations designate wastes or constituents as hazardous.
Due Date:	Within 90 days of the effective date of the published regulation.
Content:	See Section IV.D. and 40 CFR 403.12(p).

F. O & M Manual

Frequency:	As needed prior to installation or changes of pretreatment equipment.
Due Date:	Approval required prior to completion of construction.
Content:	O & M instructions and pretreatment system "as-builts". See Section IV.E. and WAC 173-240.

III. SUMMARY OF REPORTS (continued)

G. Self Monitoring Report

Frequency:	As required.
Due Date:	Commencing on date of Permit issuance. To be submitted no later than the last day of each month following self monitoring.
Content:	Data required in Section II.A or, if appropriate, a notification that no discharge has occurred. See Section IV.F.

H. Notification of Violation

Frequency:	As needed.
Due Date:	Notify the City within 24 hrs. of discovery and submit a written report within 5 days.
Content:	Reason for violation and corrective action taken. See Section IV.G.

I. Changes To Discharge

Frequency:	As needed.
Due Date:	90 days prior to changes in discharge that result in altered wastewater pollutants.
Content:	See Section IV.H.

J. Spill Report

Frequency:	As needed.
Due Date:	Notify City within 24 hrs of discovery and a written report within 5 days.
Content:	Characteristics of and reason for spill, and corrective action taken. See Section IV.I.

K. Upset Report

Frequency:	As needed
Due Date:	Notify the City within 24 hrs of discovery and submit a written report within 5 days.
Content:	Characteristics of and reason for noncompliance, and corrective action taken. See Section IV.J.

L. Engineering Report

Frequency:	As needed prior to installation or changes of the pretreatment equipment.
Due Date:	Approval required prior to installation.
Content:	Per WAC 173-240. See Section IV.K.

IV. REPORTING REQUIREMENTS

The Permittee shall monitor their discharge to the sanitary sewer as specified in Section II of this permit. The Permittee shall also submit to the City of Everett, Department of Public Works, all of the reports according to the following schedule and content requirements.

A. Reserved

B. Accidental Spill Prevention Plan

The Permittee shall continue with implementation of their approved Accidental Spill Prevention Plan to eliminate or minimize the accidental slug discharge of pollutants into the sewer system which could have an effect on the City's wastewater treatment plant, biosolids and biosolids utilization plans, or cause the City to violate it's National Pollutant Discharge Elimination System (NPDES) permit.

C. Notification of Hazardous Waste Discharges

The Permittee shall notify the City, the EPA RCRA Director and State Dangerous Wastes Director, in writing within 90 days of the effective date of this permit, of any discharge of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other).

Notification need be submitted only once for each hazardous waste discharged. The notification requirement in this section does not apply to pollutants already reported under the self-monitoring requirements in Section II of this permit. The Permittee shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated.

D. Notification of New Hazardous Wastes

Whenever the EPA publishes new RCRA rules identifying additional hazardous wastes or new characteristics of hazardous wastes, the Permittee must notify the City, EPA RCRA Director and State Hazardous Wastes Director if any of these wastes are discharged to the City's treatment system. The notification must occur within 90 days of the effective date of the published regulation.

IV. REPORTING REQUIREMENTS (continued)

E. Operation and Maintenance Manual

As needed with installation or changes of pretreatment equipment. The Permittee shall submit an operation and maintenance manual and "as-built" drawings for the pretreatment system, to the City, for approval prior to completion of construction. This does not apply to equipment replaced with operationally identical parts during repair or maintenance activities. See WAC 173-240.

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F. Self Monitoring Reports

The Permittee shall monitor the parameters specified in Section II.A of this permit. All monitoring results obtained during the month shall be summarized and reported on a form approved by the City, to be submitted no later than the last day of the month following the completed reporting period. The Permittee shall include the daily pH highs and lows and daily flows. The report shall be signed and certified in accordance with the requirements of Section VII.B. and submitted to the following address:

City of Everett
Industrial Pretreatment Program
3200 Cedar St.
Everett, WA. 98201
Attn.: Gene Bennett

In the event that additional monitoring (other than that required in Section II.A) is conducted, the Permittee shall report all results in the report. Note that reporting TTO monitoring data is not required monthly. The December and June self monitoring reports shall contain TTO discharge monitoring data or certification statement.

G. Notification of Violation

If self monitoring data indicates that a discharge limit has been exceeded, the Permittee shall notify the City within 24 hours of becoming aware of the violation. The Permittee shall repeat the sampling and submit the analysis to the City within 30 days after becoming aware of the violation. Formal written notification discussing circumstances and remedies shall be submitted to the City within five (5) days of becoming aware of the violation or as required.

H. Notification of Changed Discharge

The Permittee shall notify the City 90 days prior to the introduction of new wastewater pollutants, changes in manufacturing operations or any substantial change in the volume or character of pollutants in their discharge, including the listed or characteristic hazardous wastes for which the Permittee has submitted initial notification under 40 CFR 403.12(p). The Permittee shall obtain approval from the City prior to any substantial change in their discharge.

IV. REPORTING REQUIREMENTS (continued)

I. Spill/Slug Discharge Reports

The Permittee shall notify the City immediately, either in person or by phone (see Section I Emergency Notification), upon accidental spill or slug discharge to the sanitary sewer. Formal written notification discussing circumstances and remedies shall be submitted to the City within five (5) days of the occurrence or as required.

J. Upset Reporting

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1. Definition

For the purpose of this section, "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with applicable pretreatment standards because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance or careless or improper operation.

2. Effect of an Upset

An upset shall constitute an affirmative defense to action brought for noncompliance with applicable pretreatment standards if the requirements of paragraph 3 are met.

3. Conditions Necessary for a Demonstration of Upset:

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs or other relevant evidence that:

a. an upset occurred and the permittees can identify the specific cause(s) of the upset;

b. the facility was, at the time, being operated in a prudent and workman-like manner and in compliance with applicable operation and maintenance procedures; and

IV. REPORTING REQUIREMENTS (continued)

J. Upset Reporting (continued)

c. the Permittee has submitted the following information to the City within 24 hours of becoming aware of the upset (if this information is provided verbally a written submission must be provided within five days):

(1) a description of the discharge and cause of noncompliance;
(2) the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to be corrected; and
(3) steps being taken and/or planned to reduce, eliminate and prevent recurrence of the noncompliance.

4. Burden of Proof

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset shall have the burden of proof.

5. Permittee Responsibility in Case of Upset

The Permittee shall control production or all discharges to the extent necessary to maintain compliance with applicable pretreatment standards upon reduction, loss or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost or fails.

K. Engineering Report

Prior to constructing or modifying any wastewater control facilities, detailed plans shall be submitted to the City and the Washington Department of Ecology for approval in accordance with WAC 173-240. Facilities shall be constructed and operated in accordance with the approved plans.

V. SPECIAL CONDITIONS/COMPLIANCE SCHEDULES

A. Batch Discharge Log

The Permittee shall maintain a log containing the date and time of discharge, contents, and the volume and number of batches discharged per day.

B. Effluent Meter

The Permittee shall install and maintain a continuous flow meter, monitoring flow through the discharge/sample site.

C. Recording pH Meter

The Permittee shall maintain a continuously recording pH meter with an audible alarm system and shall report the high and low pH values for each day the Permittee discharges. Any discharge without a pH record shall be considered a violation of this permit.

The Permittee shall maintain a log that includes a record of calibration for the instrument used with: the date, time, name of the person doing the calibration, and the method used. The chart shall be dated and initialed on working days.

D. Autosampler

The Permittee shall use an autosampler approved by the City to flow proportion composite samples of the treatment discharge to be monitored per Section II.A of this permit. Samples may be flow proportioned by hand if use of an autosampler is impractical. See Sections II.B and VI.I concerning the sample site.

V. SPECIAL CONDITIONS/COMPLIANCE SCHEDULES (continued)

E. Solvent Management Plan/TTO

1. Requirements

If the Permittee demonstrates compliance with the TTO limits, it may elect to develop a solvent management plan in lieu of sampling for TTO's. The plan must be submitted to the City for review and approval. The plan must include:

a. a list of the Total Toxic Organic's used;
b. the method of disposal, i.e., reclamation, contract hauling or incineration; and
c. the procedures that are used to insure that TTO's do not routinely spill or leak into the wastewater.

2. TTO Status

Status reports are due each June and December as part of the Self Monitoring Report. List any changes to the last plan on file or state there have been no changes to the plan. The Permittee shall make the following certification statement:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation or pretreatment standard for TTO, I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the solvent management plan submitted to the City." See 40 CFR 403.12(e).

VI. OPERATIONS AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures. The Permittee shall keep and maintain an operation and maintenance log on all facilities and systems of treatment and control.

Water conservation practices shall be used to reduce total effluent volume. Waste prevention practices shall be used to reduce or eliminate contaminant loading to the POTW. These include, but are not limited to, minimizing excessive dragout of cleaning, stripping, etching, and plating solutions used during metal finishing operations. In addition, the following practices shall be used:

A. Chemical Storage

Chemicals shall be stored in a manner which will prevent the entry into the municipal sewer system or the waters of the State. All liquid chemicals will be stored in a no outlet area, approved by the City.

1. Oils, waste oils, solvents, chemicals, and waste chemical solution shall be stored in a curbed and covered area with an impervious surface to prevent the contamination of the ground, ground water, storm sewer system or the sanitary sewer system. Empty barrels shall be adequately stoppered and stored in a designated area.

2. Incompatible chemicals shall be segregated.

3. Adequate dikes, sumps, and valves shall be installed to intercept and contain overflows and spills from all chemical cleaning and metal finishing tanks. Wastes from the sumps shall be collected for disposal in a manner that will prevent its entry into waters of the state or, be adequately treated and analyzed before discharge to the POTW.

B. Spill Prevention

1. All plating process tanks shall be stored in bermed, roofed, secured, no outlet areas.

2. Process tanks shall be located in an area capable of containing 110 percent of the volume of the largest tank. This area can have no outlet to the sewer system or the waters of the State.

3. All process tanks and chemical storage containers shall be adequately labeled. Emergency phone numbers shall be posted.

VI. OPERATIONS AND MAINTENANCE (continued)

B. Spill Prevention (continued)

4. In the event of a concentrated solution spill, such as a tank failure, the Permittee shall not discharge any spilled solution into the municipal sewer system unless laboratory test results indicate that the substance meets the conditions of this permit. The Permittee shall receive approval from the City prior to the discharge of any untreated spilled solution.

5. The Permittee shall use spill prevention practices to preclude the discharge of liquids, solids, or gasses, which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosions.

C. Required Process Changes

The Permittee shall make the process changes required and/or install whatever pretreatment equipment is necessary to meet the discharge conditions of this permit.

D. Shutoff Devices

1. The Permittee shall provide a functional shutoff device downstream of the pretreatment system.

2. Incoming rinse waters shall be turned off and shut off devices shall be closed at all times when the plant is not operating (i.e., nights, weekends and holidays), and in the event of an emergency spill. Rinse water to specific processes shall be turned off when process is not in operation.

E. Housekeeping

1. No plating or process bath filter shall be flushed over the processing floor, rinse tanks, or in any area where they may drain into the sanitary sewer system.

2. All filters shall be placed inside the processing tanks or over other containers to prevent any leaks to the sanitary sewer system.

3. The Permittee shall maintain and inspect all process solution and rinse tanks on a regular basis. Any leaks shall be repaired promptly.

F. Proper Disposal of Sludges and Spent Chemicals

1. The Permittee shall comply with the provisions of WAC 173-303 (Dangerous Waste Regulations).

VI. OPERATIONS AND MAINTENANCE (continued)

F. Proper Disposal of Sludges and Spent Chemicals (continued)

2. If it has not already done so and if applicable, the Permittee shall obtain a Hazardous Waste generator number from the US EPA or the WDOE for proper disposal of wastes.

3. Spent plating, etching and other concentrated process solutions shall not be disposed of to the sanitary sewer system.

4. The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into waters of the State.

5. For all liquid wastes and sludges removed by waste disposal companies, the Permittee shall record and retain for a period of three (3) years:

   a. chemical name and trade name of the substance;
   b. volume of each substance;
   c. date that it was hauled away;
   d. identity of the waste hauler and, if applicable, an EPA registration number; and
   e. receipt from the waste hauler.

G. Flowmeter

The Permittee shall maintain a water or sewer meter which provides accurate information regarding industrial process wastewater discharges to the sewer. The Permittee shall maintain a daily log of flowmeter readings and daily flows.

H. Dilution

Excess water usage shall be minimized to prevent dilution. No Industrial User shall increase the use of potable or process water, or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

I. Sample Site

An approved sampling site shall be maintained downstream of the final pretreatment system and upstream of any mixing with unregulated flows for the monitoring of the industrial discharge. City personnel shall have access to the sample site during normal business hours and in the event of an emergency. All process wastewater shall flow through the sampling point. All process wastewater shall be hard-piped to the sampling point. All wastewater monitoring samples shall be collected from the approved sample site. Sample sites are to remain unobstructed at all times to allow access. All sample sites shall have a suitable, City approved, primary device installed for the purpose of monitoring industrial discharge flow to the Sanitary Sewer.

VII. GENERAL CONDITIONS

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A. Compliance

1. All discharges to the City sanitary sewer system shall be in accordance with the requirements and ordinances of the City.

2. All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

3. The Permittee shall comply with all the general prohibitive discharge standards in Ordinance 2034-95 (as amended) and is responsible to take whatever steps are necessary to ensure discharge requirements of this permit are met.

4. Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

5. All applicable requirements of 40 CFR 403 and 40 CFR 433 are incorporated into this permit by reference.

6. Sanitary sewage shall be disposed of in accordance with the requirements of the Snohomish County Health District.

B. Signatory Requirements

All reports and information submitted to the City shall be signed by an executive officer, or his/her designated official, testifying to the accuracy of the results and representativeness of the sample by making the following statement:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

C. Confidential Information

Except for data determined to be confidential under Section 7 of the City's Industrial Pretreatment Ordinance No. 2034-95 (as amended), all reports required by this permit shall be available for public inspection at the office of the City of Everett, Department of Public Works.

VII. GENERAL CONDITIONS (continued)

D. Records Retention

The Permittee shall retain for a minimum of three years all records of monitoring activities and results, including all reports of recordings from continuous monitoring instrumentation. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the City.

E. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information:

1. the date, exact place, person collecting the sample, and time of sampling;
2. the date the analyses were performed;
3. who performed the analyses;
4. the analytical techniques or methods used;
5. the results of all the analyses; and
6. provide certification of representativeness.

F. Representative Sampling

Samples and measurements taken to meet the requirements of this condition shall be representative of the volume and the nature of the monitored discharge.

G. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless approved otherwise in writing by the City, conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants, contained in 40 CFR 136. Where 40 CFR 136 does not include a sampling or analytical technique for the pollutant in question, sampling and analyses shall be performed in accordance with any other sampling and analysis procedure approved by the EPA Administrator.

VII. GENERAL CONDITIONS (continued)

H. Bypass

The intentional bypass of wastes from all or any portion of a treatment works to the extent that permit effluent limitations cannot be met is prohibited unless the following four conditions are met:

1. Bypass is:

   (a) unavoidable to prevent loss of life, personal injury, or severe property damage; or
   (b) necessary to perform construction or maintenance related activities essential to meet the requirements of the Clean Water Act and authorized by administrative order;

2. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or temporary reduction or termination of production;

3. The Permittee submits notice of an anticipated bypass in accordance with Section IV.H. Where the Permittee knows or should have known in advance of the need for a bypass, this prior notification shall be submitted for approval to the City, if possible, at least 10 days before the date of bypass; and

4. This bypass is allowed under conditions determined to be necessary by the City to minimize any adverse effects. The public shall be notified and be given the opportunity to comment on bypass incidents of significant duration, to the extent feasible.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic impact caused by delays in production.

After consideration of the factors above and the adverse effects of the proposed bypass, the City may approve the request.

VII. GENERAL CONDITIONS (continued)

I. Right of Entry

The Permittee shall allow an authorized representative of the City, upon the presentation of credentials and such other documents as may be required by law and at reasonable hours:

1. To enter the Permittee's premises where a discharge source is located or where any records must be kept under the terms and conditions of the permit;

2. To have access to and copy any records that must be kept under terms and conditions of the permit;

3. To inspect any monitoring equipment or method required in the permit;

4. To inspect any collection, treatment, pollution management, or discharge facilities required under the permit;

5. To sample any discharge of pollutants (sampling sites are to remain unobstructed at all times); and

6. Where a user has security measures in force which require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the Director will be permitted to enter without delay for the purposes of performing specific responsibilities. Unreasonable delays in allowing the Director access to the user's premises shall be a violation of this Permit.

J. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Property rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringement of Federal, State, or Local regulations.

L. Falsifying Information or Tampering With Monitoring Equipment

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under the criminal laws of the City, as well as being subject to civil penalties and relief.

VII. GENERAL CONDITIONS (continued)

M. Enforcement Provision

The City may seek any or all of the remedies or penalties (including civil and judicial action) provided in City ordinances, including recovering costs incurred by the City, in response to the following:

1. Any violation by the Permittee of the provision of the Industrial Wastewater Discharge Permit;

2. Any violation by the Permittee of the provisions of the City Code; or

3. Any violation by the Permittee of any order of the Director with respect to provisions set forth in this Industrial Wastewater Discharge Permit or the City Code.

The range or severity of remedial actions taken against the Permittee may include, but not be limited to, notices of violation, compliance schedules, fines of up to $10,000 per day per violation, show cause hearings and/or cease discharge notices and be determined, in part, by the nature, duration and frequency of the violation (including significant non-compliance status).

N. Duty to Reapply

The City shall notify the Permittee 180 days prior to the expiration of the Permitee's permit. Within 90 days of the notification, the Permittee shall apply for reissuance of the permit on a form provided by the City.

O. New or Supplemental Application for Changes

The City may require the Permittee to submit a new application or supplement to the previous application where facility expansions, production increases, or process modifications will result in:

1. New or substantially increased discharges of pollutants;

2. A substantial increase in flow; or

3. Violation of the terms and conditions of the existing permit.

The Permittee shall notify the City 60 days prior to such changes. Formal written notification shall follow within 30 days. Submission of such an application does not relieve the discharger of the duty to comply with the existing permit until it is modified or reissued.

VII. GENERAL CONDITIONS (continued)

P. Limitation of Permit Transfer

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Permits are issued to a specific User for a specific operation and are not assignable to another User or transferable to any other location without the prior written approval of the City. Sale of a User shall obligate the purchaser to seek prior written approval from the City for continued discharge to the POTW.

Q. Emergency Suspension of Service and Revocation of Permit

The City may, without advance notice, order the suspension of the wastewater treatment service and revoke the Industrial Waste Discharge Permit from a Permittee when it appears to the City that an actual or threatened discharge:

1. presents or threatens an imminent or substantial danger to the health or welfare of persons or substantial danger to the environment; or

2. threatens to interfere with the operation of the POTW, or violate any pretreatment limits.

Any Permittee notified of the City's suspension order shall immediately cease all discharges. In the event of failure of the Permittee to comply with a suspension order, the City may immediately take all necessary steps to halt or prevent any further discharge by such Permittee into the POTW. See Ordinance 2034-95 (as amended), section 9.7.

R. Modification, Revision or Termination of the Permit

This permit may be modified, terminated, or revoked during its term for:

1. Failure of the Permittee to disclose fully all relevant facts or the misrepresentation of any relevant facts by the Permittee in the application or during the permit issuance process;

2. A violation of any term or condition of the permit;

3. EPA promulgating a new federal pretreatment standard;

4. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit;

5. Information indicating that the permitted discharge poses a threat to human health or welfare;

VII. GENERAL CONDITIONS (continued)

R. Modification or Revision of the Permit (continued)

6. A change in ownership or control of the source;

7. A change in City Ordinances or other just cause

8. Incorporating special conditions resulting from the issuance of a special order; or

9. Failure to pay pretreatment charges that causes the user's account to be sent to a collection agency.

Permit transfer fee shall be $500.00

Permit modification fee shall be $500.00. Permit modification fees will only be charged in a case where changes in the user's operation require the modification, or when the user requests a modification.

Any permit modification which results in new conditions in the permit will include a reasonable time schedule for compliance, if necessary. Permit modification, revocation and reissuance, or termination may be initiated by the City or requested by any interested person.

S. Analytical Requirements

All analyses performed to establish compliance and used in compliance reporting shall be performed by a laboratory accredited by the Quality Assurance Division of the Washington State Department of Ecology in accordance with WAC 173-50. Laboratories must be accredited for the analyses that they are performing.

Washington Department of Ecology
Hazardous Waste & Toxics Reduction Program
Compliance Report

Site:	**TC Systems**	**RCRA ID#:**	**WAD088722947**
Inspection Date:	August 8, 2006		
Site Contacts:	Guy Donaldson Charles Souder		
Phone:	(425) 258-4055	FAX:	
Site Location:	1032 Marine View Drive Everett, WA 98201		
At This Site Since:	20 Years	NAICS#:	332813
Generator/Site Status:	Large Quantity Generator (LQG)		

Ecology

Lead Contact: Victoria Sutton Phone: (425) 649-7277 FAX : (425) 649-7098
Other Representatives: Warren Walton
Report Date: October 4, 2006
Report By: Victoria Sutton

_____ _____
(Signed) (Date)

Facility Background:

TC Systems cleans and paints pre-fabricated metal parts. Sixty percent of their business is related to aerospace and Boeing, and 40% is for other types of commercial metal painting. Metal parts are brought to the site, cleaned in the cleaning line, and the wastewater treated and discharged under permit. They currently have 18 employees.

Inspection Summary:

We arrived on site at 9:05 am and asked for Guy Donaldson, the environmental contact. Guy took us to the hazardous waste storage area in a corner of the building. Charles Souder joined us there and helped explain the waste management. The area was well marked with signs. There is one additional waste accumulation area in the paint mixing room, and no other areas of the facility are currently being used to accumulate hazardous waste.

Waste sludge is generated from the wastewater treatment system for the metal cleaning line. The sludge is a solid containing chromium and is stored in two large plastic tote sacks. The sacks were labeled as hazardous waste with start dates, and all sacks were stored within the 90-day accumulation time limit. The sacks were not labeled with the risk associated with the waste (see Photo # 1).

One of the tote sacks was labeled as chromium solids, but the sack is placed in a box that is labeled "Paint Booth Filters" (see Photo # 3). Paint booth filters are accumulated in another tote sack. They did not think that the filters had chromium from the paint, so they may not be hazardous waste.

Photo # / Area	Notes/Descriptions	Photographs
Hazardous Waste Storage Area Photo # 1 (MVC-001F.JPG) / 9:13 am	Tote sacks containing chromium sludge without risk labels.	
Hazardous Waste Storage Area Photo # 3 (MVC-003F.JPG) / 9:21 am	This tote sack contained chromium sludge, but the box was labeled as paint booth filters.	

There was one 55-gallon drum for accumulating waste paint on a pallet in the accumulation area. Guy and Charles explained that they generate very little waste paint. Most of the paint is used and there is a small amount of waste generated from gun cleaning. The waste paint drum is labeled as hazardous waste and has a risk label, but no accumulation start date nor secondary containment (see Photos # 2 and 4). It is not near the area where the gun cleaning waste is generated so it is not serving as a satellite accumulation drum.

Photo # / Area	Notes/Descriptions	Photographs
Hazardous Waste Storage Area Photo # 2 (MVC-002F.JPG) / 9:16 am	Waste paint drum without accumulation start date.	

Photo # / Area	Notes/Descriptions	Photographs
Hazardous Waste Storage Area Photo # 4 (MVC-004F.JPG) / 9:27 am	Waste paint drum without secondary containment.	

Warren provided some shipping risk labels for the tote sacks and waste paint drum. Over to the side stored in the accumulation area were several unused secondary containment pallets.

We went into Paint Booth # 5 and Guy and Charles said that the waste gun cleaner was generated in the booths, and then stored in buckets until the end of the day. They are then emptied into one of the 55-gallon drums, either in the hazardous waste accumulation area, or in the paint storage room. In this paint booth, there was a container of flammable liquid product with the lid off. We told Charles and Guy that they should check their air permit requirements since lids might be required to be kept on products.

The waste gun cleaner was stored in five-gallon buckets with the lids sitting on. The buckets were not labeled (see Photo # 5). This waste may have been stored here for several days without being emptied into the waste accumulation drum.

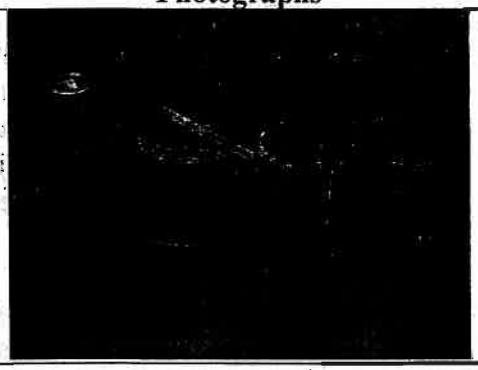
Photo # / Area	Notes/Descriptions	Photographs
Paint Booth # 5 Photo # 5 (MVC-005F.JPG) / 9:29 am	Open, unlabeled containers of spent gun cleaning solvent.	

We went into the paint storage room. An additional hazardous waste storage area was located within the flammable storage area. There was a secondary containment pallet holding two 55-gallon drums and several five-gallon buckets. The 55-gallon drum on the left was for accumulating waste paint thinner from gun cleaning. It was labeled as hazardous waste and had a risk label, but no start date (see Photo # 6).

The 55-gallon drum on the right was for accumulating paint solids from the paint pot bottoms. It was open, was not labeled as hazardous waste, nor did it have a start date or risk label (see Photo # 6). Several five-gallon buckets of hazardous waste paint with the lids sitting on them and no labels were also stored on the pallets.

Photo # / Area	Notes/Descriptions	Photographs
Flammable Storage Area Photo # 6 (MVC-006F.JPG) / 9:43 am	Open, unlabeled containers of liquid and solidified waste paint.	

We went to Paint Booth # 1 and found open, unlabeled buckets of hazardous waste paint (see Photo # 7).

Photo # / Area	Notes/Descriptions	Photographs
Paint Booth # 1 Photo # 7 (MVC-007F.JPG) / 9:46 am	Open, unlabeled containers of spent gun cleaner.	

We went to the conference room to review records. No weekly inspections were currently being performed. Warren provided the Generator Toolbox CD, which contains a blank weekly inspection checklist, and labels for printing. We reviewed the manifests and they were in order.

The facility's generator status has been large quantity generator, though they have stated on their Annual Dangerous Waste Reports that they have been a medium quantity generator in a few of the years since 2000. In 2005, they revised their Site Identification Form and also indicated that they were a medium quantity generator. However, the manifest records show that the facility is a large quantity generator due to waste shipments larger than 2200 pounds, exceeding the accumulation limit for medium quantity generators.

In 2006, their first shipment of two tote sacks of chromium sludge hazardous waste was in the amount of 3200 pounds, exceeding the 2000 pound accumulation limit and making them a large quantity generator for this year. The large quantity generator regulations thus currently apply.

We discussed how the weight of the tote sacks is determined and Charles and Guy said that the disposal firm measured the weight. They have no way to measure the weight in order to verify that the disposal firm is measuring the weight accurately.

COMPLIANCE PROBLEMS

*The following conditions identified during the inspection on **(August 8, 2006)** were not in compliance with Dangerous Waste and/or other environmental laws. Each problem is covered in three parts: (1) the **citation from the regulations**, (2) the **specific observations** from the inspection that highlight the problem, and (3) the **corrective measures** needed to fix the problem and achieve compliance. On the last page(s) of this report is a 'Compliance Certificate' which again lists these compliance citations and directives in a table. That certificate also lists the deadlines for the corrective measures to be completed. These deadlines are Ecology's expectation of the time reasonably required to resolve violations. The deadlines do not relieve you of your continuing responsibility to comply with the regulations at all times. The certificate explains how to complete the form and return it to the Department of Ecology.*

1) WAC 173-303-170(2) and by reference 200(1)(d): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste.

Containers of spent gun wash in the paint booths and paint storage room were not labeled as hazardous waste and did not have risk labels ("Flammable"), (see Photos # 5, 6, and 7). Tote sacks of chromium sludge were not labeled with the risk associated with the waste ("Toxic"). Labels may be printed on your computer using the pre-prepared labels on the "Generator Toolbox" compact disk left with you during the inspection.

Within two days of receipt of this letter, adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d).

2) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste.

Containers of dangerous waste in the paint booths and paint storage room were not kept closed (see Photos # 5, 6, and 7).

Within two days of receipt of this letter, ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5).

3) WAC 173-303-200(1)(b) and by reference 630(7): Containers of liquid dangerous waste did not have adequate secondary containment.

A drum of waste paint in the 90-day accumulation area did not have secondary containment (see Photo # 4).

Within 30 calendar days of the receipt of this letter, provide a containment system for container accumulation areas that is capable of holding spills and leaks per WAC 173-303-630(7).

4) WAC 173-303-170(2) and by reference 200(1)(c): Containers of dangerous waste were not marked with the date accumulation began and/or the date accumulation began was not clearly visible for inspection on each container.

Containers of waste paint in the hazardous waste accumulation area and paint storage areas did not have accumulation start dates (see Photos # 2 and 6).

Within two days of receipt of this letter, ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Also ensure that the date accumulation began is clearly visible for inspection on each container.

5) WAC 173-303-200(1)(b) and by reference 630(6): Dangerous waste accumulation areas were not inspected weekly.

Dangerous waste stored in the 90-day accumulation area and the paint storage areas were not inspected weekly.

Within 7 days of receipt of this letter, institute an inspection schedule for areas where containers of dangerous waste are stored. These areas must be inspected at least on a weekly basis. Maintain an inspection log that includes: the date and time of inspection; the name and signature of the inspector; a notation of the observations made; and the date and nature of any corrective measures taken.

Submit a copy of the proposed inspection log within 7 days.

6) WAC 173-303-170(2) and by reference 200(2)(a): Dangerous waste collected in satellite accumulation areas must be managed in accordance with the regulations.

Five gallon buckets of hazardous waste in Paint Booths # 1 and 5 were being used as satellite accumulation containers without complying with the regulations (see Photos # 5 and 7). If the buckets are emptied after every shift, they may be used as they are, but if the waste is stored past one shift, a satellite accumulation area should be established and managed accordingly. A guidance document on the regulations applying to these areas is enclosed.

Within ten days of receipt of this letter, comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date and transfer it within three days to the 90-day accumulation area; (c) ensuring containers are in good condition, handled safely, labeled as hazardous waste, and compatible with waste stored; and (d) keeping containers closed at all times.

7) WAC 173-303-200(1)(e) and by reference 330: Training requirements were not met. The facility should have a training program, a written training plan, and keep training records.

A training plan is not being followed.

Within 45 calendar days of the receipt of this letter, develop a dangerous waste training program which shall include a written training plan and records per WAC 173-303-330.

Submit a copy to Ecology.

8) WAC 173-303-200(1)(e) and by reference 350(2): A contingency plan was not prepared.

Please submit a copy of the facility's contingency plan.

Within 60 calendar days of the receipt of this letter, develop and retain on-site a contingency plan per the requirements of WAC 173-303-350. Submit a copy of the contingency plan within 60 days.

COMPLIANCE CERTIFICATE

Instructions: **Return this Completed Form or Request an Extension** -- Use this form to report if the action(s) needed to achieve compliance, identified during the inspection on **August 8, 2006**, have been completed. Complete the shaded portion of the table and mail a copy of this form to Victoria Sutton by **December 13, 2006** at the following address: Washington Department of Ecology, Hazardous Waste and Toxics Reduction Program, Attention: Victoria Sutton, 3190 160th Avenue SE, Bellevue, WA, 98008.

An extension of the deadlines to achieve compliance may be requested. Please make a request in writing, including the reasons an extension is necessary and proposed date(s) for completion, and send it to Victoria Sutton before the date specified above. Ecology will provide a written approval or denial of your request.

If you have any questions about information in this Compliance Report, please call:
Victoria Sutton *at* (425) 649-7277.

The problems identified below must be corrected in order to be in compliance with Washington Dangerous Waste Regulations (Chapter 173-303 WAC), or other environmental laws or regulations. Please indicate the date each action is completed and initial each item. Include any comments explaining the actions taken on a separate piece of paper.

1) WAC 173-303-170(2) and by reference 200(1)(d): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste.

Within two days of receipt of this letter, adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d).

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(2) and by reference 200(1)(d)	**October 18, 2006**		

2) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste.

Within two days of receipt of this letter, ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5).

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(b) and by reference 630(5)(a)	**October 18, 2006**		

3) WAC 173-303-200(1)(b) and by reference 630(7): Containers of liquid dangerous waste did not have adequate secondary containment.

Within 30 calendar days of the receipt of this letter, provide a containment system for container accumulation areas that is capable of holding spills and leaks per WAC 173-303-630(7).

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(b) and by reference 630(7)	November 18, 2006		

4) WAC 173-303-170(2) and by reference 200(1)(c): Containers of dangerous waste were not marked with the date accumulation began and/or the date accumulation began was not clearly visible for inspection on each container.

Within two days of receipt of this letter, ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Also ensure that the date accumulation began is clearly visible for inspection on each container.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(2) and by reference 200(1)(c)	October 18, 2006		

5) WAC 173-303-200(1)(b) and by reference 630(6): Dangerous waste accumulation areas were not inspected weekly.

Within 7 days of receipt of this letter, institute an inspection schedule for areas where containers of dangerous waste are stored. These areas must be inspected at least on a weekly basis. Maintain an inspection log that includes: the date and time of inspection; the name and signature of the inspector; a notation of the observations made; and the date and nature of any corrective measures taken.

Submit a copy of the proposed inspection log within 7 days.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(b) and by reference 630(6)	October 20, 2006		

6) WAC 173-303-170(2) and by reference 200(2)(a): Dangerous waste collected in satellite accumulation areas must be managed in accordance with the regulations.

Within ten days of receipt of this letter, comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date and transfer it within three days to the 90-day accumulation area; (c) ensuring containers are in good condition, handled safely, labeled as hazardous waste, and compatible with waste stored; and (d) keeping containers closed at all times.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(2) and by reference 200(2)(a)	**October 23, 2006**		

7) WAC 173-303-200(1)(e) and by reference 330: Training requirements were not met. The facility should have a training program, a written training plan, and keep training records.

Within 45 calendar days of the receipt of this letter, develop a dangerous waste training program which shall include a written training plan and records per WAC 173-303-330.

Submit a copy to Ecology.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(e) and by reference 330	**November 30, 2006**		

8) WAC 173-303-200(1)(e) and by reference 350(2): A contingency plan was not prepared.

Within 60 calendar days of the receipt of this letter, develop and retain on-site a contingency plan per the requirements of WAC 173-303-350. Submit a copy of the contingency plan within 60 days.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(e) and by reference 350(2)	**December 13, 2006**		

APPENDIX B
Digital Camera Photolog

Camera: Sony FD Mavica (MVC-FD75) **Lead Inspector: Daylin Davidson**
Photographer: Warren Walton

Disc 1

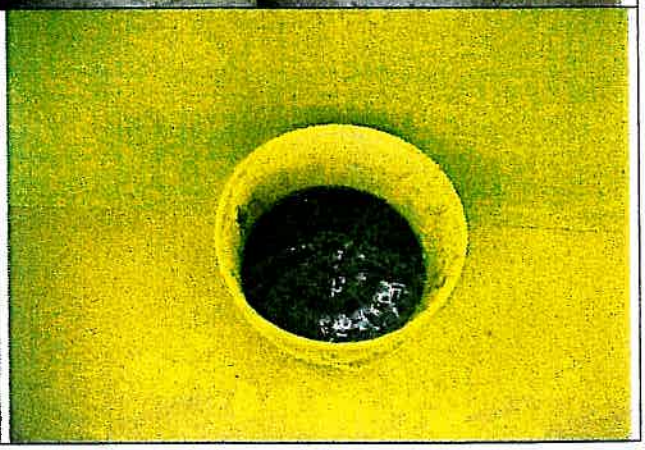
Photo # Area	Notes/Descriptions	Photographs
Photo 1 of 19 9:54 a.m. In Building C Inside paint booth # 4.	Robert Deatherage of TC Systems was given labels by Ecology inspectors to apply to hazardous waste drums containing contaminated solid debris (tape, gloves, etc.) and empty paint cans. Note – There is no lid for either drum.	
Photo 2 of 19 9:55 a.m. Bldg C Inside paint booth # 4.	A hazardous waste label was applied to the left drum in our presence, but not filled out. Right drum is also labeled "garbage".	
Photo 3 of 19 9:57 a.m. Bldg C Inside paint booth # 4.	Paint gun wash out and paint solids were found in this open 5-gallon plastic bucket. The solvent being used for paint gun wash out is MEK.	

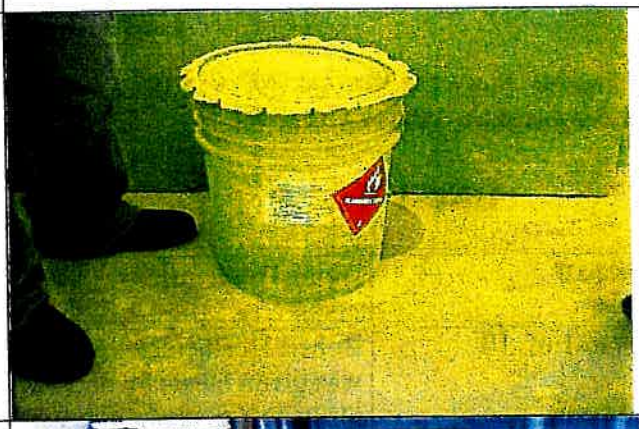
Photo # Area	Notes/Descriptions	Photographs
Photo 4 of 19 10:02 a.m. Bldg C Inside paint booth # 4.	This is the same container as in photo 3 of 19. The HW label reads filter cake. But contents are clearly a flammable liquid. The lid placed on the container during the inspection is ill fitting and would not contain the liquid contents if knocked over.	
Photo 5 of 19 10:06 a.m. Bldg C HWAA	Tote contains mastic, tape, and crushed paint cans. It is labeled properly but does not have a lid.	

Photo # Area	Notes/Descriptions	Photographs
Photo 6 of 19 10:06 a.m. Bldg C HWAA	A piece of plywood was placed on top of the open tote acting as a cover.	
Photo 7 of 19 10:09 a.m. Bldg C HWAA	The contents of this bag (mastic debris) are crushed so they will fit in the bag. Once the bags are compacted, they will fit in the soft shipment tote. The tote has a risk label, but no hazardous waste label or start date.	

Photo # Area	Notes/Descriptions	Photographs
Photo 8 of 19 10:10 a.m. Bldg C HWAA	More mastic debris in another 'open' tote without a hazardous waste label, risk label, or start date. Two more bags of HW debris were stored on the floor in this area. (not shown.)	
Photo 9 of 19 10:11 a.m. Bldg C HWAA	Paint booth filters are over filling this box. Box on floor in foreground contains more filters with no labels or start dates.	

Photo # Area	Notes/Descriptions	Photographs
Photo 10 of 19 10:14 a.m. Bldg C HWAA	Berm area clean out fills both drums. We were told this would have to be processed as a waste on site. No labels are visible. A locking ring leans against the open drums. The drums are not closed.	
Photo 11 of 19 10:17 a.m. Bldg C HWAA	All of the boxes of spent fluorescent bulbs to the left in the photo are properly labeled. The standing spent bulbs are not protected from breakage, are not labeled as Universal Waste Bulbs, and have no accumulation start date displayed.	

Photo # Area	Notes/Descriptions	Photographs
Photo 12 of 19 10:21 a.m. Bldg C Mezzanine	An open satellite drum that collects contaminated striping tape. Photo taken after can was turned to make labels visible. Outside oven # 4	
Photo 13 of 19 10:25 a.m. Bldg C Former Satellite Collection Area	The label reads… "Vintage Oil, Inc. [Used filter recycling service].	

Photo # Area	Notes/Descriptions	Photographs
Photo 14 of 19 10:26 a.m. Bldg C Former Satellite Collection Area	Hardened unknown substance in 5-gallon bucket.	
Photo 15 of 19 10:32 a.m. At the North end of Bldg C – delivery area	It was recommended to TC Systems personnel that covering the storm drain immediately beneath liquid chemical unloading areas is wise. Bulk chemical totes with 250-300 gallon capacity are frequently unloaded in this area.	

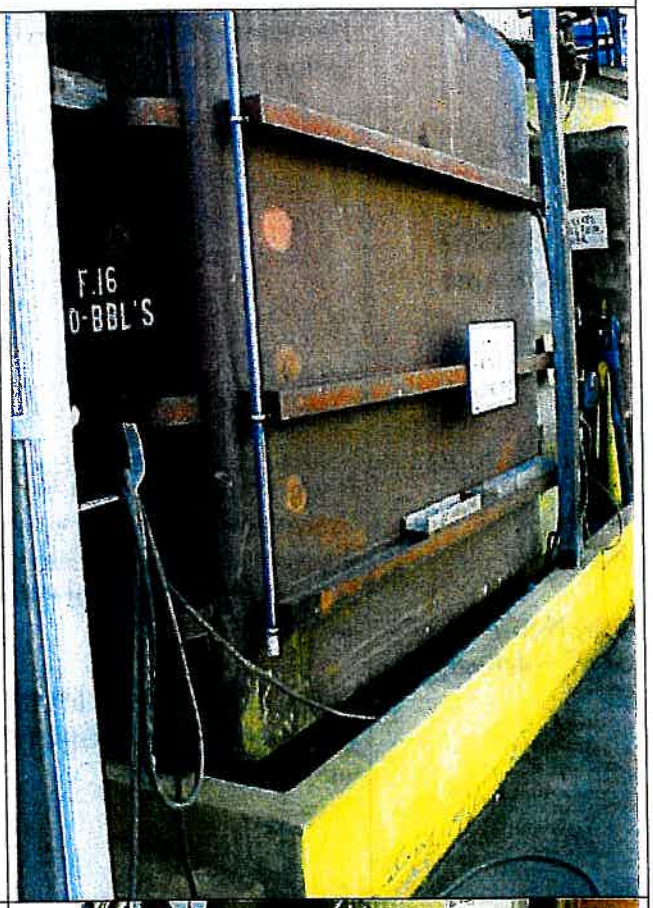
Photo # Area	Notes/Descriptions	Photographs
Photo 16 of 19 10:33 a.m. Treatment tanks In alley against Building B	Looking generally south from the corner of the wastewater treatment area at the containment berm	
Photo 17 of 19 10:34 a.m. Treatment and chemical storage area In alley against Building B	Containment for outside area at Bldg B - Looking generally north.	

Photo # Area	Notes/Descriptions	Photographs
Photo 18 of 19 10:37 a.m. Looking at containment area in waste water treatment area more closely. In alley against Building B	Containment wall seen in photo 17 above. The wall has cracked and does not have containment on rainwater or other liquid.	
Photo 19 of 19 10:37 a.m. Looking at containment area in waste water treatment area more closely. In alley against Building B	Outside containment wall for Bldg B. The wall shows signs of not being properly moisture sealed.	

Photo # Area	Notes/Descriptions	Photographs
Disc 2		
Photo 1 of 11 10:39 a.m. Looking at containment area in waste water treatment area more closely. In alley against Building B	A small sump area was designed to capture rainwater.	
Photo 2 of 11 10:42 a.m. Compressor shed outside Building C	A compressor that leaks oil. This unit was sitting on what appeared to be a dirt floor in an area where the asphalt had broken away.	
Photo 3 of 11 10:43 a.m. Boiler Shed outside Building B	A hole underneath the asphalt bed at the foundation wall of Building B receives condensate from the small boiler plant.	

Photo # Area	Notes/Descriptions	Photographs
Photo 7 of 11 10:49 a.m. At NE corner of Bldg C in alley way, in filter press shed.	"Soap sludge" from operations in Building B. Personnel on site suggested this had been covered with water and that the water had evaporated away. Ecology was told this waste was to go into a nearby chromium sludge tote.	
Photo 8 of 11 10:59 a.m. Inside building B on the west side of the process tanks.	Inside building B on the west side of the process tanks. This photo was taken near the base of the stairs up to the tanks. There are several inches of sludge in the containment area.	

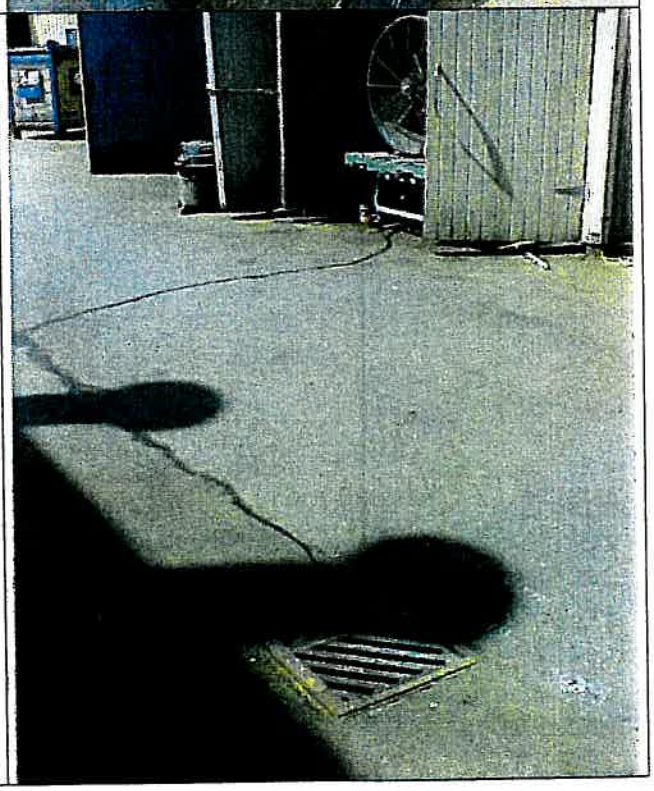
Photo # Area	Notes/Descriptions	Photographs
Photo 4 of 11 10:45 a.m. Storm drain contents. Drain between Bldg B and C.	Close up of the surface of the sump in photo 5 of 11. It appears to be oily or like an emulsion.	
Photo 5 of 11 10:46 a.m. Storm drain between Bldg B & C	The storm drain where photo 4 of 11 was taken.	
Photo 6 of 11 10:46 a.m. Storm drain between building B and C	Looking up hill toward the compressor shed area. Note: liquid trail to the storm drain from the covered shed.	

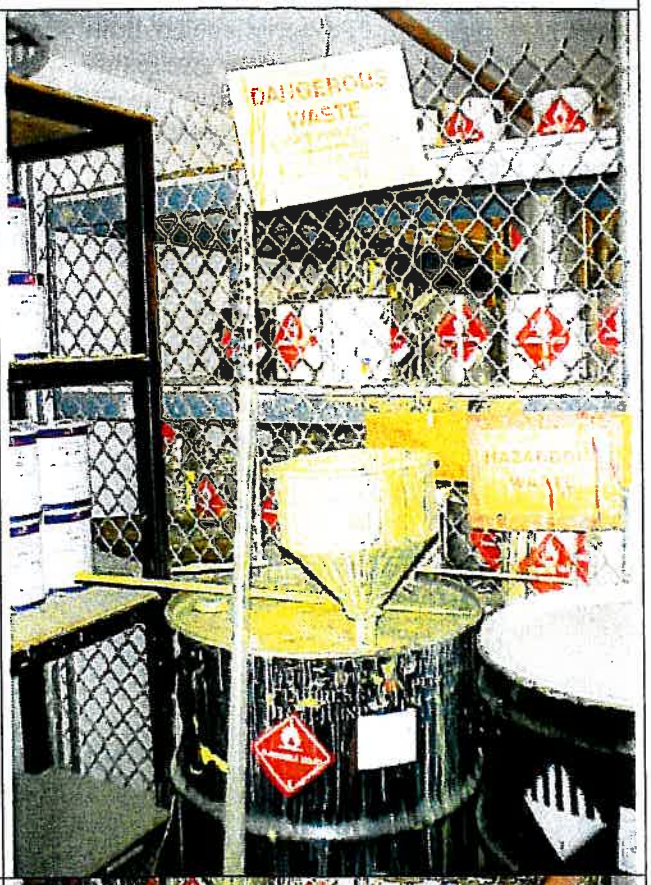
Photo # Area	Notes/Descriptions	Photographs
Photo 9 of 11 11:03 a.m. Bldg B – Paint Locker	Open funnel sits screwed in to the small lid bung on left drum, which is for liquid paint wastes. Larger bung on this drum is open with lid resting on top of lid. Right drum was full of paint solids with the lid just resting on it.	
Photo 10 of 11 11:03 a.m. Bldg B – Paint Locker	Both drums are properly labeled and with start dates as these cannot be a satellite accumulation area. However, the two five-gallon buckets in front contain hazardous waste intended to be air-dried (evaporated) and then scraped into the drum on the right in this photo.	

Photo # Area	Notes/Descriptions	Photographs
Photo 11 of 11 11:12 a.m. Bldg B – Paint Locker	Properly labeled drum of dangerous waste floor sweepings. The lid is only resting on the drum, not properly closed.	

Washington Department of Ecology
Hazardous Waste & Toxics Reduction Program
Compliance Report

Site: TC Systems **RCRA ID#: WAD 088 722 947**

Inspection Date:	November 6, 2007	
Site Contacts:	Charles Souder	
Phone:	(425) 258-4055	FAX: (425) 252-6855
E-mail:	ccsouder@hotmail.com	
Site Location:	1032 W Marine View Dr Everett, WA	
At This Site Since:	1993	NAICS#: 332813
Generator/Site Status:	LQG	Electroplating, Plating, Polishing, etc.

Ecology
Lead Contact: Daylin Davidson
E-mail: DayD461@ecy.wa.gov
Report Date: November 19, 2007
Report By: Daylin Davidson

Phone: (425) 649-7090 FAX: (425) 649-7218
Other Representatives: Warren Walton

_____ _____
(Signed) (Date)

Facility Background:
TC Systems is located near the Everett Marina on West Marine View Drive. Employee numbers vary between twelve and twenty working the day shift five days a week. TC Systems supports the aviation and boating industries by chemically treating and painting metal parts using their chemical line and paint booths. Waste water from the tank line is pre-treated to meet local discharge limits and discharged under a permit. A limited amount of sand blasting is done here. TC Systems received Hazardous Waste Compliance inspections from the Department of Ecology in 1997, 1998, 2003, and 2006.

Inspection Summary:
We arrived on site at 10:00 a.m. and asked to speak to Guy Donaldson, the QA Manager. We were joined briefly by Charles Souder. We explained the reason for our visit to Mr. Souder and Mr. Donaldson and proceeded on a site tour with only Mr. Donaldson.

Mr. Donaldson told us the following about the facility's processes and waste streams:

- Filter press sludge from the treatment of waste water contains chromium and is the largest waste stream generated at this facility.
- Liquid paint and solvent (including MEK) waste is the second largest waste stream.
- Floor sweeping and solids scraped from the paint booths are also managed as dangerous wastes.
- Used oil from compressors, equipment, and one company truck is also stored at the facility, as well as spent antifreeze.
- Paint booth filters are managed as dangerous waste for heavy metals.
- Spent fluorescent bulbs may be taken to the local transfer station.
- Paint cans are drained and thrown in the trash.
- Paint contaminated tape, gloves, and paint can filters are thrown in the trash.

Hazardous Waste Accumulation Area
Waste sludge is generated from the plating line waste water treatment system. The sludge comes from the filter press and is a dangerous waste due to chromium. The sludge is accumulated at the filter press in large plastic tote sacks, then is brought to the Hazardous Waste Accumulation Area (HWAA) for 90-day storage before being

taken by the hazardous waste vendor. We saw one sludge sack in this area. It was properly labeled as hazardous waste with a risk label and a start date of August 13, 2007. We pointed out to Mr. Donaldson that the waste would have to be shipped within the week to meet the 90 day accumulation time limit. Two drums of paint waste, one liquid, the other solid (floor sweepings and clean out from the paint booths) were also located here. They were properly labeled and dated with August 14, 2007 as the accumulation start date, but the drum of liquid waste did not have any secondary containment (liquid waste drum is on the right in photo #1 below, drum on left is paint solids and was identified as "floor sweepings" on the lid and by Mr. Donaldson.)

Photo #1 of 20 Hazardous waste accumulation area (HWAA) Building B 10:12 a.m.	Photos of properly labeled drums with accumulation dates of 8-14-07. These drums should be shipped the week of 11-11-07 or will exceed 90 days on site.	

Mr. Donaldson showed us a spill kit and a fire extinguisher near this area. The spill kit drum was almost empty. The fire extinguisher was last serviced in November of 2006. We pointed out that it was due this month to be serviced. We noticed some fluorescent light tubes stored under the nearby staircase and Mr. Donaldson confirmed they were spent bulbs. We asked what would happen to them and he explained that bulbs are typically taken to the local transfer station for recycling, but he did not have any records to show this. The bulbs were not secured or labeled as universal waste, nor with an accumulation start date.

<u>Paint Booth</u>
We went into Paint Booth # 5 and Mr. Donaldson said that the waste gun cleaner was generated in the booths, and then stored in buckets until the end of the day. He said they are then emptied into the 55-gallon drum in the paint locker. We observed the waste gun cleaner stored in five-gallon buckets with the lids sitting on top (not closed). The buckets were not labeled (see photo # 2 below).

Photo #2 of 20 In paint booth 5, Building B 10:17 a.m.	Open, unlabeled containers of spent solvent waste, to be emptied every night into the liquid paint waste drum in the paint locker.	

"Satellite Collection Area" in Building B

This area held paint booth filters, used oil, spent antifreeze, undesignated "blasting dust," and liquid paint waste. Though the area had a sign marking it as a "Satellite Collection Area," none of these waste accumulations were managed in a way that met the definition of "Satellite Accumulation."

Photo #3 of 20 "Satellite area" in Building B 10:18 a.m.	Paint booth filters are packaged but loosely stacked near a box full of the same items. None of the bags were labeled as hazardous waste and had no risk labels or start dates. There is more than a 55 gallon equivalent of paint booth filters at this location, therefore this cannot be managed as a satellite accumulation of paint booth filters.	

There were an estimated two dozen bags of paint booth filters piled in this area (see photo #3 above), not counting those inside the wood box shown above in the background of photo #3 and in photo #4 (below). The box was properly labeled but lacked an accumulation start date.

Photo #4 of 20 "Satellite area" in Building B 10:19 a.m.	Paint booth filters labeled "Hazardous Waste" and with risk labels, but lacking an accumulation start date.	

One full drum of liquid paint waste was on a secondary containment pallet and was properly labeled, but lacked an accumulation start date (see photo #5 below).

Photo #5 of 20 "Satellite area" in Building B 10:20 a.m.	The hazardous waste and risk label are in compliance, but there is no accumulation start date and the drum appeared to be full.	

A drum labeled "Blasting Dust" and "Flammable Liquid" had an unsecured lid (see photo #6 below). We confirmed the contents were indeed dust/grit and asked Mr. Donaldson what type of blasting material TC Systems uses. He told us he believed it was a garnet medium, but he did not know if this debris had been sampled or designated as non-hazardous or hazardous waste.

Photo #6 of 20 "Satellite area" in Building B 10:23 a.m.	This drum was labeled "Blasting Dust". It is not labeled as hazardous waste, but has a flammable liquid risk label on this solid waste.	

We also saw an open drum of used oil and an open drum labeled "used antifreeze" in this area. We did not see any spill kit in this room.

Along the left wall of this area were five drums of used oil (photo #7 & 8 below). Though properly labeled and stored on spill pallets, four of the five drums were open and some of the secondary containment had been compromised by the practice of draining oil from filters directly into the secondary containment (shown in photo #8 below).

Photo #7 of 20 Area adjacent to "satellite area" in Building B 10:24 a.m.	Open drums of used oil. Containers adjacent to drums will be poured to drums. All used oil containers were sitting on containment pallets.	

Photo #8 of 20 Adjacent to Building B satellite area 10:24 a.m.	More open drums of used oil. All drums of liquid were sitting on containment pallets. Note used oil filter draining into secondary containment between drums.	

Paint Locker Room

We went into the paint locker room next. There was a secondary containment pallet holding two 55-gallon drums and several five-gallon buckets. The 55-gallon drum on the left was for accumulating liquid waste paint and thinner from gun cleaning. It had an open funnel in it and no labels. This drum was not near the area where the gun cleaning waste is generated not under the control of the process operator (?) so it was not serving as a satellite accumulation drum and did not have an accumulation start date.

The 55-gallon drum on the right was for accumulating paint solids from the paint pot bottoms. It was full, open, not labeled as hazardous waste, and did not have an accumulation start date. It did have a flammable liquid risk label (photo #9 below) even though it was used to accumulate solids. Several five-gallon buckets of hazardous waste paint solids were open with no labels or accumulation start dates and were also stored on the secondary containment pallets.

Another full 55-gallon drum was stored near the door. It had no labels or dates, but Mr. Donaldson told us it was floor sweepings, the same hazardous waste stream we had seen in the HWAA (photo #1). We did not see any spill kit in this room.

Photo #9 of 20 Paint Locker room 10:28 a.m.	Open funnel sits screwed in to the small lid bung on left drum, which is for liquid paint wastes. Right drum was full of paint solids with the lid just resting on it. Open five gallon plastic buckets in front also contained paint solids. None of these containers were properly labeled. Only the right drum has a risk label, but it is a flammable liquid label on what is clearly a solid inside the drum.	

We noticed two trash cans right next to this waste drums inside the paint locker. The first trash can held empty paint cans. One can was still 25 to 30% full of paint (see photo #10 below). We pointed out the can to Mr. Donaldson. He said it should not be in there; cans are supposed to be drained before being put in the trash can.

Photo #10 of 20 Paint Locker room 10:30 a.m.	Open can of paint in top right of photo is 25-30% full of free-flowing paint liquids. Other cans appear to be empty as they are on their sides and no free liquid has drained from them.	

In the other trash can, we saw paint covered tape, latex gloves, filters, rags, and other paint covered debris. We asked Mr. Donaldson if these wastes had been designated and he said he was not aware of any testing having been done.

Photo #11 of 20 Paint Locker room 10:31 a.m.	Paint contaminated tape, rags, filters, empty container, and PPE debris.	

On the product side of the paint locker, we noticed a cart filled with rusty and outdated items (see photo #13 below). One can on the right side was bulging. We observed expiration dates of August 2004 and earlier. Mr. Donaldson said these items had not been stored there the week before, when he left for vacation. He did not know why they were here, but suspected someone had pulled expired products to be disposed of.

We told Mr. Donaldson that these items should be designated, moved to the 90-day hazardous waste accumulation area (HWAA), and disposed of as hazardous waste.

Photo #13 of 20 Paint Locker room 10:33 a.m.	Various one gallon and smaller items determined to be no longer useful due to their age. Expiration dates observed were for 2004 and earlier. Many are rusted, one can is clearly bulging.	

Back Lot

Outside in the north parking lot, we noticed a white drum that was labeled as "Zep Aluminum Cleaner and Brightener" (see photo #14 below). It was just under ¼ full of a dark liquid. Mr. Donaldson said he thought it might be diesel fuel that had been pumped out of a truck. We discussed the proximity of the nearby storm drain and how standing water on top of a drum can pass through the bung lid to contaminate the contents of a drum. We also discussed the possible incompatibility of the liquid in the drum with the product that the drum previously contained. The drum was not correctly labeled, had no start date, and no secondary containment. We recommended that the drum be brought inside the building as soon as possible.

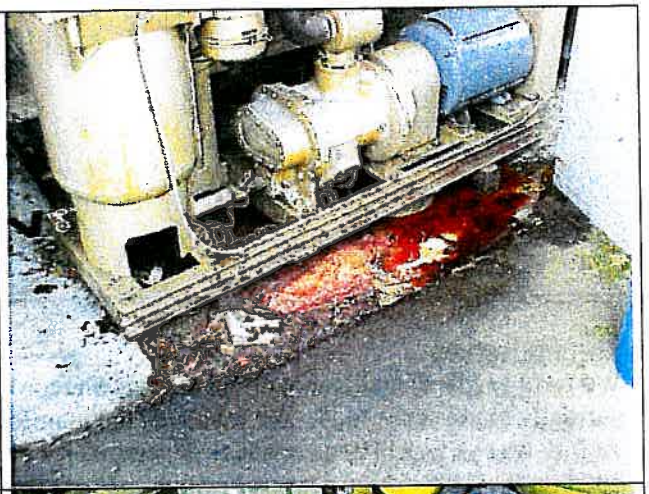
Photo #14 of 20 About 80 feet north of Building C. 10:41 a.m.	Poly drum partially full of dark liquid, possibly diesel fuel, that is labeled as a corrosive and poisonous product from ZEP. Storm drain to bay is approximately 20 feet down grade from this drum.	

Tank Area Between Buildings B and C

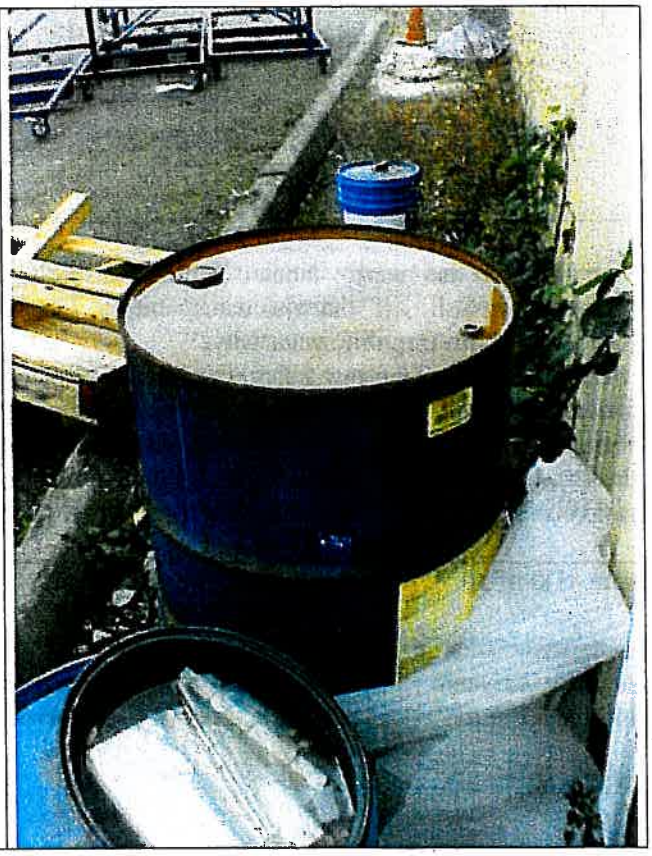
We went to the alley way between Buildings B and C where the sludge from the waste water treatment process is collected and batch processed in the filter press. The solids are hazardous waste due to heavy metal content. From the filter press, the solid are dropped into a tray under the filter press and accumulated in a bulk solids container (photo #16 below). The bulk solids container is on a skid pallet and stored under cover against Building C. The open container was approximately half full of sludge and had no labels or accumulation start date. Mr. Donaldson applied a hazardous waste label and risk label provided by inspector Warren Walton while we were there.

Photo #16 of 20 Alley way between Buildings B and C. 10:46 a.m.	Sludge container was open and had no labels. . Inspectors provided Mr. Donaldson with labels and he is applying labels in this photo.	

We noticed a shed nearby labeled "Spill Control Station" that held a few absorbents and a drum labeled "Emergency Spill Kit" that was nearly empty. The alley had several storm drains that were labeled as going to the local stream or public waterway.
In this same alley, we saw a shed that was housing compressors. There was red liquid on the ground shown in photo #18 below. Mr. Donaldson told us this compressor was no longer operational and would be repaired before being used again. He said? the red liquid is the oil that had leaked from the compressor when it was last used. In this same shed, we noticed an open, unlabeled blue bucket of dark oil shown in photo #19 below. Mr. Donaldson said this should have been poured into one of the used oil drums in the "Satellite Area" in Building B.

Photo #18 of 20 Compressor Shed in alley way between Buildings B and C 10:53 a.m.	Compressor site with leaking, puddled oil on the ground. The oil appears to have stained the asphalt in front of the doorway.	
Photo #19 of 20 Compressor Shed in alley way between Buildings B and C 10:54 a.m.	Open, unlabeled bucket of used oil under a piece of equipment to the right of the compressor in photo 18. The compressor oil leak was four to six feet in length – note liquid in left foreground.	

Outside of Building C, we saw two containers (see photo #20 below). The first was a 50-gallon drum that had rusted on top and was half full of an unknown liquid. The drum had a product label reading "Duplicating Fluid 5 Anhydrous" and the manufacturer's name – ChemCentral. The other container was a 5-gallon blue bucket half full of an unknown liquid, but had no legible label. Mr. Donaldson didn't know what was in either container or why they were stored outside in this location. We advised that the containers be moved indoors as soon as possible and that the contents be identified.

Photo #20 of 20 Outside North end of Building C 10:57 a.m.	Blue drum with rusting top is approximately ½ full. Product label reads: "Duplicating Fluid 5 Anhydrous" with the manufacturer's name – ChemCentral. Blue bucket in background is approximately ½ full of unknown substance. The label was illegible.	

Records Review

We went to Mr. Donaldson's office to review records. No weekly inspections or general facility inspections were currently being performed. We reviewed the manifests for 2005, 2006, and 2007, which clearly demonstrated the facility was an LQG (large quantity generator) for all three years. The facility's generator status was revised in 2005 on their Site Identification Form to indicate that they were a medium quantity generator. However, the manifest records show that the facility was a large quantity generator in 2005 due to waste shipments larger than 2,200 pounds, exceeding the accumulation limit for medium quantity generators. In 2006, their first shipment of two tote sacks of chromium sludge hazardous waste was in the amount of 3,200 pounds, exceeding the 2,200 pound accumulation limit for a medium quantity generator and making them a large quantity generator for 2006. The most recent shipment was in August of this year and also exceeded 2,200 pounds, thus the large quantity generator regulations currently apply. The facility is delinquent in submitting their 2006 annual dangerous waste report to Ecology.. No contingency plan, training plan, or training records were available.

We did not review most of our findings with Mr. Donaldson, as he had told us he was leaving the company the end of the week for a new job. We did advise that he arrange for a pickup of the waste in the HWAA before he resigned, which he agreed to do. We left the site at 11:15 a.m.

- Universal wastes are certain dangerous wastes that are able to be managed appropriately under less stringent regulatory requirements if they are recycled. For light bulbs, the rule includes, but is not limited to fluorescent tubes, compact fluorescent, mercury vapor, metal halide, high pressure sodium and neon lamps. The benefits of managing the lamps as universal waste include no counting, no manifesting, no reporting on annual reports and a 12-month accumulation time limit. To manage your used bulbs as Universal Waste, please store them so that they will not be broken and label their container with the words "Universal Waste Lamps" and the start date when the first item was placed in the container to ensure they are recycled within the 12-month accumulation time limit.

- Used shop towels contaminated with hazardous substances may also designate as dangerous waste under the Dangerous Waste regulations. If your used shop towels designate you have the option to handle *and recycle* (i.e. *launder*) them according to Ecology's best management practices (BMPs). If you choose to do this, they are not subject to generator, transporter and permitted treatment, storage and disposal facility requirements of the Dangerous Waste Regulations and are not "counted" as a hazardous waste. To be considered managed under Ecology's BMP's, the containers of used shop rags must be labeled "contaminated shop rags." Please label the containers of shop rags in your facility. Please see the publication: *Used Shop Towels* for more information. **[If your towels are being disposed they must be managed as hazardous waste if they fail any hazardous waste test.]**

COMPLIANCE PROBLEMS

The following conditions identified during the inspection were not in compliance with Dangerous Waste and/or other environmental laws. Each problem is covered in three parts: (1) the **citation from the regulations**, (2) the specific observations from the inspection, and (3) the *corrective measures* needed to fix the problem and achieve compliance.

1) WAC 173-303-515(6) and by reference 40 CFR Part 279.22(d): A used oil generator must respond to releases of used oil to the environment and perform the following cleanup steps: a) stop the release; b) contain the released used oil; c) clean up and manage properly the released used oil and other materials; and d) repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

Oil that has spilled/leaked from the old compressor is still puddled on the ground in the compressor shed between Buildings B & C.

Within 2 days of receipt of this letter, ensure that any old releases of used oil and contaminated soil are cleaned up and properly managed. In case of oil releases in the future, immediately perform the cleanup steps listed. Submit photos showing the spilled oil in the compressor shed has been cleaned up as well as photos of the containers used to hold the clean up materials to be disposed of properly.

2) WAC 173-303-141(1): Designated dangerous waste was not offered to a treatment, storage, and disposal facility (TSD).

One paint can in the trash can in the paint locker was still ¼ - 1/3 full of paint.

Upon receipt of this letter, do not send any more designated dangerous waste to non-permitted facilities. Dangerous waste may only be sent to permitted hazardous waste treatment, storage, or disposal facilities. Within 10 days of receipt of this letter, submit documentation showing employees have received training in proper disposal of these wastes, and documentation showing how the paint can described above was managed.

3) WAC 173-303-170(1) and by reference 070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes. REPEAT VIOLATION

The designation status has not been determined for the following: The drum of "blasting dust" in satellite area of Building B: the paint contaminated tape, gloves, filters, and other debris in the trash can in the paint locker; the cart full of expired materials in the paint locker; the white drum that is ¼ full, possibly of diesel fuel, outside behind the buildings; and the blue drum and blue bucket outside Building C.

Immediately upon receipt of this letter move the three containers that are out back inside the buildings. Within 30 days of receipt of this letter, provide to the Department documentation that designation of the solid wastes listed has occurred. This documentation shall include, but not be limited to, copies of the analytical results of designation testing and any contracts with testing laboratories.

4) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste. REPEAT VIOLATION

The following containers were open during the inspection: the 5-gallon buckets of dirty solvent in the paint booths; the open funnel in the liquid paint waste drum in the paint locker; the 55-gallon drum of paint solids in the paint locker; the 5-gallon buckets of paint solids in the paint locker; and the box of sludge outside between buildings B & C.

Within 2 days of receipt of this letter, ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5). Submit photos of all the containers listed above to demonstrate compliance with this item.

5) WAC 173-303-200(1)(d) as referenced by 170(2): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste. REPEAT VIOLATION

Numerous containers of dangerous waste were lacking proper labeling. These include: Buckets of paint/solvent waste in the paint booths; bagged paint booth filters; all three 55-gallon drums of paint waste (and floor sweepings) in the paint locker; all the buckets of paint solids in the paint locker; and the box of sludge between Buildings B & C.

Within two days of receipt of this letter, adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d). Submit photos of all the containers listed above to demonstrate compliance with this item.

6) WAC 173-303-200(1)(c) as referenced by 170(2): Failure to mark each container with the accumulation start date. REPEAT VIOLATION

Numerous containers of dangerous waste were lacking start dates. These include: bagged paint booth filters; all three 55-gallon drums of paint waste (and floor sweepings) in the paint locker; all the buckets of paint solids in the paint locker; one drum of liquid paint wastes in the "Satellite Area" in Building B; and the box of sludge between Buildings B & C.

Within two days of receipt of this letter, ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Submit photos to demonstrate compliance with this item.

7) WAC 173-303-200(2)(a) as referenced by 170(2): Failure to meet the satellite accumulation area standards for containers. **REPEAT VIOLATION**

Though the area in Building B had a sign marking it as "Satellite Collection Area," none of the waste accumulations there were managed in a way that met the definition of "Satellite Accumulation." The containers were not at or near the point of generation, and the paint booth filters vastly exceeded the 55-gallon limit for satellite accumulation. The 55-gallon limit was also exceeded in the flammable paint locker for the solid paint waste stream because the 55-gallon drum was full and 5-gallon buckets of the same waste stream were stored next to it, but none of the containers had start dates. These containers must be treated as 90-day containers when they do not meet the requirements for satellite accumulation.

Within two days of receipt of this letter, comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date; (c) insuring containers are in good condition, handled safely, and compatible with waste stored; and (d) keeping containers closed at all times.

8) WAC 173-303-522(2)(a): The special requirements for generators recycling spent antifreeze were not met.

We saw an open drum labeled "used antifreeze" in the "Satellite Area" of Building B.

Within two days of receipt of this letter, label containers of spent antifreeze as "spent antifreeze". Accumulate antifreeze in a manner to prevent releases to the environment. This includes but is not limited to storing wastes in compatible containers, on impermeable surfaces, or in secondary containment structures. Submit photos to demonstrate compliance with this item.

9) WAC 173-303-515(6) and by reference 40 CFR Part 279.22(c)(1): Containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."

The bucket of used oil in the compressor shed was not labeled.

Within two days of receipt of this letter, label all used oil collection containers with the words "Used Oil". Submit photos to demonstrate compliance with this item.

10) WAC 173-303-515(6)(a)(i): Containers of used oil must be kept closed except to add or remove used oil.

Five drums of used oil in the satellite area of Building B and the bucket of used oil in the compressor shed were open.

Within two days of receipt of this letter, close all containers of used oil. Submit photos to demonstrate compliance with this item.

11) WAC 173-303-200(1)(b) and by reference 630(3): Failure to maintain identification of containers by re-labeling during transfer of contents, and/or to properly remove or destroy labels on empty containers.

A drum labeled "Blasting Dust" has a "Flammable Liquid" risk label on it in the "satellite area" of Building B. A 55-gallon drum of paint solids had a flammable liquid risk label on it in the paint locker.

A white drum that was labeled as Zep Aluminum Cleaner and Brightener contained what was believed to be diesel fuel in the outside back lot.

Within two days of receipt of this letter, institute a process to label all containers so that the information required is present and accurate, according to the current contents of the container. Submit photos of the correctly labeled containers listed above to demonstrate compliance with this item.

12) WAC 173-303-170(3) and by reference 200(1)(a): Dangerous waste was accumulated on-site for more than 90 days. REPEAT VIOLATION

Drums and totes in the Hazardous Waste Accumulation Area are dated 8/14/07, which means the 90 day accumulation time limit was exceeded November 12th.

Within 5 calendar days of the receipt of this letter, provide copies of manifests for waste disposal of all waste which has been on-site greater than 90 days.

13) WAC 173-303-630(6) as referenced by 200(1)(b): Dangerous waste accumulation areas were not inspected weekly. REPEAT VIOLATION

Weekly inspections were not being conducted.

Within 7 days of receipt of this letter, institute an inspection schedule for areas where containers of dangerous waste are stored. These areas must be inspected at least on a weekly basis. Maintain an inspection log that includes: the date and time of inspection; the name and signature of the inspector; a notation of the observations made; and the date and nature of any corrective measures taken. At a minimum, items to include are checking that containers are closed, containers are labeled including hazardous waste labels as appropriate, containers are dated with the accumulation start date, spills and leaks have been addressed, and up to date emergency information is posted near telephones. Submit a copy of the proposed inspection log within 7 days and copies of three weeks of completed logs within 30 days.

14) WAC 173-303-340(1) as referenced by 200(1)(e): Spill control equipment in dangerous waste accumulation areas was missing or inadequate.

Spill control equipment in the Hazardous Waste Accumulation Area was inadequate to control a release of liquid hazardous waste. We did not see any spill kits in the "Satellite Area" in Building B, nor in the paint locker.

Within 30 calendar days of the receipt of this letter, ensure that spill control equipment is well stocked and available in areas where liquid waste is stored. Submit a report within 30 calendar days documenting compliance with this requirement.

15) WAC 173-303-630(7) as referenced by 200(1)(b): Containers of liquid dangerous waste did not have adequate secondary containment. REPEAT VIOLATION

The drum of liquid waste in the HWAA did not have any secondary containment.

Within 30 calendar days of the receipt of this letter, provide a containment system for container accumulation areas that is capable of holding spills and leaks per WAC 173-303-630(7). Submit photos to demonstrate compliance with this item.

16) WAC 173-303-573(9): Universal wastes must be managed in a way that prevents releases of universal waste or component of a universal waste to the environment, as required by this subsection.

Spent fluorescent light tubes stored under the staircase near the HWAA were not secured in boxes.

Within 30 calendar days of the receipt of this letter properly manage universal waste in a way that prevents releases to the environment, as described in WAC 173-303-573(9). Submit photos to demonstrate compliance with this item.

17) WAC 173-303-573(10): Universal wastes must be properly labeled or marked to identify the type of universal waste as required by this section.

Spent fluorescent light tubes stored under the staircase near the HWAA were not labeled and had no start dates.

Within 30 calendar days of the receipt of this letter label or mark the universal waste lamps with the words "Universal Waste Lamp(s)", "Waste Lamp(s)", or "Used Lamp(s)" and the date the first bulb went in the container to demonstrate compliance with the 12-month accumulation time limit. Submit photos of the labeled containers to demonstrate compliance with this item.

18) WAC 173-303-200(1)(e) and by reference 320(1): General facility inspections were not conducted.
REPEAT VIOLATION

General facility inspections were not conducted at this facility.

Within 30 calendar days of receipt of this letter, plan, conduct, and document a general facility inspection. Submit a copy of the plan and log sheet. Determine the appropriate interval for future inspections and inform Ecology of this interval. Inspections must be frequent enough to identify and correct problems before they harm human health or the environment.

19) WAC 173-303-170(2) and by reference 060(5) and 220(1): Failure to submit a Dangerous Waste Annual Report for the 2006 calendar year.

The facility is delinquent in submitting their 2006 annual dangerous waste report to Ecology.

Within 30 calendar days of the receipt of this letter, submit to the Department a completed Dangerous Waste Annual Report for the year 2006.

20) WAC 173-303-350(2) as referenced by 200(1)(e): A contingency plan was not prepared.
REPEAT VIOLATION

No contingency plan was available for this facility.

Within 60 calendar days of the receipt of this letter, develop and retain on-site a contingency plan per the requirements of WAC 173-303-350. Submit a copy of the contingency plan within 60 days.

21) WAC 173-303-330 as referenced by 200(1)(e): Training requirements were not met. The facility should have a training program, a written training plan, and keep training records. REPEAT VIOLATION

No training program was available for this facility.

Within 60 calendar days of the receipt of this letter, develop and submit a dangerous waste training program which shall include a written training plan and records per WAC 173-303-330.

COMPLIANCE CERTIFICATE

Instructions: **Return this Completed Form**
The problems listed above are repeated below and must be corrected in order to be in compliance with Washington Dangerous Waste Regulations. Complete the shaded portion of the table by initialing and indicating the date each action is completed, and **briefly explain the actions taken for each item in a cover letter.** Mail this completed form, the cover letter, and any requested documentation by ***January 28, 2008*** to: Daylin Davidson, Department of Ecology, Hazardous Waste Program, 3190 160th Avenue SE, Bellevue, WA 98008-5452. *(An extension of the deadlines may be requested. Please e-mail a request to DayD461@ecy.wa.gov before the date specified above.)*

1) WAC 173-303-515(6) and by reference 40 CFR Part 279.22(d): A used oil generator must respond to releases of used oil to the environment and perform the following cleanup steps: a) stop the release; b) contain the released used oil; c) clean up and manage properly the released used oil and other materials; and d) repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

Within 2 days of receipt of this letter, ensure that any old releases of used oil and contaminated soil are cleaned up and properly managed. In case of oil releases in the future, immediately perform the cleanup steps listed. Submit photos showing the spilled oil in the compressor shed has been cleaned up as well as photos of the containers used to hold the clean up materials to be disposed of properly.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-515(6)	November 26, 2007		

2) WAC 173-303-141(1): Designated dangerous waste was not offered to a treatment, storage, and disposal facility (TSD).

Upon receipt of this letter, do not send any more designated dangerous waste to non-permitted facilities. Dangerous waste may only be sent to permitted hazardous waste treatment, storage, or disposal facilities. Within 10 days of receipt of this letter, submit documentation showing employees have received training in proper disposal of these wastes, and documentation showing how the paint can described above was managed.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-141(1)	November 26, 2007		

3) WAC 173-303-170(1) and by reference 070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes. **REPEAT VIOLATION**

Immediately upon receipt of this letter move the three containers that are out back inside the buildings. Within 30 days of receipt of this letter, provide to the Department documentation that designation of the solid wastes listed has occurred. This documentation shall include, but not be limited to, copies of the analytical results of designation testing and any contracts with testing laboratories.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(1)	December 27, 2007		

4) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste. **REPEAT VIOLATION**

Within 2 days of receipt of this letter, ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5). Submit photos of all the containers listed above to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(b)	November 26, 2007		

5) WAC 173-303-200(1)(d) as referenced by 170(2): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste. **REPEAT VIOLATION**

Within two days of receipt of this letter, adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d). Submit photos of all the containers listed above to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(d)	November 26, 2007		

6) WAC 173-303-200(1)(c) as referenced by 170(2): Failure to mark each container with the accumulation start date. **REPEAT VIOLATION**

Within two days of receipt of this letter, ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(c)	November 26, 2007		

7) WAC 173-303-200(2)(a) as referenced by 170(2): Failure to meet the satellite accumulation area standards for containers. **REPEAT VIOLATION**

Within two days of receipt of this letter, comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date; (c) insuring containers are in good condition, handled safely, and compatible with waste stored; and (d) keeping containers closed at all times.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(2)(a)	November 26, 2007		

8) WAC 173-303-522(2)(a): The special requirements for generators recycling spent antifreeze were not met.

Within two days of receipt of this letter, label containers of spent antifreeze as "spent antifreeze". Accumulate antifreeze in a manner to prevent releases to the environment. This includes but is not limited to storing wastes in compatible containers, on impermeable surfaces, or in secondary containment structures. Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-522(2)(a)	November 26, 2007		

9) WAC 173-303-515(6) and by reference 40 CFR Part 279.22(c)(1): Containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."

Within two days of receipt of this letter, label all used oil collection containers with the words "Used Oil". Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-515(6)	November 26, 2007		

10) WAC 173-303-515(6)(a)(i): Containers of used oil must be kept closed except to add or remove used oil.

Within two days of receipt of this letter, close all containers of used oil. Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-515(6)(a)(i)	November 26, 2007		

11) WAC 173-303-200(1)(b) and by reference 630(3): Failure to maintain identification of containers by re-labeling during transfer of contents, and/or to properly remove or destroy labels on empty containers.

Within two days of receipt of this letter, institute a process to label all containers so that the information required is present and accurate, according to the current contents of the container. Submit photos of the correctly labeled containers listed above to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(b)	November 26, 2007		

12) WAC 173-303-170(3) and by reference 200(1)(a): Dangerous waste was accumulated on-site for more than 90 days. **REPEAT VIOLATION**

Within 5 calendar days of the receipt of this letter, provide copies of manifests for waste disposal of all waste which has been on-site greater than 90 days.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(3)	November 29, 2007		

13) WAC 173-303-630(6) as referenced by 200(1)(b): Dangerous waste accumulation areas were not inspected weekly. **REPEAT VIOLATION**

Within 7 days of receipt of this letter, institute an inspection schedule for areas where containers of dangerous waste are stored. These areas must be inspected at least on a weekly basis. Maintain an inspection log that includes: the date and time of inspection; the name and signature of the inspector; a notation of the observations made; and the date and nature of any corrective measures taken. At a minimum, items to include are checking that containers are closed, containers are labeled including hazardous waste labels as appropriate, containers are dated with the accumulation start date, spills and leaks have been addressed, and up to date emergency information is posted near telephones. Submit a copy of the proposed inspection log within 7 days and copies of three weeks of completed logs within 30 days.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-630(6)	November 31, 2007		

14) WAC 173-303-340(1) as referenced by 200(1)(e): Spill control equipment in dangerous waste accumulation areas was missing or inadequate.

Within 30 calendar days of the receipt of this letter, ensure that spill control equipment is well stocked and available in areas where liquid waste is stored. Submit a report within 30 calendar days documenting compliance with this requirement.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-340(1)	December 27, 2007		

15) WAC 173-303-630(7) as referenced by 200(1)(b): Containers of liquid dangerous waste did not have adequate secondary containment. **REPEAT VIOLATION**

Within 30 calendar days of the receipt of this letter, provide a containment system for container accumulation areas that is capable of holding spills and leaks per WAC 173-303-630(7). Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-630(7)	December 27, 2007		

16) WAC 173-303-573(9): Universal wastes must be managed in a way that prevents releases of universal waste or component of a universal waste to the environment, as required by this subsection.

Within 30 calendar days of the receipt of this letter properly manage universal waste in a way that prevents releases to the environment, as described in WAC 173-303-573(9). Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-573(9)	December 27, 2007		

17) WAC 173-303-573(10): Universal wastes must be properly labeled or marked to identify the type of universal waste as required by this section.

Within 30 calendar days of the receipt of this letter label or mark the universal waste lamps with the words "Universal Waste Lamp(s)", "Waste Lamp(s)", or "Used Lamp(s)" and the date the first bulb went in the container to demonstrate compliance with the 12-month accumulation time limit. Submit photos of the labeled containers to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-573(10)	December 27, 2007		

18) WAC 173-303-200(1)(e) and by reference 320(1): General facility inspections were not conducted. REPEAT VIOLATION.

Within 30 calendar days of receipt of this letter, plan, conduct, and document a general facility inspection. Submit a copy of the plan and log sheet. Determine the appropriate interval for future inspections and inform Ecology of this interval. Inspections must be frequent enough to identify and correct problems before they harm human health or the environment.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(e)	December 27, 2007		

19) WAC 173-303-170(2) and by reference 060(5) and 220(1): Failure to submit a Dangerous Waste Annual Report for the 2006 calendar year.

Within 30 calendar days of the receipt of this letter, submit to the Department a completed Dangerous Waste Annual Report for the year 2006.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(2)	December 27, 2007		

20) WAC 173-303-350(2) as referenced by 200(1)(e): A contingency plan was not prepared. REPEAT VIOLATION

Within 60 calendar days of the receipt of this letter, develop and retain on-site a contingency plan per the requirements of WAC 173-303-350. Submit a copy of the contingency plan within 60 days.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-350(2)	January 28, 2008		

21) WAC 173-303-330 as referenced by 200(1)(e): Training requirements were not met. The facility should have a training program, a written training plan, and keep training records. REPEAT VIOLATION

Within 60 calendar days of the receipt of this letter, develop and submit a dangerous waste training program which shall include a written training plan and records per WAC 173-303-330.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-330	**January 28, 2008**		

APPENDIX A
Digital Camera Photolog

Camera: Sony FD Mavica (MVC-FD75)
Photographer: Warren Walton **Lead Inspector: Daylin Davidson**
Camera clock had not been adjusted for day light savings time, so times have been moved back one hour in this photo log to represent the actual time the photos were taken.

Photo # Area	Notes/Descriptions	Photographs
Photo #1 of 20 Hazardous waste accumulation area (HWAA) Building B 10:12 a.m.	Photos of properly labeled drums with accumulation dates of 8-14-07. These drums should be shipped the week of 11-11-07 or will exceed 90 days on site.	
Photo #2 of 20 In paint booth 5, Building B 10:17 a.m.	Open, unlabeled containers of spent solvent waste, to be emptied every night into the liquid paint waste drum in the paint locker.	

Photo # Area	Notes/Descriptions	Photographs
Photo #3 of 20 "Satellite area" in Building B 10:18 a.m.	Paint booth filters are packaged but loosely stacked near a box full of the same items. None of the bags were labeled as hazardous waste and had no risk labels or start dates. There is more than a 55 gallon equivalent of paint booth filters at this location, therefore this cannot be managed as a satellite accumulation of paint booth filters.	
Photo #4 of 20 "Satellite area" in Building B 10:19 a.m.	Paint booth filters labeled "Hazardous Waste" and with risk labels, but lacking an accumulation start date.	

Photo # Area	Notes/Descriptions	Photographs
Photo #5 of 20 "Satellite area" in Building B 10:20 a.m.	The hazardous waste and risk label are in compliance, but there is no accumulation start date and the drum appeared to be full.	
Photo #6 of 20 "Satellite area" in Building B 10:23 a.m.	This drum was labeled "Blasting Dust". It is not labeled as hazardous waste, but has a flammable liquid risk label on this solid waste.	

Photo # Area	Notes/Descriptions	Photographs
Photo #7 of 20 Area adjacent to "satellite area" in Building B 10:24 a.m.	Open drums of used oil. Containers adjacent to drums will be poured to drums. All used oil containers were sitting on containment pallets.	
Photo #8 of 20 Adjacent to Building B satellite area 10:24 a.m.	More open drums of used oil. All drums of liquid were sitting on containment pallets. Note used oil filter draining into secondary containment between drums.	
Photo #9 of 20 Paint Locker room 10:28 a.m.	Open funnel sits screwed in to the small lid bung on left drum, which is for liquid paint wastes. Right drum was full of paint solids with the lid just resting on it. Open five gallon plastic buckets in front also contained paint solids. None of these containers were properly labeled. Only the right drum has a risk label, but it is a flammable liquid label on what is clearly a solid inside the drum.	

Photo # Area	Notes/Descriptions	Photographs
Photo #10 of 20 Paint Locker room 10:30 a.m.	Open can of paint in top right of photo is 25-30% full of free-flowing paint liquids. Other cans appear to be empty as they are on their sides and no free liquid has drained from them.	
Photo #11 of 20 Paint Locker room 10:31 a.m.	Paint contaminated tape, rags, filters, empty container, and PPE debris.	
Photo #12 of 20 Paint Locker room 10:32 a.m.	However, photos 9, 10, and 11 all show open containers.	

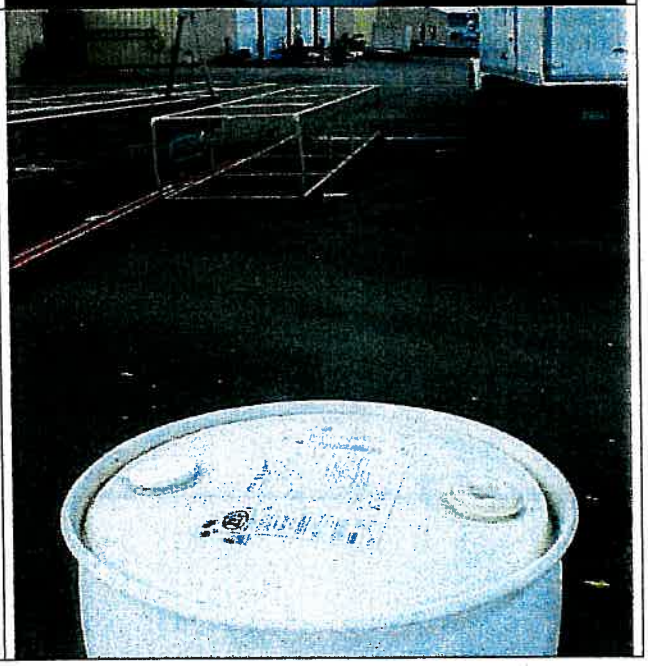
Photo # Area	Notes/Descriptions	Photographs
Photo #13 of 20 Paint Locker room 10:33 a.m.	Various one gallon and smaller items determined to be no longer useful due to their age. Expiration dates observed were for 2004 and earlier. Many are rusted, one can is clearly bulging.	
Photo #14 of 20 About 80 feet north of Building C. 10:41 a.m.	Poly drum partially full of dark liquid, possibly diesel fuel, that is labeled as a corrosive and poisonous product from ZEP. Storm drain to bay is approximately 20 feet down grade from this drum.	
Photo #15 of 20 About 80 feet north of Building C. 10:41 a.m.	Drum of alleged diesel fuel was placed in a poly drum that formerly contained a corrosive and poisonous product from ZEP. Storm drain is at far end of wheeled cart. All storm drains here go to the bay.	

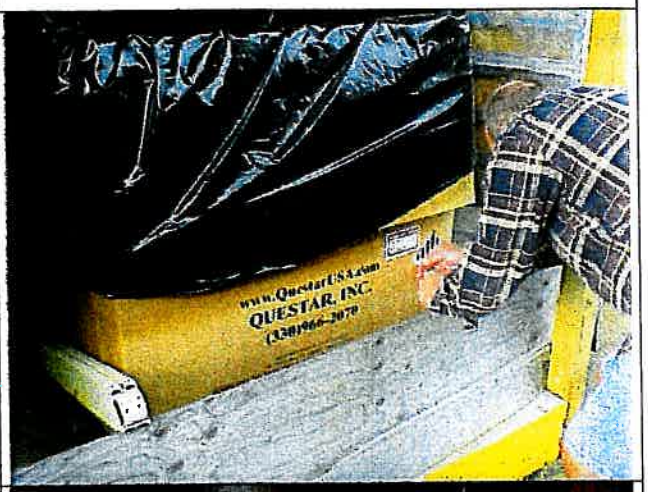
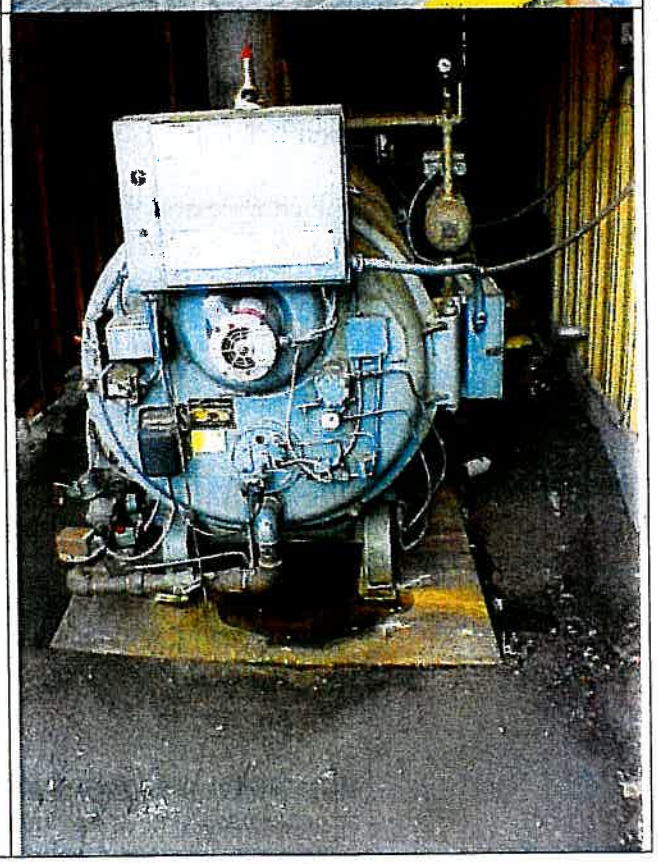
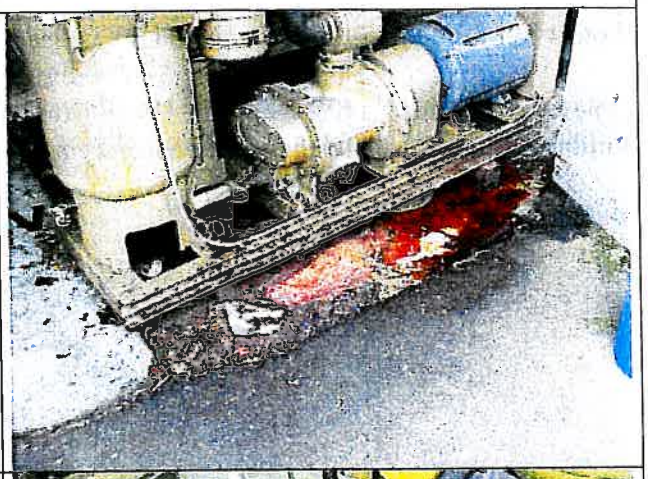
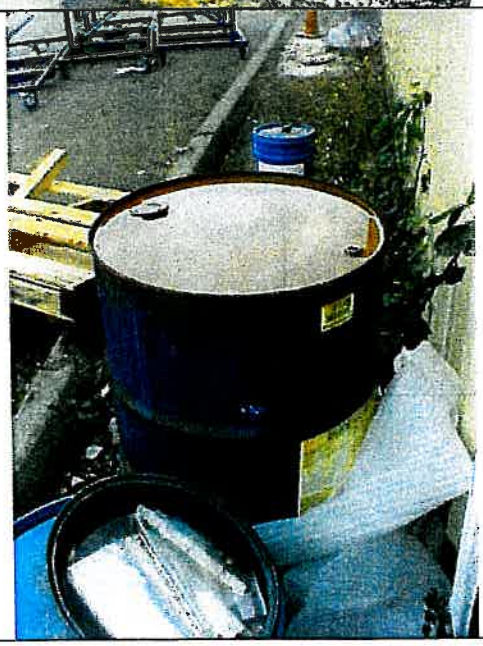
Photo # Area	Notes/Descriptions	Photographs
Photo #16 of 20 Alley way between Buildings B and C. 10:46 a.m.	Sludge container was open and had no labels. . Inspectors provided Mr. Donaldson with labels and he is applying labels in this photo.	
Photo #17 of 20 Boiler Shed in alley way between Buildings B and C. 10:51 a.m.	Boiler on pad which appears to be settling. Water leaking from the boiler may be causing mortar leaching on the pad.	

Photo # Area	Notes/Descriptions	Photographs
Photo #18 of 20 Compressor Shed in alley way between Buildings B and C 10:53 a.m.	Compressor site with leaking, puddled oil on the ground. The oil appears to have stained the asphalt in front of the doorway.	
Photo #19 of 20 Compressor Shed in alley way between Buildings B and C 10:54 a.m.	Open, unlabeled bucket of used oil under a piece of equipment to the right of the compressor in photo 18. The compressor oil leak was four to six feet in length – note liquid in left foreground.	
Photo #20 of 20 Outside North end of Building C 10:57 a.m.	Blue drum with rusting top is approximately ½ full. Product label reads: "Duplicating Fluid 5 Anhydrous" with the manufacturer's name – ChemCentral. Blue bucket in background is approximately ½ full of unknown substance. The label was illegible.	

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

November 7, 2007

CERTIFIED MAIL
7007 0220 0004 7250 2570

Mr. Charles Souder
TC Systems
1032 W Marine View Dr
Everett, WA 98201

Dear Mr. Souder:

RE: Immediate Action Required
Dangerous Waste Compliance Inspection at TC Systems
RCRA ID# WAD 088 722 947 on November 6, 2007

Thank you for your staff's time during the recent compliance inspection. The purpose of this inspection was to determine compliance with the Washington State Dangerous Waste Regulations (Chapter 173-303 WAC). These regulations establish a system for safe and responsible management of dangerous waste.

There were several areas of non-compliance with the Dangerous Waste Regulations at TC Systems observed during the inspection. This letter is provided in advance of the Compliance Inspection Report to give you notice of several actions to be taken in order to mitigate potential environmental threats. Please see that the following actions are completed immediately upon receipt of this letter.

1) WAC 173-303-170(3) and by reference 200(1)(a): Dangerous waste was accumulated on-site for more than 90 days.

Drums and totes in the Hazardous Waste Accumulation Area are dated 8/14/07, which means the 90 day accumulation time limit will be exceeded after next Monday, November 11th. This time limitation was discussed with Guy Donaldson, QA Manager, during yesterday's inspection.

These wastes must be shipped before November 12th.

2) WAC 173-303-145(3): For spills and discharges, the responsible person must take appropriate mitigation and control actions.

Oil that has spilled/leaked from the old compressor is still puddled on the ground in the compressor shed between Buildings B & C.

Immediately upon receipt of this letter, clean up the spilled oil in the compressor shed.

3) WAC 173-303-170(1) and by reference 070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes.

The designation status has not been determined for the following: The drum of "blasting dust" in satellite area of Building B: the paint contaminated tape, gloves, filters, and other debris in the trash can in the paint locker; the cart full of expired materials in the paint locker; the white drum that is ¼ full, possibly of diesel fuel, outside behind the buildings; and the blue drum and blue bucket outside Building C.

Immediately upon receipt of this letter move the three containers that are out back inside the buildings. Immediately upon receipt of this letter, provide to the Department documentation that samples have been sent to an accredited lab or that designation of the solid wastes listed has been determined in another manner. This documentation shall include, but not be limited to, copies of any contracts with testing laboratories and a written description of how the generator determined designation status.

4) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste.

The following containers were open during yesterday's inspection: 5 drums of used oil in the satellite area of Building B; the bucket of used oil in the compressor shed; the open funnel in the liquid paint waste drum in the paint locker; and the open 1/3 full can of paint in the trash can in the paint locker.

Immediately upon receipt of this letter, ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5).

5) WAC 173-303-200(1)(c) & (d) as referenced by 170(2): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste, nor with the accumulation start date.

Numerous containers of dangerous waste were lacking proper labeling. These include: Buckets of paint/solvent waste in the paint booths (these do not need a start date); bagged paint booth filters; one drum of liquid paint wastes in the "Satellite Area" in Building B did not have a start

date; all three 55-gallon drums of paint waste (and floor sweepings) in the paint locker and all the buckets of paint solids in the paint locker.

Immediately upon receipt of this letter, adequately label all drums containing dangerous waste with the words "Hazardous Waste", the appropriate risk label, and the accumulation start date.

These and the remaining conditions not in compliance will be listed in the Compliance Report that will follow this letter soon. To correct these items of non-compliance, you are required to complete the actions needed to achieve compliance as listed in this letter and the Compliance Certificate portion of the Compliance Report within the specified timeframes. Please be advised that failure to correct these items of non-compliance may result in the issuance of an administrative order and/or penalty as provided by the Revised Code of Washington, Sections 70.105.080 and/or .095 (Hazardous Waste Management Act).

Please do not hesitate to contact me at dayd461@ecy.wa.gov or (425) 649-7090 should you have questions or require clarification of any items in this letter.

Sincerely,

Daylin Davidson, Hazardous Waste Compliance Inspector
Hazardous Waste and Toxics Reduction Program

DD:SA

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

February 26, 2008

CERTIFIED MAIL
7007 0220 0004 7250 3454

Charles Souder
TC Systems
1032 W Marine View Dr
Everett, WA 98201

Dear Mr. Souder:

RE: Dangerous Waste Compliance Inspection at TC Systems
RCRA ID# WAD 088 722 947 on November 6, 2007

Thank you for your submittal received January 30, 2008. However, *a number of items still remain delinquent*. These are outlined below:

Item 3 – Only information regarding the designation of the blast dust was provided. What about the paint contaminated tape, gloves, filters, and other debris in the trash can in the paint locker; the cart full of expired materials in the paint locker; and the blue drum and blue bucket outside Building C? You must submit documentation of designation of all of these wastes.

Items 4-6, 9-11, and 15 – As stated in the compliance certificate, photos were required of all of these items to show they were corrected before being shipped off site. Additionally no information was provided regarding the 55-gallon drum of paint solids (item #4). Provide photos of new containers for each of these items.

Items 8 – Again, no photo was provided to show proper labeled of the spent antifreeze and the bill of lading provided only shows that used oil was shipped, not antifreeze.

Item 13 – Weekly inspection logs provided are for 12/13/07, 1/14/08, and 1/20/08. What about all the weeks between 12/13/07 and 1/14/07?

Item 14 – You showed you had ordered a spill kit. You must follow up with evidence that the spill kits have been delivered and is set up in all proper locations. Please submit photos.

Item 17 – The photo of the box of bulbs is too far away to see if the box is labeled and/or dated.

Item 19 – TC Systems has incorrectly filed as a Medium Quantity Generator (MQG) for 2005, 2006, and 2007. Manifests seen on site by inspectors prove the facility accumulated over 2,200 pounds of dangerous waste on site each of those years, making the facility a Large Quantity Generator (LQG). All three annual reports must be revised to show the correct generator status.

Item 21 – The Training Plan provided did not include any records to demonstrate any training had been conducted (individual training records) and did not specify what training "Level 3" employees will receive.

Lastly, as directed in the compliance certificate, you must submit the completed compliance certificate found at the end of the report. Resolution of and a description of actions taken to resolve the items described in this letter must be submitted to Ecology no later than March 12th, 2008.

Please do not hesitate to contact me at DayD461@ecy.wa.gov or (425) 649-7090 should you have questions or require clarification of any items in this letter.

Sincerely,

Daylin Davidson, Hazardous Waste Compliance Inspector
Hazardous Waste and Toxics Reduction Program

DD:SA

Washington Department of Ecology
Hazardous Waste & Toxics Reduction Program
Compliance Report

Site: TC Systems **RCRA ID#: WAD 088 722 947**

Inspection Date:	July 8, 2008
Site Contacts:	Charles Souder
Phone:	(425) 258-4055 FAX: (425) 252-6855
E-mail:	ccsouder@hotmail.com
Site Location:	1032 W Marine View Dr Everett, WA
At This Site Since:	1993 NAICS#: 332813
Generator/Site Status:	LQG Electroplating, Plating, Polishing, etc.

Ecology
Lead Contact: Daylin Davidson Phone: (425) 649-7090 FAX: (425) 649-7218
E-mail: DayD461@ecy.wa.gov Other Representatives: Warren Walton
Report Date: July 22, 2008
Report By: Daylin Davidson

_____ _____
(Signed) (Date)

Facility Background:
TC Systems is located near the Everett Marina on West Marine View Drive. Employee numbers vary between twelve and twenty-two working the day shift five days a week. TC Systems supports the aviation (primarily Boeing) and boating industries by chemically treating and painting metal parts using their chemical line and paint booths. Waste water from the tank line is pre-treated to meet local discharge limits and discharged under a permit with the City of Everett. A limited amount of sand blasting is done here. TC Systems received Hazardous Waste Compliance inspections from the Department of Ecology in 1997, 1998, 2003, 2006 and 2007.

Inspection Summary:
We arrived on site at 9:20 a.m. and asked to speak to Charles Souder, the General Manager. We met briefly with Charles Souder, then were joined by Robert Deatherage and Les Deatherage. We were told Robert has been receiving training as he has taken over responsibility for hazardous waste management at the facility. We explained the reason for our visit to Charles, Robert, and Les and proceeded on a site tour without Charles.

We knew the following about the facility's processes and waste streams from previous inspections:

- Filter press sludge from the treatment of waste water contains chromium and is the largest waste stream generated at this facility.
- Liquid paint and solvent (including MEK) waste is the second largest waste stream.
- Floor sweeping and paint-contaminated solids are also managed as dangerous wastes.
- Used oil from compressors, equipment, and one company truck is also stored at the facility, as well as spent antifreeze.
- Paint booth filters are managed as dangerous waste for heavy metals.
- Spent fluorescent bulbs are managed as universal waste.
- Paint cans are drained and thrown in the trash.

Records Review
We went to the upstairs office to review records. Weekly inspection logs for the last few months were reviewed and were complete. We reviewed the manifests for 2008, which clearly demonstrated the facility was an LQG (large quantity generator) for this year. (A shipment in April of 2008 exceeded 2,200 pounds, thus the large quantity generator regulations currently apply.) We noted four manifests did not have the final signed copies. The

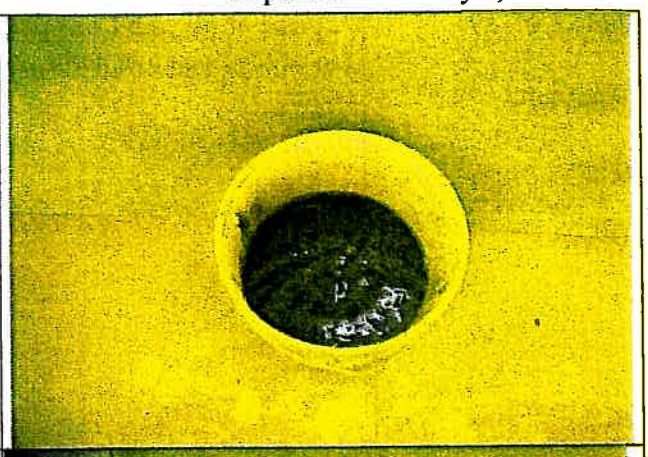
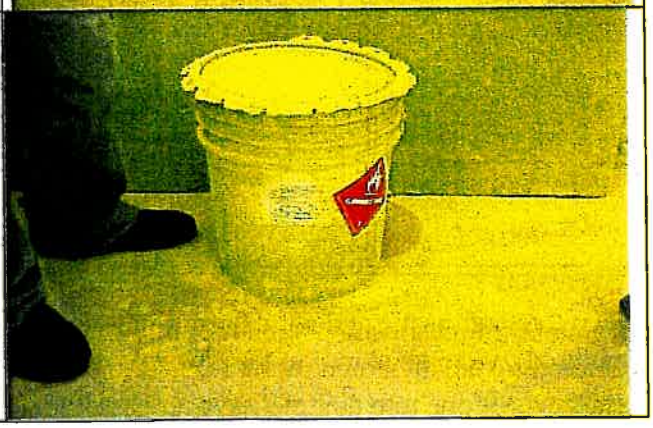
facility's generator status was revised for 2007 and 2006 on their Site Identification Form to indicate that they were a medium quantity generator. However, the manifest records show that the facility was a large quantity generator in 2007 due to waste shipments larger than 2,200 pounds, exceeding the accumulation limit for medium quantity generators. In 2006, their first shipment of two tote sacks of chromium sludge hazardous waste was in the amount of 3,200 pounds, exceeding the 2,200 pound accumulation limit for a medium quantity generator and making them a large quantity generator for 2006. We discussed the contingency and training plans. Robert told us he had received training in April, but that was all. Robert and Les both acknowledged that the contingency plan had not been updated to reflect the changes from the previous hazardous waste manager to Robert as the emergency coordinator and point of contact.

Paint Booth

We went into Paint Booth # 4 and Robert showed us two drums used to accumulate mastic and other solid debris contaminated with chromium and paint cans. The mastic debris had no hazardous waste label, but Ecology provided a label and Robert applied it while we were there, though he did not indicate the drum contents on the hazardous waste label. (See photos #1 & 2.) Both drums were open.

Photo 1 of 19 9:54 a.m. In Building C Inside paint booth # 4.	Robert Deatherage of TC Systems was given labels by Ecology inspectors to apply to hazardous waste drums containing contaminated solid debris (tape, gloves, etc.) and empty paint cans. Note – There is no lid for either drum.	
Photo 2 of 19 9:55 a.m. Bldg C Inside paint booth # 4.	A hazardous waste label was applied to the left drum in our presence, but not filled out. Right drum is also labeled "garbage".	

Robert said that the waste gun cleaner was generated in the booths, and then stored in buckets until the end of the day. He said they are then emptied into the 55-gallon drum in the paint locker. We observed the waste gun cleaner stored in a five-gallon bucket with no lid. Robert found a lid and set it on top (still not closed). The bucket was improperly labeled as "filter cake" (see photos # 3 & 4 below).

Photo 3 of 19 9:57 a.m. Bldg C Inside paint booth # 4.	Paint gun wash out and paint solids were found in this open 5-gallon plastic bucket. The solvent being used for paint gun wash out is MEK.	
Photo 4 of 19 10:02 a.m. Bldg C Inside paint booth # 4.	This is the same container as in photo 3 of 19 (above). The HW label reads filter cake. But contents are clearly a flammable liquid. The lid placed on the container during the inspection is ill fitting and would not contain the liquid contents if knocked over.	

Hazardous Waste Accumulation Area (HWAA)
A tote of chromium-contaminated metal crushed cans was lacking a lid in this area. Robert put a piece of plywood on top of the tote while we were there. (See photo #5 & 6 below.)

Photo 5 of 19 10:06 a.m. Bldg C HWAA	Tote contains mastic, paint can lids, and crushed paint cans. It is labeled properly but does not have a lid.	

Photo 6 of 19 10:06 a.m. Bldg C HWAA	A piece of plywood was placed on top of the open tote acting as a cover.	

Two totes of mastic and solid chromium-contaminated debris, plus two more bags on the floor (not pictured), were all stored in the HWAA. All were missing hazardous waste labels, risk labels, and start dates except one tote that did have a risk label. (See photos #7 & 8 below.)

Photo 7 of 19 10:09 a.m. Bldg C HWAA	The contents of this bag (mastic debris) will be crushed so they will fit in the bag. Once the bags are compacted, they will fit in the soft shipment tote. The tote has a risk label, but no hazardous waste label or start date.	

Photo 8 of 19 10:10 a.m. Bldg C HWAA	More mastic debris in another 'open' tote without a hazardous waste label, risk label, or start date. Two more bags of HW debris were stored on the floor in this area. (not shown.)	

A tote of paint booth filters was properly labeled, dated, and closed. But a box of more filters was stored on the floor in front of the tote and these were not labeled, dated, or closed. Robert and Les speculated about the possibility of reusing the filters in the box, but said it was unlikely this would be a viable alternative to disposal.

Photo 9 of 19 10:11 a.m. Bldg C HWAA	Paint booth filters are over filling this box. Box on floor in foreground contains more filters with no labels or start dates.	

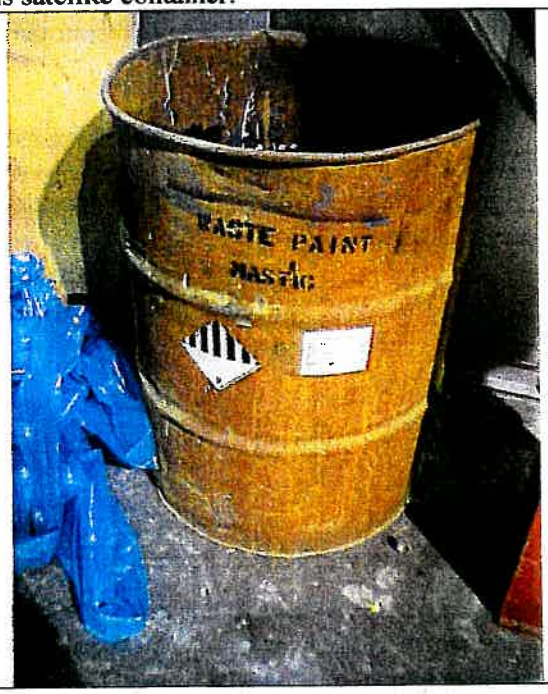
Two drums of "rusty water" (per Robert and Les) had been pumped out of the secondary containment berm outside, at the waste water treatment tank system area, and Les said the waste would be disposed of as dangerous waste. Neither of the drums were labeled, dated, or properly closed. (See photo #10.)

Photo 10 of 19 10:14 a.m. Bldg C HWAA	Berm area clean out fills both drums. We were told this would have to be processed as a waste on site. No labels are visible. A locking ring leans against the open drums. The drums are not closed.	
Photo 11 of 19 10:17 a.m. Bldg C HWAA	All of the boxes of spent fluorescent bulbs to the left in the photo are properly labeled. The standing spent bulbs are not protected from breakage, are not labeled as Universal Waste Bulbs, and have no accumulation start date displayed.	

Robert showed us a spill kit and a fire extinguisher near this area. We noticed some spent fluorescent light tubes stored here. Most of the bulbs were in labeled and dated boxes, but, as shown in photo #11 above, several were stored in an unsecured box with no label or start date.

Building C "Mezzanine"

One satellite accumulation container used to collect mastic waste was located in this area. We discovered it was properly labeled after Robert turned the drum around, as the labels had been facing the wall, but the can had no lid and it was unclear where the operator and workstation were for this satellite container.

Photo 12 of 19 10:21 a.m. Bldg C Mezzanine	An open satellite drum that collects contaminated striping tape. Photo taken after can was turned to make labels visible. Outside oven # 4	

Former Satellite Collection Area in Building C

This area, which was a satellite collection area on our last visit, now held mostly product. However, we noticed an open, unlabeled bucket of some material that had hardened. Neither Robert nor Les knew what was in the bucket.

Photo 14 of 19 10:26 a.m. Bldg C Former Satellite Collection Area	Hardened unknown substance in 5-gallon bucket.	

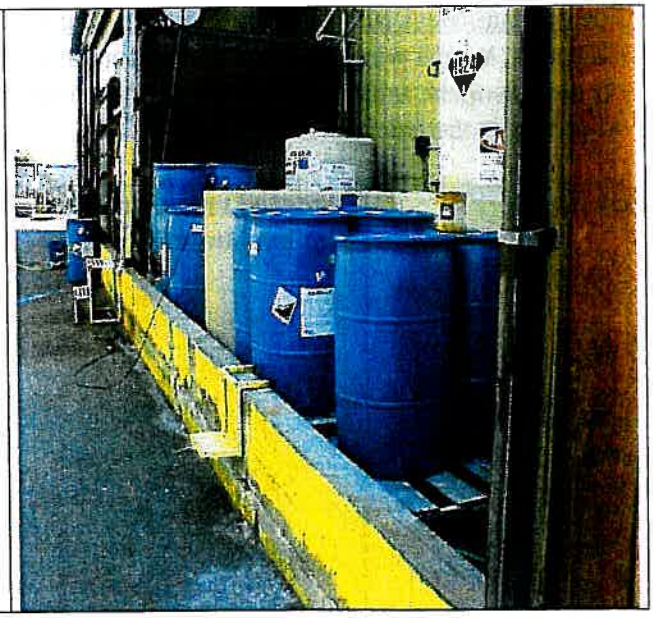
Tank Area Between Buildings B and C

We went to the alley way between Buildings B and C where the sludge from the waste water treatment process is collected and batch processed in the filter press. The solids are hazardous waste due to TCLP metal content. From the filter press, the solids are dropped into a tray under the filter press and accumulated in a bulk solids

container. The bulk solids container is on a skid pallet and stored under cover in a shed against Building C. We saw one sludge sack/tote in this area. The open container was approximately half full of sludge and while it did have proper labels and accumulation start date, these were only visible after Robert removed the tarp on the side of the shed and lifted up the flaps on the side of the tote.
In this same shed we noticed a drum that had "soap sludge" from the waste water treatment process that was open, had no labels, and no start date; though Les told us it is a dangerous waste, and would likely be added into the filter press solids/sludge.

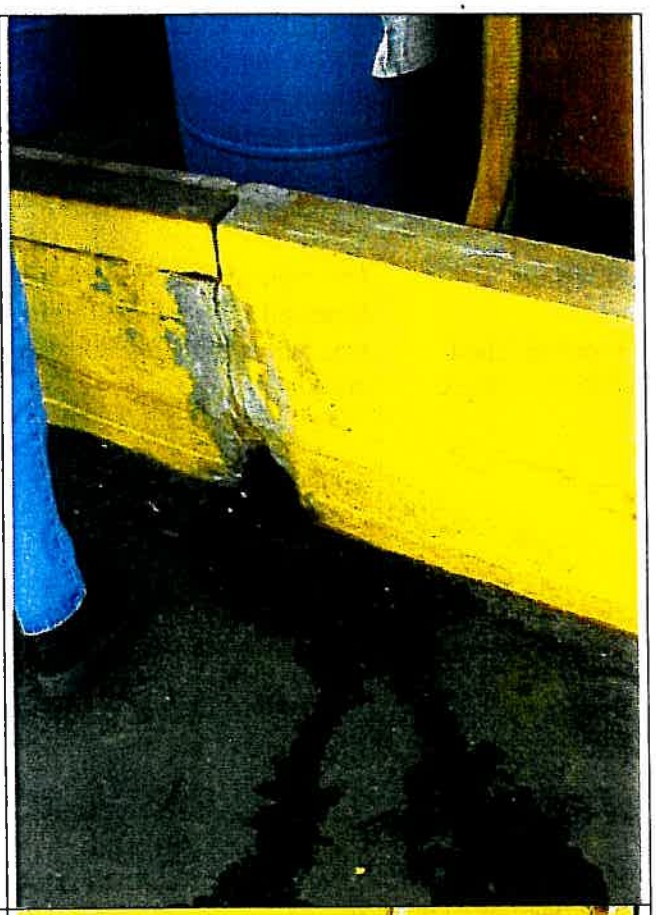
Photo 7 of 11 10:49 a.m. At NE corner of Bldg C in alley way, in filter press shed.	"Soap sludge" from operations in Building B. Personnel on site suggested this had been covered with water and that the water had evaporated away. Ecology was told this waste was to go into a nearby chromium sludge tote.	

The alley had several storm drains that were labeled as going to the local stream or public waterway. The waste water treatment system was constructed inside a berm along most of the length of the alley against Building B. A bit less than half of the tank area was covered, thus allowing rain water to enter the containment area.

Photo 17 of 19 10:34 a.m. Treatment and chemical storage area In alley against Building B	Containment for outside area at Bldg B - Looking generally north.	

Robert told us he pumps out the containment area regularly, routing the liquids back into the treatment system. He also told us there are float valves in place that send an alarm (a phone call) to the front desk and then to the owner's personal phone if the levels in the containment ever get too high. I asked Robert if he did any inspections of the tanks or the containment. He said he keeps an eye out, but the tanks never leak, and he does not keep any

logs of these visual assessments. We pointed out the cracks in the containment wall that were obviously leaking (as shown in photos #18 & 19 below) and Les admitted the wall needed some patching.
I also asked Robert if any of the tanks had received any engineering or integrity testing, or if the containment area was lined. He indicated he was unsure, but he did not think so.

Photo 18 of 19 10:37 a.m. Looking at containment area in waste water treatment area more closely. In alley against Building B	Containment wall seen in photo 17 above. The wall has cracked and does not have containment of rainwater or other liquid.	
Photo 19 of 19 10:37 a.m. Looking at containment area in waste water treatment area more closely. In alley against Building B	Outside containment wall for Bldg B. The wall shows signs of not being properly moisture sealed.	

We noted liquids accumulated in low spots inside the containment berm.

In this same alley, we saw a shed that was housing compressors. There was red/orange liquid on the ground shown in photo #2 below. We had observed the same problem on our previous inspection in November of 2007 and cited TC Systems for failure to take action to mitigate a spill of used oil. Mr. Charles Souder submitted a response to that violation on January 24, 2008 stating that "this compressor will remain out of service until repairs have been made to eliminate the leaking oil". Yet, we observed the same compressor exhibiting the same leak. It appears there were significant gaps in the floor surface in this area and leaked oil was migrating into the soil.

Photo 2 of 11 10:42 a.m. Compressor shed outside Building C	A compressor that leaks oil. This unit was sitting on what appeared to be a dirt floor in an area where the asphalt had broken away.	

Additionally, there was a clear path of liquids flowing from the leaking compressor area to the nearest storm drain as shown in photo #6 below.

Photo 6 of 11 10:46 a.m. Storm drain between building B and C	Looking up hill toward the compressor shed area. Note: liquid trail to the storm drain from the covered shed.	

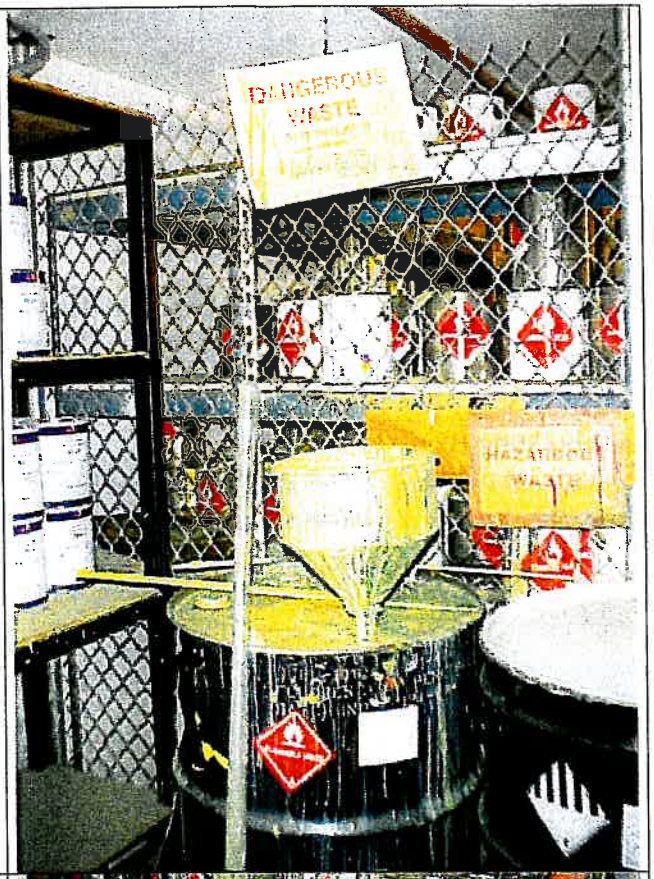
Building B Chem Line

We passed the Chem Line on our way to the paint locker inside building B and were joined by Charles Souder. I asked Les how often the sludge in the containment area under the chem line is cleaned out and he said he thought it was done two to three times per year. We observed several inches of sludge underneath all the tanks. An example is shown in photo #8 below.

Photo 8 of 11 10:59 a.m. Inside building B on the west side of the process tanks.	Inside building B on the west side of the process tanks. This photo was taken near the base of the stairs up to the tanks. There are several inches of sludge in the containment area.	

Paint Locker Room in Building B

The last place we visited was the paint locker room. There was a secondary containment pallet holding two 55-gallon drums and two five-gallon buckets. The 55-gallon drum on the left was for accumulating liquid waste paint and thinner from gun cleaning. It had an open funnel and the other bung was open as well. It was labeled and dated. The 55-gallon drum on the right was for accumulating paint solids from the paint pot bottoms. Its lid was only resting on top of the drum, but it was also properly labeled and dated. Two five-gallon buckets of hazardous waste paint solids were open with no labels or accumulation start dates and were also stored on the secondary containment pallets. Mr. Souder told us these were left to dry out before being scraped into the solid paint waste drum. We advised Mr. Souder, Robert, and Les that allowing paint waste containing listed solvents (in this case MEK) was illegal disposal to the air and was not in compliance with dangerous waste regulations. Robert began scraping the contents of the buckets into the solid paint waste drum while we were there.

Photo 9 of 11 11:03 a.m. Bldg B – Paint Locker	Open funnel sits screwed in to the small lid bung on left drum, which is for liquid paint wastes. Larger bung on this drum is open with lid resting on top of drum. Right drum was full of paint solids with the lid just resting on it.	
Photo 10 of 11 11:03 a.m. Bldg B – Paint Locker	Both drums are properly labeled and with start dates as these cannot be a satellite accumulation area. However, the two five-gallon buckets in front contain hazardous waste intended to be air-dried (evaporated) and then scraped into the drum on the right in this photo.	

Another full 55-gallon drum was stored near the door. It was properly labeled and dated as containing chromium contaminated floor sweepings, but the lid was not secured onto the containers.

Photo 11 of 11 11:12 a.m. Bldg B – Paint Locker	Properly labeled drum of dangerous waste floor sweepings. The lid is only resting on the drum, not properly closed.	

We left the site at 11:45 a.m.
On July 15th, I sent an e-mail to Robert requesting copies of the missing final copies of four manifests; the training plan; and general facility inspection logs. As of the date of this report, no response was received.

Additional Information

During our walk through, we noticed liquid products being off-loaded directly over a storm drain.
We recommended to Robert and Les that a mat be put over the drain during unloading operations to prevent any accidental spills from entering the storm drain.

Photo 15 of 19 10:32 a.m. At the North end of Bldg C – delivery area	It was recommended to TC Systems personnel that covering the storm drain immediately beneath liquid chemical unloading areas is wise. Bulk chemical totes with 250-300 gallon capacity are frequently unloaded in this area.	

COMPLIANCE PROBLEMS

The following conditions identified during the inspection were not in compliance with Dangerous Waste and/or other environmental laws. Each problem is covered in three parts: (1) the **citation from the regulations**, (2) the specific observations from the inspection, and (3) the *corrective measures* needed to fix the problem and achieve compliance.

1) WAC 173-303-141(1): Illegal disposal of hazardous waste. **REPEAT VIOLATION**

- Spilled compressor oil (not being recycled) has been allowed to migrate into the soil and the nearby storm drain.
- Soap sludge stored in open drum in filter cake shed has been allowed to evaporate.
- Paint wastes containing MEK solvent have been routinely allowed to evaporate.

Immediately do not allow any more dangerous waste to evaporate or enter the soil or storm drain. Dangerous waste may only be sent to permitted hazardous waste treatment, storage, or disposal facilities.

2) WAC 173-303-515(6) and by reference 40 CFR Part 279.22(d): A used oil generator must respond to releases of used oil to the environment and perform the following cleanup steps: a) stop the release; b) contain the released used oil; c) clean up and manage properly the released used oil and other materials; and d) repair or replace any leaking used oil storage containers or tanks prior to returning them to service. **REPEAT VIOLATION**

Oil that has spilled/leaked from the compressor that was STILL being used after Ecology was told it would not, was left puddled on the ground again in the compressor shed between Buildings B & C.

Ensure that any old releases of used oil and contaminated soil are cleaned up and properly managed. In case of oil releases in the future, immediately perform the cleanup steps listed. Submit photos showing the spilled oil in the compressor shed has been cleaned up as well as photos of the containers used to hold the clean up materials to be disposed of properly.

3) WAC 173-303-170(1) and by reference 070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes. **REPEAT VIOLATION**

The designation status has not been determined for the bucket of unknown material that had hardened in the former satellite area of Building C.

Provide to the Department documentation that designation of the solid wastes listed has occurred. This documentation shall include, but not be limited to, copies of the analytical results of designation testing and any contracts with testing laboratories.

4) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste. **REPEAT VIOLATION**

The following containers were open during the inspection: the 5-gallon buckets of dirty solvent in the paint booths; the open funnel (and other bung) in the liquid paint waste drum in the paint locker; the 55-gallon drum of paint solids in the paint locker; the 5-gallon buckets of paint solids in the paint locker; the drum of floor

sweepings in the paint locker; all cans and totes used to accumulate contaminated solid debris (mastic, sticks, gloves, and paint cans); the two drums of "rusty water" in the HWAA; the drum of soap sludge and the tote of sludge outside between buildings B & C.

Ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5). Submit photos of all the containers listed above to demonstrate compliance with this item. (Multiple resources for finding appropriate/practical lid options were e-mailed to Robert and Mr. Souder on July 14, 2008.)

5) WAC 173-303-200(1)(d) as referenced by 170(2): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste.
REPEAT VIOLATION

Numerous containers of dangerous waste were lacking proper labeling. These include: Buckets of paint/solvent waste in the paint booths (one was labeled as "filter cake"; one can of mastic waste in Paint Booth #4; box of paint booth filters in HWAA; two totes and three bags of mastic debris in the HWAA; two drums of "rusty water" in the HWAA; and two buckets of paint solids in the paint locker. Additionally, the box of sludge between Buildings B & C was labeled and the drum in the mezzanine for mastic waste was labeled, but these labels were not visible.

Adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d). Submit photos of all the containers listed above to demonstrate compliance with this item.

6) WAC 173-303-200(1)(c) as referenced by 170(2): Failure to mark each container with the accumulation start date.
REPEAT VIOLATION

Numerous containers of dangerous waste were lacking start dates. These include: two totes of mastic/solid debris in the HWAA; two bags of mastic/solid debris in the HWAA; one box of paint booth filters in the HWAA; two drums of "rusty water" in the HWAA; one drum of soap sludge in the filter cake shed between building B & C; and two buckets of paint waste in the paint locker.

Ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Submit photos to demonstrate compliance with this item.

7) WAC 173-303-200(2)(a) as referenced by 170(2): Failure to meet the satellite accumulation area standards for containers.
REPEAT VIOLATION

Though the drum in the mezzanine is not dated because it is being used as a satellite container, it must meet the definition of "Satellite Accumulation". This requires the container to be at or near the point of generation, and it was not clear where the point of generation for this container was. Also, the container had no lid.

Comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date; (c) insuring containers are in good condition, handled safely, and compatible with waste stored; and (d) keeping containers closed at all times.

8) WAC 173-303-573(9): Universal wastes must be managed in a way that prevents releases of universal waste or component of a universal waste to the environment, as required by this subsection.

Spent fluorescent light tubes in the small box in the HWAA were not secured.

Properly manage universal waste in a way that prevents releases to the environment, as described in WAC 173-303-573(9). Submit photos to demonstrate compliance with this item.

9) WAC 173-303-573(10): Universal wastes must be properly labeled or marked to identify the type of universal waste as required by this section. REPEAT VIOLATION

Spent fluorescent light tubes in the small box in the HWAA were not labeled and had no start dates.

Label or mark the universal waste lamps with the words "Universal Waste Lamp(s)", "Waste Lamp(s)", or "Used Lamp(s)" and the date the first bulb went in the container to demonstrate compliance with the 12-month accumulation time limit. Submit photos of the labeled containers to demonstrate compliance with this item.

10) WAC 173-303-200(1)(e) and by reference 320(1): General facility inspections were not conducted. REPEAT VIOLATION

Records of general facility inspections were not provided.

Within 30 calendar days of receipt of this letter, plan, conduct, and document a general facility inspection. Submit a copy of the plan and log sheet. Determine the appropriate interval for future inspections and inform Ecology of this interval. Inspections must be frequent enough to identify and correct problems before they harm human health or the environment.

11) WAC 173-303-170(2) and by reference 060(5) and 220(1): A Dangerous Waste Annual Report was not submitted to Ecology according to the Instructions on the form. REPEAT VIOLATION

The facility's generator status was revised in January of 2008 for 2007 and 2006 on their Site Identification Form to indicate that they were a medium quantity generator, though they were an LQG.

Submit to the Department a revised Dangerous Waste Annual Report for the year(s):2006 & 2007 to revise generator status back to LQG. This can be done online via Turbowaste.net.

12) WAC 173-303-200(1)(e) and by reference 350(3): An adequate contingency plan was not maintained or available. REPEAT VIOLATION

Robert and Les both acknowledged that the contingency plan had not been updated to reflect the changes from the previous hazardous waste manager to Robert as the emergency coordinator and point of contact.

Amend the current contingency plan or spill prevention control and countermeasures (SPCC) plan to update it with the most current and accurate information to comply with WAC 173-303-350 and WAC 173-303-360. Submit a copy of the amendments.

13) WAC 173-303-330 as referenced by 200(1)(e): Training requirements were not met. The facility should have a training program, a written training plan, and keep training records. REPEAT VIOLATION

The training program and training records (other than one certificate for Robert Deatherage) were not provided to Ecology.

Develop and submit a dangerous waste training program which shall include a written training plan and records showing all employees that handle hazardous waste have received relevant training per WAC 173-303-330.

14) WAC 173-303-170(2) and by reference 180(3) and 210(1): The appropriate signed manifests were not kept by the generator.

Four manifests were missing the final signed copies: #001368741; 001368742; 001368825; and 001368983.

Obtain copies of manifests listed above for shipments of wastes from your facility. Implement procedures to ensure that copies of the signed manifests are kept on-site for the required five years. Submit copies of the listed manifests to Ecology.

15) WAC 173-303-802(5): Failure to comply with permit by rule requirements for totally enclosed facility, elementary neutralization or waste water treatment units.

- Volume of secondary containment for waste treatment system tanks in not adequate to hold 100% of the largest tank or 10% of the total volume.
- Treatment system and secondary containment system is not totally enclosed – only partially covered, allowing rainwater to compromise system.
- Tanks have not been integrity tested or certified by an engineer.
- Daily tank inspections are not being conducted or logged.
- Secondary containment berm is not sealed.
- Secondary containment system has not been maintained, and has already failed in several places.

In order to avoid revocation of Permit by Rule, you must comply with permit by rule requirements by correcting all of the deficiencies noted above. A schedule for accomplishing these corrections may be submitted by the due date for this report providing a timeline for corrections, subject to approval by Ecology.

16) WAC 173-303-640(4)(c)(iv): Leaked waste or precipitation from secondary containment should be removed within 24 hours, or in as timely a manner as is possible.

We observed several inches of sludge underneath all the tanks.

In order to avoid the containment under the tank line being considered a hazardous waste storage tank, thereby subject to all hazardous waste storage tank requirements, remove all liquid/sludge from the dangerous waste accumulation tank secondary containment and treat or dispose of properly. The containment area must be kept clean and dry at all times to avoid tank requirements. Submit disposal records and photos.

WAD 088 722 947
Inspection Date: July 8, 2008

COMPLIANCE CERTIFICATE

Instructions: **Return this Completed Form**
The problems listed above are repeated below and must be corrected in order to be in compliance with Washington Dangerous Waste Regulations. Complete the shaded portion of the table by initialing and indicating the date each action is completed, and **briefly explain the actions taken for each item in a cover letter.** Mail this completed form, the cover letter, and any requested documentation by ***August 27, 2008*** to: Daylin Davidson, Department of Ecology, Hazardous Waste Program, 3190 160th Avenue SE, Bellevue, WA 98008-5452. *(An extension of the deadlines may be requested. Please e-mail a request to DayD461@ecy.wa.gov before the date specified above.)*

1) WAC 173-303-141(1): Illegal disposal of hazardous waste. **REPEAT VIOLATION**

Immediately do not allow any more dangerous waste to evaporate or enter the soil or storm drain. Dangerous waste may only be sent to permitted hazardous waste treatment, storage, or disposal facilities.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-141(1)	August 27, 2008		

2) WAC 173-303-515(6) and by reference 40 CFR Part 279.22(d): A used oil generator must respond to releases of used oil to the environment and perform the following cleanup steps: a) stop the release; b) contain the released used oil; c) clean up and manage properly the released used oil and other materials; and d) repair or replace any leaking used oil storage containers or tanks prior to returning them to service. **REPEAT VIOLATION**

Ensure that any old releases of used oil and contaminated soil are cleaned up and properly managed. In case of oil releases in the future, immediately perform the cleanup steps listed. Submit photos showing the spilled oil in the compressor shed has been cleaned up as well as photos of the containers used to hold the clean up materials to be disposed of properly.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-515(6)	August 27, 2008		

3) WAC 173-303-170(1) and by reference 070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes. **REPEAT VIOLATION**

Provide to the Department documentation that designation of the solid wastes listed has occurred. This documentation shall include, but not be limited to, copies of the analytical results of designation testing and any contracts with testing laboratories.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(1)	August 27, 2008		

4) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste. **REPEAT VIOLATION**

Ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5). Submit photos of all the containers listed above to demonstrate compliance with this item. (Multiple resources for finding appropriate/practical lid options were e-mailed to Robert and Mr. Souder on July 14, 2008.)

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(b)	**August 27, 2008**		

5) WAC 173-303-200(1)(d) as referenced by 170(2): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste.
REPEAT VIOLATION

Adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d). Submit photos of all the containers listed above to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(d)	**August 27, 2008**		

6) WAC 173-303-200(1)(c) as referenced by 170(2): Failure to mark each container with the accumulation start date.
REPEAT VIOLATION

Ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(c)	**August 27, 2008**		

7) WAC 173-303-200(2)(a) as referenced by 170(2): Failure to meet the satellite accumulation area standards for containers.
REPEAT VIOLATION

Comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date; (c) insuring containers are in good condition, handled safely, and compatible with waste stored; and (d) keeping containers closed at all times.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(2)(a)	**August 27, 2008**		

8) WAC 173-303-573(9): Universal wastes must be managed in a way that prevents releases of universal waste or component of a universal waste to the environment, as required by this subsection.
REPEAT VIOLATION

Properly manage universal waste in a way that prevents releases to the environment, as described in WAC 173-303-573(9). Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-573(9)	August 27, 2008		

9) WAC 173-303-573(10): Universal wastes must be properly labeled or marked to identify the type of universal waste as required by this section. **REPEAT VIOLATION**

Label or mark the universal waste lamps with the words "Universal Waste Lamp(s)", "Waste Lamp(s)", or "Used Lamp(s)" and the date the first bulb went in the container to demonstrate compliance with the 12-month accumulation time limit. Submit photos of the labeled containers to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-573(10)	August 27, 2008		

10) WAC 173-303-200(1)(e) and by reference 320(1): General facility inspections were not conducted. **REPEAT VIOLATION**

Within 30 calendar days of receipt of this letter, plan, conduct, and document a general facility inspection. Submit a copy of the plan and log sheet. Determine the appropriate interval for future inspections and inform Ecology of this interval. Inspections must be frequent enough to identify and correct problems before they harm human health or the environment.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(e)	August 27, 2008		

11) WAC 173-303-170(2) and by reference 060(5) and 220(1): A Dangerous Waste Annual Report was not submitted to Ecology according to the Instructions on the form. **REPEAT VIOLATION**

Submit to the Department a revised Dangerous Waste Annual Report for the year(s):2006 & 2007 to revise generator status back to LQG. This can be done online via Turbowaste.net.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(2)	August 27, 2008		

12) WAC 173-303-200(1)(e) and by reference 350(3): An adequate contingency plan was not maintained or available. **REPEAT VIOLATION**

Amend the current contingency plan or spill prevention control and countermeasures (SPCC) plan to update it with the most current and accurate information to comply with WAC 173-303-350 and WAC 173-303-360. Submit a copy of the amendments.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(e)	August 27, 2008		

13) WAC 173-303-330 as referenced by 200(1)(e): Training requirements were not met. The facility should have a training program, a written training plan, and keep training records. REPEAT VIOLATION

Develop and submit a dangerous waste training program which shall include a written training plan and records showing all employees that handle hazardous waste have received relevant training per WAC 173-303-330.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-330	August 27, 2008		

14) WAC 173-303-170(2) and by reference 180(3) and 210(1): The appropriate signed manifests were not kept by the generator.

Obtain copies of manifests listed above for shipments of wastes from your facility. Implement procedures to ensure that copies of the signed manifests are kept on-site for the required five years. Submit copies of the listed manifests to Ecology.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(2)	August 27, 2008		

15) WAC 173-303-802(5): Failure to comply with permit by rule requirements for totally enclosed facility, elementary neutralization or waste water treatment units.

In order to avoid revocation of Permit by Rule, you must comply with permit by rule requirements by correcting all of the deficiencies noted above. A schedule for accomplishing these corrections may be submitted by the due date for this report providing a timeline for corrections, subject to approval by Ecology.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-802(5)	August 27, 2008		

16) WAC 173-303-640(4)(c)(iv): Leaked waste or precipitation from secondary containment should be removed within 24 hours, or in as timely a manner as is possible.

In order to avoid the containment under the tank line being considered a hazardous waste storage tank, thereby subject to all hazardous waste storage tank requirements, remove all liquid/sludge from the dangerous waste accumulation tank secondary containment and treat or dispose of properly. The containment area must be kept clean and dry at all times to avoid tank requirements. Submit disposal records and photos.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-640(4)(c)(iv)	August 27, 2008		

Washington Department of Ecology
Hazardous Waste & Toxics Reduction Program
Compliance Report

Site: TC Systems **RCRA ID#: WAD 088 722 947**

Inspection Date:	August 19, 2008
Site Contacts:	Charles Souder
Phone:	(425) 258-4055 FAX: (425) 252-6855
E-mail:	ccsouder@hotmail.com
Site Location:	1032 W Marine View Dr Everett, WA
At This Site Since:	1993 NAICS#: 332813
Generator/Site Status:	LQG Electroplating, Plating, Polishing, etc.

Ecology
Lead Contact: Daylin Davidson Phone: (425) 649-7090 FAX: (425) 649-7218
E-mail: DayD461@ecy.wa.gov Other Representatives: Dave Misko
Report Date: September 2, 2008
Report By: Daylin Davidson

_____ _____
(Signed) (Date)

Facility Background:
TC Systems is located near the Everett Marina on West Marine View Drive. Employee numbers vary between twelve and twenty-two working the day shift five days a week. TC Systems supports the aviation (primarily Boeing) and boating industries by chemically treating and painting metal parts using their chemical line and paint booths. Waste water from the tank line is pre-treated to meet local discharge limits and discharged under a permit with the City of Everett. A limited amount of sand blasting is done here. TC Systems received Hazardous Waste Compliance inspections from the Department of Ecology in 1997, 1998, 2003, 2006, 2007, and July 2008.

Inspection Summary:
We arrived on site at 9:00 a.m. for a scheduled meeting with Charles Souder, the General Manager, and Robert Deatherage who has responsibility for hazardous waste management at the facility. We were also joined by Wendee Cook, the representative for General Environmental Management, Inc. (GEM) which is TC Systems hazardous waste vendor. We discussed the compliance history of TC Systems and informed Mr. Souder that Ecology would be issuing formal enforcement in the coming months, likely in the form of an Order and Penalty. Robert told us he had just conducted facility-wide training on proper waste drum management, particularly the requirement to keep the containers closed. He told us all employees are "level one" employees and he is a "level three". No one else at the facility is above a "level one" besides Robert.

Records Review
Robert provided weekly inspection logs for the last nine weeks. We reviewed the four manifests that were missing final copies during the last inspection and found two were still missing. Wendee offered to find those copies and fax them to Ecology.

Building C - Paint Booth
We went into Paint Booth # 4 and Robert showed us two drums used to accumulate mastic and other solid debris contaminated with chromium and paint cans. All containers were closed and labeled.

Building C - Hazardous Waste Accumulation Area (HWAA)
Totes of chromium-contaminated metal crushed cans, mastic and other solid debris were all labeled, dated, and had plywood covers. A tote of paint booth filters was properly labeled, dated, and closed via a double-

bagging system. Two drums of liquid and sludge had been pumped out of the secondary containment berm inside under the chem line. These were labeled, dated, and closed.

Robert showed us a spill kit and a fire extinguisher near this area. Spent fluorescent bulbs were all in labeled and dated boxes.

Building C "Mezzanine"
One satellite accumulation container on wheels, used to collect mastic waste was located in this area. It was properly labeled and closed.

Building C - Can crushing area
Robert told us that he brings the satellite accumulation drums from the rest of the facility to this area to sort the waste and crush the paint cans.

#4 of 8 10:00 a.m. Can compactor area	A total of four open, unlabeled drums of hazardous waste paint cans, mastic, and other chrome contaminated debris were brought here from satellite locations to be sorted, crushed, and/or repackaged before being moved to the HWAA.	

Back Parking Lot

#2 of 8 9:45 a.m. Back parking lot	Drum of unknown liquid with methanol label and flammable risk label. Holes had been punched in the top and on the side just above the first chime.	

Tank Area Between Buildings B and C

We went to the alley way between Buildings B and C where the sludge from the waste water treatment process is collected and batch processed in the filter press. The solids are hazardous waste due to TCLP metal content. From the filter press, the solids are dropped into a tray under the filter press and accumulated in a bulk solids container. The bulk solids container is on a skid pallet and stored under cover in a shed against Building C. We saw one sludge sack/tote in this area. The container was closed and had labels and an accumulation start date.

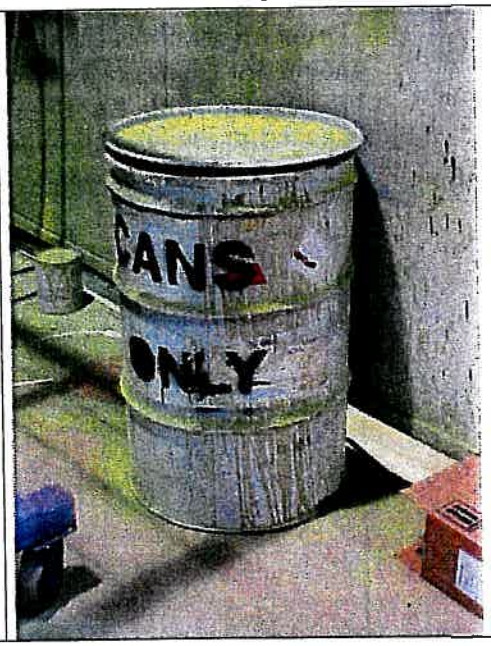
In this same alley, we saw a shed that was housing compressors. There was red/orange liquid on the ground shown in photo #2 below. We had observed the same problem on our previous inspection in November of 2007 and cited TC Systems for failure to take action to mitigate a spill of used oil. Mr. Charles Souder submitted a response to that violation on January 24, 2008 stating that "this compressor will remain out of service until repairs have been made to eliminate the leaking oil". Yet, we observed the same compressor exhibiting the same leak. It appears there were significant gaps in the floor surface in this area and leaked oil was migrating into the soil.

Building B - Chem Line

We passed the Chem Line on our way to the paint locker inside building B and noted all sludge we had previously seen had been removed from underneath the tanks.

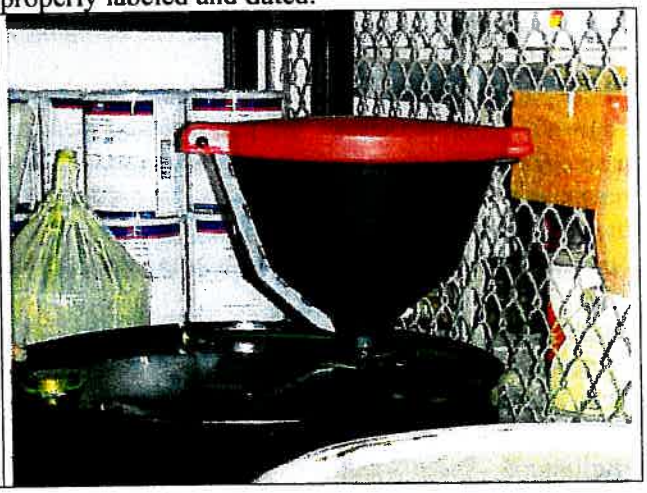
Building B - Paint Booth

Robert began scraping the contents of the buckets into the solid paint waste drum while we were there.

#5 of 8 10:15 a.m. Paint booth	Open drum of hazardous waste paint cans lacking labels.	

Building B - Paint Locker

The last place we visited was the paint locker room. There was a secondary containment pallet holding two 55-gallon drums. The 55-gallon drum on the left was for accumulating liquid waste paint and thinner from gun cleaning. It had a funnel in it but the funnel was not latched or spring-loaded (see photo #6 below). It was labeled and dated. The 55-gallon drum on the right was for accumulating paint solids from the paint pot bottoms. It was closed and was also properly labeled and dated.

#6 of 8 10:24 a.m. Paint Locker	Funnel for drum of paint waste does not have a latch.	

#7 of 8 10:25 a.m. Paint Locker	Accumulation of old paints, one of which was labeled "bad paint".	

Another full 55-gallon drum was stored near the door. It was properly labeled and dated as containing chromium contaminated floor sweepings, and the lid was secured.

We left the site at 10:45 a.m.

Additional Information

COMPLIANCE PROBLEMS

The following conditions identified during the inspection were not in compliance with Dangerous Waste and/or other environmental laws. Each problem is covered in three parts: (1) the **citation from the regulations**, (2) the specific observations from the inspection, and (3) the *corrective measures* needed to fix the problem and achieve compliance.

1) WAC 173-303-141(1): Illegal disposal of hazardous waste. **REPEAT VIOLATION**

- Spilled compressor oil (not being recycled) has been allowed to migrate into the soil and the nearby storm drain.

Immediately do not allow any more dangerous waste to evaporate or enter the soil or storm drain. Dangerous waste may only be sent to permitted hazardous waste treatment, storage, or disposal facilities.

2) WAC 173-303-515(6) and by reference 40 CFR Part 279.22(d): A used oil generator must respond to releases of used oil to the environment and perform the following cleanup steps: a) stop the release; b) contain the released used oil; c) clean up and manage properly the released used oil and other materials; and d) repair or replace any leaking used oil storage containers or tanks prior to returning them to service.
REPEAT VIOLATION

Oil that has spilled/leaked from the compressor that was STILL being used after Ecology was told it would not, was left puddled on the ground again in the compressor shed between Buildings B & C.

Ensure that any old releases of used oil and contaminated soil are cleaned up and properly managed. In case of oil releases in the future, immediately perform the cleanup steps listed. Submit photos showing the spilled oil in the compressor shed has been cleaned up as well as photos of the containers used to hold the clean up materials to be disposed of properly.

3) WAC 173-303-170(1) and by reference 070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes. **REPEAT VIOLATION**

The designation status has not been determined for the bucket of unknown material that had hardened in the former satellite area of Building C.

Provide to the Department documentation that designation of the solid wastes listed has occurred. This documentation shall include, but not be limited to, copies of the analytical results of designation testing and any contracts with testing laboratories.

4) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste. **REPEAT VIOLATION**

The following containers were open during the inspection: the 5-gallon buckets of dirty solvent in the paint booths; the open funnel (and other bung) in the liquid paint waste drum in the paint locker; the 55-gallon drum of paint solids in the paint locker; the 5-gallon buckets of paint solids in the paint locker; the drum of floor sweepings in the paint locker; all cans and totes used to accumulate contaminated solid debris (mastic, sticks, gloves, and paint cans); the two drums of "rusty water" in the HWAA; the drum of soap sludge and the tote of sludge outside between buildings B & C.

Ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5). Submit photos of all the containers listed above to demonstrate compliance with this item. (Multiple resources for finding appropriate/practical lid options were e-mailed to Robert and Mr. Souder on July 14, 2008.)

5) WAC 173-303-200(1)(d) as referenced by 170(2): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste. **REPEAT VIOLATION**

Numerous containers of dangerous waste were lacking proper labeling. These include: Buckets of paint/solvent waste in the paint booths (one was labeled as "filter cake"; one can of mastic waste in Paint Booth #4; box of paint booth filters in HWAA; two totes and three bags of mastic debris in the HWAA; two drums of "rusty water" in the HWAA; and two buckets of paint solids in the paint locker. Additionally, the box of sludge between Buildings B & C was labeled and the drum in the mezzanine for mastic waste was labeled, but these labels were not visible.

Adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d). Submit photos of all the containers listed above to demonstrate compliance with this item.

6) WAC 173-303-200(1)(c) as referenced by 170(2): Failure to mark each container with the accumulation start date. **REPEAT VIOLATION**

Numerous containers of dangerous waste were lacking start dates. These include: two totes of mastic/solid debris in the HWAA; two bags of mastic/solid debris in the HWAA; one box of paint booth filters in the HWAA; two drums of "rusty water" in the HWAA; one drum of soap sludge in the filter cake shed between building B & C; and two buckets of paint waste in the paint locker.

Ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Submit photos to demonstrate compliance with this item.

10) WAC 173-303-200(1)(e) and by reference 320(1): General facility inspections were not conducted. REPEAT VIOLATION

Records of general facility inspections were not provided.

Within 30 calendar days of receipt of this letter, plan, conduct, and document a general facility inspection. Submit a copy of the plan and log sheet. Determine the appropriate interval for future inspections and inform Ecology of this interval. Inspections must be frequent enough to identify and correct problems before they harm human health or the environment.

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The facility's generator status was revised in January of 2008 for 2007 and 2006 on their Site Identification Form to indicate that they were a medium quantity generator, though they were an LQG.

Submit to the Department a revised Dangerous Waste Annual Report for the year(s):2006 & 2007 to revise generator status back to LQG. This can be done online via Turbowaste.net.

12) WAC 173-303-200(1)(e) and by reference 350(3): An adequate contingency plan was not maintained or available. REPEAT VIOLATION

Robert and Les both acknowledged that the contingency plan had not been updated to reflect the changes from the previous hazardous waste manager to Robert as the emergency coordinator and point of contact.

Amend the current contingency plan or spill prevention control and countermeasures (SPCC) plan to update it with the most current and accurate information to comply with WAC 173-303-350 and WAC 173-303-360. Submit a copy of the amendments.

13) WAC 173-303-330 as referenced by 200(1)(e): Training requirements were not met. The facility should have a training program, a written training plan, and keep training records. REPEAT VIOLATION

The training program and training records (other than one certificate for Robert Deatherage) were not provided to Ecology.

Develop and submit a dangerous waste training program which shall include a written training plan and records showing all employees that handle hazardous waste have received relevant training per WAC 173-303-330.

14) WAC 173-303-170(2) and by reference 180(3) and 210(1): The appropriate signed manifests were not kept by the generator.

Four manifests were missing the final signed copies: #001368741; 001368742; 001368825; and 001368983.

Obtain copies of manifests listed above for shipments of wastes from your facility. Implement procedures to ensure that copies of the signed manifests are kept on-site for the required five years. Submit copies of the listed manifests to Ecology.

15) WAC 173-303-802(5): Failure to comply with permit by rule requirements for totally enclosed facility, elementary neutralization or waste water treatment units.

- Volume of secondary containment for waste treatment system tanks in not adequate to hold 100% of the largest tank or 10% of the total volume.
- Treatment system and secondary containment system is not totally enclosed – only partially covered, allowing rainwater to compromise system.
- Tanks have not been integrity tested or certified by an engineer.
- Daily tank inspections are not being conducted or logged.
- Secondary containment berm is not sealed.
- Secondary containment system has not been maintained, and has already failed in several places.

In order to avoid revocation of Permit by Rule, you must comply with permit by rule requirements by correcting all of the deficiencies noted above. A schedule for accomplishing these corrections may be submitted by the due date for this report providing a timeline for corrections, subject to approval by Ecology.

COMPLIANCE CERTIFICATE

Instructions: **Return this Completed Form**

The problems listed above are repeated below and must be corrected in order to be in compliance with Washington Dangerous Waste Regulations. Complete the shaded portion of the table by initialing and indicating the date each action is completed, and **briefly explain the actions taken for each item in a cover letter.** Mail this completed form, the cover letter, and any requested documentation by ***August 27, 2008*** to: Daylin Davidson, Department of Ecology, Hazardous Waste Program, 3190 160th Avenue SE, Bellevue, WA 98008-5452. *(An extension of the deadlines may be requested. Please e-mail a request to DayD461@ecy.wa.gov before the date specified above.)*

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-			

The Department of Ecology is an equal opportunity agency and does not discriminate on the basis of race, creed, color, disability, age, religion, national origin, sex, marital status, disabled veteran's status, Vietnam Era veteran's status or sexual orientation. If you have special accommodation needs or require this document in alternative format, please contact *Daylin Davidson* at DayD461@ecy.wa.gov or *(425) 649-7090* (Voice) or **Washington State Relay Operator/Service: 711 or 1-800-833-6388 (TTY).**

Washington Department of Ecology
Hazardous Waste & Toxics Reduction Program
Compliance Report

DEPARTMENT OF ECOLOGY
NORTHWEST REGIONAL OFFICE
HAZARDOUS WASTE AND TOXICS REDUCTION PROGRAM

Date: March 25, 2009

To: Julie Sellick, Section Supervisor

Through: Dave Misko, Unit Supervisor

From: Daylin Davidson, Hazardous Waste Compliance Inspector

Subject: Recommendation for Enforcement for TC Systems
1032 W Marine View Dr, Everett 98201 (WAD 088 722 947)

SUMMARY

TC Systems has received six inspections from Ecology's Hazardous Waste and Toxics Reduction Program over the course of the last eleven years, during which a total of fifty-nine violations were cited. Inspectors have repeatedly observed many of the same violations of the Dangerous Waste Regulations. Inadequate performance of regulatory responsibilities at TC Systems directly led to violations for illegal disposal, failure to designate, and numerous repeat violations for improper waste management.

BACKGROUND

TC Systems provides metal cleaning, non-destructive testing, electroplating, etching, and coloring services to support the aviation and boating industries. Waste water from the tank line is pre-treated on-site and discharged under their local discharge permit.

TC Systems first established an EPA/state ID# for the generation and handling of hazardous waste in 1986 pursuant to RCRA requirements. The facility has reported as a Large Quantity Generator (LQG) of dangerous waste for all years except 2003 and 2004, when it self-reported as a Medium Quantity Generator (MQG). In 2005, the facility reported as an LQG. In 2007, TC Systems revised its generator status for 2006 and 2007 from LQG to MQG, which was incorrect based on a review of manifests during the 2006 and 2007 inspections which clearly showed the facility to be an LQG for both years.

TC Systems has an Industrial Pretreatment Discharge Permit with the City of Everett Public Works and has received over a dozen Notices of Violation from the City over the last 11 years.

The facility received the following visits by Ecology under the authority of Chapter 173-303 WAC and Chapter 70.105 RCW:

- On March 20, 1997 Ecology inspected TC Systems and found eleven violations of state dangerous waste regulations. (See Table 1 on page 2.) The due date for correction of these violations was May 9, 1997. The facility returned to compliance on May 26, 1997 by submitting the required compliance certificate.
- Twelve months later on June 2, 1998 Ecology inspected TC Systems as follow up to the 1997 inspection and determined that "while TC Systems has made progress in addressing regulatory compliance, especially regarding paperwork and record keeping, we have concerns

about the commitment of facility management to proper dangerous waste management." (Cover letter for 6/2/98 inspection report by Elliott Zimmermann.) Six violations were found during this inspection. The facility returned to compliance by the due date by submitting the required compliance certificate and other requested documentation.

- On August 6, 1998 Ecology inspected TC Systems to follow up on the June 2, 1998 inspection and found the facility had completed all the required actions as stated in their compliance certificate.
- On May 13, 2003 Ecology inspected TC Systems again and found seven violations of state dangerous waste regulations. The facility returned to compliance by the due date by submitting the required compliance certificate and other requested documentation.
- On August 8, 2006 Ecology inspected TC Systems again and found eight violations of state dangerous waste regulations. The due date for correction of these violations was November 30, 2006. *There are no records to show that TC Systems submitted any "return to compliance" documentation or responded in any way to that inspection report.*
- On November 6, 2007 Ecology inspected TC Systems again and found fifteen violations of state dangerous waste regulations. (See Appendix A Photolog.) The original compliance due date was January 28, 2008. After several extensions to April 30th, 2008, the facility submitted all requested items to demonstrate compliance.
- On July 8, 2008, Ecology inspected TC Systems again and found twelve repeat violations. (See Appendix B Photolog.) The original compliance due date was August 27, 2008. An extension was requested and granted to September 15, 2008. On September 16th, the facility submitted an incomplete return-to-compliance packet, and did not resolve the four remaining violations.

TC Systems has exhibited an eleven-year history of repeat violations of Washington's Dangerous Waste Regulations, Chapter 173-303 WAC. Table 1 shows the violations for each inspection:

	TABLE 1	1997	1998	2003	2006	2007	2008
	Environmental Coordinator	Robert Howard	Lisa Patterson	Mike Farnham	Guy Donaldson	Tim Webster	Robert Deatherage
1	141(1): Illegal disposal (& oil spill)					X	X
2	070(3): Designation		X			X	X
3	630(5)(a): Closed Container	X	X	X	X	X	X
4	630(3): Labeling Containers	X	X	X	X	X	X
5	200(1)(c): Start Dates on Containers	X	X	X	X	X	X
6	330: Training Plans/Records	X		X	X	X	X
	320(1): General Facility Inspections	X				X	X
	350(2): Contingency Plan	X			X	X	X
	630(6): Weekly Inspections	X		X	X	X	
	200(2)(a): Satellite Accumulation Standards	X	X	X	X	X	X
	630(7): Secondary Containment	X			X	X	
	170(3): Accumulation Time Limits			X			
	210(1): Proper Manifest recordkeeping		X				X
	220(1): Annual Reporting issues	X				X	X
	630(5)(c): Adequate Aisle Space	X					
	515(6): Used Oil container management					X	
	522(2)(a): Spent Antifreeze container mgmnt					X	
	573(9) & (10): Universal Waste management					X	X

FINDINGS

The following findings are based on the information provided to Ecology by the Environmental Coordinators and employees during the dangerous waste inspections conducted on November 6, 2007 *(2007)* and July 8, 2008 *(2008)*.

Designated Wastes	Process	Source of information	Assigned Codes
Filter press sludge	Waste water treatment	Manifests & Facility Contact	D007
Soap sludge	Waste water treatment	Facility Contact	D007
Berm Cleanout Sludge	Waste water treatment	Facility Contact	D007
Paint/Solvent liquids & sludges	Painting/coating/cleanup	Manifests & Facility Contact	D001, D007, D008, F003, F005
Paint booth filters	Air filtration during painting	Manifests & Facility Contact	D007
Solid Paint debris	Floor sweeping & paint booth cleanout	Manifests & Facility Contact	D007
Mastic, gloves, filters	Painting/coating/cleanup	Facility Contact	D007

Numerous violations of Chapter 173-303 WAC and Chapter 70.105 RCW occurred. However, we have chosen only to pursue formal enforcement for the following violations because the first three are high priority indicator violations, the fourth and fifth are repeats of minor violations, and the sixth is the foundation upon which the other violations occurred:

1) WAC 173-303-141(1): Illegal disposal of dangerous waste.

- Spilled compressor oil (not being recycled) has been allowed to migrate into the soil and the nearby storm drain. The spill residue was disposed of as used oil per the definition in WAC 173-303-515. *(2007 & 2008)*
- Paint wastes containing acetone & methyl ethyl ketone (MEK) solvents have been routinely allowed to evaporate. *(2008)*

2) WAC 173-303-070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes.

- The designation status had not been determined for the drum of "blasting dust" in satellite area of Building B: the paint contaminated tape, gloves, filters, and other debris in the trash can in the paint locker; the cart full of expired materials in the paint locker; the white drum that is ¼ full, possibly of diesel fuel, outside behind the buildings; and the blue drum and blue bucket outside Building C. *(2007)*

- The designation status has not been determined for the bucket of unknown material that had hardened in the former satellite area of Building C. *(2008)*

The facility subsequently determined through testing that only the paint contaminated debris designated as dangerous waste for Chromium (D007). None of the other wastes designated as dangerous wastes.

3) WAC 173-303-630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste.

- Containers of dangerous waste paint wastes in the paint booths and paint storage room were not kept closed. *(2007,2008)*
- Cans and totes used to accumulate previously designated dangerous waste (mastic, sticks, gloves, and paint cans); the two drums of berm cleanout sludge declared to be dangerous waste by Environmental Coordinator Robert Deatherage; the drum of soap sludge declared to be dangerous waste by Les Deatherage; and the tote of sludge designated as dangerous waste outside between buildings B & C were not kept closed. *(2008)*

4) WAC 173-303-630(3): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste.

Numerous containers of dangerous waste throughout the facility were lacking proper labeling or labels were not visible. These include: buckets of paint/solvent waste in the paint booths; bagged paint booth filters; all three 55-gallon drums of paint waste (and floor sweepings) in the paint locker; all the buckets of paint solids in the paint locker; and the box of sludge between Buildings B & C. *(2007)*

One can of mastic waste in Paint Booth #4; box of paint booth filters in Hazardous Waste Accumulation Area (HWAA); two totes and three bags of mastic debris in the HWAA; two drums of berm cleanout sludge in the HWAA; and two buckets of paint solids in the paint locker. Additionally, the box of sludge between Buildings B & C was labeled and the drum in the mezzanine for mastic waste was labeled, but these labels were not visible. *(2008)*

5) WAC 173-303-200(1)(c): Failure to mark each container with the accumulation start date.

Numerous containers of dangerous waste throughout the facility were lacking start dates. These include: bagged paint booth filters; all three 55-gallon drums of paint waste (and floor sweepings) in the paint locker; all the buckets of paint solids in the paint locker; one drum of liquid paint wastes in the "Satellite Area" in Building B; and the box of sludge between Buildings B & C. *(2007)*

Two totes of mastic/solid debris in the HWAA; two bags of mastic/solid debris in the HWAA; one box of paint booth filters in the HWAA; two drums of berm cleanout sludge in the HWAA; one drum of soap sludge in the filter cake shed between building B & C; and two buckets of paint waste in the paint locker. *(2008)*

6) WAC 173-303-330: Training requirements were not met. The facility should have a training program, a written training plan, and keep training records.

No training program was available for this facility. (A plan was subsequently created.) *(2007)*

The training plan had not been implemented and training records (other than one certificate for Robert Deatherage) were not provided to Ecology. Mr. Deatherage told Ecology that TC Systems had not been keeping up with this requirement. *(2008)*

RECOMMENDATION FOR ORDER

TC Systems is a Significant Non-Complier (SNC) as defined by the Hazardous Waste & Toxics Reduction Program's "Compliance Assurance Policy." The definition of a SNC is:

> "a facility which has caused actual exposure or a substantial likelihood of exposure to hazardous waste or hazardous waste constituents; is a chronic or recalcitrant violator; or deviates substantially from the terms of a permit, order, agreement or from RCRA statutory or regulatory requirements."

Inadequate performance of regulatory responsibilities at TC Systems directly led to violations for illegal disposal, failure to designate, and numerous repeat violations for improper waste management. These actions deviate substantially from regulatory requirements.

It appears employee turnover in the position of Environmental Coordinator has hindered training and compliance. TC Systems has not addressed turnover adequately to ensure continued compliance.

The Hazardous Waste Management Act is intended to establish safe and responsible hazardous waste management to prevent adverse effects on the environment and to protect public health and safety. Pursuant to RCW 70.105.095, Ecology may issue an order requiring compliance with the provisions of RCW 70.105 when the department determines that a person has violated or is about to violate any provision of RCW 70.105. Pursuant to this authority, Ecology recommends issuing an Administrative Order to TC Systems. The goals of this Administrative Order are to require TC Systems to:

- Reduce immediate risk to human health and the environment by properly managing and disposing of dangerous waste.
- Make management responsible for bridging the gap of turnover with timely training and expedient hiring and replacement.

- Train employees in proper waste management procedures.
- Demonstrate over time that employees remain vigilant and well-trained regarding dangerous waste management as demonstrated by showing that dangerous wastes are properly managed at TC Systems to prevent future repeat violations.

In order to achieve these goals, the Order requires that TC Systems complete the following actions within the time frame indicated, and items 1A & C must be completed again whenever there is turnover in the Environmental Coordinator position, which must remain filled at all times:

1) Training Program
   A. Within 30 days of the date of the Order, TC Systems must identify an employee to be responsible for dangerous waste management and training (Environmental Coordinator) at TC Systems. Within 35 days of the date of the Order, submit notice and contact information for the identified employee to Ecology.
   B. Within 45 days of the date of the Order, TC Systems must hire an outside contractor to provide all employees and managers with site specific hazardous waste management training, on-site and the course content and attendance sheet must be submitted to Ecology
   C. Within 60 days of the date of the Order, the Environmental Coordinator must attend the McCoy and Associates RCRA training seminar or an equivalent training approved by Ecology. Within 75 days of the date of the Order, a copy of the certificate of completion must be sent to Ecology.
   D. Within 90 days of the date of the Order, the following plan, including course content, must be submitted to Ecology, subject to approval by Ecology: TC Systems must create a site specific training plan (or revise any existing plan) for all employees and managers at TC Systems to cover initial training on standard operating procedures for all of the following topics: proper chemical storage, disposal of all dangerous wastes, spill response, treatment by generator, dangerous waste determinations, storage of compatibles, dangerous waste container management (labeling, dating, closing containers), universal waste management, secondary containment, and storage of flammables. Within 10 days of the date of approval notice from Ecology, the approved plan must be implemented and initial training conducted.
   E. Beginning 20 days from the date of plan approval notice from Ecology and for a period of fifteen months from the date of this Order, TC Systems must conduct monthly refresher training on hazardous waste management to all employees and provide training records to Ecology by the 1st of each month.

2) Monitoring
   A. Beginning within 45 days of the date of the Order to continue until the same end date as the monthly training records (1E above), TC Systems must submit copies of weekly inspection logs to Ecology by the 1st of every month.
   B. Beginning within 45 days of the date of the Order to continue until the same end date as the monthly training records (1E above), TC Systems must conduct and log general facility inspections at least monthly and submit copies of the logs to Ecology by the 1st of every month.

3) Revise and Submit Dangerous Waste Annual Reports

Within 15 days of the date of the Order, submit to the Department a revised Dangerous Waste Annual Report for the year 2007 to correct generator status from MQG to LQG and file the 2008 report (with LQG generator status). Call the Annual Reporting Hotline at 1-800-874-2022 for assistance in completing this action correctly.

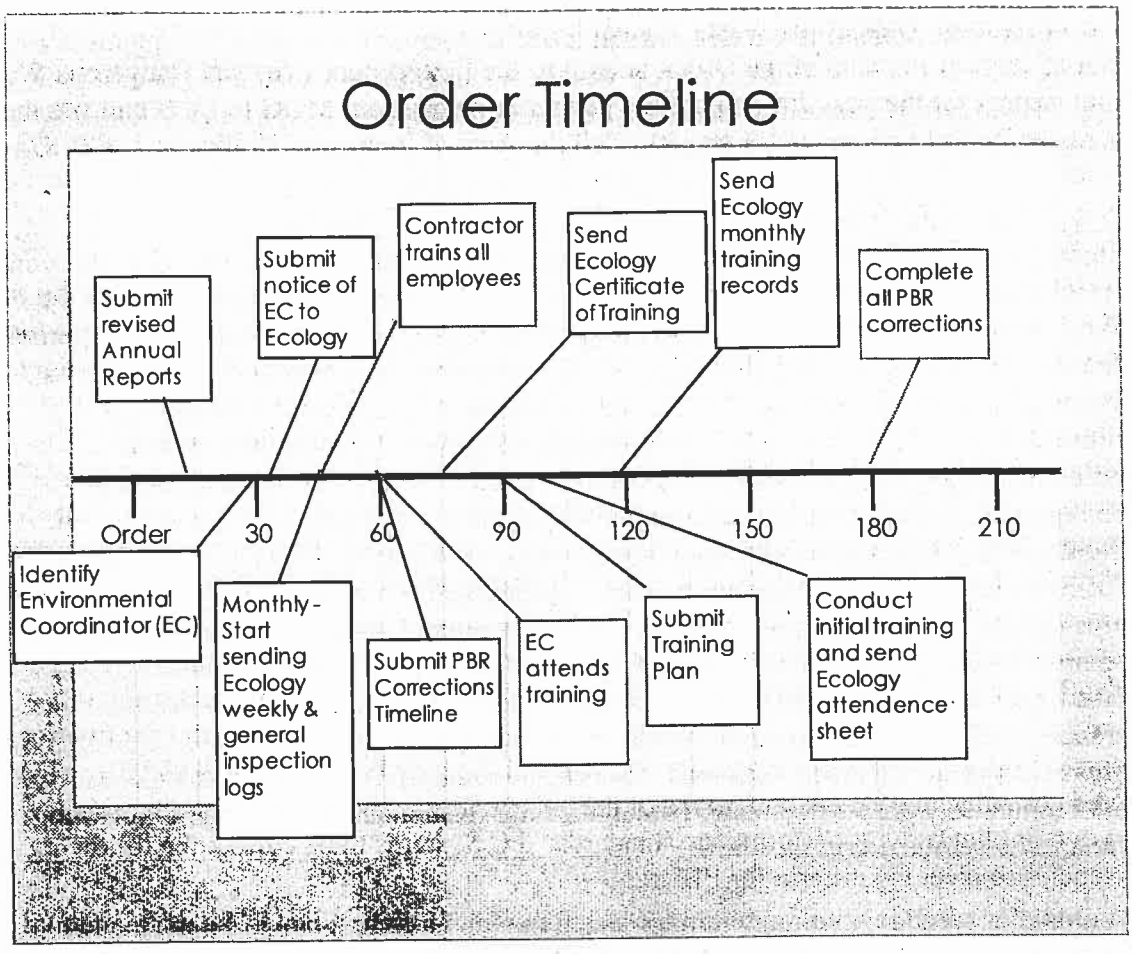
4) Waste Water Treatment System Requirements to Utilize Permit-by-Rule

TC Systems has the option to operate their wastewater treatment system under permit by rule (PBR) if all of the conditions found in WAC 173-303-802 are met. This allowance lets the facility treat dangerous waste without being required to submit an application for a dangerous waste facility permit. However, if these conditions are not met, TC Systems is subject to violations and subsequent penalties for treating dangerous waste without a permit. Conditions include WAC 173-303-283 (Performance Standards) requirements that all generators must design, construct, operate, and/or maintain the facility in a manner that prevents degradation of groundwater, surface water, and/or air quality.

TC Systems did not comply with the standards found in WAC 173-303-283(3)(c) or with the City of Everett Public Works Department Waste Discharge Permit No.7708-04 VI(B) – which requires in part, that process tanks shall be located in a bermed, roofed, secured area capable of containing 110 percent of the volume of the largest tank. TC System's tanks are only partially covered with a roof, and have inadequate containment. Therefore, the facility does not currently meet the criteria to qualify for PBR because: 1) WAC 173-303-802(5)(a)(iii) requires compliance with the conditions of the permit; and 2) WAC 173-303-802(5)(a)(iv)(C) requires compliance with performance standards. TC Systems must correct the following deficiencies to meet the criteria for PBR:

A. Volume of secondary containment for waste treatment system tanks is not adequate to hold 110% of the largest tank or 10% of the total volume;
B. Treatment system and secondary containment system is not totally enclosed – only partially covered, allowing rainwater to compromise system and reduce available containment volume;
C. Tanks have not been integrity tested or certified by an engineer;
D. Daily tank inspections are not being conducted or logged;
E. Secondary containment berm is not sealed; and
F. Secondary containment system has not been maintained, and has already failed in several places.

Within 60 days of the date of the Order, TC Systems must submit a timeline for resolving the problems listed above, subject to approval by Ecology. In order to avoid the requirement to submit an application for a dangerous waste facility permit; and to address violations for past treatment without a permit, TC Systems must comply with PBR requirements by correcting all of the deficiencies noted above within 180 days of the date of the Order.



RECOMMENDATION FOR PENALTY

Definition of Violation Types

Major violations are those that pose imminent threat to human health or the environment, actions that deviate significantly from the requirements of a regulation or are recurrent. These can be assessed in the $6,000 to $10,000 range.
Moderate violations are those that have the potential for threat to human health or the environment, actions that present some deviation from the regulatory requirements or repetition of minor violations. These can be assessed in the $3,000 to $6,000 range.
Minor violations are of an administrative nature and have little or no potential to impact human health or the environment or actions that deviate somewhat from the regulations but most or all of the important aspects are being met. These can be assessed in the $500-$3,000 range.

Most of the recommended penalty amounts were calculated at the lower end of these respective ranges and all are based on only one count per violation. We are recommending a penalty of **$24,000** be issued for the following violations:

1. For violation of WAC 173-303-141(1), Illegal Disposal, a penalty of $6,000 is recommended. This violation is determined to be a major violation because it posed potential or actual harm to the environment and was a repeat violation.

2. For violation of WAC 173-303-070(3), Waste Designation, a penalty of $5,000 is recommended. This violation is determined to be a moderate violation because it posed potential harm to the environment because undesignated liquids were stored outside near a storm drain, and was a repeat violation.
3. For violation of WAC 173-303-630(5)(a), Open Containers, a penalty of $3,000 is recommended. This violation is determined to be a moderate violation because it posed potential worker exposure and was a repeat violation.
4. For violation of WAC 173-303-630(3), Container Labeling, a penalty of $3,000 is recommended. This violation is determined to be a moderate violation because it is a repeat of minor violation.
5. For violation of WAC 173-303-200(1)(c), Container Start Date, a penalty of $1,000 is recommended. This violation is determined to be a minor violation because it did not pose a threat to human health or the environment but was a repeat of a minor violation.
6. For violation of WAC 173-303-330, Training Requirements, a penalty of $6,000 is recommended. This violation is determined to be a moderate violation because it is the foundation upon which subsequent violations occurred, and is a repeat of a minor violation.

PENALTY DETERMINATION

Violation #	Violation	Recommended Penalty	Instances of violation	Maximum Penalty
1	WAC 173-303-141(1)	$6,000	4	$24,000
2	WAC 173-303-070(3)	$5,000	7	$35,000
3	WAC 173-303-630(5)(a)	$3,000	8	$24,000
4	WAC 173-303-630(3)	$3,000	2	$6,000
5	WAC 173-303-200(1)(c)	$1,000	2	$2,000
6	WAC 173-303-330	$6,000	6	$36,000
	Total	$24,000		$127,000

The discretionary factors considered in calculating this penalty amount are explained in Table 2. Please see the attached Appendix C titled "Benefits of Non-Compliance" for a breakdown of the cost savings realized by TC Systems due to their lack of proper waste management.

Table 2

Discretionary Factor	Inspector Evaluation	Effect on Penalty
Degree of Threat to Human Health and the Environment	TC Systems left unknown liquids outside, near storm drains, allowed used oil to enter the storm drain, and put chromium contaminated tape, gloves, filters, and other debris into the landfill. Actual harm cannot be confirmed.	No change
History of Compliance	TC Systems has an eleven year history of recalcitrant behavior.	Raise
Impact on Regulated Community	TC Systems is in the plating industry and this penalty is likely to serve as an example for other facilities in this industry. This penalty amount is sufficient for this purpose.	No change
Small Business Incentives	This company employs fewer than 50 people and is considered a small business. The criteria for reducing a penalty against a small business are: no previous enforcement; no actual harm; corrective action taken; does not involve criminal conduct. TC Systems meets the criteria.	Lower
Public Entity	This company is not a public entity.	None
Economic Benefit	Calculated at: $16,761 See Appendix B titled "Benefits of Non-Compliance."	Threshold to be collected per USEPA guidance

Department of Ecology News Release - March 30, 2009

09-074

Everett company fined $24,000 for hazardous waste violations

BELLEVUE – The Department of Ecology (Ecology) has fined TC Systems, an Everett metal-working firm, $24,000 for repeated failures to properly manage its hazardous waste.

Ecology also has issued an order directing the company to take a series of steps to correct the problems and provide better protection of public safety, health and the environment.

"Over the past dozen years we've found violations, seen the company correct them, and then found violations again," said K Seiler, who manages Ecology's hazardous waste and toxics reduction program. "It's important for the company to responsibly manage hazardous materials, just as other businesses in Washington do, so people and the environment are safe."

Ecology has inspected TC Systems – located at 1032 W. Marine View Drive – six times from 1997 through 2008. The fines apply to violations found in 2007 and 2008, most of which are repeat violations found in earlier inspections:

- Illegal disposal of dangerous waste: Spilled compressor oil was allowed to enter soil and a storm drain. Paint waste solvents were set out to evaporate.
- Negligent labeling: neglected to identify whether waste materials were hazardous and required special handling, storage and disposal.
- Failure to keep dangerous waste containers closed, which prevents spills and evaporation of volatile liquids to the air.
- Failure to label dangerous waste containers: Labels identify the contents and the specific risks, and help prevent mishandling of the materials.
- Failure to date containers: Dangerous waste containers must be dated to demonstrate they have not remained on site longer than 90 days.
- Absence of a training plan: Employees must have up-to-date training on proper handling of dangerous wastes to protect themselves and the environment.

Ecology's order requires four sets of corrective actions and sets several deadlines:

- Establish an employee training program, subject to Ecology's approval.
- Set up an internal compliance monitoring program, and submit regular reports to Ecology.
- Submit a corrected 2007 dangerous waste annual report, and prepare the 2008 report, using assistance from Ecology's Annual Reporting Hotline.
- Bring its wastewater pre-treatment system into compliance with City of Everett permit requirements for discharge to the city's sanitary sewer.

TC Systems may appeal the penalty, the order or both to Ecology or to the Washington State Pollution Control Hearings Board within 30 days.

Hazardous waste compliance is a critical part of Ecology's priorities to reduce toxic threats to people and the environment and to restore and protect water quality in Puget Sound.

###

Media Contacts:
Kim Schmanke, Ecology media relations, 360-407-6239
Daylin Davidson, Ecology hazardous waste and toxics reduction program, 425-649-7090

For more information: www.ecy.wa.gov/pubs/0501055/0501055_hwtr.pdf

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TC SYSTEMS, INC.
MS. MARY UTICK, PRESIDENT
1032 W MARINE VIEW DR
EVERETT WA 98201-1557

PS Form 3800, August 2006 See Reverse for Instructions

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MS. MARY UTICK, PRESIDENT
1032 W MARINE VIEW DR
EVERETT WA 98201-1557

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November 20, 2009

TC Systems, Inc. (Everett)
SIT 8-2

TC Systems, Inc.
Ms. Mary Utick, President
1032 West Marine View Drive
Everett, Washington 98201-1557

RE: **A Reported Release of Hazardous Substances and Potential Liability for the Release at the following site:**

- **Site Name:** TC Systems, Inc.
- **Address:** 1032 West Marine View Drive, Everett, Washington 98201-1557
- **Snohomish County Assessor's Tax Parcels:** 29051800200700 and 29051800201300
- **Facility/Site Number:** 10587741

Dear Ms. Utick:

Under the Model Toxics Control Act (MTCA), Chapter 70.105D RCW, which governs the cleanup of hazardous waste sites in Washington State, the Department of Ecology (Ecology) may identify persons that it finds liable for the release of hazardous substances at a Site. Before making such a finding, Ecology must provide persons with notice and an opportunity to comment on the proposed finding. Any person whom Ecology finds based on credible evidence to be liable, is known as a "potentially liable person" or "PLP."

Ecology files on your facility (dating back to 1990) show repeated violations of state hazardous waste regulations (173-303 WAC), violations of your Ecology industrial stormwater permit (Permit No. S03-000762D), and violations of your city of Everett industrial pretreatment discharge permit (Permit No. 7708). As a result of the aforementioned violations and recent investigations (discussed in more detail below) at the TC System, Inc. (TC Systems) facility, Ecology believes that a release of hazardous substances has occurred and that further action will be required at this Site. The TC Systems leased property is generally located between 10th and 11th Streets off West Marine View Drive, Everett, Washington (see **Exhibit 1**). Based on these investigations and your history of non-compliance, Ecology intends to add the TC Systems (see **Exhibit 2**) to our database of suspected hazardous waste sites.

Proposed Finding of Liability

Based on credible evidence, Ecology is proposing to find TC Systems liable under RCW 70.105D.040 for the release of hazardous substances at the TC Systems, Inc. Site (Site) generally located between 10th and 11th Streets off West Marine View Drive, Everett, Washington (see **Exhibit 1**). This proposed finding is based on the following evidence:

1. According to our information, TC Systems is a current operator of a "facility" as defined in RCW 70.105D.020(5). TC Systems (formerly Tri Coatings) has operated at the Site since about 1984 (about 25 years). TC Systems current leasehold (held with the Norton Industries, Inc.) is shown on **Exhibit 2**.

   The Site is located in Section 18, Township 29 North, Range 5 East, Snohomish County, Washington. Tax account numbers corresponding to the Site include 29051800200700 and 29051800201300. Additional property information from the Snohomish County Tax Assessor's Office is presented in **Exhibit 3**.

2. Credible evidence exists indicating that a "release or threatened release" of a "hazardous substance" has occurred at the facility as defined in RCW 70.105D.020(10) and (25), which poses a threat to human health or the environment. As a result of environmental non-compliance and recent investigations performed at the facility, Ecology believes that a release of hazardous substances has occurred at the Site, and further action will be required at this Site.

   ECOLOGY HAZARDOUS WASTE INSPECTIONS

   Ecology's Hazardous Waste and Toxics Reduction Program has conducted numerous inspections at TC Systems (mainly between 1997 and 2008). During that period, Ecology cited TC Systems over fifty violations of state hazardous waste regulations (173-303 WAC). Ecology found violations of Dangerous Waste Regulations in all but one of the inspections (between 1997 and 2008). Inspectors have repeatedly observed many of the same violations of the Dangerous Waste Regulations. Inadequate performance of regulatory responsibilities at TC Systems directly led to violations for illegal disposal (failure to respond to a release of used oil), failure to designate its dangerous waste, and numerous repeat violations for improper waste management. In addition, inspectors have noted that the secondary containment wall in the alley between TC Systems' Buildings B and C contains cracks and does not provide adequate containment of rainwater or other liquids (**Exhibit 4**, Photos 1 and 2).

   Ecology inspectors have noted that spilled compressor oil (not being recycled) has been allowed to migrate into the soil and the nearby storm drain (**Exhibit 4**, Photo 3). The location of the compressor shed and the nearby storm drain are depicted in **Exhibit 2**. The leak from the compressor was identified in 2007 by Ecology hazardous waste inspectors and was not immediately corrected (the same problem was identified in July and August of 2008). There were significant gaps in the floor surface in the area and according to Ecology inspection reports, it appeared that oil was migrating into the soil. Additionally, there was a clear path of liquids flowing from the leaking compressor area to the nearest storm drain (**Exhibit 4**, Photo 4). Note that the leak was apparently initially discovered in 2004 by Ecology stormwater inspectors (see section below on stormwater inspections, 2nd Bullet).

   In the spring of 2009, Ecology fined TC Systems $24,000 for its repeated failures to properly manage its hazardous waste. Ecology also issued an Order (DE 6459) on March 25, 2009, directing the company to take a series of steps to correct the problems and provide better protection of public safety, health and the environment.

ECOLOGY INDUSTRIAL STORMWATER INPSECTIONS

TC Systems has an industrial stormwater permit (Permit No. S03-000762D) issued by Ecology. The permit indicates that industrial stormwater from the site discharges to Port Gardner. A 1996 map of North Marina showing the location of utilities indicates that industrial stormwater from TC Systems discharges to the 12th Street Marina (**Exhibit 5**). Some of the non-compliance issues associated with TC Systems industrial stormwater permit is summarized below.

- On March 10, 1993, Ecology sent a letter to Orin Smith of TC Systems providing instructions on implementing its stormwater baseline general permit (SO3-000762). The most significant requirement of the permit is the development of a Stormwater Pollution Prevention Plan (SWPPP). TC Systems acknowledged in a July 20, 1995, permit renewal application that it had not written a SWPPP. On August 9, 1995, Ecology sent TC Systems a notice of non-compliance letter for failure to write and implement a SWPPP.
- On April 20, 2004, Ecology conducted a Site visit to TC Systems facility. Ecology made this Site visit in response to a request from the Snohomish Public Utility District (PUD). The PUD had informed Ecology that TC Systems was not keeping up on its electric bills and the power would be turned off. During the April 2004 Site visit, Ecology noted issues concerning the outside storage of chemicals and waste, which have a potential to discharge to the storm sewer. According to Joyce Smith, then Ecology Industrial Permit Coordinator, the facility was behind on discharge monitoring reporting (DMRs). Some of the violations noted by Ecology inspectors are summarized below:
    - Paint chips were visible next to the secondary containment berm. This is in close proximity to the storm drains (**Exhibit 4**, Photo 5).
    - Hoses were used to transport waste across a driveway with open storm sewers. This practice presents a substantial potential to discharge to the storm sewers and is not considered a Best Management Practice.
    - Washing vehicles in a parking lot at the facility which discharges to the storm sewer.
    - The containment area was collecting stormwater which was siphoned off by a sump. There was no generator back up present for instances when the power goes off.
    - The containment space was not adequate.
    - Cover and containment was not adequate.
    - No SWPPP was available at the time of this inspection.
    - Leaking oil from a compressor was noted in a place lacking containment (**Exhibit 4**, Photo 6).
- Ecology performed a stormwater inspection on September 17, 2007, for the purposes of determining TC Systems' compliance with its industrial stormwater permit. Some of the violations Ecology inspectors observed during the September 2007 inspection are summarized below:

- Failed to perform quarterly sampling and visual monitoring of the facility's discharge.
    - Monitoring was conducted twice in 2004 (1st and 3rd Quarters.). No other monitoring exists. During these two monitoring events, TC Systems monitored for lead, copper, zinc, oil and grease, pH, and turbidity. A zinc exceedance (630 micrograms/liter [µg/L]) occurred in July 2004. TC Systems said that they had stopped stormwater sampling after the lab they were using had been shut down. The Ecology inspector told TC Systems that not sampling stormwater as required by condition "S4" is a violation of the permit.
- Failed to produce and has not been implementing an adequate SWPPP.
    - The SWPPP was inadequate and incomplete. Much of the information within the SWPPP needed updating to reflect current on-site conditions. The SWPPP was missing several required sections including a monitoring plan, a facility map, visual monitoring logs, and a designated stormwater pollution prevention team.
- Allowed an oily sheen to be discharged from the compressor to the nearby storm drain (**Exhibit 4**, Photo 7).
- Failed to retain adequate records to document compliance with the general Permit, including a copy of the Permit, visual monitoring logs, and discharge monitoring reports (DMRs).

  Based on the violations, Ecology inspectors recommended that TC Systems should implement good housekeeping practices on-site to reduce stormwater pollution potential from items such as stored leaky drums collecting stormwater on-site. Ecology noted that all chemical drums (including empty drums) should be properly sealed and cleaned on their exteriors. Ecology also recommended that TC Systems should monitor, maintain, and cover machinery and parts stored outdoors to make sure that certain fluid leaks and powders are not contaminating soil or stormwater.

- Ecology performed a stormwater inspection on September 16, 2009, at TC Systems for the purposes of determining compliance with their industrial stormwater permit. Ecology noted violations of their stormwater permit during the inspection. One of the violations Ecology observed during its inspection was TC Systems' failure to perform stormwater monitoring in accordance with the permit. Stormwater monitoring has not been conducted since 2004. During the stormwater inspection, Ecology collected a sediment sample (named TC-CB-01) from the stormwater catch basin located between Buildings A and B and just north of the compressor shed (see the red circled stormwater catch basin in **Exhibit 2**). Analytical results of the catch basin sediment sample were compared against the Sediment Management Standards (SMS) (Chapter 173-204 WAC), Sediment Quality Standards (SQS), and Cleanup Screening Levels (CSL). Sample results on a dry weight basis revealed that the measured concentrations for cadmium (8.72 milligrams/kilogram [mg/kg]), chromium (3,270 mg/kg), copper (1,360 mg/kg), lead (693 mg/kg), and zinc (2,270 mg/kg) exceeded dry weight equivalent CSL and SQS levels. In addition, the results from sample TC-CB-01 show that polychlorinated biphenyl (PCB) levels associated with Aroclor-1248 (120 µg/kg) and -1254 (420 µg/kg) exceeded the dry weight equivalent SQS level for PCBs. Also, the sample results for total petroleum hydrocarbons

(TPH), as lube oil, were measured at 3,800 mg/kg (dry weight) in sample TC-CB-01; this result raises a concern for TPH contamination in sediments at or near the Site. Finally, analytical results associated with semi-volatile organic compounds (SVOCs) including polycyclic aromatic hydrocarbons (PAHs) in sample TC-CB-1 revealed that benzoic acid (22,000 µg/kg) and bis(2-ethylhexyl)phthalate (96,000 µg/kg) exceeded dry weight equivalent CSL and SQS levels. It is also noted that sample TC-CB-1 had to be diluted by a factor of 200 times because it contained a large amount of oil. This resulted in elevated reporting limits (i.e., reporting limits that exceeded CSL and SQS levels) for the majority of SVOCs and PAHs analyzed in the sample.

CITY OF EVERETT INDUSTRIAL PRETREATMENT DISCHARGE PERMIT

TC Systems operates a wastewater pretreatment system at its facility that provides wastewater treatment before the wastewater is discharged to the city of Everett sewer system. The facility has an Industrial Pretreatment Discharge Permit with the city of Everett Public Works and has received over 25 Notices of Violation from the city based on available Ecology files from 1990 to 1998. TC Systems has also received numerous notices of significant non-compliance of its industrial wastewater permit from the city of Everett. Numerous administrative violations of the Industrial Pretreatment Discharge Permit have occurred, including TC Systems' failure to sample for the required parameters and exceedances of pretreatment standards for lead, zinc, copper, pH, and fats, oils, and grease (FOG). City of Everett fines against TC Systems for violations of the Industrial Pretreatment Discharge Permit have totaled over $8,000. In 1999, TC Systems had a spill (reportedly 200 gallons of diluted chromic conversion coating) to its wastewater treatment plant as reported in Ecology's Environmental Report Tracking System (ERTS).

TC SYSTEMS PHASE I Environmental Site Assessment (ESA)

E3RA, Inc. performed a Phase I Environmental Site Assessment ESA on behalf of TC Systems in April 2009. The results of the Phase I ESA indicated three recognized environmental conditions (REC) as follows:

- REC – Multiple above ground storage tanks (ASTs) observed on the property.
- REC – Compressor Oil Leak.
- REC – Dye penetrant in direct contact with the concrete.

As a result of the Phase I ESA, TC Systems performed a limited Phase II ESA in August 2009 that included soil and groundwater sampling. Soil samples were collected from five boring locations at the TC Systems' facility and analyzed for TPH-diesel and -oil including total chromium. In addition, groundwater samples were collected and analyzed for TPH-diesel and -oil. The groundwater sample collected at location SB-4 had TPH-diesel and -oil at concentrations of 1,200 µg/L and 860 µg/L, respectively. These concentrations exceed Ecology's MTCA Method A groundwater cleanup level for diesel and oil range organics.

As a result of the evidence (information) presented above, Ecology has identified TC Systems as a PLP for the existing release at the TC Systems, Inc. Site.

Opportunity to Respond to Proposed Finding of Liability

In response to Ecology's proposed finding of liability, TC Systems may either:

1. In the interest of expediting this process without admitting liability, TC Systems may wish to accept its status as a PLP by waiving its right to the thirty (30) day notice and comment period. This may be accomplished by signing and returning the enclosed form (**Exhibit 6**) or sending a letter containing similar information to Ecology;

2. challenge TC Systems' status as a PLP by submitting written comments to Ecology within thirty (30) calendar days of the date you receive this letter; or

3. choose not to comment on TC Systems' status as a PLP.

Please submit your waiver or written comments to me at the address on this letterhead.

After reviewing any comments submitted, or after 30 days if no response has been received, Ecology will make a final determination regarding TC Systems' status as a PLP and provide you with written notice of that determination.

Identification of Other Potentially Liable Persons

Ecology has notified the following additional person that they may be potentially liable for the release of hazardous substances at the Site:

Norton Industries, Inc.
1020 10th Street
Everett, WA 98201-1580

If TC Systems is aware of any other persons who may be potentially liable for the release at this Site, Ecology encourages TC Systems to provide us with their identity and credible evidence that will substantiate TC Systems' belief that they are potentially liable. Ecology also suggests that you contact these other persons to discuss how TC Systems can jointly work together to most efficiently clean up the Site.

Responsibility and Scope of Potential Liability

Please note that Ecology may either conduct or require PLPs to conduct remedial actions to investigate and clean up the release of hazardous substances at a Site. PLPs are also encouraged to initiate discussions and negotiations with Ecology and the Office of the Attorney General that may lead to an agreement on the remedial action to be conducted at the Site.

Please also note that each liable person is strictly liable, jointly and severally, for all remedial investigations and remedial action costs, and for all natural resource damages resulting from the release of hazardous substances at a site. If Ecology incurs remedial action costs in connection with the investigation and/or cleanup of real property, and those costs are not reimbursed, then Ecology has the authority under RCW 70.105D.055 to file a lien against that real property to recover those costs.

Next Steps in Cleanup Process

In response to the release of hazardous substances at the TC Systems, Inc. Site, Ecology will initiate discussion for an agreed order in which a detailed scope of work and associated work schedule will be developed for the following:

- Remedial Investigation and Feasibility Study (RI/FS) per WAC 173-340-350.
- An Interim Action if found to be necessary per WAC 173-340-430.
- A Cleanup Action Plan (CAP) per WAC 173-340-380.

For description of the process for cleaning up a hazardous waste site under MTCA, please refer to the enclosed fact sheet (**Exhibit 7**).

Ecology's policy is to work cooperatively with PLPs to accomplish an efficient, prompt and effective cleanup of hazardous waste sites. Please note that cooperating with Ecology in planning or conducting remedial actions at the Site is not an admission of guilt or liability.

Site Listing

Also enclosed is the information on this facility that Ecology intends to add to our database of suspected hazardous waste sites (**Enclosure 8**). Please review this information for accuracy and return your comments within thirty (30) days of receipt of this letter

Contact Information

If you have any questions regarding this letter, or if you would like additional information regarding the cleanup of hazardous waste sites, please call me at (360) 407-7226 or Andy Kallus at (360) 407-7259.

Thank you for your cooperation.

Sincerely,

Tim L. Nord, Manager
Land and Aquatic Lands Cleanup Section
Toxics Cleanup Program

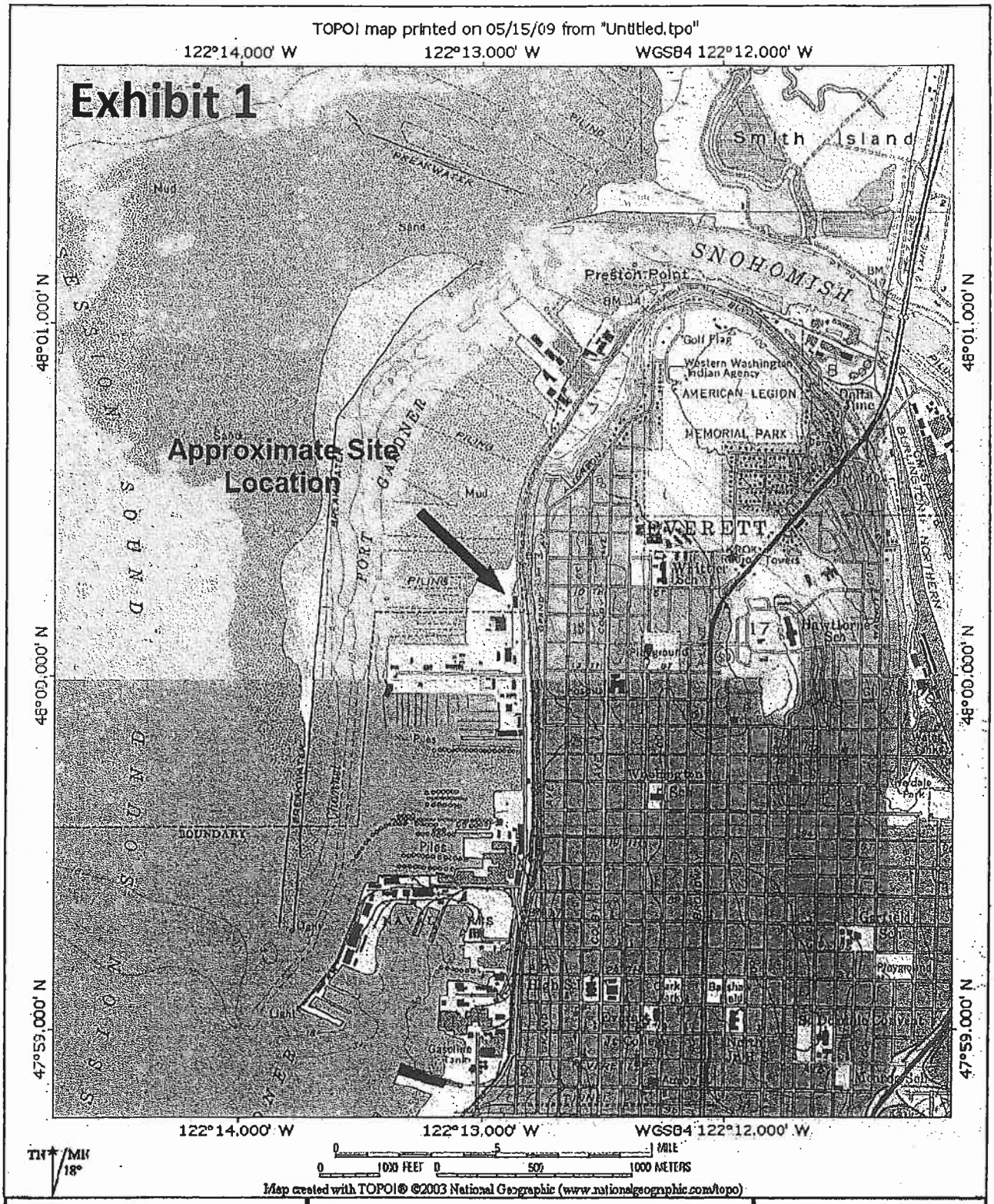
Enclosures (8)

By certified mail 7006 3450 0001 6755 1594

cc: Michael Rubel, The Fuller Trident Group
John Level, Assistant Attorney General

EXHIBIT 1

SITE LOCATION MAP



E3RA, Inc. P.O. Box 44840 Tacoma, WA 98448 253-537-9400 253-537-9401 fax	**Phase I ESA** **1032 West Marine View Drive** **Everett, Washington**	**FIGURE 1** **SITE LOCATION MAP**

EXHIBIT 2

SITE LAYOUT MAP

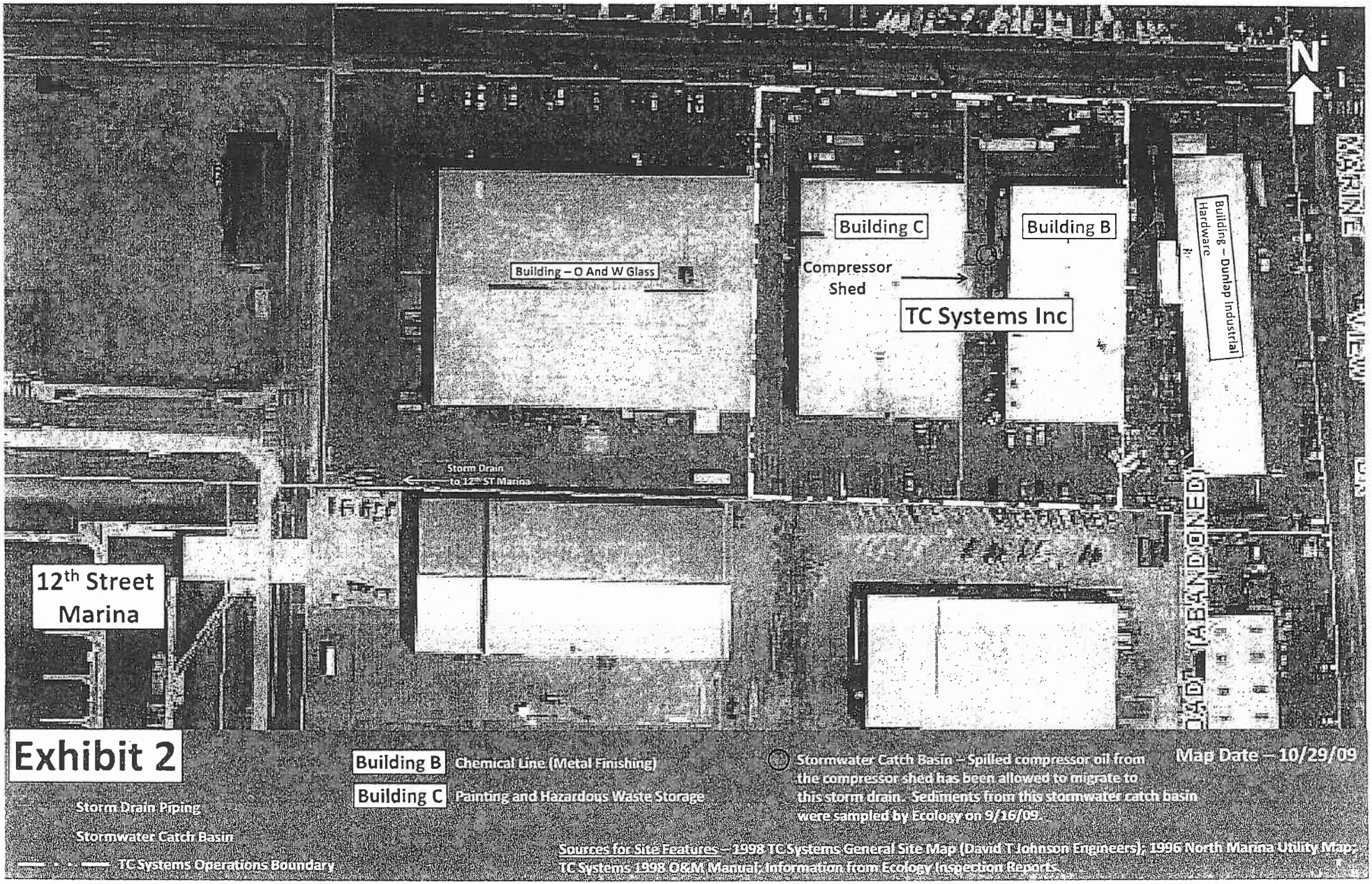

N
Building C
Building B
Compressor Shed
TC Systems Inc
Building – O And W Glass
Building – Dunlap Industrial Hardware
Storm Drain to 12th ST Marina
12th Street Marina
Exhibit 2
Building B Chemical Line (Metal Finishing)
Building C Painting and Hazardous Waste Storage
Stormwater Catch Basin – Spilled compressor oil from the compressor shed has been allowed to migrate to this storm drain. Sediments from this stormwater catch basin were sampled by Ecology on 9/16/09.
Map Date – 10/29/09
Storm Drain Piping
Stormwater Catch Basin
TC Systems Operations Boundary
Sources for Site Features – 1998 TC Systems General Site Map (David T Johnson Engineers); 1996 North Marina Utility Map; TC Systems 1993 O&M Manual; Information from Ecology Inspection Reports

EXHIBIT 3

LEGAL DESCRIPTION/SNOHOMISH COUNTY TAX ASSESSOR INFORMATION

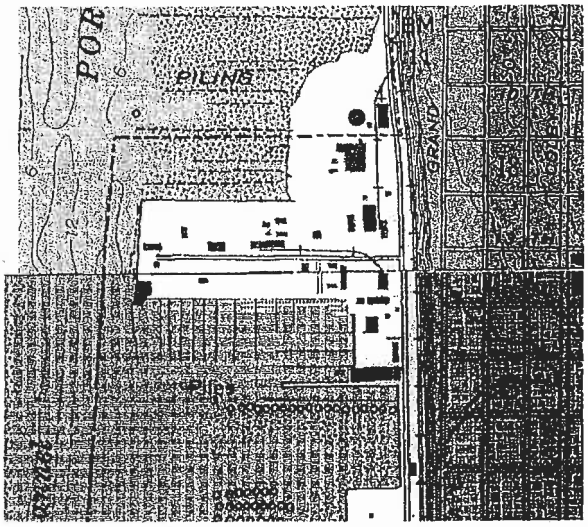
TC SYSTEMS INC SITE

SITE/PROPERTY LOCATION INFORMATION

The TC Systems Inc property is generally located between 10th and 11th Streets off West Marine View Drive, Everett, Washington. Site coordinates, a legal description, and county assessor's parcel numbers are provided below. Additional property information from the Snohomish County Tax Assessor's Office is attached.

Coordinates: Latitude: 48°00'13.37" North; Longitude: 122°12'54.64" West.

Latitude/Longitude Reference Point: Center of the TC Systems, Inc. Building B (see red circle on the figure below for approximate location).



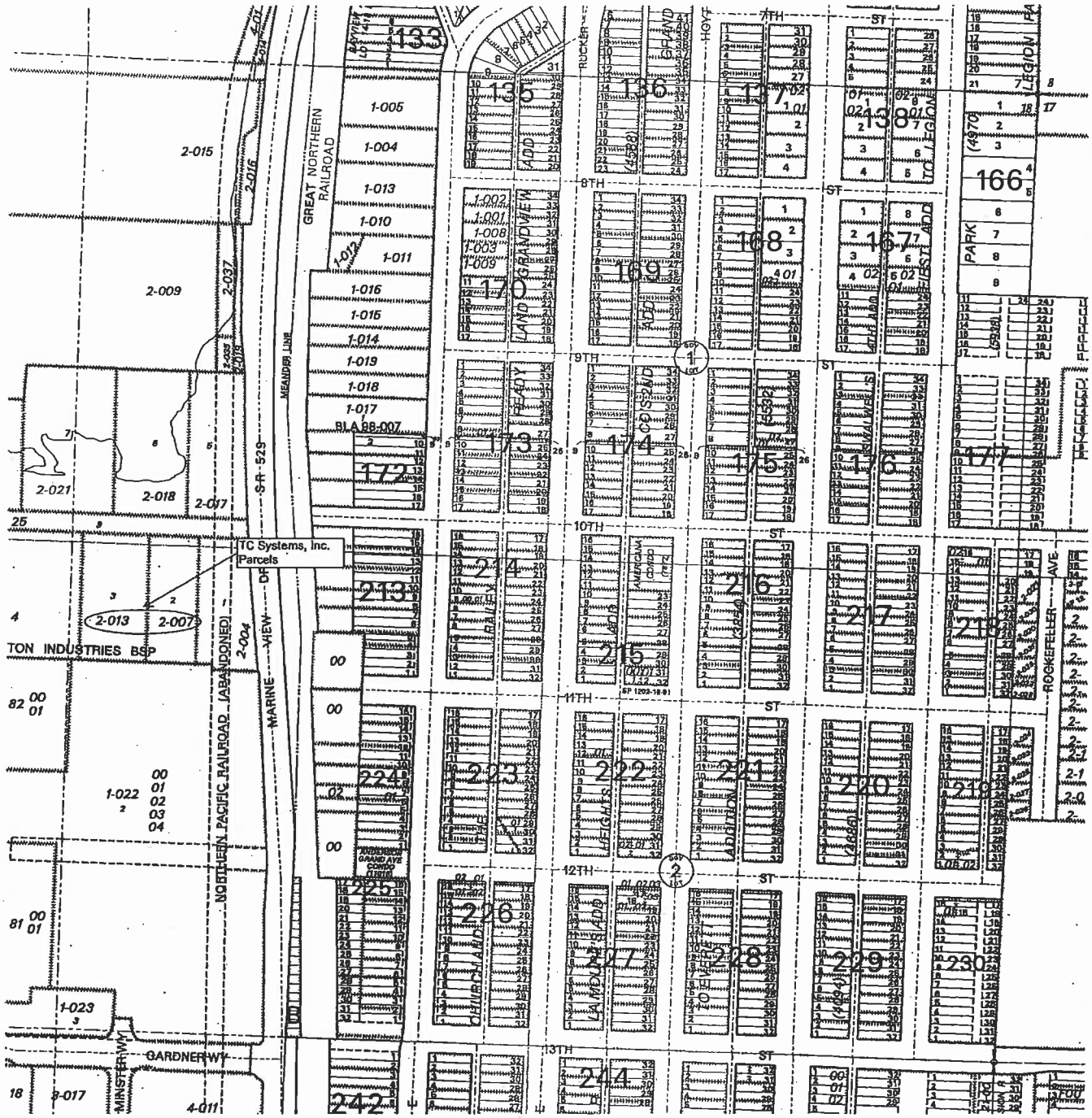
Legal Description: Section 18, Township 29 North, Range 5 East.

County Assessor's Parcel Numbers (Port of Everett Property): Tax account numbers corresponding to the TC Systems Inc Site include 29051800200700 and 29051800201300.

QUARTER	SECTION	TOWNSHIP N.W.B.L.	RANGE E.W.M.
NE	18	29	5

A product of the Snohomish County Assessor's Office
Map produced on August 05, 2009

SE-7-29-5



SE-18-29-5

Snohomish County Washington — Online Government Information & Services

* R E A L * Property Information

County Home Assessor Home Treasurer Home Information on which Department to contact

Please view Disclaimer **If you have questions, comments or suggestions, please** Contact Us.

Date/Time:7/7/2009 4:54:26 PM Answers to Frequently Asked Questions about Parcel Data (opens as new window)

Return to Property Information Entry page

Parcel Number **29051800200700** Prev Parcel Reference **18290520070001**

View Map of this parcel (opens as new window)

General Information

Taxpayer Name || Address (contact the Treasurer if you have questions)

NORTON INDUSTRIES || PO BOX 1188 - - - EVERETT, WA 98206

If the above mailing address is incorrect and you want to make a change, see the information on Name and Address Changes

Owner Name || Address (contact the Assessor if you have questions)

NORTON INDUSTRIES || P O BOX 1188 - - - EVERETT, WA 98206

If the above name and address is incorrect due to a recent sale, please see the information on Name and Address Changes After a Sale

Street (Situs) Address (contact the Assessor if you have questions)

1104 10TH ST - - - EVERETT, WA 98201-1581

Parcel Legal Description

SEC 18 TWP 29 RGE 05 LOT 2 OF NORTON INDUSTRIES BSP REC VOL 2894 BSP'S PG 0177 AF NO 940401424 & AF NOS 9404015002 & 9405185001 BEING A PTN OF N1/2 SEC 18

Go to top of page

Treasurer's Tax Information

Taxes For answers to questions about Taxes, please contact the Treasurer's office (opens as new window)

2009 Taxes for this parcel $10,474.76

Payments: Receipt No.	5117752	5/4/2009	$5,237.38

(Taxes may include Surface Water Management and/or State Forest Fire Patrol fees and any fees related to late payments. LID charges, if any, are not included.)

To obtain a duplicate tax statement, either download our Tax Statement Request form or call 425-388-3366 to request it by phone.

Go to top of page

Assessor's Property Data

Characteristics and Value Data below are for 2009 tax year.

Please contact the Treasurer's office **for answers to questions about Taxes** (opens as new window)

For questions ONLY about property characteristics or property values (NOT taxes), please contact the Assessor's Office

Property Values Values do not reflect adjustments made due to an exemption, such as a senior or disabled persons exemption. Reductions for exemptions are made on the property tax bill.

Tax Year	Market Land	Market Improvement	Market Total
2009	$284,500	$815,500	$1,100,000

Pending Property Values

Tax Year	Market Land	Market Improvement	Market Total
2010	$284,500	$815,500	$1,100,000

Go to top of page

Valuation, Payment, and Property Tax History

View History (opens as new window)

Go to top of page

Property Characteristics

Tax Code Area (TCA) **00010** View Taxing Districts for this Parcel (opens as new window)

Use Code **349 Other Fabricated Metal Products NEC**

Size Basis **ACRE** Size **1.12** (Size may include undivided interest in common tracts and road parcels)

Go to top of page

Property Structures

Type	Yr.Built	Structure Description
Commercial	**1978**	**TC SYSTEMS INC** View Structure Data (opens as new window)

Go to top of page

Property Sales since 7/31/1999

Explanation of Sales Information (opens as new window)

Sales data is based solely upon excise affidavits processed by the Assessor.

No sales for this parcel have been recorded since 7/31/1999

Go to top of page

Property Maps Township/Range/Section/Quarter, links to maps

Neighborhood **5306000** Explanation of Neighborhood Code (opens as new window)

Township **29** Range **05** Section **18** Quarter **NW** Find parcel maps for this Township/Range/Section

View Map of this parcel (opens as new window)

Snohomish County Washington — Online Government Information & Services

* R E A L * Property Information

County Home Assessor Home Treasurer Home Information on which Department to contact

Please view Disclaimer **If you have questions, comments or suggestions, please** Contact Us.

Date/Time:7/7/2009 4:59:51 PM Answers to Frequently Asked Questions about Parcel Data (opens as new window)

Return to Property Information Entry page

Parcel Number **29051800201300** Prev Parcel Reference **18290520130003**

View Map of this parcel (opens as new window)

General Information

Taxpayer Name || Address (contact the Treasurer if you have questions)

NORTON INDUSTRIES || PO BOX 1188 - - - EVERETT, WA 98206

If the above mailing address is incorrect and you want to make a change, see the information on Name and Address Changes

Owner Name || Address (contact the Assessor if you have questions)

NORTON INDUSTRIES || P O BOX 1188 - - - EVERETT, WA 98206

If the above name and address is incorrect due to a recent sale, please see the information on Name and Address Changes After a Sale

Street (Situs) Address (contact the Assessor if you have questions)

1032 10TH ST - - - EVERETT, WA 98201-1580

Parcel Legal Description

SEC 18 TWP 29 RGE 05 LOT 3 OF NORTON INDUSTRIES BSP REC VOL 2894 BSP'S PG 0177 AF NO 9404010424 & AF NOS 9404015002 & 9405185001 BEING A PTN OF N1/2 SEC 18

Go to top of page

Treasurer's Tax Information

Taxes For answers to questions about Taxes, please contact the Treasurer's office (opens as new window)

2009 Taxes for this parcel $14,664.67

Payments: Receipt No.	5117753	5/4/2009	$7,332.33

(Taxes may include Surface Water Management and/or State Forest Fire Patrol fees and any fees related to late payments. LID charges, if any, are not included.)

To obtain a duplicate tax statement, either download our Tax Statement Request form or call 425-388-3366 to request it by phone.

Go to top of page

Assessor's Property Data

Characteristics and Value Data below are for 2009 tax year.

Please contact the Treasurer's office **for answers to questions about Taxes** (opens as new window)

For questions ONLY about property characteristics or property values (NOT taxes), please contact the Assessor's Office

Property Values

Values do not reflect adjustments made due to an exemption, such as a senior or disabled persons exemption. Reductions for exemptions are made on the property tax bill.

Tax Year	Market Land	Market Improvement	Market Total
2009	$368,300	$1,171,700	$1,540,000

Pending Property Values

Tax Year	Market Land	Market Improvement	Market Total
2010	$368,300	$1,171,700	$1,540,000

Go to top of page

Valuation, Payment, and Property Tax History

View History (opens as new window)

Go to top of page

Property Characteristics

Tax Code Area (TCA) **00010** View Taxing Districts for this Parcel (opens as new window)

Use Code **349 Other Fabricated Metal Products NEC**

Size Basis **ACRE** Size **1.45** (Size may include undivided interest in common tracts and road parcels)

Go to top of page

Property Structures

Type	Yr.Built	Structure Description
Commercial	**1980**	**CRUISE A HOME INC TC SYSTEMS** View Structure Data (opens as new window)

Go to top of page

Property Sales since 7/31/1999

Explanation of Sales Information (opens as new window)

Sales data is based solely upon excise affidavits processed by the Assessor.

No sales for this parcel have been recorded since 7/31/1999

Go to top of page

Property Maps Township/Range/Section/Quarter, links to maps

Neighborhood **5306000** Explanation of Neighborhood Code (opens as new window)

Township **29** Range **05** Section **18** Quarter **NW** Find parcel maps for this Township/Range/Section

View Map of this parcel (opens as new window)

EXHIBIT 4

PHOTO DOCUMENTATION

EXHIBIT 4

Photo 1 (7/8/07 Ecology Inspection; cracks in secondary containment)

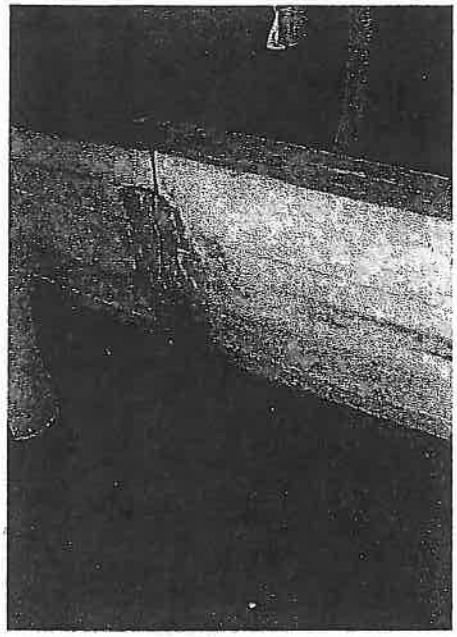


Photo 2 (7/8/07 Ecology Inspection; containment wall not properly moisture sealed)

Photo 3 (7/8/08 Ecology Inspection; compressor oil leak)

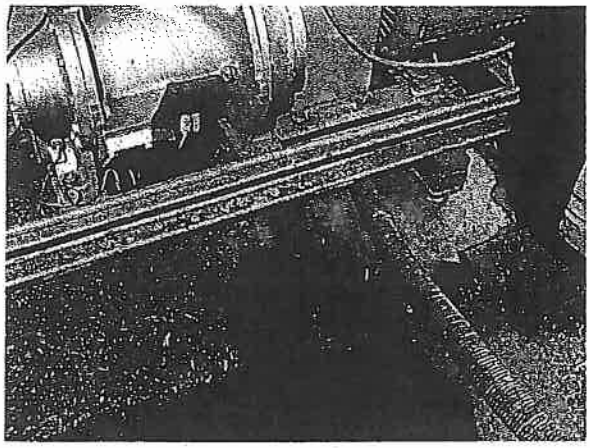


Photo 4 (7/8/08 Ecology Inspection; photo shows a liquid trail to the storm drain from the compressor shed)

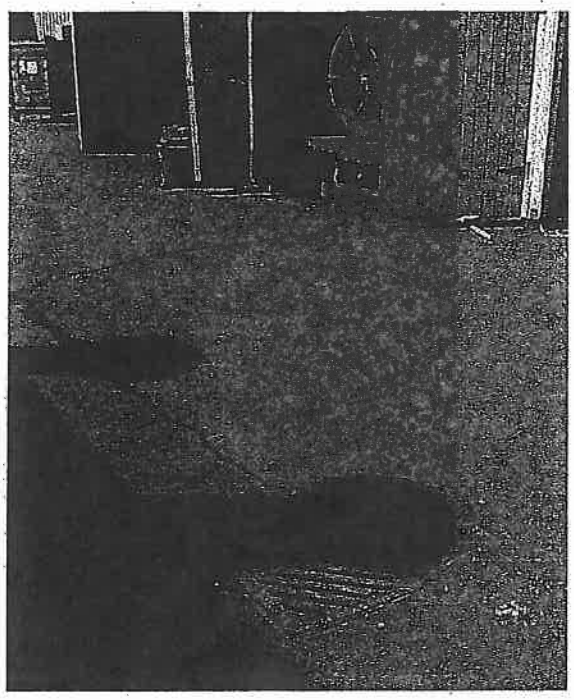


Photo 5 (4/20/04 Berm around outside containers show paint chips which need to be cleaned up Due to proximity of storm drains.)

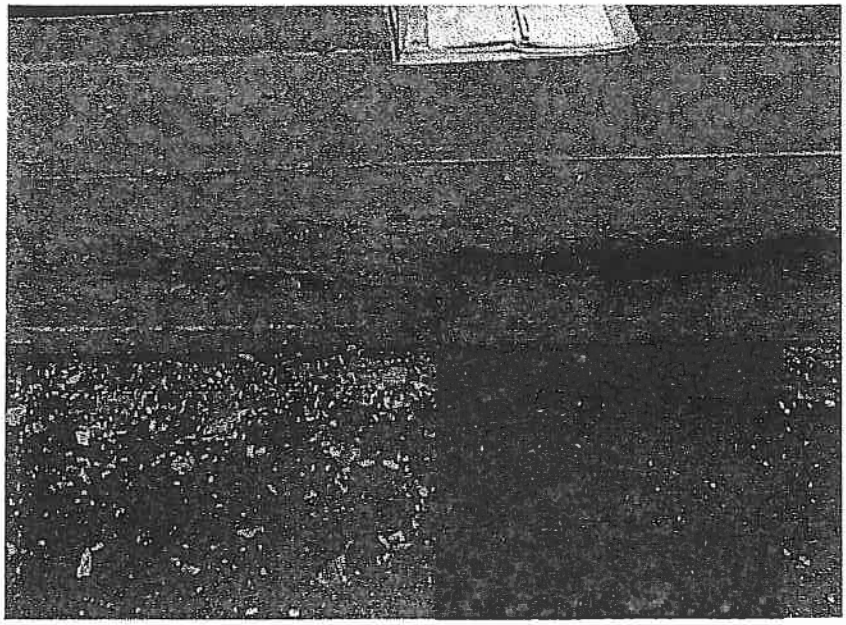


Photo 6 (4/20/04 Compressor in shed adjacent to driveway with storm drains. The pump is leaking oil and fluids)

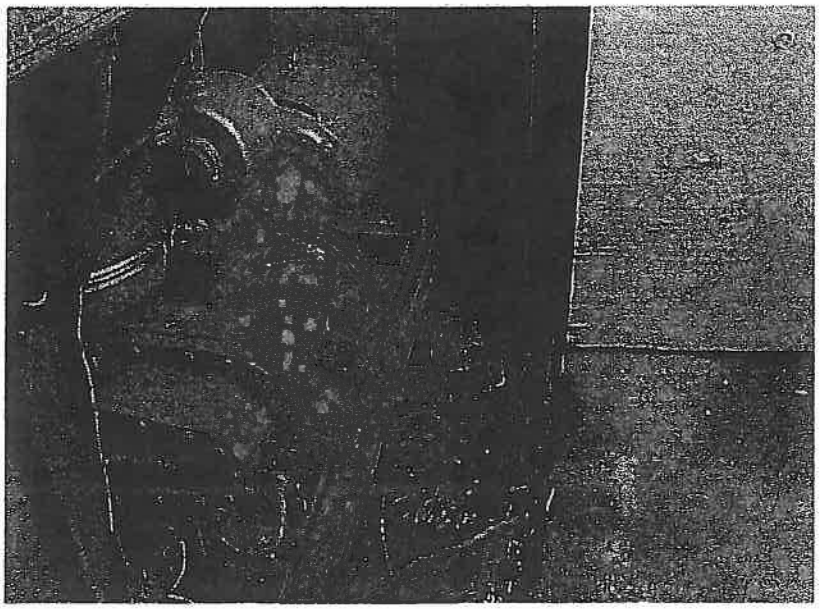


Photo 7 (9/17/07 Oily sheen discharging to storm drain)

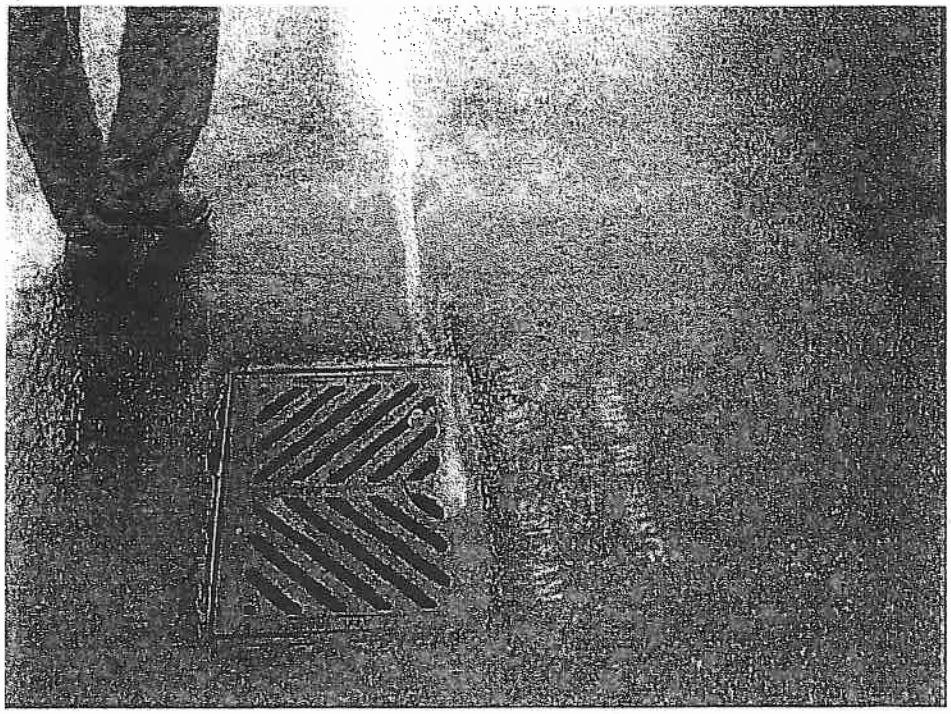


EXHIBIT 5

JUNE 1996 NORTH MARINA UTILITY MAP

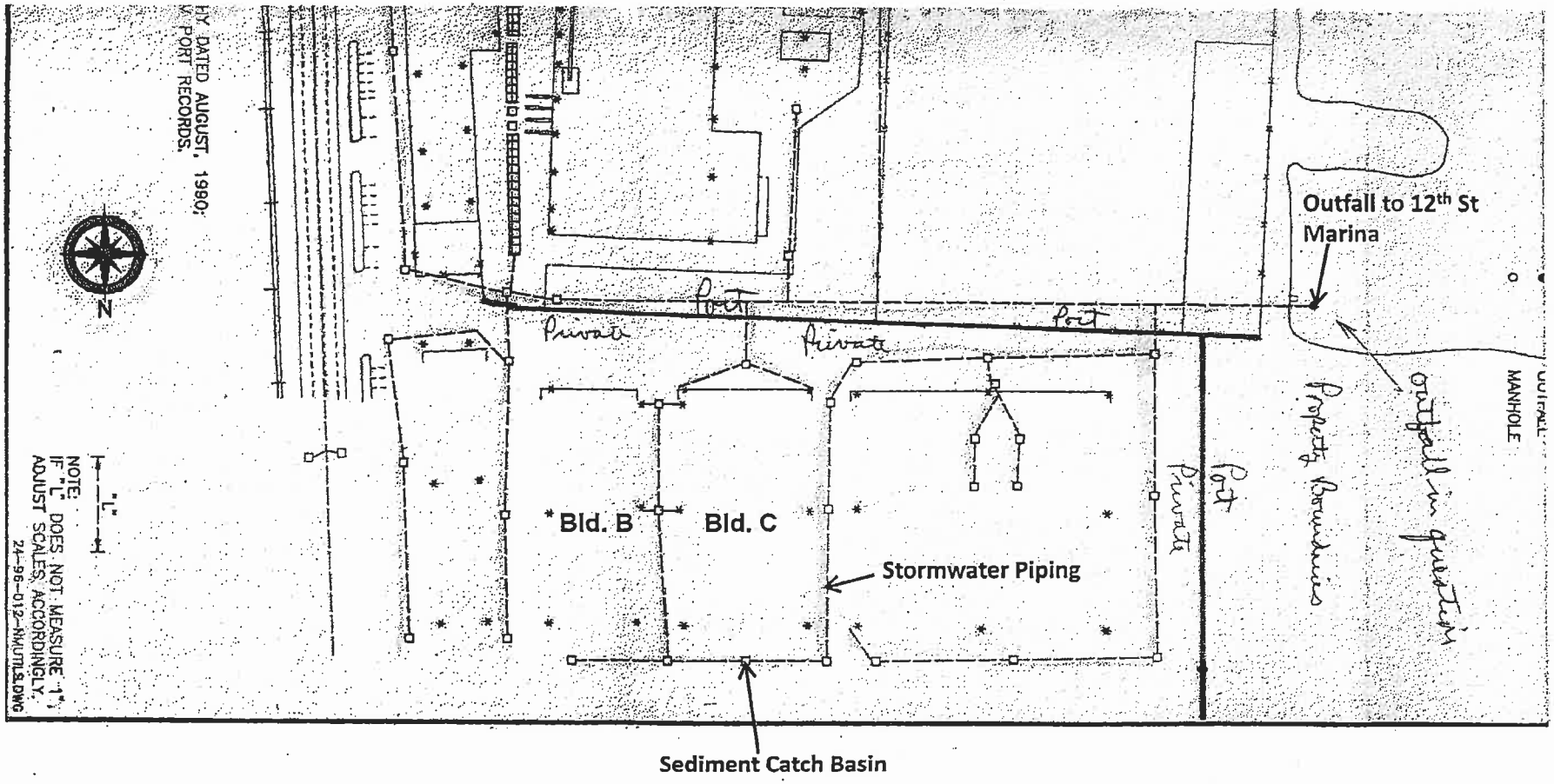


Exhibit 5

June 1996 North Marina Utility Map

(Source: Port of Everett)

EXHIBIT 6

PLP NOTICE LETTER AND 30 DAY COMMENT PERIOD WAIVER FORM

EARLY POTENTIALLY LIABLE PERSON NOTICE LETTER
THIRTY–DAY COMMENT PERIOD WAIVER FORM

Name:

Address:

Pursuant to WAC 173-340-500 and WAC 173-340-520(1)(b)(i), I ....., as a representative of TC Systems, Inc. (TC Systems), do hereby waive the TC Systems' right to the thirty (30) day notice and comment period described in WAC 173-340-500(3) and accept(s) TC Systems' status as a Potentially Liable Person for the TC Systems Inc Site located at 1032 West Marine View Drive, Everett, Washington. This waiver is solely for purposes of entering into an Agreed Order with Ecology for conducting the additional investigation/remedial action at the site. By waiving this right, TC Systems makes no admission of liability.

_____ _____

Signature Date

_____

Relation To The Site
(ie, Owner, Operator or Representative)

EXHIBIT 7

MTCA FACT SHEET

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Focus

Model Toxics Control Act Cleanup Regulation: Process for Cleanup of Hazardous Waste Sites

In March of 1989, an innovative, citizen-mandated toxic waste cleanup law went into effect in Washington, changing the way hazardous waste sites in this state are cleaned up. Passed by voters as Initiative 97, this law is known as the Model Toxics Control Act, chapter 70.105D RCW. This fact sheet provides a brief overview of the process for the cleanup of contaminated sites under the rules Ecology adopted to implement that Act (chapter 173-340 WAC).

How the Law Works

The cleanup of hazardous waste sites is complex and expensive. In an effort to avoid the confusion and delays associated with the federal Superfund program, the Model Toxics Control Act is designed to be as streamlined as possible. It sets strict cleanup standards to ensure that the quality of cleanup and protection of human health and the environment are not compromised. At the same time, the rules that guide cleanup under the Act have built-in flexibility to allow cleanups to be addressed on a site-specific basis.

The Model Toxics Control Act funds hazardous waste cleanup through a tax on the wholesale value of hazardous substances. The tax is imposed on the first in-state possessor of hazardous substances at the rate of 0.7 percent, or $7 per $1,000. Since its passage in 1988, the Act has guided the cleanup of thousands of hazardous waste sites that dot the Washington landscape. The Washington State Department of Ecology's Toxic Cleanup Program ensures that these sites are investigated and cleaned up.

What Constitutes a Hazardous Waste Site?

Any owner or operator who has information that a hazardous substance has been released to the environment at the owner or operator's facility and may be a threat to human health or the environment must report this information to the Department of Ecology (Ecology). If an "initial investigation" by Ecology confirms further action (such as testing or cleanup) may be necessary, the facility is entered onto either Ecology's "Integrated Site Information System" database or "Leaking Underground Storage Tank" database. These are computerized databases used to track progress on all confirmed or suspected contaminated sites in Washington State. All confirmed sites that have not been already voluntarily cleaned up are ranked and placed on the state "Hazardous Sites List." Owners, operators and other persons known to be potentially liable for the cleanup of the site will receive an "Early Notice Letter" from Ecology notifying them that their site is suspected of needing cleanup, and that it is Ecology's policy to work cooperatively with them to accomplish prompt and effective cleanup.

October 2005
Revised

Focus No. 94-129

printed on recycled paper

Who is Responsible for Cleanup?

Any past or present relationship with a contaminated site may result in liability. Under the Model Toxics Control Act a potentially liable person can be:

- A current or past facility owner or operator.
- Anyone who arranged for disposal or treatment of hazardous substances at the site.
- Anyone who transported hazardous substances for disposal or treatment at a contaminated site, unless the facility could legally receive the hazardous materials at the time of transport.
- Anyone who sells a hazardous substance with written instructions for its use, and abiding by the instructions results in contamination.

In situations where there is more than one potentially liable person, each person is jointly and severally liable for cleanup at the site. That means each person can be held liable for the entire cost of cleanup. In cases where there is more than one potentially liable person at a site, Ecology encourages these persons to get together to negotiate how the cost of cleanup will be shared among all potentially liable persons.

Ecology must notify anyone it knows may be a "potentially liable person" and allow an opportunity for comment before making any further determination on that person's liability. The comment period may be waived at the potentially liable person's request or if Ecology has to conduct emergency cleanup at the site.

Achieving Cleanups through Cooperation

Although Ecology has the legal authority to order a liable party to clean up, the department prefers to achieve cleanups cooperatively. Ecology believes that a non-adversarial relationship with potentially liable persons improves the prospect for prompt and efficient cleanup. The rules implementing the Model Toxics Control Act, which were developed by Ecology in consultation with the Science Advisory Board (created by the Act), and representatives from citizen, environmental and business groups and government agencies, are designed to:

- Encourage independent cleanups initiated by potentially liable persons, thus providing for quicker cleanups with less legal complexity.
- Encourage an open process for the public, local government and liable parties to discuss cleanup options and community concerns.
- Facilitate cooperative cleanup agreements rather than Ecology-initiated orders. *Ecology can, and does, however use enforcement tools in emergencies or with recalcitrant potentially liable persons.*

What is the Potentially Liable Person's Role in Cleanup?

The Model Toxics Control Act requires potentially liable persons to assume responsibility for cleaning up contaminated sites. For this reason, Ecology does not usually conduct the actual cleanup when a potentially liable person can be identified. Rather, Ecology oversees the cleanup of sites to ensure that investigations, public involvement and actual cleanup and monitoring are done appropriately. Ecology's costs of this oversight are required to be paid by the liable party.

When contamination is confirmed at the site, the owner or operator may decide to proceed with cleanup without Ecology assistance or approval. Such "independent cleanups" are

allowed under the Model Toxics Control Act under most circumstances, but must be reported to Ecology, and are done at the owner's or operator's own risk. Ecology may require additional cleanup work at these sites to bring them into compliance with the state cleanup standards. Most cleanups in Washington are done independently.

Potentially liable persons conducting independent cleanups do not have access to financial assistance from Ecology. Those who plan to seek contributions from other persons to help pay for cleanup costs need to be sure their cleanup is "the substantial equivalent of a department-conducted or department-supervised remedial action." Ecology has provided guidance on how to meet this requirement in WAC 173-340-545. Persons interested in pursuing a private contribution action on an independent cleanup should carefully review this guidance prior to conducting site work.

Working with Ecology to Achieve Cleanup

Ecology and potentially liable persons often work cooperatively to reach cleanup solutions. Options for working with Ecology include formal agreements such as consent decrees and agreed orders, and seeking technical assistance through the Voluntary Cleanup Program. These mechanisms allow Ecology to take an active role in cleanup, providing help to potentially liable persons and minimizing costs by ensuring the job meets state standards the first time. This also minimizes the possibility that additional cleanup will be required in the future – providing significant assurances to investors and lenders.

Here is a summary of the most common mechanisms used by Ecology:

- **Voluntary Cleanup Program:** Many property owners choose to cleanup their sites independent of Ecology oversight. This allows many smaller or less complex sites to be cleaned up quickly without having to go through a formal process. A disadvantage to property owners is that Ecology does not approve the cleanup. This can present a problem to property owners who need state approval of the cleanup to satisfy a buyer or lender.

  One option to the property owner wanting to conduct an independent cleanup yet still receive some feedback from Ecology is to request a technical consultation through Ecology's Voluntary Cleanup Program. Under this voluntary program, the property owner submits a cleanup report with a fee to cover Ecology's review costs. Based on the review, Ecology either issues a letter stating that the site needs "No Further Action" or identifies what additional work is needed. Since Ecology is not directly involved in the site cleanup work, the level of certainty in Ecology's response is less than in a consent decree or agreed order. However, many persons have found a "No Further Action" letter to be sufficient for their needs, making the Voluntary Cleanup Program a popular option.

- **Consent Decrees:** A consent decree is a formal legal agreement filed in court. The work requirements in the decree and the terms under which it must be done are negotiated and agreed to by the potentially liable person, Ecology and the state Attorney General's office. Before consent decrees can become final, they must undergo a public review and comment period that typically includes a public hearing. Consent decrees protect the potentially liable person from being sued for "contribution" by other persons that incur cleanup expenses at the site while facilitating any contribution claims against the other persons when they are responsible for part of the cleanup costs. Sites cleaned up under a consent decree are also exempt from having to obtain certain state and local permits that could delay the cleanup.

- ***De Minimus* Consent Decree:** Landowners whose contribution to site contamination is "insignificant in amount and toxicity" may be eligible for a de minimus consent decree. In these decrees, the landowner typically settles their liability by paying for some of the cleanup instead of actually conducting the cleanup work. Ecology usually accepts a de minimus settlement proposal only if the landowner is affiliated with a larger site cleanup that Ecology is currently working on.
- **Prospective Purchaser Consent Decree:** A consent decree may also be available for a "prospective purchaser" of contaminated property. In this situation, a person who is not already liable for cleanup and wishes to purchase a cleanup site for redevelopment or reuse may apply to negotiate a prospective purchaser consent decree. The applicant must show, among other things, that they will contribute substantial new resources towards the cleanup. Cleanups that also have a substantial public benefit will receive a higher priority for prospective purchaser agreements. If the application is accepted, the requirements for cleanup are negotiated and specified in a consent decree so that the purchaser can better estimate the cost of cleanup before buying the land.
- **Agreed Orders:** Unlike a consent decree, an agreed order is not filed in court and is not a settlement. Rather, it is a legally binding, administrative order issued by Ecology and agreed to by the potentially liable person. Agreed orders are available for remedial investigations, feasibility studies, and final cleanups. An agreed order describes the site activities that must occur for Ecology to agree not to take enforcement action for that phase of work. As with consent decrees, agreed orders are subject to public review and offer the advantage of facilitating contribution claims against other persons and exempting cleanup work from obtaining certain state and local permits.

Ecology-Initiated Cleanup Orders

Administrative orders requiring cleanup activities without an agreement with a potentially liable person are known as **enforcement orders**. These orders are usually issued to a potentially liable person when Ecology believes a cleanup solution cannot be achieved expeditiously through negotiation or if an emergency exists. If the responsible party fails to comply with an enforcement order, Ecology can clean up the site and later recover costs from the responsible person(s) at up to three times the amount spent. The state Attorney General's Office may also seek a fine of up to $25,000 a day for violating an order. Enforcement orders are subject to public notification.

Financial Assistance

Each year, Ecology provides millions of dollars in grants to local governments to help pay for the cost of site cleanup. In general, such grants are available only for sites where the cleanup work is being done under an order or decree. Ecology can also provide grants to local governments to help defray the cost of replacing a public water supply well contaminated by a hazardous waste site. Grants are also available for local citizen groups and neighborhoods affected by contaminated sites to facilitate public review of the cleanup. See Chapter 173-322 WAC for additional information on grants to local governments and Chapter 173-321 WAC for additional information on public participation grants.

Public Involvement

Public notices are required on all agreed orders, consent decrees and enforcement orders. Public notification is also required for all Ecology-conducted remedial actions.

Ecology's Site Register is a widely used means of providing information about cleanup efforts to the public and is one way of assisting community involvement. The Site Register is published every two weeks to inform citizens of public meetings and comment periods, discussions or negotiations of legal agreements, and other cleanup activities. Persons affected by contaminated sites and needing additional information on the Act, cleanup standards, or risk assessment can call Ecology's Citizen Technical Advisor toll free at 1-800-826-7716. The Site Register can be accessed on the Internet at: www.ecy.wa.gov/programs/tcp/pub_inv/pub_inv2.html.

How Sites are Cleaned Up

The rules describing the cleanup process at a hazardous waste site are in chapter 173-340 WAC. The following is a general description of the steps taken during the cleanup of an average hazardous waste site. Consult the rules for the specific requirements for each step in the cleanup process.

1. Site Discovery: Sites where contamination is found must be reported to Ecology's Toxics Cleanup Program within 90 days of discovery, unless it involves a release of hazardous materials from an underground storage tank system. In that case, the site discovery must be reported to Ecology within 24 hours. At this point, potentially liable persons may choose to conduct independent cleanup without assistance from the department, but cleanup results must be reported to Ecology.

2. Initial Investigation: Ecology is required to conduct an initial investigation of the site within 90 days of receiving a site discovery report. Based on information obtained about the site, a decision must be made within 30 days to determine if the site requires additional investigation, emergency cleanup, or no further action. If further action is required under the Model Toxics Control Act, Ecology sends early notice letters to owners, operators and other potentially liable persons inviting them to work cooperatively with the department.

3. Site Hazard Assessment: A site hazard assessment is conducted to confirm the presence of hazardous substances and to determine the relative risk the site poses to human health and the environment.

4. Hazard Ranking: The Model Toxics Control Act requires that sites be ranked according to the relative health and environmental risk each site poses. Working with the Science Advisory Board, Ecology created the Washington Ranking Method to categorize sites using data from site hazard assessments. Sites are ranked on a scale of 1 to 5. A score of 1 represents the highest level of risk and 5 the lowest. Ranked sites are placed on the state Hazardous Sites List.

5. Remedial Investigation/Feasibility Study: A remedial investigation and feasibility study is conducted to define the extent and magnitude of contamination at the site. Potential impacts on human health and the environment and alternative cleanup technologies are also evaluated in this study. Sites being cleaned up by Ecology or by potentially liable persons under a consent decree, agreed order or enforcement order are required to provide for a 30 day public review before finalizing the report.

6. Selection of Cleanup Action: Using information gathered during the study, a cleanup action plan is developed. The plan identifies preferred cleanup methods and specifies cleanup standards and other requirements at the site. A draft of the plan is subject to public review and comment before it is finalized.

7. Site Cleanup: Actual cleanup begins when the cleanup action plan is implemented. This includes design, construction, operation and monitoring of cleanup actions. A site may be taken off the Hazardous Sites List after cleanup is completed and Ecology determines cleanup standards have been met.

For More Information / Special Accommodation Needs

If you would like more information about the state Model Toxics Control Act, please call us toll-free at **1-800-826-7716**, or contact your regional Washington State Department of Ecology office listed below. Information about site cleanup, including a listing of ranked hazardous waste sites, is also accessible through our Internet address: http://www.ecy.wa.gov/programs/tcp/cleanup.html

- **Northwest Regional Office** **425/649-7000 (voice) / 206/649-4259 (TDD)**
  (Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom Counties)
- **Southwest Regional Office** **360/407-6300 (voice) / 360/407-6306 (TDD)**
  (Southwestern Washington, Olympic Peninsula, Pierce, Thurston and Mason Counties)
- **Central Regional Office** **509/575-2490 (voice) / 509/454-7673 (TDD)**
  (Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima Counties)
- **Eastern Regional Office** **509/329-3400 (voice) / 509/458-2055 (TDD)**
  (Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman Counties)

If you need this publication in an alternate format, please contact Toxics Cleanup Program at 360-407-7170. For persons with a speech or hearing impairment call 711 for relay service or 800-833-6388 for TTY.

Disclaimer Notice: This fact sheet is intended to help the user understand the Model Toxics Control Act Cleanup Regulation, chapter 173-340 WAC. It does not establish or modify regulatory requirements.

EXHIBIT 8

FACILITY SITE & ISIS INFORMATION

FACILITY SITE INFORMATION (TCP)

Shaded fields are required

Site Name: TC Systems Inc **FS ID:** 10587741

Location Description: Generally located between between 10th and 11th Streets off West Marine View Drive, Everett, Washington.

Geographic Position: 05

01 = Centroid of STR Unit
02 = Centroid of STR Qtr. Section
03 = Centroid of STR QTR QTR Section
04 = Centroid of STR QTR QTR QTR Section
05 = Facility/Site Centroid
06 = NE Corner of Land Parcel
07 = NW Corner of Land Parcel
08 = Plant Entrance
09 = SE Corner of Land Parcel
11 = SW Corner of Land Parcel
99 = Unknown

Site Address: 1032 West Marine View Drive

City: Everett **Zip:** 98201-1557

County: Snohomish **WRIA ID:** #7 **Indian Land:** ☐

Collection Source: 01

01 = Not Applicable
02 = "1:500,000
03 = "1:250,000
04 = "1:125,000
05 = "1:100,000
06 = "1:63,360
07 = "1:62,500
08 = "1:50,000
09 = "1:25,000
10 = "1:24,000
11 = "1:20,000
12 = "1:15,840
13 = "1:10,000
14 = "1:12,000
15 = "1:25,001-1:50,000
16 = "1:50,001-1:100,000
17 = "1:20,001-1:125,000
18 = "1:15,001-1:20,000
19 = "1:10,000-1:15,000
20 = "1:5,001-1:10,000
21 = "1:501-1:5,000
22 = <=1:500
23 = <1:500
99 = Unknown

Collection Method: 18

01 = Address Matching—Block Face
02 = Address Matching—House Number
03 = Address Matching—Street Centerline
04 = Address Matching—Unknown
05 = Aerial Photography—Rectified
06 = Aerial Photography—Unknown
07 = Aerial Photography—Unrectified
08 = Cadastral Survey
09 = Census Block 1990 Centroid
10 = Census Block Group 1990 Centroid
11 = Conversion from STR
12 = Digital or manual raw photo extraction
13 = Digitized of CTR screen/digital data
14 = Digitized—paper map
15 = GPS (Carrier/Geodetic)
16 = GPS (Code/Geodetic)
17 = GPS (Kinematic)
18 = GPS (Unknown)
19 = Hand Measured—paper map
20 = LORAN-C
21 = Orthophotography—digital
22 = Orthophotography—paper
23 = Satellite Imagery—Landsat MSS
24 = Satellite Imagery—Landsat TM
25 = Satellite Imagery—Other
26 = Satellite Imagery—SPOT Panchromatic
27 = Satellite Imagery—SPOT Multi Spectral
28 = Zip Code Centroid
99 = Unknown

Horizontal Datum: 04

01 = North American Datum 1927 NAD27
02 = North American Datum 1983 ('91 adj.) = NAD83
03 = HARN
04 = WGS84 (GPS NAVD88)
99 = Unknown

Areal Extent Code: 06

01 = Large Facility/Complex or area > 10 Acre
02 = Small Facility/Complex or area > 1 Acre < 10 Acre
03 = Large Building or area > 5,000 sq. ft.
04 = Small Building or area < 5,000 sq. ft.
05 = Crossing or Intersection of two features; e.g., bridge stream
06 = Small object or area < 10 sq. ft.; e.g., well
99 = Unknown

Accuracy Level:	01 = > 1/100 meter	06 = +/- 40 feet (12 meter)	11 = +/- 1000 feet
06	02 = < 1/10 meter and > 1/100 meter	07 = +/- 100 feet (35 meter)	12 = +/- 2000 feet
	03 = < 1 meter and > 1/10 meter	08 = +/- 180 feet (55 meter)	13 = > 2000 feet
	04 = +/- 10 feet (3 meter)	09 = +/- 250 feet	99 = Unknown
	05 = +/- 20 feet (6 meter)	10 = +/- 500 feet	

	Degrees	Minutes	Seconds		Number	Direction	Quarter	Circle
Latitude:	48	00	13.37 N	Section:	18			NW (NE) SW SE
Longitude:	122	12	54.64 W	Township:	29	North		NW NE SW SE
If you don't have LAT/LONG, please provide map of site!				Range:	5	East		NW NE SW SE

Ecology Interaction (check all that apply):			Program ID:	System:	
☐	FCS	Federal (Superfund Cleanup Site)		☒	ISIS
☐	INDPNDNT	Independent Cleanup			
☐	IRAP	Independent Remedial Action Program			
☐	LUST	Leaking Underground Storage Tank			
☑	SCS	State Cleanup Site			
☐	SEDIMENT	Sediment Site			
☐	UST	Underground Storage Tank			
☐	VOLCLNST	Voluntary Cleanup Program			

Active Status: _____ Date: _____ Inactive Status: _____ Date: _____

Sic/NAIC Code:	Description:
1. 3471/332813 2. 3479/332812	Metal Finishing

If this site is a sub-site or operable unit of a larger site, include the name and FS ID# of the parent site:

FS ID#: _____ Site Name: TC Systems Inc

Company Name: TC Systems, Inc Title: Ms

Last Name: Utick First Name: Mary Middle Initial: _____

Address: 1032 West Marine View Drive PO Box: _____

City: Everett State: WA Zip: 98201-1557 Country: USA

Tax ID#: _____ UBI#: _____ Phone#: 425-258-4055 Ext: _____

Fax#: _____ Alt Phone#: _____ E-Mail Address: _____

Affiliation Type: PLP

AC = Application Contact
AP = Affected Party
APPL = Applicant
ATT = Attorney
BC = Billing Contact
BO = Business Owner
CA = Co Applicant
CNTR = Contractor
CRP = Cost Recovery Party
DBA = Doing Business As
FOPER = Former Operator
FOWNR = Former Owner
IC = Inspection Contact
LAO = Land Owner
LEO = Legal Owner
MH = Mortgage Holder
OP = Operator
PE = Project Engineer
PI = Public Involvement Person
PLP = Potentially Liable Person
PM = Project Manager
PRMT = Permittee
PRP = Potentially Responsible Party
SA = Site Attorney
SC = Site Contact
SO = Site Owner
TSC = Toxics Site Contact
UNK = Unknown

Relationship Start Date: _____ Relationship End Date: _____

Alternate Site Names

1. Tri Coatings

ISIS SITE CLEANUP INFORMATION

Shaded fields are required

Site Name: TC Systems Inc **FS ID:**

Warm Bin #: 1 (If NPL(0) 1= State has lead 3 = Joint lead; circle one 2 = EPA has lead 4 = Fed Fac Agreemnt)

Tax Parcel #(s): 29051800200700, 29051800201300

Ecology Status: 1

1 = Awaiting SHA
2 = Ranked, Awaiting RA
3 = RA in progress
4 = Independent RA
5 = Construction Completed, O & M Underway
6 = RA Completed, Confirmational Monitoring Underway
7 = RA Conducted, residual contamination left on site; on-going institutional controls required
8 = RA and other activities completed

Statute: 2 & 7

1 = CERCLA
2 = MTCA Only
3 = RCW 70.105B
4 = RCW 90.48
5 = RCRA-C
6 = RCRA-D
7 = MTCA (SED)

Independent Status:

1 = Release report received, awaiting assessment by PLP
2 = Independent Site Assessment or Interim RA Report received
3 = Independent Final RA Report received
(This field is only used and required if Ecology Status is 4)

Program Plan:

1 = Prepayment
2 = Program Plan
3 = IRAP
4 = VCP

Owner Type: 1

1 = Private
2 = Municipal (City)
3 = County
4 = Federal
5 = State
6 = Tribal
7 = Mixed
8 = Public School
10 = Publicly-Owned (Bankrupt)
11 = Financial Institution Owned (Bankrupt)

ERTS ID: **UST SITE ID (of LUST SITE):** **AFRS Code:**

Site Manager: Andy Kallus **Responsible Unit:** HQ TCP Lands Cleanup Unit

NFA Code:

1 = NFA after assessment, IRAP, or VCP
2 = Removed from Hazardous Sites List (HSL)
3 = Referred (transferred to another Ecology Prog.
4 = Referred to another agency
5 = Referred to local governmental entity
6 = Cleaned up under prior authority
7 = Cleanup completed, not on HSL
8 = Restrictive Covenant, Institutional Controls
9 = Removed from HSL, Restrictive Cov. Inst. Contr.

NFA Date:

Reopen Type:

1 = Conditions of IC/RC not met
2 = More Contaminants found
3 = New release
4 = VCP NFA Rescinded
5 = New discovery (ND) + no action
6 = ND + assessment/cleanup occurring
7 = ND + cleanup completed + no monitoring needed
8 = ND + cleanup completed + monitoring underway

Old NFA Code: **Old NFA Date:**

Restrictive Covenant Required: ☐ **Verified by:**

Site Comments:

Activity Code	Activity Status	Start Date	End Date	Activity Lead	Action By	Neg. Start Date	Legal Mech.
II	C	April 2009	Sept 2009	TC Systems Inc.	7		
II	C	July 2009	Sept 2009	Ecology	1		
ENL	P	Oct 2009	Nov 2009	Ecology	1		

See code definitions on the next page.

Activity Codes

SD = Site Discovery/Report Received
II = Initial Investigation
ENL = Early Notice Letter
SHA = Site Hazard Assessment
HSL = Hazardous Sites Listing
EA = Emergency Action
IA = Interim Action
RC = Routine Cleanup Action
CAP = Cleanup Action Plan
CED = Cleanup Engineering Design
CC = Cleanup Construction
COM = Cleanup Operation & Maintenance
PR = Periodic Review (5 year)
RHSL = Removal from Hazardous Site List
RI/FS = Remedial Investigation/Feasibility Study

SC = Site Characterization | IRRU = IRAP-Unpaid IRRP = IRAP-Paid | USI = UXO Safety Inspection

Activity Status Codes	Action By Codes	Legal Mechanism
C = Completed I = In Process P = Planned X = Canceled	1 = Ecology 2 = Ecology w/Contractor 3 = EPA 4 = Local Government 6 = PLP 7 = PLP w/Contractor	1 = Enforcement Order 2 = Agreed Order 3 = Consent Decree 4 = Governmental Action 5 = Independent

Activity Comments: _____

Media	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1 Groundwater	S		S				C		S		S										DW
2 Surface Water																					T
3 Air																					Y
4 Soil	S		S		S		S		S		S										P
5 Sediment	S		S		S		S		S		S										E
6 Drinking Water																					

Status Codes: B = Below Cleanup Levels; C = Confirmed (above cleanup levels); R = Remediated; S = Suspected

Drinking Water Types: 1 = Single Family; 2 = Community

Contaminant Codes (for examples of specifics within contaminant groups please check an ISIS manual):

1 = Base/Neutral Organics
2 = Halogenated Organic Compounds
3 = Metals—Priority Pollutants
4 = Metals—Other
5 = PCB
6 = Pesticides
7 = Petroleum Products
8 = Phenolic Compounds
9 = Non-Halogenated Solvents
10 = Dioxins
11 = PAH
12 = Reactive Wastes
13 = Corrosive Wastes
14 = Radioactive Wastes
15 = Conventional Contaminants, Organic
16 = Conventional Contaminants, Inorganic
17 = Asbestos
18 = Arsenic
19 = MTBE
20 = UXO
21 = Tibutyl Tin (TBT)
22 = Bioassay/Benthic Failures
23 = Wood Debris
24 = Other Deleterious Substance

Waste Mgmt Check all that apply

- ☐ 1. Drug Lab
- ☑ 2. Drum
- ☐ 3. Impoundment
- ☑ 4. Improper Handling
- 5. Landfill
- ☐ 6. Land Application
- ☐ 7. Pesticide Application
- ☐ 8. Pesticide Disposal
- ☑ 9. Spill
- ☑ 10. Storm Drain
- ☑ 11. Tank
- ☐ 12. Unknown
- ☐ 13. Aquatic Disposal
- ☐ 14. UXO Range
- ☐

IC Decision Document Type: _____

1 = Consent Decree; 2 = Prospective Purchaser; 3 = Consent Decree; 4 = Agreed Order; 5 = Enforcement Order; 6 = Amendment; 7 = VCP; 8 = IRAP

Filing # : _____ Filing Date: _____ VCP # _____

IC Decision Document Comments: _____

IC Documents: _____

1 = Restrictive Covenant; 2 = Conservative Easement; 3 = Ordinance

County Filing #: _____ Filing Date: _____ Status: ____

1 = Active; 2 = Rescinded; 3 = No Proof of Filing

Status Date: _____

IC Document Comments: _____

IC Category Check all that apply

- ☐ Drinking Water Restriction
- ☐ Educational Programs
- ☐ Groundwater Restriction
- ☐ Maintenance Requirements
- ☐ Physical Measure
- ☐ Property Use Restriction
- ☐ Soil Restriction
- ☐ Surface Water Restriction

IC Financial Assurance Type: _____

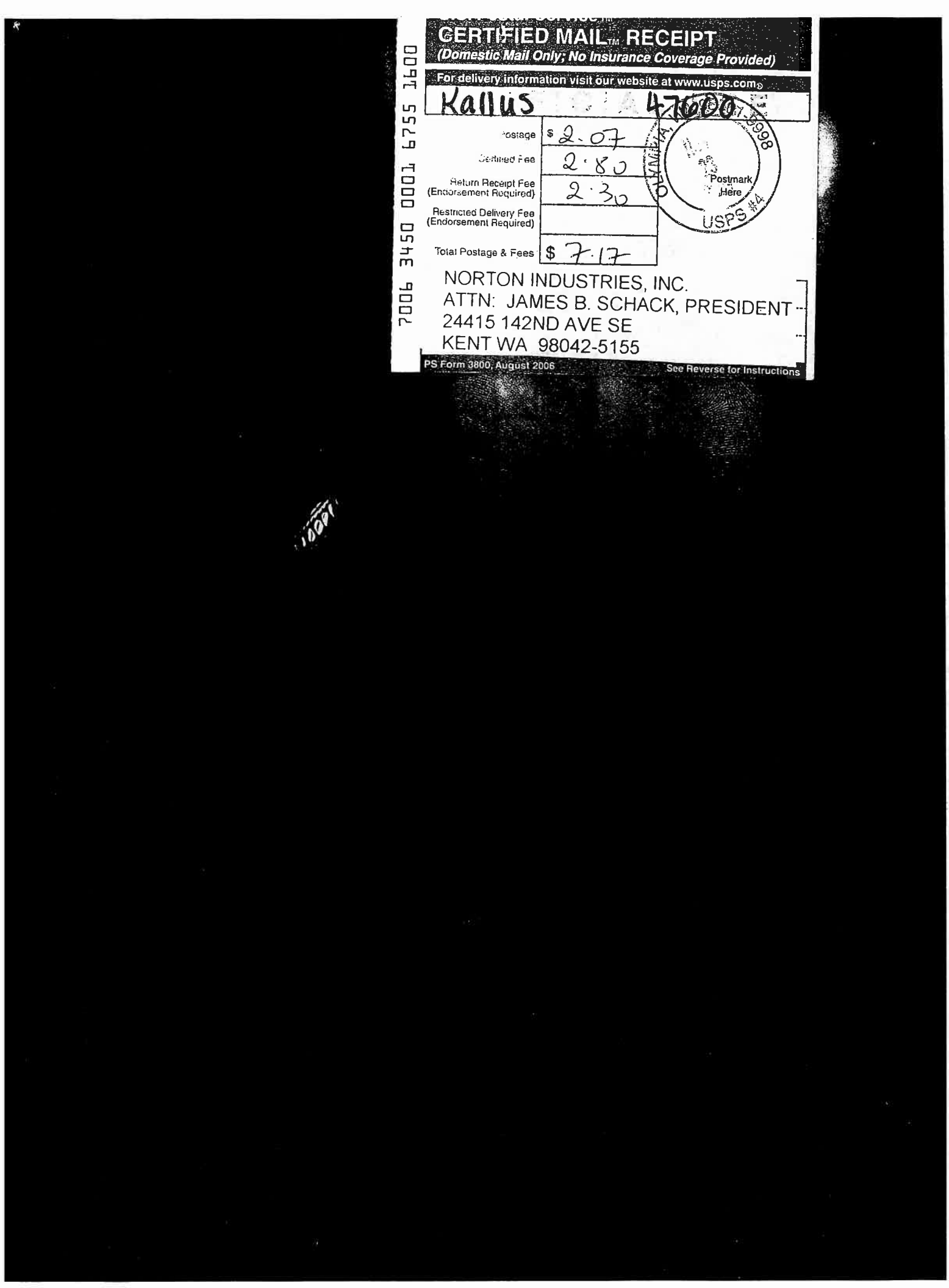
1 = Financial Test; 2 = Surety Bond; 3 = Letter of Credit; 4 = Trust Fund; 5 = Standby Trust Fund; 6 = Govt Bond Rating Test; 7 = Govt Financial Test; 8 = Govt Guarantee; 9 = Govt Fund

Financial Assurance Amount: $ _____ Financial Assurance Date: _____

Five Year Review Completed by: _____ Review Completion Date: _____ Next Review Due Date: _____

Five Year Review Comments: _____

FY Review Results Check all that apply	☐ Passed ☐ Failed—Engineered Controls ☐ Failed—Institutional Controls ☐ Failed—Cleanup Standards
TEE Exclusion Check all that apply:	☐ No Contam. Present ☐ All Contam. Is Below 6 ft w/IC ☐ Covered by Physical Barriers ☐<1½ Acres of Contiguous Undeveloped Ind ☐ All Contam. Below 15 Ft ☐ Site-Specific Pt. of Compliance ☐<1/4 Acre of Contig.Undev.Land☐ Concentrations Do Not Exceed Bckground
TEE Simplified Eval Check all that apply:	☐ Are of Contamination =<350 ft2 ☐ Depth of Contamination ☐ Chemical Not Present w/in(C)POC ☐ Pass Bioassay ☐ Exposure Unlikely via Table 749-1☐ No Completed Expos. Pathway ☐ Below Table 749-2 Values ☐ 749-2 Used to Set CU Lvls
TEE Site-Specific Evaluation Completion Date: _____	Method Type: _____ 1 = Literature for Non-Listed chemical 5 = Wildlife Exposure Model (Tbl 749-5) 2 = Literature for Site-Specific Conditions 6 = Biomarket 3 = Literature for Augment Table 749-5 7 = Field Study 4 = Soil Bioassay Used 8 = Weight of Evidence
	Contractor Name: _____
TEE Site-Specific Comments:	


7006 3450 0001 6755 1600
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(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com®
Kallus
47000
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Certified Fee 2.80
Return Receipt Fee (Endorsement Required) 2.30
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees $7.17
Postmark Here
USPS #4
NORTON INDUSTRIES, INC.
ATTN: JAMES B. SCHACK, PRESIDENT
24415 142ND AVE SE
KENT WA 98042-5155
PS Form 3800, August 2006
See Reverse for Instructions

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- For an additional fee, delivery may be restricted to the addressee or addressee's authorized agent. Advise the clerk or mark the mailpiece with the endorsement *"Restricted Delivery"*.
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PS Form 3800, August 2006 *(Reverse)* PSN 7530-02-000-9047

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- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

NORTON INDUSTRIES, INC.
ATTN: JAMES B. SCHACK, PRES
24415 142ND AVE SE
KENT WA 98042-5155

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
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3. Service Type
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☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7006 3450 0001 6755 1600

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

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DEPARTMENT OF ECOLOGY
TOXICS CLEANUP PROGRAM
ANDY KALLUS
PO BOX 47600
OLYMPIA WA 98504-7600

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

November 20, 2009

TC Systems, Inc. (Everett)
SIT 8.4

Norton Industries, Inc.
Attn: James B. Schack, President
24415 142nd Avenue SE
Kent, Washington 98042-5155

RE: **A Reported Release of Hazardous Substances and Potential Liability for the Release at the Following Site:**

- **Site Name:** TC Systems, Inc.
- **Address:** 1032 West Marine View Drive, Everett, Washington 98201-1557
- **Snohomish County Assessor's Tax Parcels:** 29051800200700 and 29051800201300
- **Facility/Site Number:** 10587741

Dear Mr. Schack:

Under the Model Toxics Control Act (MTCA), Chapter 70.105D RCW, which governs the cleanup of hazardous waste sites in Washington State, the Department of Ecology (Ecology) may identify persons that it finds liable for the release of hazardous substances at a site. Before making such a finding, Ecology must provide persons with notice and an opportunity to comment on the proposed finding. Any person Ecology finds, based on credible evidence, to be liable is known as a "potentially liable person" or "PLP."

Ecology's files on the TC Systems, Inc. (TC Systems) facility (dating back to 1990) show repeated violations of state hazardous waste regulations (173-303 WAC); violations of their Ecology industrial stormwater permit (Permit No. S03-000762D), and violations of their city of Everett industrial pretreatment discharge permit (Permit No. 7708). As a result of the aforementioned violations, and recent investigations (discussed in more detail below) at the TC Systems facility, Ecology believes that a release of hazardous substances has occurred and that further action will be required at this facility. The TC Systems leased property, which is owned by Norton Industries, Inc. (Norton Industries), is generally located between 10th and 11th Streets off West Marine View Drive, Everett, Washington (see **Exhibit 1**). Based on these investigations and the facility's history of non-compliance, Ecology intends to add the TC Systems (see **Exhibit 2**) to our database of suspected hazardous waste sites.

Proposed Finding of Liability

Based on credible evidence, Ecology is proposing to find Norton Industries liable under RCW 70.105D.040 for the release of hazardous substances at the TC Systems, Inc .Site (Site) generally

located between 10th and 11th Streets off West Marine View Drive, Everett, Washington (see **Exhibit 1**). This proposed finding is based on the following evidence:

1. According to our information, Norton Industries is the current property owner of a "facility" as defined in RCW 70.105D.020(5). Norton Industries has owned the Site since 1984 when it purchased it from Summit Timer Company, a Washington Corporation. A map depicting TC Systems current leasehold on the Norton Industries property is shown on **Exhibit 2.**

   The Site is located in Section 18, Township 29 North, Range 5 East, Snohomish County, Washington. Tax account numbers corresponding to the Site include 29051800200700 and 29051800201300. Additional property information from the Snohomish County Tax Assessor's Office is presented in **Exhibit 3.**

2. Credible evidence exists indicating that a "release or threatened release" of a "hazardous substance" has occurred at the facility as defined in RCW 70.105D.020(10) and (25), which poses a threat to human health or the environment. As a result of environmental non-compliance and recent investigations performed at the facility, Ecology believes that a release of hazardous substances has occurred at the Site, and further action will be required at this Site.

   ECOLOGY HAZARDOUS WASTE INSPECTIONS

   Ecology's Hazardous Waste and Toxics Reduction Program has conducted numerous inspections at TC Systems (mainly between 1997 and 2008). During that period, Ecology cited TC Systems over fifty violations of state hazardous waste regulations (173-303 WAC). Ecology found violations of Dangerous Waste Regulations in all but one of the inspections (between 1997 and 2008). Inspectors have repeatedly observed many of the same violations of the Dangerous Waste Regulations. Inadequate performance of regulatory responsibilities at TC Systems directly led to violations for illegal disposal (failure to respond to a release of used oil), failure to designate its dangerous waste, and numerous repeat violations for improper waste management. In addition, inspectors have noted that the secondary containment wall in the alley between TC Systems' Buildings B and C contains cracks and does not provide adequate containment of rainwater or other liquids (**Exhibit 4**, Photos 1 and 2).

   Ecology inspectors have noted that spilled compressor oil (not being recycled) has been allowed to migrate into the soil and the nearby storm drain (**Exhibit 4**, Photo 3). The location of the compressor shed and the nearby storm drain are depicted in **Exhibit 2.** The leak from the compressor was identified in 2007 by Ecology hazardous waste inspectors and was not immediately corrected (the same problem was identified in July and August of 2008). There were significant gaps in the floor surface in the area, and according to Ecology inspection reports, it appeared that oil was migrating into the soil. Additionally, there was a clear path of liquids flowing from the leaking compressor area to the nearest storm drain (**Exhibit 4**, Photo 4). Note that the leak was apparently initially discovered in 2004 by Ecology stormwater inspectors (see section below on stormwater inspections, 2nd Bullet).

   In the spring of 2009, Ecology fined TC Systems $24,000 for its repeated failures to properly manage its hazardous waste. Ecology also issued an Order (DE 6459) on March 25, 2009, directing the company to take a series of steps to correct the problems and provide better protection of public safety, health and the environment.

ECOLOGY INDUSTRIAL STORMWATER INPSECTIONS

TC Systems has an industrial stormwater permit (Permit No. S03-000762D), issued by Ecology. The permit indicates that industrial stormwater from the Site discharges to Port Gardner. A 1996 map of North Marina showing the location of utilities indicates that industrial stormwater from TC Systems discharges to the 12th Street Marina (**Exhibit 5**). Some of the non-compliance issues associated with TC Systems industrial stormwater permit is summarized below.

- On March 10, 1993, Ecology sent a letter to Orin Smith of TC Systems providing instructions on implementing its stormwater baseline general permit (SO3-000762). The most significant requirement of the permit is the development of a Stormwater Pollution Prevention Plan (SWPPP). TC Systems acknowledged in a July 20, 1995, permit renewal application that it had not written a SWPPP. On August 9, 1995, Ecology sent TC Systems a notice of non-compliance letter for failure to write and implement a SWPPP.
- On April 20, 2004, Ecology conducted a site visit to TC Systems facility. Ecology made this site visit in response to a request from the Snohomish Public Utility District (PUD). The PUD had informed Ecology that TC Systems was not keeping up on its electric bills and the power would be turned off. During the April 2004 site visit, Ecology noted issues concerning the outside storage of chemicals and waste which have a potential to discharge to the storm sewer. According to Joyce Smith, then Ecology Industrial Permit Coordinator, the facility was behind on discharge monitoring reporting (DMRs). Some of the violations noted by Ecology inspectors are summarized below:
    - Paint chips were visible next to the secondary containment berm. This is in close proximity to the storm drains (**Exhibit 4**, Photo 5).
    - Hoses were used to transport waste across a driveway with open storm sewers. This practice presents a substantial potential to discharge to the storm sewers and is not considered a Best Management Practice.
    - Washing vehicles in a parking lot at the facility which discharges to the storm sewer.
    - The containment area was collecting stormwater which was siphoned off by a sump. There was no generator back up present for instances when the power goes off.
    - The containment space was not adequate.
    - Cover and containment was not adequate.
    - No SWPPP was available at the time of this inspection.
    - Leaking oil from a compressor was noted in a place lacking containment (**Exhibit 4**, Photo 6).
- Ecology performed a stormwater inspection on September 17, 2007, for the purposes of determining TC Systems' compliance with its industrial stormwater permit. Some of the violations Ecology inspectors observed during the September 2007 inspection are summarized below:

- Failed to perform quarterly sampling and visual monitoring of the facility's discharge.
    - Monitoring was conducted twice in 2004 (1st and 3rd Quarters.). No other monitoring exists. During these two monitoring events, TC Systems monitored for lead, copper, zinc, oil and grease, pH, and turbidity. A zinc exceedance (630 micrograms/liter [µg/L]) occurred in July 2004. TC Systems said that they had stopped stormwater sampling after the lab they were using had been shut down. The Ecology inspector told TC Systems that not sampling stormwater as required by condition "S4" is a violation of the permit.
- Failed to produce and has not been implementing an adequate SWPPP.
    - The SWPPP was inadequate and incomplete. Much of the information within the SWPPP needed updating to reflect current on-site conditions. The SWPPP was missing several required sections including a monitoring plan, a facility map, visual monitoring logs, and a designated stormwater pollution prevention team.
- Allowed an oily sheen to be discharged from the compressor to the nearby storm drain (**Exhibit 4**, Photo 7).
- Failed to retain adequate records to document compliance with the general Permit, including a copy of the permit, visual monitoring logs, and discharge monitoring reports (DMRs).

  Based on the violations, Ecology inspectors recommended that TC Systems should implement good housekeeping practices on-site to reduce stormwater pollution potential from items such as stored leaky drums collecting stormwater on-site. Ecology noted that all chemical drums (including empty drums) should be properly sealed and cleaned on their exteriors. Ecology also recommended that TC Systems should monitor, maintain, and cover machinery and parts stored outdoors to make sure that certain fluid leaks and powders are not contaminating soil or stormwater.

- Ecology performed a stormwater inspection on September 16, 2009, at TC Systems for the purposes of determining compliance with their industrial stormwater permit. Ecology noted violations of their stormwater permit during the inspection. One of the violations Ecology observed during its inspection was TC Systems' failure to perform stormwater monitoring in accordance with the permit. Stormwater monitoring has not been conducted since 2004. During the stormwater inspection, Ecology collected a sediment sample (named TC-CB-01) from the stormwater catch basin located between Buildings A and B and just north of the compressor shed (see the red circled stormwater catch basin in **Exhibit 2**). Analytical results of the catch basin sediment sample were compared against the Sediment Management Standards (SMS) (Chapter 173-204 WAC), Sediment Quality Standards (SQS), and Cleanup Screening Levels (CSL). Sample results on a dry weight basis revealed that the measured concentrations for cadmium (8.72 milligrams/kilogram [mg/kg]), chromium (3,270 mg/kg), copper (1,360 mg/kg), lead (693 mg/kg), and zinc (2,270 mg/kg) exceeded dry weight equivalent CSL and SQS levels. In addition, the results from sample TC-CB-01 show that polychlorinated biphenyl (PCB) levels associated with Aroclor-1248 (120 µg/kg) and -1254 (420 µg/kg) exceeded the dry weight equivalent

SQS level for PCBs. Also, the sample results for total petroleum hydrocarbons (TPH), as lube oil, were measured at 3,800 mg/kg (dry weight) in sample TC-CB-01; this result raises a concern for TPH contamination in sediments at or near the Site. Finally, analytical results associated with semi-volatile organic compounds (SVOCs) including polycyclic aromatic hydrocarbons (PAHs) in sample TC-CB-1 revealed that benzoic acid (22,000 µg/kg) and bis(2-ethylhexyl)phthalate (96,000 µg/kg) exceeded dry weight equivalent CSL and SQS levels. It is also noted that sample TC-CB-1 had to be diluted by a factor of 200 times because it contained a large amount of oil. This resulted in elevated reporting limits (i.e., reporting limits that exceeded CSL and SQS levels) for the majority of SVOCs and PAHs analyzed in the sample.

CITY OF EVERETT INDUSTRIAL PRETREATMENT DISCHARGE PERMIT

TC Systems operates a wastewater pretreatment system at its facility that provides wastewater treatment before the wastewater is discharged to the city of Everett sewer system. The facility has an Industrial Pretreatment Discharge Permit with the city of Everett Public Works and has received over 25 Notices of Violation from the city based on available Ecology files from 1990 to 1998. TC Systems has also received numerous notices of significant non-compliance of its industrial wastewater permit from the city of Everett. Numerous administrative violations of the Industrial Pretreatment Discharge Permit have occurred, including TC Systems' failure to sample for the required parameters and exceedances of pretreatment standards for lead, zinc, copper, pH, and fats, oils, and grease (FOG). City of Everett fines against TC Systems for violations of the Industrial Pretreatment Discharge Permit have totaled over $8,000. In 1999, TC Systems had a spill (reportedly 200 gallons of diluted chromic conversion coating) to its wastewater treatment plant as reported in Ecology's Environmental Report Tracking System (ERTS).

TC SYSTEMS PHASE I Environmental Site Assessment (ESA)

E3RA, Inc. performed a Phase I Environmental Site Assessment ESA on behalf of TC Systems in April 2009. The results of the Phase I ESA indicated three recognized environmental conditions (REC) as follows:

- REC – Multiple above ground storage tanks (ASTs) observed on the property.
- REC – Compressor Oil Leak.
- REC – Dye penetrant in direct contact with the concrete.

As a result of the Phase I ESA, TC Systems performed a limited Phase II ESA in August 2009 that included soil and groundwater sampling. Soil samples were collected from five boring locations at the TC Systems' facility and analyzed for TPH-diesel and -oil including total chromium. In addition, groundwater samples were collected and analyzed for TPH-diesel and -oil. The groundwater sample collected at location SB-4 had TPH-diesel and -oil at concentrations of 1,200 µg/L and 860 µg/L, respectively. These concentrations exceed Ecology's MTCA Method A groundwater cleanup level for diesel and oil range organics.

As a result of the evidence (information) presented above, Ecology has identified Norton Industries as a PLP for the existing release at the TC Systems, Inc. Site.

Opportunity to Respond to Proposed Finding of Liability

In response to Ecology's proposed finding of liability, Norton Industries may either:

1. In the interest of expediting this process without admitting liability, Norton Industries may wish to accept its status as a PLP by waiving its right to the thirty (30) day notice and comment period. This may be accomplished by signing and returning the enclosed form (**Exhibit 6**) or sending a letter containing similar information to Ecology;

2. challenge Norton Industries' status as a PLP by submitting written comments to Ecology within thirty (30) calendar days of the date you receive this letter; or

3. choose not to comment on Norton Industries' status as a PLP.

Please submit your waiver or written comments to me at the address on this letterhead.

After reviewing any comments submitted, or after 30 days if no response has been received, Ecology will make a final determination regarding Norton Industries' status as a PLP and provide you with written notice of that determination.

Identification of Other Potentially Liable Persons

Ecology has notified the following additional person that they may be potentially liable for the release of hazardous substances at the Site:

Ms. Mary Utick, President
TC Systems, Inc.
1032 West Marine View Drive
Everett, Washington 98201-1557

If Norton Industries is aware of any other persons who may be potentially liable for the release at this Site, Ecology encourages Norton Industries to provide us with their identity and credible evidence that will substantiate Norton Industries' belief that they are potentially liable. Ecology also suggests that you contact these other persons to discuss how you can jointly work together to most efficiently clean up the Site.

Responsibility and Scope of Potential Liability

Please note that Ecology may either conduct, or require PLPs to conduct, remedial actions to investigate and clean up the release of hazardous substances at a Site. PLPs are also encouraged to initiate discussions and negotiations with Ecology and the Office of the Attorney General that may lead to an agreement on the remedial action to be conducted at the Site.

Please also note that each liable person is strictly liable, jointly and severally, for all remedial investigations and remedial action costs, and for all natural resource damages resulting from the release of hazardous substances at a site. If Ecology incurs remedial action costs in connection with the investigation and/or cleanup of real property, and those costs are not reimbursed, then Ecology has the authority under RCW 70.105D.055 to file a lien against that real property to recover those costs.

Next Steps in Cleanup Process

In response to the release of hazardous substances at the TC Systems, Inc. Site, Ecology will initiate discussion for an agreed order in which a detailed scope of work and associated work schedule will be developed for the following:

- Remedial Investigation and Feasibility Study (RI/FS) per WAC 173-340-350.
- An Interim Action if found to be necessary per WAC 173-340-430.
- A Cleanup Action Plan (CAP) per WAC 173-340-380.

For description of the process for cleaning up a hazardous waste site under MTCA, please refer to the enclosed fact sheet (**Exhibit 7**).

Ecology's policy is to work cooperatively with PLPs to accomplish an efficient, prompt and effective cleanup of hazardous waste sites. Please note that cooperating with Ecology in planning or conducting remedial actions at the site is not an admission of guilt or liability.

Site Listing

Also enclosed is the information on this facility that Ecology intends to add to our database of suspected hazardous waste sites (**Enclosure 8**). Please review this information for accuracy and return your comments within thirty (30) days of receipt of this letter

Contact Information

If you have any questions regarding this letter, or if you would like additional information regarding the cleanup of hazardous waste sites, please call me at (360) 407-7226 or Andy Kallus at (360) 407-7259.

Thank you for your cooperation.

Sincerely,

Tim L. Nord, Manager
Land and Aquatic Lands Cleanup Section
Toxics Cleanup Program

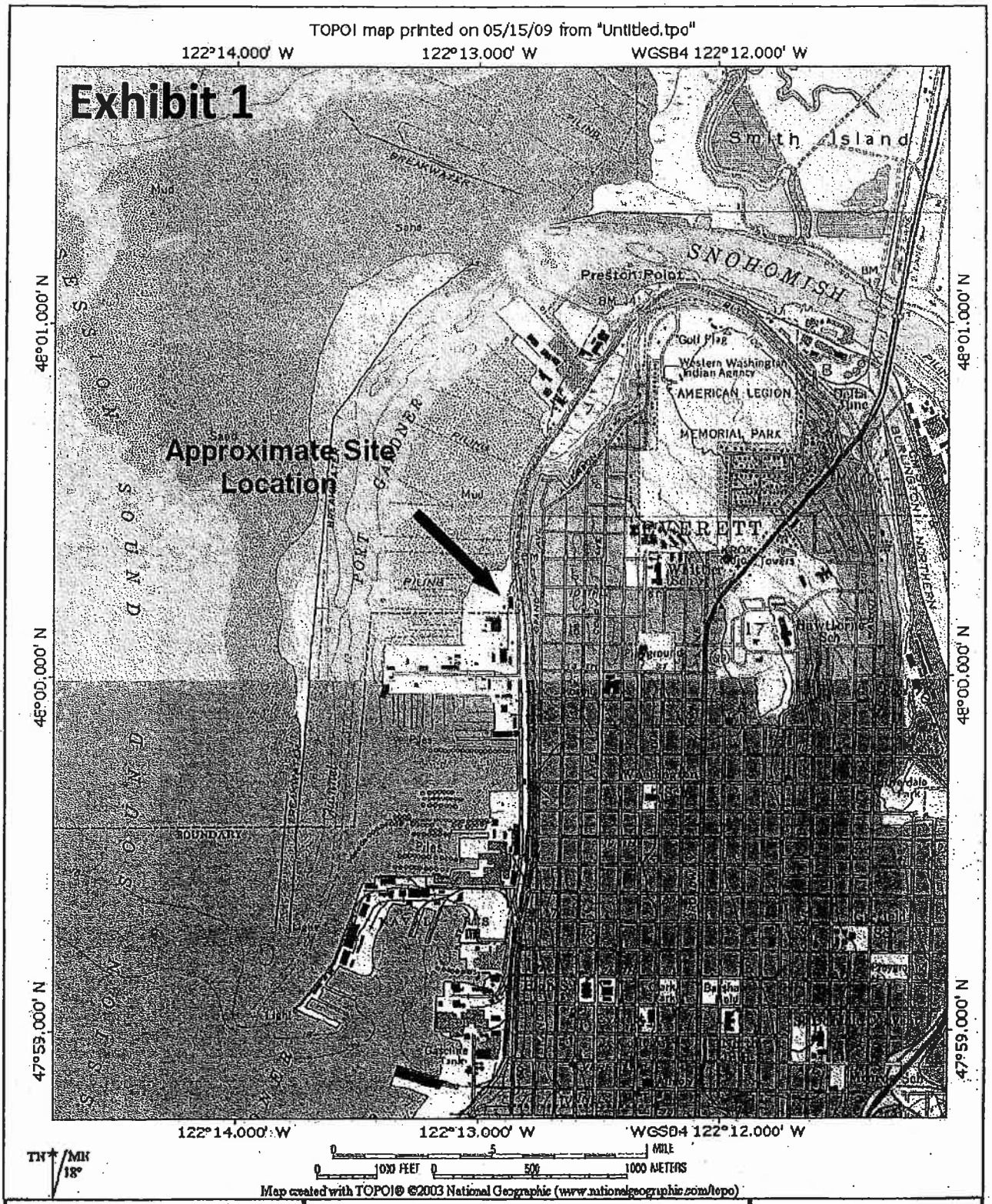
Enclosures (8)

By certified mail 7006 3540 0001 6755 1600

cc: John Level, Assistant Attorney General

EXHIBIT 1

SITE LOCATION MAP



E3RA, Inc.
P.O. Box 44840
Tacoma, WA 98448
253-537-9400
253-537-9401 fax

Phase I ESA
1032 West Marine View Drive
Everett, Washington

FIGURE 1

SITE LOCATION MAP

EXHIBIT 2

SITE LAYOUT MAP

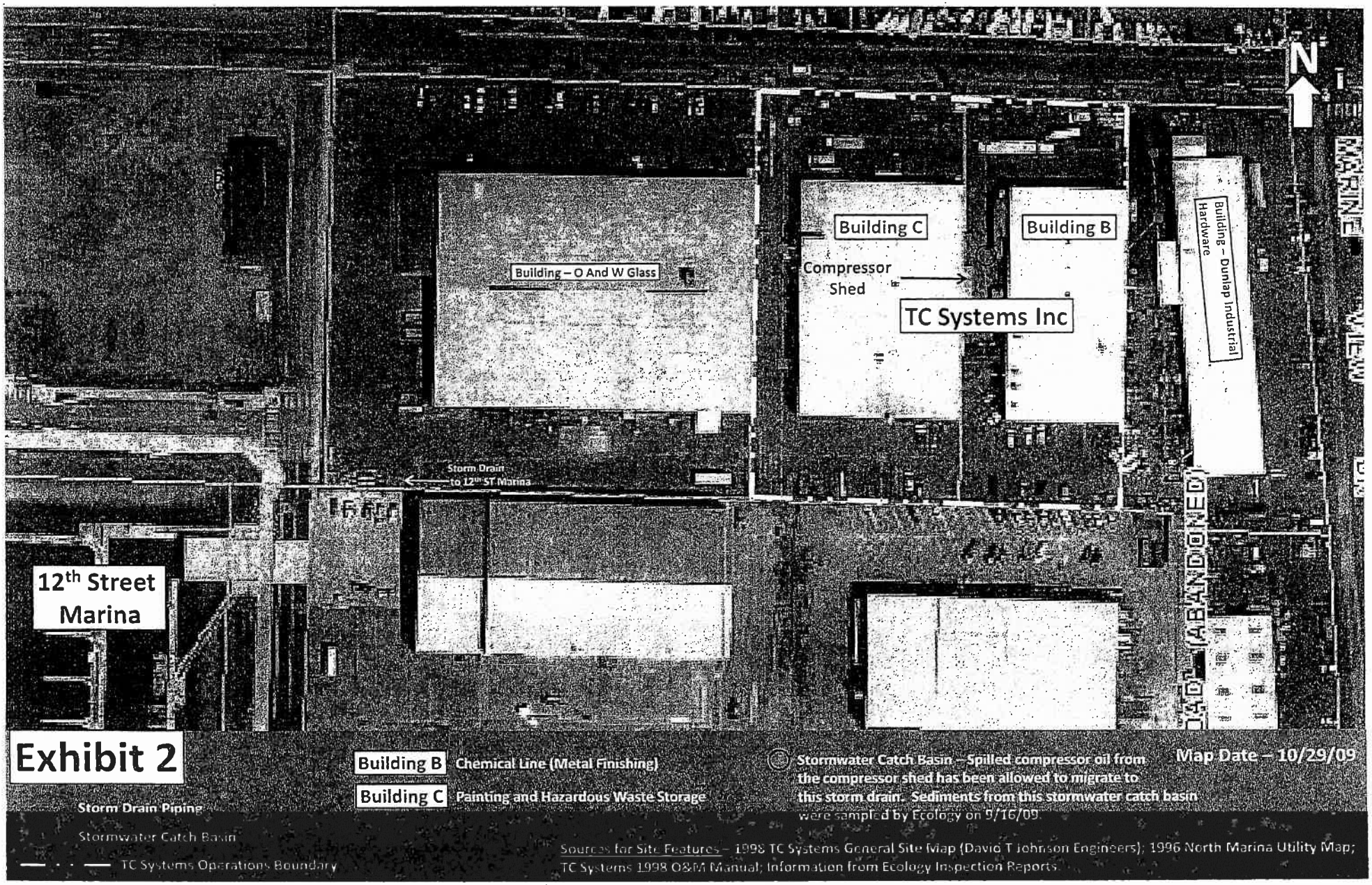

N
Building C
Building B
Compressor Shed
TC Systems Inc
Building – O And W Glass
Building – Dunlap Industrial Hardware
Storm Drain to 12th ST Marina
12th Street Marina
Exhibit 2
Building B Chemical Line (Metal Finishing)
Building C Painting and Hazardous Waste Storage
Stormwater Catch Basin – Spilled compressor oil from the compressor shed has been allowed to migrate to this storm drain. Sediments from this stormwater catch basin were sampled by Ecology on 9/16/09.
Map Date – 10/29/09
Storm Drain Piping
Stormwater Catch Basin
TC Systems Operations Boundary
Sources for Site Features – 1998 TC Systems General Site Map (David T Johnson Engineers); 1996 North Marina Utility Map; TC Systems 1998 O&M Manual; Information from Ecology Inspection Reports.

EXHIBIT 3

LEGAL DESCRIPTION/SNOHOMISH COUNTY TAX ASSESSOR INFORMATION

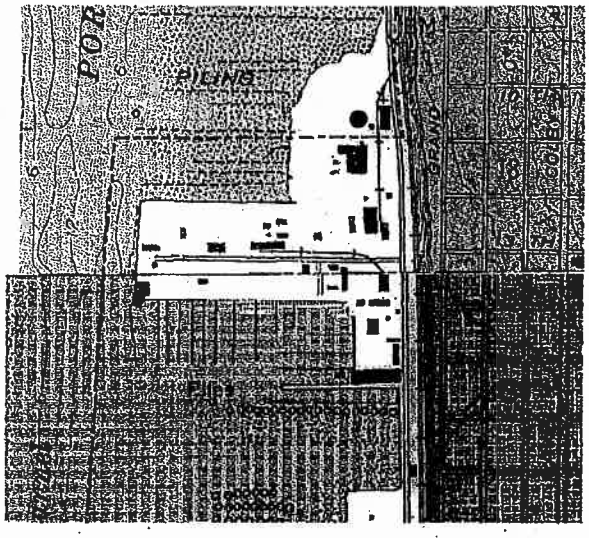
TC SYSTEMS INC SITE

SITE/PROPERTY LOCATION INFORMATION

The TC Systems Inc property is generally located between 10th and 11th Streets off West Marine View Drive, Everett, Washington. Site coordinates, a legal description, and county assessor's parcel numbers are provided below. Additional property information from the Snohomish County Tax Assessor's Office is attached.

Coordinates: Latitude: 48°00'13.37" North; Longitude: 122°12'54.64" West.

Latitude/Longitude Reference Point: Center of the TC Systems, Inc. Building B (see red circle on the figure below for approximate location).



Legal Description: Section 18, Township 29 North, Range 5 East.

County Assessor's Parcel Numbers (Port of Everett Property): Tax account numbers corresponding to the TC Systems Inc Site include 29051800200700 and 29051800201300.

QUARTER	SECTION	TOWNSHIP N.W.B.L.	RANGE E.W.M.
NE	18	29	5

A product of the Snohomish County Assessor's Office
Map produced on August 05, 2009

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SE-7-29-5

SE-18-29-5

NW-18-29-5

NW-17-29-5

TC Systems, Inc. Parcels

GREAT NORTHERN RAILROAD

MEANDER LINE

S R 529

NORTHERN PACIFIC RAILROAD - (ABANDONED)

MARINE VIEW DR

GARDNER WY

MINSTER WY

TON INDUSTRIES BSP

ROCKEFELLER AVE

LAUNDERS ADD

LAUNDERS HEIGHTS

LAUNDERS 2ND ADD

LAUNDERS 3RD ADD

LAUNDERS 4TH ADD

CHURCHLAND

HOYT

WALL

COLBY

EVERETT

PARK

LEGION

7TH ST

8TH ST

9TH ST

10TH ST

11TH ST

12TH ST

13TH ST

Snohomish County Washington — Online Government Information & Services

* R E A L * Property Information

County Home | Assessor Home | Treasurer Home | Information on which Department to contact

Please view Disclaimer **If you have questions, comments or suggestions, please Contact Us.**
Date/Time:7/7/2009 4:54:26 PM Answers to Frequently Asked Questions about Parcel Data (opens as new window)
Return to Property Information Entry page

Parcel Number **29051800200700** Prev Parcel Reference **18290520070001**

View Map of this parcel (opens as new window)

General Information

Taxpayer Name || Address (contact the Treasurer if you have questions)

NORTON INDUSTRIES || PO BOX 1188 - - - EVERETT, WA 98206

If the above mailing address is incorrect and you want to make a change, see the information on Name and Address Changes

Owner Name || Address (contact the Assessor if you have questions)

NORTON INDUSTRIES || P O BOX 1188 - - - EVERETT, WA 98206

If the above name and address is incorrect due to a recent sale, please see the information on Name and Address Changes After a Sale

Street (Situs) Address (contact the Assessor if you have questions)

1104 10TH ST - - - EVERETT, WA 98201-1581

Parcel Legal Description

SEC 18 TWP 29 RGE 05 LOT 2 OF NORTON INDUSTRIES BSP REC VOL 2894 BSP'S PG 0177 AF NO 940401424 & AF NOS 9404015002 & 9405185001 BEING A PTN OF N1/2 SEC 18

Go to top of page

Treasurer's Tax Information

Taxes For answers to questions about Taxes, please contact the Treasurer's office (opens as new window)

2009 Taxes for this parcel $10,474.76

Payments: Receipt No.	5117752	5/4/2009	$5,237.38

(Taxes may include Surface Water Management and/or State Forest Fire Patrol fees and any fees related to late payments. LID charges, if any, are not included.)
To obtain a duplicate tax statement, either download our Tax Statement Request form or call 425-388-3366 to request it by phone.

Go to top of page

Assessor's Property Data

Characteristics and Value Data below are for 2009 tax year.
Please contact the Treasurer's office for answers to questions about Taxes (opens as new window)

For questions ONLY about property characteristics or property values (NOT taxes), please contact the Assessor's Office

Property Values Values do not reflect adjustments made due to an exemption, such as a senior or disabled persons exemption. Reductions for exemptions are made on the property tax bill.

Tax Year	Market Land	Market Improvement	Market Total
2009	$284,500	$815,500	$1,100,000
Pending Property Values			
2010	$284,500	$815,500	$1,100,000

Go to top of page

Valuation, Payment, and Property Tax History

View History (opens as new window)

Go to top of page

Property Characteristics

Tax Code Area (TCA) **00010** View Taxing Districts for this Parcel (opens as new window)

Use Code **349 Other Fabricated Metal Products NEC**

Size Basis **ACRE** Size **1.12** (Size may include undivided interest in common tracts and road parcels)

Go to top of page

Property Structures

Type	Yr.Built	Structure Description
Commercial	**1978**	**TC SYSTEMS INC** View Structure Data (opens as new window)

Go to top of page

Property Sales since 7/31/1999

Explanation of Sales Information (opens as new window)

Sales data is based solely upon excise affidavits processed by the Assessor.

No sales for this parcel have been recorded since 7/31/1999

Go to top of page

Property Maps Township/Range/Section/Quarter, links to maps

Neighborhood **5306000** Explanation of Neighborhood Code (opens as new window)

Township **29** Range **05** Section **18** Quarter **NW** Find parcel maps for this Township/Range/Section

View Map of this parcel (opens as new window)

Snohomish County Washington — Online Government Information & Services

* R E A L * Property Information

County Home | Assessor Home | Treasurer Home | Information on which Department to contact

Please view Disclaimer | **If you have questions, comments or suggestions, please** Contact Us.

Date/Time:7/7/2009 4:59:51 PM | Answers to Frequently Asked Questions about Parcel Data (opens as new window)

Return to Property Information Entry page

Parcel Number **29051800201300** Prev Parcel Reference **18290520130003**

View Map of this parcel (opens as new window)

General Information

Taxpayer Name || Address (contact the Treasurer if you have questions)

NORTON INDUSTRIES || PO BOX 1188 - - - EVERETT, WA 98206

If the above mailing address is incorrect and you want to make a change, see the information on Name and Address Changes

Owner Name || Address (contact the Assessor if you have questions)

NORTON INDUSTRIES || P O BOX 1188 - - - EVERETT, WA 98206

If the above name and address is incorrect due to a recent sale, please see the information on Name and Address Changes After a Sale

Street (Situs) Address (contact the Assessor if you have questions)

1032 10TH ST - - - EVERETT, WA 98201-1580

Parcel Legal Description

SEC 18 TWP 29 RGE 05 LOT 3 OF NORTON INDUSTRIES BSP REC VOL 2894 BSP'S PG 0177 AF NO 9404010424 & AF NOS 9404015002 & 9405185001 BEING A PTN OF N1/2 SEC 18

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Treasurer's Tax Information

Taxes For answers to questions about Taxes, please contact the Treasurer's office (opens as new window)

2009 Taxes for this parcel $14,664.67

Payments: Receipt No.	5117753	5/4/2009	$7,332.33

(Taxes may include Surface Water Management and/or State Forest Fire Patrol fees and any fees related to late payments. LID charges, if any, are not included.)

To obtain a duplicate tax statement, either download our Tax Statement Request form or call 425-388-3366 to request it by phone.

Go to top of page

Assessor's Property Data

Characteristics and Value Data below are for 2009 tax year.

Please contact the Treasurer's office **for answers to questions about Taxes** (opens as new window)

For questions ONLY about property characteristics or property values (NOT taxes), please contact the Assessor's Office

Property Values Values do not reflect adjustments made due to an exemption, such as a senior or disabled persons exemption. Reductions for exemptions are made on the property tax bill.

Tax Year	Market Land	Market Improvement	Market Total
2009	$368,300	$1,171,700	$1,540,000

Pending Property Values

Tax Year	Market Land	Market Improvement	Market Total
2010	$368,300	$1,171,700	$1,540,000

Go to top of page

Valuation, Payment, and Property Tax History

View History (opens as new window)

Go to top of page

Property Characteristics

Tax Code Area (TCA) **00010** View Taxing Districts for this Parcel (opens as new window)

Use Code **349 Other Fabricated Metal Products NEC**

Size Basis **ACRE** Size **1.45** (Size may include undivided interest in common tracts and road parcels)

Go to top of page

Property Structures

Type	Yr.Built	Structure Description	
Commercial	**1980**	**CRUISE A HOME INC TC SYSTEMS**	View Structure Data (opens as new window)

Go to top of page

Property Sales since 7/31/1999

Explanation of Sales Information (opens as new window)

Sales data is based solely upon excise affidavits processed by the Assessor.

No sales for this parcel have been recorded since 7/31/1999

Go to top of page

Property Maps Township/Range/Section/Quarter, links to maps

Neighborhood **5306000** Explanation of Neighborhood Code (opens as new window)

Township **29** Range **05** Section **18** Quarter **NW** Find parcel maps for this Township/Range/Section

View Map of this parcel (opens as new window)

EXHIBIT 4

PHOTO DOCUMENTATION

EXHIBIT 4

Photo 1 (7/8/07 Ecology Inspection; cracks in secondary containment)

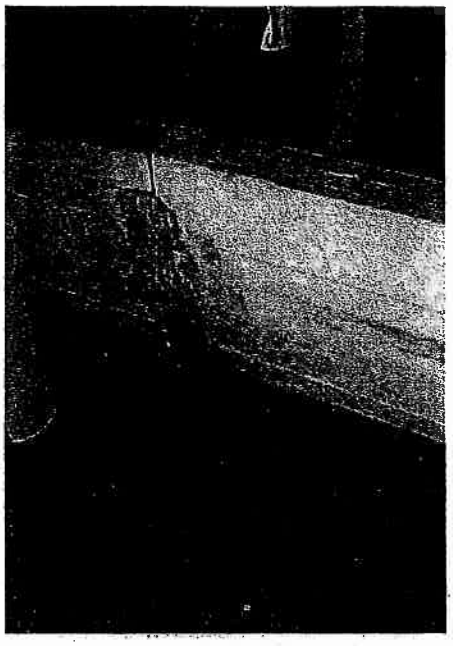

Photo 2 (7/8/07 Ecology Inspection; containment wall not properly moisture sealed)

Photo 3 (7/8/08 Ecology Inspection; compressor oil leak)

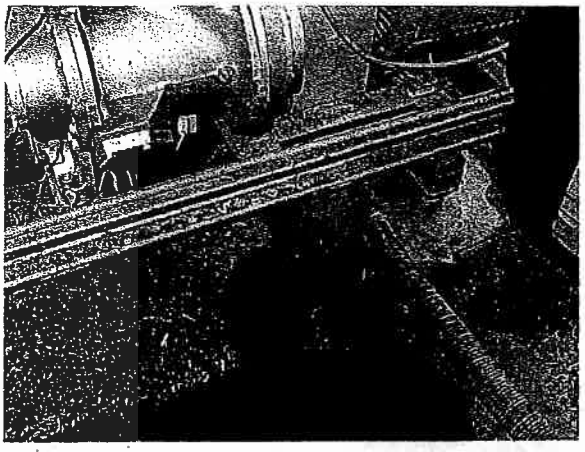

Photo 4 (7/8/08 Ecology Inspection; photo shows a liquid trail to the storm drain from the compressor shed)

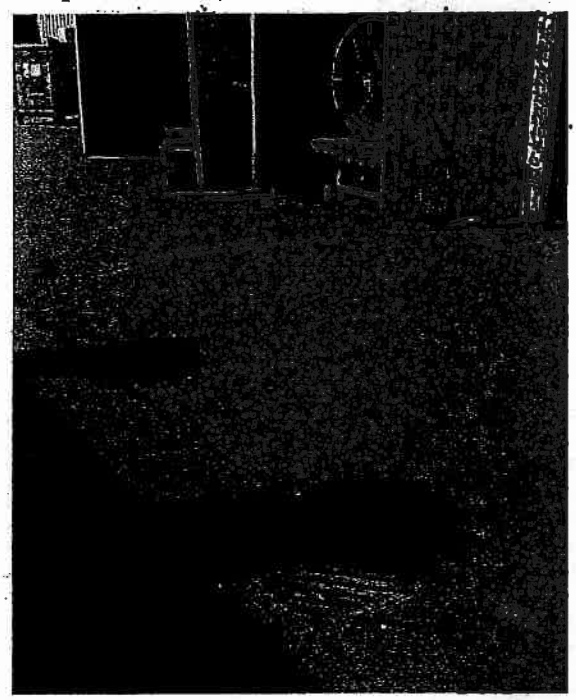

Photo 5 (4/20/04 Berm around outside containers show paint chips which need to be cleaned up Due to proximity of storm drains.)

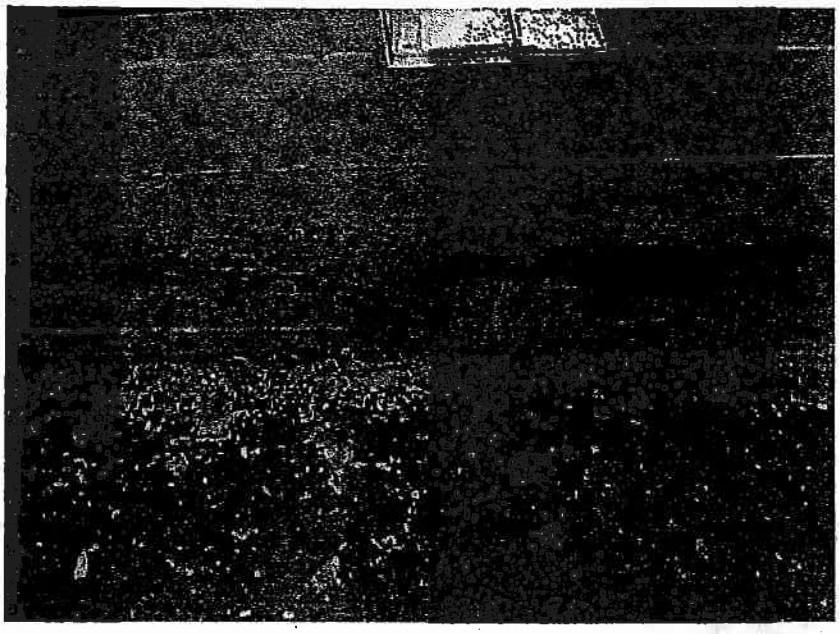

Photo 6 (4/20/04 Compressor in shed adjacent to driveway with storm drains. The pump is leaking oil and fluids)

Photo 7 (9/17/07 Oily sheen discharging to storm drain)

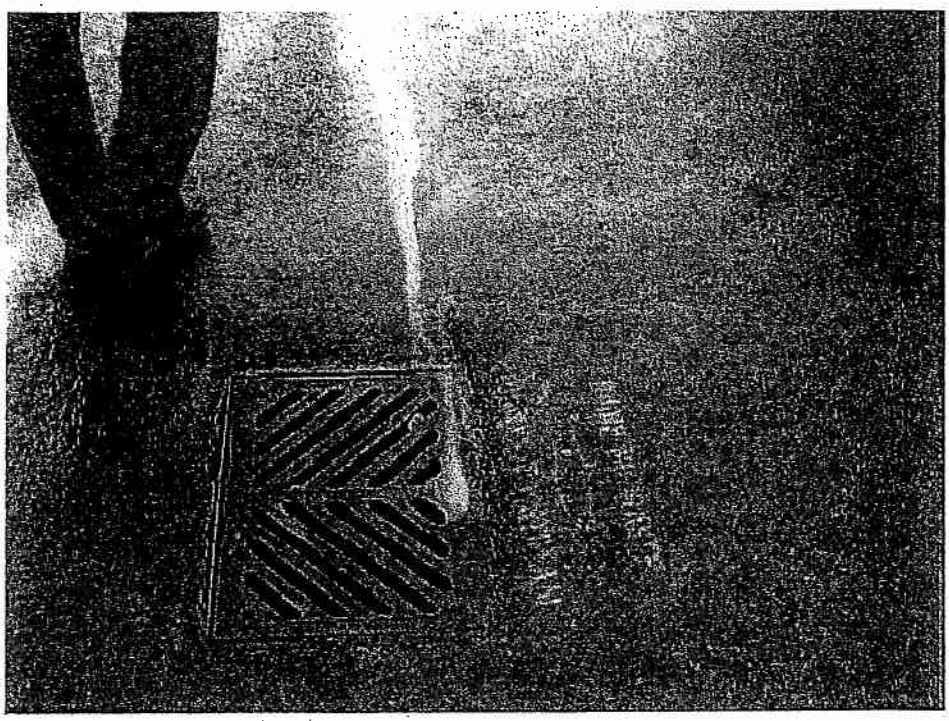

EXHIBIT 5

JUNE 1996 NORTH MARINA UTILITY MAP

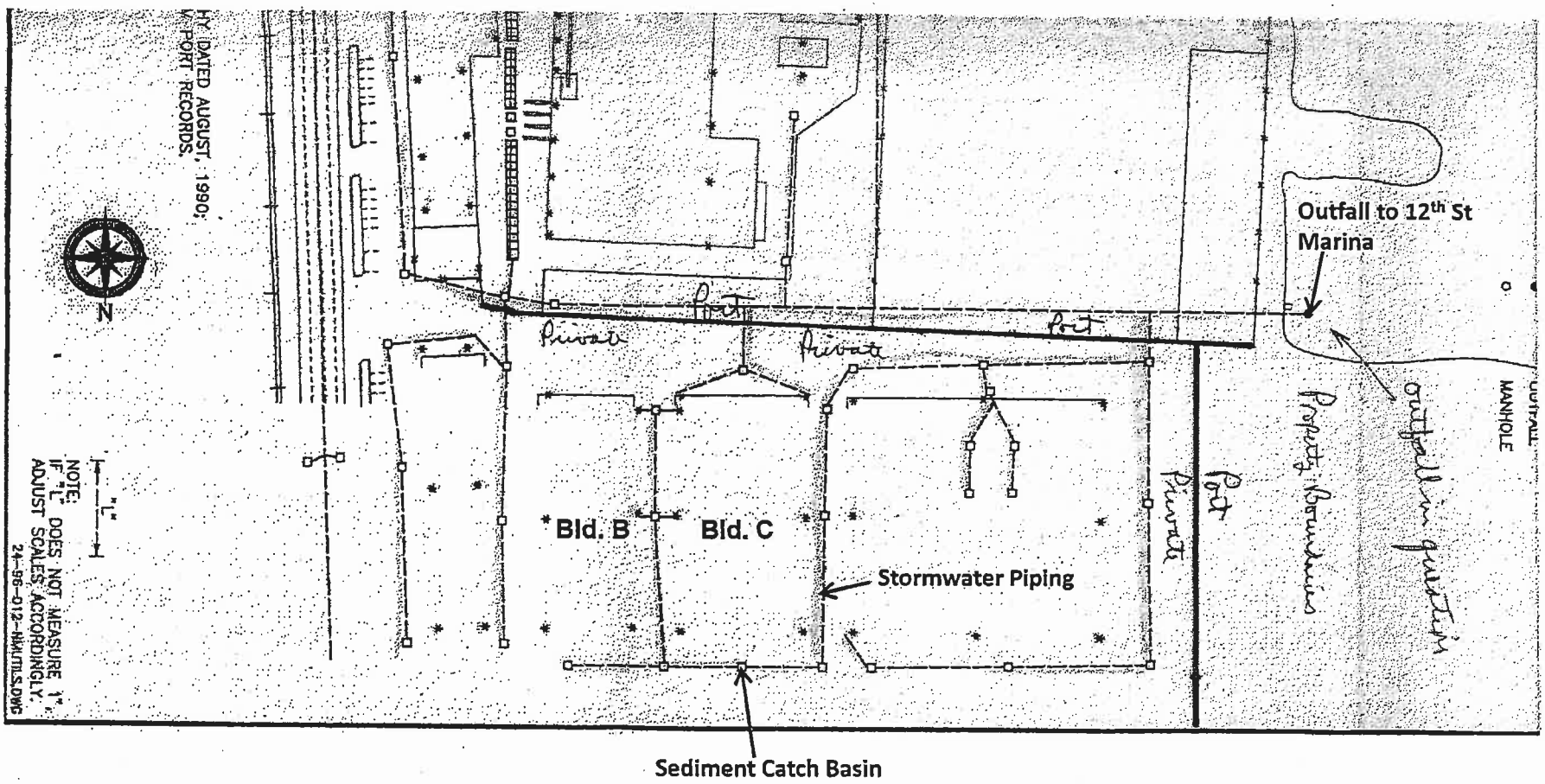

Exhibit 5

June 1996 North Marina Utility Map

(Source: Port of Everett)

EXHIBIT 6

PLP NOTICE LETTER AND 30 DAY COMMENT PERIOD WAIVER FORM

EARLY POTENTIALLY LIABLE PERSON NOTICE LETTER
THIRTY–DAY COMMENT PERIOD WAIVER FORM

Name:

Address:

Pursuant to WAC 173-340-500 and WAC 173-340-520(1)(b)(i), I ....., as a representative of Norton Industries, Inc. (Norton Industries), do hereby waive the Norton Industries' right to the thirty (30) day notice and comment period described in WAC 173-340-500(3) and accept(s) Norton Industries' status as a Potentially Liable Person for the TC Systems Inc Site located at 1032 West Marine View Drive, Everett, Washington. This waiver is solely for purposes of entering into an Agreed Order with Ecology for conducting the additional investigation/remedial action at the site. By waiving this right, Norton Industries makes no admission of liability.

_____ _____

Signature Date

_____

Relation To The Site
(ie, Owner, Operator or Representative)

EXHIBIT 7

MTCA FACT SHEET

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Focus

Model Toxics Control Act Cleanup Regulation: Process for Cleanup of Hazardous Waste Sites

In March of 1989, an innovative, citizen-mandated toxic waste cleanup law went into effect in Washington, changing the way hazardous waste sites in this state are cleaned up. Passed by voters as Initiative 97, this law is known as the Model Toxics Control Act, chapter 70.105D RCW. This fact sheet provides a brief overview of the process for the cleanup of contaminated sites under the rules Ecology adopted to implement that Act (chapter 173-340 WAC).

How the Law Works

The cleanup of hazardous waste sites is complex and expensive. In an effort to avoid the confusion and delays associated with the federal Superfund program, the Model Toxics Control Act is designed to be as streamlined as possible. It sets strict cleanup standards to ensure that the quality of cleanup and protection of human health and the environment are not compromised. At the same time, the rules that guide cleanup under the Act have built-in flexibility to allow cleanups to be addressed on a site-specific basis.

The Model Toxics Control Act funds hazardous waste cleanup through a tax on the wholesale value of hazardous substances. The tax is imposed on the first in-state possessor of hazardous substances at the rate of 0.7 percent, or $7 per $1,000. Since its passage in 1988, the Act has guided the cleanup of thousands of hazardous waste sites that dot the Washington landscape. The Washington State Department of Ecology's Toxic Cleanup Program ensures that these sites are investigated and cleaned up.

What Constitutes a Hazardous Waste Site?

Any owner or operator who has information that a hazardous substance has been released to the environment at the owner or operator's facility and may be a threat to human health or the environment must report this information to the Department of Ecology (Ecology). If an "initial investigation" by Ecology confirms further action (such as testing or cleanup) may be necessary, the facility is entered onto either Ecology's "Integrated Site Information System" database or "Leaking Underground Storage Tank" database. These are computerized databases used to track progress on all confirmed or suspected contaminated sites in Washington State. All confirmed sites that have not been already voluntarily cleaned up are ranked and placed on the state "Hazardous Sites List." Owners, operators and other persons known to be potentially liable for the cleanup of the site will receive an "Early Notice Letter" from Ecology notifying them that their site is suspected of needing cleanup, and that it is Ecology's policy to work cooperatively with them to accomplish prompt and effective cleanup.

October 2005
Revised

Focus No. 94-129

printed on recycled paper

Who is Responsible for Cleanup?

Any past or present relationship with a contaminated site may result in liability. Under the Model Toxics Control Act a potentially liable person can be:

- A current or past facility owner or operator.
- Anyone who arranged for disposal or treatment of hazardous substances at the site.
- Anyone who transported hazardous substances for disposal or treatment at a contaminated site, unless the facility could legally receive the hazardous materials at the time of transport.
- Anyone who sells a hazardous substance with written instructions for its use, and abiding by the instructions results in contamination.

In situations where there is more than one potentially liable person, each person is jointly and severally liable for cleanup at the site. That means each person can be held liable for the entire cost of cleanup. In cases where there is more than one potentially liable person at a site, Ecology encourages these persons to get together to negotiate how the cost of cleanup will be shared among all potentially liable persons.

Ecology must notify anyone it knows may be a "potentially liable person" and allow an opportunity for comment before making any further determination on that person's liability. The comment period may be waived at the potentially liable person's request or if Ecology has to conduct emergency cleanup at the site.

Achieving Cleanups through Cooperation

Although Ecology has the legal authority to order a liable party to clean up, the department prefers to achieve cleanups cooperatively. Ecology believes that a non-adversarial relationship with potentially liable persons improves the prospect for prompt and efficient cleanup. The rules implementing the Model Toxics Control Act, which were developed by Ecology in consultation with the Science Advisory Board (created by the Act), and representatives from citizen, environmental and business groups and government agencies, are designed to:

- Encourage independent cleanups initiated by potentially liable persons, thus providing for quicker cleanups with less legal complexity.
- Encourage an open process for the public, local government and liable parties to discuss cleanup options and community concerns.
- Facilitate cooperative cleanup agreements rather than Ecology-initiated orders. *Ecology can, and does, however use enforcement tools in emergencies or with recalcitrant potentially liable persons.*

What is the Potentially Liable Person's Role in Cleanup?

The Model Toxics Control Act requires potentially liable persons to assume responsibility for cleaning up contaminated sites. For this reason, Ecology does not usually conduct the actual cleanup when a potentially liable person can be identified. Rather, Ecology oversees the cleanup of sites to ensure that investigations, public involvement and actual cleanup and monitoring are done appropriately. Ecology's costs of this oversight are required to be paid by the liable party.

When contamination is confirmed at the site, the owner or operator may decide to proceed with cleanup without Ecology assistance or approval. Such "independent cleanups" are

allowed under the Model Toxics Control Act under most circumstances, but must be reported to Ecology, and are done at the owner's or operator's own risk. Ecology may require additional cleanup work at these sites to bring them into compliance with the state cleanup standards. Most cleanups in Washington are done independently.

Potentially liable persons conducting independent cleanups do not have access to financial assistance from Ecology. Those who plan to seek contributions from other persons to help pay for cleanup costs need to be sure their cleanup is "the substantial equivalent of a department-conducted or department-supervised remedial action." Ecology has provided guidance on how to meet this requirement in WAC 173-340-545. Persons interested in pursuing a private contribution action on an independent cleanup should carefully review this guidance prior to conducting site work.

Working with Ecology to Achieve Cleanup

Ecology and potentially liable persons often work cooperatively to reach cleanup solutions. Options for working with Ecology include formal agreements such as consent decrees and agreed orders, and seeking technical assistance through the Voluntary Cleanup Program. These mechanisms allow Ecology to take an active role in cleanup, providing help to potentially liable persons and minimizing costs by ensuring the job meets state standards the first time. This also minimizes the possibility that additional cleanup will be required in the future – providing significant assurances to investors and lenders.

Here is a summary of the most common mechanisms used by Ecology:

- **Voluntary Cleanup Program:** Many property owners choose to cleanup their sites independent of Ecology oversight. This allows many smaller or less complex sites to be cleaned up quickly without having to go through a formal process. A disadvantage to property owners is that Ecology does not approve the cleanup. This can present a problem to property owners who need state approval of the cleanup to satisfy a buyer or lender.

  One option to the property owner wanting to conduct an independent cleanup yet still receive some feedback from Ecology is to request a technical consultation through Ecology's Voluntary Cleanup Program. Under this voluntary program, the property owner submits a cleanup report with a fee to cover Ecology's review costs. Based on the review, Ecology either issues a letter stating that the site needs "No Further Action" or identifies what additional work is needed. Since Ecology is not directly involved in the site cleanup work, the level of certainty in Ecology's response is less than in a consent decree or agreed order. However, many persons have found a "No Further Action" letter to be sufficient for their needs, making the Voluntary Cleanup Program a popular option.

- **Consent Decrees:** A consent decree is a formal legal agreement filed in court. The work requirements in the decree and the terms under which it must be done are negotiated and agreed to by the potentially liable person, Ecology and the state Attorney General's office. Before consent decrees can become final, they must undergo a public review and comment period that typically includes a public hearing. Consent decrees protect the potentially liable person from being sued for "contribution" by other persons that incur cleanup expenses at the site while facilitating any contribution claims against the other persons when they are responsible for part of the cleanup costs. Sites cleaned up under a consent decree are also exempt from having to obtain certain state and local permits that could delay the cleanup.

- ***De Minimus* Consent Decree:** Landowners whose contribution to site contamination is "insignificant in amount and toxicity" may be eligible for a de minimus consent decree. In these decrees, the landowner typically settles their liability by paying for some of the cleanup instead of actually conducting the cleanup work. Ecology usually accepts a de minimus settlement proposal only if the landowner is affiliated with a larger site cleanup that Ecology is currently working on.
- **Prospective Purchaser Consent Decree:** A consent decree may also be available for a "prospective purchaser" of contaminated property. In this situation, a person who is not already liable for cleanup and wishes to purchase a cleanup site for redevelopment or reuse may apply to negotiate a prospective purchaser consent decree. The applicant must show, among other things, that they will contribute substantial new resources towards the cleanup. Cleanups that also have a substantial public benefit will receive a higher priority for prospective purchaser agreements. If the application is accepted, the requirements for cleanup are negotiated and specified in a consent decree so that the purchaser can better estimate the cost of cleanup before buying the land.
- **Agreed Orders:** Unlike a consent decree, an agreed order is not filed in court and is not a settlement. Rather, it is a legally binding, administrative order issued by Ecology and agreed to by the potentially liable person. Agreed orders are available for remedial investigations, feasibility studies, and final cleanups. An agreed order describes the site activities that must occur for Ecology to agree not to take enforcement action for that phase of work. As with consent decrees, agreed orders are subject to public review and offer the advantage of facilitating contribution claims against other persons and exempting cleanup work from obtaining certain state and local permits.

Ecology-Initiated Cleanup Orders

Administrative orders requiring cleanup activities without an agreement with a potentially liable person are known as **enforcement orders.** These orders are usually issued to a potentially liable person when Ecology believes a cleanup solution cannot be achieved expeditiously through negotiation or if an emergency exists. If the responsible party fails to comply with an enforcement order, Ecology can clean up the site and later recover costs from the responsible person(s) at up to three times the amount spent. The state Attorney General's Office may also seek a fine of up to $25,000 a day for violating an order. Enforcement orders are subject to public notification.

Financial Assistance

Each year, Ecology provides millions of dollars in grants to local governments to help pay for the cost of site cleanup. In general, such grants are available only for sites where the cleanup work is being done under an order or decree. Ecology can also provide grants to local governments to help defray the cost of replacing a public water supply well contaminated by a hazardous waste site. Grants are also available for local citizen groups and neighborhoods affected by contaminated sites to facilitate public review of the cleanup. See Chapter 173-322 WAC for additional information on grants to local governments and Chapter 173-321 WAC for additional information on public participation grants.

Public Involvement

Public notices are required on all agreed orders, consent decrees and enforcement orders. Public notification is also required for all Ecology-conducted remedial actions.

Ecology's Site Register is a widely used means of providing information about cleanup efforts to the public and is one way of assisting community involvement. The Site Register is published every two weeks to inform citizens of public meetings and comment periods, discussions or negotiations of legal agreements, and other cleanup activities. Persons affected by contaminated sites and needing additional information on the Act, cleanup standards, or risk assessment can call Ecology's Citizen Technical Advisor toll free at 1-800-826-7716. The Site Register can be accessed on the Internet at: www.ecy.wa.gov/programs/tcp/pub_inv/pub_inv2.html.

How Sites are Cleaned Up

The rules describing the cleanup process at a hazardous waste site are in chapter 173-340 WAC. The following is a general description of the steps taken during the cleanup of an average hazardous waste site. Consult the rules for the specific requirements for each step in the cleanup process.

1. Site Discovery: Sites where contamination is found must be reported to Ecology's Toxics Cleanup Program within 90 days of discovery, unless it involves a release of hazardous materials from an underground storage tank system. In that case, the site discovery must be reported to Ecology within 24 hours. At this point, potentially liable persons may choose to conduct independent cleanup without assistance from the department, but cleanup results must be reported to Ecology.

2. Initial Investigation: Ecology is required to conduct an initial investigation of the site within 90 days of receiving a site discovery report. Based on information obtained about the site, a decision must be made within 30 days to determine if the site requires additional investigation, emergency cleanup, or no further action. If further action is required under the Model Toxics Control Act, Ecology sends early notice letters to owners, operators and other potentially liable persons inviting them to work cooperatively with the department.

3. Site Hazard Assessment: A site hazard assessment is conducted to confirm the presence of hazardous substances and to determine the relative risk the site poses to human health and the environment.

4. Hazard Ranking: The Model Toxics Control Act requires that sites be ranked according to the relative health and environmental risk each site poses. Working with the Science Advisory Board, Ecology created the Washington Ranking Method to categorize sites using data from site hazard assessments. Sites are ranked on a scale of 1 to 5. A score of 1 represents the highest level of risk and 5 the lowest. Ranked sites are placed on the state Hazardous Sites List.

5. Remedial Investigation/Feasibility Study: A remedial investigation and feasibility study is conducted to define the extent and magnitude of contamination at the site. Potential impacts on human health and the environment and alternative cleanup technologies are also evaluated in this study. Sites being cleaned up by Ecology or by potentially liable persons under a consent decree, agreed order or enforcement order are required to provide for a 30 day public review before finalizing the report.

6. Selection of Cleanup Action: Using information gathered during the study, a cleanup action plan is developed. The plan identifies preferred cleanup methods and specifies cleanup standards and other requirements at the site. A draft of the plan is subject to public review and comment before it is finalized.

7. Site Cleanup: Actual cleanup begins when the cleanup action plan is implemented. This includes design, construction, operation and monitoring of cleanup actions. A site may be taken off the Hazardous Sites List after cleanup is completed and Ecology determines cleanup standards have been met.

For More Information / Special Accommodation Needs

If you would like more information about the state Model Toxics Control Act, please call us toll-free at **1-800-826-7716**, or contact your regional Washington State Department of Ecology office listed below. Information about site cleanup, including a listing of ranked hazardous waste sites, is also accessible through our Internet address:
http://www.ecy.wa.gov/programs/tcp/cleanup.html

- **Northwest Regional Office** **425/649-7000 (voice) / 206/649-4259 (TDD)**
  (Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom Counties)
- **Southwest Regional Office** **360/407-6300 (voice) / 360/407-6306 (TDD)**
  (Southwestern Washington, Olympic Peninsula, Pierce, Thurston and Mason Counties)
- **Central Regional Office** **509/575-2490 (voice) / 509/454-7673 (TDD)**
  (Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima Counties)
- **Eastern Regional Office** **509/329-3400 (voice) / 509/458-2055 (TDD)**
  (Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman Counties)

If you need this publication in an alternate format, please contact Toxics Cleanup Program at 360-407-7170. For persons with a speech or hearing impairment call 711 for relay service or 800-833-6388 for TTY.

Disclaimer Notice: This fact sheet is intended to help the user understand the Model Toxics Control Act Cleanup Regulation, chapter 173-340 WAC. It does not establish or modify regulatory requirements.

EXHIBIT 8

FACILITY SITE & ISIS INFORMATION

FACILITY SITE INFORMATION (TCP)

Shaded fields are required

Site Name: TC Systems Inc **FS ID:** 10587741

Location Description: Generally located between between 10th and 11th Streets off West Marine View Drive, Everett, Washington.

Geographic Position: 05

01 = Centroid of STR Unit
02 = Centroid of STR Qtr. Section
03 = Centroid of STR QTR QTR Section
04 = Centroid of STR QTR QTR QTR Section
05 = Facility/Site Centroid
06 = NE Corner of Land Parcel
07 = NW Corner of Land Parcel
08 = Plant Entrance
09 = SE Corner of Land Parcel
11 = SW Corner of Land Parcel
99 = Unknown

Site Address: 1032 West Marine View Drive

City: Everett **Zip:** 98201-1557

County: Snohomish **WRIA ID:** #7 **Indian Land:** ☐

Collection Source: 01

01 = Not Applicable
02 = 1:500,000
03 = 1:250,000
04 = 1:125,000
05 = 1:100,000
06 = 1:63,360
07 = 1:62,500
08 = 1:50,000
09 = 1:25,000
10 = 1:24,000
11 = 1:20,000
12 = 1:15,840
13 = 1:10,000
14 = 1:12,000
15 = 1:25,001-1:50,000
16 = 1:50,001-1:100,000
17 = 1:20,001-1:125,000
18 = 1:15,001-1:20,000
19 = 1:10,000-1:15,000
20 = 1:5,001-1:10,000
21 = 1:501-1:5,000
22 = <=1:500
23 = <1:500
99 = Unknown

Collection Method: 18

01 = Address Matching—Block Face
02 = Address Matching—House Number
03 = Address Matching—Street Centerline
04 = Address Matching—Unknown
05 = Aerial Photography—Rectified
06 = Aerial Photography—Unknown
07 = Aerial Photography—Unrectified
08 = Cadastral Survey
09 = Census Block 1990 Centroid
10 = Census Block Group 1990 Centroid
11 = Conversion from STR
12 = Digital or manual raw photo extraction
13 = Digitized of CTR screen/digital data
14 = Digitized—paper map
15 = GPS (Carrier/Geodetic)
16 = GPS (Code/Geodetic)
17 = GPS (Kinematic)
18 = GPS (Unknown)
19 = Hand Measured—paper map
20 = LORAN-C
21 = Orthophotography—digital
22 = Orthophotography—paper
23 = Satellite Imagery—Landsat MSS
24 = Satellite Imagery—Landsat TM
25 = Satellite Imagery—Other
26 = Satellite Imagery—SPOT Panchromatic
27 = Satellite Imagery—SPOT Multi Spectral
28 = Zip Code Centroid
99 = Unknown

Horizontal Datum: 04

01 = North American Datum 1927 NAD27
02 = North American Datum 1983 ('91 adj.) = NAD83
03 = HARN
04 = WGS84 (GPS NAVD88)
99 = Unknown

Areal Extent Code: 06

01 = Large Facility/Complex or area > 10 Acre
02 = Small Facility/Complex or area > 1 Acre <10 Acre
03 = Large Building or area > 5,000 sq. ft.
04 = Small Building or area < 5,000 sq. ft.
05 = Crossing or Intersection of two features; e.g., bridge stream
06 = Small object or area <10 sq. ft.; e.g., well
99 = Unknown

Accuracy Level: 06	01 = > 1/100 meter 02 = < 1/10 meter and > 1/100 meter 03 = < 1 meter and > 1/10 meter 04 = +/- 10 feet (3 meter) 05 = +/- 20 feet (6 meter)	06 = +/- 40 feet (12 meter) 07 = +/- 100 feet (35 meter) 08 = +/- 180 feet (55 meter) 09 = +/- 250 feet 10 = +/- 500 feet	11 = +/- 1000 feet 12 = +/- 2000 feet 13 = > 2000 feet 99 = Unknown

	Degrees	Minutes	Seconds		Number	Direction	Quarter	Circle
Latitude:	48	00	13.37 N	Section:	18			NW (NE) SW SE
Longitude:	122	12	54.64 W	Township:	29	North		NW NE SW SE
If you don't have LAT/LONG please provide map of site!				Range:	5	East		NW NE SW SE

Ecology Interaction (check all that apply):				Program ID:	System:	
	☐	FCS	Federal (Superfund Cleanup Site)		☒	ISIS
	☐	INDPNDNT	Independent Cleanup			
	☐	IRAP	Independent Remedial Action Program			
	☐	LUST	Leaking Underground Storage Tank			
	☑	SCS	State Cleanup Site			
	☐	SEDIMENT	Sediment Site			
	☐	UST	Underground Storage Tank			
	☐	VOLCLNST	Voluntary Cleanup Program			

Active Status: _____ Date: _____ Inactive Status: _____ Date: _____

Sic/NAIC Code:	Description:
1. 3471/332813 2. 3479/332812	Metal Finishing

If this site is a sub-site or operable unit of a larger site, include the name and FS ID# of the parent site:

FS ID#: _____ Site Name: TC Systems Inc

Company Name: TC Systems, Inc Title: Ms

Last Name: Utick First Name: Mary Middle Initial: _____

Address: 1032 West Marine View Drive PO Box: _____

City: Everett State: WA Zip: 98201-1557 Country: USA

Tax ID#: _____ UBI#: _____ Phone#: 425-258-4055 Ext: _____

Fax#: _____ Alt Phone#: _____ E-Mail Address: _____

Affiliation Type: PLP

AC = Application Contact
AP = Affected Party
APPL = Applicant
ATT = Attorney
BC = Billing Contact
BO = Business Owner
CA = Co Applicant
CNTR = Contractor
CRP = Cost Recovery Party
DBA = Doing Business As
FOPER = Former Operator
FOWNR = Former Owner
IC = Inspection Contact
LAO = Land Owner
LEO = Legal Owner
MH = Mortgage Holder
OP = Operator
PE = Project Engineer
PI = Public Involvement Person
PLP = Potentially Liable Person
PM = Project Manager
PRMT = Permittee
PRP = Potentially Responsible Party
SA = Site Attorney
SC = Site Contact
SO = Site Owner
TSC = Toxics Site Contact
UNK = Unknown

Relationship Start Date: _____ Relationship End Date: _____

Alternate Site Names

1. Tri Coatings

ISIS SITE CLEANUP INFORMATION

Shaded fields are required

Site Name: TC Systems Inc **FS ID:**

Warm Bin #: 1 (If NPL(0) 1= State has lead 3 = Joint lead; circle one 2 = EPA has lead 4 = Fed Fac Agreemnt) **Tax Parcel #(s):** 29051800200700, 29051800201300

Ecology Status: 1

1 = Awaiting SHA
2 = Ranked, Awaiting RA
3 = RA in progress
4 = Independent RA
5 = Construction Completed, O & M Underway
6 = RA Completed, Confirmational Monitoring Underway
7 = RA Conducted, residual contamination left on site, on-going institutional controls required
8 = RA and other activities completed

Statute: 2 & 7

1 = CERCLA
2 = MTCA Only
3 = RCW 70.105B
4 = RCW 90.48
5 = RCRA-C
6 = RCRA-D
7 = MTCA (SED)

Independent Status:

1 = Release report received, awaiting assessment by PLP
2 = Independent Site Assessment or Interim RA Report received
3 = Independent Final RA Report received
(This field is only used and required if Ecology Status is 4)

Program Plan:

1 = Prepayment
2 = Program Plan
3 = IRAP
4 = VCP

Owner Type: 1

1 = Private
2 = Municipal (City)
3 = County
4 = Federal
5 = State
6 = Tribal
7 = Mixed
8 = Public School
10 = Publicly Owned (Bankrupt)
11 = Financial Institution Owned (Bankrupt)

ERTS ID: **UST SITE ID (of LUST SITE):** **AFRS Code:**

Site Manager: Andy Kallus **Responsible Unit:** HQ TCP Lands Cleanup Unit

NFA Code:

1 = NFA after assessment, IRAP, or VCP
2 = Removed from Hazardous Sites List (HSL)
3 = Referred (transferred to another Ecology Prog.
4 = Referred to another agency
5 = Referred to local governmental entity
6 = Cleaned up under prior authority
7 = Cleanup completed, not on HSL
8 = Restrictive Covenant, Institutional Controls
9 = Removed from HSL, Restrictive Cov. Inst. Contr.

NFA Date:

Reopen Type:

1 = Conditions of IC/RG not met
2 = More Contaminants found
3 = New release
4 = VCP NFA Rescinded
5 = New discovery (ND) + no action
6 = ND + assessment/cleanup occurring
7 = ND + cleanup completed + no monitoring needed
8 = ND + cleanup completed + monitoring underway

Old NFA Code: **Old NFA Date:**

Restrictive Covenant Required: ☐ **Verified by:**

Site Comments:

Activity Code	Activity Status	Start Date	End Date	Activity Lead	Action By	Neg. Start Date	Legal Mech.
II	C	April 2009	Sept 2009	TC Systems Inc.	7		
II	C	July 2009	Sept 2009	Ecology	1		
ENL	P	Oct 2009	Nov 2009	Ecology	1		

See code definitions on the next page.

Activity Codes

SD = Site Discovery/Report Received
II = Initial Investigation
ENL = Early Notice Letter
SHA = Site Hazard Assessment
HSL = Hazardous Sites Listing
EA = Emergency Action
IA = Interim Action
RC = Routine Cleanup Action
CAP = Cleanup Action Plan
CED = Cleanup Engineering Design
CC = Cleanup Construction
COM = Cleanup Operation & Maintenance
PR = Periodic Review (5 year)
RHSL = Removal from Hazardous Site List
RI/FS = Remedial Investigation/Feasibility Study

SC = Site Characterization IRRU = IRAP-Unpaid IRRP = IRAP-Paid USI = UXO Safety Inspection

Activity Status Codes	C = Completed I = In Process P = Planned X = Canceled	Action By Codes	1 = Ecology 2 = Ecology w/Contractor 3 = EPA 4 = Local Government 6 = PLP 7 = PLP w/Contractor	Legal Mechanism	1 = Enforcement Order 2 = Agreed Order 3 = Consent Decree 4 = Governmental Action 5 = Independent

Activity Comments: _____

Media	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1 Groundwater	S		S				C		S		S										DW
2 Surface Water																					T
3 Air																					Y
4 Soil	S		S		S		S		S		S										P
5 Sediment	S		S		S		S		S		S										E
6 Drinking Water																					

Status Codes: B = Below Cleanup Levels; C = Confirmed (above cleanup levels); R = Remediated; S = Suspected

Drinking Water Types: 1 = Single Family; 2 = Community

Contaminant Codes: (for examples of specifics within contaminant groups please check an ISIS manual)

1 = Base/Neutral Organics; 2 = Halogenated Organic Compounds; 3 = Metals—Priority Pollutants; 4 = Metals—Other; 5 = PCB; 6 = Pesticides; 7 = Petroleum Products; 8 = Phenolic Compounds; 9 = Non-Halogenated Solvents; 10 = Dioxins; 11 = PAH; 12 = Reactive Wastes; 13 = Corrosive Wastes; 14 = Radioactive Wastes; 15 = Conventional Contaminants, Organic; 16 = Conventional Contaminants, Inorganic; 17 = Asbestos; 18 = Arsenic; 19 = MTBE; 20 = UXO; 21 = Tibutyl Tin (TBT); 22 = Bioassay/Benthic Failures; 23 = Wood Debris; 24 = Other Deleterious Substance

Waste Mgmt Check all that apply

- ☐ 1. Drug Lab
- ☑ 2. Drum
- ☐ 3. Impoundment
- ☑ 4. Improper Handling
- 5. Landfill
- ☐ 6. Land Application
- ☐ 7. Pesticide Application
- ☐ 8. Pesticide Disposal
- ☑ 9. Spill
- ☑ 10. Storm Drain
- ☑ 11. Tank
- ☐ 12. Unknown
- ☐ 13. Aquatic Disposal
- ☐ 14. UXO Range
- ☐

IC Decision Document Type: _____ (1 = Consent Decree; 2 = Prospective Purchaser; 3 = Consent Decree; 4 = Agreed Order; 5 = Enforcement Order; 6 = Amendment; 7 = VCP; 8 = IRAP)

Filing # : _____ Filing Date: _____ VCP # _____

IC Decision Document Comments: _____

IC Documents: _____ (1 = Restrictive Covenant; 2 = Conservative Easement; 3 = Ordinance)

County Filing #: _____ Filing Date: _____ Status: _____ (1 = Active; 2 = Rescinded; 3 = No Proof of Filing) Status Date: _____

IC Document Comments: _____

IC Category Check all that apply

- ☐ Drinking Water Restriction
- ☐ Educational Programs
- ☐ Groundwater Restriction
- ☐ Maintenance Requirements
- ☐ Physical Measure
- ☐ Property Use Restriction
- ☐ Soil Restriction
- ☐ Surface Water Restriction

IC Financial Assurance Type: _____ (1 = Financial Test; 2 = Surety Bond; 3 = Letter of Credit; 4 = Trust Fund; 5 = Standby Trust Fund; 6 = Govt Bond Rating Test; 7 = Govt Financial Test; 8 = Govt Guarantee; 9 = Govt Fund)

Financial Assurance Amount: $ _____ Financial Assurance Date: _____

Five Year Review Completed by: _____ Review Completion Date: _____ Next Review Due Date: _____

Five Year Review Comments: _____

FY Review Results Check all that apply	☐ Passed ☐ Failed—Engineered Controls ☐ Failed—Institutional Controls ☐ Failed—Cleanup Standards

TEE Exclusion Check all that apply:	☐ No Contam. Present ☐ All Contam. Is Below 6 ft w/IC ☐ Covered by Physical Barriers ☐<1½ Acres of Contiguous Undeveloped Ind ☐ All Contam. Below 15 Ft ☐ Site-Specific Pt. of Compliance ☐<1/4 Acre of Contig.Undev.Land☐ Concentrations Do Not Exceed Bckground

TEE Simplified Eval Check all that apply:	☐ Are of Contamination =<350 ft2 ☐ Depth of Contamination ☐ Chemical Not Present w/in(C)POC ☐ Pass Bioassay ☐ Exposure Unlikely via Table 749-1☐ No Completed Expos. Pathway ☐ Below Table 749-2 Values ☐ 749-2 Used to Set CU Lvls

TEE Site-Specific Evaluation Completion Date: _____	Method Type: _____	1 = Literature for Non-Listed chemical 5 = Wildlife Exposure Model (Tbl 749-5) 2 = Literature for Site-Specific Conditions 6 = Biomarker 3 = Literature for Augment Table 749-5 7 = Field Study 4 = Soil Bioassay Used 8 = Weight of Evidence	Contractor Name: _____

TEE Site-Specific Comments:

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 5

A-1.

A-2. Blast media with (chromium & zinc)

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A01

A-8. B304

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 6820.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
WAD980739395	M141	6820	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
05/04/1995	95076		WAD980739395	2200.00	
07/18/1995	510004		WAD980739395	4400.00	
12/06/1995	551201		WAD980739395	220.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 4

A-1.

A-2. Paint powder with metals

A-3. D007, D035, F003, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A21

A-8. B319

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 18020.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
AZD049318009	M141	3000	0
WAD000812909	M141	2700	0
WAD980739395	M141	12320	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
03/13/1995	12071		WAD000812909	2700.00	
05/04/1995	95076		WAD980739395	4400.00	
07/18/1995	510001		WAD980739395	3520.00	
08/06/1995	F95001		WAD980739395	2200.00	
09/06/1995	95188		AZD049318009	3000.00	
12/06/1995	551201		WAD980739395	2200.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 8

A-1.

A-2. Waste chromic acid solution

A-3. D002, D007

A-4.

A-5. [X] EHW [ ] DW

A-6. [X] No [ ] Yes

A-7. A37

A-8. B106

A-9. [ ] i [X] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 7800.00 [ ] Tons [ ] Pounds [ ] Kilograms [X] Gallons (If Gallons, answer B-1.a.)

B-1.a. 8.34 [X] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
CAD097030993	M141	7800	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
11/27/1995	76281		CAD097030993	3100.00	
12/08/1995	27394		CAD097030993	4700.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 3

A-1.

A-2. Chromium hydroxide sludge

A-3. D007, F006

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A75

A-8. B505

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 11300.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
AZD049318009	M141	1500	0
WAD020257945	M141	1000	0
WAD980739395	M141	8800	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
03/13/1995	12072		WAD020257945	1000.00	
05/04/1995	95076		WAD980739395	2200.00	
08/03/1995	F95001		WAD980739395	2200.00	
09/06/1995	95188		AZD049318009	1500.00	
12/06/1995	551201		WAD980739395	4400.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 1

A-1.

A-2. Spent solvent and paint solids

A-3. D001, D007, D008, D035, F003, F005

A-4. WP02 WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A33

A-8. B602

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 1510.00 [ ] Tons [ ] Pounds [ ] Kilograms [X] Gallons (If Gallons, answer B-1.a.)

B-1.a. 10.01 [X] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
WAD000812909	M061	300	0
WAD980739395	M061	1210	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
03/13/1995	12071		WAD000812909	300.00	
05/04/1995	95076		WAD980739395	550.00	
07/18/1995	951001		WAD980739395	440.00	
08/03/1995	F95001		WAD980739395	220.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 6

A-1.

A-2. Sludge contaminated with metals (etch)

A-3. D002, D007

A-4. WT01 WC01

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A27

A-8. B316

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 4400.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
WAD980739395	M141	4400	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
08/03/1995	F95001		WAD980739395	1100.00	
11/02/1995	95226		WAD980739395	3300.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 2

A-1.

A-2. Paint solids and mineral spirits

A-3. D001, D007, D008, F003, F005

A-4. WP01 WT01

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A33

A-8. B602

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 605.00 [ ] Tons [ ] Pounds [ ] Kilograms [X] Gallons (If Gallons, answer B-1.a.)

B-1.a. 4.59 [X] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
AZD049318009	M061	220	0
WAD980739395	M061	385	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
09/06/1995	95188		AZD049318009	220.00	
11/02/1995	95226		WAD980739395	165.00	
12/06/1995	551201		WAD980739395	220.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 7

A-1.

A-2. Sludge debris with metals

A-3. D007

A-4. WT01

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A51

A-8. B311

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 880.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
WAD980739395	M141	880	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
11/02/1995	95226		WAD980739395	880.00	

C. Comments

Off-Site Identification Form

OI

Please enter your RCRA Site ID Number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your off-site identification facilities.

Please complete this form if your facility received dangerous waste from off site or shipped dangerous waste off site during the year.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

RCRA Site ID Number: AZD049318009
Name:
Site Address:
City/State/Zip/Country: ,
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: CAD097030993
Name:
Site Address:
City/State/Zip/Country: ,
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: WAD000812909
Name:
Site Address:
City/State/Zip/Country: ,
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: WAD020257945
Name:
Site Address:
City/State/Zip/Country: ,
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: WAD980739395
Name:
Site Address:
City/State/Zip/Country: ,
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [ ] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) — Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) — 12/31/1995
- [x] A component of the **Dangerous Waste Annual Report** (skip section 11) — Reporting Year: 1995

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1028 W MARINE VIEW DR
City/State/Zip: EVERETT, WA 98201-1557
County: SNOHOMISH
Tax Registration Number: 601995788
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name:
Mail Address:
City/State/Zip: ,
Country:

5. Legal Owner

Name:
Mail Address:
City/State/Zip: ,
Phone Number (Ext):
Owner Since: (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [ ] Private [ ] Tribal [ ] Other

6. Land Owner

Name:
Mail Address:
City/State/Zip: ,
Phone Number (Ext):
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [ ] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name:

Mail Address:

City/State/Zip: ,

Phone Number (Ext):

Operator Since: (mm/dd/yyyy)

Operator Type: ☐ Federal ☐ State ☐ County ☐ Municipal ☐ District ☐ Private ☐ Tribal ☐ Other

8. Site Contact

Name:

Mail Address:

City/State/Zip: ,

Phone Number (Ext):

Email Address:

9. Form Contact

Name:

Mail Address:

City/State/Zip: ,

Phone Number (Ext):

Email Address:

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [X] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [ ] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [ ] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [ ] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Treatment, Storage, Disposal or Recycling (TSDR) Facility** (Note: A RCRA Permit is required for this activity)
- [ ] **11. Immediate Recycler of Off-Site Waste** (Up to 72 hours with Ecology permission)

12. Dangerous Waste Fuel Activity

- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)

d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

12. Comments

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 8

A-1.

A-2. Metal finishing rinsate with < 500 ppm chromium, <400 ppm copper, <200 ppm

A-3. D007

A-4.

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A05

A-8. B119

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 366960.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [X] On-site [ ] Off-site [ ] Both

B-3. 366960.00 M121

B-3.a. [ ] No [X] Yes

B-4.

B-5.

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 4

A-1.

A-2. SLudge contaminated with metals (etch crystals)

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A27

A-8. B316

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 9320.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
FCCANADA	M141	9320	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
02/02/1996	96007		FCCANADA	3520.00	
05/31/1996	96157		FCCANADA	2200.00	
12/18/1996	96341		FCCANADA	3600.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 1

A-1.

A-2. Paint solids and mineral spirits

A-3. D001, D007, D008, F003, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A33

A-8. B602

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 16664.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
FCCANADA••	M061	9544	0
KDS980633259	M061	7120	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/04/1996	96001		FCCANADA	3652.00	
02/02/1996	96007		FCCANADA	871.00	
04/26/1996	DF009		FCCANADA	1369.00	
05/31/1996	96157		FCCANADA	3652.00	
09/18/1996	96272		KSD980633259	3520.00	
12/19/1996	96336		KSD980633259	3600.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 5

A-1.

A-2. Sludge debris with metals

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A51

A-8. B311

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 2656.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
FCCANADA	M141	2656	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
04/26/1996	DF009		FCCANADA	456.00	
04/26/1996	DF009		FCCANADA	2200.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 2

A-1.

A-2. Chromium hydroxide sludge

A-3. D007, F006

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A75

A-8. B505

A-9. [ ] i [ ] ii [ ] iii [ ] iv [X] v (If v, answer A-9.a.)

A-9a. M121

B. Waste Management Activities

B-1. 12810.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
CAT000646117	M141	8410	0
FCCANADA	M141	4400	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
04/26/1996	DF009		FCCANADA	2200.00	
05/31/1996	96157		FCCANADA	2200.00	
09/11/1996	76697		CAT000646117	4205.00	
12/16/1996	75738		CAT000646117	4205.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 6

A-1.

A-2. Waste paint

A-3. D001

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A57

A-8. B101

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 1671.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
FCCANADA	M061	871	0
KSD980633259	M061	800	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
04/26/1996	DF009		FCCANADA	871.00	
12/19/1996	96336		KSD980633259	800.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 7

A-1.

A-2. Waste cleaner

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A19

A-8. B102

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 2739.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
FCCANADA	M141	2739	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
04/26/1996	DF009		FCCANADA	2739.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 3

A-1.

A-2. Paint powder with metals

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A21

A-8. B319

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 8700.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
CAT000646117	M141	4500	0
FCCANADA	M141	4200	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/04/1996	96001		FCCANADA	2000.00	
04/26/1996	DF009		FCCANADA	2200.00	
09/11/1996	76697		CAT000646117	3000.00	
12/16/1996	75738		CAT000646117	1500.00	

C. Comments

Off-Site Identification Form

OI

Please enter your RCRA Site ID Number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your off-site identification facilities.

Please complete this form if your facility received dangerous waste from off site or shipped dangerous waste off site during the year.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

RCRA Site ID Number: CAT000646117
Name:
Site Address:
City/State/Zip/Country: ,
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: FCCANADA
Name:
Site Address:
City/State/Zip/Country: , Canada
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: FCCANADA••
Name:
Site Address:
City/State/Zip/Country: , Canada
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: KDS980633259
Name:
Site Address:
City/State/Zip/Country: ,
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: KSD980633259
Name:
Site Address:
City/State/Zip/Country: ,
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [ ] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) — Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) — 12/31/1996
- [x] A component of the **Dangerous Waste Annual Report** (skip section 11) — Reporting Year: 1996

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1028 W MARINE VIEW DR
City/State/Zip: EVERETT, WA 98201-1557
County: SNOHOMISH
Tax Registration Number: 601995788
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1028 W MARINE VIEW DR BLDG C
City/State/Zip: EVERETT, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name:
Mail Address:
City/State/Zip: ,
Phone Number (Ext):
Owner Since: (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [ ] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [ ] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc

Mail Address: 1028 W MARINE VIEW DR

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext):

Operator Since: 01/01/1997 (mm/dd/yyyy)

Operator Type: ☐ Federal ☐ State ☐ County ☐ Municipal ☐ District ☐ Private ☐ Tribal ☐ Other

8. Site Contact

Name: Fred Owen

Mail Address:

City/State/Zip: ,

Phone Number (Ext): (425) 258-4055

Email Address:

9. Form Contact

Name:

Mail Address:

City/State/Zip: ,

Phone Number (Ext):

Email Address:

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [X] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [ ] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [ ] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [ ] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Treatment, Storage, Disposal or Recycling (TSDR) Facility** (Note: A RCRA Permit is required for this activity)
- [ ] **11. Immediate Recycler of Off-Site Waste** (Up to 72 hours with Ecology permission)

12. Dangerous Waste Fuel Activity

- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)

d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

12. Comments

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 4

A-1.

A-2. Paint powder with metals

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A21

A-8. B319

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 2900.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
UTD991301748	M132	2020	0
WAD981769110	M061	880	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
05/01/1997	97301		WAD981769110	880.00	
10/01/1997	97206		UTD991301748	2020.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 3

A-1.

A-2. Chromium hydroxide sludge

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A75

A-8. B505

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 24118.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
UTD991301748	M132	24118	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
05/01/1997	97078		UTD991301748	2424.00	
06/01/1997	97111		UTD991301748	1400.00	
09/01/1997	97167		UTD991301748	500.00	
10/01/1997	97206		UTD991301748	10099.00	
11/01/1997	97226		UTD991301748	9695.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 1

A-1.

A-2. Paint solids and mineral spirits

A-3. D001, D007, D008, F003, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A33

A-8. B602

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 3669.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	M061	3669	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
03/01/1997	97042		KSD980633259	2752.00	
03/02/1997	97050		KSD980633259	917.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 6

A-1.

A-2. Waste paint and solvents

A-3. D001, D007, D008, D035, F003, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A33

A-8. B602

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 25303.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
WAD981769110	M061	6689	0
WAD981769110	M022	18614	60

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
05/01/1997	97301		WAD981769110	2294.00	
05/01/1997	97301		WAD981769110	459.00	
09/01/1997	97558		WAD981769110	3335.00	
09/01/1997	97558		WAD981769110	5248.00	
10/01/1997	97657		WAD981769110	2752.00	
11/01/1997	97737		WAD981769110	5504.00	
12/01/1997	97758		WAD981769110	982.00	
12/01/1997	97758		WAD981769110	4729.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 7

A-1.

A-2. Waste 1,1,1 trichloroethane and oil

A-3. F002

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A54

A-8. B206

A-9. [ ] i [X] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 459.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
WAD981769110	M061	459	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
05/01/1997	97255		WAD981769110	459.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 2

A-1.

A-2. Paint booth filters

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A55

A-8. B310

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 11400.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
IND000646943	M061	7600	0
UTD991301748	M132	3800	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
02/01/1997	97013		UTD991301748	200.00	
03/01/1997	97043		UTD991301748	1600.00	
05/01/1997	97078		UTD991301748	2000.00	
06/01/1997	42667		IND000646943	3200.00	
09/01/1997	68320		IND000646943	1600.00	
10/01/1997	68351		IND000646943	1800.00	
11/01/1997	68369		IND000646943	1000.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 5

A-1.

A-2. Tank cleaning

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A60

A-8. B311

A-9. [ ] i [X] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 5963.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
CAT000646117	M132	5963	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
09/07/1997	77622		CAT000646117	5963.00	

C. Comments

Off-Site Identification Form

OI

Please enter your RCRA Site ID Number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your off-site identification facilities.

Please complete this form if your facility received dangerous waste from off site or shipped dangerous waste off site during the year.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

RCRA Site ID Number: CAT000646117

Name:

Site Address:

City/State/Zip/Country: ,

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: IND000646943

Name:

Site Address:

City/State/Zip/Country: ,

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: KSD980633259

Name:

Site Address:

City/State/Zip/Country: ,

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: UTD991301748

Name:

Site Address:

City/State/Zip/Country: ,

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: WAD981769110

Name:

Site Address:

City/State/Zip/Country: ,

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [ ] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) — Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) — 12/31/1997
- [x] A component of the **Dangerous Waste Annual Report** (skip section 11) — Reporting Year: 1997

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1028 W MARINE VIEW DR
City/State/Zip: EVERETT, WA 98201-1557
County: SNOHOMISH
Tax Registration Number: 601995788
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1028 W MARINE VIEW DR BLDG C
City/State/Zip: EVERETT, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name:
Mail Address:
City/State/Zip: ,
Phone Number (Ext):
Owner Since: (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [ ] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [ ] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc

Mail Address: 1028 W MARINE VIEW DR

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext):

Operator Since: 01/01/1997 (mm/dd/yyyy)

Operator Type: ☐ Federal ☐ State ☐ County ☐ Municipal ☐ District ☐ Private ☐ Tribal ☐ Other

8. Site Contact

Name: Lisa Patterson

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 302

Email Address:

9. Form Contact

Name: Lisa Patterson

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 302

Email Address:

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [X] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [ ] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [ ] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [ ] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Treatment, Storage, Disposal or Recycling (TSDR) Facility** (Note: A RCRA Permit is required for this activity)
- [ ] **11. Immediate Recycler of Off-Site Waste** (Up to 72 hours with Ecology permission)

12. Dangerous Waste Fuel Activity

- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)

d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

12. Comments

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 1

A-1.

A-2. Paint Powder With Metals

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A21

A-8. B319

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 5655.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
UTD991301748	M132	5655	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
03/16/1998	98044		UTD991301748	1820.00	
08/17/1998	98178		UTD991301748	2240.00	
12/02/1998	98253		UTD991301748	1595.00	

C. Comments

Paint overspray clean-up

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 7

A-1.

A-2. Paint Booth Filters

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A55

A-8. B310

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 13000.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
IND000646943	M061	11800	0
UTD991301748	M132	1200	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
02/04/1998	68408		IND000646943	1400.00	
03/16/1998	98044		UTD991301748	1200.00	
04/22/1998	68465		IND000646943	1600.00	
06/17/1998	68499		IND000646943	2200.00	
07/01/1998	61016		IND000646943	400.00	
08/17/1998	61062		IND000646943	1200.00	
09/21/1998	61092		IND000646943	1600.00	
11/04/1998	61122		IND000646943	1400.00	
12/02/1998	61138		IND000646943	1200.00	
12/28/1998	44811		IND000646943	800.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 2

A-1.

A-2. Paint Solvents & Mineral Spirits

A-3. D001, D007, D008, F003, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A33

A-8. B602

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 7480.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	M061	7480	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
08/17/1998	98129		KSD980633259	1760.00	
09/21/1998	98219		KSD980633259	1760.00	
11/04/1998	98254		KSD980633259	1760.00	
12/02/1998	98179		KSD980633259	440.00	
12/28/1998	98289		KSD980633259	1760.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 6

A-1.

A-2. Chromium Hydroxide Sludge

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A75

A-8. B505

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 51898.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
UTD991301748	M132	51898	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
02/04/1998	98016		UTD991301748	1000.00	
03/16/1998	98044		UTD991301748	3000.00	
04/22/1998	98078		UTD991301748	3000.00	
06/17/1998	98118		UTD991301748	3000.00	
07/01/1998	98128		UTD991301748	3000.00	
08/17/1998	98178		UTD991301748	1000.00	
09/30/1998	98228		UTD991301748	9500.00	
11/04/1998	98255		UTD991301748	3698.00	
12/02/1998	98253		UTD991301748	19000.00	
12/28/1998	98288		UTD991301748	5700.00	

C. Comments

Wet vs Dry shipments; Wet shipments represents a 40% increase in lbs Actual volume by container (bags) has increased only by 10%

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 8

A-1.

A-2. Waste Paint and Solvents

A-3. D001, D007, D008, D035, F003, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A33

A-8. B602

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 43135.31 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
WAD981769110	M061	43135.31	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/16/1998	98020		WAD981769110	2920.75	
02/04/1998	98082		WAD981769110	2753.85	
02/18/1998	98117		WAD981769110	2753.85	
03/26/1998	98234		WAD981769110	2753.85	
04/14/1998	98291		WAD981769110	1911.01	
05/06/1998	98380		WAD981769110	2920.75	
05/27/1998	98432		WAD981769110	2753.85	
06/24/1998	98536		WAD981769110	2753.85	
07/17/1998	98620		WAD981769110	2753.85	
08/06/1998	98684		WAD981769110	2753.85	
09/02/1998	98780		WAD981769110	2853.99	
09/25/1998	98852		WAD981769110	2853.99	
10/28/1998	98975		WAD981769110	2737.16	
11/18/1998	99042		WAD981769110	2753.85	
12/11/1998	99112		WAD981769110	2920.75	
12/23/1998	99158		WAD981769110	1986.11	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 3

A-1.

A-2. Paint Operation & Distallation

A-3. D001, D035, F003, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A33

A-8. B602

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 2418.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	M061	2418	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
04/22/1998	98079		KSD980633259	538.00	
06/17/1998	98119		KSD980633259	1880.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 4

A-1.

A-2. Paint Waste

A-3. D001, D035, F003, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A21

A-8. B604

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 3410.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	M061	3410	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
03/16/1998	98045		KSD980633259	1650.00	
12/02/1998	98179		KSD980633259	1760.00	

C. Comments

Unused paint from operations

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 5

A-1.

A-2. Tank Cleaning

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A60

A-8. B316

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 17290.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
UTD991301748	M132	17290	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
03/16/1998	98044		UTD991301748	5850.00	
07/01/1998	98128		UTD991301748	5280.00	
09/21/1998	98220		UTD991301748	3520.00	
12/28/1998	98288		UTD991301748	2640.00	

C. Comments

Off-Site Identification Form

OI

Please enter your RCRA Site ID Number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your off-site identification facilities.

Please complete this form if your facility received dangerous waste from off site or shipped dangerous waste off site during the year.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

RCRA Site ID Number: IND000646943

Name:

Site Address:

City/State/Zip/Country: ,

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: KSD980633259

Name:

Site Address:

City/State/Zip/Country: ,

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: UTD991301748

Name:

Site Address:

City/State/Zip/Country: ,

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: WAD981769110

Name:

Site Address:

City/State/Zip/Country: ,

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [ ] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) — Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) — 12/31/1998
- [x] A component of the **Dangerous Waste Annual Report** (skip section 11) — Reporting Year: 1998

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1028 W MARINE VIEW DR
City/State/Zip: EVERETT, WA 98201-1557
County: SNOHOMISH
Tax Registration Number: 601995788
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1028 W MARINE VIEW DR BLDG C
City/State/Zip: EVERETT, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name:
Mail Address:
City/State/Zip: ,
Phone Number (Ext):
Owner Since: (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [ ] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [ ] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc

Mail Address: 1028 W MARINE VIEW DR

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext):

Operator Since: 01/01/1997 (mm/dd/yyyy)

Operator Type: ☐ Federal ☐ State ☐ County ☐ Municipal ☐ District ☐ Private ☐ Tribal ☐ Other

8. Site Contact

Name: Lisa Patterson

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 302

Email Address:

9. Form Contact

Name: Lisa Patterson

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 302

Email Address:

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [X] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [ ] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [ ] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [ ] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Treatment, Storage, Disposal or Recycling (TSDR) Facility** (Note: A RCRA Permit is required for this activity)
- [ ] **11. Immediate Recycler of Off-Site Waste** (Up to 72 hours with Ecology permission)

12. Dangerous Waste Fuel Activity

- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)

d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

12. Comments

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 6

A-1.

A-2. Paint powder with metals

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A21

A-8. B319

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 1914.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ORD089452353	M141	650	0
UTD991301748	M141	1264	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
03/29/1999	99014		UTD991301748	614.00	
07/20/1999	99101		UTD991301748	650.00	
12/10/1999	99210		ORD089452353	650.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 1

A-1.

A-2. Paint solids and mineral spirits

A-3. D001, D007, D008, F003, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A33

A-8. B602

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 22671.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	M061	22671	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
02/16/1999	98320		KSD980633259	1320.00	
03/29/1999	99015		KSD980633259	3211.00	
04/21/1999	99030		KSD980633259	2294.00	
06/02/1999	99062		KSD980633259	2085.00	
07/14/1999	99093		KSD980633259	2752.00	
07/20/1999	99099		KSD980633259	459.00	
09/13/1999	99129		KSD980633259	5504.00	
11/15/1999	99187		KSD980633259	2752.00	
12/10/1999	99211		KSD980633259	2294.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 5

A-1.

A-2. Tank cleaning

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A60

A-8. B316

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 5962.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ORD089452353	M141	5082	0
UTD991301748	M141	880	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
03/29/1999	99014		UTD991301748	880.00	
07/20/1999	99100		ORD089452353	5082.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 3

A-1.

A-2. Paint booth filters

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A55

A-8. B310

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 8271.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
IND000646943	M061	8271	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
02/16/1999	44833		IND000646943	1801.00	
03/29/1999	44773		IND000646943	1213.00	
04/21/1999	44785		IND000646943	456.00	
06/03/1999	44849		IND000646943	900.00	
07/20/1999	44883		IND000646943	900.00	
09/20/1999	61532		IND000646943	1260.00	
12/10/1999	61596		IND000646943	1741.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 7

A-1.

A-2. Waste water with chrome from tank cleaning

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A60

A-8. B316

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 15153.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ORD089452353	M141	15153	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
10/05/1999	99153		ORD089452353	15153.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 2

A-1.

A-2. Waste paint and solvents

A-3. D001, D007, D008, D035, F003, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A33

A-8. B209

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 7570.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
WAD981769110	M061	3332	0
WAD981769110	M022	4238	54

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
02/02/1999	99303		WAD981769110	2463.00	
03/19/1999	99445		WAD981769110	2478.00	
06/17/1999	99780		WAD981769110	2629.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 4

A-1.

A-2. Chromium hydroxide sludge

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A75

A-8. B505

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 32192.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ORD089452353	M141	4467	0
UTD991301748	M141	27725	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
02/16/1999	98319		UTD991301748	12919.00	
03/29/1999	99014		UTD991301748	11113.00	
04/21/1999	99031		UTD991301748	3693.00	
07/20/1999	99100		ORD089452353	2467.00	
12/10/1999	99210		ORD089452353	2000.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 8

A-1.

A-2. Waste water from evaporator

A-3. D002, D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A78

A-8. B103

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 3234.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ORD089452353	M141	3234	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
10/06/1999	99152		ORD089452353	3234.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 9

A-1.

A-2. Waste water from outside tank

A-3. D002, D007, F019

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A02

A-8. B103

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 41420.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ORD089452353	M141	41420	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
08/11/1999	99117		ORD089452353	41420.00	

C. Comments

Off-Site Identification Form

OI

Please enter your RCRA Site ID Number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your off-site identification facilities.

Please complete this form if your facility received dangerous waste from off site or shipped dangerous waste off site during the year.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

RCRA Site ID Number: IND000646943
Name:
Site Address:
City/State/Zip/Country: ,
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: KSD980633259
Name:
Site Address:
City/State/Zip/Country: ,
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: ORD089452353
Name:
Site Address:
City/State/Zip/Country: ,
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: UTD991301748
Name:
Site Address:
City/State/Zip/Country: ,
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: WAD981769110
Name:
Site Address:
City/State/Zip/Country: ,
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [ ] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) — Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) — 12/31/1999
- [x] A component of the **Dangerous Waste Annual Report** (skip section 11) — Reporting Year: 1999

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1028 W MARINE VIEW DR
City/State/Zip: EVERETT, WA 98201-1557
County: SNOHOMISH
Tax Registration Number: 601995788
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1028 W MARINE VIEW DR BLDG C
City/State/Zip: EVERETT, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name:
Mail Address:
City/State/Zip: ,
Phone Number (Ext):
Owner Since: (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [ ] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [ ] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc

Mail Address: 1028 W MARINE VIEW DR

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext):

Operator Since: 01/01/1997 (mm/dd/yyyy)

Operator Type: ☐ Federal ☐ State ☐ County ☐ Municipal ☐ District ☐ Private ☐ Tribal ☐ Other

8. Site Contact

Name: Lisa Patterson

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 302

Email Address:

9. Form Contact

Name: Lisa Patterson

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 302

Email Address:

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [X] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [ ] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [ ] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [ ] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Treatment, Storage, Disposal or Recycling (TSDR) Facility** (Note: A RCRA Permit is required for this activity)
- [ ] **11. Immediate Recycler of Off-Site Waste** (Up to 72 hours with Ecology permission)

12. Dangerous Waste Fuel Activity

- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)

d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

12. Comments

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 5

A-1.

A-2. PAINT POWDER WITH METALS

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A21

A-8. B319

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 5090.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ORD089452353	M111	5090	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
05/31/2000	00098		ORD089452353	4000.00	
10/11/2000	00211		ORD089452353	545.00	
12/04/2000	00273		ORD089452353	545.00	

C. Comments

Paint Powder with Metals

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 4

A-1.

A-2. TANK CLEANING

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A60

A-8. B316

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 11550.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ORD089452353	M111	11550	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
05/01/2000	00080		ORD089452353	8778.00	
08/07/2000	00160		ORD089452353	2310.00	
12/04/2000	00273		ORD089452353	462.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 3

A-1.

A-2. CHROMIUM HYDROXIDE SLUDGE

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A75

A-8. B505

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 31553.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ORD089452353	M111	31553	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/31/2000	00020		ORD089452353	1505.00	
03/15/2000	00042		ORD089452353	3458.00	
05/03/2000	00077		ORD089452353	1941.00	
05/31/2000	00098		ORD089452353	9705.00	
06/23/2000	00121		ORD089452353	6000.00	
08/07/2000	00149		ORD089452353	4000.00	
10/11/2000	00211		ORD089452353	1504.00	
12/04/2000	00273		ORD089452353	3440.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 2

A-1.

A-2. PAINT BOOTH FILTERS

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A55

A-8. B310

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 9400.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
IND000646943	M061	9400	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/31/2000	61633		IND000646943	2432.00	
03/15/2000	61663		IND000646943	720.00	
05/01/2000	75811		IND000646943	720.00	
05/31/2000	75836		IND000646943	720.00	
06/23/2000	75863		IND000646943	360.00	
08/07/2000	75896		IND000646943	540.00	
10/11/2000	75957		IND000646943	1982.00	
12/04/2000	88811		IND000646943	1926.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 7

A-1.

A-2. WASTE OIL AND GASOLINE

A-3. D001, D018

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A54

A-8. B206

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 1848.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
IND000646943	M061	1848	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
10/11/2000	75957		IND000646943	1848.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 6

A-1.

A-2. PAINT WASTE

A-3. D001, D035, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A21

A-8. B604

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 8800.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	M061	8800	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/31/2000	00021		KSD980633259	1320.00	
03/15/2000	00043		KSD980633259	440.00	
04/24/2000	00065		KSD980633259	3960.00	
05/03/2000	00076		KSD980633259	2200.00	
05/31/2000	00097		KSD980633259	440.00	
09/11/2000	00183		KSD980633259	440.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 1

A-1.

A-2. PAINT SOLIDS AND MINERAL SPIRITS

A-3. D001, D007, D008, F003, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A33

A-8. B602

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 24209.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	M061	24209	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/03/2000	99221		KSD980633259	2752.00	
02/14/2000	00027		KSD980633259	2000.00	
03/15/2000	00043		KSD980633259	459.00	
03/28/2000	00050		KSD980633259	2777.00	
05/31/2000	00097		KSD980633259	459.00	
06/02/2000	00099		KSD980633259	2752.00	
06/23/2000	00120		KSD980633259	2752.00	
09/11/2000	00183		KSD980633259	3669.00	
10/11/2000	00212		KSD980633259	459.00	
10/23/2000	00225		KSD980633259	2752.00	
12/04/2000	00272		KSD980633259	459.00	
12/18/2000	00287		KSD980633259	2919.00	

C. Comments

Off-Site Identification Form

OI

Please enter your RCRA Site ID Number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your off-site identification facilities.

Please complete this form if your facility received dangerous waste from off site or shipped dangerous waste off site during the year.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

RCRA Site ID Number: IND000646943

Name:

Site Address:

City/State/Zip/Country: ,

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: KSD980633259

Name:

Site Address:

City/State/Zip/Country: ,

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: ORD089452353

Name:

Site Address:

City/State/Zip/Country: ,

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [ ] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) 12/31/2000
- [x] A component of the **Dangerous Waste Annual Report** (skip section 11) Reporting Year: 2000

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1028 W MARINE VIEW DR
City/State/Zip: EVERETT, WA 98201-1557
County: SNOHOMISH
Tax Registration Number: 601995788
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1028 W MARINE VIEW DR BLDG C
City/State/Zip: EVERETT, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name: TC Systems Inc, Dave Utick
Mail Address: 3333 CASITAS AVE
City/State/Zip: LOS ANGELES, CA 90039-2207
Phone Number (Ext): (323)663-1261
Owner Since: 02/15/2001 (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [ ] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [ ] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc

Mail Address: 1028 W MARINE VIEW DR

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext):

Operator Since: 01/01/1997 (mm/dd/yyyy)

Operator Type: ☐ Federal ☐ State ☐ County ☐ Municipal ☐ District ☐ Private ☐ Tribal ☐ Other

8. Site Contact

Name: Lisa Patterson

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 302

Email Address:

9. Form Contact

Name: Lisa Patterson

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 302

Email Address:

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [X] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [ ] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [ ] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [ ] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Treatment, Storage, Disposal or Recycling (TSDR) Facility** (Note: A RCRA Permit is required for this activity)
- [ ] **11. Immediate Recycler of Off-Site Waste** (Up to 72 hours with Ecology permission)

12. Dangerous Waste Fuel Activity

- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)

d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

12. Comments

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 6

A-1.

A-2. PAINT WASTE

A-3. D001, D035, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A21

A-8. B604

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 2640.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	M061	2640	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
07/23/2001	01184		KSD980633259	1760.00	
11/05/2001	01334		KSD980633259	880.00	

C. Comments

Generation and Management Form

GM

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Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 3

A-1.

A-2. CHROMIUM HYDROXIDE SLUDGE

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A75

A-8. B505

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 19657.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ORD089452353	M111	19657	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/22/2001	01012		ORD089452353	1340.00	
03/14/2001	01049		ORD089452353	4000.00	
04/30/2001	01085		ORD089452353	5737.00	
06/20/2001	01126		ORD089452353	2000.00	
07/23/2001	01185		ORD089452353	3220.00	
11/05/2001	01332		ORD089452353	3360.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 7

A-1.

A-2. STRIP TANK WASTE

A-3. D001

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A01

A-8. B105

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 1478.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
IND000646943	M061	1478	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
06/20/2001	88914		IND000646943	1478.00	

C. Comments

PRODUCT OF STRIPPING

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 2

A-1.

A-2. PAINT BOOTH FILTERS

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A55

A-8. B310

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 3574.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
IND000646943	M061	3574	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/22/2001	88857		IND000646943	360.00	
03/14/2001	88892		IND000646943	940.00	
04/30/2001	88971		IND000646943	294.00	
06/20/2001	88914		IND000646943	360.00	
07/23/2001	01183		IND000646943	720.00	
11/05/2001	01333		IND000646943	900.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 4

A-1.

A-2. TANK CLEANING

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A60

A-8. B316

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 6930.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ORD089452353	M111	6930	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/22/2001	01012		ORD089452353	2310.00	
03/14/2001	01049		ORD089452353	1386.00	
06/20/2001	01126		ORD089452353	1848.00	
11/05/2001	01332		ORD089452353	1386.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 5

A-1.

A-2. PAINT POWDER WITH METALS

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A21

A-8. B319

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 3482.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ORD089452353	M111	3482	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
03/14/2001	01049		ORD089452353	1089.00	
06/20/2001	01126		ORD089452353	462.00	
07/23/2001	01185		ORD089452353	545.00	
11/05/2001	01332		ORD089452353	1386.00	

C. Comments

paint powder with metals

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 1

A-1.

A-2. PAINT SOLIDS AND MINERAL SPIRITS

A-3. D001, D007, D008, F003, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. A33

A-8. B602

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 24196.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [ ] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	M061	24196	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/22/2001	01011		KSD980633259	459.00	
02/05/2001	01021		KSD980633259	2752.00	
03/14/2001	01043		KSD980633259	2752.00	
04/30/2001	01084		KSD980633259	3669.00	
05/30/2001	01111		KSD980633259	2752.00	
06/20/2001	01127		KSD980633259	459.00	
07/23/2001	01184		KSD980633259	2669.00	
09/04/2001	01234		KSD980633259	5046.00	
11/05/2001	01334		KSD980633259	918.00	
11/12/2001	01349		KSD980633259	2720.00	

C. Comments

Off-Site Identification Form

OI

Please enter your RCRA Site ID Number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your off-site identification facilities.

Please complete this form if your facility received dangerous waste from off site or shipped dangerous waste off site during the year.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

RCRA Site ID Number: IND000646943

Name:

Site Address:

City/State/Zip/Country: ,

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: KSD980633259

Name:

Site Address:

City/State/Zip/Country: ,

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: ORD089452353

Name:

Site Address:

City/State/Zip/Country: ,

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [ ] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) — Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) — 12/31/2001
- [x] A component of the **Dangerous Waste Annual Report** (skip section 11) — Reporting Year: 2001

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1028 W MARINE VIEW DR
City/State/Zip: EVERETT, WA 98201-1557
County: SNOHOMISH
Tax Registration Number: 601995788
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1028 W MARINE VIEW DR BLDG C
City/State/Zip: EVERETT, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name: TC Systems Inc, Dave Utick
Mail Address: 3333 CASITAS AVE
City/State/Zip: LOS ANGELES, CA 90039-2207
Phone Number (Ext): (323)663-1261
Owner Since: 02/15/2001 (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [ ] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [ ] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc

Mail Address: 1028 W MARINE VIEW DR

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext):

Operator Since: 01/01/1997 (mm/dd/yyyy)

Operator Type: ☐ Federal ☐ State ☐ County ☐ Municipal ☐ District ☐ Private ☐ Tribal ☐ Other

8. Site Contact

Name: Lisa Patterson

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 302

Email Address:

9. Form Contact

Name: Lisa Patterson

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 302

Email Address:

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [X] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [ ] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [ ] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [ ] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Treatment, Storage, Disposal or Recycling (TSDR) Facility** (Note: A RCRA Permit is required for this activity)
- [ ] **11. Immediate Recycler of Off-Site Waste** (Up to 72 hours with Ecology permission)

12. Dangerous Waste Fuel Activity

- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)

d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

12. Comments

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 1

A-1.

A-2. paint booth filters

A-3. D007

A-4. wt02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. a55

A-8. b310

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 10800.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ind000646943	M061	10800	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
02/15/2002	206545		ind000646943	5400.00	
12/04/2002	227293		ind000646943	5400.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 2

A-1.

A-2. waste paint

A-3. D001, D035, F005

A-4. wt02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. a21

A-8. b604

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 8730.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
FCCANADA	M061	8730	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
03/26/2002	62820		FCCANADA	8730.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 3

A-1.

A-2. etch tank clean

A-3. D007

A-4. wt02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. a60

A-8. b316

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 8400.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ord089452353	M042	4200	0
utd991301748	M042	2100	0
wad067548966	M042	2100	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
02/15/2002	01416		ord089452353	4200.00	
06/21/2002	66260		utd991301748	2100.00	
09/23/2002	01684		wad067548966	2100.00	

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 4

A-1.

A-2. paint powder w/metals

A-3. D007

A-4. wt02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. a21

A-8. b319

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 900.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ord089452353	M043	900	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
02/15/2002	01416		ord089452353	900.00	

C. Comments

paint powder w/metals

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 5

A-1.

A-2. Chromium Hydroxide Sludge

A-3. D007

A-4. wt02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. a75

A-8. b505

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 9746.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ord089452353	M043	4000	0
utd991301748	M043	3746	0
wad067548966	M043	2000	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
02/15/2002	01416		ord089452353	4000.00	m043
03/28/2002	62821		utd991301748	1746.00	m043
06/28/2002	66260		utd991301748	2000.00	m043
09/23/2002	01684		wad067548966	2000.00	m043

C. Comments

Off-Site Identification Form

OI

Please enter your RCRA Site ID Number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your off-site identification facilities.

Please complete this form if your facility received dangerous waste from off site or shipped dangerous waste off site during the year.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

RCRA Site ID Number: FCCANADA
Name:
Site Address:
City/State/Zip/Country: ,
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

---

RCRA Site ID Number: ind000646943
Name: POLLUTION CONTROL INDUSTRIES INC
Site Address: 4343 KENNEDY AVE
City/State/Zip/Country: EAST CHICAGO, IN 46312 UNITED STATES
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

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RCRA Site ID Number: ord089452353
Name: CHEMICAL WASTE MANAGEMENT OF THE NW
Site Address: 17629 CEDAR SPRINGS LN
City/State/Zip/Country: ARLINGTON, OR 97812 UNITED STATES
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

---

RCRA Site ID Number: ps8388
Name:
Site Address:
City/State/Zip/Country: ,
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

---

RCRA Site ID Number: utd991301748
Name: CLEAN HARBORS GRASSY MOUNTAIN, LLC
Site Address: SEC 16; T 1 N; T 12 W
City/State/Zip/Country: CLIVE, UT 84107 UNITED STATES
Comments:
Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number:	wad067548966							
Name:	VOPAK USA INC							
Site Address:	8201 S 212TH ST							
City/State/Zip/Country:	KENT, WA 980321952 UNITED STATES							
Comments:								
Handler Type:	**(Check all that apply)**	☐	Generator	☐	Transporter	☒	TSDR	☐ Special Waste

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [ ] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) — Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) — 12/31/2002
- [x] A component of the **Dangerous Waste Annual Report** (skip section 11) — Reporting Year: 2002

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1028 W MARINE VIEW DR
City/State/Zip: EVERETT, WA 98201-1557
County: SNOHOMISH
Tax Registration Number:
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1028 W MARINE VIEW DR BLDG C
City/State/Zip: EVERETT, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name: TC Systems Inc, Dave Utick
Mail Address: 3333 CASITAS AVE
City/State/Zip: LOS ANGELES, CA 90039-2207
Phone Number (Ext): (323)663-1261
Owner Since: 12/31/2002 (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [x] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [x] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc, Mike Farnham

Mail Address: 1028 W MARINE VIEW DR

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055

Operator Since: 12/31/2002 (mm/dd/yyyy)

Operator Type:

- [ ] Federal
- [ ] State
- [ ] County
- [ ] Municipal
- [ ] District
- [x] Private
- [ ] Tribal
- [ ] Other

8. Site Contact

Name: Mike Farnham

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 3

Email Address: mfarnham@netos.com

9. Form Contact

Name: Mike Farnham

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 3

Email Address: mfarnham@netos.com

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [x] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [ ] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [ ] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [ ] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Treatment, Storage, Disposal or Recycling (TSDR) Facility** (Note: A RCRA Permit is required for this activity)
- [ ] **11. Immediate Recycler of Off-Site Waste** (Up to 72 hours with Ecology permission)

12. Dangerous Waste Fuel Activity

- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)

d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

12. Comments

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 1

A-1.

A-2. paint booth filters

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G06

A-8. W310

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 1500.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
IND000646943	H061	1000	0
ORD089452353	H061	500	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
05/21/2003	02226		IND000646943	1000.00	H061
09/05/2003	22814		ORD089452353	500.00	H061

C. Comments

Generation and Management Form

GM

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Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 2

A-1.

A-2. waste paint

A-3. D001, D035, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G06

A-8. W209

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 16960.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
IND000646943	H040	1960	0
KSD980633259	H040	10800	0
WAD981769110	H040	4200	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
05/21/2003	02078		KSD980633259	10800.00	H040
07/30/2003	22242		IND000646943	1300.00	H040
09/05/2003	22813		IND000646943	660.00	H040
10/13/2003	23408		WAD981769110	4200.00	H040

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 3

A-1.

A-2. etch tank clean

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G06

A-8. W110

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 500.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ORD089452353	H131	500	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
05/21/2003	02076		ORD089452353	500.00	H131

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 4

A-1.

A-2. paint powder w/metals

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G06

A-8. W310

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 220.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
IND000646943	H061	220	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
10/13/2003	23407		IND000646943	220.00	H061

C. Comments

paint powder w/metals

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 5

A-1.

A-2. Chromium Hydroxide Sludge

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G03

A-8. W501

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 7500.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ORD089452353	H131	7500	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
05/21/2003	02076		ORD089452353	4500.00	H131
09/05/2003	22814		ORD089452353	3000.00	H131

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 6

A-1.

A-2. paint solids/and mineral spirits

A-3. D001, D007, D008, D035

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G06

A-8. W209

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 1000.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
IND000646943	H040	500	0
KSD980633259	H040	500	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
05/21/2003	02078		KSD980633259	500.00	H040
09/05/2003	22804		IND000646943	500.00	H040

C. Comments

Off-Site Identification Form

OI

Please enter your RCRA Site ID Number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your off-site identification facilities.

Please complete this form if your facility received dangerous waste from off site or shipped dangerous waste off site during the year.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

RCRA Site ID Number:	IND000646943					
Name:	POLLUTION CONTROL INDUSTRIES INC					
Site Address:	4343 KENNEDY AVE					
City/State/Zip/Country:	EAST CHICAGO, IN 46312 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☐ Transporter	☒ TSDR	☐ Special Waste	

RCRA Site ID Number:	KSD980633259					
Name:	SYSTECH ENVIRONMENTAL CORP					
Site Address:	1420 S CEMENT RD					
City/State/Zip/Country:	FREDONIA, KS 66736 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☒ Transporter	☒ TSDR	☐ Special Waste	

RCRA Site ID Number:	ORD089452353					
Name:	CHEMICAL WASTE MANAGEMENT OF THE NW					
Site Address:	17629 CEDAR SPRINGS LN					
City/State/Zip/Country:	ARLINGTON, OR 97812 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☐ Transporter	☒ TSDR	☐ Special Waste	

RCRA Site ID Number:	WAD067548966					
Name:	VOPAK USA INC					
Site Address:	8201 S 212TH ST					
City/State/Zip/Country:	KENT, WA 980321952 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☒ Transporter	☐ TSDR	☐ Special Waste	

RCRA Site ID Number:	WAD981769110					
Name:	EMERALD SERVICES INC					
Site Address:	1825 ALEXANDER AVE					
City/State/Zip/Country:	TACOMA, WA 98421 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☐ Transporter	☒ TSDR	☐ Special Waste	

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [ ] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) — Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) — 12/31/2003
- [x] A component of the **Dangerous Waste Annual Report** (skip section 11) — Reporting Year: 2003

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1028 W MARINE VIEW DR
City/State/Zip: EVERETT, WA 98201-1557
County: SNOHOMISH
Tax Registration Number:
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1028 W MARINE VIEW DR BLDG C
City/State/Zip: EVERETT, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name: TC Systems Inc, Dave Utick
Mail Address: 3333 CASITAS AVE
City/State/Zip: LOS ANGELES, CA 90039-2207
Phone Number (Ext): (323)663-1261
Owner Since: 12/31/2002 (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [x] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [x] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc, Mike Farnham

Mail Address: 1028 W MARINE VIEW DR

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055

Operator Since: 12/31/2002 (mm/dd/yyyy)

Operator Type:

- [ ] Federal
- [ ] State
- [ ] County
- [ ] Municipal
- [ ] District
- [x] Private
- [ ] Tribal
- [ ] Other

8. Site Contact

Name: Mike Farnham

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 3

Email Address: mike98205@lycos.com

9. Form Contact

Name: Mike Farnham

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 3

Email Address: mike98205@lycos.com

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [ ] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [x] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [x] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [ ] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Treatment, Storage, Disposal or Recycling (TSDR) Facility** (Note: A RCRA Permit is required for this activity)
- [ ] **11. Immediate Recycler of Off-Site Waste** (Up to 72 hours with Ecology permission)

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- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)

d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

paint waste(liquid, solid, powder) D001,D035,F005,D007,D008,D001.Chromium hydroxide sludge, Etch tank cleaning, paint booth filters D007

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

12. Comments

Changed section 10.A to read medium quantity generator since 2002 production rates have decreased we have been shipping less waste we are currently working a single shift instead of the usual 2 we were working prior to 2002. sorry for the delay in filing for 2003 we had a loss of power for three weeks. section 11.A not sure about the state regulated codes i have only seen federal codes on the manifest.

Thank you Mike Farnham TC Systems

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Generation and Management Form

GM

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Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 2

A-1.

A-2. paint powder w/metals

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G06

A-8. W310

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 300.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
IDD073114654	H010	300	0

B-5.

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 4

A-1.

A-2. Chromium Hydroxide Sludge

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G03

A-8. W501

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 1000.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
IDD073114654	H010	1000	0

B-5.

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 5

A-1.

A-2. waste paint

A-3. D001, D035, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G06

A-8. W209

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 55.00 [ ] Tons [ ] Pounds [ ] Kilograms [X] Gallons (If Gallons, answer B-1.a.)

B-1.a. 7.50 [X] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
WAD981769110	H010	55	0

B-5.

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 6

A-1.

A-2. paint solids/and mineral spirits

A-3. D001, D007, D008, D035

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G06

A-8. W209

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 55.00 [ ] Tons [ ] Pounds [ ] Kilograms [X] Gallons (If Gallons, answer B-1.a.)

B-1.a. 12.00 [X] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
WAD981769110	H040	55	0

B-5.

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 7

A-1.

A-2. oakite stripper

A-3. D002, F002, F004

A-4. WL01

A-5. [X] EHW [ ] DW

A-6. [X] No [ ] Yes

A-7. G06

A-8. W113

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 165.00 [ ] Tons [ ] Pounds [ ] Kilograms [X] Gallons (If Gallons, answer B-1.a.)

B-1.a. 9.00 [X] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
ARD069748192	H010	165	0

B-5.

C. Comments

Off-Site Identification Form

OI

Please enter your RCRA Site ID Number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your off-site identification facilities.

Please complete this form if your facility received dangerous waste from off site or shipped dangerous waste off site during the year.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

RCRA Site ID Number:	ARD069748192				
Name:	TERIS LLC (DBA ENSCO)				
Site Address:	309 AMERICAN CIRCLE				
City/State/Zip/Country:	EL DORADO, AR 71730 UNITED STATES				
Comments:					
Handler Type:	**(Check all that apply)**	☐ Generator	☒ Transporter	☒ TSDR	☐ Special Waste

RCRA Site ID Number:	IDD073114654				
Name:	US ECOLOGY IDAHO INC SITE B				
Site Address:	10.5 MI NW HWY 78 LEMLEY RD				
City/State/Zip/Country:	GRAND VIEW, ID 83624 UNITED STATES				
Comments:					
Handler Type:	**(Check all that apply)**	☐ Generator	☐ Transporter	☒ TSDR	☐ Special Waste

RCRA Site ID Number:	OKD981588791				
Name:	TRIAD TRANSPORT INC.				
Site Address:	1630 DIESEL AVENUE				
City/State/Zip/Country:	MCALESTER, OK 74501 UNITED STATES				
Comments:					
Handler Type:	**(Check all that apply)**	☐ Generator	☒ Transporter	☐ TSDR	☐ Special Waste

RCRA Site ID Number:	WAD058364647				
Name:	EMERALD SERVICES INC				
Site Address:	7343 E MARGINAL WAY S				
City/State/Zip/Country:	SEATTLE, WA 98103 UNITED STATES				
Comments:					
Handler Type:	**(Check all that apply)**	☐ Generator	☒ Transporter	☐ TSDR	☐ Special Waste

RCRA Site ID Number:	WAD981769110				
Name:	EMERALD SERVICES INC ALEXANDER AVE				
Site Address:	1825 ALEXANDER AVE				
City/State/Zip/Country:	TACOMA, WA 98421 UNITED STATES				
Comments:					
Handler Type:	**(Check all that apply)**	☐ Generator	☐ Transporter	☒ TSDR	☐ Special Waste

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [ ] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) — Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) — 12/31/2004
- [x] A component of the **Dangerous Waste Annual Report** (skip section 11) — Reporting Year: 2004

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1028 W MARINE VIEW DR
City/State/Zip: EVERETT, WA 98201-1557
County: SNOHOMISH
Tax Registration Number:
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1028 W MARINE VIEW DR BLDG C
City/State/Zip: EVERETT, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name: TC Systems Inc, Dave Utick
Mail Address: 3333 CASITAS AVE
City/State/Zip: LOS ANGELES, CA 90039-2207
Phone Number (Ext): (323)663-1261
Owner Since: 12/31/2002 (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [x] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [x] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc, Mike Farnham

Mail Address: 1028 W MARINE VIEW DR

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055

Operator Since: 12/31/2002 (mm/dd/yyyy)

Operator Type:

- [ ] Federal
- [ ] State
- [ ] County
- [ ] Municipal
- [ ] District
- [x] Private
- [ ] Tribal
- [ ] Other

8. Site Contact

Name: Mike Farnham

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 3

Email Address: mike98205@lycos.com

9. Form Contact

Name: Mike Farnham

Mail Address: 1028 W Marine View Dr Bldg C

City/State/Zip: EVERETT, WA 98201-1557

Phone Number (Ext): (425)258-4055 3

Email Address: mike98205@lycos.com

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [ ] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [x] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [x] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [ ] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Treatment, Storage, Disposal or Recycling (TSDR) Facility** (Note: A RCRA Permit is required for this activity)
- [ ] **11. Immediate Recycler of Off-Site Waste** (Up to 72 hours with Ecology permission)

12. Dangerous Waste Fuel Activity

- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)

d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

d001,d007,f003,f005,f004,d002,wp01,d008,f006

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

12. Comments

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 4

A-1.

A-2. Chromium Hydroxide Sludge

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G03

A-8. W501

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 8170.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
UTD991301748	H111	8170	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
07/20/2005	98108		UTD991301748	4522.00	H111
10/19/2005	44350		UTD991301748	3648.00	H111

C. Comments

Off-Site Identification Form

OI

Please enter your RCRA Site ID Number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your off-site identification facilities.

Please complete this form if your facility received dangerous waste from off site or shipped dangerous waste off site during the year.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

RCRA Site ID Number: UTD991301748

Name: CLEAN HARBORS GRASSY MOUNTAIN, LLC.

Site Address: EXIT 41 OFF I-80 3 MILES EAST 7 MILES NORTH OF KNOLLS

City/State/Zip/Country: GRASSY MOUNTAIN, UT 84029 UNITED STATES

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [ ] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) — Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) — 12/31/2005
- [x] A component of the **Dangerous Waste Annual Report** (skip section 11) — Reporting Year: 2005

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1032 W Marine View DR
City/State/Zip: Everett, WA 98201-1557
County: SNOHOMISH
Tax Registration Number:
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1032 W Marine View DR
City/State/Zip: Everett, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name: TC Systems Inc, Dave Utick
Mail Address: 3333 CASITAS AVE
City/State/Zip: LOS ANGELES, CA 90039-2207
Phone Number (Ext): (323)663-1261
Owner Since: 12/31/2002 (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [x] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [x] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc, Guy Donaldson

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Operator Since: (mm/dd/yyyy)

Operator Type:
- [ ] Federal
- [ ] State
- [ ] County
- [ ] Municipal
- [ ] District
- [x] Private
- [ ] Tribal
- [ ] Other

8. Site Contact

Name: Charles Souder

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Email Address: ccsouder@hotmail.com

9. Form Contact

Name: Guy Donaldson

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Email Address: ccsouder@hotmail.com

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [x] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [ ] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [ ] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [ ] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Treatment, Storage, Disposal or Recycling (TSDR) Facility** (Note: A RCRA Permit is required for this activity)
- [ ] **11. Immediate Recycler of Off-Site Waste** (Up to 72 hours with Ecology permission)

12. Dangerous Waste Fuel Activity

- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)

d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

12. Comments

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 4

A-1.

A-2. Chromium Hydroxide Sludge

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G03

A-8. W501

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 7926.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
UTD991301748	H132	7926	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/31/2006	07255		UTD991301748	4252.00	H132
08/31/2006	34037		UTD991301748	3674.00	H132

C. Comments

Off-Site Identification Form

OI

Please enter your RCRA Site ID Number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your off-site identification facilities.

Please complete this form if your facility received dangerous waste from off site or shipped dangerous waste off site during the year.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

RCRA Site ID Number: UTD991301748

Name: CLEAN HARBORS GRASSY MOUNTAIN, LLC.

Site Address: EXIT 41 OFF I-80 3 MILES EAST 7 MILES NORTH OF KNOLLS

City/State/Zip/Country: GRASSY MOUNTAIN, UT 84029 UNITED STATES

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [x] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) — Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) — 04/17/2006
- [ ] A component of the **Dangerous Waste Annual Report** (skip section 11) — Reporting Year:

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1032 W Marine View DR
City/State/Zip: Everett, WA 98201-1557
County: SNOHOMISH
Tax Registration Number:
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1032 W Marine View DR
City/State/Zip: Everett, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name: TC Systems Inc, Dave Utick
Mail Address: 3333 CASITAS AVE
City/State/Zip: LOS ANGELES, CA 90039-2207
Phone Number (Ext): (323)663-1261
Owner Since: 12/31/2002 (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [x] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [x] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc, Guy Donaldson

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Operator Since: (mm/dd/yyyy)

Operator Type:
- [ ] Federal
- [ ] State
- [ ] County
- [ ] Municipal
- [ ] District
- [x] Private
- [ ] Tribal
- [ ] Other

8. Site Contact

Name: Charles Souder

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Email Address: ccsouder@hotmail.com

9. Form Contact

Name: Guy Donaldson

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Email Address: ccsouder@hotmail.com

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [ ] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [x] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [ ] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [ ] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Treatment, Storage, Disposal or Recycling (TSDR) Facility** (Note: A RCRA Permit is required for this activity)
- [ ] **11. Immediate Recycler of Off-Site Waste** (Up to 72 hours with Ecology permission)

12. Dangerous Waste Fuel Activity

- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)

d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

12. Comments

City changed the physical number of the business address from 1028 to 1032 per Charles Souder. TW

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [x] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) 12/31/2006
- [x] A component of the **Dangerous Waste Annual Report** (skip section 11) Reporting Year: 2006

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1032 W Marine View DR
City/State/Zip: Everett, WA 98201-1557
County: SNOHOMISH
Tax Registration Number:
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1032 W Marine View DR
City/State/Zip: Everett, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name: TC Systems Inc, Dave Utick
Mail Address: 3333 CASITAS AVE
City/State/Zip: LOS ANGELES, CA 90039-2207
Phone Number (Ext): (323)663-1261
Owner Since: 12/31/2002 (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [x] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [x] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc, Charles Souder

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Operator Since: (mm/dd/yyyy)

Operator Type:
- [ ] Federal
- [ ] State
- [ ] County
- [ ] Municipal
- [ ] District
- [x] Private
- [ ] Tribal
- [ ] Other

8. Site Contact

Name: Charles Souder

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Email Address: ccsouder@hotmail.com

9. Form Contact

Name: Charles Souder

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Email Address: ccsouder@hotmail.com

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [x] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [ ] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [x] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [ ] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Treatment, Storage, Disposal or Recycling (TSDR) Facility** (Note: A RCRA Permit is required for this activity)
- [ ] **11. Immediate Recycler of Off-Site Waste** (Up to 72 hours with Ecology permission)

12. Dangerous Waste Fuel Activity

- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)

d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

D001, D007

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

WT02

12. Comments

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 1

A-1.

A-2. Chromium Hydroxide Sludge

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G03

A-8. W501

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 10450.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
NVT330010000	H132	10450	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
08/06/2007	001371969JJK		NVT330010000	9200.00	H132
11/08/2007	001368601JJK		NVT330010000	1250.00	H132

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 2

A-1.

A-2. Waste Paint Acetone Chromium

A-3. D001, D007, D008, F003, F005

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G06

A-8. W209

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 2291.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	H061	2291	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
08/06/2007	001371970JJK		KSD980633259	1833.00	H061
11/08/2007	001368602JJK		KSD980633259	458.00	H061

C. Comments

Off-Site Identification Form

OI

Please enter your RCRA Site ID Number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your off-site identification facilities.

Please complete this form if your facility received dangerous waste from off site or shipped dangerous waste off site during the year.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

RCRA Site ID Number: KSD980633259

Name: SYSTECH ENVIRONMENTAL CORP

Site Address: 1420 S CEMENT RD

City/State/Zip/Country: FREDONIA, KS 66736 UNITED STATES

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

RCRA Site ID Number: NVT330010000

Name: US ECOLOGY NEVADA

Site Address: 11 11MILES S. HWY 95

City/State/Zip/Country: BEATTY, NV 89003 UNITED STATES

Comments:

Handler Type: **(Check all that apply)** ☐ Generator ☐ Transporter ☒ TSDR ☐ Special Waste

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [ ] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) — Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) — 12/31/2007
- [x] A component of the **Dangerous Waste Annual Report** (skip section 11) — Reporting Year: 2007

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1032 W Marine View DR
City/State/Zip: Everett, WA 98201-1557
County: SNOHOMISH
Tax Registration Number:
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1032 W Marine View DR
City/State/Zip: Everett, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name: TC Systems Inc, Dave Utick
Mail Address: 3333 CASITAS AVE
City/State/Zip: LOS ANGELES, CA 90039-2207
Phone Number (Ext): (323)663-1261
Owner Since: 12/31/2002 (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [x] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [x] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc, Charles Souder

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Operator Since: (mm/dd/yyyy)

Operator Type:
- [ ] Federal
- [ ] State
- [ ] County
- [ ] Municipal
- [ ] District
- [x] Private
- [ ] Tribal
- [ ] Other

8. Site Contact

Name: Charles Souder

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Email Address: ccsouder@hotmail.com

9. Form Contact

Name: Charles Souder

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Email Address: ccsouder@hotmail.com

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [x] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [ ] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [x] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [x] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Treatment, Storage, Disposal or Recycling (TSDR) Facility** (Note: A RCRA Permit is required for this activity)
- [ ] **11. Immediate Recycler of Off-Site Waste** (Up to 72 hours with Ecology permission)

12. Dangerous Waste Fuel Activity

- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
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d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

D001, D007, D008, F003, F005

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

12. Comments

Permit By Rule check box filled per email request from Daylin Davidson. Jb 4/23/2008

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

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Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 1

A-1.

A-2. Chromium Hydroxide Sludge

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G04

A-8. W501

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 14010.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	H132	350	0
NVT330010000	H132	13660	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/17/2008	001368379JJK		NVT330010000	2300.00	H132
02/29/2008	001368741JJK		NVT330010000	1900.00	H132
04/18/2008	001368825JJK		KSD980633259	350.00	H132
04/18/2008	001368824JJK		NVT330010000	4400.00	H132
04/24/2008	001368834JJK		NVT330010000	200.00	H132
06/06/2008	001368983JJK		NVT330010000	1000.00	H132
07/24/2008	001365594JJK		NVT330010000	1650.00	H132
08/28/2008	001365699JJK		NVT330010000	810.00	H132
10/08/2008	001364534JJK		NVT330010000	1400.00	H132

C. Comments

A7 ALSO G006.

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 2

A-1.

A-2. Waste Paint Acetone Chromium

A-3. D001, D007, D008, F003, F005

A-4.

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G06

A-8. W209

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 1350.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	H061	1350	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/17/2008	001368680JJK		KSD980633259	450.00	H061
02/29/2008	001368742JJK		KSD980633259	450.00	H061
08/28/2008	001365700JJK		KSD980633259	450.00	H061

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 3

A-1.

A-2. WASTE PAINT SOLIDS

A-3. D001, D007, D008, F003, F005

A-4.

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G06

A-8. W409

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 1250.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	H061	1250	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
05/17/2008	001368680JJK		KSD980633259	800.00	H061
08/28/2008	001365700JJK		KSD980633259	450.00	H061

C. Comments

A-8 WASTE PAINT SOLIDS

Off-Site Identification Form

OI

Please enter your RCRA Site ID Number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your off-site identification facilities.

Please complete this form if your facility received dangerous waste from off site or shipped dangerous waste off site during the year.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

RCRA Site ID Number:	CAD982523433					
Name:	DILLARD ENVIRONMENTAL SERVICES					
Site Address:	3120 CAMINO DIABLO					
City/State/Zip/Country:	BYRON, CA 94514 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☒ Transporter	☐ TSDR	☐ Special Waste	

RCRA Site ID Number:	CAD983649880					
Name:	GENERAL ENVIRONMENTAL MANAGEMENT INC					
Site Address:	11155 JERSEY BLVD UNIT G					
City/State/Zip/Country:	RANCHO CUCAMONGA, CA 91730 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☒ Transporter	☐ TSDR	☐ Special Waste	

RCRA Site ID Number:	KSD980633259					
Name:	SYSTECH ENVIRONMENTAL CORP					
Site Address:	1420 S CEMENT RD					
City/State/Zip/Country:	FREDONIA, KS 66736 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☐ Transporter	☒ TSDR	☐ Special Waste	

RCRA Site ID Number:	NED986382133					
Name:	SMITH SYSTEMS TRANSPORTATION INC					
Site Address:	417 9TH AVENUE					
City/State/Zip/Country:	SCOTTSBLUFF, NE 69361 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☒ Transporter	☐ TSDR	☐ Special Waste	

RCRA Site ID Number:	NVT330010000					
Name:	US ECOLOGY NEVADA					
Site Address:	11 11MILES S. HWY 95					
City/State/Zip/Country:	BEATTY, NV 89003 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☐ Transporter	☒ TSDR	☐ Special Waste	

RCRA Site ID Number:	UTR000007708
Name:	SLT EXPRESS WAY INC.
Site Address:	4255 SOUTH 300 WEST, STE B
City/State/Zip/Country:	MURRY, UT 84017 UNITED STATES
Comments:	

Handler Type: **(Check all that apply)** ☐ Generator ☒ Transporter ☐ TSDR ☐ Special Waste

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [x] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) 01/11/2008
- [ ] A component of the **Dangerous Waste Annual Report** (skip section 11) Reporting Year:

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1032 W Marine View DR
City/State/Zip: Everett, WA 98201-1557
County: SNOHOMISH
Tax Registration Number:
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1032 W Marine View DR
City/State/Zip: Everett, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name: TC Systems Inc, Dave Utick
Mail Address: 3333 CASITAS AVE
City/State/Zip: LOS ANGELES, CA 90039-2207
Phone Number (Ext): (323)663-1261
Owner Since: 12/31/2002 (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [x] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [x] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc, Charles Souder

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Operator Since: (mm/dd/yyyy)

Operator Type:
- [ ] Federal
- [ ] State
- [ ] County
- [ ] Municipal
- [ ] District
- [x] Private
- [ ] Tribal
- [ ] Other

8. Site Contact

Name: Charles Souder

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Email Address: ccsouder@hotmail.com

9. Form Contact

Name: Charles Souder

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Email Address: ccsouder@hotmail.com

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [ ] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [x] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [x] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [ ] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Dangerous Waste Permitted Facility – also called a Treatment, Storage, or Disposal (TSD) Facility.** (Requires an Ecology Part A or Part B permit for dangerous waste management). Note: On-site accumulation of waste by a generator does not usually require a permit for storage.
- [ ] **11. Recycler of Dangerous Waste Received from Off-Site** (Regulated under the State Dangerous Waste Regulations WAC 173-303-120.)

12. Dangerous Waste Fuel Activity

- [x] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)

d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

D001
D007
D008

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

WT02

12. Comments

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [ ] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) — Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) — 12/31/2008
- [x] A component of the **Dangerous Waste Annual Report** (skip section 11) — Reporting Year: 2008

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1032 W Marine View DR
City/State/Zip: Everett, WA 98201-1557
County: SNOHOMISH
Tax Registration Number:
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1032 W Marine View DR
City/State/Zip: Everett, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name: TC Systems Inc, Dave Utick
Mail Address: 3333 CASITAS AVE
City/State/Zip: LOS ANGELES, CA 90039-2207
Phone Number (Ext): (323)663-1261
Owner Since: 12/31/2002 (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [x] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [x] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Operator Since: (mm/dd/yyyy)

Operator Type:
- [ ] Federal
- [ ] State
- [ ] County
- [ ] Municipal
- [ ] District
- [x] Private
- [ ] Tribal
- [ ] Other

8. Site Contact

Name: Robert Deatherage

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Email Address: robertdeatherage@msn.com

9. Form Contact

Name: Robert Deatherage

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Email Address: robertdeatherage@msn.com

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [x] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [ ] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [x] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only
  - [ ] 1. Spills
  - [ ] 2. Clean Up

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [x] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Dangerous Waste Permitted Facility – also called a Treatment, Storage, or Disposal (TSD) Facility.** (Requires an Ecology Part A or Part B permit for dangerous waste management). Note: On-site accumulation of waste by a generator does not usually require a permit for storage.
- [ ] **11. Recycler of Dangerous Waste Received from Off-Site** (Regulated under the State Dangerous Waste Regulations WAC 173-303-120.)

12. Dangerous Waste Fuel Activity

- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)
- d. Burner (indicate type of combustion unit)
  - [ ] 1. Utility boiler
  - [ ] 2. Industrial boiler
  - [ ] 3. Industrial furnace
- e. Deferrals/Exemptions (in federal registry only)
  - [ ] 1. Smelter deferral
  - [ ] 2. Small quantity exemption
  - [ ] 3. Other (specify):

- [ ] **13. Generator of Special Waste** (Regulated under the State Dangerous Waste Regulations - WAC 173-303-073)

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

D001,D007,D008,F003,F005

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

12. Comments

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 1

A-1.

A-2. Chromium Hydroxide Sludge

A-3. D007

A-4. WT02

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G04

A-8. W501

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 14010.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	H132	350	0
NVT330010000	H132	13660	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/17/2008	001368379JJK		NVT330010000	2300.00	H132
02/29/2008	001368741JJK		NVT330010000	1900.00	H132
04/18/2008	001368825JJK		KSD980633259	350.00	H132
04/18/2008	001368824JJK		NVT330010000	4400.00	H132
04/24/2008	001368834JJK		NVT330010000	200.00	H132
06/06/2008	001368983JJK		NVT330010000	1000.00	H132
07/24/2008	001365594JJK		NVT330010000	1650.00	H132
08/28/2008	001365699JJK		NVT330010000	810.00	H132
10/08/2008	001364534JJK		NVT330010000	1400.00	H132

C. Comments

A7 ALSO G006.

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 2

A-1.

A-2. Waste Paint Acetone Chromium

A-3. D001, D007, D008, F003, F005

A-4.

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G06

A-8. W209

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 1350.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	H061	1350	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
01/17/2008	001368680JJK		KSD980633259	450.00	H061
02/29/2008	001368742JJK		KSD980633259	450.00	H061
08/28/2008	001365700JJK		KSD980633259	450.00	H061

C. Comments

Generation and Management Form

GM

Please enter your RCRA Site ID number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Then complete one answer sheet for each waste stream.

Reference the instructions on pages 27 through 36 as you complete this form.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

A. Description of Dangerous Waste Stream

Sequence: 3

A-1.

A-2. WASTE PAINT SOLIDS

A-3. D001, D007, D008, F003, F005

A-4.

A-5. [ ] EHW [X] DW

A-6. [X] No [ ] Yes

A-7. G06

A-8. W409

A-9. [X] i [ ] ii [ ] iii [ ] iv [ ] v (If v, answer A-9.a.)

A-9a.

B. Waste Management Activities

B-1. 1250.00 [ ] Tons [X] Pounds [ ] Kilograms [ ] Gallons (If Gallons, answer B-1.a.)

B-1.a. 0.00 [ ] Lbs/gal [ ] Specific gravity

B-2. [ ] On-site [X] Off-site [ ] Both

B-3. 0.00

B-3.a. [X] No [ ] Yes

B-4.

i. Designated Facility (TSDR)	ii. Managememt Code	iii. Quantity	iv. Recycling Percent
KSD980633259	H061	1250	0

B-5.

i. Date Shipped (mm/dd/yyyy)	ii. Manifest Document Number	iii. Internal Tracking Code	iv. Designated Facility (TSDR)	v. Quantity Shipped	vi. Management Code
05/17/2008	001368680JJK		KSD980633259	800.00	H061
08/28/2008	001365700JJK		KSD980633259	450.00	H061

C. Comments

A-8 WASTE PAINT SOLIDS

Off-Site Identification Form

OI

Please enter your RCRA Site ID Number and your site name in the small box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your off-site identification facilities.

Please complete this form if your facility received dangerous waste from off site or shipped dangerous waste off site during the year.

Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: WAD088722947

Site Name: TC Systems Inc

For Ecology Use Only:

Date Received:

RCRA Site ID Number:	CAD983649880					
Name:	GENERAL ENVIRONMENTAL MANAGEMENT INC					
Site Address:	11155 JERSEY BLVD UNIT G					
City/State/Zip/Country:	RANCHO CUCAMONGA, CA 91730 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☒ Transporter	☐ TSDR	☐ Special Waste	

RCRA Site ID Number:	KSD980633259					
Name:	SYSTECH ENVIRONMENTAL CORP					
Site Address:	1420 S CEMENT RD					
City/State/Zip/Country:	FREDONIA, KS 66736 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☐ Transporter	☒ TSDR	☐ Special Waste	

RCRA Site ID Number:	MAD039322250					
Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES INC					
Site Address:	100 JOSEPH ST					
City/State/Zip/Country:	KINGSTON, MA 02364 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☒ Transporter	☐ TSDR	☐ Special Waste	

RCRA Site ID Number:	NED981723513					
Name:	CLEAN HARBORS ENVIRONMENTAL SERVICES INC					
Site Address:	2247 S HWY 71					
City/State/Zip/Country:	KIMBALL, NE 69145 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☐ Transporter	☒ TSDR	☐ Special Waste	

RCRA Site ID Number:	NVT330010000					
Name:	US ECOLOGY NEVADA					
Site Address:	11 11MILES S. HWY 95					
City/State/Zip/Country:	BEATTY, NV 89003 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☐ Transporter	☒ TSDR	☐ Special Waste	

RCRA Site ID Number:	UTD991301748					
Name:	CLEAN HARBORS GRASSY MOUNTAIN, LLC.					
Site Address:	EXIT 41 OFF I-80 3 MILES EAST 7 MILES NORTH OF KNOLLS					
City/State/Zip/Country:	GRASSY MOUNTAIN, UT 84029 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☐ Transporter	☒ TSDR	☐ Special Waste	

RCRA Site ID Number:	UTR000007708					
Name:	SLT EXPRESS WAY INC.					
Site Address:	4255 SOUTH 300 WEST, STE B					
City/State/Zip/Country:	MURRY, UT 84017 UNITED STATES					
Comments:						
Handler Type:	**(Check all that apply)**	☐ Generator	☒ Transporter	☐ TSDR	☐ Special Waste	

Dangerous Waste Site Identification Form

Site ID

Washington State Department of Ecology
Hazardous Waste Information
P.O. Box 47658
Olympia, WA 98504-7658
(800) 874-2022 (within state)
(360) 407-6170

Web site: www.ecy.wa.gov/programs/hwtr

1. Reason for Submittal

- [ ] To provide **New** Notification of Regulated Waste Activity (complete entire form)
- [ ] To provide **Revised** Site Identification information (complete entire form)
- [ ] To **Withdraw** Site Identification Number (skip sections 10 and 11) — Effective Date (mm/dd/yyyy):
- [ ] To **Reactiviate** Site Identification Number (complete entire form) — 12/31/2009
- [x] A component of the **Dangerous Waste Annual Report** (skip section 11) — Reporting Year: 2009

2. RCRA Site ID Number: WAD088722947

3. Site Location Information

Company Name: TC Systems Inc
Site Address: 1032 W Marine View DR
City/State/Zip: Everett, WA 98201-1557
County: SNOHOMISH
Tax Registration Number:
NAICS Code: 332813
Type of Business:

4. Company Mailing Address

Name: TC Systems Inc
Mail Address: 1032 W Marine View DR
City/State/Zip: Everett, WA 98201-1557
Country: UNITED STATES

5. Legal Owner

Name: TC Systems Inc, Dave Utick
Mail Address: 3333 CASITAS AVE
City/State/Zip: LOS ANGELES, CA 90039-2207
Phone Number (Ext): (323)663-1261
Owner Since: 12/31/2002 (mm/dd/yyyy)
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] District [x] Private [ ] Tribal [ ] Other

6. Land Owner

Name: John Schaak
Mail Address: 1210 W Marine View Dr
City/State/Zip: EVERETT, WA 98201-1558
Phone Number (Ext): (425)252-5187
Owner Type: [ ] Federal [ ] State [ ] County [ ] Municipal [ ] Other [ ] District [x] Private [ ] Tribal [ ] Puyallup Trust

7. Site Operator

Name: TC Systems Inc

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Operator Since: (mm/dd/yyyy)

Operator Type:
- [ ] Federal
- [ ] State
- [ ] County
- [ ] Municipal
- [ ] District
- [x] Private
- [ ] Tribal
- [ ] Other

8. Site Contact

Name: Robert Deatherage

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Email Address: robertdeatherage@msn.com

9. Form Contact

Name: Robert Deatherage

Mail Address: 1032 W Marine View DR

City/State/Zip: Everett, WA 98201-1557

Phone Number (Ext): (425)258-4055

Email Address: robertdeatherage@msn.com

10. Type of Regulated Waste Activity (Mark the appropriate boxes for activities that apply to your site)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one)

- [x] a. LQG: Large Quantity Generator (Greater than 2,200 lbs/mo)
- [ ] b. MQG: Medium Quantity Generator (Between 220 - 2,200 lbs/mo)
- [ ] c. SQG: Small Quantity Generator (Less than 220 lbs/mo)
- [ ] d. XQG: No Regulated Waste Generated

2. Frequency of Generation (choose only one)

- [x] a. Monthly
- [ ] b. Batch
- [ ] c. One-time only

3. Transporter of Dangerous Waste

- [ ] a. Transport own waste
- [ ] b. Transport for commercial purposes

- [ ] **4. Recycler of On-Site Waste** (i.e., on-site use, reuse, or reclamation of a waste after it has been generated)
- [ ] **5. Transfer Facility of Hazardous Waste**
- [x] **6. Permit-by-Rule (PBR)**
- [ ] **7. Treatment-by-Generator (TBG)**
- [ ] **8. Generator of Mixed Radioactive Waste**
- [ ] **9. Importer of Hazardous Waste**
- [ ] **10. Dangerous Waste Permitted Facility – also called a Treatment, Storage, or Disposal (TSD) Facility.** (Requires an Ecology Part A or Part B permit for dangerous waste management). Note: On-site accumulation of waste by a generator does not usually require a permit for storage.
- [ ] **11. Recycler of Dangerous Waste Received from Off-Site** (Regulated under the State Dangerous Waste Regulations WAC 173-303-120.)

12. Dangerous Waste Fuel Activity

- [ ] a. Generator of dangerous waste fuel
- [ ] b. Generator marketing to burner
- [ ] c. Other marketers (i.e., blender, distributor, etc.)

d. Burner (indicate type of combustion unit)

- [ ] 1. Utility boiler
- [ ] 2. Industrial boiler
- [ ] 3. Industrial furnace

e. Deferrals/Exemptions (in federal registry only)

- [ ] 1. Smelter deferral
- [ ] 2. Small quantity exemption
- [ ] 3. Other (specify):

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste
(Mark all boxes that apply)

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐

☐ **2. Destination Facility for Universal Waste**
(Note: A RCRA Permit is required for this activity)

C. Used Oil Activities

1. Off-specification used oil burner
Indicate types of combustion devices

☐ a. Utility boiler
☐ b. Industrial boiler
☐ c. Industrial furnace

2. Used oil transporter Indicate types of activity(s)

☐ a. Transporter
☐ b. Transfer facility

3. Used oil processor/re-refiner Indicate types of activity(s)

☐ a. Process
☐ b. Re-refine

4. Used oil Fuel Marketer

☐ a. Directs shipment of used oil to used oil burner
☐ b. First claims the used oil meets the specifications

11. Description of Hazardous Wastes

A. Waste Codes for Federally Regulated Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.)

B. Waste Codes for State Regulated (i.e., non-Federal) Hazardous Wastes: Identify those codes that best describe your waste.
(e.g., WT02 - Toxic, WP02 - Persistent, WSC2 - Solid Corrosive, etc.)

12. Comments

13. Certification

This form cannot be processed without a signature

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ **Date** _____

Name (print or type) _____ **Title** _____

If you have special accomodation needs or require this document in an alternative format, please contact the Hazardous Waste and Toxics Reduction Program at 1-800-833-6388 (TTY) or quick dial 711-833-6388 (TTY).

14. Electronic Submittals

☐ I am interested in the electronic filing of my Dangerous Waste Annual Reporting and Site Identification information to Ecology over the Internet. Ecology will issue a PIN number, along with electronic filing instructions, in a letter addresses to the Form Contact in Section 9 on this form.

Site History

The facility received the following visits by Ecology under the authority of Chapter 173-303 WAC and Chapter 70.105 RCW:

- On March 20, 1997 Ecology inspected TC Systems and found several violations of state hazardous waste regulations. The violations were for failure to: (1) properly label, date, and close containers of dangerous waste; (2) file an amended 1995 annual report to include an estimation of wastewater generation; (3) maintain adequate aisle space between rows of containers of hazardous waste; (4) prepare a written inspection schedule for monitoring and safety equipment; (5) maintain a general facility inspection log; (6) develop and maintain a personnel training plan; (7) meet satellite accumulation standards; (8) update and revise the contingency plan; (9) maintain a weekly inspection log of dangerous waste storage area; and (10) provide secondary containment for containers of liquid dangerous wastes. The due date for correction of these violations was May 9, 1997. The facility returned to compliance on May 26, 1997 by submitting the required compliance certificate.
- On June 2, 1998 Ecology inspected TC Systems as follow up to the 1997 inspection and determined that "while TC Systems has made progress in addressing regulatory compliance, especially regarding paperwork and record keeping, we have concerns about the commitment of facility management to proper dangerous waste management." (Cover letter for 6/2/98 inspection report by Elliott Zimmermann.) The violations found during this inspection were for failure to: properly label, date, and close containers of dangerous waste; designate wastes; meet satellite accumulation standards; use proper manifest tracking procedures. The facility returned to compliance by the due date by submitting the required compliance certificate and other requested documentation.
- On August 6, 1998 Ecology inspected TC Systems to follow up on the June 2, 1998 inspection and found the facility had completed all the required actions as stated in their compliance certificate.
- On May 13, 2003 Ecology inspected TC Systems again and found several violations of state hazardous waste regulations. The violations were for failure to: properly label, date, and close containers of dangerous waste; dispose of waste within the 90 day accumulation time limit; develop and maintain a personnel training plan and training records; meet satellite accumulation standards; and maintain a weekly inspection log of dangerous waste storage area. The facility returned to compliance by the due date by submitting the required compliance certificate and other requested documentation.
- On August 8, 2006 Ecology inspected TC Systems again and found several violations of state hazardous waste regulations. The violations were for failure to: properly label, date, and close containers of dangerous waste; develop and maintain a personnel training plan and training records; meet satellite accumulation standards; develop and maintain a contingency plan; maintain a weekly inspection log of dangerous waste storage area; and provide secondary containment for containers of liquid dangerous wastes. The due date for correction of these violations was November 30, 2006. There are no records to show that TC Systems submitted any "return to compliance" documentation or responded in any way to that inspection report.
- On November 6, 2007 Ecology inspected TC Systems again and found several violations of state hazardous waste regulations. The violations were for failure to: properly label, date, and close containers of dangerous waste; develop and maintain a

personnel training plan and training records; meet satellite accumulation standards; develop and maintain a contingency plan; maintain a weekly inspection log of dangerous waste storage area; provide secondary containment for containers of liquid dangerous wastes; respond to release of used oil; offer dangerous waste to a TSD; designate wastes; meet spent antifreeze management requirements; label used oil containers; keep containers of used oil closed; remove product labels; meet the 90-day accumulation time limit; providing adequate emergency response equipment; properly store and label universal waste; conduct general facility inspections; submit the annual report by the due date. The original compliance due date was January 28, 2008. After several extensions to April 30th, 2008, the facility submitted all requested items to demonstrate compliance.

- On July 8, 2008 Ecology inspected TC Systems again and found numerous repeat violations as well as several new ones. The violations were for failure to: properly label, date, and close containers of dangerous waste; develop and maintain a personnel training plan and training records; meet satellite accumulation standards; develop and maintain a contingency plan; maintain a weekly inspection log of dangerous waste storage area; provide secondary containment for containers of liquid dangerous wastes; respond to release of used oil; offer dangerous waste to a TSD; designate wastes; meet spent antifreeze management requirements; label used oil containers; keep containers of used oil closed; remove product labels; meet the 90-day accumulation time limit; maintain final copies of manifests; properly store and label universal waste; conduct general facility inspections; submit an accurate annual report; meet permit-by-rule requirements; and keep secondary containment of the tank line clean and dry. The original compliance due date was August 27, 2008.

TC Systems has exhibited an eleven year history of repeat violations of Dangerous Waste Regulations, Chapter 173-303 WAC. The following chart shows the violations for each inspection:

	Violation	1997	1998	2003	2006	2007	2008
1	Spill Clean up (used oil) / illegal disposal					X	X
2	Designation		X			X	X
3	Closed Container	X	X	X	X	X	X
4	Labeling Containers	X	X	X	X	X	X
5	Start Dates on Containers	X	X	X	X	X	X
	General Facility Inspections	X				X	X
	Contingency Plan	X			X	X	X
6	Training Plans/Records	X		X	X	X	X
	Weekly Inspections	X		X	X	X	
	Satellite Accumulation Standards	X	X	X	X	X	X
	Secondary Containment	X			X	X	
	Accumulation Time Limits			X			
	Proper Manifest recordkeeping		X				X
	Annual Reporting issues	X				X	X
	Adequate Aisle Space	X					
	Used Oil container management					X	

Spent Antifreeze container management	X		
Universal Waste management	X		X

Material Safety Data Sheet

Used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200

SHERWIN INCORPORATED
5530 Borwick Aveune
South Gate, California 90280

562.861.6324 fax: 562.923.8370

IDENTITY (As on label and list)	DUBL-CHEK PENETRANT HM-430	Blank spaces are not permitted. Non-applicable items or unavailable information must be so noted

Section I

Manufacturer's Name	SHERWIN INCORPORATED	Emergency phone No.	Transportation Emergency: 800-424-9300 Sherwin Incorporated: 562-861-6324
Address	5530 BORWICK AVENUE	Information phone No.	562-861-6324
	SOUTH GATE, CA 90280	Date Prepared	November 2004
		Preparer's Signature	

Section II — Hazardous Ingredients Identity Information

Hazardous Components (Specific Chemical Name; Common Name(s))		OSHA PEL	ACGIH TLV	other limits recommended	% optional
Ethoxylated C11-C15 Secondary Alcohols Mixture. A nonionic surface active agent or "wetting agent" (detergent)	CAS no. 68131-40-8	unlisted	unlisted	--	--
	While exposure limits are not established, a general guideline for products of this type is 5 mg/m³ (8-hour time-weighted average)				
A liphatic oil refined, hydrotreated middle distillate	CAS no. 64742-46-7	5 mg/m³	5 mg/m³	TWA	--
Hydrotreated light distillate, petroleum	CAS no. 64742-53-6	5 mg/m³	10 mg/m³	TWA	

HMIS - F-1, H-2, R-0, S-0

Section III — Physical/Chemical Characteristics

Boiling Point	440° F	Specific Gravity (H_20 = 1) approximately	0.93
Vapor Pressure (mm Hg.)	n/a	Melting Point	n/a
Vapor Density (AIR = 1)	n/a	Evaporation Rate (Butyl Acetate = 1)	n/a
Solubility in Water		Emulsifiable	
Appearance and Odor	Yellow, green liquid.	Petroleum odor	

Section IV — Fire and Explosion Hazard Data

Flash Point (method used)	200° F	Flammable Limits		LEL n/a	UEL n/a
Extinguishing Media	Large fires: apply alcohol-type or all-purpose-type foam by mfr's recommended techniques. Small fires: use carbon dioxide or dry chemical media.				
Special Fire Fighting Procedures	Do not use direct stream of water or foam into hot, burning pools; this may cause frothing and increase fire intensity. Firefighters should wear self-contained breathing apparatus and protective clothing.				
Unusual Fire & Explosion Hazards	On burning, this product can release toxic fumes and vapors. This material may produce a floating fire hazard.				

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid	Open flames, build up of vapors and hazards normally incompatible with petroleum oils.
	Stable	x		
Incompatibility (materials to avoid)				Normally unreactive; however, avoid strong oxidizing agents.
Hazardous Decomposition or Byproducts				Burning can produce toxic vapors which are harmful if inhaled as well as the following products: carbon monoxide and/or carbon dioxide.
Hazardous Polymerization	May Occur		Conditions to Avoid	none
	Will Not Occur	x		

Section VI — Health Hazard Data

Routes of Entry: Inhalation? primary Skin? primary Ingestion? not likely

Health Hazards (acute and chronic): **Swallowing:** May cause irritation of the mouth and throat, abdominal discomfort, nausea, vomiting and diarrhea. Skin **absorption:** Prolonged or widespread contact may result in the absorption of potentially harmful amounts of material. **Inhalation:** Short term harmful effects are not expected from vapor generated at ambient temperature. **Skin contact:** causes irritation w/ discomfort, local redness and swelling. Prolonged contact may cause severe irritation. Effects may be prolonged. **Eye contact:** Causes moderate to severe irritation, experienced as discomfort or pain, excess blinking and tear production, w/ marked excess redness and swelling of the conjunctiva. Corneal injury may occur. .

Carcinogenicity: NTP? N/A IARC monographs? N/A OSHA regulated? N/A

Signs & Symptoms of Exposure: Repeated skin contact may cause dermatitis.

Medical Conditions Generally Aggravated by Exposure: Skin contact may aggravate existing dermatitis.

Emergency & First Aid Procedures: **Swallowing:** DO NOT INDUCE VOMITING. Obtain medical attention. **Skin:** Remove contaminated clothing. Wash w/ soap and water. If irritation persists or if contact has been prolonged, obtain medical attention. **Inhalation:** Remov[illegible] fresh air. **Eyes:** Immediately flush eyes w/ water and continue washing for at least 15 minutes. Obtain medical attention w/o delay, preferably from an opthalmologist.

Section VII — Precautions for Safe Handling and Use

Steps to be taken if material is released or spilled: Wear eye and skin protection. Floor may be slippery; use care to avoid falling. Contain spills immediately w/ inert materials (e.g. sand, earth). Avoid discharge to natural waters. Transfer liquids and solids, diking material to suitable containers for recovery or disposal. The material is water-miscible and final clean-up w/ water to remove surface residue is permissable. Immediately extinguish all flames and sources of ignition.

Waste Disposal Method: Incinerate in a furnace where permitted under Federal, State and Local regulations.

Storing & Handling Precautions: **Handling:** Do not splash or create mists or vapors. **Storage:** Store away from high temperatures and open flames. Keep containers closed.

Other Precautions: Use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions. Emptied containers retain vapor and product residues. DO NOT cut or weld on or near the container.

Section VIII — Control Measures

Specific Respiratory Protection: Use NIOSH approved respirator if vapors or mist is generated.

Ventilation	Local Exhaust	Advisable	Special	none
	Mechanical (general)	room ventilation is expected to be satisfactory	Other	none
Protective Gloves	Chemical resistant		Eye Protection	Monogoggles or chemical safety when possib[illegible], of splashing.

Other Protective Clothing/Equipment: Chemical apron, eye bath, safety shower.

Work/Hygenic Practices: Wash thoroughly after handling.

'OLYETHYLENE GLYCOL TRIMETHYLNONYL :THER Product Description

POLYETHYLENE GLYCOL TRIMETHYLNONYL ETHER Structure

68131-40-8

CAS No.	**68131-40-8**
Chemical Name:	**POLYETHYLENE GLYCOL TRIMETHYLNONYL ETHER**
Synonyms:	DETERGENT BIOGRAD FL-70;TERGITOL TYPE NP-9;TERGITOL TYPE NP-10;TERGITOL TYPE NP-7;TERGITOL TYPE 15-S-12;TERGITOL TYPE 15-S-30;TERGITOL TYPE 15-S-5;TERGITOL TYPE 15-S-7;TERGITOL TYPE 15-S-9;TERGITOL(R) TMN 10;TERGITOL(R) 15-S-5;TERGITOL(R) TMN 3;TERGITOL(R) TMN 6;TERGITOL(TM) 15-S-3;TERGITOL(TM) 15-S-30;TERGITOL(TM) 15-S-40;TERGITOL(TM) 15-S-5;TERGITOL(TM) 15-S-7;TERGITOL(TM) 15-S-9;TERGITOL TMN
CBNumber:	CB2301826
Molecular Formula:	
Formula Weight:	0
MOL File:	Mol file

LYETHYLENE GLYCOL TRIMETHYLNONYL ETHER Property

ensity :	1.04 g/mL at 20 °C
) :	249 °C
ıfety	
ıazard Codes :	Xn,N,Xi
sk Statements :	41-51/53-38-22-36/38
fety Statements :	26-39-61-36-22-36/39
DADR :	UN 3082 9/PG 3
GK Germany :	3
TECS :	WZ5950000
ızardClass :	9
ckingGroup :	III

Harmful Dangerous for the environment irritant

OLYETHYLENE GLYCOL TRIMETHYLNONYL ETHER hemical Properties,Usage;Production

POLYETHYLENE GLYCOL TRIMETHYLNONYL ETHER Suppliers Global(12)Suppliers

BELGIUM 1

Supplier	Tel	Fax	Email	Country	ProdList	Advantage
SIGMA-RBI	–	–		SWITZERLAND	6658	91
Advance Scientific & Chemical	–	–	sales@advance-scientific.com	USA	6029	71
Guangzhou WeiBo Chemical Co., Ltd.	–	–	weibochem@163.com	CHINA	6357	67
CHEMICAL LAND21	–	–	sales21@chemicalland21.com	South Korea	6586	74
Service Chemical Inc.	–	–	sales@chemos-group.com	GERMANY	6964	71
Spartan Chemical Co., Inc.	–	–	Sales@spartanchemical.com	USA	195	75
INEOS Oxide	–	–	procurement@ineos.com	BELGIUM	19	55
Chem-Impex International, Inc.	–	–		USA	6307	64
City Chemicals Corporation	–	–		USA	6477	72
Fisher Scientific	–	–	sales@fishersci.com	USA	2320	86

68131-40-8(POLYETHYLENE GLYCOL TRIMETHYLNONYL ETHER)Related Search:
BioChemical 68131-40-8 DETERGENT BIOGRAD FL-70 TERGITOL TYPE NP-9 TERGITOL TYPE NP-10 TERGITOL TYPE NP-7 TERGITOL TYPE 15-S-12 TERGITOL TYPE 15-S-30 TERGITOL TYPE 15-S-5 TERGITOL TYPE 15-S-7 TERGITOL TYPE 15-S-9 TERGITOL(R) TMN 10 TERGITOL(R) 15-S-5 TERGITOL(R) TMN 3 TERGITOL(R) TMN 6 TERGITOL(TM) 15-S-3 TERGITOL (TM) 15-S-30 TERGITOL(TM) 15-S-40 TERGITOL(TM) 15-S-5 TERGITOL(TM) 15-S-7 TERGITOL(TM) 15-S-9 TERGITOL TMN TERGITOL TMN-6 TERGITOL(TM) TMN-10 TERGITOL(TM) TMN-6 POLYETHYLENE GLYCOL TRIMETHYLNONYL ETHER Detergents Non-Ionic Alcohols,C11-15-secondary,ethoxylated alkyl(100%c11-c15)phenoxypoly alkyl(100%c11-c15)phenoxypoly (ethyleneoxy)ethanol LinearsecondaryalcoholC11-15-ethoxylate proprietary proprietaryblendoflinear proprietaryblendoflinearsecondaryalcoholsreacted proprietaryblendoflinearsecondaryalcoholsreactedwithethyleneoxide tergitol15-s-12 (nonionic) tergitol15-s-12nonionic tergitol15-s-15 tergitol15-s-20 tergitol15-s-3 tergitol15-s-5 tergitol15-s-7(nonionic) tergitol15-s-9 C11-15 PARETH-3 C11-15 PARETH-5 C11-15 PARETH-7 C11-15 PARETH-9 C11-15 PARETH-20 C11-15 PARETH-30 C11-15 PARETH-40 TERGITOL 15-S-5 NONIONIC TERGITOL 15-S-30 NONIONIC TERGITOL 15-S-9 NONIONIC C11-15-secondary,ethoxylated Alkyl (C11-C15) phenoxypoly (ethylene oxy) ethanol tergitol TERGITOL15-S-3,SURFACTANT

Ergon Refining, Inc.
a company that works™

Material Safety Data Sheet

HYVOLT II

Date of Preparation: June 5, 2003

Section 1 - Chemical Product and Company Identification

Product Name: Hyvolt II
Chemical Name: Severely Hydrotreated Light Naphthenic Distillate
Chemical Family: Petroleum Distillate
Chemical Formula: Not Applicable
CAS Number: 64742-53-6
Other Designations: Contains Oil
Manufacturer: Ergon Refining, Inc., P.O. Box 309, Vicksburg, MS 39181
Company Contact: Will Poe, Phone (601) 630-8319

EMERGENCY TELEPHONE NUMBERS:
Ergon Refining, Inc. (601) 638-4960 Normal Business Hours
Chemtrec (800) 424-9300 After Business Hours

Section 2 - Composition / Information on Ingredients

A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces finished oil with a viscosity near 60 SUS @ 100°F (9 cSt @ 40°C).

Ingredient Name	CAS Number	%
Severely Hydrotreated Light Naphthenic Petroleum Oil	64742-53-6	> 99.7
Butylated Hydroxytoluene (BHT) or 2,6-Di-*tert*-butyl-*p*-cresol (DBPC)	128-37-0	< 0.3

Trace Impurities:

Ingredient	OSHA PEL TWA	OSHA PEL STEL	ACGIH TLV TWA	ACGIH TLV STEL	NIOSH REL TWA	NIOSH REL STEL	NIOSH IDLH
Severely Hydrotreated Light Naphthenic Petroleum Oil	5 mg/m^3 (oil mist)	None estab.	5 mg/m^3 (oil mist)	10 mg/m^3 (oil mist)	none estab.	none estab.	none estab.

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆
Not Expected to cause a severe emergency hazard.

HMIS	
H	1
F	1
R	0
PPE†	B

†Sec. 8

Potential Health Effects

Primary Entry Routes: Skin
Inhalation: Inhalation of vapors or mist may be irritating to respiratory passages. Prolonged exposure may result in dizziness and nausea. Target Organ for mineral oil mist is lungs.
Eye: Eye contact may result in slight irritation and redness.
Skin: Short term contact with skin is unlikely to cause any problems; excessive or prolonged and repeated contact and poor hygiene conditions may result in dryness, dermatitis, erythema, oil acne, cracking and defatting of the skin.
Ingestion: May result in nausea or stomach discomfort.
Carcinogenicity: Based on OSHA 1910.1200 and IARC study requirements, this product does not require labeling. Meets EU requirement of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC) using IP 346. NTP and OSHA do not list this product as a potential carcinogen.
Mutagenicty: This product gives negative mutagenic results from Modified Ames Assay.
Medical Conditions Aggravated by Long-Term Exposure: Personnel with pre-existing skin disorders should avoid contact with this product.

Section 4 - First Aid Measures

Eye Contact: Wash with water. If irritation or redness persists seek medical help.
Skin Contact: Wash thoroughly with soap and water. Remove contaminated clothing. Reuse only after cleaning.
Inhalation: Remove to fresh air. Assist breathing if necessary. Seek medical help.
Aspiration: If there is any suspicion of aspiration into the lungs obtain medical advise.
Ingestion: If swallowed, observe for signs of stomach discomfort or nausea. If symptoms persist, seek medical help. Do not induce vomiting.

Section 5 - Fire-Fighting Measures

Flash Point: > 295°F (> 145 °C)
Flash Point Method: COC
Burning Rate: Not available
Autoignition Temperature: > 600 °F (> 315 °C)
Lower Explosive Level (LEL): Not determined
Upper Explosive Limit (UEL): Not determined
Flammability Classification: OSHA Class III-B Combustible Liquid
Extinguishing Media: Halon, dry chemical, foam, CO2 and water mist or fog. Water may be used to cool below flash point.
Unusual Fire or Explosion Hazards: Do not use forced stream as this could cause fire to spread.
Combustion Products: Fumes, smoke and carbon monoxide.
Fire-Fighting Instructions and Equipment: Use water to cool containers exposed to flames. Do not enter enclosed or a confined workspace without proper protective equipment. Fire fighting personnel should wear respiratory protection (positive pressure if available).

Section 6 - Accidental Release Measures

Spill /Leak Procedures: Stop spill at source if possible without risk. Contain spill. Eliminate sources of ignition. Spill area will be slick. Recover all possible material for reclamation. Use non-flammable absorbent material to pick up remainder of spill.

Spill to Navigable Waters: If this material is spilled into navigable waters and creates a visible sheen, it is reportable to the National Response Center.

Section 7 - Handling and Storage

Handling and Storage Precautions: Keep away from flames, sparks or hot surfaces. Never use a torch to cut or weld on or near container. Empty oil containers can contain explosive vapors. NFPA Class IIIB storage. Wash thoroughly after handling.

Work / Hygienic Practices: Wash hands with soap and water before eating, drinking, smoking or use of toilet facilities. Do not use gasoline, solvents, kerosene, or harsh abrasive skin cleaners for washing exposed skin areas. Take a shower after work if general contact occurs. Remove oil-soaked clothing and launder before reuse. Discard contaminated shoes and leather gloves.

Shelf Life: Product should be stored in clean, dry containers at ambient temperatures and it should remain stable with exception of slight color stability loss unless it is contaminated.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Adequate ventilation is required where excessive heating or agitation may occur to maintain concentration below exposure limits.
Eye / Face Protection: Safety glasses or face shield where splashing is possible.
Skin Protection: As needed to prevent repeated skin contact. Solvent resistant gloves should be used if needed.
Respiratory Protection: Not Normally Needed. Respirator should be used in areas where vapor concentrations are excessive due to high temperatures or where oil misting occurs.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: Clear & bright
Color: Water white to pale
Odor: Mild Petroleum Odor
Odor Threshold: Not determined
Vapor Pressure: Not applicable
Vapor Density (Air=1): > 5
Specific Gravity (H_2O=1): 0.88

Water Solubility: Nil
Boiling Point: 500-700°F (260-370°C)
Melting Point: - 65°F (- 55°C)
% Volatile: Nil LVP-VOC
Evaporation Rate: Not available
pH: Not applicable

Section 10 - Stability and Reactivity

Stability: Stable
Polymerization: Polymerization will not occur.
Chemical Incompatibilities: Strong Oxidizers.
Conditions to Avoid (Stability): Sources of ignition.
Hazardous Decomposition Products: Combustion products include carbon dioxide and carbon monoxide.

Section 11 - Toxicological Information

Acute Studies: Tests on similar materials show a low order of acute oral and dermal toxicity.

Eye Effects: Minimal irritation on contact.

Skin Effects: Practically non-toxic if absorbed. May cause mild irritation with prolonged and repeated exposure.

Acute Oral Effects: Tests on similar materials indicate low order of acute oral toxicity.

Acute Inhalation Effects: Low acute toxicity expected on inhalation.

This product is severely hydrotreated. Severely hydrotreated naphthenic petroleum oils have not been found to be carcinogenic or potential carcinogens.

Section 12 - Ecological Information

Aquatic Release: Advise authorities if product has entered or may enter watercourses or sewer drains.

Section 13 - Disposal Considerations

Follow Federal, State, and Local regulations. Not a RCRA hazardous waste if uncontaminated. If "used", RCRA criteria must be determined. Do not flush to drain / storm sewer. Contract to authorized disposal service. If permitted incineration may be practical. Consider recycling.

Section 14 - Transport Information

Proper Shipping Name: Not regulated by DOT (Contains Oil)
Hazard Class: Not Applicable
DOT ID No.: Not Applicable
DOT Shipping Label: Not regulated by DOT

Section 15 - Regulatory Information

U.S. Federal Regulatory Information:

CERCLA / SARA

302/303/304 Categories:	Extremely Hazardous Substances	None
311/312 Categories:	Immediate (Acute) Health Effects	No
	Delayed (Chronic) Health Effects	No
	Fire Hazard	No
	Sudden Release of Pressure Hazard	No
	Reactivity Hazard	No
313 Categories:	Toxic Chemicals (40 CFR 372)	None
Clean Air Act:	Hazardous Air Pollutants (HAPS)	None
	Ozone Depleting Compounds (ODC)	None
Clean Water Act: (40 CFR 116; 401.15)	If spilled into navigable waters it is reportable to National Response Center, 800-424-8802 Reportable Quantity = Oil Sheen present on navigable water surface	
OSHA (29 CFR 1910):	This product is not hazardous under Hazard Communication Standard 29 CFR 1910.1200	
RCRA (40 CFR 261.33)	This product does not meet hazardous waste criteria.	

State Regulations:

California Prop 65	No Proposition 65 chemicals exists in this product, no labeling required.
Florida	No listed ingredients are present
Massachusetts RTK	No listed ingredients are present
Minnesota RTK	No listed ingredients are present
New Jersey RTK	Lists petroleum oil, but this product does not contain hazardous ingredients.
Pennsylvania RTK	Lists petroleum oil, but this product does not contain hazardous ingredients greater than 3%.
Illinois DOL TSL	No listed ingredients are present

Other Regulations:

CONEG Metals:	Since cadmium, chromium, lead and mercury are not detectable and it does not exceed 100 ppm total in this product, it is compliant with CONEG Metals regulation.
EEC (Europe):	This product is not known to be a dangerous good internationally, unlabeled
EPA/TSCA Inventory:	The components of this product are listed on the EPA/TSCA inventory of chemicals. CAS No. 64742-53-6
Foreign Inventories:	The components of this product are listed under the following foreign inventories: European Union's EINICS No. 265-156-6 Korea's ECL No. KE-12552 Australia's AICS No. 64742-53-6 Canada's DSL No. 64742-53-6 Philippines' PICCS – on List

Section 16 - Other Information

NFPA Hazard Rating	**- Health**	**1 Slight**
	- Fire	**1 Slight**
	- Reactivity	**0 Least**

Prepared By: Will Poe **Phone:** (601) 630-8319

Supersedes MSDS Dated:	March 28, 2001	Added additional regulatory references, color
	January 1, 2000	Change from 100% to > 99.7 %, add BHT in Section 2
	May 21, 1999	Change date

This MSDS complies with OSHA Hazard Communication Standard (HCS) 29 CFR 1910.1200 and conforms to ANSI Z 400.1 16-Section Format.

Disclaimer: Ergon Refining, Inc. believes this information is accurate but not all-inclusive in all circumstances. It is the responsibility of the user to determine suitability of the material for their purposes. No warranty, expressed or implied, is given.

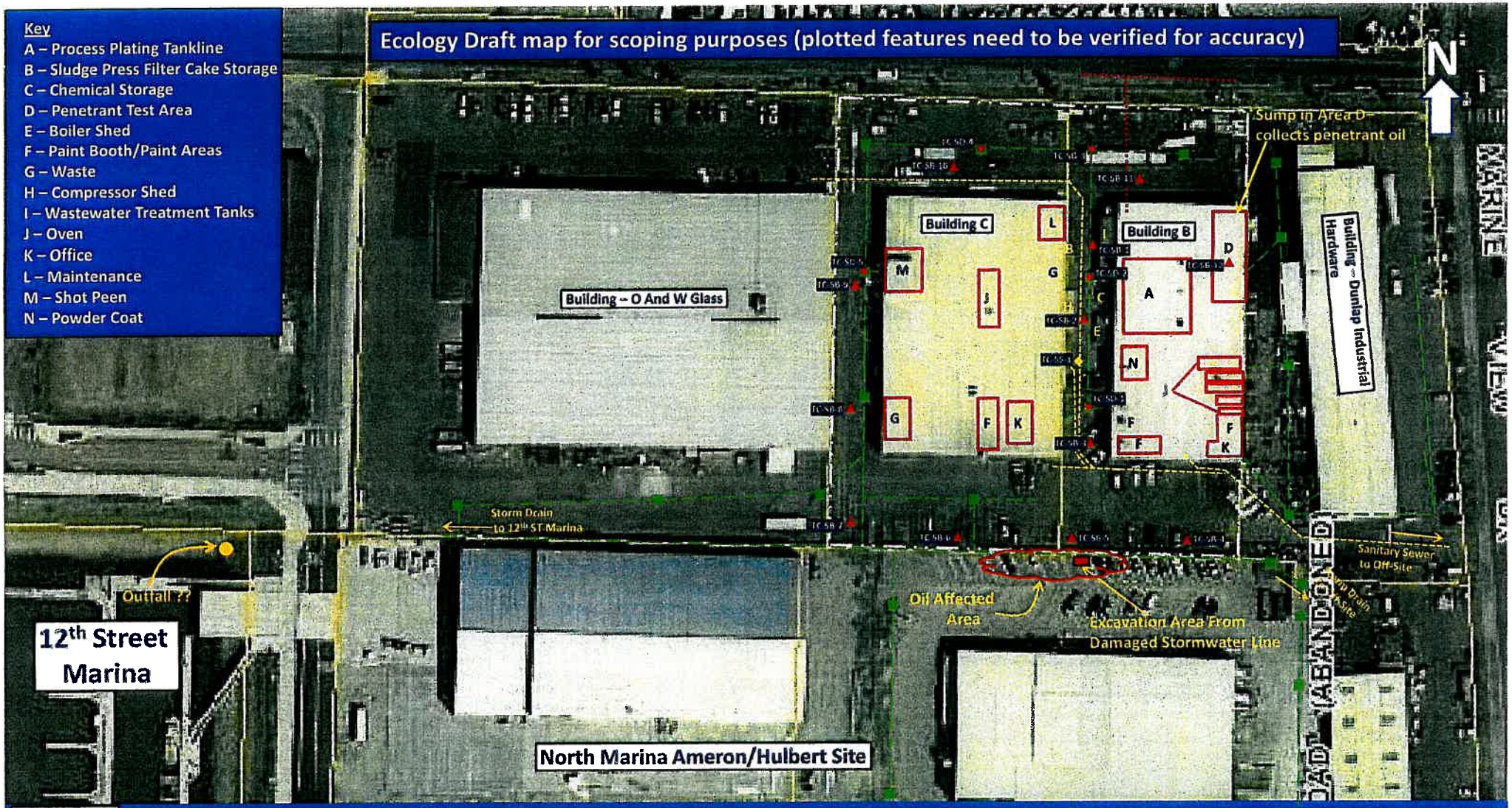
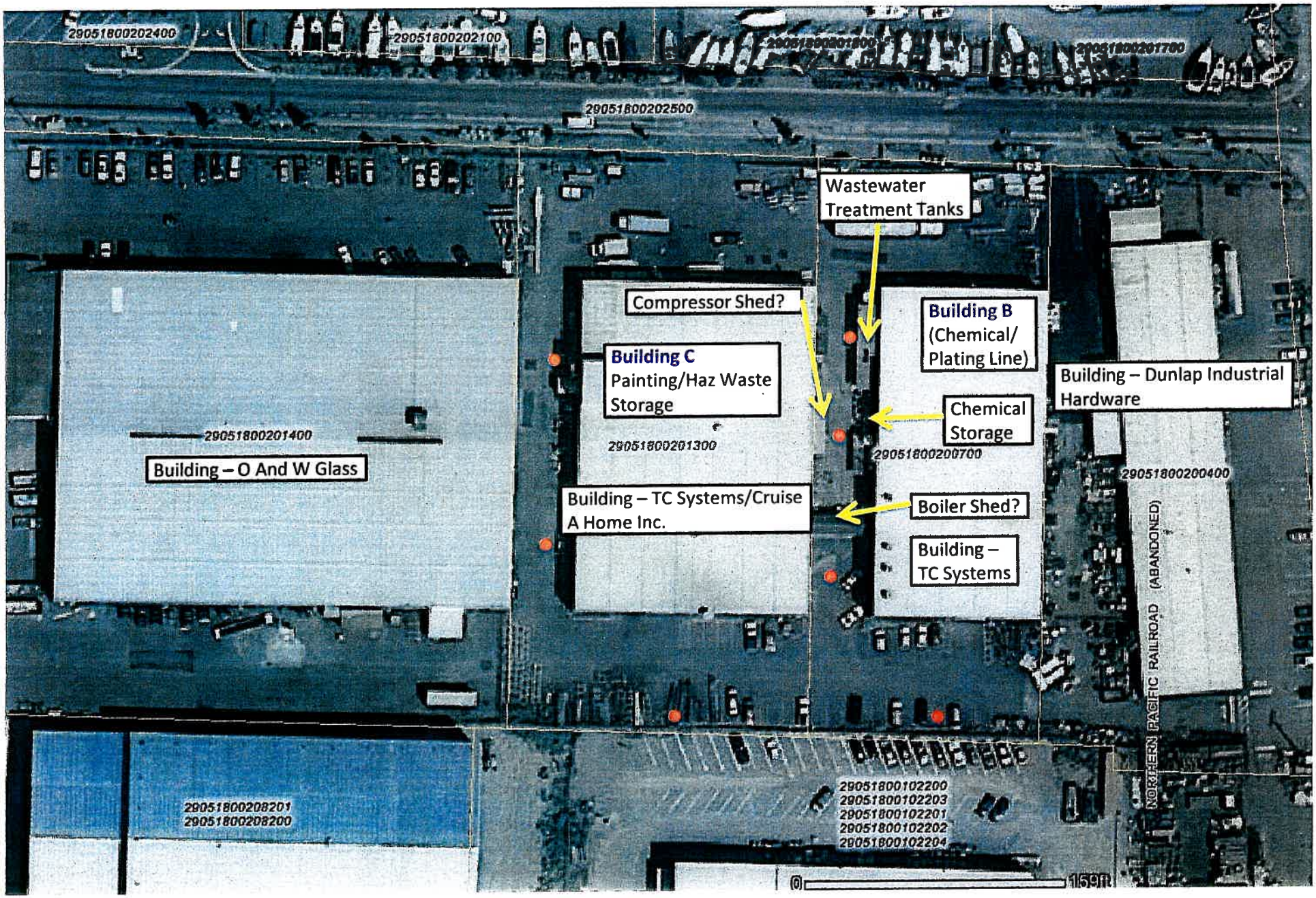


Figure 3

Storm Drain Piping
Sanitary Sewer Piping
Storm Drain Catch Basin
Preliminary Boring Location (collect soil and groundwater)
Sediment Sample From Stormwater Catch Basin
Potable Water Piping
TC Systems Operations Boundary
Surface Soil Grab Sample from an unpaved area
Approximate extent of Oil Affected Area.
Building B Chemical Line (Metal Finishing)
Building C Painting and Hazardous Waste Storage

Map Date – 7-30-09

Sources for Site Features – 1998 TC Systems General Site Map (David T Johnson Engineers); 1996 North Marina Utility Map; TC Systems 1998 O&M Manual; Information from Ecology Inspection Reports; Landau's 6-2-05 report on the "Oil Affect Area" at Ameron.


29051800202400
29051800202100
29051800201800
29051800201700
29051800202500
Wastewater Treatment Tanks
Compressor Shed?
Building B (Chemical/ Plating Line)
Building C Painting/Haz Waste Storage
Building – Dunlap Industrial Hardware
Chemical Storage
29051800201400
29051800201300
29051800200700
29051800200400
Building – O And W Glass
Building – TC Systems/Cruise A Home Inc.
Boiler Shed?
Building – TC Systems
NORTHERN PACIFIC RAILROAD (ABANDONED)
29051800208201
29051800208200
29051800102200
29051800102203
29051800102201
29051800102202
29051800102204
0
150ft

Ecology Draft map for scoping purposes (plotted features need to be verified for accuracy)

ey
– Process Plating Tankline
– Sludge Press Filter Cake Storage
– Chemical Storage
– Penetrant Test Area
– Boiler Shed
– Paint Booth/Paint Areas
– Waste
– Compressor Shed
– Wastewater Treatment Tanks
– Oven
– Office
– Maintenance
M – Shot Peen
N – Powder Coat

N

Sump in Area D – collects rinsewater

Building – O And W Glass

Building C

Building B

Building – Dunlap Industrial Hardware

Storm Drain to 12th ST Marina

Outfall ??

Oil Affected Area

Excavation Area From Damaged Stormwater Line

Sanitary Sewer to Off-Site

Storm Drain to Off-Site

ABANDONED ROAD

12th Street Marina

North Marina Ameron/Hulbert Site

Storm Drain Piping
Sanitary Sewer Piping
Storm Drain Catch Basin
Preliminary Boring Location (collect soil and groundwater)

Potable Water Piping
TC Systems Operations Boundary

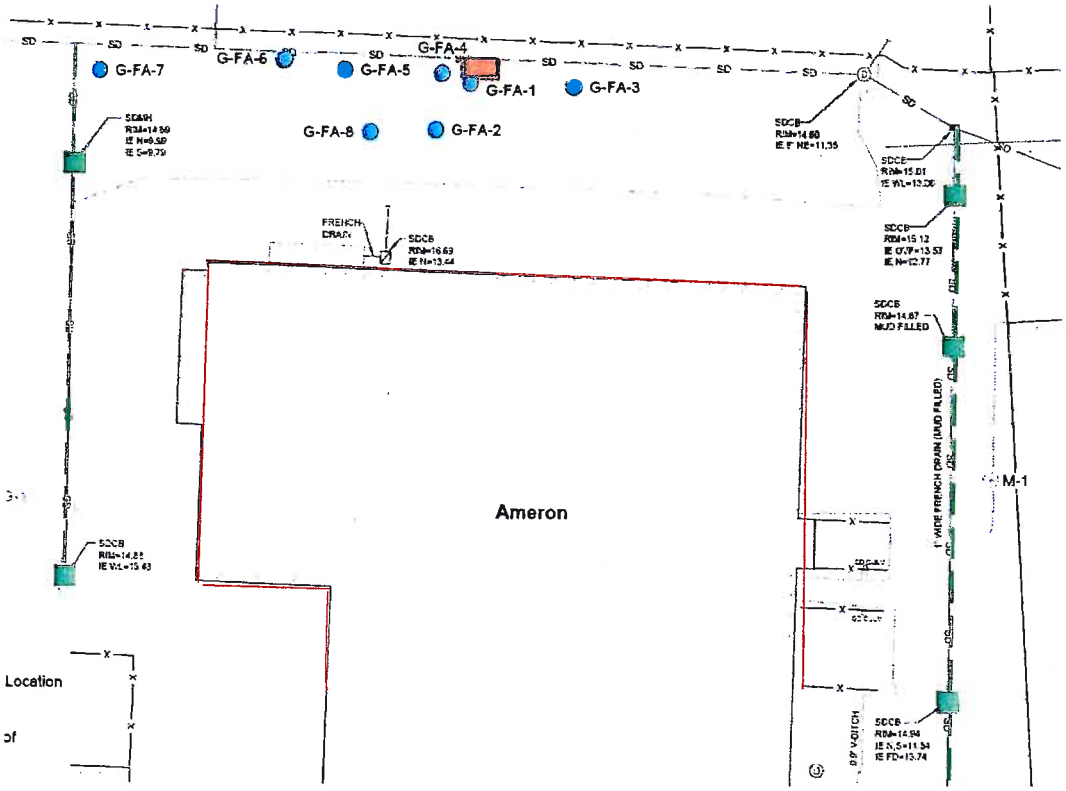
Approximate extent of Oil Affected Area.

Building B Chemical Line (Metal Finishing)

Building C Painting and Hazardous Waste Storage

Map Date – 7-22-0

Sourced for Site Features – 1998 TC Systems General Site Map (David T Johnson Engineers); 1996 North Marina Utility Map; TC Systems 1998 O&M Manual; Information from Ecology Inspection Reports; Landau's 6-2-05 report on the "Oil Affect Area" at A


G-FA-7
G-FA-6
G-FA-5
G-FA-4
G-FA-1
G-FA-3
G-FA-8
G-FA-2
SD
SDCB
FRENCH DRAIN
Ameron
M-1
Location

ERTS # 615854

Initial Report

External Reference #

Caller Information

First Last
Name A ANONYMOUS
Busines Name
Street Address
Other Address
City State WA Zip
E-mail Confidential_FL ☐
Phone Ext Type

Where did it happen

Berth Anchorage
Location Name TC SYSTEMS
Street Address 1032 W MARINE VIEW DR
Other Address
City/Place EVERETT State WA Zip
County - Region **SNOHOMISH** NWRO FS ID
WIRA #
Waterway Type STORM DRAIN
Latitude Longitude
Topo Quad 1:24:000 EVERETT
Direction/Landmark (mile post, cross roads, township/range)

What happened

Spills Program Oil Spill? N

Incident Date Received Date 10/13/2009 13:42
Medium STORM DRAIN PIPE
Material CHEMICAL
Quantity Unit

Source INDUSTRIAL FACILITY
Cause OTHER
Incident Type
Activity OTHER
Impact WATER POLLUTION
Vessel Name
Hull Number

Primary Potentially Responsible Party Information

First Last
Name CHARLES SOUDER
Business Name **TC SYSTEMS**
Street Address
Other Address
City State WA Zip
Phone Ext Type
E-mail

Additional Contact Information

Name Phone Ext Type

More Information

TC SYSTEMS WAS CLEANING UP SPILLS UNDERNEATH THEIR CHEMICAL LINE. CHARLES SOUDER ORDERED THAT THE SPILL MATERIAL BE PRESSURE WASHED DOWN A STORM DRAIN.

UNKNOWN DATE, BUT OCCURRED AFTER ECOLOGY'S 9/16/09 STORM WATER INSPECTION.

MATERIAL IS BELIEVED TO BE ASSOCIATED WITH THE CHEMICAL LINE.

Entry Person SACAYANAN, TAMARA Entry Date 10/13/2009

ERTS # 615854

Referral

Referral # 127133

Referral Method
- ○ E-mail ERTS number
- ◉ E-mail attachment
- ○ Print
- ○ Telephone

Person Referred to STEGMAN, GREG Primary ☐
Phone (425) 649-7019 Fax (425) 649-7098
E-mail gste461@ecy.wa.gov
Program/Organization WATER QUALITY
Address 3190 160TH AVE SE
City BELLEVUE WA 98008-
Region/Location NWRO
Referral Date 10/13/2009

Referral # 127137

Referral Method
- ○ E-mail ERTS number
- ◉ E-mail attachment
- ○ Print
- ○ Telephone

Person Referred to EVERETT DISPATCH (use for all complaints), 24-HOUR Primary ☐
Phone (425) 257-8821 Fax (425) 257-8978
E-mail EMAIL EVERETT CODE COMPLIANCE UNIT
Program/Organization EVERETT PUBLIC WORKS DISPATCH
Address 32000 CEDAR STREET
City EVERETT WA
Region/Location CITY OF EVERETT PUBLIC WORKS
Referral Date 10/13/2009

ERTS # 615854

Followup

Inspector Information

Referral # 127137
☑ Lead Inspector EVERETT DISPATCH (use for all complaints)
Program/Organization EVERETT PUBLIC WORKS DISPATCH
* Region/Location CITY OF EVERETT PUBLIC WORKS
# of Ecology Staff Overtime ☐

Action

	Start Date	End Date
FIELD RESPONSE - INVESTIGATION	10/13/2009	10/14/2009

What happened

Spills Program Oil Spill? N
Incident Date
Medium
STORM DRAIN PIPE
Material
CHEMICAL
Quantity Unit Est ☒
Source Regulated? ☐
INDUSTRIAL FACILITY
Cause
OTHER
Incident Type
Activity
OTHER
Impact
WATER POLLUTION
Vessel

Where did it happen Followup #1

Berth Anchorage
Location Name TC SYSTEMS
Street Address 1032 W MARINE VIEW DR
Other Address
City/Place EVERETT State WA Zip
County SNOHOMIS Region NWRO FS ID
Waterway Type STORM DRAIN PI
WRIA #
Latitude Longitude
Topo Quad 1:24,000 EVERETT
Direction/Landmark (mile post, cross roads, township/range)

Potentially Responsible Party Information

Check if the primary PRP provided notice to Ecology ☐

Narrative

From: Bob Keller [mailto:BKeller@ci.everett.wa.us]
Sent: Wednesday, October 14, 2009 1:33 PM
To: Sacayanan, Tamara L. (ECY)
Cc: Mark Sadler
Subject: FW: 1032 Marine Drive

Tami, please review the report from Mike Papa. This may not be an issue. Bob Keller

---

From: Mike Papa
Sent: Wednesday, October 14, 2009 11:22 AM
To: Bob Keller
Cc: Gene Bennett; Jane Zimmerman
Subject: 1032 Marine Drive

I received DOE ERTS request #615854 this morning (see attached). The property is private, even though it is surrounded by properties owned by the Port of Everett. The two adjacent properties are private as well, as is the storm drain system that serves them. The storm drains system is strictly a conveyance system, after conferring with Jane Zimmerman. There is no treatment and it outlets into the new marina to the west. The area adjacent to the south that has been redeveloped in the last several years does have a more modern, City permitted, storm system.

The anonymous caller stated that on an undetermined date the company was cleaning up a spill under one of their chemical lines and that the manager, Charles Souder, ordered the spill material to be washed into the storm drain.

I went to TC Systems this morning and Mr. Souder showed me what had happened. The short one line description on ERTS is not what the circumstances really were. Mr. Souder was not happy about the accusation and characterization of what happened and wanted a copy of the ERTS report, which he copied while I was there. Not being familiar with the site, from the description of what happened it could lead one to surmise that the material was washed into an outside storm drain.

What happened was as follows. They had drained, or were in the process of draining, one of their process tanks. It is a long narrow tank. On one side of the tank is a metal plate. The plate developed a leak and the spilled material went onto the concrete floor under it. They did wash the material into the drain underneath, but this drain was not a storm drain. The drain was part of their containment/treatment system, so it was doing what it was supposed to do.

ERTS # 615854

So, as I told Mr. Souder, since no material left the building then this is not a surface water issue.
<<TC Systems.pdf>>
Michael Papa, Engineering Technician
City of Everett Public Works Department
phone: 425-257-8925 fax: 425-257-8882
email: mpapa@ci.everett.wa.us

Entry Person: SACAYANAN, TAMARA Entry Date 10/14/2009

1)

CHEMICAL IDENTIFICATION

RTECS Number AZ0888850
Chemical Name Alcohols, C11-15-secondary, ethoxylated
CAS Registry Number 68131-40-8
Last Updated 200308
Data Items Cited 1

Synonyms/Trade Names
Alkyl omega-hydroxypoly(oxyethylene) (100% C11-C15)

HEALTH HAZARD DATA

U.S. STANDARDS AND REGULATIONS

EPA FIFRA 1998 STATUS OF PESTICIDES: Unsupported
RBREV* Status of Pesticides in Registration, Reregistration, and Special Review (Rainbow Report), Special Review and Reregistration Division Office of Pesticide Programs U.S. Environmental Protection Agency, 401 M. Street, S.W., Washington, D.C. 20460, Spring 1998 Volume(issue)/page/year: -,273,1998

END OF RECORD

2)

CHEMICAL IDENTIFICATION

RTECS Number JN9379645
Chemical Name Distillates (petroleum), hydrotreated middle
CAS Registry Number 64742-46-7
Last Updated 199710
Data Items Cited 5
Compound Descriptor Tumorigen
Mutagen

Synonyms/Trade Names
Amoco NT-45 process oil
Kermac 600W (mineral seal oil)

TUMORIGENIC DATA

Type of Test	Route of Exposure	Species Observed	Dose Data	Toxic Effects	Reference
TDLo - Lowest published toxic dose	Administration onto the skin	Rodent - mouse	416 gm/kg/2Y (intermittent)	Tumorigenic - equivocal tumorigenic agent by RTECS criteria Skin and Appendages - tumors	EPASR* United States Environmental Protection Agency, Office of Pesticides and Toxic Substances. (U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460) History unknown. Volume(issue)/page/year: 8EHQ-1288-0775

CHEMICAL IDENTIFICATION

RTECS Number	PY8036000
Chemical Name	Mineral oil, petroleum distillates, hydrotreated (mild) light naphthenic
CAS Registry Number	64742-53-6
Last Updated	199712
Data Items Cited	11
Compound Descriptor	Tumorigen Primary Irritant

Synonyms/Trade Names

Distillates (petroleum), hydrotreated (mild) light naphthenic
Hydrotreated (mild) light naphthenic distillate
Hydrotreated (mild) light naphthenic distillates (petroleum)

ACUTE TOXICITY DATA

Type of Test	Route of Exposure	Species Observed	Dose Data	Toxic Effects	Reference
LD - Lethal dose	Oral	Rodent - rat	>5 gm/kg	Behavioral - somnolence (general depressed activity)	ATDAEI Acute Toxicity Data. Journal of the American College of Toxicology, Part B. (Mary Ann Liebert, Inc., 1651 Third Ave., New York, NY 10128) V.1- 1990- Volume(issue)/page/year: 1,131,1990
LD - Lethal dose	Administration onto the skin	Rodent - rabbit	>2 gm/kg	Details of toxic effects not reported other than lethal dose value	ATDAEI Acute Toxicity Data. Journal of the American College of Toxicology, Part B. (Mary Ann Liebert, Inc., 1651 Third Ave., New York, NY 10128) V.1- 1990- Volume(issue)/page/year: 1,131,1990

OTHER MULTIPLE DOSE TOXICITY DATA

Type of Test	Route of Exposure	Species Observed	Dose Data	Toxic Effects	Reference

TDLo - Lowest published toxic dose	Administration onto the skin	Rodent - rabbit	24 gm/kg/28D (intermittent)	Skin and Appendages - dermatitis, other (after systemic exposure) Nutritional and Gross Metabolic - weight loss or decreased weight gain	NTIS** National Technical Information Service. (Springfield, VA 22161) Formerly U.S. Clearinghouse for Scientific & Technical Information. Volume(issue)/page/year: OTS0539127

TUMORIGENIC DATA

Type of Test	Route of Exposure	Species Observed	Dose Data	Toxic Effects	Reference
TDLo - Lowest published toxic dose	Administration onto the skin	Rodent - mouse	480 gm/kg/80W (intermittent)	Tumorigenic - neoplastic by RTECS criteria Skin and Appendages - tumors Tumorigenic - tumors at site of application	EPASR* United States Environmental Protection Agency, Office of Pesticides and Toxic Substances. (U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460) History unknown. Volume(issue)/page/year: 8EHQ-0887-0691S

Material Safety Data Sheet

Used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200

SHERWIN INCORPORATED
5530 Borwick Aveune
South Gate, California 90280

562.861.6324 fax: 562.923.8370

IDENTITY (As on label and list)	DUBL-CHEK PENETRANT HM-430	Blank spaces are not permitted. Non-applicable items or unavailable information must be so noted

Section I

Manufacturer's Name	SHERWIN INCORPORATED	Emergency phone No.	Transportation Emergency: 800-424-9300 Sherwin Incorporated: 562-861-6324
Address	5530 BORWICK AVENUE	Information phone No.	562-861-6324
	SOUTH GATE, CA 90280	Date Prepared	November 2004
		Preparer's Signature	

Section II — Hazardous Ingredients Identity Information

Hazardous Components (Specific Chemical Name; Common Name(s))		OSHA PEL	ACGIH TLV	other limits recommended	% optional
Ethoxylated C11-C15 Secondary Alcohols Mixture. A nonionic surface active agent or "wetting agent" (detergent)	CAS no. 68131-40-8	unlisted	unlisted	--	--
	While exposure limits are not established, a general guideline for products of this type is 5 mg/m³ (8-hour time-weighted average)				
A liphatic oil refined, hydrotreated middle distillate	CAS no. 64742-46-7	5 mg/m³	5 mg/m³	TWA	--
Hydrotreated light distillate, petroleum	CAS no. 64742-53-6	5 mg/m³	10 mg/m³	TWA	

HMIS - F-1, H-2, R-0, S-0

Section III — Physical/Chemical Characteristics

Boiling Point	440° F	Specific Gravity (H_20 = 1) approximately	0.93
Vapor Pressure (mm Hg.)	n/a	Melting Point	n/a
Vapor Density (AIR = 1)	n/a	Evaporation Rate (Butyl Acetate = 1)	n/a
Solubility in Water		Emulsifiable	
Appearance and Odor	Yellow, green liquid.	Petroleum odor	

Section IV — Fire and Explosion Hazard Data

Flash Point (method used)	200° F	Flammable Limits	LEL n/a	UEL n/a
Extinguishing Media	Large fires: apply alcohol-type or all-purpose-type foam by mfr's recommended techniques. Small fires: use carbon dioxide or dry chemical media.			
Special Fire Fighting Procedures	Do not use direct stream of water or foam into hot, burning pools; this may cause frothing and increase fire intensity. Firefighters should wear self-contained breathing apparatus and protective clothing.			
Unusual Fire & Explosion Hazards	On burning, this product can release toxic fumes and vapors. This material may produce a floating fire hazard.			

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid	Open flames, build up of vapors and hazards normally incompatible with petroleum oils.
	Stable	x		
Incompatibility (materials to avoid)			Normally unreactive; however, avoid strong oxidizing agents.	
Hazardous Decomposition or Byproducts			Burning can produce toxic vapors which are harmful if inhaled as well as the following products: carbon monoxide and/or carbon dioxide.	
Hazardous Polymerization	May Occur		Conditions to Avoid	none
	Will Not Occur	x		

Section VI — Health Hazard Data

Routes of Entry: Inhalation? primary Skin? primary Ingestion? not likely

Health Hazards (acute and chronic): **Swallowing:** May cause irritation of the mouth and throat, abdominal discomfort, nausea, vomiting and diarrhea. Skin **absorption:** Prolonged or widespread contact may result in the absorption of potentially harmful amounts of material. **Inhalation:** Short term harmful effects are not expected from vapor generated at ambient temperature. Skin contact: causes irritation w/ discomfort, local redness and swelling. Prolonged contact may cause severe irritation. Effects may be prolonged. **Eye contact:** Causes moderate to severe irritation, experienced as discomfort or pain, excess blinking and tear production, w/ marked excess redness and swelling of the conjunctiva. Corneal injury may occur.

Carcinogenicity: NTP? N/A IARC monographs? N/A OSHA regulated? N/A

Signs & Symptoms of Exposure: Repeated skin contact may cause dermatitis.

Medical Conditions Generally Aggravated by Exposure: Skin contact may aggravate existing dermatitis.

Emergency & First Aid Procedures: **Swallowing:** DO NOT INDUCE VOMITING. Obtain medical attention. **Skin:** Remove contaminated clothing. Wash w/ soap and water. If irritation persists or if contact has been prolonged, obtain medical attention. **Inhalation:** Remove to fresh air. **Eyes:** Immediately flush eyes w/ water and continue washing for at least 15 minutes. Obtain medical attention w/o delay, preferably from an opthalmologist.

Section VII — Precautions for Safe Handling and Use

Steps to be taken if material is released or spilled: Wear eye and skin protection. Floor may be slippery; use care to avoid falling. Contain spills immediately w/ inert materials (e.g. sand, earth). Avoid discharge to natural waters. Transfer liquids and solids, diking material to suitable containers for recovery or disposal. The material is water-miscible and final clean-up w/ water to remove surface residue is permissable. Immediately extinguish all flames and sources of ignition.

Waste Disposal Method: Incinerate in a furnace where permitted under Federal, State and Local regulations.

Storing & Handling Precautions: **Handling:** Do not splash or create mists or vapors. **Storage:** Store away from high temperatures and open flames. Keep containers closed.

Other Precautions: Use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions. Emptied containers retain vapor and product residues. DO NOT cut or weld on or near the container.

Section VIII — Control Measures

Specific Respiratory Protection: Use NIOSH approved respirator if vapors or mist is generated.

Ventilation	Local Exhaust	Advisable	Special	none
	Mechanical (general)	room ventilation is expected to be satisfactory	Other	none
Protective Gloves	Chemical resistant		Eye Protection	Monogoggles or chemical safety when possib... , of splashing.

Other Protective Clothing/Equipment: Chemical apron, eye bath, safety shower.

Work/Hygenic Practices: Wash thoroughly after handling.

Prepared by Ecology

DRAFT SCOPE OF WORK – TC SYTEMS PHASE II ESA

1. INTRODUCTION

A meeting was held on July 23, 2009 between the Washington State Department of Ecology (Ecology) and TC Systems, Inc. (TC Systems) to discuss sampling needs at the TC Systems property. The meeting was held at TC Systems facility located at 1032 West Marine View Drive, Everett, Washington. As part of the meeting, TC Systems provided Ecology with a tour of their facility. It was decided during the meeting that Ecology would provide TC Systems and the property owner (Norton Industries, Inc.) a scope of work (SOW) for conducting a Phase II Environmental Site Assessment (ESA) at TC Systems. Ecology understands that TC Systems 25 year lease (which dates the operations back to around 1984) from Norton Industries will soon expire and the company has a prospective buyer for their operations (this prompted the Phase I ESA performed in April 2009). Provided below is some background information on TC Systems operations, results from E3RA's Phase I ESA, information on the North Marina Ameron/Hulbert cleanup site, and Ecology's recommended SOW for the Phase II ESA. Note that the information presented below does not represent a complete review of all the file information related to TC Systems.

2. OWNERSHIP/OPERATIONAL HISTORY

TC Systems operates on two parcels of land (Snohomish County Tax Parcel No's. 29051800200700 and 29051800201300) owned by Norton Industries, Inc. (Norton Industries). According to tax records, the parcel of land occupied by Building B is located at 1104 10th Street Everett, Washington. The address for Building B in the late 1980s/early 1990s was 1028 W. Marine View Drive, Everett, Washington. The parcel of land occupied by Building C is located at 1032 10th Street, Everett, Washington. According to Mr. James Shack, President of Norton Industries, Buildings B and C were constructed in the 1980s. Snohomish County Tax Assessor Records show that Building B was constructed in 1979, and Building C in 1980. According to Mr. Shack, the buildings were constructed over an historic shingle mill (i.e., Jamison Shingle Mill) that was built on pilings and operated for over 40 years. Early Sanborn Fire Insurance Maps (Sanborn Maps) show that the Jamison Shingle Mill was in operation at least as far back as

1914. Sanborn Maps also show that the mill was in operation in 1957. Available historic aerial photos show that the mill was present at the site in 1966, but not in 1979 when Building B was constructed. As shown in Figure 1, the footprint of Buildings B and C overlap the former mill.

TC Systems is currently owned by the Utick family. The Utick's also own Hehr International, the parent company to TC Systems. The 1990 address for Hehr International, as reported in the May 2009 Phase I ESA report, is 1028 W. Marine View Drive, Everett, Washington. According to Ecology hazardous waste inspection reports, TC Systems began operations at their current location in 1993. However, TC Systems was formerly known as Tri-Coatings, Inc. (Tri-Coatings) who operated at the current location prior to 1993. According to a 1991 Phase I ESA performed by Kleinfelder, Inc. on the adjacent property south of TC Systems, Tri-Coatings operated a maintenance and mechanics shop in the northeast portion of the North Marina Ameron/Hulbert Site to support their main facility located on the adjacent property to the north (i.e., TC Systems current location). The Tri-Coatings manager in 1991 indicated in the Phase I report that the maintenance and repair shop would soon be moved to the main facility. According to the Phase I report, Tri-Coatings specialized in commercial coating (paint) applications which included stripping paint and coatings from products. The following was noted during Kleinfelder's 1991 site visit at Tri-Coatings maintenance and repair shop:

- Corrosion was observed in the sump floor (the concrete's aggregate was plainly visible). The sump is reportedly used as an area to strip parts.
- Kleinfelder did not observe hazardous waste signage warning employees of hazardous substances in the area, nor did Kleinfelder observe any inspection forms.
- Some drums containing hazardous waste had no hazardous class designation. Some drum labels showed accumulation start dates back to August 31, 1990.
- Corrosive and flammable material drums were not supplied with separate secondary containment.

It is noted that the Snohomish County tax assessor records identify Cruise-A-Home Inc. to be associated with Building C. According to the May 2009 Phase I ESA, Cruise-A-Home Inc. was identified as being present at 1028 W. Marine View Drive, Everett, Washington in 1975 and 1980 (based on historical city directories). TC Systems indicated to Ecology during the July 23, 2009 meeting that Cruise-A-Home Inc. formerly operated at Building C.

3. DESCRIPTION OF CURRENT OPERATIONS

TC Systems supports the aviation and boating industries by chemically treating and painting metal parts using their chemical line and paint booths. TC Systems applies various surface treatments and coatings to prefabricated metal parts, and conducts non-destructive testing of metal parts using a penetrant oil as well as sand blasting for surface preparation. Wastewater from the chemical tank line is pre-treated to meet local discharge limits, and discharged to the sanitary sewer under a permit with the City of Everett. Mr. Charles Souder, general manager at TC Systems, explained to Ecology during the meeting on July 23, 2009 that TC Systems does not conduct any metal plating activities. It is noted that the terms plating solutions, plating process tanks, and spent plating are referenced in the *1998 TC Systems Operations and Maintenance Manual for Industrial Wastewater Pretreatment Systems*.

TC Systems is a large quantity generator due to waste shipments larger than 2,200 pounds. In 2006, their first shipment of two tote sacks of chromium sludge hazardous waste was in the amount of 3,200 pounds, exceeding the 2,200 pound accumulation limit for a medium quantity generator.

4. REGULATORY COMPLIANCE HISTORY

File information made available to Ecology's Toxics Cleanup Program (TCP) indicates that TC Systems has been inspected by Ecology's Hazardous Waste and Water Quality Programs. In addition, TC Systems has a permit with the City of Everett to discharge pre-treated wastewater to the sanitary sewer. A summary of the inspections and findings are provided below.

4.1 HAZARDOUS WASTE INSPECTIONS

TC Systems has received six inspections from Ecology's Hazardous Waste and Toxics Reduction Program over the last dozen years, during which a total of fifty-nine violations were cited. Ecology found violations of state and hazardous waste regulations in all but one of the inspections. Inspectors have repeatedly observed many of the same violations of the Dangerous Waste Regulations. Inadequate performance of regulatory responsibilities at TC Systems

directly led to violations for illegal disposal (failure to respond to a release of used oil), failure to designate, and numerous repeat violations for improper waste management. In addition, inspectors have noted that the secondary containment wall in the alley between Buildings B and C contains cracks and does not provide adequate containment on rainwater or other liquids.

Spilled compressor oil (not being recycled) has been allowed to migrate into the soil and the nearby storm drain. The compressor oil is reddish in color. The leak from the compressor was identified in a November 6, 2007 inspection and was never corrected (the same problem was identified in July and August of 2008). The compressor oil leak was four to six feet in length. There were significant gaps in the floor surface in the area and it appeared that oil was migrating into the soil. Additionally, there was a clear path of liquids flowing from the leaking compressor area to the nearest storm drain.

Ecology recently (spring of 2009) fined TC Systems $24,000 for repeated failures to properly manage its hazardous waste. Ecology also issued an order (DE 6459) on March 25, 2009 directing the company to take a series of steps to correct the problems and provide better protection of public safety, health and the environment.

4.2 ECOLOGY INDUSTRIAL STORMWATER PERMIT

TC Systems has an industrial stormwater permit (Permit# S03-000762D) issued by Ecology. Ecology files show that the permit expired on May 31, 2008. The permit indicates that industrial stormwater from the site discharges to Port Gardner. A 1996 map of North Marina showing the location of utilities indicates that industrial stormwater from TC Systems discharges to the 12 Street Marina (Figure 2). Based on discussions during Ecology's July 23, 2009 meeting with TC Systems, TC Systems personnel currently do not know where the discharge point is for their facilities industrial stormwater.

Inspections were conducted by Ecology in May/June 2004 and in September 2007. Violations as identified in the 2007 inspection (October 24, 207 Informal Action/Warning Letter from Ecology) are presented below.

- Failed to perform quarterly sampling and visual monitoring of the facility's discharge.

- Monitoring was conducted twice in 2004 (1st and 3rd Qtrs.). No other monitoring exists. Monitored for lead, copper, zinc, oil and grease, pH, and turbidity. A zinc exceedance (630 ug/L) occurred in July 2004.

- The inspector identified an oily sheen discharging to a storm drain on September 17, 2007.
- Failed to produce and has not been implementing an adequate Stormwater Pollution Prevention Plan (SWPPP).
- Failed to retain adequate records to document compliance with the general permit.
- Good Housekeeping practices should be implemented on-site in order to reduce stormwater pollution potential from items such as stored heavily rusted and degraded drums (some were collecting stormwater onsite). Ensure that all chemical drums (including empty drums) are properly sealed and clean on their exteriors.
- Monitor, maintain, and cover machinery and parts stored outdoors to make certain fluid leaks and powders are not contaminating soils or stormwater.

It is noted that Mr. Charles Souder (TC Systems) stated in the May 2009 Phase I ESA that he was not aware of any violations associated with their Ecology stormwater permit.

4.3 CITY OF EVERETT INDUSTRIAL WASTEWATER PERMIT

TC Systems operates a wastewater pretreatment system at their facility that provides wastewater treatment before it is discharged to the City of Everett sewer system. TC Systems has an Industrial Pretreatment Discharge Permit (issued on 4/30/04; expires 4/29/09) with the City of Everett Public Works and has received over a dozen Notices of Violation from the City over the last 11 years. It is noted that Mr. Charles Souder (TC Systems) stated in the May 2009 Phase I ESA that he was not aware of any violations related to the wastewater permit with the City of Everett.

5. TC SYSTEMS WASTE STREAMS

General waste streams associated with TC Systems are summarized below.

- Filter press sludge from the treatment of waste water contains chromium and is the largest waste stream generated at this facility.
- Metals such as zinc and copper can be present in the rinsewater streams.
- Batch pretreatment of process wastes – Hexavalent chromium may be present.

- Liquid paint and solvents and paint thinners/strippers (including MEK and acetone) are the second largest waste stream.
- Cleaning solutions to remove inks, light oil, grease and grime residues left on metal parts, etc.
- Waste acids and bases
- Powder coatings
- General Paint Waste: paint booth filters (managed as dangerous waste for heavy metals) and paint solids.
- Waste Flammable Liquids – Toluene, xylenes, methylene chloride, and methanol were identified as being present in waste flammable liquids based on a Tri-Coatings 1990 waste profile.
- Hazardous Waste Liquids – According to a Tri-Coatings 1989 waste manifest, hazardous waste liquids containing 1,1,1-Trichloroethane were shipped as waste.
- Used oil from compressors, oil filters, equipment, and one company truck is also stored at the facility, as well as spent antifreeze.
- Spent fluorescent bulbs may be taken to the local transfer station.
- Sand blasting material.
- Penetrant oil and associated rinsewater captured in a sump.

6. E3RA, INC PHASE I ESA FINDINGS

Ecology understands that TC Systems 25 year lease from Norton Industries will soon expire and the company has a prospective buyer for their operations. As a result, E3RA, Inc. performed a Phase I ESA on behalf of TC Systems in April 2009. The results of the Phase I ESA indicated three recognized environmental conditions (REC) as follows:

- REC – Multiple ASTs.
- REC – Compressor Oil Leak.
- REC – Dye penetrant in direct contact with the concrete.
    - E3RA, Inc. observed the dye penetrant leaking from application tanks located in the northeast corner of Building B. To collect and reuse the penetrant, a small sump has been cut in the concrete floor near the application tanks. Ecology walked the penetrant testing area during their July 23, 2009 meeting at TC Systems and observed penetrant oil in contact the concrete slab. During Ecology's visit, Mr. Charles Souder of TC Systems indicated that he built the sump himself (Mr. Souder started working for TC Systems in 2003). Mr. Souder explained to Ecology that the sump is used to collect and reuse the penetrant in the process. Ecology notes that the 1998 TC Systems Operations and

Maintenance Manual describes a sump also being present, but the process for reusing the penetrant is different than what Mr. Souder described during Ecology's site visit (see below). The sump is used to collect rinsewater, not penetrant oil, which is then transferred to the sewer discharge line.

- **1998 O&M Description of Penetrant Washing** – *Penetrant oil is applied to metal parts as a part of non-destructive testing of metal parts. After application, excess penetrant is removed by water rinsing of the parts. TC Systems uses 'Dubl-Chek' penetrant oils in this process and collects the rinsewater in a sump located in the penetrant washing area. A sump pump transfers the rinsewater to the sewer discharge line prior to the flow measurement weir.*

Ecology notes that as part of the Phase I ESA, E3RA, Inc. did not review any files on TC Systems maintained at Ecology's Northwest Regional Office. These files contained in part Ecology's hazardous waste inspection reports, TC Systems 1998 O&M manual, stormwater inspection reports, and information on their industrial wastewater discharge permit with the City of Everett. A review of these files would have yielded important information on the environmental conditions at the property.

7. NORTH MARINA AMERON/HULBERT SITE

On June 3, 2009, Ecology, the Port of Everett (Port), and the Hulbert Family entered into an Agreed Order (DE 6677) to investigate and develop a cleanup action plan (CAP) for the North Marina Ameron/Hulbert Site. The results of several environmental studies showed the following contaminants at the Site:

- **Soil** – Metals, carcinogenic polycyclic aromatic hydrocarbons (cPAHs), polychlorinated biphenyls, and petroleum hydrocarbons.
- **Groundwater** – Arsenic, bis(2-ethylhexyl)phthalate, and vinyl chloride (a chlorinated solvent).
- **Sediment** – Zinc.

The Port has conducted interim actions to clean up much of the contaminated soil identified during these previous environmental studies. However, further investigation is needed to fully characterize the contamination at the North Marina Ameron/Hulbert Site so that the appropriate cleanup action for the Site can be developed. Below is a description of an oil affected area

identified at the property boundary between the North Marina Ameron/Hulbert Site and TC Systems. The oil affected area is depicted in Figure 3.

Ameron reportedly discovered petroleum-impacted soil and groundwater while excavating a damaged stormwater line in 2004. A November 2004 site reconnaissance performed by Landau Associates (Landau) on behalf of the Port yielded the following observations:

- The stormwater line is aligned generally with the northern property boundary of the Site and extends to the 12th Street channel (point of discharge), about 500-ft west of the excavation.
- At the time of the reconnaissance, the excavation was about 10 ft wide and about 6 ft deep.
- The soil material observed in the stockpile and the side walls of the excavation consisted of dark brown to black gravely sand, mixed with discolored soil and construction debris. In places, the soil had a moderate to strong petroleum odor, but no sheen. The discolored soil and debris consisted of green, red, and orange silty sand-size granular material, and concrete debris. The concrete debris ranged from 6 inches to 3-ft in diameter.

On behalf of the Port, Landau performed a Geoprobe™ investigation on January 20, 2005 in the vicinity of the excavation. The investigation was performed to delineate the extent of affected soil and groundwater associated with the conditions observed during the November 2004 Site reconnaissance. Soil sampling results yielded concentrations of cPAHs, PCBs, and metals above preliminary cleanup levels. Petroleum odors and sheens were noted in several borings. Visual contamination was not sampled. Arsenic and bis-(2ethylhexyl)phthalate were the only chemicals that exceeded preliminary cleanup levels in groundwater samples.

8. ECOLGY PHASE II ESA RECOMMENDED SCOPE OF WORK

A Phase II ESA is recommended for TC Systems based on the following:

- The nature of the facilities operations and waste streams.
- A history of poor waste management practices dating back to when the facility was known as Tri-Coatings.
- Hazardous waste inspection violations cited by Ecology from 1997 to 2008.
- Industrial stormwater violations cited by Ecology.
- Industrial wastewater discharge violations from the City of Everett.

- Spilled compressor oil has been allowed to migrate into soil and in the nearby storm drain.
- Stormwater monitoring in 2004 identified a zinc exceedance of 630 ug/L.
- Penetrant leaks (accumulations of penetrant oil on the building slab) in Building B.
- Potential for legacy wastes associated with the Historical Jamison Shingle Mill.
- Potential contamination issues associated with the North Marina Ameron/Hulbert Site (e.g., oil affected area at the property boundary).

Ecology understands that a Phase II ESA investigation will be conducted based on the results of the May 2009 Phase I ESA. Development of the Phase II SOW should be conducted in cooperation with Ecology. Ecology's recommended SOW for the Phase II ESA is provided below.

The Phase II ESA SOW should include development of a detailed sampling and analysis work plan, collection of environmental field data (e.g., soil, groundwater, etc.), and preparing a final report. Ecology will provide review and approval on all work products and will conduct oversight of sampling activities. The Phase II ESA should include a review of all historic information associated with the site including, but not limited, to the following (some of this information may already be available from the Phase 1 ESA report):

- Ecology Files
- City of Everett Files
- Historical sampling associated with TC Systems Industrial Pretreatment Discharge Permit
- Historic Aerial Photographs
- Sanborn Fire Insurance Maps
- Historic Topographic Maps

The Phase II ESA sampling and analysis work plan should include sections on:

- Ownership and operational history (include discussions when TC Systems operated as Tri-Coatings and their operations on the Ameron/Hulbert Site).
- Regulatory compliance history
- Environmental setting including topography/site drainage and geology/hydrogeology.
- Previous investigations

- Identification of Preliminary Screening Levels for media of concern (e.g., soil, groundwater, etc.)
- Scope of Work for collecting environmental samples including:
  - Sample location, depths, and rationale
  - Field screening procedures (e.g., use of a PID, etc.)
  - Sample custody and documentation
  - Sample transportation and handling
  - Laboratory Analyses (i.e., analytical methods)
  - Equipment decontamination
  - Data Evaluation / QA/QC procedures
  - Analytical Data Quality Objectives
  - Field and Lab QA Samples
  - Data verification and validation
- Data management procedures
- Investigative Derived Waste Management
- Site-Specific Health and Safety Plan

The Phase II investigation should focus on identifying potential contamination in on-site soil, groundwater, and in storm drain sediment and/or surface water. In addition, sampling should be conducted at the boundary between the North Marina Ameron/Hulbert Site and TC Systems to evaluate whether there is a potential issue related to co-mingling of contamination in these two areas. Based on the waste streams identified at TC Systems, wastes identified at the property boundary between the North Marina Ameron/Hulbert Site and TC Systems, and potential legacy wastes from the former mill operation, sample analyses should include priority pollutant metals including hexavalent chromium, semivolatile organic compounds (SVOCs), volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH), and organotins (due to blasting activities).

8.4 SAMPLE RATIONALE

Proposed sampling locations are shown on Figure 3. The locations should be considered approximate. Actual locations should be confirmed in the field based on site conditions including locations of underground and overhead utilities. One surface soil sample location (TC-SS-1),

twelve co-located soil boring/groundwater grab locations (TC-SB-1 to TC-SB-12), and sediment samples from five stormwater catch basins have been identified for the Phase II ESA. The sampling rationale for each location is summarized below.

Soil Boring Locations

- **Surface Soil Sample TC-SS-1** – One surface soil grab sample located in an unpaved area adjacent to Building C. This area is located just north of the breezeway that connects Buildings B and C. This location was selected to characterize potential releases to exposed soil.
- **Borings TC-SB-1 to TC-SB-3** – Three boring locations between Buildings B and C. These locations were selected to characterize conditions near the wastewater treatment tanks, the compressor shed, and in the vicinity of the paint booth area.
- **Borings TC-SB-4 to TC-SB-6** – Three boring locations along southern property boundary between the North Marina Ameron/Hulbert Site and TC Systems property. These locations were selected to characterize conditions adjacent to the Ameron/Hulbert site and in the vicinity of the oil affected area.
- **Boring TC-SB-7** – One boring at the southwest corner of the property. This location was identified to characterize conditions near the downstream end of the property's stormwater drainage system.
- **Borings TC-SB-8 and TC-SB-9** – Two borings located west of Building C. These locations were selected to characterize conditions downgradient and in the vicinity of Building C which is used for painting, storage of hazard waste, and sand blasting. This building also formerly housed operations from Cruise-A-Home Inc.
- **Borings TC-SB-10 and TC-SB-11** – Two borings located north of Buildings B and C. These locations were selected to characterize conditions north of these buildings. The groundwater flow direction at the site has not been characterized. However, it is assumed to flow towards Port Gardner, directed either to the southwest or northwest. Tidal action can make the flow pattern change at different times of the tide cycle.
- **Boring TC-SB-12** – One boring located inside Building B in the penetrant testing area. This boring was selected to characterize conditions where penetrant oils have been used inside the building and near a sump. The penetrant oil is in regular contact with the floor of the facility.

Stormwater Catch Basin Sample Locations

A total of five stormwater catch basins (TC-SD-1 to TC-SD-5) have been selected for sampling. These locations were selected to characterize sediment conditions within the catch basins at the property. Figure 1-1 of the 1998 TC Systems Operations and Maintenance Manual shows

stormwater piping exiting the buildings in the vicinity of sample location TC-SD-1 and TC-SD-5.

8.5 SAMPLE COLLECTION AND ANALYSES

Sample collection and analysis methods are described below.

8.5.1 Surface Soil Sample

One surface soil sample from location TC-SS-1 will be collected at a depth interval of 0.5 to 1 feet below ground surface (bgs) and analyzed for priority pollutant metals, SVOCs, VOCs, and TPH. The surface soil sample should be field-screened with a photoionization detector (PID) for VOCs. Samples for VOCs should be collected compliant with EPA Method 5035A (i.e., Closed-System Purge-and-Trap Extraction for VOCs). The EPA 5035A soil sampling method is intended to reduce volatilization and biodegradation of samples. VOC soil samples, including samples for hydrocarbon testing, should be collected from the undisturbed soil sample prior to any homogenization of the soil sample.

Note that the soil sample should be submitted for NWTPH-HCID analysis with follow-up analysis for TPHDx and/or TPH-Gx if the HCID shows the presence of this range of hydrocarbons in the sample. The NWTPH-HCID method is a qualitative and semi-quantitative screen to determine the presence and type of petroleum products that may exist.

The following additional analyses should be performed based on the initial sampling results:

- If the sample contains concentrations of TPH based on the NWTPH-HCID analysis, then PCBs should also analyzed.
- If the sample contains a concentration of total chromium in excess of 48 mg/kg, then it should be additionally analyzed for hexavalent chromium.
- The soil sample should be submitted for organotin analysis if there is evidence of any blasting material (e.g., abrasive grit).

8.5.2 Direct Push Soil Samples

Soil samples for lithologic logging should be collected continuously during drilling with the push probe rig. Upon collection of each soil sample, field screening of the soil sample should be conducted, first by scanning a freshly cut surface of the recovered soil along the length of the sample with a PID or similar equipment, then by visually observing the full length of the sample for obvious signs of contamination. Observations (e.g., presence of odors, petroleum sheens, soil discoloration, etc.) from the field screening should be recorded and the soil profile logged.

A minimum of one soil sample should be collected at each of the 12 soil boring locations. The sample should be collected where field screening (e.g., e.g., visual observations such as staining or the presence of abrasive grit, olfactory evidence or elevated PID readings) indicates that the soil interval contains elevated levels of contaminants (i.e., the interval with highest evidence of contamination). In the event that no evidence of contamination is noted, a sample at 0.5 to 1 foot bgs should be collected (make sure the sample is collected beneath the pavement and underlying base course). Soil samples should also be collected and analyzed at other depth intervals if field screening shows dissimilar types of contamination at different intervals (e.g., dark stained soil at one depth, abrasive grit red staining at another depth).

All soil samples should be analyzed for priority pollutant metals, SVOCs, VOCs, and TPH. Samples for VOCs should be collected compliant with EPA Method 5035A (i.e., Closed-System Purge-and-Trap Extraction for VOCs). Soil samples should be submitted for NWTPH-HCID analysis with follow-up analysis for TPHDx and/or TPH-Gx if the HCID shows the presence of this range of hydrocarbons in the sample. The following additional analyses should be performed based on the initial sampling results:

- Samples containing concentrations of TPH based on the NWTPH-HCID analysis should also be analyzed for PCBs.
- Samples containing concentrations of total chromium in excess of 48 mg/kg, should be additionally analyzed for hexavalent chromium.
- Soil samples should be submitted for organotin analysis if soil cores show evidence of any blasting material (e.g., abrasive grit).

8.5.3 Groundwater Samples

A groundwater grab sample should be collected at each of the twelve boring locations. To minimize potential tidal influences on groundwater samples, sampling should be conducted at a time that corresponds to low tide conditions. All groundwater samples should be analyzed for priority pollutant metals, SVOCs, VOCs, and TPH. Groundwater samples should be submitted for NWTPH-HCID analysis with follow-up analysis for TPHDx and/or TPH-Gx if the HCID shows the presence of this range of hydrocarbons in the sample. The following additional analyses should be performed based on the initial sampling results:

- Samples containing concentrations of TPH based on the NWTPH-HCID analysis should also be analyzed for PCBs.
- Samples containing concentrations of total chromium in excess of 50 ug/L should be additionally analyzed for hexavalent chromium. The concentration of 50 ug/L is the MTCA cleanup level for groundwater.

Groundwater samples should be submitted for both total and dissolved metals analyses. The sample for dissolved metals analyses should be filtered in the field using a 0.45-μm in-line filter.

8.5.4 Stormwater Catch Basement Sediment Samples

Stormwater catch basement sediment samples should be analyzed for priority pollutant metals, SVOCs, VOCs, TPH, and organotins. Sediment samples should be submitted for NWTPH-HCID analysis with follow-up analysis for TPHDx and/or TPH-Gx if the HCID shows the presence of this range of hydrocarbons in the sample. The following additional analyses should be performed based on the initial sampling results:

- Samples containing concentrations of TPH based on the NWTPH-HCID analysis should also be analyzed for PCBs.
- Samples containing concentrations of total chromium in excess of 48 mg/kg, should be additionally analyzed for hexavalent chromium.

8.5.5 Surveying

Sampling locations should be surveyed to facilitate accurate placement of these features on project figures and drawings.

8.5.6 Quality Assurance Samples

The field sampling program should include the collection of field and laboratory quality assurance samples (e.g., field duplicates, blank samples, etc.).

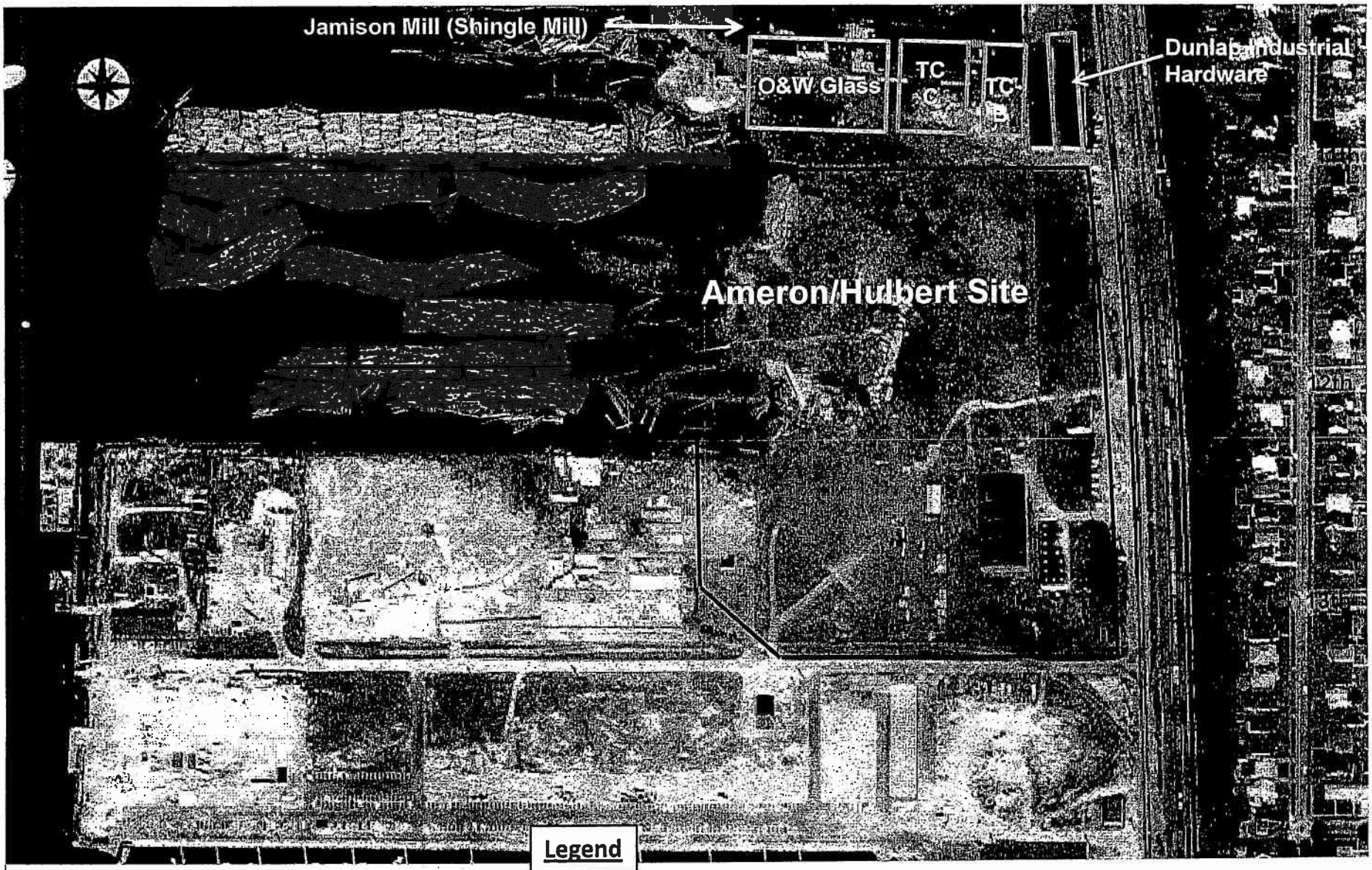
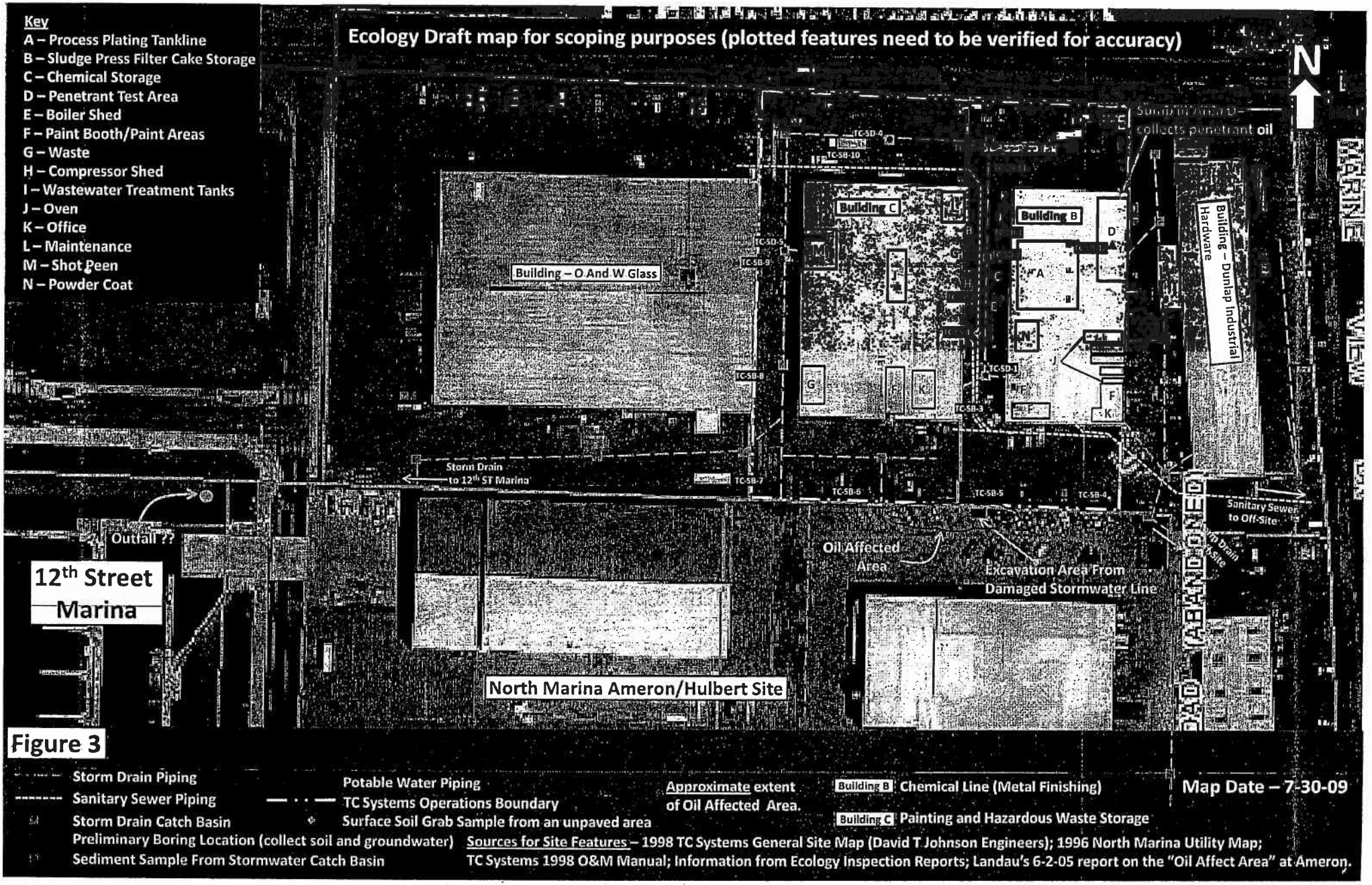


Figure1
1966 Aerial Photo Showing the Ameron/Hulbert Site
(Source: Photo provided by WSDOT)


Key
A – Process Plating Tankline
B – Sludge Press Filter Cake Storage
C – Chemical Storage
D – Penetrant Test Area
E – Boiler Shed
F – Paint Booth/Paint Areas
G – Waste
H – Compressor Shed
I – Wastewater Treatment Tanks
J – Oven
K – Office
L – Maintenance
M – Shot Peen
N – Powder Coat
Ecology Draft map for scoping purposes (plotted features need to be verified for accuracy)
N
Sump in Area D – collects penetrant oil
Building C
Building B
Building – O And W Glass
Building – Dunlap Industrial Hardware
TC-SD-4
TC-SB-10
TC-SD-5
TC-SB-9
TC-SB-8
TC-SD-1
TC-SB-3
TC-SB-7
TC-SB-6
TC-SB-5
TC-SB-4
Storm Drain to 12th ST Marina
Outfall ??
12th Street Marina
Oil Affected Area
Excavation Area From Damaged Stormwater Line
Sanitary Sewer to Off-Site
North Marina Ameron/Hulbert Site
Figure 3
Storm Drain Piping
Sanitary Sewer Piping
Storm Drain Catch Basin
Preliminary Boring Location (collect soil and groundwater)
Sediment Sample From Stormwater Catch Basin
Potable Water Piping
TC Systems Operations Boundary
Surface Soil Grab Sample from an unpaved area
Approximate extent of Oil Affected Area.
Building B Chemical Line (Metal Finishing)
Building C Painting and Hazardous Waste Storage
Map Date – 7-30-09
Sources for Site Features – 1998 TC Systems General Site Map (David T Johnson Engineers); 1996 North Marina Utility Map; TC Systems 1998 O&M Manual; Information from Ecology Inspection Reports; Landau's 6-2-05 report on the "Oil Affect Area" at Ameron.

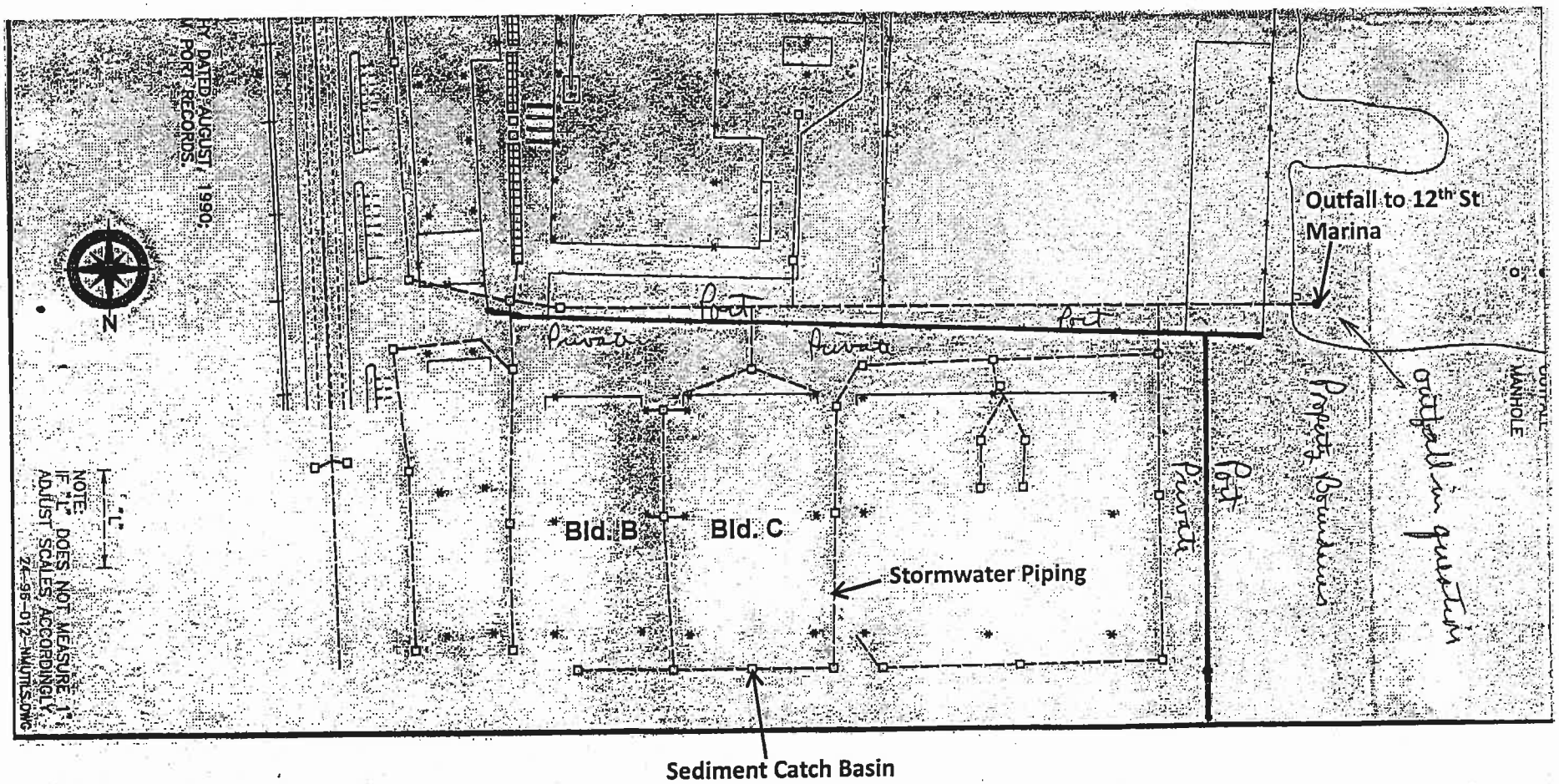


Figure 2
June 1996 North Marina Utility Map
(Source: Port of Everett)

Full history.doc

The facility received the following visits by Ecology under the authority of Chapter 173-303 WAC and Chapter 70.105 RCW:

- On March 20, 1997 Ecology inspected TC Systems and found several violations of state hazardous waste regulations. The violations were for failure to: (1) properly label, date, and close containers of dangerous waste; (2) file an amended 1995 annual report to include an estimation of wastewater generation; (3) maintain adequate aisle space between rows of containers of hazardous waste; (4) prepare a written inspection schedule for monitoring and safety equipment; (5) maintain a general facility inspection log; (6) develop and maintain a personnel training plan; (7) meet satellite accumulation standards; (8) update and revise the contingency plan; (9) maintain a weekly inspection log of dangerous waste storage area; and (10) provide secondary containment for containers of liquid dangerous wastes. The due date for correction of these violations was May 9, 1997. The facility returned to compliance on May 26, 1997 by submitting the required compliance certificate.
- On June 2, 1998 Ecology inspected TC Systems as follow up to the 1997 inspection and determined that "while TC Systems has made progress in addressing regulatory compliance, especially regarding paperwork and record keeping, we have concerns about the commitment of facility management to proper dangerous waste management." (Cover letter for 6/2/98 inspection report by Elliott Zimmermann.) The violations found during this inspection were for failure to: properly label, date, and close containers of dangerous waste; designate wastes; meet satellite accumulation standards; use proper manifest tracking procedures. The facility returned to compliance by the due date by submitting the required compliance certificate and other requested documentation.
- On August 6, 1998 Ecology inspected TC Systems to follow up on the June 2, 1998 inspection and found the facility had completed all the required actions as stated in their compliance certificate.
- On May 13, 2003 Ecology inspected TC Systems again and found several violations of state hazardous waste regulations. The violations were for failure to: properly label, date, and close containers of dangerous waste; dispose of waste within the 90 day accumulation time limit; develop and maintain a personnel training plan and training records; meet satellite accumulation standards; and maintain a weekly inspection log of dangerous waste storage area. The facility returned to compliance by the due date by submitting the required compliance certificate and other requested documentation.
- On August 8, 2006 Ecology inspected TC Systems again and found several violations of state hazardous waste regulations. The violations were for failure to: properly label, date, and close containers of dangerous waste; develop and maintain a personnel training plan and training records; meet satellite accumulation standards; develop and maintain a contingency plan; maintain a weekly inspection log of dangerous waste storage area; and provide secondary containment for containers of liquid dangerous wastes. The due date for correction of these violations was November 30, 2006. There are no records to show that TC Systems submitted any "return to compliance" documentation or responded in any way to that inspection report.

- On November 6, 2007 Ecology inspected TC Systems again and found several violations of state hazardous waste regulations. The violations were for failure to: properly label, date, and close containers of dangerous waste; develop and maintain a personnel training plan and training records; meet satellite accumulation standards; develop and maintain a contingency plan; maintain a weekly inspection log of dangerous waste storage area; provide secondary containment for containers of liquid dangerous wastes; respond to release of used oil; offer dangerous waste to a TSD; designate wastes; meet spent antifreeze management requirements; label used oil containers; keep containers of used oil closed; remove product labels; meet the 90-day accumulation time limit; providing adequate emergency response equipment; properly store and label universal waste; conduct general facility inspections; submit the annual report by the due date. The original compliance due date was January 28, 2008. After several extensions to April 30th, 2008, the facility submitted all requested items to demonstrate compliance.
- On July 8, 2008 Ecology inspected TC Systems again and found numerous repeat violations as well as several new ones. The violations were for failure to: properly label, date, and close containers of dangerous waste; develop and maintain a personnel training plan and training records; meet satellite accumulation standards; develop and maintain a contingency plan; maintain a weekly inspection log of dangerous waste storage area; provide secondary containment for containers of liquid dangerous wastes; respond to release of used oil; offer dangerous waste to a TSD; designate wastes; meet spent antifreeze management requirements; label used oil containers; keep containers of used oil closed; remove product labels; meet the 90-day accumulation time limit; maintain final copies of manifests; properly store and label universal waste; conduct general facility inspections; submit an accurate annual report; meet permit-by-rule requirements; and keep secondary containment of the tank line clean and dry. The original compliance due date was August 27, 2008.

TC Systems has exhibited an eleven year history of repeat violations of Dangerous Waste Regulations, Chapter 173-303 WAC. The following chart shows the violations for each inspection:

	Violation	1997	1998	2003	2006	2007	2008
1	Spill Clean up (used oil) / illegal disposal					X	X
2	Designation		X			X	X
3	Closed Container	X	X	X	X	X	X
4	Labeling Containers	X	X	X	X	X	X
5	Start Dates on Containers	X	X	X	X	X	X
	General Facility Inspections	X				X	X
	Contingency Plan	X			X	X	X
6	Training Plans/Records	X		X	X	X	X
	Weekly Inspections	X		X	X	X	
	Satellite Accumulation Standards	X	X	X	X	X	X
	Secondary Containment	X			X	X	
	Accumulation Time Limits			X			
	Proper Manifest recordkeeping		X				X

Annual Reporting issues	X		X	X
Adequate Aisle Space	X			
Used Oil container management			X	
Spent Antifreeze container management			X	
Universal Waste management			X	X

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Entity Name:	NORTON INDUSTRIES, INC.
Firm Name:	NORTON INDUSTRIES, INC.
License Type:	Washington State Business
Entity Type:	Profit Corporation
UBI:	600552787 Business ID:001 Location ID:0002
Status	To check the status of this company, go to Secretary of State.

Location Address:
1020 10TH ST
EVERETT, WA, 98201

Mailing Address:
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TC SYSTEMS STORM DRAIN SEDIMENT SAMPLING AND ANALYSIS PLAN – SEPTEMBER 15, 2009

1. INTRODUCTION

This Storm Drain Sediment Sampling and Analysis Plan (SAP) has been prepared to describe the proposed scope of work for storm drain sediment sampling at the TC Systems Inc. (TC Systems) facility in Everett, Washington (see **Exhibit 1**). Storm drain sediment samples will be collected to characterize sediment quality within the TC System catch basins which discharge through the outfalls to the marine sediment in the 12th Street Waterway. This SAP identifies the purpose and objectives of the sediment data collection, and specifies field and quality assurance/quality control (QA/QC) procedures to be implemented during sampling activities and laboratory analyses to meet the requirements of Washington Administrative Code (WAC) 173-340, Model Toxics Control Act (MTCA) and WAC 173-204, Sediment Management Standards (SMS).

Provided below is some background information on TC Systems operations, results from E3RA's Phase I ESA, information on the North Marina Ameron/Hulbert cleanup site, and Ecology's plan for collecting storm drain sediment samples at the TC Systems facility.

2. OWNERSHIP/OPERATIONAL HISTORY

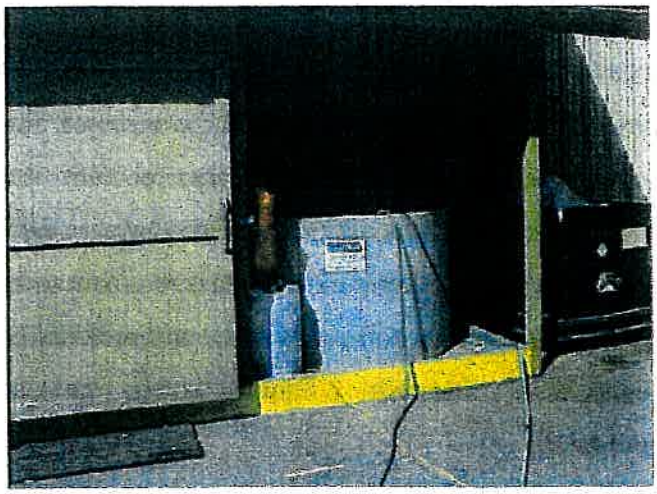
TC Systems operates on two parcels of land (Snohomish County Tax Parcel No's. 29051800200700 and 29051800201300) owned by Norton Industries, Inc. (Norton Industries). According to tax records, the parcel of land occupied by Building B is located at 1104 10th Street Everett, Washington. The address for Building B in the late 1980s/early 1990s was 1028 W. Marine View Drive, Everett, Washington. The parcel of land occupied by Building C is located at 1032 10th Street, Everett, Washington. According to Mr. James Shack, President of Norton Industries, Buildings B and C were constructed in the 1980s. Snohomish County Tax Assessor Records show that Building B was constructed in 1979, and Building C in 1980. According to Mr. Shack, the buildings were constructed over an historic shingle mill (i.e., Jamison Shingle Mill) that was built on pilings and operated for over 40 years. Early Sanborn Fire Insurance Maps (Sanborn Maps) show that the Jamison Shingle Mill was in operation at least as far back as

3. DESCRIPTION OF CURRENT OPERATIONS

TC Systems supports the aviation and boating industries by chemically treating and painting metal parts using their chemical line and paint booths. TC Systems applies various surface treatments and coatings to prefabricated metal parts, and conducts non-destructive testing of metal parts using a penetrant oil as well as sand blasting for surface preparation. Wastewater from the chemical tank line is pre-treated to meet local discharge limits, and discharged to the sanitary sewer under a permit with the City of Everett. Mr. Charles Souder, general manager at TC Systems, explained to Ecology during the meeting on July 23, 2009 (see Section 5) that TC Systems does not conduct any metal plating activities. It is noted that the terms plating solutions, plating process tanks, and spent plating are referenced in the *1998 TC Systems Operations and Maintenance Manual for Industrial Wastewater Pretreatment Systems*. A description of the waste treatment operations as provided in 2004 Ecology stormwater inspection report is provided below.

TC Systems waste goes through a sludge press and the wastewater is then pumped through a rubber hose (see Photo 1 below) across the driveway between two adjacent buildings (i.e., Building B and C) to an outside container. The water has the potential to contain chromium and is treated at this container. It is then again pumped through a hose across the same driveway to a container inside the building. It is tested in part here for metals and pH. The water is either discharged to sanitary sewer or stored for hauling.

Photo 1 (4/20/04 Ecology Inspection)



Ecology recently (spring of 2009) fined TC Systems $24,000 for repeated failures to properly manage its hazardous waste. Ecology also issued an order (DE 6459) on March 25, 2009 directing the company to take a series of steps to correct the problems and provide better protection of public safety, health and the environment. A selection of photos from the Ecology hazardous wastes inspections are provided below.

Photo 2 (7/8/07 Ecology Inspection; cracks in secondary containment)

Photo 3 (7/8/07 Ecology Inspection; containment wall not properly moisture sealed)

Photo 6 (11/6/07 Ecology Inspection; compressor oil leak)

4.2 ECOLOGY INDUSTRIAL STORMWATER PERMIT

TC Systems has an industrial stormwater permit (Permit# S03-000762D) issued by Ecology. Ecology files show that the permit expired on May 31, 2008. The permit indicates that industrial stormwater from the site discharges to Port Gardner. A 1996 map of North Marina showing the location of utilities indicates that industrial stormwater from TC Systems discharges to the 12th Street Marina (**Exhibit 3**). Based on discussions during Ecology's July 23, 2009 meeting with TC Systems (see Section 5), TC Systems personnel currently do not know where the discharge point is for their facilities industrial stormwater. The compliance history (based on available files from Ecology's Northwest Regional Office [NWRO]) associated with the industrial stormwater permit is presented below.

- **December 28, 1992** – Ecology received TC Systems application for coverage under the stormwater baseline general permit.
    - Regulatory status shows a state waste discharge permit number of WAD088722947. Mr. Fred Owen signed the notice of intent for Baseline General Permit to Discharge Stormwater Associated with Industrial Activity on September 11, 1992.
- **March 10, 1993** – Ecology sent a letter to Orin Smith of TC Systems providing instructions related to coverage under the stormwater baseline general permit (SO3-000762). The most

These issues were addressed with Mike Farnham the Environmental Facility Manager. Ecology inspectors observed the following:

- Paint chips were visible next to the secondary containment berm. This is in close proximity to the storm drains.
- The outside area where waste containers and product containers are stored is only partially covered by a roof.
- The aladine rinse tank should be covered.
- The pump associated with the compressor shed is leaking oil and fluids.
- The shed where the previous pump is housed shows oil and fluids leaking onto open pavement under the shed.
- Leaking oil was noted in a place lacking containment.
- Waste materials were noted outside with no cover or containment.

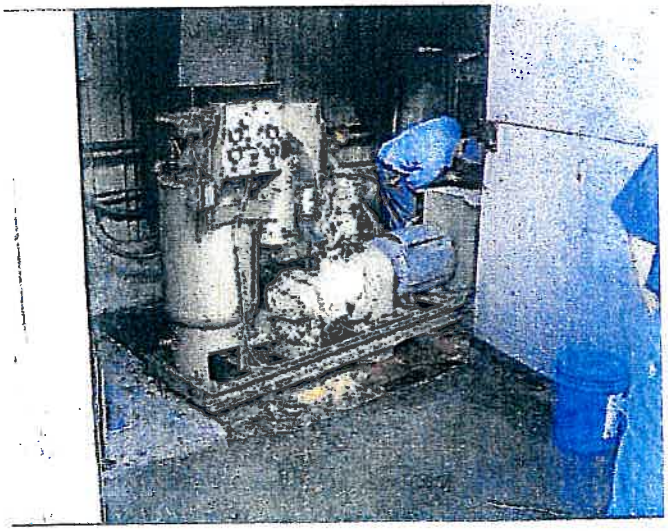
- **December 1, 2004** – Ecology made modifications to the industrial stormwater general permit.
- **Permit Renewal** – SO3000762D – 08/21/2002 05/31/2008.
- **October 24, 2007 Letter from Ecology** – Violations as identified in the September 17, 2007 inspection (10-24-07 Informal Action/Warning Letter from Ecology) are presented below.
  - Failed to perform quarterly sampling and visual monitoring of the facility's discharge.
    - Monitoring was conducted twice in 2004 (1st and 3rd Qtrs.). No other monitoring exists. Monitored for lead, copper, zinc, oil and grease, pH, and turbidity. A zinc exceedance (630 ug/L) occurred in July 2004.
    - The Ecology database shows that DMRs had only been submitted for the 1st and 3rd quarters of 2004. Mr. Souder said that they had stopped stormwater sampling after the lab they were using had been shut down. The Ecology inspector told Mr. Souder that not sampling stormwater as required by condition "S4" is a violation of the permit.
  - Failed to produce and has not been implementing an adequate SWPPP.
    - The SWPPP was inadequate and incomplete. Much of the information within the SWPPP needed updating to reflect current onsite conditions. The SWPPP was missing several required sections including a monitoring plan, a facility map, visual monitoring logs, and a designated stormwater pollution prevention team.
  - Failed to retain adequate records to document compliance with the general permit.
  - Good Housekeeping practices should be implemented on-site to reduce stormwater pollution potential from items such as stored leaky drums collecting stormwater onsite. Ensure that all chemical drums (including empty drums) are properly sealed and clean on their exteriors.

Photo 9 (4/20/04 Ecology Inspection; oil and fluids leaking onto open pavement under shed)

Photo 10 (4/20/04 Ecology Inspection; leaking oil not in a contained area)

Photo 13 (9/17/07 Ecology Inspection; oily sheen discharging to storm drain)

Photo 14 (9/17/07 Ecology Inspection; compressor oil leak)



4.3 CITY OF EVERETT INDUSTRIAL WASTEWATER PERMIT

TC Systems operates a wastewater pretreatment system at their facility that provides wastewater treatment before it is discharged to the City of Everett sewer system. The facility has an Industrial Pretreatment Discharge Permit (last issued on 4/30/04; expires 4/29/09) with the City of Everett Public Works and has received over 25 Notices of Violation from the City based on available Ecology files from 1990 to 1998. TC Systems has also received numerous notices of significant non-compliance of its industrial wastewater permit from the City of Everett. Numerous administrative violations have occurred along with failing to sample for the required parameters and exceedances of pretreatment standards for lead, zinc, copper, pH, and fats, oils, and grease (FOG). City of Everett fines against TC Systems have totaled over $8,000 dollars. In 1999, TC Systems had a spill (reportedly 200 gallons of diluted chromic conversion coating) to their wastewater treatment plant as reported in Ecology's Environmental Report Tracking System (ERTS). Note, the files maintained by Ecology may not include all of the files related to TC Systems Industrial Wastewater Permit. It also noted that Mr. Charles Souder (TC Systems) stated in the May 2009 Phase I ESA that he was not aware of any violations related to the wastewater permit with the City of Everett. The compliance history (based on available files from Ecology's NWRO) associated with the industrial wastewater permit is presented below.

- **April 6, 1990** – City of Everett notice of violation (NOV) to Tri-Coatings (Fred Owen – General Manager). Tri-Coatings address is 1028 W. Marine View Dr. Discharges from Tri-Coatings have exceeded effluent limitations for pH and Heavy Metals.
- **March 19, 1991** – City of Everett NOV to Tri-Coatings (Fred Owen – General Manager). Tri-coatings has exceeded City of Everett pretreatment standards for zinc and copper. The magnitude and duration of these violations has placed Tri Coatings in Significant Noncompliance (SNC). *SNC indicates chronic violations. That is, sixty-six percent or more of the measurements exceed the daily maximum/minimum limit or average limit for the same pollutant parameter by any amount in a 6 month period. Technical Review Criteria (TRC) Violations. Thirty-three percent or more of the measurements equals or exceeds the product of the daily maximum/minimum limit or the average limit multiplied by the applicable criteria (1.2 times the limit for metals) in a 6 month period.*
- **July 30, 1992** – City of Everett NOV to TC Systems (Fred Owen – General Manager). TC Systems address is 1028 W. Marine View Dr. TC Systems has exceeded Federal Categorical pretreatment standards for Zinc in the sample you took on June 15, 1992. The zinc concentration was 3.70 mg/L and the discharge limit is 2.61 mg/L.
- **March 10, 1994** Discharge Permit Fact Sheet – Wastes generated – Metals, Fats, Oil, and Grease (FOG), cyanide, total toxic organics (TTO).

- **December 21, 1995** – City of Everett NOV to TC Systems (K. Douglas Miracle – General Manager). TC Systems is in violation of Industrial Pretreatment Discharge Permit #7708, Section IV E. titled "Monthly Self Monitoring Reports", which states, "all monitoring results obtained during the month shall be summarized and reported on a form approved by the City, to be submitted no later than the last day of the month following the completed reporting period." The monthly self monitoring report for the month of October 1995, which was faxed to the Industrial Pretreatment office December 1, 1995, was late. TC Systems is hereby assessed a penalty of $30.00 for the above described violations.
- **January 26, 1996** – City of Everett NOV to TC Systems (K. Douglas Miracle – General Manager). TC Systems letter dated January 9, 1996 indicates that during a twelve-hour period on January 4th and 5th, there was a discharge of rinsate water with a pH of 2.5. This is close to being characterized as a Dangerous Waste as described in WAC 173-303.
- **January 3, 1997** – City of Everett NOV to TC Systems (K. Douglas Miracle – General Manager). Your October Self Monitoring Report indicated that you failed to sample for these parameters (i.e., metals and FOG) for the month of October, resulting in eleven violations of your permit requirements. TC Systems is hereby assessed a penalty of $30.00 for the above described violations.
- **January 30, 1997** – City of Everett NOV to TC Systems (K. Douglas Miracle – General Manager). Your November Self Monitoring Report indicated that you failed to sample for these parameters (i.e., total and nonpolar FOG) for the month of November, resulting in two violations of your permit requirements. TC Systems is hereby assessed a penalty of $250.00 for the above described violations.
- **May 19, 1997** – City of Everett NOV to TC Systems (K. Douglas Miracle – General Manager). TC Systems exceeded Federal Categorical pretreatment standards for zinc in the sample taken by City of Everett personnel on March 17, 1997 (the sample concentration was 2.96 mg/L). When this number is averaged with the zinc sample reported in your March Self Monitoring Report of 1.96 mg/L. (sampled on March 25, 1997), the average is 2.46 mg/L. This value exceeds the monthly average limit of 1.48 mg/L by an amount greater than the Technical Review Criteria (TRC) which is used to determine Significant Non Compliance (SNC). TC Systems was placed in Significant Non Compliance (SNC).
- **June 5, 1997** – City of Everett NOV to TC Systems (K. Douglas Miracle – General Manager). TC Systems exceeded Federal Categorical pretreatment standards for zinc in the results reported on your April 1997 self monitoring report. The zinc concentration was reported at 3.23 mg/L and exceeded the daily maximum limit of 2.61 mg/L and the monthly average limit of 1.48 mg/L by an amount greater than the Technical Review Criteria (TRC) which is used to determine Significant Non Compliance (SNC). TC Systems was assessed a penalty of $1,000.00 for the above described violations.
- **July 31, 1997** – City of Everett NOV to TC Systems (K. Douglas Miracle – General Manager). TC Systems exceeded Federal Categorical pretreatment standards for zinc in the results reported on your May 1997 self monitoring report. The zinc concentration was reported at 1.85 mg/L and exceeded the monthly average limit of 1.48 mg/L by an amount greater than the Technical Review Criteria (TRC) which is used to determine Significant Non Compliance (SNC).

- **April 8, 2002** – City of Everett NOV to TC Systems (Charles Souder – General Manager). Tampered with City of Everett compliance sampling efforts. Incurred a $360 fine.
- **September 30, 2002** – City of Everett NOV to TC Systems (Charles Souder – General Manager). Failed pH levels.
- **May 19, 2004** – City of Everett NOV to TC Systems (Charles Souder – General Manager). TC Systems was cited for falling behind on their utility bills, including Pretreatment Fees, to the point where the balance of $4,382.78 is being sent to a collection agency. Effective at 11:59 PM, May 31, 2004, TC Systems authorization to discharge pretreated industrial wastewater to the City of Everett sewer system will be suspended.
- **September 21, 2004** – City of Everett NOV to TC Systems (Charles Souder – General Manager). Failed pH levels.
- **October 26, 2004** – City of Everett NOV to TC Systems (Charles Souder – General Manager). Failed pH levels.
- **December 27, 2004** – City of Everett NOV to TC Systems (Charles Souder – General Manager). A sample collected on September 30, 2004 revealed a lead concentration of 0.852 mg/L, exceeding the permitted daily average limit of 0.69 mg/L; this level also exceeds the monthly average limit of 0.43 mg/L. TC Systems also failed to accurately report this violation as required in Section III. H. of your Discharge Permit.
- **September 20, 2005** – City of Everett NOV to TC Systems (Charles Souder – General Manager). Self-monitoring report was submitted late and failed closed cup flashpoint requirement. Incurred a $300 fine.
- **January 31, 2008** – City of Everett NOV to TC Systems (Charles Souder – General Manager). TC Systems failed to conduct required monitoring of their discharge and did not submit required reports for the first three quarters of 2007. These failures are serious violations and put TC Systems into Significant Non-Compliance as defined in Everett Ordinance 2034-95 (as amended) and 40 CFR 403. Incurred a $1,000 fine.
- **June 17, 2008** – City of Everett NOV to TC Systems (Charles Souder – General Manager). The required self-monitoring report for April, due May 31, 2008, was not submitted until June 11, 2008. Incurred a $660 fine.

5. JULY 23, 2009 MEETING AT TC SYSTEMS

A meeting was held on July 23, 2009 between the Washington State Department of Ecology (Ecology) and TC Systems, Inc. (TC Systems) to discuss sampling needs at the TC Systems property. The meeting was held at TC Systems facility located at 1032 West Marine View Drive, Everett, Washington. As part of the meeting, TC Systems provided Ecology with a tour of their facility. It was decided during the meeting that Ecology would provide TC Systems and the property owner (Norton Industries, Inc.) a scope of work (SOW) for conducting a Phase II Environmental Site Assessment (ESA) at TC Systems. Ecology understands that TC Systems 25

- General Paint Waste: paint booth filters (managed as dangerous waste for heavy metals) and paint solids.
- Waste Flammable Liquids – Toluene, xylenes, methylene chloride, and methanol were identified as being present in waste flammable liquids based on a Tri-Coatings 1990 waste profile.
- Hazardous Waste Liquids – According to a Tri-Coatings 1989 waste manifest, hazardous waste liquids containing 1,1,1-Trichloroethane were shipped as waste.
- Used oil from compressors, oil filters, equipment, and one company truck is also stored at the facility, as well as spent antifreeze.
- Spent fluorescent bulbs may be taken to the local transfer station.
- Sand blasting material.
- Penetrant oil and associated rinsewater captured in a sump.

7. E3RA, INC PHASE I ESA FINDINGS

Ecology understands that TC Systems 25 year lease from Norton Industries will soon expire and the company has a prospective buyer for their operations. As a result, E3RA, Inc. performed a Phase I ESA on behalf of TC Systems in April 2009. The results of the Phase I ESA indicated three recognized environmental conditions (REC) as follows:

- REC – Multiple ASTs.
- REC – Compressor Oil Leak.
- REC – Dye penetrant in direct contact with the concrete.
    - E3RA, Inc. observed the dye penetrant leaking from application tanks located in the northeast corner of Building B. To collect and reuse the penetrant, a small sump has been cut in the concrete floor near the application tanks. Ecology walked the penetrant testing area during their July 23, 2009 meeting at TC Systems and observed penetrant oil in contact the concrete slab. During Ecology's visit, Mr. Charles Souder of TC Systems indicated that he built the sump himself (Mr. Souder started working for TC Systems in 2003). Mr. Souder explained to Ecology that the sump is used to collect and reuse the penetrant in the process. Ecology notes that the 1998 TC Systems Operations and Maintenance Manual describes a sump also being present, but the process for reusing the penetrant is different than what Mr. Souder described during Ecology's site visit (see below). The sump is used to collect rinsewater, not penetrant oil, which is then transferred to the sewer discharge line.
        - **1998 O&M Description of Penetrant Washing** – *Penetrant oil is applied to metal parts as a part of non-destructive testing of metal parts. After application, excess penetrant is removed by water rinsing of the parts. TC*

Photo 18 (5/31/09 E3RA Photos; View of dye penetrant sump in concrete slab)

Photo 19 (5/31/09 E3RA Photos; View of leaking compressor oil)

soil and groundwater associated with the conditions observed during the November 2004 Site reconnaissance. Soil sampling results yielded concentrations of cPAHs, PCBs, and metals above preliminary cleanup levels. Petroleum odors and sheens were noted in several borings. Visual contamination was not sampled. Arsenic and bis-(2ethylhexyl)phthalate were the only chemicals that exceeded preliminary cleanup levels in groundwater samples.

9. STORM DRAIN SEDIMENT SAMPLING PROCEDURES

This section describes the procedures associated with sampling storm drain catch basins at TC Systems. The section also specifies field and quality assurance/quality control (QA/QC) procedures to be implemented during sampling activities along with laboratory analyses to meet the requirements of Washington Administrative Code (WAC) 173-340, Model Toxics Control Act (MTCA) and WAC 173-204, Sediment Management Standards (SMS).

9.1 SAMPLE LOCATION AND RATIONALE

Proposed storm drain sampling locations (TC-CB-1 to TC-CB-3) are shown on **Exhibit 5**. The sampling locations are tentative and may be changed based on the quantity of sediment available in the catch basins as well as visual observations made during field sampling (e.g., presence of odors, petroleum sheens, discolored sediments, etc.). Sediment samples from three stormwater catch basins have been identified for sampling. Stormwater catch basement sediment samples will be analyzed for priority pollutant metals including hexavalent chromium, semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), TPH-Dx, percent solids, total volatile solids (TVS), and total organic carbon (TOC).

9.2 SAMPLING PROCEDURES

9.2.1 Sampling Methods

Sampling equipment will be selected based on the presence and depth of water, solids water content, and catch basin depth. Note that temporary modifications in response to non-typical field conditions or equipment malfunction shall be recorded in the field log and field forms.

2. A decontaminated corer will be advanced into catch basin solids with a smooth, continuous motion. The corer will be twisted and the sample withdrawn in a single motion.
3. The nosepiece of the sampler will be removed and the sample will be withdrawn into a stainless steel bowl or tray.
4. Steps 2 and 3 will be repeated in each corner (or, if round, each compass point) and the center of the catch basin. Material recovered at each point will be a composite of the total depth of accumulated material.
5. The solids will be homogenized thoroughly using a decontaminated or disposable stainless steel spoon.
6. Conduct steps 4 through 6 as specified in Section 9.2.2.1.

9.2.1.2.2 Clamshell-Type Dredge Sampler

Clamshell-type dredge samplers like the Petite Poner® and Van Veen® 0.025-m^2 dredge sampler are capable of sampling moist and wet solids, including those below standing water. However, penetration depths usually will not exceed several inches, so it may not be possible to collect a representative sample if the solids layer is greater than several inches.

The sampling action of these devices causes agitation currents that may temporarily re-suspend some settled solids. This disturbance can be minimized by lowering the sampler slowly and by allowing slow contact with the solids.

Samples collected with clamshell-type dredge samplers should meet the following acceptability criteria to ensure that representative samples have been collected:

- Solids do not extrude from the upper surface of the sampler.
- Overlying water is present in the sampler (indicating minimal leakage).
- Overlying water is clear and not excessively turbid.
- Desired depth of penetration has been achieved.
- The solids-water interface is intact and relatively flat, with no sign of channeling or sample washout.
- There is no evidence of sample loss.

The following procedures will be used when sampling moist, wet, or submerged solids with a dredge sampler:

3. Solids collected in the sampling jar or stainless steel cup will be allowed to settle out to the maximum extent practicable. After settling, excess water will be decanted from the sample jar (taking care not to allow fines to be released) and into a clean bucket. After all sampling is completed, decanted water in the bucket will be returned back to the storm drain.
4. The sampled solids will be placed into a decontaminated stainless steel bowl or tray. Step 2 and 3 will be repeated as necessary to obtain the required volume. The solids will be homogenized thoroughly using a decontaminated or disposable stainless steel spoon.
5. Conduct steps 4 through 6 as specified in Section 9.2.2.1.

9.2.2 Decontamination

The sampling equipment (i.e., stainless steel scoops and bowls, soil augers, petite ponar sampler, and sediment core sampler) were decontaminated using the methods detailed below prior to going into the field.

- Wash using a laboratory-grade non-phosphate detergent (i.e., Liqui-Nox® detergent).
- Rinse with tap water.
- Wash with 10% nitric acid. This step was done because the samples will be analyzed for metals.
- Rinse with distilled water.
- Rinse with acetone, then hexane. This step is intended to remove trace organics from the sampling equipment.
- Wrap with aluminum foil (shiny side of foil facing out)

Sub-sampling and processing equipment will be decontaminated before use at each station as necessary in order to prevent cross-contamination of samples. Necessary decontamination of equipment in the field will be accomplished using the procedure detailed below.

All sampling equipment (e.g, sampling device, spoons, bowls, and reusable containers from which samples are transferred to sample jars) will be washed with a Liqui-Nox®/water solution, then rinsed with tap water, and finally rinsed with distilled water. Any deviations from these procedures will be documented in the field notebook.

onsite processes, etc. Site features, distances, flow directions, and gradients will be noted or sketched on a site map.

- The dimensions of the catch basins will be recorded along with a diagram of catch basin inlet/outlet pipes. The source of inlet flows and destination of outlet flows will be noted, if known.
- The presence of water, visible flows, signs of flooding, clogging, debris in or around the catch basin, blocked inlets/outlets, staining, etc. will be noted in the log book.
- Any apparent evidence of contamination in the catch basin, such as odor, sheen, discoloration, etc., of water or solids will be noted in the log book.
- The depth of solids in the catch basin and the total depth of the catch basin or sump will be measured and recorded in the log book. A disposable wooden dowel will be used to probe the total depth of the catch basin.
- The following visual observations will be noted for each recovered sample:
    - Color.
    - Texture, estimates of particle size fractions (as soil classification).
    - Amount and type of debris (Note: any large debris observed in the sample, including sticks, leaves, beverage containers, miscellaneous pieces of plastic and metal, stones and gravel, etc., should be removed, but paint chips and small organic matter should be left in the sample).
- Sampling locations within the catch basins will be noted on a map along with any special features such as sumps, inlets and outlets, etc.
- All sampling equipment will be decontaminated using documented procedures (see Section 9.2.2) before and after any sampling activities. The decontamination procedures will be recorded in the log book.
- Any deviations from the specified sampling procedures or any obstacles encountered will be noted in the log book.

9.2.5 Sample Labeling and Tags

Labels and tags will be attached to the outside of all sample containers prior to collection of the samples. The following information will be indicated on each sample label with a waterproof marker:

- Sampling identification.
- Project name.
- Date and time, initials of sampler.
- Analysis to be performed; and preservatives used (if any).

9.2.6.1 *Field Custody Procedures*

A limited number of people will handle the samples. The sampler will be personally responsible for completion of the chain-of-custody form and the care and custody of collected samples until they are transferred to another person.

9.2.6.2 *Transfer of Custody*

When samples transfer possession, the individuals relinquishing and receiving the samples will sign the chain-of-custody form and document the date and time of transfer. The sample collector will sign the form in the first signature space. The sample receiver will then sign the form in the second signature space.

9.2.6.3 *Laboratory Custody Procedures*

A designated sample custodian in the laboratory will accept custody of the samples. The custodian will verify that the sample identification numbers match those on the chain-of-custody record. The laboratory will maintain sample security and custody as appropriate.

9.2.7 Delivery of Samples to Analytical Laboratory

The samples will transported back to Ecology Headquarters and stored in the walk-in cooler inside the building. Daily courier service is available from the Ecology Headquarters building in Lacey, Washington. The courier starts work at the Ecology Headquarters building Monday through Friday at 7:00 a.m.

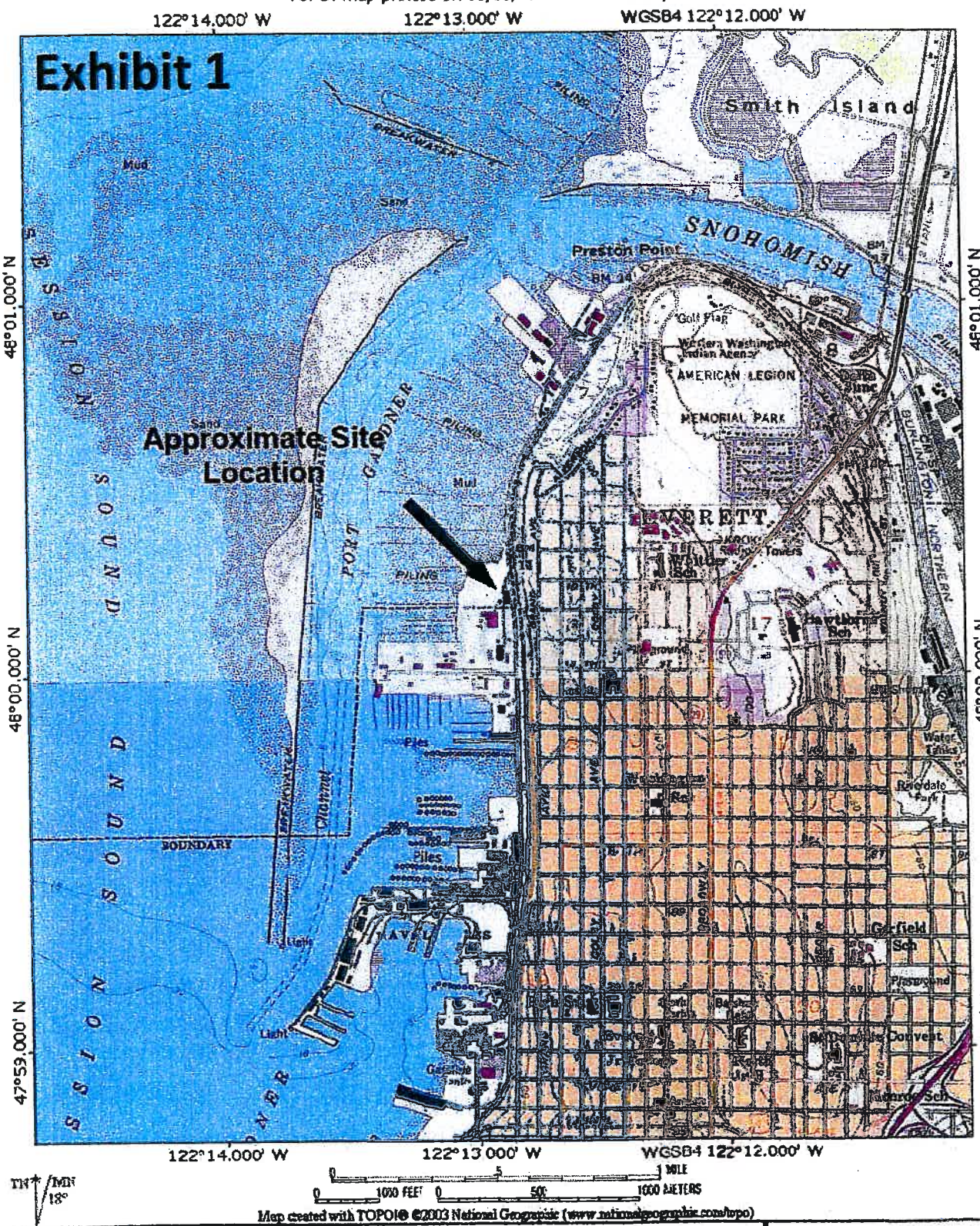
A copy of the chain-of-custody form or a note about where to find the samples will be left in the Ecology courier "In-basket." This will alert the courier that the samples are ready to be taken to the Manchester Laboratory located at the address below.

Manchester Environmental Laboratory
WA State Dept. of Ecology
Attn: Sample Receiving
7411 Beach Dr E
Port Orchard, WA 98366-8204

11. CORRECTIVE ACTIONS TO ACHIEVE PQLs

Reasonable adjustments to sample volume used for analysis will be made to account for total solids content and total organic carbon (TOC) in an effort to achieve Ecology's SQS criteria. However, low TOC levels (0.1% to 0.3%) have been observed in Puget Sound sediments such that an increase in sample volume used for analysis may not achieve the criteria due to other factors such as matrix interferences that can't be overcome through cleanups due to the sample volume used. The TOC-normalized laboratory reporting limits for several compounds may exceed SQS criteria if TOC content in sediments is very low (0.1% to 0.3%); therefore, the results will also be reported on a dry weight basis and compared to the dry weight analogs of the SMS criteria.

Analyses will target the PQLs in Table 5 of Ecology's 2008 SAPA. The pertinent portions of that table are reproduced here as **Exhibit 8**. In the event that the laboratory reporting limits exceed SQS criteria, every effort will be made by the laboratory to resolve the cause of the exceedance and achieve the requested criteria. The laboratory will immediately contact the Ecology project manager regarding the circumstances and options to resolve the reporting limit exceedances. These efforts may include extracting additional sample volume and performing additional cleanup procedures. The laboratory method detection limits (MDLs) will meet the SQS criteria even with correction for anticipated low TOC. If low TOC results impact the ability to clearly assess if chemical concentrations are above or below SQS criteria, the data for these compounds will be reviewed based on the MDL and a determination will be made as to whether it is appropriate to report an estimated value between the MDL and the RL if it appears the compound is present or to report as not detected at the MDL if it is not present.



E3RA, Inc. P.O. Box 44840 Tacoma, WA 98448 253-537-9400 253-537-9401 fax	**Phase I ESA** **1032 West Marine View Drive** **Everett, Washington**	**FIGURE 1** **SITE LOCATION MAP**

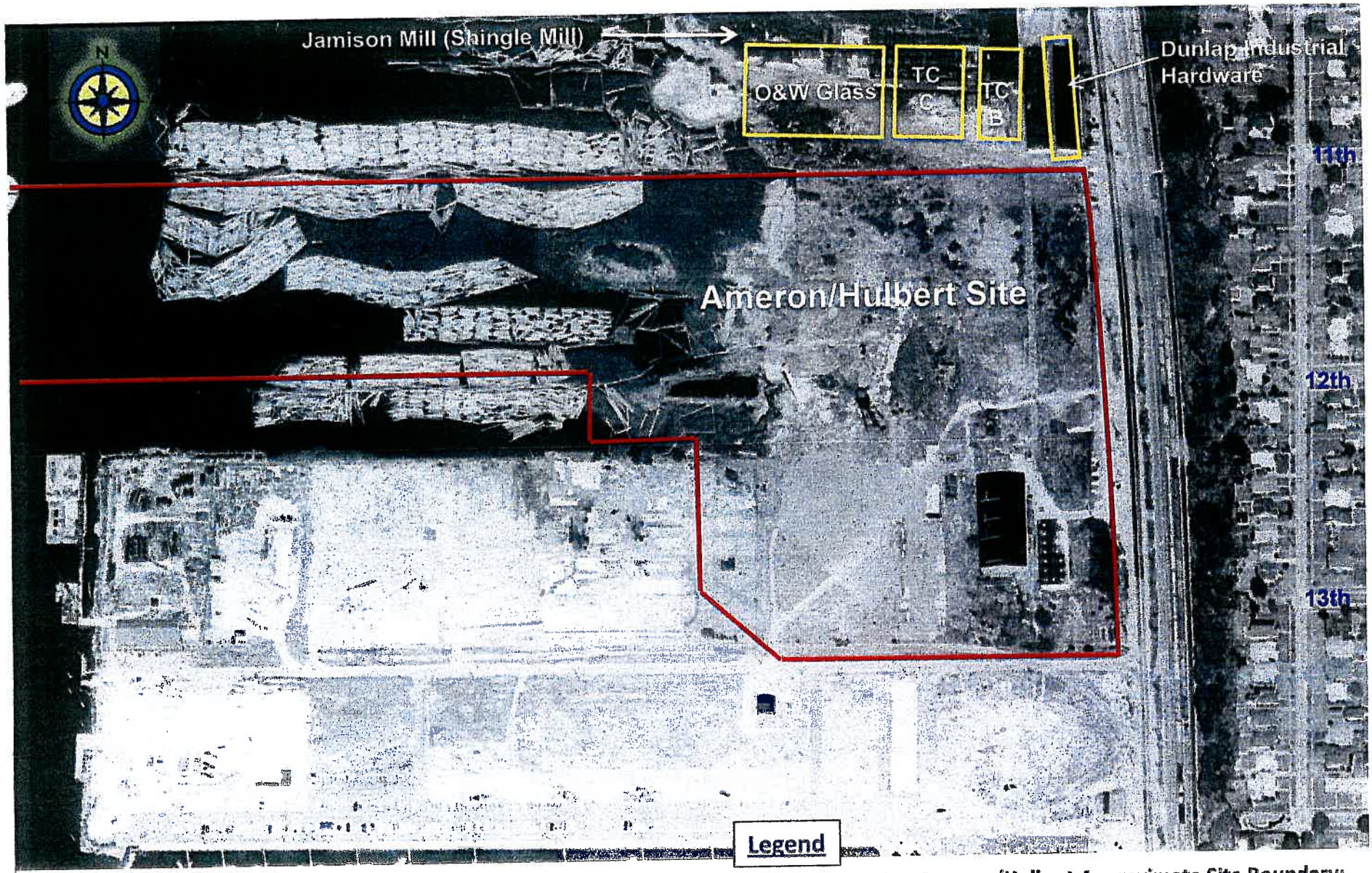


Exhibit 2

1966 Aerial Photo Showing the Ameron/Hulbert Site and the Footprint of Current Buildings to the North

(Source: Photo provided by WSDOT)

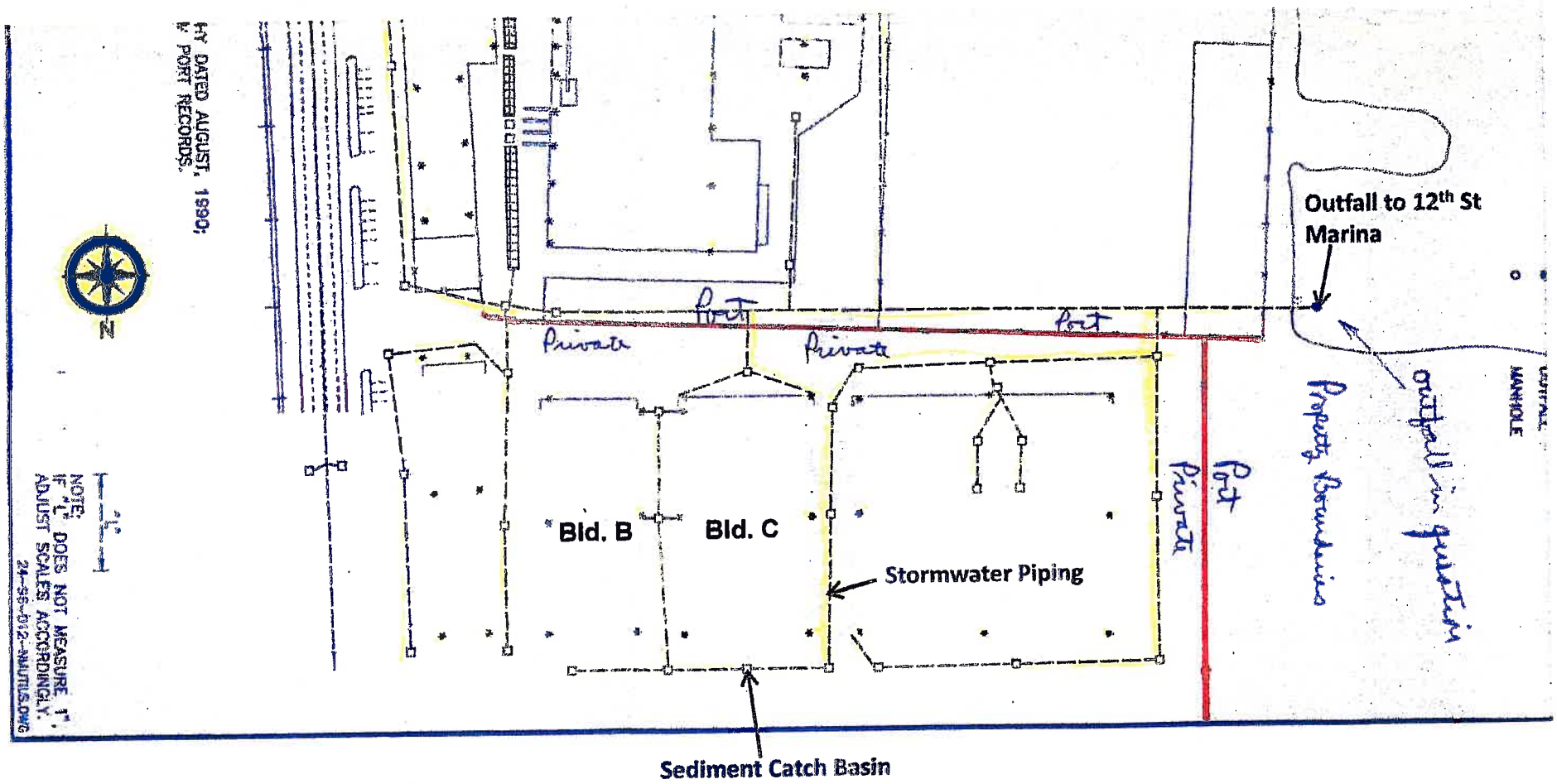


Exhibit 3

June 1996 North Marina Utility Map

(Source: Port of Everett)


Key
A – Process Plating Tankline
B – Sludge Press Filter Cake Storage
C – Chemical Storage
D – Penetrant Test Area
E – Boiler Shed
F – Paint Booth/Paint Areas
G – Waste
H – Compressor Shed
I – Wastewater Treatment Tanks
J – Oven
K – Office
L – Maintenance
M – Shot Peen
N – Powder Coat
Ecology Draft map for scoping purposes (plotted features need to be verified for accuracy)
N
Sump in Area D– collects penetrant oil
Building C
Building B
Building – Dunlap Industrial Hardware
Building – O And W Glass
Storm Drain to 12th ST Marina
Outfall ??
Oil Affected Area
Excavation Area From Damaged Stormwater Line
Sanitary Sewer to Off-Site
12th Street Marina
North Marina Ameron/Hulbert Site
Figure 3
Storm Drain Piping
Sanitary Sewer Piping
Storm Drain Catch Basin
Preliminary Boring Location (collect soil and groundwater)
Sediment Sample From Stormwater Catch Basin
Potable Water Piping
TC Systems Operations Boundary
Surface Soil Grab Sample from an unpaved area
Approximate extent of Oil Affected Area.
Building B Chemical Line (Metal Finishing)
Building C Painting and Hazardous Waste Storage
Sources for Site Features – 1998 TC Systems General Site Map (David T Johnson Engineers); 1996 North Marina Utility Map;
TC Systems 1998 O&M Manual; Information from Ecology Inspection Reports; Landau's 6-2-05 report on the "Oil Affect Area" at Amero
Map Date – 7-30-0


Key
A – Process Plating Tankline
B – Sludge Press Filter Cake Storage
C – Chemical Storage
D – Penetrant Test Area
E – Boiler Shed
F – Paint Booth/Paint Areas
G – Waste
H – Compressor Shed
I – Wastewater Treatment Tanks
J – Oven
K – Office
L – Maintenance
M – Shot Peen
N – Powder Coat
N
Sump in Area D – collects penetrant oil
Building C
Building B
Building – Dunlap Industrial Hardware
Building – O And W Glass
Storm Drain to 12th ST Marina
Outfall ??
12th Street Marina
Oil Affected Area
Excavation Area From Damaged Stormwater Line
Sanitary Sewer to Off Site
North Marina Ameron/Hulbert Site
Exhibit 5
Storm Drain Piping
Sanitary Sewer Piping
Storm Drain Catch Basin
Sediment Sample From Stormwater Catch Basin
Potable Water Piping
TC Systems Operations Boundary
Approximate extent of Oil Affected Area.
Building B Chemical Line (Metal Finishing)
Building C Painting and Hazardous Waste Storage
Map Date – 8/31/0
Sources for Site Features – 1998 TC Systems General Site Map (David T Johnson Engineers); 1996 North Marina Utility Map;
TC Systems 1998 O&M Manual; Information from Ecology Inspection Reports; Landau's 6-2-05 report on the "Oil Affect Area" at Amero

* PQLs

PRE-Sampling Notification

Fax to Manchester Laboratory: (360) 871-8850

Enforcement
Monitoring
Emergency
Class II
Preliminary Invest.
Special turnaround

Project Name: TC Systems Inc **SIC:** J1B72

Requested by: Andy Kallus **Sampling Date(s):** 9/16/09

Program: Toxics Cleanup - HQ **Date to Lab:** 9/17/09

Phone No.: 360-407-7259 **Sample Pickup Location:** Lacey HQ

QAPP: ☐Yes ☒No **Date results needed by:** Standard Turn Around Time

General Chemistry	W	S	O
Alkalinity			
Conductivity			
Hardness			
pH			
Turbidity			
☐ Fluoride ☐ Chloride ☐ Sulfate			
Cyanide ☐ Total ☐ Dissociable			
Total Solids			
Total Nonvolatile Solids			
Total Suspended Solids			
Total Nonvolatile Suspended			
Total Dissolved Solids			
Chlorophyll ☐ Filtered in field ☐ Filtered at lab			
% Solids (A)		4	
% Volatile Solids (TVS) (A)		4	
Total Organic Carbon (A)		4	
Dissolved Organic Carbon			
Biochemical Oxygen Demand (BOD) 5 day			
BOD - Inhibited			
BOD - Ultimate			
Ammonia			
Nitrate-Nitrite			
Orthophosphate			
Total Phosphorous			
☐ TPN ☐ TKN			

Microbiology	W	S	O
Fecal Coliforms ☐ MF ☐ MPN			
E. Coli MF ☐ "MUG" ☐ mTEC2			
E. Coli MPN			
% Klebsiella			
SW846 6010C/7471B (Hg)			

Metals	W_T	W_D	S	O
Priority Pollutant Metals (13 elements)			4	
TCLP metals				
Hardness				
Mercury (Hg) ☐ Low Level ☐ Regular				
Other: List individual elements:				
Chromium 6			4	
(SW3060A - extraction				
(SW7196A - Analyses				
Asbestos				

Organic Chemistry	W	S	O
(A) Base/Neutral/Acids (BNA)**		4	
Polynuclear Aromatics (PAH)			
Volatile Organic Analysis (VOA)			
BTEX			
Pest/PCB's (Organochlorine)			
Pesticides only (Organochlorine)			
PCB's only 8082		4	
OP - Pests (Organophosphorous)			
Herbicides (Chlorophenoxy)			
Nitrogen Pesticides			
PCL Pesticides (8085)			
PBDEs			
Hydrocarbon ID (match to source)			
TPH-ID (gas/diesel/oil)			
$TPH\text{-}G_x$			
$TPH\text{-}D_x$ NWTPH-Dx		4	
TCLP-VOA			
TCLP-BNA			
TCLP-Herbicides			
TCLP-Pesticides			

Comments:

Enter the number of samples in the appropriate box(es) above

W = water S = soil/sediment O = other (please specify)
W_{TR} = water total W_D = water dissolved

** - BNA SQS as per my conversation w/ Stuart Magoon. Include PAHs

* - I would like to meet the PQLs for those chemical reported in the Sed. Management Std (SMS)

(A) Analytical method - As recommended by the lab.

EXHIBIT 7

Matrix Codes

Code	Description
10	Water
11	Field Filtered Water
12	Filter from Water
13	Water to be filtered upon receipt at lab
40	Soil/Sediment
41	Frozen Soil/Sediment (PSEP)
45	Semi-Solid/Sludge
70	Tissue
80	Oil/Solvent
90	Waste
00	Other (Use only if no other apply)

Source Codes

Code	Description
00	Unspecified Source
01	Unknown Liquid Media (Drum/Tank)
02	Unknown Liquid Media (Spill Area)
03	Unknown Liquid Media (Waste Pond)
10	Water (General)
12	Ambient Stream/River
13	Lake Reservoir
14	Estuary/Ocean
15	Spring/Seepage
16	Rain
17	Surface Runoff/Pond (general)
18	Irrigation Canal/Return Flow
20	Well (General)
21	Well (Industrial/Agricultural)
22	Well (Drinking Water Supply)
23	Well (Test/Observation)
24	Drinking Water Intake
25	Drinking Water (At Tap)
30	Effluent Wastewater (General)
31	Municipal Effluent
32	Municipal Inplant Waters
33	Industrial Surface Runoff/Leachate
34	Industrial Effluent
35	Industrial Inplant Waters
36	Industrial Surface Runoff/Pond
37	Industrial Waste Pond
38	Landfill Runoff/Pond/Leachate
40	Sediment (General)
42	Bottom Sediment or Deposit
44	Sludge (General)
45	Sludge (WastePond)
46	Sludge (Drum/Tank)
48	Soil (General)
49	Soil (Spill/Contaminated Area)

Code	Description
50	Bore Hole Material
60	Air (General)
61	Ambient Air
62	Source or Effluent Air
63	Industrial or Workroom Air
70	Tissue (General)
71	Fish Tissue
72	Shellfish Tissue
73	Bird Tissue
74	Mammal Tissue
75	Macroinvertebrate
76	Algae
77	Periphyton
78	Plant/Vegetation
80	Oil/Solvent (General)
81	Oil (Transformer/Capacitor)
82	Oil/Solvent (Drum Tank)
83	Oil/Solvent (Spill Area)
84	Oil/Solvent (Waste/Pond)
90	Commercial Product Formulation
95	Well Drill Water
96	Well Drill Mud
97	Well Sealing Material
98	Gravel Pack Material

TABLE 5. RECOMMENDED SAMPLE PREPARATION METHODS, CLEANUP METHODS, ANALYTICAL METHODS, AND PRACTICAL QUANTITATION LIMITS FOR SEDIMENTS

Chemical	Recommended Sample Preparation Methods[a]	Recommended Sample Cleanup Methods[b]	Recommended Analytical Methods[c]	Recommended Practical Quantitation Limits[d,e]
Metals				**(mg/kg dry weight)**
Antimony	PSEP/3050B	–	6010B/6020/B7041	50
Arsenic	PSEP/3050B	–	6010B/6020/7061A	19
Cadmium	PSEP/3050B	–	6010B/6020/7131A	1.7
Chromium	PSEP/3050B	–	6010B/6020/7191	87
Copper	PSEP/3050B	–	6010B/6020	130
Lead	PSEP/3050B	–	6010B/6020	150
Mercury	–[f]	–	7471A/245.5	0.14
Nickel	PSEP/3050B		6010B/6020	47
Silver	PSEP/3050B	–	6010B/6020	2
Zinc	PSEP/3050B	–	6010B/6020	137
Nonionizable Organic Compounds				**(µg/kg dry weight or as listed)**
LPAH Compounds				
Naphthalene	3540C/3550B/3545	3640A/3660B	8270C/1625C	700
Acenaphthylene	3540C/3550B/3545	3640A/3660B	8270C/1625C	433
Acenaphthene	3540C/3550B/3545	3640A/3660B	8270C/1625C	167
Fluorene	3540C/3550B/3545	3640A/3660B	8270C/1625C	180
Phenanthrene	3540C/3550B/3545	3640A/3660B	8270/1625C	500
Anthracene	3540C/3550B/3545	3640A/3660B	8270C/1625C	320
2-Methylnaphthalene	3540C/3550B/3545	3640A/3660B	8270C/1625C	223
HPAH Compounds				
Fluoranthene	3540C/3550B/3545	3640A/3660B	8270C/1625C	567
Pyrene	3540C/3550B/3545	3640A/3660B	8270C/1625C	867
Benz[a]anthracene	3540C/3550B/3545	3640A/3660B	8270C[h]/1625C	433
Chrysene	3540C/3550B/3545	3640A/3660B	8270C[h]/1625C	467
Total benzofluoranthenes[g]	3540C/3550B/3545	3640A/3660B	8270[h]/1625C	1067
Benzo[a]pyrene	3540C/3550B/3545	3640A/3660B	8270C[h]/1625C	533
Indeno[1,2,3-cd]pyrene	3540C/3550B/3545	3640A/3660B	8270C[h]/1625C	200
Dibenz[a,h]anthracene	3540C/3550B/3545	3640A/3660B	8270C[h]/1625C	77
Benzo[ghi]perylene	3540C/3550B/3545	3640A/3660B	8270C/1625C	223
Chlorinated Benzenes				
1,2-Dichlorobenzene	3540C/3550B/3545	3640A/3660B	8270C[h]/1625C	35
1,3-Dichlorobenzene	3540C/3550B/3545	3640A/3660B	8270C[h]/1625C	57
1,4-Dichlorobenzene	3540C/3550B/3545	3640A/3660B	8270C[h]/1625C	37
1,2,4-Trichlorobenzene	3540C/3550B/3545	3640A/3660B	8270C[h]/1625C	31
Hexachlorobenzene	3540C/3550B/3545	3640A/3660B	8270C[h]/1625C	22
Phthalate Esters				
Dimethyl phthalate	3540C/3550B/3545	3640A/3660B	8270C/1625C	24
Diethyl phthalate	3540C/3550B/3545	3640/A3660B	8270C/1625C	67
Di-n-butyl phthalate	3540C/3550B/3545	3640A/3660B	8270C/1625C	467
Butyl benzyl phthalate	3540C/3550B/3545	3640A/3660B	8270C/1625C	21

Chemical	Recommended Sample Preparation Methods[a]	Recommended Sample Cleanup Methods[b]	Recommended Analytical Methods[c]	Recommended Practical Quantitation Limits[d,e]
Total petroleum hydrocarbons	–	–	8440 Ecology method - pub. 97-602 (1997)	20 mg/kg (gasoline), 50 mg/kg (#2 diesel), 100 mg/kg (lmotor oil) based on 100% solids
Polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans (PCDDs/PCDFs)	–	–	1613	1 - 10 ng/kg
Guaiacols	3540C	–	NCASI Method CP – 86.02 Chlorinated Phenols	50-100
Resin acids	3540C (using acetone)	–	NCASI Method RA/FA 85.02	50-100
Radioactive substances, Explosive compounds	8330	–	8095/8330	250-2200 (method 8330)

Note:
- AVS - acid volatile sulfide
- EPA - U.S. Environmental Protection Agency
- GPC - gel permeation chromatography
- HPAH - high molecular weight polycyclic aromatic hydrocarbon
- LPAH - low molecular weight polycyclic aromatic hydrocarbon
- PCB - polychlorinated biphenyl
- PSEP - Puget Sound Estuary Program
- TOC - total organic carbon

[a] Recommended sample preparation methods are:
PSEP (1997a)
Method 3050B and 3500 series - sample preparation methods from SW-846 (U.S. EPA 1996) and subjected to changes by EPA updates.

[b] Recommended sample cleanup methods are:
Sample extracts subjected to GPC cleanup follow the procedures specified by EPA SW-846 Method 3640A. Special care should be used during GPC to minimize loss of analytes.
If sulfur is present in the samples (as is common in most marine sediments), cleanup procedures specified by EPA SW-846 Method 3660B should be used.
All PCB extracts should be subjected to sulfuric acid/permanganate cleanup as specified by EPA SW-846 Method 3665A.
Additional cleanup procedures may be necessary on a sample-by-sample basis. Alternative cleanup procedures are described in PSEP (1997b) and U.S. EPA (1986).

[c] Recommended analytical methods are:
Method 6000, 7000, 8000, and 9000 series - analytical methods from SW-846 (U.S. EPA 1986) and updates
The SW-846 and updates are available from the web site at:

http://www.epa.gov/epaoswer/hazwaste/test/sw846.htm

Method 1613 - analytical method from U.S. EPA-821/B-94-005 (1994)
Method 1624C/1625C - isotope dilution method (U.S. EPA 1989)
NCASI – analytical methods from the National Council for Air and Stream Improvement, Inc.
Plumb (1981) - U.S. EPA/U.S. Army Corps of Engineers Technical Report EPA/CE-81-1
PSEP (1986a)
Acid volatile sulfide method for sediment (U.S. EPA 1991).
Krone (1989) – Krone, C. A., D. W. Brown, D. G. Burrows, R. G. Bogar, S. L. Chan and U. Varanasi, 1989. A Method for the Analysis of Butyltin Species and the Measurement of Butyltins in Sediment and English Sole Livers from Puget Sound. Marine Environmental Research 27:1-18.

[d] To achieve the recommended practical quantitation limits for organic compounds, it may be necessary to use a larger sample size approximately 100 g), a smaller final extract volume for gas chromatography/mass spectrometry analyses (0.5 mL), and one of the recommended sample cleanup methods as necessary to reduce interference, using different analytical methods with better sensitivity.

[e] Detection limits are on a dry-weight basis unless otherwise indicated. For sediment samples with low TOC, it may be necessary to achieve even lower detection limits for certain analytes in order to compare the TOC-normalized concentrations with applicable numerical criteria (see Table 1).

(Footnotes continued on next page)

ATTACHMENT A

1032 W Marine View Dr, Everett, WA 98201

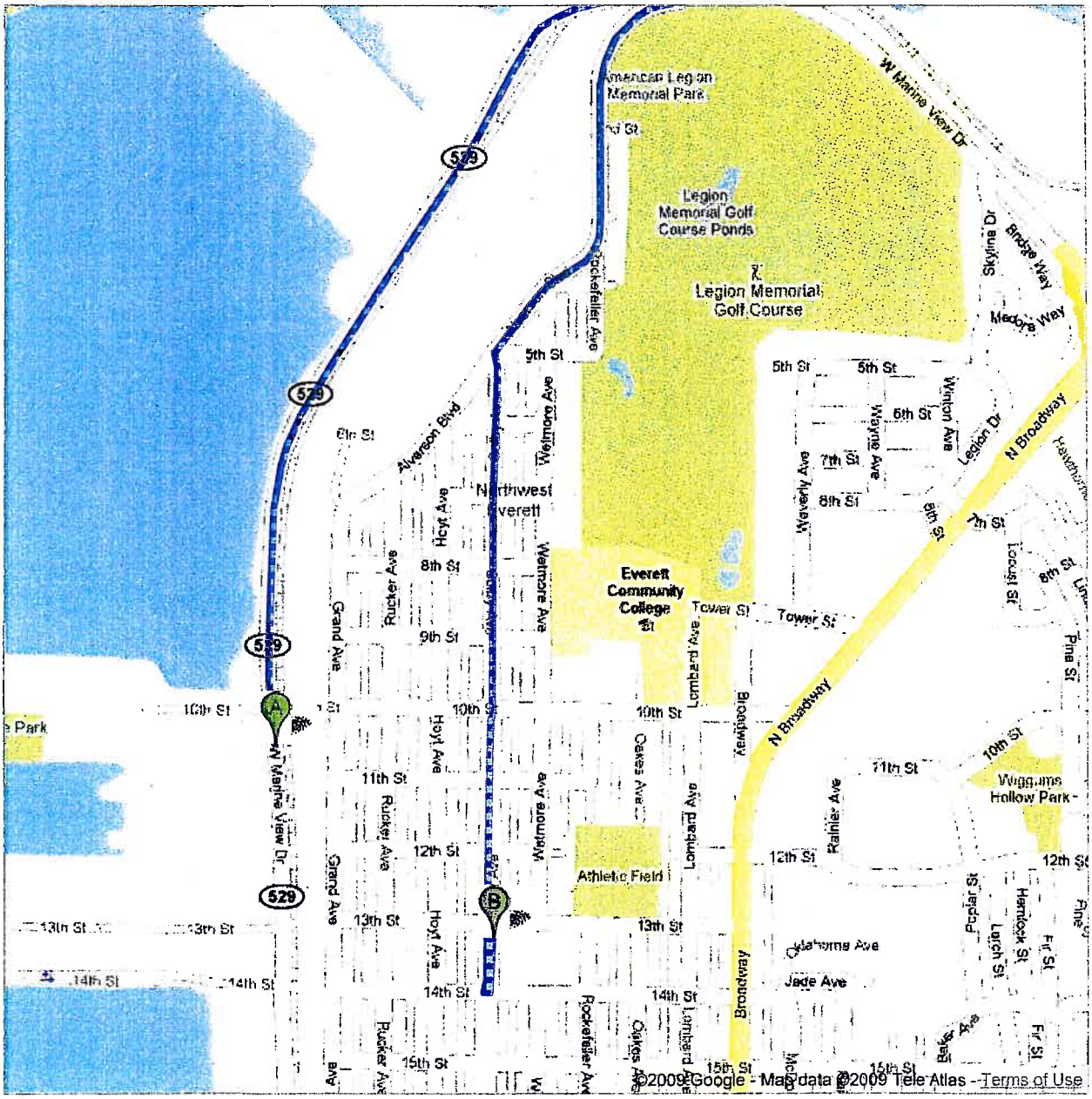
1.	Head **north** on **W Marine View Dr** toward **Alverson Blvd** About 3 mins	go 1.2 mi total 1.2 mi
2.	Take the 1st **right** onto **Alverson Blvd** About 2 mins	go 0.6 mi total 1.8 mi
3.	Turn **left** at **Colby Ave** About 3 mins	go 0.8 mi total 2.6 mi
4.	Make a **U-turn** at **14th St**	go 427 ft total 2.7 mi

1321 Colby Ave, Everett, WA 98201

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Google maps

Directions to 1321 Colby Ave, Everett, WA 98201
2.7 mi – about **8 mins**



ATTACHMENT B

CHOMIUM

NIOSH Publication 2005-149 September 2005

NIOSH Pocket Guide to Chemical Hazards

NPG Home | Introduction | Synonyms & Trade Names | Chemical Names | CAS Numbers | RTECS Numbers | Appendices | Search

Chromium metal

CAS 7440-47-3

Cr

RTECS GB4200000

Synonyms & Trade Names
Chrome, Chromium

DOT ID & Guide

Exposure Limits	**NIOSH REL**: TWA 0.5 mg/m^3 See Appendix C
	OSHA PEL*: TWA 1 mg/m^3 See Appendix C [*Note: The PEL also applies to insoluble chromium salts.]

IDLH 250 mg/m^3 (as Cr) See: 7440473

Conversion

Physical Description
Blue-white to steel-gray, lustrous, brittle, hard, odorless solid.

MW: 52.0	BP: 4788°F	MLT: 3452°F	Sol: Insoluble
VP: 0 mmHg (approx)	IP: NA		Sp.Gr: 7.14
Fl.P: NA	UEL: NA	LEL: NA	

Noncombustible Solid in bulk form, but finely divided dust burns rapidly if heated in a flame.

Incompatibilities & Reactivities
Strong oxidizers (such as hydrogen peroxide), alkalis

Measurement Methods
NIOSH 7024, 7300, 7301, 7303, 9102; OSHA ID121, ID125G
See: NMAM or OSHA Methods

Personal Protection & Sanitation (See protection codes)
Skin: No recommendation
Eyes: No recommendation
Wash skin: No recommendation
Remove: No recommendation
Change: No recommendation

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Soap wash
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations NIOSH

Up to 2.5 mg/m^3:
(APF = 5) Any quarter-mask respirator. Click here for information on selection of N, R, or P filters.*

Up to 5 mg/m^3:
(APF = 10) Any particulate respirator equipped with an N95, R95, or P95 filter (including N95, R95, and P95 filtering facepieces) except quarter-mask respirators. The following filters may also be used: N99, R99, P99, N100, R100, P100. Click here for information on selection of N, R, or P filters.*
(APF = 10) Any supplied-air respirator*

Up to 12.5 mg/m^3:
(APF = 25) Any supplied-air respirator operated in a continuous-flow mode*
(APF = 25) Any powered air-purifying respirator with a high-efficiency particulate filter.*

Up to 25 mg/m^3:
(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter. Click here for information on selection of N, R, or P filters.
(APF = 50) Any powered, air-purifying respirator with a tight-fitting facepiece and a high-efficiency particulate filter*
(APF = 50) Any self-contained breathing apparatus with a full facepiece
(APF = 50) Any supplied-air respirator with a full facepiece

CHROMIUM 6

Site Safety Plan for TC Systems Inc. Storm Drain Sediment Sampling

Reference: Toxics Cleanup Program Safety Plan – January 2005

Name of Ecology Inspector(s): Andy Kallus

Training requirements for this inspection: 40 Hour HAZWOPER per OSHA 1910.120

Medical monitoring requirements: None

Date: 9/16/09 **Arrival Time:** 10 am **Site Name:** TC Systems Inc.

Site Location: 1032 West Marine View Drive, Everett, Washington

Nearest City: Everett

Nearest Hospital:
Providence Everett Medical Center
1321 Colby Avenue, Everett, WA
425.261.2000

See Attachment A for a map of the route to the hospital.

Emergency Numbers: Statewide 911 Hospital: 425.261.2000 **Ambulance**: Rural/Metro Inc, 425-252-2111

Name of Contractor (if on site): Not Applicable

Is the site currently active? Yes ☒ No ☐

Will the buddy system be used? Yes ☒ No ☐ **Names:** Greg Stegman NWRO

Site Description:

TC Systems operates on two parcels of land (Snohomish County Tax Parcel No's. 29051800200700 and 29051800201300) owned by Norton Industries, Inc. (Norton Industries). TC Systems supports the aviation and boating industries by chemically treating and painting metal parts using their chemical line and paint booths. TC Systems applies various surface treatments and coatings to prefabricated metal parts, and conducts non-destructive testing of metal parts using a penetrant oil as well as sand blasting for surface preparation. Wastewater from the chemical tank line is pre-treated to meet local discharge limits, and discharged to the sanitary sewer under a permit with the City of Everett.

Scope/Objective of Work: Sediment samples from three stormwater catch basins have been identified for sampling. Stormwater catch basement sediment samples will be analyzed for priority pollutant metals including hexavalent chromium, semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), TPH-Dx, percent solids, total volatile solids (TVS), and total organic carbon (TOC).

PPE Requirements: A minimum of Level D protection will be required for all site activities. This level includes:

- Hard hat
- Ear Plugs (AW 9/15/09)
- Safety glasses
- Steel-toed boots
- Traffic safety vest
- Rain gear (if necessary)

Known or Suspected Chemical Hazard(s): Information for each chemical listed below is provided in Attachment B.

Compound	Exposure Limits	Route of Exposure	Acute Symptoms	Odor Threshold	Odor Description
Chromium	PEL – 1 mg/m^3	inhalation, ingestion, skin and/or eye contact	Irritation of the eyes and skin	Not available	Odorless
Chrome 6	PEL – 0.005 mg/m^3	inhalation, ingestion, skin and/or eye contact	Irritation of the respiratory system and eye injury	Not available	Odorless
Chromic Acid	PEL – 1 mg/m^3	inhalation, ingestion, skin and/or eye contact	severe irritation and burns; avoid contact with eyes, skin, and clothes	Not available	Odorless
Copper	PEL – 1 mg/m^3	inhalation, ingestion, skin and/or eye contact	Eye irritation, nausea, skin irritation. Irritation of mucous membranes and pharynx.	Not available	Not available
Zinc	PEL – 5 mg/m^3 for zinc oxide	inhalation, ingestion, skin and/or eye contact	skin contact (irritant), of eye contact (irritant)	Not available	Not available

Compound	Exposure Limits	Route of Exposure	Acute Symptoms	Odor Threshold	Odor Description
Diesel	Not available	inhalation, ingestion, skin and/or eye contact	Causes severe skin irritation. Aspiration hazard if swallowed	Not available	Characteristic petroleum
Oakite 160 (sodium hydroxide)	PEL – 2 mg/m^3	Inhalation, skin contact, and ingestion.	severe irritation of the nose, mouth & respiratory tract; coughing, difficulty breathing	Not available	Odorless
Oakite 166 (primarily boric acid)	PEL – 5 mg/m^3	Inhalation, skin contact, and ingestion.	inhalation of dust/mist causes irritation of mucous membranes; skin irritation	Not available	Odorless
Oakite Deoxidizer (nitric acid)	PEL – 5 mg/m^3	Inhalation, skin contact, and ingestion.	severe respiratory irritant. high concentrations may cause pneumonitis & pulmonary edema. skin: severe burns. eyes: severe/permanent damage	Not available	Sharp Odor
Alodine 600*	PEL – 0.005 mg/m^3 (most restrictive)	Inhalation, skin contact, and ingestion.	Severe irritation and burns through all exposure routes. Very corrosive.	Not available	Bland
Alodine 1000**	PEL – 5 mg/m^3	Inhalation, skin contact, and ingestion.	Severe eye and skin irritation. Contact with broken skin may result in ulcers.	Not available	Odorless
PAHs (coal tar pitch volatiles)	PEL – 0.2 mg/m^3	inhalation, skin and/or eye contact	Eye and skin irritation. Irritation of digestive tract if swallowed. Respiratory tract irritation if inhaled.	Not available	Faint aromatic odor

*Contains sodium borofluoride, sodium chromate, dipotassium hexafluorozirconate, sodium nitrate, and chromic acid.

** Contains chromic acid and zirconium potassium fluoride.

Routes of chemical exposure (circle one):
Inhalation☒ Dermal☒ Ingestion☒

Overall risk of chemical exposure (circle one):
☐Serious Low**☒ ☐Moderate ☐Unknown

**Sampling will be outdoors at several stormwater catch basins.

Physical Hazard(s) (circle one):

Confined space: NA

Noise: Heavy equipment can may produce continuous and impact noise. Ear plugs will be used if excess noise is produces from heavy machinery.

Heat/cold stress: Sampling is being conducted during nice weather in September. The high temperature is expected to be 72 degrees; the low in the high 50s.

Other (specify)
Workers should exercise caution when walking around the site to avoid fall and trip hazards.

Workers should watch where they are walking and walk only in areas of good stability. Workers should exercise caution around open storm drains.

Workers should exercise caution when working in areas that may include potential traffic from vehicles or other machinery (e.g., forklifts). Traffic vests will be worn and cones will be placed in the immediate area where sampling is taking place.

If any area to be investigated is a confined/enclosed space, please describe:
Note: TCP policy is that inspectors are prohibited from entry into Permit-Required confined spaces.

Expected Parameters/Contaminants to be Sampled for: Metals, Chromium 6, SVOCs including PAHs, PCBs, and TPH.

Sampling Matrix (circle all that apply): ☐Air ☐Surface water ☐Groundwater ☐Soil ☒Sediment

Was air monitoring conducted? ☐Yes ☒No Prior to site entrance? ☐Yes ☒No

Type of air monitoring instrument used: NA

If air monitoring was not conducted, explain why: Sampling will be conducted outside at stormdrain catch basins. The potential for inhalation exposure in outdoor ambient air is low.

Wind direction: **Approx. Wind Speed:**

Was radiation monitoring conducted? ☐Yes ☒No Result:

Departure time: 7am **Total time spent on site:**

ATTACHMENT A

1032 W Marine View Dr, Everett, WA 98201

1.	Head **north** on **W Marine View Dr** toward **Alverson Blvd** About 3 mins	go 1.2 mi total 1.2 mi
2.	Take the 1st **right** onto **Alverson Blvd** About 2 mins	go 0.6 mi total 1.8 mi
3.	Turn **left** at **Colby Ave** About 3 mins	go 0.8 mi total 2.6 mi
4.	Make a **U-turn** at **14th St**	go 427 ft total 2.7 mi

1321 Colby Ave, Everett, WA 98201

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

APG

Analytical Products Group, Inc.

2730 Washington Blvd., Belpre, OH 45714
740-423-4200 800-272-4442 Fax 740-423-5588

Material Safety Data Sheet

Date prepared on: 9/14/95

Last revised on: 1/20/08

Page 1

Section I: Product Identification

CATALOG NUMBER: 1400/4180/4182/4183/224180/6250/6252	PRODUCT NAME: Hexavalent Chromium

Section II - Hazardous Ingredients/Identity Information

Chemical Name	CAS Reg. No.	OSHA PEL (TWA)	% Composition*
Nitric Acid	7697-37-2	2 ppm	1.2%

Non-Hazardous Ingredients/Identity Information

Chemical Name	CAS Reg. No.	OSHA PEL (TWA)	% Composition*
Potassium Dichromate	7778-50-9		<0.02%
Water			>98%

* Components are calculated on a weight/weight basis.

Section III - Physical/Chemical Characteristics of Hazardous Ingredients
Nitric Acid

BOILING POINT: >83°C		SPECIFIC GRAVITY: Water = 1.5027 @ 25°C
VAPOR PRESSURE: 47.9 mm @ 20°C	SOLUBILITY IN WATER: Complete	APPEARANCE/ODOR: Colorless to pale yellow liquid with suffocating odor.

Section IV - Fire and Explosion Hazard Data

FLASH POINT (Method used): Not available	AUTO IGNITION TEMPERATURE: Not available	FLAMMABLE LIMITS Not available	LEL NA	UEL NA
EXTINGUISHING MEDIA: Non-flammable, use extinguisher media appropriate for surrounding the fire.				
SPECIAL FIRE FIGHTING PROCEDURES: NA				
UNUSUAL FIRE AND EXPLOSION HAZARDS: NA				

Section V - Reactivity Data

STABILITY:	Unstable ☐	Stable ☒	Conditions to Avoid: None known
INCOMPATIBILITY (Materials to avoid): Concentrated Nitric Acid will react violently with organic and hydrophobic compounds.			
HAZARDOUS DECOMPOSITION PRODUCTS: None known			
HAZARDOUS POLYMERIZATION:	May Occur ☐	Will Not Occur ☒	Conditions to Avoid: NA

Section VI - Health Hazard Data

ROUTES OF ENTRY	Inhalation? YES	Skin? YES	Ingestion? YES
HEALTH HAZARDS (Acute and Chronic): ACUTE: No CHRONIC: Chromium is a human poison by ingestion. Long term effects are localized itching, burning and dermatitis. Individuals with bronchial asthma can be affected. The metal is a severe irritant of the mucous membranes.			

CHROMIC ACID

NIOSH Publication 2005-149 September 2005

NIOSH Pocket Guide to Chemical Hazards

NPG Home | Introduction | Synonyms & Trade Names | Chemical Names | CAS Numbers | RTECS Numbers | Appendices | Search

Chromic acid and chromates

CAS 1333-82-0 (CrO_3)

CrO_3 (acid)

RTECS GB6650000 (CrO_3)

Synonyms & Trade Names
Chromic acid (CrO_3): Chromic anhydride, Chromic oxide, Chromium(VI) oxide (1:3), Chromium trioxide
Synonyms of chromates (i.e., chromium(VI) compounds) such as zinc chromate vary depending upon the specific compound.

DOT ID & Guide
1755 154 (acid solution)
1463 141 (acid, solid)

Exposure Limits
NIOSH REL (as Cr): Ca TWA 0.001 mg/m^3 See Appendix A See Appendix C
OSHA PEL (as CrO_3): TWA 0.005 mg/m^3 See Appendix C

IDLH Ca [15 mg/m^3 {as Cr(VI)}] See: 1333820

Conversion

Physical Description
CrO_3: Dark-red, odorless flakes or powder. [Note: Often used in an aqueous solution (H_2CrO_4).]

MW: 100.0	BP: 482°F (Decomposes)	MLT: 387°F (Decomposes)	Sol: 63%
VP: Very low	IP: NA		Sp.Gr: 2.70 (CrO_3)
Fl.P: NA	UEL: NA	LEL: NA	

CrO_3: Noncombustible Solid, but will accelerate the burning of combustible materials.

Incompatibilities & Reactivities
Combustible, organic, or other readily oxidizable materials (paper, wood, sulfur, aluminum, plastics, etc.); corrosive to metals

Measurement Methods
NIOSH 7600, 7604, 7605, 7703, 9101; OSHA ID103, ID215, W4001
See: NMAM or OSHA Methods

Personal Protection & Sanitation (See protection codes)
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet or contaminated
Change: Daily
Provide: Eyewash, Quick drench

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Soap flush immediately
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations NIOSH
At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape:
(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter. Click here for information on selection of N, R, or P filters./Any appropriate escape-type, self-contained breathing apparatus
Important additional information about respirator selection

Exposure Routes inhalation, ingestion, skin and/or eye contact

Symptoms Irritation respiratory system; nasal septum perforation; liver, kidney damage; leukocytosis (increased blood leukocytes),

Material Safety Data Sheet

ience Stuff, Inc.
04 Newport Ave
stin, TX 78753

Phone (512) 837-6020
Chemtrec 800-424-9300
24 Hour Emergency Assistance

ection 1 Identification

oduct umber:	C1502
oduct Name:	Chromic Acid Cleaner Dichromate-Sulfuric Acid
ade/Chemical ynonyms	
ormula:	N/A
TECS:	None
.A.S	See Below

Health:	3
Flammability	0
Reactivity	2

Hazard Rating:

Least Slight Moderate High Extreme

0 1 2 3 4

NA = Not Applicable NE = Not Established

ection 2 Component Mixture

ara 13	Component	CAS Number	%	Dim	Exposure Limits:
☐	Water, Deionized ASTM Type II	CAS# 7732-18-5	~2%	w/v	None Established
☐	Sodium Dichromate Dihydrate	CAS# 7789-12-0	~2%	w/v	OSHA TWA 0.1 mg/mƒ
☑	Sulfuric Acid	CAS# 7664-93-9	Balance	v/v	OSHA TWA 1 mg/mƒ, ACGIH STEL 3 ppm

ection 3 Hazard Identification (Also see section 11)

auses severe irritation and burns. Harmful if swallowed. Avoid breathing apor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, nd clothes. Wash thoroughly after handling. Keep container closed.

ection 4 First Aid Measures

auses severe irritation and burns. Harmful if swallowed. Avoid breathing apor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, nd clothes. Wash thoroughly after handling. Keep container closed.

RST AID: CALL A PHYSICIAN. SKIN: In case of contact, immediately flush in with water for at least 15 minutes while removing contaminated othing and shoes. Thoroughly clean clothing and shoes before reuse.

YES: Wash eyes with plenty of water for at least 15 minutes, lifting lids casionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not eathing, give artificial respiration. If breathing is difficult, give oxygen

NGESTION: Give several glasses of milk or water. Vomiting may occur ontaneously, but DO NOT INDUCE! Never give anything by mouth to an nconscious person.

ection 5 Fire Fighting Measures

ire Extinguisher ype:	Dry Chemical
ire/Explosion lazards:	Reacts at extreme temperatures with violent decomposition.
ire Fighting rocedure:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

Section 6 Accidental Release Measures

Absorb spill with inert material, then place in a chemical waste container. Neutralize with a weak base.

Section 7 Handling and Storage

Wear appropriate NIOSH/MSHA-Approved respirator, Chemical-resistant gloves, safety goggles. Do not breateh vapor.

Section 8 Exposure Controls & Personal Protection

Respiratory Protection:NIOSH/MSHA-approved respirator

Ventilation: Mechanical: ☑ Local Exhaust: ☑

Hand Protection: Wear appropriate gloves to prevent skin exposure

Eye Protection: Splash Goggles

Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

Section 9 Physical and Chemical Properties

Melting Point:	Information not available	Specific Gravity	1.835-1.842
Boiling Point:	534 to -590°c	Percent Volatile by Volume:	0
Vapor Pressure:	information not available	Evaporation Rate:	not applicable
Vapor Density:	information not available	Evaporation Standard:	Not Applicable
Solubility in Water:	100%	Auto ignition Temperature:	Not applicable
Appearance and Odor:	Dark Brown viscous odorless liquid	Lower Flamm. Limit in Air:	Not applicable
Flash Point:	nonflammable	Upper Flamm. Limit in Air:	Not applicable

Section 10 Stability and Reactivity Information

Stability: Stable Conditions to Avoid: high temperatures (300°c)

Materials to Avoid:
Water, metals, organic compounds, acids.

Hazardous Decomposition Products:
Toxic fumes of: Sulfur oxides,acid vapors or mist.

Hazardous Polymerization:Will Not Occur

Condition to Avoid:None known

Section 11 Additional Information

DANGER!! Always add acid to water slowly. DANGER!! This material is extremely corrosive to the skin and,eyes. Effects of over exposure:SERVERE irritation of the eyes,skin and possible vision impairment. Severe pain of the skin,coughing and possible charring of skin.vomiting blood ,shock severe tissue damage and DEATH may occur. Acute:EXTREMELY!! CORROSIVE! Causes severe skin and eye burns mist can be extermly irritating to the upper respiratory tract. Chronic: may cause severe dental erosion swallowing this material may cause DEATH! Target organs:eyes,skin,mouth,upper respiratory tract and GI tract. Conditions

COPPER

Material Safety Data Sheet

ience Stuff, Inc.
04 Newport Ave
stin, TX 78753

Phone (512) 837-6020
Chemtrec 800-424-9300
24 Hour Emergency Assistance

ection 1 Identification

oduct umber:	C1613
oduct Name:	Copper Powder, 150 Mesh
ade/Chemical ynonyms	
ormula:	Cu
TECS:	GL5325000
.A.S	CAS# 7440-50-8

Health:	1
Flammability	0
Reactivity	0

Hazard Rating:

Least Slight Moderate High Extreme

0 1 2 3 4

NA = Not Applicable NE = Not Established

ection 2 Component Mixture

ara 13	Component	CAS Number	%	Dim	Exposure Limits:
☑	Copper	CAS# 7440-50-8	100%	W/W	OSHA TWA 1 mg (Cu)/mƒ (dust, mist)

ection 3 Hazard Identification (Also see section 11)

enerally not hazardous in normal handling, however good laboratory actices should always be used. Avoid long term exposure to skin or inhalation.

ection 4 First Aid Measures

enerally not hazardous in normal handling, however good laboratory actices should always be used. Avoid long term exposure to skin or inhalation.

RST AID: SKIN: Wash exposed area with soap and water. If irritation ersists, seek medical attention.

'ES: Wash eyes with plenty of water for at least 15 minutes, lifting ls occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. not breathing, give artificial respiration. If breathing is difficult, give ygen

IGESTION: Give several glasses of milk or water. Vomiting may occur ontaneously, but it is not necessary to induce. Never give anything by outh to an unconscious person.

ection 5 Fire Fighting Measures

re Extinguisher ype:	Any means suitable for extinguishing surrounding fire
re/Explosion azards:	Fire possible at elevated tepuratures. Dust in sufficient quantities can be a dust explosion hazard.
re Fighting rocedure:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

Section 6 Accidental Release Measures

Sweep up and place in suitable (fiberboard) containers for reclamation or later disposal.

Section 7 Handling and Storage

Store in a cool dry place. This Material is not considered hazardous. Handle using safe laboratory practices.

Section 8 Exposure Controls & Personal Protection

Respiratory Protection:None required

Ventilation: Mechanical: ☐ Local Exhaust: ☑

Hand Protection: Wear appropriate gloves to prevent skin exposure

Eye Protection: Splash Goggles

Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

Section 9 Physical and Chemical Properties

Melting Point:	1083 Deg. C	Specific Gravity	8.94
Boiling Point:	2595 Deg. C	Percent Volatile by Volume:	N/A
Vapor Pressure:	1MM@1628°c	Evaporation Rate:	N/A
Vapor Density:	N/A	Evaporation Standard:	
Solubility in Water:	Insoluble	Auto Ignition Temperature:	Not applicable
Appearance and Odor:	Reddish lusterous metal	Lower Flamm. Limit in Air:	Not applicable
Flash Point:	N/A	Upper Flamm. Limit in Air:	Not applicable

Section 10 Stability and Reactivity Information

Stability: Stable

Conditions to Avoid: Avoid contact with incompatible materials.

Materials to Avoid:
Acetylene, magnesium metal (as copper dust)

Hazardous Decomposition Products:
None

Hazardous Polymerization:Will Not Occur

Condition to Avoid:None known

Section 11 Additional Information

Can irritate eyes, mucous membranes, and pharynx. Can cause nausea, ulcer perforation, metal taste and dermatitis. Conditions aggravated/target organs: Persons with pre-existing eye, skin, or respiratory conditions may be more susceptible

DOT Classification: Not Regulated

DOT regulations may change from time to time. Please consult the most recent version of the relevant regulations.

Revision No:1 Date Entered: 9/1/2006 Approved by: WPF

NIOSH Publication 2005-149 September 2005

NIOSH Pocket Guide to Chemical Hazards

NPG Home | Introduction | Synonyms & Trade Names | Chemical Names | CAS Numbers | RTECS Numbers | Appendices | Search

Copper (dusts and mists, as Cu)

CAS 7440-50-8

Cu

RTECS GL5325000

Synonyms & Trade Names
Copper metal dusts, Copper metal fumes

DOT ID & Guide

Exposure Limits

NIOSH REL*: TWA 1 mg/m^3 [*Note: The REL also applies to other copper compounds (as Cu) except Copper fume.]

OSHA PEL*: TWA 1 mg/m^3 [*Note: The PEL also applies to other copper compounds (as Cu) except copper fume.]

IDLH 100 mg/m^3 (as Cu) See: 7440508

Conversion

Physical Description
Reddish, lustrous, malleable, odorless solid.

MW: 63.5	BP: 4703°F	MLT: 1981°F	Sol: Insoluble
VP: 0 mmHg (approx)	IP: NA		Sp.Gr: 8.94
Fl.P: NA	UEL: NA	LEL: NA	

Noncombustible Solid in bulk form, but powdered form may ignite.

Incompatibilities & Reactivities
Oxidizers, alkalis, sodium azide, acetylene

Measurement Methods
NIOSH 7029, 7300, 7301, 7303, 9102; OSHA ID121, ID125G
See: NMAM or OSHA Methods

Personal Protection & Sanitation (See protection codes)
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet or contaminated
Change: Daily

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Soap wash promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations NIOSH/OSHA

Up to 5 mg/m^3:
(APF = 5) Any quarter-mask respirator. Click here for information on selection of N, R, or P filters.*

Up to 10 mg/m^3:
(APF = 10) Any particulate respirator equipped with an N95, R95, or P95 filter (including N95, R95, and P95 filtering facepieces) except quarter-mask respirators. The following filters may also be used: N99, R99, P99, N100, R100, P100. Click here for information on selection of N, R, or P filters.*
(APF = 10) Any supplied-air respirator*

Up to 25 mg/m^3:
(APF = 25) Any supplied-air respirator operated in a continuous-flow mode*
(APF = 25) Any powered air-purifying respirator with a high-efficiency particulate filter.*

Up to 50 mg/m^3:
(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter. Click here for information on selection of N, R, or P filters.
(APF = 50) Any powered, air-purifying respirator with a tight-fitting facepiece and a high-efficiency particulate filter*
(APF = 50) Any self-contained breathing apparatus with a full facepiece

ZINC

Material Safety Data Sheet

ience Stuff, Inc.
04 Newport Ave
stin, TX 78753

Phone (512) 837-6020
Chemtrec 800-424-9300
24 Hour Emergency Assistance

ection 1 Identification

oduct umber:	C2980
oduct Name:	Zinc Metal Reagent Grade, Powder (Dust)
ade/Chemical ynonyms	
ormula:	Zn
TECS:	ZG8600000
.A.S	CAS# 7740-66-6

Health:	1
Flammability	2
Reactivity	1

Hazard Rating:

Least Slight Moderate High Extreme

0 1 2 3 4

NA = Not Applicable NE = Not Established

ection 2 Component Mixture

ara 313	Component	CAS Number	%	Dim	Exposure Limits:
☐	Zinc Metal	CAS# 7740-66-6	100%	W/W	OSHA TWA 5 mg/mƒ

ection 3 Hazard Identification (Also see section 11)

eep away from heat and ignition sources. Harmful if swallowed. oid breathing vapors. Use with adequate ventilation. Avoid contact ith eyes, skin, and clothes. Wash thoroughly after handling. Keep ntainer closed.

ection 4 First Aid Measures

eep away from heat and ignition sources. Harmful if swallowed. oid breathing vapors. Use with adequate ventilation. Avoid contact ith eyes, skin, and clothes. Wash thoroughly after handling. Keep ntainer closed.

RST AID: CALL A PHYSICIAN. SKIN: Wash exposed area with soap id water.

/ES: Wash eyes with plenty of water for at least 15 minutes, lifting ls occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. not breathing, give artificial respiration. If breathing is difficult, give xygen

IGESTION: If swallowed, induce vomiting immediately after giving o glasses of water. Never give anything by mouth to an unconcious erson.

ection 5 Fire Fighting Measures

ire Extinguisher ype:	Smother with dry powder (i.e.: sand, sodium chloride, magnesium oxide).
ire/Explosion azards:	Dust, in moist air can generate sufficient heat to ignite the hydrogen gas released. Metal burns at high tempuratures.
ire Fighting rocedure:	Avoid water. Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

Section 6 Accidental Release Measures

Avoid water. Remove all sources of ignition. Ventilate area of leak or spill. Wear respiratory protection. Do not disperse dust into air. Use non-sparking tools to pick up and place in closed dry container.

Section 7 Handling and Storage

Store in a cool, dry, well-ventilated place away from incompatible materials. Wash thoroughly after handling.

Section 8 Exposure Controls & Personal Protection

Respiratory Protection:NIOSH/MSHA-approved respirator

Ventilation: Mechanical: ☐ Local Exhaust: ☑

Hand Protection: NIOSH Approved Gloves

Eye Protection: Safety Glasses

Other Protective Equipment: Use safe laboratory handling procedures.

Section 9 Physical and Chemical Properties

Melting Point:	419° C	Specific Gravity	7.14
Boiling Point:	907° C	Percent Volatile by Volume:	N/A
Vapor Pressure:	N/A	Evaporation Rate:	N/A
Vapor Density:	N/A	Evaporation Standard:	
Solubility in Water:	Not soluble	Auto ignition Temperature:	460° C
Appearance and Odor:	Gray, blue matallic powder / no odor	Lower Flamm. Limit in Air:	N/E
Flash Point:	information not available	Upper Flamm. Limit in Air:	N/E

Section 10 Stability and Reactivity Information

Stability: Stable Conditions to Avoid: Heat and moisture

Materials to Avoid:

Hazardous Decomposition Products: Hydrogen gas, Zinc oxide fumes

Hazardous Polymerization:Will Not Occur

Condition to Avoid:None known

Section 11 Additional Information

Conditions aggravated/Target organs: Persons with preexisting skin or respiratory disorders may be more susceptible. Acute: Irritation possible to skin, eyes, lungs, mucous membranes, and GI tract. If heated fumes may cause "zinc fume fever". Chronic: None known.

DOT Classification: Zinc Dust, 4.3, UN1436, PG II

DOT regulations may change from time to time. Please consult the most recent version of the relevant regulations.

Revision No:0 Date Entered: 9/1/2006 Approved by: WPF

DIESEL

MSDS SUMMARY SHEET

Manufacturer:
Name: PHILLIPS PETROLEUM COMPANY
Address 1:
Address 2:
Address 3:
CSZ: BARTLESVILLE **State:** OK **Zipcode:** 74004
Emergency phone: (800) 424-9300
Business phone: 800-762-0942

Product:

Ferndale MSDS#: 1354 **Version # :** 6
Manufacturer MSDS#: 0041
Current? : 2002
Name:

NO. 2 DIESEL FUEL

Synonyms:

CARB **Diesel** TF3
CARB **Diesel**
CARB **Diesel** 10%
Diesel Fuel Oil
EPA Low Sulfur **Diesel** Fuel
EPA Low Sulfur **Diesel** Fuel – Dyed
EPA Off Road High Sulfur **Diesel** – Dyed
Fuel Oil No. 2 – CAS # 68476-30-2
No. 2 **Diesel** Fuel Oil
No. 2 Fuel Oil – Non Hiway – Dyed
No. 2 High Sulfur **Diesel** – Dyed
No. 2 Low Sulfur **Diesel** - Dyed
No. 2 Low Sulfur **Diesel** - Undyed
Crude column 3rd IR
Crude column 3rd side cut
Atmospheric tower 3rd side cut
Ultra Low Sulfur **Diesel** No. 2
Finished **Diesel**
DHT Reactor Feed
Straight Run **Diesel**
Diesel
Middle Distillate

Product/Catalog Numbers:
MSDS Date: 01/01/2002 **(received:** 01/14/2002)

NFPA codes:
Health: 0 **Flammability:** 2 **Reactivity:** 0

HFPA Hazard Class:
Health: 0 (Least)
Flammability: 2 (Moderate)
Reactivity: 0 (Least)

HMIS Hazard Class
Not Evaluated

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS	% VOLUME	EXPOSURE GUIDELINE		
		Limits	Agency	Type
Diesel Fuel No. 2 CAS# 68476-34-6	100	100* mg/m3	ACGIH	TWA-SKIN
Naphthalene CAS# 91-20-3	<1	10ppm	ACGIH	TWA
		15ppm	ACGIH	STEL
		10ppm	OSHA	TWA
		250ppm	NIOSH	IDLH

All components are listed on the TSCA inventory

Tosco Low Sulfur No. 2 Diesel meets the specifications of 40 CFR 60.41 for low sulfur diesel fuel.

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

*Proposed ACGIH (1999)

3. HAZARDS IDENTIFICATION

Potential Health Effects:

Eye: Contact may cause mild eye irritation including stinging, watering, and redness.

Skin: Severe skin irritant. Contact may cause redness, itching, burning, and severe skin damage. Prolonged or repeated contact can worsen irritation by causing drying and cracking of the skin, leading to dermatitis (inflammation). Not actually toxic by skin absorption, but prolonged or repeated skin contact may be harmful (see Section 11).

Inhalation (Breathing): No information available. Studies by other exposure routes suggest a low degree of toxicity by inhalation.

Ingestion (Swallowing): Low degree of toxicity by ingestion. ASPIRATION HAZARD – This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

Signs and Symptoms: Effects of overexposure may include irritation of the nose and throat, irritation of the digestive tract, nausea, diarrhea and transient excitation followed by signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue).

Cancer: Possible skin cancer hazard (see Sections 11 and 14).

Target Organs: There is limited evidence from animal studies that overexposure may cause injury to the kidney (see Section 11).

Developmental: Inadequate data available for this material.

Pre-Existing Medical Conditions: Conditions aggravated by exposure may include skin disorders and kidney disorders.

6. ACCIDENTAL RELEASE MEASURES

Flammable. Keep all sources of ignition and hot metal surfaces away from spill/release. The use of explosion-proof equipment is recommended.

Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8).

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Use foam on spills to minimize vapors (see Section 5). Spilled material may be absorbed into an appropriate material.

Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, notify the National Response Center (phone number 800-424-8802).

7. HANDLING AND STORAGE

Handling: Open container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel to another. Can accumulate static charge by flow or agitation. Can be ignited by static discharged. The use of explosion-proof equipment is recommended and may be required (see appropriate fire codes). Refer to NFPA-704 and/or API RP 2003 for specific bonding/grounding requirements.

Do not enter confined spaces such as tanks or pits without following proper entry procedures such ASTM D-4276 and 29CFR 1910.146. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2 and 8).

Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames. Use good personal hygiene practices.

High pressure injection of hydrocarbon fuels, hydraulic oils or greases under the skin may have serious consequences even though no symptoms or injury may be apparent. This can happen accidentally when using high pressure equipment such as high pressure grease guns, fuel injection apparatus or from pinhole leaks in tubing or high pressure hydraulic oil equipment.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSIZ49.1 and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

Storage: Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post area "No Smoking or Open Flame." Store only in approved containers. Keep away from incompatible material (see Section 10). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: If current ventilation practices are not adequate to maintain airborne concentration below the established exposure limits (see Section 2), additional ventilation or exhaust systems may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used (see appropriate electrical codes).

Hazardous Decomposition Products: The use of hydrocarbon fuels in an area without adequate ventilation may result in hazardous levels of combustion products (e.g., oxides of carbon, sulfur and nitrogen, benzene and other hydrocarbons) and/or dangerously low oxygen levels. ACGIH has included a TLV of 0.05 mg/m3 TWA for diesel exhaust particulate on its 1999 Notice of Intended Changes. See Section 11 for additional information on hazards of engine exhaust.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Diesel Fuel No. 2 (CAS# 68476-34-6)

Carcinogenicity: Chronic dermal application of certain middle distillate streams contained in diesel fuel No. 2 resulted in an increased incidence of skin tumors in mice. This material has not been identified as carcinogen by NTP, IARC, or OSHA. Diesel exhaust is a probable cancer hazard based on tests with laboratory animals.

Target Organ(s): Limited evidence of renal impairment has been noted from a few case reports involving excessive exposure to diesel fuel No. 2.

Naphthalene (CAS# 91-20-3)

Carcinogenicity: Naphthalene has been evaluated in two year inhalation studies in both rats and mice. The National Toxicology Program (NTP) concluded that there is clear evidence of carcinogenicity in male and female rats based on increased incidences of respiratory epithelial adenomas and olfactory epithelial neuroblastomas of the nose. NTP found some evidence of carcinogenicity in female mice (alveolar adenomas) and no evidence of carcinogenicity in male mice. Naphthalene has not been identified as a carcinogen by IARC or OSHA.

12. ECOLOGICAL INFORMATION

Not evaluated at this time

13. DISPOSAL CONSIDERATIONS

This material, if discarded as produced, would be a RCRA "characteristic" hazardous waste due to the characteristic(s) of ignitability (D001) and benzene (D018). If the material is spilled to soil or water, characteristic testing of the contaminated materials is recommended. Further, this material, once it becomes a waste, is subject to the land disposal restrictions in 40 CFR 268.40 and may require treatment prior to disposal to meet specific standards. Consult state and local regulations to determine whether they are more stringent then the federal requirements.

Container contents should be completely used and containers should be emptied prior to discard. Container ?insate? could be considered a RCRA hazardous waste and must be disposed of with care and in compliance with federal, state and local regulations. Large empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller containers, consult with state and local regulations and disposal authorities.

14. TRANSPORT INFORMATION

DOT Shipping Description: Diesel Fuel, NA1983
Non-Bulk Package Marking: Diesel Fuel, 3, NA 1993, III

Tosco Refining Company ***Ferndale Refinery***

UltraLow Sulfur Diesel Product Specification

Ferndale Product Code:34380xx (5) Product Code: ULSD2

(COMETS)

Specification	Unit	Limit	Test Procedure	Typical
Appearance				
Water & Sediment	Vol %	0.05 Max	D 2709	
Color	Number	3.0 Max	D 1500	
Haze Rating	Rating	2 Max	D 4176	
Composition				
Carbon Residue (Ramsbottom)	Wt %	0.35 Max	D 524, D 189	
Volatility				
90% Recovered	Deg; F	540 Min	D 86	
	Deg; F	640 Min	D 86	
Flash Point	Deg; F	125 Min (1)	D 93	130 F
Gravity	API	30 Min	D 287, D4052	
Fluidity				
Pour Point	Deg; F	See Season Table (6)	D 97	
Cloud Point	Deg; F	See Season Table (6)	D 2500	10 F
Viscosity @ 104F	cSt	1.9 Min	D 445	
	cSt	4.1 Max	D 445	
Lubricity, SLBOCLE	grams	3100 Min	D 6078	3300gm
Lubricity, HFRR	mm	.45	D 6079	
Combustion				
Cetane Index or Cetane Number (3,4)	Number	40.0 Min	D 976, D613	47.0
Corrosion				
Copper Strip, 3hr @ 50 deg C	Number	3 Max (2)	D 130	
Aromatics (4)	Vol %	35 Max	D 1319	25 %
Contaminants				
Total Sulfur	PPM	30 Max	D 2622, D4294	15-20ppm
Water & Sediment	Vol %	0.05 Max	D 1796	
Ash	Wt %	0.01 Max	D 482	
Additives				
Cetane Improver	Lb/MBbl	675 Max		
Dye		Undyed		

1. Minimum release specification is 125 deg. F. The refinery should target 135 deg. F.
2. Test result reported as a number and letter (e.g. 1a). Any letter is allowable as long as the number meets the spec shown.
3. Either specification must be met.
4. Either cetane index minimum or aromatics maximum must be met.
5. Winter cloud and pour specifications may be relaxed to the summer specifications by agreement with the customer.
6. Season Table

Month	Product Code	Pour Point	Cloud Point
Jan, Feb, Nov, Dec	WI	0 max (5)	14 max (5)
Mar - Oct	SU	15 max	24 max

PAHs

NIOSH Publication 2005-149 September 2005

NIOSH Pocket Guide to Chemical Hazards

NPG Home | Introduction | Synonyms & Trade Names | Chemical Names | CAS Numbers | RTECS Numbers | Appendices | Search

Coal tar pitch volatiles

CAS 65996-93-2

RTECS GF8655000

Synonyms & Trade Names
Synonyms vary depending upon the specific compound (e.g., pyrene, phenanthrene, acridine, chrysene, anthracene & benzo(a)pyrene). [Note: NIOSH considers coal tar, coal tar pitch, and creosote to be coal tar products.]

DOT ID & Guide
2713 153 (acridine)

Exposure Limits

NIOSH REL: Ca TWA 0.1 mg/m^3 (cyclohexane-extractable fraction) See Appendix A See Appendix C

OSHA PEL: TWA 0.2 mg/m^3 (benzene-soluble fraction) [1910.1002] See Appendix C

IDLH Ca [80 mg/m^3] See: 65996932

Conversion

Physical Description
Black or dark-brown amorphous residue.

Properties vary depending upon the specific compound.			

Combustible Solids

Incompatibilities & Reactivities
Strong oxidizers

Measurement Methods
OSHA 58
See: NMAM or OSHA Methods

Personal Protection & Sanitation (See protection codes)
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: Daily
Remove: No recommendation
Change: Daily

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Soap wash immediately
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations NIOSH
At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration:
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister having an N100, R100, or P100 filter. Click here for information on selection of N, R, or P filters./Any appropriate escape-type, self-contained breathing apparatus
Important additional information about respirator selection

Exposure Routes inhalation, skin and/or eye contact

Symptoms Dermatitis, bronchitis, [potential occupational carcinogen]

OAKITE 160

.KITE PRODUCTS INC -- OAKITE 160, 1600 -- 6850-00N000635

========== Product Identification ==========

)duct ID:OAKITE 160, 1600
)S Date:03/23/1992
::6850
:N:00N000635
)S Number: BZZDB
= Responsible Party ===
ıpany Name:OAKITE PRODUCTS INC
lress:50 VALLEY RD
:y:BERKELEY HEIGHTS
ıte:NJ
':07922
ıntry:US
:o Phone Num:908-464-6900
:rgency Phone Num:800-424-9300(CHEMTREC)
:parer's Name:MICHAEL CHANG
;E:44389
= Contractor Identification ===
ıpany Name:OAKITE PRODUCTS INC
lress:50 VALLEY ROAD
::City:BERKELEY HEIGHTS
ıte:NJ
':07922
ıntry:US
)ne:908-464-6900
;E:44389

========== Composition/Information on Ingredients ==========

;red Name:SODIUM HYDROXIDE (CERCLA)
;:1310-73-2
:CS #:WB4900000
ıction by Wt: 80-90%
IA PEL:2 MG/M3
;IH TLV:2 MG/M3, C
ı Rpt Qty:1000 LBS
' Rpt Qty:1000 LBS

;red Name:SODIUM CARBONATE
;:497-19-8
:CS #:VZ4050000
ıction by Wt: <10%
IA PEL:N/K
;IH TLV:N/K

;red Name:NON-HAZARDOUS INGREDIENTS
ıction by Wt: BALANCE
IA PEL:N/K
;IH TLV:N/K

========== Hazards Identification ==========

;0 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
ıtes of Entry: Inhalation:YES Skin:YES Ingestion:YES
)orts of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
ılth Hazards Acute and Chronic:SEVERE IRRITATION OF THE NOSE, MOUTH &
RESPIRATORY TRACT; COUGHING, DIFFICULTY BREATHING; CHEMICAL
PNEUMONITIS. SEVERE SKIN IRRITATION & BURNS. EYE CONTACT CAUSES
SEVERE OR PERMANENT DAMAGE.
)lanation of Carcinogenicity:NOT RELEVANT

:ability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.
ızardous Decomposition Products:HYDROGEN.

========== Disposal Considerations ==========

.ste Disposal Methods:DISPOSE OF I/A/W LOCAL, STATE & FEDERAL REGULATIONS.

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ocument should seek competent professional advice to verify and
ssume responsibility for the suitability of this information to their
articular situation.

OAKITE DEOXIDIZER

AKITE PRODUCTS INC -- DEOXIDIZER LNC -- 6850-01-011-9874

========== Product Identification ==========

oduct ID:DEOXIDIZER LNC
DS Date:10/24/1990
C:6850
IN:01-011-9874
DS Number: BHYKY
= Responsible Party ===
mpany Name:OAKITE PRODUCTS INC
dress:50 VALLEY ROAD
ty:BERKELEY HEIGHTS
ate:NJ
P:07922-2712
untry:US
fo Phone Num:201-464-6900
ergency Phone Num:201-464-6900/800-424-9300(CHEMTREC)
eparer's Name:UNREADABLE
GE:44389
= Contractor Identification ===
mpany Name:OAKITE PRODUCTS INC
dress:50 VALLEY ROAD
x:City:BERKELEY HEIGHTS
ate:NJ
P:07922
untry:US
one:908-464-6900
GE:44389

========== Composition/Information on Ingredients ==========

gred Name:FERRIC SULFATE (SARA III)
S:10028-22-5
ECS #:NO8505000
action by Wt: 30-40%
ner REC Limits:NONE SPECIFIED
HA PEL:1 MG FE/M3
GIH TLV:1 MG FE/M3; 9293
A Rpt Qty:1000 LBS
T Rpt Qty:1000 LBS

gred Name:NITRIC ACID (SARA III)
S:7697-37-2
ECS #:QU5775000
action by Wt: 15-25%
ner REC Limits:NONE SPECIFIED
HA PEL:2 PPM/4 STEL
GIH TLV:2 PPM/4 STEL; 9293
A Rpt Qty:1000 LBS
T Rpt Qty:1000 LBS

gred Name:HYDROGEN FLUORIDE (SARA III)
S:7664-39-3
ECS #:MW7875000
action by Wt: <5%
ner REC Limits:NONE SPECIFIED
HA PEL:3 PPM/6 STEL (F)
GIH TLV:C 3 PPM (F); 9293
A Rpt Qty:100 LBS
T Rpt Qty:100 LBS

gred Name:POTASSIUM PEROXYMONOSULFATE

spiratory Protection:NONE NORMALLY REQUIRED WITH ADEQUATE VENTILATION. NIOSH/MSHA-APPROVED CHEMICAL CARTRIDGE RESPIRATOR OR GAS MASK CONTAINING NON-OXIDIZABLE SORBENT AS APPROPIATE FOR EXPOSURE OF CONCERN IF PEL IS EXCEED ED.
ntilation:LOCAL EXHAUST VENTILATION AS REQUIRED TO KEEP EXPOSURE LEVELS BELOW PEL.
otective Gloves:NEOPRENE GLOVES IF CONTACT POSSIBLE.
e Protection:CHEMICAL SPLASH GOGGLES AS REQUIRED.
her Protective Equipment:PROTECTIVE CLOTHING AS REQUIRED TO MINIMIZE EXPOSURE FROM PROLONGED OR REPEATED CONTACT. EYE BATH AND SAFETY SHOWER.
rk Hygienic Practices:WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.
pplemental Safety and Health
N MANAGED BY COAST GUARD.

========== Physical/Chemical Properties ==========

C:C1
por Density:>1(AIR=1)
ec Gravity:1.44 (WATER=1)
:<1.0
aporation Rate & Reference:<1 (BUTYL ACETATE = 1)
lubility in Water:COMPLETE
pearance and Odor:DARK AMBER LIQUID. SHARP ODOR.
rcent Volatiles by Volume:20-30

========== Stability and Reactivity Data ==========

ability Indicator/Materials to Avoid:YES
OID ALKALIES, COMBUSTIBLES. CONTACT WITH CERTAIN METALS MAY YIELD EXPLOSIVE HYDROGEN GAS.
ability Condition to Avoid:AVOID DIRECT SUNLIGHT.
zardous Decomposition Products:SULFUR DIOXIDE, NITROGEN DIOXIDE, HYDROGEN.

========== Disposal Considerations ==========

ste Disposal Methods:CONTACT YOUR LOCAL ENVIRONMENTAL OFFICER. DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

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ocument should seek competent professional advice to verify and
ssume responsibility for the suitability of this information to their
articular situation.

OAKITE 166

AKITE PRODUCTS INC -- ALUMINUM CLEANER 166, 3142 -- 6850-00N047883

========== Product Identification ==========

oduct ID:ALUMINUM CLEANER 166, 3142
)S Date:12/23/1991
::6850
[N:00N047883
)S Number: BSTPS
= Responsible Party ===
ıpany Name:OAKITE PRODUCTS INC
lress:50 VALLEY RD
:y:BERKELEY HEIGHTS
ıte:NJ
?:07922
ıntry:US
:o Phone Num:908-464-6900
ergency Phone Num:800-424-9300(CHEMTREC)
;E:44389
= Contractor Identification ===
ıpany Name:OAKITE PRODUCTS INC
lress:50 VALLEY ROAD
t::City:BERKELEY HEIGHTS
ıte:NJ
?:07922
ıntry:US
)ne:908-464-6900
;E:44389

========== Composition/Information on Ingredients ==========

ıred Name:BORIC ACID, DISODIUM SALT; (SODIUM TETRABORATE)
;:1330-43-4
:CS #:ED4588000
ıction by Wt: 60-70%
[A PEL:10 MG/M3
;IH TLV:1 MG/M3

ıred Name:PYROPHOSPHORIC ACID, TETRASODIUM SALT; (TETRASODIUM PYROPHOSPHATE)
;:7722-88-5
:CS #:UX7350000
ıction by Wt: <5%
[A PEL:5 MG/M3
;IH TLV:5 MG/M3

ıred Name:ZINC SULFATE(1:1); (ZINC SULFATE)
;:7733-02-0
:CS #:ZH5260000
ıction by Wt: <5%
[A PEL:10 MG/M3
;IH TLV:10 MG/M3
ı Rpt Qty:1000 LBS
' Rpt Qty:1000 LBS

ıred Name:SODIUM(I) NITRATE(1:1); (SODIUM NITRATE)
;:7631-99-4
:CS #:WC5600000
ıction by Wt: <5%
[A PEL:N/K
;IH TLV:N/K

ıred Name:NONHAZARDOUS INGREDIENTS

========== Physical/Chemical Properties ==========

pec Gravity:0.97(H*2O=1)
H:9.1
olubility in Water:APPRECIABLE
ppearance and Odor:WHITE POWDER; ODORLESS

========== Stability and Reactivity Data ==========

tability Indicator/Materials to Avoid:YES
TRONG ACIDS.
tability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.
azardous Decomposition Products:PHOSPHOROUS OXIDES, BORON OXIDES.

========== Disposal Considerations ==========

aste Disposal Methods:DISPOSE OF I/A/W LOCAL, STATE AND FEDERAL
REGULATIONS.

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document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.

ALODINE 600

Material Safety Data Sheet

Revision Number: 004.1

Issue date: 01/22/2009

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: ALODINE 600 RTU
Product type: Coating

IDH number: 595387

Region: United States

Company address:
Henkel Corporation
32100 Stephenson Highway
Madison Heights, MI 48071

Contact information:
Telephone: 248.583.9300
For Chemical Emergency: Call CHEMTREC at 800.424.9300
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state: Liquid
Color: Orange
Odor: Bland

HMIS:
HEALTH: *3
FLAMMABILITY: 0
PHYSICAL HAZARD: 0
Personal Protection: See MSDS Section 8

DANGER -- CORROSIVE!: CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
MAY CAUSE EYE, SKIN AND RESPIRATORY BURNS.
MAY CAUSE BLINDNESS.
MAY CAUSE ALLERGIC SKIN REACTION.
POSSIBLE CANCER HAZARD.

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation: Mists, vapors or liquid may cause severe irritation or burns. Prolonged or repeated breathing may cause ulceration of nasal membranes.

Skin contact: Contact with broken skin may lead to formation of firmly marginated "chrome sores". Product contains chromium, which may cause an allergic skin sensitization reaction. Massive overexposures may lead to kidney failure and death.

Eye contact: This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.

Ingestion: This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

Existing conditions aggravated by exposure: Eye, skin and respiratory disorders. Kidney disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Sodium borofluoride	13755-29-8	0.1 - 1
Sodium chromate	7775-11-3	0.1 - 1
Dipotassium hexafluorozirconate	16923-95-8	0.1 - 1
Sodium nitrate	7631-99-4	0.1 - 1
Chromic acid	7738-94-5	0.1 - 1

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Sodium borofluoride	2 mg/m3 TWA Inhalable fraction. 6 mg/m3 STEL Inhalable fraction.	None	None	None
Sodium chromate	0.05 mg/m3 TWA (as Cr)	0.005 mg/m3 TWA 0.0025 mg/m3 OSHA ACT (SKIN) 0.1 mg/m3 Ceiling	None	None
Dipotassium hexafluorozirconate	5 mg/m3 TWA (as Zr) 10 mg/m3 STEL (as Zr)	5 mg/m3 TWA (as Zr)	None	None
Sodium nitrate	None	None	None	None
Chromic acid	0.05 mg/m3 TWA (as Cr)	0.1 mg/m3 Ceiling 0.005 mg/m3 TWA (SKIN) 0.0025 mg/m3 OSHA ACT 29 CFR 1910.1026	None	None

Engineering controls: Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

Respiratory protection: If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

Eye/face protection: Wear chemical goggles; face shield (if splashing is possible).

Skin protection: Wear impervious gloves for prolonged contact. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron and boots are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Orange
Odor:	Bland
Odor threshold:	Not available
pH:	< 2
Vapor pressure:	Not determined
Boiling point/range:	> 100 °C (> 212°F)
Melting point/ range:	Not available
Specific gravity:	1.01 - 1.03
Vapor density:	Not determined
Flash point:	> 100 °C (> 212°F)
Flammable/Explosive limits - lower:	Not applicable
Flammable/Explosive limits - upper:	Not applicable
Autoignition temperature:	Not applicable
Evaporation rate:	Not determined
Solubility in water:	Complete
Partition coefficient (n-octanol/water):	Not determined
VOC content:	Not applicable

International Air Transportation (ICAO/IATA)

Proper shipping name:	Environmentally hazardous substance, liquid, n.o.s.
Hazard class or division:	9
Identification number:	UN 3082
Packing group:	III

Water Transportation (IMO/IMDG)

Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazard class or division:	9
Identification number:	UN 3082
Packing group:	III

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12(b) Export Notification:	Sodium chromate (CAS# 7775-11-3).Chromic acid (CAS# 7738-94-5).
CERCLA/SARA Section 302 EHS:	None above reporting de minimus
CERCLA/SARA Section 311/312:	Immediate Health, Delayed Health
CERCLA/SARA 313:	This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Sodium chromate (CAS# 7775-11-3). Chromic acid (CAS# 7738-94-5).
CERCLA Reportable quantity:	Chromic acid (CAS# 7738-94-5) 10 lbs. (4.54 kg) Sodium chromate (CAS# 7775-11-3) 10 lbs. (4.54 kg)
California Proposition 65:	This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
WHMIS hazard class:	D.2.A, D.2.B, E

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

Prepared by: John DiCerbo, Regulatory Affairs Specialist

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation does not assume responsibility for any results obtained by persons over whose methods Henkel Corporation has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any of Henkel Corporation's products. In light of the foregoing, Henkel Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

ALODINE 1000

Material Safety Data Sheet

Material Name: ALODINE® 1000 RTU **ID: 235651**

* * * Section 1 - Chemical Product and Company Identification * * *

Product Trade Name ALODINE® 1000 RTU

Manufacturer Information

Henkel Surface Technologies
Henkel Corporation
32100 Stephenson Highway
Madison Heights, MI 48071

Contact Phone: (248) 583-9300

Chemtrec Emergency # (800) 424-9300

* * * Section 2 - Composition / Information on Ingredients * * *

CAS #	Component	Percent
7738-94-5	Chromic acid	<0.5
16923-95-8	Zirconium potassium fluoride	<0.5

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Zirconium compounds, n.o.s., Chromium (VI) compounds- water soluble, (RR-00026-0), (18540-29-9).

* * * Section 3 - Hazards Identification * * *

Emergency Overview:

WARNING! This product may be severely irritating to the eyes. Contact with broken skin may result in ulcers. Prolonged or repeated breathing may cause ulceration of nasal membranes. Cancer Hazard - Contains material which can cause cancer.

Eye Contact:

This product may be severely irritating to the eyes.

Skin Contact:

Contact with broken skin may lead to formation of firmly marginated "chrome sores". Product contains chromium, which may cause an allergic skin sensitization reaction. Liquid or vapor can cause fluoride-type irritation or burns which may not be immediately painful or visible.

Skin Absorption:

Prolonged or widespread contact may result in the absorption of potentially harmful amounts of material.

Ingestion:

No information available.

Inhalation:

Prolonged or repeated breathing may cause ulceration of nasal membranes.

Medical Conditions Aggravated by Exposure:

Pre-existing eye, skin and respiratory disorders.

* * * Section 4 - First Aid Measures * * *

Eye Contact:

In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.

Skin Contact:

Immediately take off all contaminated clothing. For skin contact, flush with large amounts of water. Seek immediate medical attention. If irritation persists, repeat flushing and get medical attention. Discard any shoes or clothing items that cannot be decontaminated.

Ingestion:

If the material is swallowed, get immediate medical attention or advice – Do not induce vomiting. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Chromic acid (7738-94-5)
ACGIH: 0.05 mg/m3 TWA (as Cr) (related to Chromium (VI) compounds, water-soluble)
OSHA: 0.1 mg/m3 Ceiling (and chromates)

Engineering Controls:
Ventilation should effectively remove and prevent buildup of any vapor or mist generated from the handling of this product.

PERSONAL PROTECTIVE EQUIPMENT
As prescribed in the OSHA Standard for Personal Protective Equipment (29 CFR 1910.132), employers must perform a Hazard Assessment of all workplaces to determine the need for, and selection of, proper protective equipment for each task performed.

Eyes/Face Protective Equipment:
Wear chemical goggles; face shield (if splashing is possible).

Skin Protection:
Use impervious gloves. Butyl, Neoprene, PVC or Nitrile gloves recommended. Use of impervious apron and boots are recommended.

Respiratory Protection:
If ventilation is not sufficient to effectively prevent buildup of aerosols or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

Work Practices:
Eye wash fountain and emergency showers are recommended.

*** Section 9 - Physical & Chemical Properties ***

Physical State:	Liquid	**Appearance:**	Light orange
Odor:	None	**Vapor Pressure:**	Not determined
Vapor Density:	Not determined	**Boiling Point:**	>212 °F (>100 °C)
Specific Gravity:	1.0 - 1.1	**pH:**	2.1
Viscosity:	Not applicable	**VOC:**	Not applicable
Solubility Water:	Complete	**Evaporation Rate:**	Not determined
Percent Volatile:	Not applicable	**Percent Solids:**	Not applicable

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability:
Stable under normal conditions.

Conditions to Avoid:
Do not allow chemical to dry in the presence of organic materials.

Incompatibility:
Avoid contact with organic materials, oils, greases, and any oxidizable materials.

Decomposition Products:
None expected.

Hazardous Polymerization:
Will not occur.

*** Section 11 - Toxicological Information ***

Acute Toxicity:
A: General Product Information
Industrial exposure to chromium may cause dermatitis, skin ulcers, perforation of the nasal septum, as well as cancers of the lungs, nasal cavity and paranasal sinuses.

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Zirconium potassium fluoride (16923-95-8)

CERCLA: 1000 lb final RQ; 454 kg final RQ

Chromic acid (7738-94-5)

CERCLA: 10 lb final RQ; 4.54 kg final RQ

SARA 311/312: **Acute:** Yes **Chronic:** Yes **Fire:** No **Pressure:** No **Reactive:** No

State Regulations

A: General Product Information

No additional information available.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS #	CA	FL	MA	MN	NJ	PA
Zirconium potassium fluoride (¹related to Zirconium compounds, n.o.s.)	16923-95-8	Yes	No	Yes	Yes¹	Yes	Yes
Chromic acid	7738-94-5	No	No	Yes	Yes	Yes	Yes

Other Regulations

A: General Product Information

All components are on the U.S. EPA TSCA Inventory List.

B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
Zirconium potassium fluoride	16923-95-8	Yes	Yes	Yes
Chromic acid	7738-94-5	Yes	Yes	Yes

C: Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

*** Section 16 - Other Information ***

NFPA Ratings: Health: 2 **Fire:** 0 **Reactivity:** 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe
HMIS Ratings: Health: 2* **Fire:** 0 **Reactivity:** 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; NFPA = National Fire Protection Association; HMIS = Hazardous Material Identification System; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; SARA = Superfund Amendments and Reauthorization Act

"Rite in the Rain"®
WEATHERPROOF

LEVEL

NOTEBOOK NO. 311

TC Systems Inc.
Stormwater Catch
Basin Sampling

Dept. of Ecology - TCP-HQ

a product of

J. L. DARLING CORPORATION
TACOMA, WASHINGTON 98421 U.S.A.

Working with you for a better Washington

Andy Kallus
Natural Resource Scientist

Department of Ecology
Toxics Cleanup Program
300 Desmond Dr SE, Lacey
Mail: PO Box 47600
Olympia, WA 98504-7600

360/407-7259
FAX 360/407-7154
akal461@ecy.wa.gov

0	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19.8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25.2	25.4	16
17	25.5	25.7	25.8	26.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30.3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	33.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.8	44.0	44.1	44.3	44.4	44.6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	46.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	38
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	39
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40

TC Systems Inc Date: 9/16/09 Page 1

Project Contacts:

- Andy Kallus - TCP HQ - 360.407.7259
- Nancy Rosenbower - Manchester Lab
  Sample Coordinator - 360.871.8827
- Leon Weiks - Manchester Lab
  Sample pickup/delivery
  cell - 360-509-7261
  office - 360-871-8825
- Greg Stegman - Ecology NWRO
  Stormwater Inspector
  425-649-7019
- Charles Souder - TC Systems 425-258-4058
  (General Manager)

Lab Address:

Manchester Environmental Lab
WA State Dept of Ecology
Attn: Sample Receiving
7411 Beach Dr E
Port Orchard, WA 98366-8204

Other Contacts:

James Shack - Site Owner 253-631-3905
Mike Rubel - Fuller Trident Group
949-791-0796

Lab WO# 0909052 Andy Kallus

Undated Notes

TC Systems Inc Date: 9/16/09 Page 2

see below

ure 1 - TC Systems Inc. Site Map

e - Sample locations are subject to
nge based on site conditions.

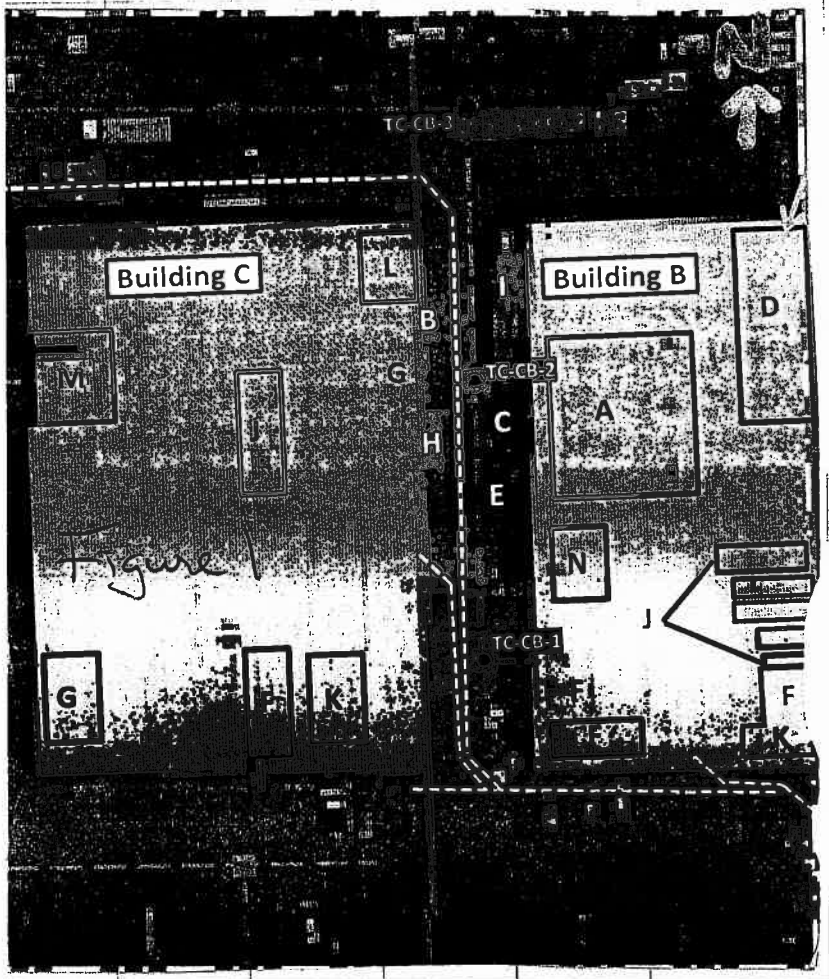


Figure 1

TC Systems Inc Date 9/16/09 Page 3

(A), (B), (C) Below - Legend For Figure 1

N

- Process Plating Tanking
- B – Sludge Press Filter Cake Storage
- C – Chemical Storage
- D – Penetrant Test Area
- E – Boiler Shed
- F – Paint Booth/Paint Areas
- G – Waste
- H – Compressor Shed
- I – Wastewater Treatment Tanks
- J – Oven
- K – Office
- L – Maintenance
- M – Shot Peen
- N – Powder Coat

Storm Drain Piping

Sanitary Sewer Piping

Storm Drain Catch Basin

Sediment Sample From Stormwater Catch

Building B Chemical Line (Metal Finishing)

Building C Painting and Hazardous Waste Storage

Cindy Kallas

Systems Inc. Date - 9/16/09 Page 4

Weather - Clear + 70°F

Arrive on-site at 10 am to meet with Charles Sonder of TC Systems. Greg Stegman of NWRO + Melissa Snoberger of NWRO are present on-site

10 am - Meet w/ Charles Sonder.

Sampling issue is a serious violation. Charles said that ESRA will conduct stormwater sampling.

Greg said that Ecology will give TC Systems a warning letter/correction form. Ecology will require sampling next Qtr (ie stormwater sampling)

The TC System General permit has expired (Statewide permit). Anticipate Jan 2010 for new general permit by Ecology.

Greg asked for the SWPPP. Charles said he may be able to find it. Charles could not find it.

Do you have a spill prevention plan? Charles said yes, but couldn't locate it. ~ Andy Kallus

TC Systems Inc. Date - 9/16/09 Page 5

Do you repair or maintain vehicles?
- Charles said no

Do you fuel equipment on-site or mobile fueling?
- Charles said no.

What do you do outside? Ecology will take a walk through with Charles. Stormwater catch basins. Cleaned out a couple of weeks ago. Clean them out as needed according to Charles. Discharge w/ City of Everett - Goes to sanitary.

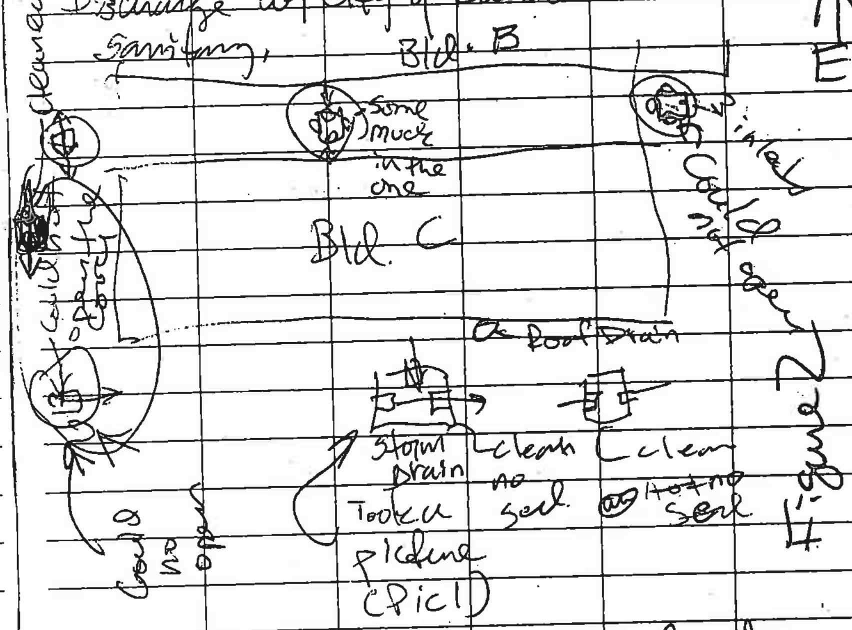


Figure 2

Charles said that they cleaned out the catch basins a month ago.
Andy Kallus

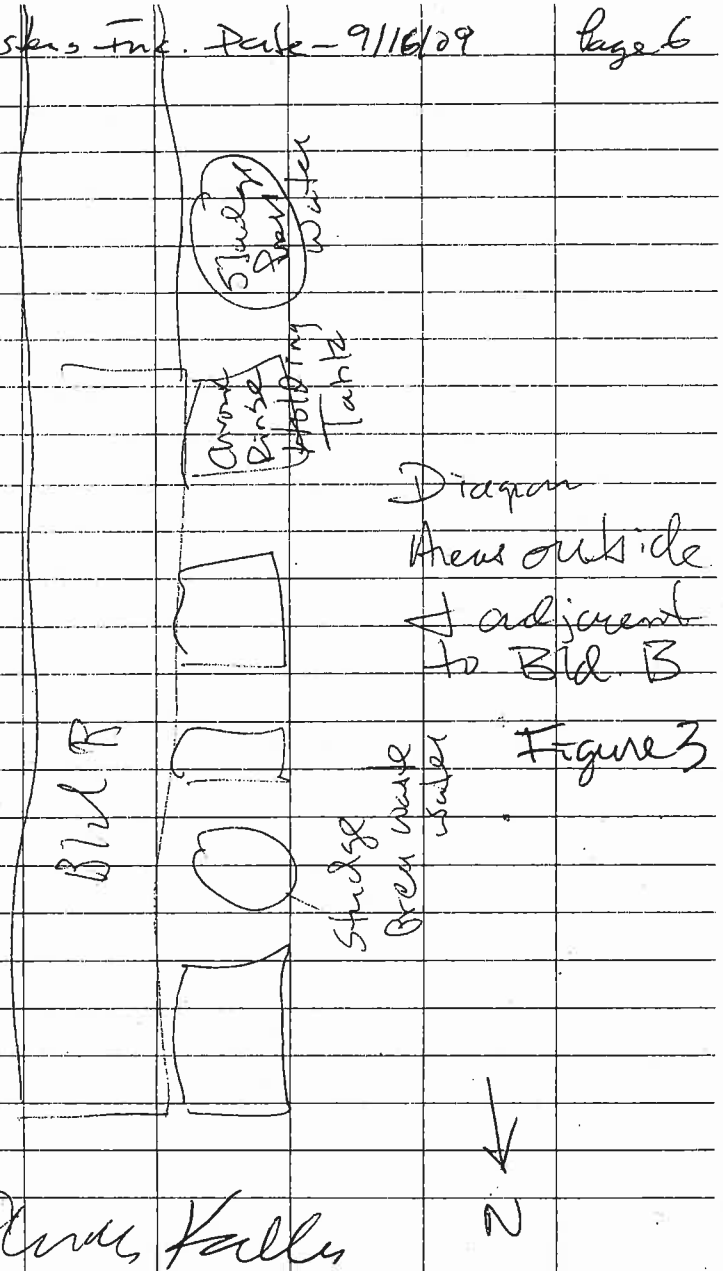


Diagram
Items outside
& adjacent
to Bldg B

Figure 3

Andy Kalles

Robert from TC Systems found the SWPPP. Needs updated.

* TC systems needs to update there Stormwater layout and where all the pipes go.

48.00373 } GPS coordinates for TC-CB-2
122.21559 } noted on Figure 1.

Charles gave Ecology a tour of the outside areas after the meeting in the conference room. Ecology inspected all of the catch basins see Figure 2. Charles indicated that the catch basins were cleaned out a month ago. Ecology was able to open & inspect all of the catch basins except two of them. Could not open the catch basin on the NW corner of the one located East south of the breezway connecting Buildings B & C. All of the Catch basins were clean except the one noted as TC-CB-2 on Figure 1. This one contained some sediment accumulation. Andy Kalles

-Systems Inc. 9/16/09 Page 8

-30 am. After the tour of the
-ant side, Ecology met with
-harles Souler and indicated that
-e wanted to sample the catch
-asin noted as TC-CB-2 on Figure 1.
-harles said OK. This is the only
-atch basin with material that
-cology could sample. Ecology named
-e sample station TC-CB-1.
Andy Kallin performed the sampling as follows:
Station - TC-CB-1
Sample ID - TC-CB-1
GPS Coordinates - 48.00373
122.~~2155900~~ 21559

Sample Analyses: SVOCs + PAHs] 1 8oz
PCBs] Jar
TPH-Dx - 1 8oz jar
PP Metals - 1 4oz jar
Cr.6 - 1 4oz jar
TVS + % Solids - 1 4oz jar
TOC - 1 2oz jar

Samp Time - 11:45 am
9/16/09

Sampling Technique:
A long handled swing sampler

Andy Kallin

TC Systems Inc 9/16/09 Page 9

with an attached 1 liter glass
jar (wide mouth from the lab) was
used to scoop out the sediment
~~from~~ from the bottom of the
~~[illegible]~~ catch basin. Collected sediment
in the jar from all four corners
+ the middle of the catch basin.
The contents from the 1 liter glass
jar were transferred straight into
the glass sampling jars. (A) see p.10 Had to
re-scoop the bottom of the catch
basin several times to get
enough volume for all bottles.
*Note: The contents of the 1 liter glass jar
~~[illegible]~~ (ie sediment) was not transferred
to a stainless steel bowl for
mixing, but was transferred directly
~~[illegible]~~ from the jar to the sample
jars. Stainless steel bowls + scoops
were not brought into the field.
Clean nitrile gloves were used
during all sampling procedures.
All sampling equipment was
rinsed over the catch basin with
tap water after sampling. Andy Kallin

ample Observations.

A diagram of the catch basin mpled is provided below

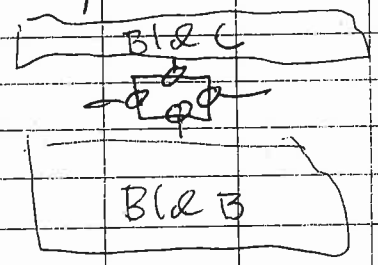


Fig. 4

atch Basin Dimensions.

Appox. 2 feet x 1 foot

Total Depth - about 4 feet

Sed thickness - about 3 to 6 inches.

e material sampled was fairly coarse grained and dark brown in appearance. What looked liked flecks of paint (mostly yellow) were mixed in the sediment. A sheen xal also noted on the water in he catch basin. What appeared to Mussel shells was observed in the samples.

Excess water was decanted off using decontaminated turkey basters. Kelly Kallin

The catch basin sampled had inlets on all four sides as depicted in Figure 4. Mr. Souder did not know the origin of the inlets coming from Buildings B+C. Ecology told him that he needs to find this out as part of the NPDES requirement. Charles said that he would.

The scoop sampler penetrated to the bottom of the catch basin.

After sampling, the sample jars were rinsed with tap water and transferred to a cooler w/ blue ice.

12:15 pm - left site for Ecology HQ to store the samples in the walk in cooler for pick up on 9/17/09.

Cheryl Kallin

- Station name/Sample ID:
- GPS Coordinates
- Sample analyses and container types
    - SVOCs and TPH-Dx – Two 8 oz jars
    - PPMETS and Cr 6 – Two 4 oz jars
    - TVS and %Solids – One 4 oz jar
    - TOC – One 2 oz jar
- Sampling Technique:
- Sample locations in each catch basin (create a figure)
- Sample date and time:
- Equipment decontamination:
- Observations:
    - Catch Basin Dimensions
    - Depth of Solids
    - Total depth of catch basin
    - Diagram of catch basin inlet/outlet pipes.
    - The presence of water, visible flows, signs of flooding, clogging, debris in or around the catch basin, blocked inlets/outlets, staining, etc. will be noted in the log book.
    - Record sample color and texture along with amount and types of particles
    - Evidence of contamination (e.g., odors, sheen, discoloration) in the catch basin.
    - Penetration depth of the grab sampler into the sediment.
    - Biological organisms visually present.
    - Wood, shell, rock, and anthropogenic material observed.
    - Source of inlet flows and destination of outlet flows will be noted, if known.
    - Potential sources to storm drain with distances and gradients
        - Field notes will include a description of potential solids or contaminant sources such as construction activities, erosion, equipment storage or use, waste or material storage, vehicles, onsite processes, etc. Site features, distances, flow directions, and gradients will be noted or sketched on a site map.

flecs

1317 South 13th Avenue Kelso, Washington 98626 (360) 577-7222 (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

October 21, 2009

Analytical Report for Service Request No: K0909194

Karin Feddersen
Washington State Department of Ecology
kfed461@ecy.wa.gov
7411 Beach Drive East
Port Orchard, WA 98366

RECEIVED
OCT 28 2009
Dept. of Ecology
Toxics Cleanup Program

RE: Hex Chrome

Dear Karin:

Enclosed are the results of the sample submitted to our laboratory on September 30, 2009. For your reference, these analyses have been assigned our service request number K0909194.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3376. You may also contact me via Email at GSalata@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Gregory Salata, Ph.D.
Project Chemist

GS/cw

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL or LOQ but greater than or equal to the MDL or LOD.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.1 definition*: Analyte was not detected and is reported as less than the LOD or as defined by the project. The LOD has been adjusted for dilution.
i	The MRL/MDL or LOQ/LOD has been elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated concentration that is less than the MRL or LOQ but greater than or equal to the MDL or LOD.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.1 definition*: Analyte was not detected and is reported as less than the LOD or as defined by the project. The LOD has been adjusted for any dilution or
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD has been elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.1 definition*: Analyte was not detected and is reported as less than the LOD or as defined by the project. The LOD has been adjusted for any dilution or
i	The MRL/MDL or LOQ/LOD has been elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

Chain of Custody Documentation

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

PC [illegible]

Client / Project: Wa. Ecology Service Request K09 09194

Received: 9/30/09 Opened: 9/30/09 By: _____

1. Samples were received via? *US Mail* (*Fed Ex*) *UPS* *DHL* *GH* *GS* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y (N) If yes, how many and where? _____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N
4. Is shipper's air-bill filed? If not, record air-bill number: 8604 9745 2710 NA Y (N)

5. **Temperature of cooler(s) upon receipt (°C):** 6.9 Received in styrofoam coolers - 2 gel Packs.
   Temperature Blank (°C): —
   Thermometer ID: 274
6. If applicable, list Chain of Custody Numbers:
7. Packing material used. *Inserts* (*Baggies*) (*Bubble Wrap*) (*Gel Packs*) *Wet Ice* *Sleeves* *Other* _____
8. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
9. **Did all bottles arrive in good condition (unbroken)?** *Indicate in the table below.* NA (Y) N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
11. Did all sample labels and tags agree with custody papers? *Indicate in the table below* NA (Y) N
12. **Were appropriate bottles/containers and volumes received for the tests indicated?** NA (Y) N
13. Were the pH-preserved bottles tested* received at the appropriate pH? *Indicate in the table below* (NA) Y N
14. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
15. **Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?** (NA) Y N
16. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time
All		X								

*Does not include all pH preserved sample aliquots received. See sample receiving SOP (SMO-GEN).

Additional Notes, Discrepancies, & Resolutions: _____

Analytical Results

Client:	Washington State Department of Ecology	**Service Request:**	K0909194
Project:	Hex Chrome		
Sample Matrix:	Sediment		

Total Solids

Prep Method:	NONE	**Units:**	PERCENT
Analysis Method:	160.3M	**Basis:**	Wet
Test Notes:			

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
0909052-01	K0909194-001	09/16/2009	09/30/2009	10/08/2009	57.3	

Service Request #: K0909194 (III) 10/11

Analysis For: Total Solids

Method: EPA METHOD 160.3 MODIFIED

Pan ID	Lab Code	Wet Weight (g)	Tare (g)	Tare + Dry Wt.(g)	Dry Weight (g)	% Total Solids
	K9194-1	9.93	1.33	6.26		
	-1d	9.84	1.31	6.11		

Oven Temp : _____ Time In : _____ Time Out : _____

Comments:

$\bar{x}$ RPD =

$\bar{x}$ RPD =

$\bar{x}$ RPD =

Analyst: TN Date: 10/8/09

Reviewed By: [signature] Date: 10/12/09

TSGEN.BCH

Group ID:	KWG0909322		
Analyst:	TNguyen	**Reviewed By:**	BH
Date Acquired:	10/08/2009 09:45	**Oven TempStart:**	105 DEG C
Date Completed:	10/09/2009 09:54	**Oven TempEnd:**	105 DEG C
		Date Reviewed:	10/9/09

#	Lab Code	Client ID	Matrix	Tare	Tare+Wet	Tare+Dry	% Solids	QC Ref Sample	Comments
27	K0909211-022	SF-19-SE-01	SEDIMENT	1.32g	12.98g	8.64g	62.8		
28	K0909211-024	SF-9.5-SE-01	SEDIMENT	1.32g	17.28g	13.06g	73.6		
29	K0909211-026	SF-3.5-SE-01	SEDIMENT	1.32g	16.14g	12.07g	72.5		
30	K0909247-001	SR-PRO-093009-S1	SOIL	1.33g	16.64g	12.33g	71.8		
31	K0909250-001	HMM-C-2-1	SLUDGE, SOLID	1.32g	12.78g	6.73g	47.2		
32	K0909250-002	HMM-AD	SLUDGE, SOLID	1.32g	15.39g	9.40g	57.4		
33	K0909250-003	HMM-C-2-2	SLUDGE, SOLID	1.33g	12.71g	6.56g	46.0		
34	K0909250-004	HMM-C-2-Mid	SLUDGE, SOLID	1.32g	15.16g	9.53g	59.3		
35	K0909250-005	HMM-C-1-1	SLUDGE, SOLID	1.33g	12.97g	5.87g	39.0		
36	K0909262-008	LT-DU2-COMP	SEDIMENT	1.33g	9.96g	5.23g	45.2		
37	K0909262-013	LT-DU3-COMP	SEDIMENT	1.34g	10.10g	5.10g	42.9		
38	K0909262-014	LT-DU4-COMP	SEDIMENT	1.33g	10.83g	5.28g	41.6		
39	K0909555-001	WW3-01:5:1	SOIL	34.0312g	44.4648g	36.4415g	23.1		
40	K0909555-002	WW3-01:5:2	SOIL	40.2107g	52.4222g	43.0140g	23.0		
41	K0909555-003	WW3-02:5:1	SOIL	34.1179g	45.6615g	36.3781g	19.6		
42	K0909555-004	WW3-03:5:1	SOIL	36.0548g	46.0396g	37.9264g	18.7		
43	K0909555-005	WW3-04:5:1	SOIL	39.3483g	48.5941g	42.2422g	31.3		
44	K0909555-006	WW3-05:5:1	SOIL	33.9758g	42.6737g	37.3282g	38.5		
45	K0909555-007	WW4-01:5:1	SOIL	35.5199g	45.2332g	38.2125g	27.7		
46	K0909555-008	WW4-02:5:1	SOIL	37.3293g	52.0865g	47.7496g	70.6		
47	KWG0909322-1	Duplicate Client Sample	SOIL	1.32g	11.36g	10.82g	94.6	K0909185-001	
48	KWG0909322-2	Duplicate Client Sample	SOIL	1.32g	12.26g	11.41g	92.2	K0909185-014	
49	KWG0909322-3	Duplicate Client Sample	SOIL	1.31g	11.39g	9.11g	77.4	K0909154-001	
50	KWG0909322-4	Duplicate Client Sample	SOIL	32.6747g	44.4042g	37.1301g	38.0	K0909555-006	
51	KWG0909322-5	Duplicate Client Sample	SEDIMENT	1.32g	13.42g	7.55g	51.5	K0909211-016	
52	KWG0909322-6	Duplicate Client Sample	SEDIMENT	1.31g	9.84g	6.11g	56.3	K0909194-001	
53	KWG0909322-7	Duplicate Client Sample	SEDIMENT	1.33g	9.01g	4.80g	45.2	K0909262-008	

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Washington State Department of Ecology	**Service Request :**	K0909194
Project Name :	Hex Chrome	**Date Collected :**	9/16/2009
Project Number :	NA	**Date Received :**	9/30/2009
Sample Matrix :	SEDIMENT	**Date Prepared :**	10/14/09
		Date Analyzed :	10/15/09

Duplicate Summary
Inorganic Parameters

Sample Name : 0909052-01
Lab Code : K0909194-001DUP
Test Notes :

Units : mg/Kg
Basis : Dry

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Chromium, Hexavalent	EPA 3060A	7196A	0.88	0.18	0.20	0.19	11	J

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Washington State Department of Ecology	**Service Request :**	K0909194
Project Name :	Hex Chrome	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	SOIL	**Date Prepared :**	10/14/09
		Date Analyzed :	10/15/09

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/Kg
Lab Code :	K0909194-LCS	Basis :	Dry
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chromium, Hexavalent	EPA 3060A	7196A	214	205	96	80-120	

Report By: MKANALY

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Washington State Department of Ecology
Project : Hex Chrome

Service Request : K0909194
Date Collected : NA
Date Received : NA

Chromium, Hexavalent
7196A
Units: mg/L

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	10/15/2009	0.50	ND
CCB2 Result	10/15/2009	0.50	ND
CCB3 Result	10/15/2009	0.50	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Washington State Department of Ecology	**Service Request:**	K0909194
Project:	Hex Chrome	**Date Collected:**	9/16/2009
Sample Matrix:	Sediment	**Date Received:**	9/30/2009

Oxidation-Reduction Potential (ORP)

Prep Method:	NA	Units:	mV
Analysis Method:	ASTM D1498-76	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
0909052-01	K0909194-001	-	1	10/15/2009	-7.1	

Work Request # (K9194, K9185

Tier: III III

Date Analyzed: 10/14/09

Analyst: SS

Analysis: Cond (Soil)

175040

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?		yes/no/NA
2.	Holding times met for all analyses and for all samples?		yes/no/NA
3.	Are calculations correct?		yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)		yes/no/NA
5.	All quality control criteria met?		yes/no/NA
	a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
	b.	MBs, CCVs, CCBs. LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
	c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
	d.	Are results for methods blanks all ND?	yes/no/NA
	e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
	f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?		yes/no/NA
7.	Are all samples labelled correctly?		yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)		yes/no/NA
9.	Are detection limits and units reported correctly?		yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?		yes/no/NA
11.	Is the unused space on the benchsheet crossed out?		yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)		yes/no/NA

COMMENTS:
K9194- due date 10/11/09

5e. K9194- (MS/MSD/lps %Rec is <1%, <1%, <1
ORP data show sample to be reducing to
Cr.

Final Approved by: [signature] Date: 10/16/09

DQREPORT

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.: K9185,K9194 Method: 7196A / 3060A

Analysis: Cr6 Color

Prep Date : 10/14/2009

	STD1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7	STD 8	STD 9
Conc. (mg/L)	0.000	0.050	0.100	0.200	0.500	1.000			
Absorbance	0.000	0.036	0.075	0.141	0.370	0.715			

Sample Name Lab Code	Initial Wt./Vol. (g) or (ml)	Dilution Factor	Absorbance @ 540 nm	Background	Net Absorbance @ 540 nm	% Solids
ICB	100	1	-0.003		-0.003	
ICV	100	1	0.214		0.214	
CCB1	100	1	-0.002		-0.002	
CCV1	100	1	0.376		0.376	
MB1	10.0481	1	-0.001		-0.001	
LCS	0.5135	2	0.379		0.379	
K9194-1	10.1960	1	0.009		0.009	57.3
K9194-1D	10.2823	1	0.010		0.010	57.3
K9194-1MS	10.0326	1	0.011		0.011	57.3
K9194-1MSD	10.3864	1	0.012		0.012	57.3
K9194-1PS	25	1	0.012		0.012	
K9185-12	10.6446	1	0.031	0.025	0.006	91.8
K9185-12D	10.6324	1	0.029	0.024	0.005	91.8
K9185-12PS	25	1	0.297	0.025	0.272	
CCB-2	100	1	-0.002		-0.002	
CCV-2	100	1	0.364		0.364	
K9185-12MS	10.5463	5	0.233	0.001	0.232	91.8
K9185-12MSD	10.2272	5	0.458	0.007	0.451	91.8
K9185-13	10.0246	1	0.005		0.005	92.9
K9185-14	10.0655	1	0.003		0.003	92.4
CCB-3	100	1	-0.001		-0.001	
CCV-3	100	1	0.363		0.363	
		1			0.000	
		1			0.000	
		1			0.000	
		1			0.000	
		1			0.000	
		1			0.000	
		1			0.000	
		1			0.000	
		1			0.000	
		1			0.000	
		1			0.000	
		1			0.000	
		1			0.000	
		1			0.000	

10/15/09

SS

COLUMBIA ANALYTICAL SERVICES, INC.

Service Request #: K9194 Method: 9045C

Analysis: pH Corrosivity Matrix: Soil/Solid

Calibration						
Buffer	1.00	4.00	7.00	10.00	12.45	Value of Buffers at 25 °C
Reading	7	4.00	7.00	10.00	7	
Temp °C		25	25	25	7	

Sample Number	Sample Wt. (g)	Vol of Ext Sol (mLs)	pH Reading	% Solids	Temp °C
Buffer Check	Buffer Value:		4.00		25°
LCS	--	--	5.78		7
9194-1	10.0231	20	6.18		
-1d	10.0648	↓	6.28		
Buffer.			4.02		↓
Buffer Check	Buffer Value:				
Buffer Check	Buffer Value:				

LCS: APG 4063 Lot #: 123194 ID #: Cond/1-54-8 T. V. = 5.81 % REC. = 99%

pH 4.00 buffer Cond/1-75- J pH 7.00 buffer Cond/1-77- L pH 10.00 buffer Cond/1-79- J

ph 1.00 buffer Cond/1-73-____ pH 12.45 buffer Cond/1-81-____ Extraction Solution:

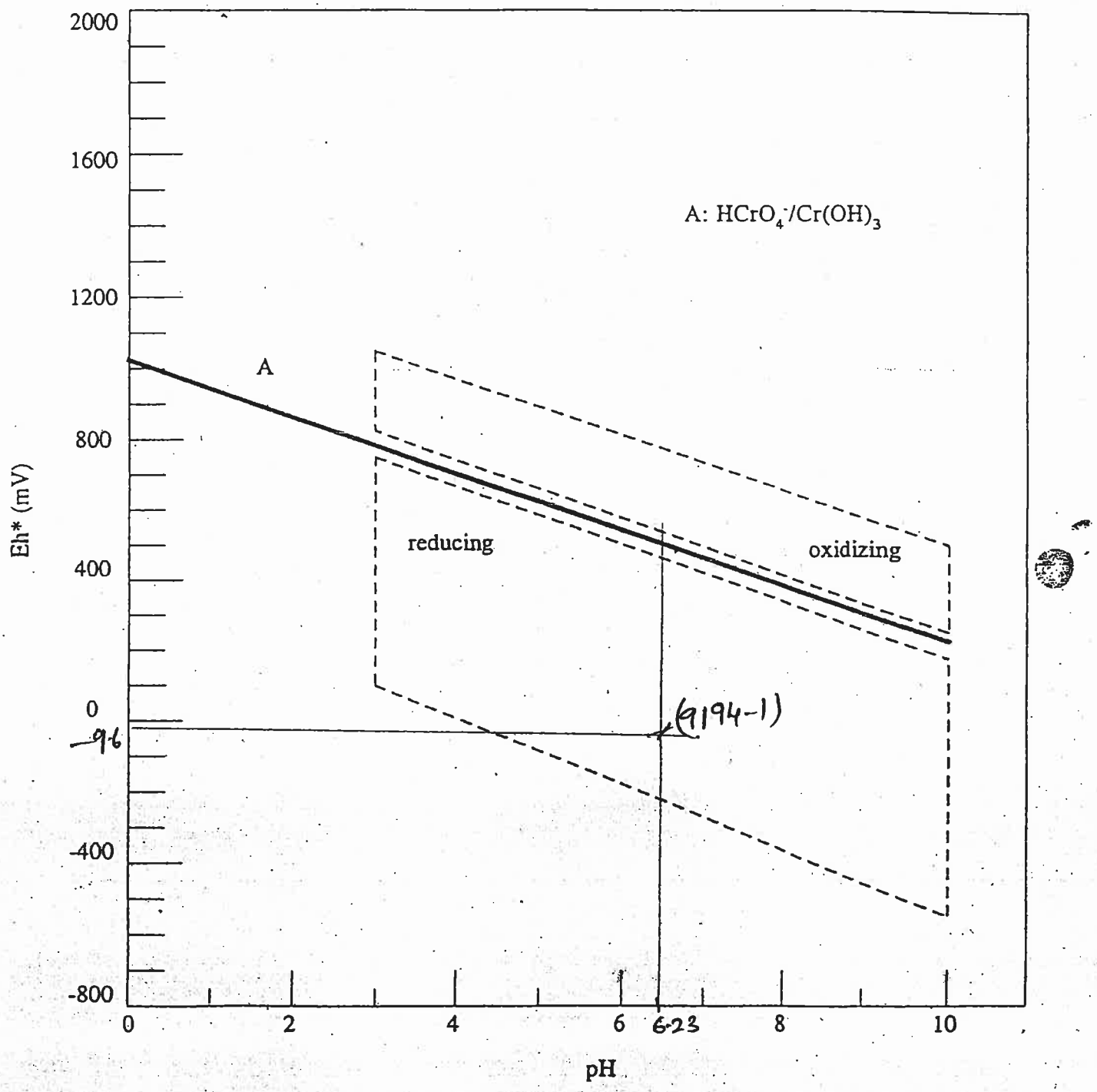
Comments:

K9194-1/1d $\bar{x}$ = 6.23 RPD = 2%

Analyst: SS	Date: 10/15/09 14:50
Reviewed By:	Date: 10/16/09

FIGURE 2
Eh/pH PHASE DIAGRAM

The dashed lines define Eh-pH boundaries commonly encountered in soils and sediments.



* Note the Eh values plotted on this diagram are corrected for the reference electrode voltage: 244 mV units must be added to the measured value when a separate calomel electrode is used, or 199 mV units must be added if a combination platinum electrode is used.

SS 10/15/09

DU520 S/N: 0112U2001732 1.03
15-OCT-09 14:12:52 SCA Group 1357
Wavelength: 540.0 nm
Formula: A=a+bC a: 0.0016 b: 0.7176

10/15/09
CO6(SOil)

Sample		Net A	Dil X	mg/L
0001	ICB	-0.003	1.0000	-0.01
0002	ICV	0.214	1.0000	0.30
0003	CCB-1	-0.002	1.0000	-0.01
0004	CCV-1	0.376	1.0000	0.52
0005	MB	-0.001	1.0000	-0.00
0006	LCS	0.379 ½	1.0000	0.53
0007	9194-1	0.009	1.0000	0.01
0008	-1d	0.010	1.0000	0.01
0009	-1MS	0.011	1.0000	0.01
0010	-1MSD	0.012	1.0000	0.01
0011	-1B	0.012	1.0000	0.01
0012	9182-12	0.031	1.0000	0.04
0013	-12d	0.029	1.0000	0.04
0014	-12MS	0.297	1.0000	0.41
0015	CCB-2	-0.002	1.0000	-0.00
0016	CCV-2	0.364	1.0000	0.51
0017	9182-12MS	0.233 10/50	1.0000	0.32
0018	-12MSD	0.458 ↓	1.0000	0.64
0019	-13	0.005	1.0000	0.00
0020	-14	0.003	1.0000	0.00
0021	-12LCS	0.025	1.0000	0.03
0022	-12dup	0.024	1.0000	0.03
0023	-12MS	0.001 10/50	1.0000	-0.00
0024	-12MSD	0.007 ↓	1.0000	0.01
0025	CCB3	0.001	1.0000	-0.00
0026	CCV-3	0.363	1.0000	0.50

BG

10/16/09

Manchester Environmental Laboratory

7411 Beach Dr E, Port Orchard, Washington 98366

Case Narrative

September 21, 2009

Subject: TC Systems Inc. Project

Sample(s): 0909052-01

Officer(s): Andrew Kallus

Work Order #: 0909052

By: Bob Carrell

NWTPH-Dx Analysis

Analytical Method

The sample, two laboratory control spikes and one method blank were extracted with methylene chloride and the extracts were analyzed by gas chromatography with flame ionization detection (GC/FID) as outlined in the NWTPH-Dx method.

Holding Times

The sample was extracted and analyzed within the recommended method holding times.

Calibration

The eight point diesel oil and an eight point lube oil calibration using linear and quadratic fit respectively resulted in correlation coefficients of greater than 0.99 with no standard varying from its true value by more than +/-15% for diesel or +/-20% for lube oil. Also the beginning and end of analytical run check standards did not vary from their true values by more than +/-15% for diesel or +/-20% for lube oil.

Blanks

No analytically significant levels of analyte were detected in the method blank (B09H159-BLK1) associated with these samples.

Surrogates

The pentacosane surrogate recoveries were acceptable and within the QC limits of 50% to 150% except for the sample 0909052-01 which had 162% recovery. This sample contains a homologous series of compounds which appear to be paraffin wax and since the surrogate compound pentacosane is one of these compounds (nC25) the additive effect of this is to increase the apparent amount of the surrogate. As a result of this no qualifiers were added due to surrogate recovery.

Matrix Spikes

None requested.

Laboratory Control Spikes

The results of the diesel oil LCSs (B09H159-BS1 and –BSD1) were acceptable and within the laboratory QC limits of 70%-130%.

Comments

The chromatogram showed that the petroleum present consisted of an unresolved envelope of compounds on top of which rides a homologous series of paraffins from approximately nC23 through nC41. The unresolved envelope equates to a lube oil however the presence of the paraffin wax suggests that a second product is present, either paraffin wax was added to the lube oil or the whole represents something else. In any event the whole was integrated and reported as lube oil.

Data Qualifier Codes

U	-	The analyte was analyzed for but was not detected above the reported sample quantitation limit.
J	-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	-	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
REJ	-	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
NAF	-	Not analyzed for.

NC - Not Calculated

bold - The analyte was present in the sample. (Visual Aid to locate detected compounds on report sheet.)

Manchester Environmental Laboratory
Final Analysis Report for
Semi-volatile petroleum products

Project: TC Systems Inc. **Field ID: TC-CB-01**

Work Order: 0909052	**Lab ID #: 0909052-01**	**Batch ID: B09I159**
Project Officer: Kallus, Andrew	**Collected: 9/16/2009**	**Prepared: 9/17/2009**
Initial Vol: 5.184 g	**Prep Method: SW3541**	**Analyzed: 9/18/2009**
Final Vol: 3 mL	**Analysis Method: NWTPH-DX**	**Matrix: Sediment/Soil**
	% Solids:	**Units: mg/kg dw**

CAS#	Analyte	Result	Qualifier	RL	MDL
68476-34-6	#2 Diesel	19	U	19	
NULL	**Lube Oil**	**3800**		48	

Surrogate Recovery:

CAS#	Analyte	Result	Qualifier	Spike Level	% Recovery	%Rec.Limits
629-99-2	Pentacosane	43.7		27	162	50-150

Authorized by: _____ **Release Date:** 9-22-09 **Printed:** 9/22/2009

Washington State Department of Ecology

Manchester Environmental Laboratory
Final Analysis Report for
Semi-volatile petroleum products

Project: TC Systems Inc. | **QC Type : Method Blank**

Work Order: 0909052
Project Officer: Kallus, Andrew
Initial Vol: 10 g
Final Vol: 3 mL

Lab ID #: B09I159-BLK1
Prep Method: SW3541
Analysis Method: NWTPH-DX
Source Field ID: Blank

Batch ID: B09I159
Prepared: 9/17/2009
Analyzed: 9/17/2009
Matrix: Sediment/Soil
Units: mg/kg dw

CAS#	Analyte	Result	Qualifier	RL	MDL
68476-34-6	#2 Diesel	3.0	U	3.0	
NULL	Lube Oil	7.5	U	7.5	

Surrogate Recovery:

CAS#	Analyte	Result	Qualifier	Spike Level	% Recovery	%Rec.Limits
629-99-2	Pentacosane	13.7		14	98	50-150

Authorized by: Barnell **Release Date:** 9-22-09 **Printed:** 9/22/2009

Manchester Environmental Laboratory
Final Analysis Report for
Semi-volatile petroleum products

Project: TC Systems Inc. **QC Type : LCS**

Work Order: 0909052
Project Officer: Kallus, Andrew
Initial Vol: 10 g
Final Vol: 3 mL

Lab ID #: B09I159-BS1
Prep Method: SW3541
Analysis Method: NWTPH-DX
Source Field ID: LCS

Batch ID: B09I159
Prepared: 9/17/2009
Analyzed: 9/17/2009
Matrix: Sediment/Soil
Units: mg/kg dw

Analyte	Spike Result	RL	Spike Level	%Rec	%Rec Limits
#2 Diesel	359	3.0	300	120	70-130

Surrogate Recovery:

CAS#	Analyte	Result	Qualifier	Spike Level	% Recovery	%Rec.Limits
629-99-2	Pentacosane	17.2		14	123	50-150

Authorized by: _____ **Release Date:** 9-22-09 **Printed:** 9/22/2009

Manchester Environmental Laboratory
Final Analysis Report for
Semi-volatile petroleum products

Project: TC Systems Inc. **QC Type : LCS Dup**

Work Order: 0909052
Project Officer: Kallus, Andrew
Initial Vol: 10 g
Final Vol: 3 mL

Lab ID #: B09I159-BSD1
Prep Method: SW3541
Analysis Method: NWTPH-DX
Source Field ID: LCS Dup

Batch ID: B09I159
Prepared: 9/17/2009
Analyzed: 9/17/2009
Matrix: Sediment/Soil
Units: mg/kg dw

Analyte	Spike Result	RL	Spike Level	%Rec	%Rec Limits	RPD	RPD Limit
#2 Diesel	321	3.0	300	107	70-130	11	40

Surrogate Recovery:

CAS#	Analyte	Result	Qualifier	Spike Level	% Recovery	%Rec.Limits
629-99-2	Pentacosane	15.8		14	113	50-150

Authorized by: _____ Release Date: 9-22-09 Printed: 9/22/2009

Manchester Environmental Laboratory

7411 Beach Dr E, Port Orchard, Washington 98366

Case Narrative
October 13, 2009

Subject: Metals TC Systems Inc.

Project No: 0909052

Officer: Andy Kallus

By: Dean Momohara

Summary

One or both matrix spike (MS) recoveries for chromium, copper, zinc and lead were not within the acceptance limits. The standard spiking level was insufficient for the elevated concentration of analyte in the source sample and no action was taken. One or both of the associated MS recoveries for mercury and antimony were less than the lower acceptance limit. The source samples were qualified as estimates. The duplicate relative percent difference (RPD) for the MS and MSD for mercury analysis was greater than the acceptance range. The source sample was qualified as an estimate. The laboratory did not encounter any other problems in the analyses of this sample. All other sample results were reported without qualification.

All analyses requested were evaluated by established regulatory quality assurance guidelines.

Methods

The laboratory analyzed and digested the sample using the following methods: EPA method 245.5 for the digestion and analysis for mercury and EPA method 3050B and EPA 200.8 for the digestion and analysis, respectively, for trace metals.

Sample Information

The laboratory received the sample on 09/17/09. The temperature of the cooler received was within the proper range of 0°C - 6°C. The sample was received in good condition. The sample was assigned laboratory identification number 0909052-01.

Other Quality Assurance Measures and Issues

U - The analyte was not detected at or above the reported result.

J - The analyte was positively identified. The associated numerical result is an estimate.

bold - The analyte was present in the sample. (Visual Aid to locate detected compounds on report sheet.)

Please call Dean Momohara at (360) 871-8808 to further discuss this project.

cc: Project File

Washington State Department of Ecology

Manchester Environmental Laboratory
Final Analysis Report for
Mercury

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 09/29/2009

Analyte: Mercury
Method: EPA245.5
Matrix: Sediment/Soil
Units: mg/kg dw

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	0.108		0.0097	0.0026	09/16/09	09/29/09	B09I244

QC Results for Batch ID: B09I244

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09I244-BLK1	Blank	0.0050	U	0.0050	09/29/09
B09I244-BLK2	Blank	0.0050	U	0.0050	09/29/09

Sample #	QC Sample	Result		Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09I244-BS1	LCS	0.109		0.1			109	85-115		
B09I244-DUP1	Duplicate	0.0060	U		0909068-12	0.0059 J				20
B09I244-MS1	Matrix Spike	0.105		0.14	0909068-01	0.016	63	75-125		
B09I244-MSD1	Matrix Spike Dup	0.130		0.14	0909068-01	0.016	81	75-125	21	20

Authorized by: DM

Release Date: 10/13/9

Washington State Department of Ecology

Manchester Environmental Laboratory

Final Analysis Report for

Silver

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 10/12/2009

Analyte: Silver
Method: EPA200.8
Matrix: Sediment/Soil
Units: mg/kg dw

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	0.95		0.10	0.004	09/16/09	10/12/09	B09J050

QC Results for Batch ID: B09J050

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09J050-BLK1	Blank	0.10	U	0.10	10/12/09

Sample #	QC Sample	Result	Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09J050-BS1	LCS	39.2	40			98	85-115		
B09J050-MS1	Matrix Spike	35.4	40	0909052-01	0.949	86	75-125		
B09J050-MSD1	Matrix Spike Dup	36.3	40	0909052-01	0.949	88	75-125	3	20

Authorized by: DM

Release Date: 10/13/09

Manchester Environmental Laboratory
Final Analysis Report for
Arsenic

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 10/12/2009

Analyte: Arsenic
Method: EPA200.8
Matrix: Sediment/Soil
Units: mg/kg dw

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	22.8		0.10	0.02	09/16/09	10/12/09	B09J050

QC Results for Batch ID: B09J050

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09J050-BLK1	Blank	0.10	U	0.10	10/12/09

Sample #	QC Sample	Result	Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09J050-BS1	LCS	39.7	40			99	85-115		
B09J050-MS1	Matrix Spike	60.8	40	0909052-01	22.8	95	75-125		
B09J050-MSD1	Matrix Spike Dup	61.3	40	0909052-01	22.8	96	75-125	0.7	20

Authorized by: DM

Release Date: 10/13/09

Manchester Environmental Laboratory
Final Analysis Report for
Beryllium

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 10/12/2009

Analyte: Beryllium
Method: EPA200.8
Matrix: Sediment/Soil
Units: mg/kg dw

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	0.32		0.10	0.006	09/16/09	10/12/09	B09J050

QC Results for Batch ID: B09J050

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09J050-BLK1	Blank	0.10	U	0.10	10/12/09

Sample #	QC Sample	Result	Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09J050-BS1	LCS	42.0	40			105	85-115		
B09J050-MS1	Matrix Spike	37.1	40	0909052-01	0.321	92	75-125		
B09J050-MSD1	Matrix Spike Dup	38.1	40	0909052-01	0.321	94	75-125	3	20

Authorized by: DM **Release Date:** 10/13/09

Manchester Environmental Laboratory
Final Analysis Report for
Cadmium

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 10/12/2009

Analyte: Cadmium
Method: EPA200.8
Matrix: Sediment/Soil
Units: mg/kg dw

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	8.72		0.10	0.006	09/16/09	10/12/09	B09J050

QC Results for Batch ID: B09J050

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09J050-BLK1	Blank	0.10	U	0.10	10/12/09

Sample #	QC Sample	Result	Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09J050-BS1	LCS	38.7	40			97	85-115		
B09J050-MS1	Matrix Spike	44.4	40	0909052-01	8.72	89	75-125		
B09J050-MSD1	Matrix Spike Dup	43.4	40	0909052-01	8.72	87	75-125	2	20

Authorized by: DM **Release Date:** 10/13/09

Manchester Environmental Laboratory
Final Analysis Report for
Chromium

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 10/12/2009

Analyte: Chromium
Method: EPA200.8
Matrix: Sediment/Soil
Units: mg/kg dw

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	3270		50.0	1.12	09/16/09	10/12/09	B09J050

QC Results for Batch ID: B09J050

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09J050-BLK1	Blank	0.50	U	0.50	10/12/09

Sample #	QC Sample	Result	Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09J050-BS1	LCS	37.8	40			94	85-115		
B09J050-MS1	Matrix Spike	3400	40	0909052-01	3270	328	75-125		
B09J050-MSD1	Matrix Spike Dup	3300	40	0909052-01	3270	82	75-125	3	20

Authorized by: DM **Release Date:** 10/13/9

Manchester Environmental Laboratory
Final Analysis Report for
Copper

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 10/12/2009

Analyte: Copper
Method: EPA200.8
Matrix: Sediment/Soil
Units: mg/kg dw

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	1360		1.00	0.12	09/16/09	10/12/09	B09J050

QC Results for Batch ID: B09J050

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09J050-BLK1	Blank	0.10	U	0.10	10/12/09

Sample #	QC Sample	Result	Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09J050-BS1	LCS	39.3	40			98	85-115		
B09J050-MS1	Matrix Spike	1360	40	0909052-01	1360	-12	75-125		
B09J050-MSD1	Matrix Spike Dup	1380	40	0909052-01	1360	52	75-125	2	20

Authorized by: _____ **Release Date:** 10/13/9

Manchester Environmental Laboratory
Final Analysis Report for
Nickel

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 10/12/2009

Analyte: Nickel
Method: EPA200.8
Matrix: Sediment/Soil
Units: mg/kg dw

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	87.3		0.10	0.006	09/16/09	10/12/09	B09J050

QC Results for Batch ID: B09J050

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09J050-BLK1	Blank	0.10	U	0.10	10/12/09

Sample #	QC Sample	Result	Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09J050-BS1	LCS	38.4	40			96	85-115		
B09J050-MS1	Matrix Spike	128	40	0909052-01	87.3	102	75-125		
B09J050-MSD1	Matrix Spike Dup	127	40	0909052-01	87.3	100	75-125	0.5	20

Authorized by: DM **Release Date:** 10/13/09

Manchester Environmental Laboratory
Final Analysis Report for
Lead

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 10/12/2009

Analyte: Lead
Method: EPA200.8
Matrix: Sediment/Soil
Units: mg/kg dw

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	693		1.00	0.07	09/16/09	10/12/09	B09J050

QC Results for Batch ID: B09J050

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09J050-BLK1	Blank	0.10	U	0.10	10/12/09

Sample #	QC Sample	Result	Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09J050-BS1	LCS	41.2	40			103	85-115		
B09J050-MS1	Matrix Spike	856	40	0909052-01	693	409	75-125		
B09J050-MSD1	Matrix Spike Dup	712	40	0909052-01	693	48	75-125	18	20

Authorized by: DM **Release Date:** 10/13/09

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Analysis Report for
Antimony

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 10/12/2009

Analyte: Antimony
Method: EPA200.8
Matrix: Sediment/Soil
Units: mg/kg dw

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	1.09	J	0.20	0.008	09/16/09	10/12/09	B09J050

QC Results for Batch ID: B09J050

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09J050-BLK1	Blank	0.20	U	0.20	10/12/09

Sample #	QC Sample	Result	Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09J050-BS1	LCS	38.7					85-115		
B09J050-MS1	Matrix Spike	5.34		0909052-01	1.09		75-125		
B09J050-MSD1	Matrix Spike Dup	5.36		0909052-01	1.09		75-125	0.4	20

Authorized by: DM **Release Date:** 10/13/9

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Analysis Report for
Selenium

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 10/12/2009

Analyte: Selenium
Method: EPA200.8
Matrix: Sediment/Soil
Units: mg/kg dw

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	1.29		0.50	0.30	09/16/09	10/12/09	B09J050

QC Results for Batch ID: B09J050

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09J050-BLK1	Blank	0.50	U	0.50	10/12/09

Sample #	QC Sample	Result	Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09J050-BS1	LCS	41.5	40			104	85-115		
B09J050-MS1	Matrix Spike	41.1	40	0909052-01	1.29	100	75-125		
B09J050-MSD1	Matrix Spike Dup	40.4	40	0909052-01	1.29	98	75-125	2	20

Authorized by: DM **Release Date:** 10/13/09

Manchester Environmental Laboratory
Final Analysis Report for
Thallium

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 10/12/2009

Analyte: Thallium
Method: EPA200.8
Matrix: Sediment/Soil
Units: mg/kg dw

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	0.10	U	0.10	0.02	09/16/09	10/12/09	B09J050

QC Results for Batch ID: B09J050

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09J050-BLK1	Blank	0.10	U	0.10	10/12/09

Sample #	QC Sample	Result	Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09J050-BS1	LCS	40.7	40			102	85-115		
B09J050-MS1	Matrix Spike	32.0	40	0909052-01	0.070	80	75-125		
B09J050-MSD1	Matrix Spike Dup	31.4	40	0909052-01	0.070	78	75-125	2	20

Authorized by: DM

Release Date: 10/13/9

Manchester Environmental Laboratory
Final Analysis Report for
Zinc

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 10/12/2009

Analyte: Zinc
Method: EPA200.8
Matrix: Sediment/Soil
Units: mg/kg dw

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	2270		50.0	2.2	09/16/09	10/12/09	B09J050

QC Results for Batch ID: B09J050

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09J050-BLK1	Blank	5.0 U		5.0	10/12/09

Sample #	QC Sample	Result	Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09J050-BS1	LCS	41.6	40			104	85-115		
B09J050-MS1	Matrix Spike	2200	40	0909052-01	2270	-185	75-125		
B09J050-MSD1	Matrix Spike Dup	2050	40	0909052-01	2270	-548	75-125	7	20

Authorized by: DM **Release Date:** 10/13/9

Manchester Environmental Laboratory

7411 Beach Dr E, Port Orchard, Washington 98366

Case Narrative

September 30, 2009

Subject: TC Systems, Inc

Sample: 0909052-01

Officer: Andrew Kallus

By: M.Mandjikov

Polychlorinated Biphenyl Analysis

Analytical Method(s)

Approximately 20 grams of the sediment sample was extracted with methylene chloride using automated Soxhlet extraction. The extracts were then solvent exchanged into hexane, eluted through a micro Florisil® column with a 6% preserved diethyl ether/ 94% hexane solution, extracted with tetrabutylammonium hydrogen sulfate (TBA) twice to remove sulfur, and adjusted to 5 mL with iso-octane.

The extracts were treated twice with concentrated sulfuric acid and then shaken with silica gel prior to analysis using dual column gas chromatography equipped with electron capture detectors (GC-ECD).

These methods are modifications of EPA SW- 846 methods 3541, 3620, 3630, 3665, and 8082.

Holding Times

All the samples were prepared and analyzed within the method holding times.

Calibration

All results are reported from calibration curves and initial calibration verification (ICV) standards that are within the established quality control (QC) limits.

The closing continuing calibration verification (CCV) for the surrogate, decachlorobiphenyl (DCB), recovered below the established QC limits of 85% - 115%.

DCB results reported and bracketed by low CCV are 0909052-01, B09I204-DUP1, B09I204-MS1, and B09I204-MSD1.

No results have been qualified due to the low CCV recovery of the surrogate.

Blanks

There are no target analytes detected in any of the blanks.

Surrogates

Each sample, blank, and QA sample was spiked with Decachlorobiphenyl (DCB). All the surrogate recoveries are within the established QC limits of 50% - 150%.

Duplicate Sample

Sample 0909052-01 was prepared in duplicate to assess the precision of this project. The relative percent difference (RPD) between the Aroclor 1254 results exceeds 40%. The Aroclor 1254 results for both the sample and the duplicate are qualified as estimates, "J".

Matrix Spike and Matrix Spike Duplicate

Sample 0909052-01 was prepared in triplicate. Two of the replicates were spiked with Aroclors 1016 and 1260. The recoveries exceed the established QC limits of 50% - 150%. However, the RPDs are within the established QC limits of ≤40%.

Aroclors 1016 and 1260 were not reported below the reporting limit in the native sample and therefore, no native amount was subtracted during the calculation of the spiked samples. The apparent high recoveries of Aroclors 1016 and 1260 are due to the contribution of the high Aroclor 1254 interference native to the sample.

No results are qualified due to matrix spike recoveries.

Laboratory Control Samples

One laboratory control sample (LCS) was extracted and analyzed with this set of samples to assess accuracy. The recoveries are within the established QC limits of 50% - 150%.

Comments

The high relative percent difference between the Aroclor 1254 results of the 0909052-01 and B09I204-DUP1 indicate that this Aroclor is not distributed evenly throughout the sample. Examination of the Aroclor 1254 concentration in the spiked replicates confirms this observation.

Because the concentration of Aroclor 1254 is so high in the sample yet not consistent throughout the subsampling, its interference upon the other Aroclors is also inconsistent.

Aroclor 1248 was detected in sample 0909052-01 and has been qualified, "J", as an estimate due to Aroclor 1254 interference. This result should be considered to be biased high due to this interference.

Aroclor 1248 and Aroclor 1260 are reported at estimated reporting limits, "UJ", for B09I204-DUP1 because the Aroclor 1254 interference is so high that neither can be estimated.

Aroclor 1016, 1221, 1232, 1242, and 1262 results are reported at estimated reporting limits, "UJ", for samples 0909052-01 and B09I204-DUP1 due to the high levels of interference.

Qualifier	Description
E	Reported result is an estimate because it exceeds the calibration range.
G	Value is likely greater than result reported; result is an estimated minimum value.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
NAF	Not analyzed for.
NC	Not calculated
R {REJ}	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
U	The analyte was not detected at or above the reported sample quantitation limit.
UJ	The analyte was not detected at or above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately measure the analyte in the sample.

Washington State Department of Ecology

Manchester Environmental Laboratory
Final Analysis Report for
Polychlorinated Biphenyls

Project: TC Systems Inc. **Field ID: TC-CB-01**

Work Order: 0909052
Project Officer: Kallus, Andrew
Initial Vol: 20.067 g
Final Vol: 5 mL

Lab ID #: 0909052-01
Collected: 9/16/2009
Prep Method: SW3541
Analysis Method: SW8082
% Solids: 51.6

Batch ID: B09I204
Prepared: 9/21/2009
Analyzed: 9/23/2009
Matrix: Sediment/Soil
Units: ug/kg dw

CAS#	Analyte	Result	Qualifier	RL	MDL
12674-11-2	PCB - 1016	48	UJ	12	5.5
11104-28-2	PCB - 1221	24	UJ	12	2.6
11141-16-5	PCB - 1232	48	UJ	12	7.1
53469-21-9	PCB - 1242	58	UJ	12	1.6
12672-29-6	**PCB - 1248**	**120**	**J**	12	1.5
11097-69-1	**PCB - 1254**	**420**	**J**	60	1.8
11096-82-5	PCB - 1260	48	UJ	12	1.4
37324-23-5	PCB - 1262	34	UJ	12	0.52
11100-14-4	PCB - 1268	12	U	12	0.60

Surrogate Recovery:

CAS#	Analyte	Result	Qualifier	Spike Level	% Recovery	%Rec.Limits
2051-24-3	Decachlorobiphenyl (DCB)	8.64		9.66	90	50-150

Authorized by: M. Manuel Kallus **Release Date:** 9/30/09 **Printed:** 9/30/2009

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Analysis Report for
Polychlorinated Biphenyls

Project: TC Systems Inc. **QC Type : Method Blank**

Work Order: 0909052
Project Officer: Kallus, Andrew
Initial Vol: 10 g
Final Vol: 5 mL

Lab ID #: B09I204-BLK1
Prep Method: SW3541
Analysis Method: SW8082
Source Field ID: Blank

Batch ID: B09I204
Prepared: 9/21/2009
Analyzed: 9/24/2009
Matrix: Sediment/Soil
Units: ug/kg dw

CAS#	Analyte	Result	Qualifier	RL	MDL
12674-11-2	PCB - 1016	12	U	12	5.7
11104-28-2	PCB - 1221	12	U	12	2.7
11141-16-5	PCB - 1232	12	U	12	7.3
53469-21-9	PCB - 1242	12	U	12	1.6
12672-29-6	PCB - 1248	12	U	12	1.6
11097-69-1	PCB - 1254	12	U	12	0.38
11096-82-5	PCB - 1260	12	U	12	1.4
37324-23-5	PCB - 1262	12	U	12	0.54
11100-14-4	PCB - 1268	12	U	12	0.62

Surrogate Recovery:

CAS#	Analyte	Result	Qualifier	Spike Level	% Recovery	%Rec.Limits
2051-24-3	Decachlorobiphenyl (DCB)	7.68		10	77	50-150

Authorized by: M. Manchikov Release Date: 9/30/09 Printed: 9/30/2009

Washington State Department of Ecology

Manchester Environmental Laboratory
Final Analysis Report for
Polychlorinated Biphenyls

Project: TC Systems Inc. **QC Type : Duplicate**

Work Order: 0909052
Project Officer: Kallus, Andrew
Initial Vol: 20.57 g
Final Vol: 5 mL

Lab ID #: B09I204-DUP1
Prep Method: SW3541
Analysis Method: SW8082
Source Field ID: Duplicate
Source Lab ID #: 0909052-01

Batch ID: B09I204
Prepared: 9/21/2009
Analyzed: 9/23/2009
Matrix: Sediment/Soil
Units: ug/kg dw

CAS#	Analyte	Duplicate Result	Duplicate Qualifier	Source Result	Source Qualifier	RPD	RPD Limit
12674-11-2	PCB - 1016	47	UJ	48	UJ		40
11104-28-2	PCB - 1221	24	UJ	24	UJ		40
53469-21-9	PCB - 1242	59	UJ	58	UJ		40
12672-29-6	PCB - 1248	170	UJ	120	J		40
11097-69-1	**PCB - 1254**	**940**	J	**420**	J	76	40
11096-82-5	PCB - 1260	82	UJ	48	UJ		40
37324-23-5	PCB - 1262	59	UJ	34	UJ		40
11100-14-4	PCB - 1268	12	U	12	U		40

Surrogate Recovery:

CAS#	Analyte	Result	Qualifier	Spike Level	% Recovery	%Rec.Limits
2051-24-3	Decachlorobiphenyl (DCB)	4.72		9.42	50	50-150

Authorized by: M. Manchester **Release Date:** 9/30/09 **Printed:** 9/30/2009

Washington State Department of Ecology

Manchester Environmental Laboratory
Final Analysis Report for
Polychlorinated Biphenyls

Project: TC Systems Inc. **QC Type : LCS**

Work Order: 0909052
Project Officer: Kallus, Andrew
Initial Vol: 10 g
Final Vol: 5 mL

Lab ID #: B09I204-BS1
Prep Method: SW3541
Analysis Method: SW8082
Source Field ID: LCS

Batch ID: B09I204
Prepared: 9/21/2009
Analyzed: 9/24/2009
Matrix: Sediment/Soil
Units: ug/kg dw

Analyte	Spike Result	RL	Spike Level	%Rec	%Rec Limits
PCB - 1016	**40.5**	12	50	81	50-150
PCB - 1260	**39.5**	12	50	79	50-150

Surrogate Recovery:

CAS#	Analyte	Result	Qualifier	Spike Level	% Recovery	%Rec.Limits
2051-24-3	Decachlorobiphenyl (DCB)	8.32		10	83	50-150

Authorized by: M C Mandjikov **Release Date:** 9/30/09 **Printed:** 9/30/2009

Washington State Department of Ecology

Manchester Environmental Laboratory
Final Analysis Report for
Polychlorinated Biphenyls

Project: TC Systems Inc. **QC Type : Matrix Spike**

Work Order: 0909052
Project Officer: Kallus, Andrew
Initial Vol: 20.2 g
Final Vol: 5 mL

Lab ID #: B09I204-MS1
Prep Method: SW3541
Analysis Method: SW8082
Source Field ID: Matrix Spike
Source Lab ID #: 0909052-01

Batch ID: B09I204
Prepared: 9/21/2009
Analyzed: 9/23/2009
Matrix: Sediment/Soil
Units: ug/kg dw

Analyte	Spike Result	RL	Spike Level	Source Result	Source Qualifier	%Rec	%Rec Limits
PCB - 1016	**81.3**	12	48	48.3	UJ	69	50-150
PCB - 1260	**143**	12	48	48.3	UJ	197	50-150

Surrogate Recovery:

CAS#	Analyte	Result	Qualifier	Spike Level	% Recovery	%Rec.Limits
2051-24-3	Decachlorobiphenyl (DCB)	5.14		9.59	54	50-150

Authorized by: M. Mandy, KW **Release Date:** 9/30/09 **Printed:** 9/30/2009

Manchester Environmental Laboratory
Final Analysis Report for
Polychlorinated Biphenyls

Project: TC Systems Inc. **QC Type : Matrix Spike Dup**

Work Order: 0909052
Project Officer: Kallus, Andrew
Initial Vol: 20.12 g
Final Vol: 5 mL

Lab ID #: B09I204-MSD1
Prep Method: SW3541
Analysis Method: SW8082
Source Field ID: Matrix Spike Dup
Source Lab ID #: 0909052-01

Batch ID: B09I204
Prepared: 9/21/2009
Analyzed: 9/23/2009
Matrix: Sediment/Soil
Units: ug/kg dw

Analyte	Spike Result	RL	Spike Level	Source Result	Source Qualifier	%Rec	%Rec Limits	RPD	RPD Limit
PCB - 1016	**76.0**	12	48.2	48.3	UJ	58	50-150	7	40
PCB - 1260	**108**	12	48.2	48.3	UJ	124	50-150	28	40

Surrogate Recovery:

CAS#	Analyte	Result	Qualifier	Spike Level	% Recovery	%Rec.Limits
2051-24-3	Decachlorobiphenyl (DCB)	5.06		9.63	53	50-150

Authorized by: M. Manolika Release Date: 9/30/09 Printed: 9/30/2009

Manchester Environmental Laboratory

7411 Beach Dr E, Port Orchard, Washington 98366

Case Narrative

September 29, 2009

Subject: General Chemistry TC Systems Inc.

Project No: 0909052

Officer: Andy Kallus

By: Dean Momohara

Summary

The laboratory did not encounter any problems in the analyses of this sample. All sample results were reported without qualification.

All analyses requested were evaluated by established regulatory quality assurance guidelines.

Methods

The laboratory analyzed the sample by the following methods: Standard Methods 2540G for % solids, EPA 160.4 for total volatile solids, and PSEP-TOC for total organic carbon (TOC).

Sample Information

The laboratory received the sample on 9/17/09. The temperature of the cooler received was within the proper range of 0°C - 6°C. The sample was received in good condition. The sample was assigned laboratory identification number 0909052-01.

Holding Times

The laboratory performed all analyses within established EPA holding times.

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Analysis Report for
Percent Solids

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 09/22/2009

Analyte: Solids
Method: SM2540G
Matrix: Sediment/Soil
Units: %

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	51.6				09/16/09	09/22/09	B09I164

QC Results for Batch ID: B09I164

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09I164-BLK1	Blank	0.0	U		09/22/09

Sample #	QC Sample	Result	Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09I164-DUP1	Duplicate	51.7		0909052-01	51.6			0.2	20

Authorized by: DM **Release Date:** 9/29/09

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Analysis Report for
Total Organic Carbon (70 C)

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 09/23/2009

Analyte: Total Organic Carbon
Method: PSEP-TOC
Matrix: Sediment/Soil
Units: %

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	6.16		0.10	0.03	09/16/09	09/23/09	B09I165

QC Results for Batch ID: B09I165

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09I165-BLK1	Blank	0.10	U	0.10	09/23/09

Sample #	QC Sample	Result	Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09I165-DUP1	Duplicate	0.153		0909033-02	0.16			5	20
B09I165-DUP2	Duplicate	0.160		0909033-02	0.16			0.7	20
B09I165-SRM1	Reference	2.65	2.99			89	75-125		

Authorized by: DM

Release Date: 9/29/9

Washington State Department of Ecology
Manchester Environmental Laboratory
Final Analysis Report for
Total Volatile Solids

Project Name: TC Systems Inc.
Work Order: 0909052
Project Officer: Kallus, Andrew

Date Collected: 09/16/2009
Date Analyzed: 09/22/2009

Analyte: Total Volatile Solids
Method: EPA160.4
Matrix: Sediment/Soil
Units: %

Sample #	Sample ID	Result	Qualifier	RL	MDL	Collected	Analyzed	Batch ID
0909052-01	TC-CB-01	14.2				09/16/09	09/22/09	B09I175

QC Results for Batch ID: B09I175

Method Blank	Sample ID	Result	Qualifer	RL	Analyzed
B09I175-BLK1	Blank	0.00	U		09/22/09

Sample #	QC Sample	Result	Spike Level	Source Sample	Source Result	%Rec	%Rec Limits	RPD	RPD Limit
B09I175-DUP1	Duplicate	14.5		0909052-01	14.2			2	20

Authorized by: DM **Release Date:** 9/29/9

Manchester Environmental Laboratory

7411 Beach Dr E, Port Orchard, Washington 98366

Case Narrative

November 25, 2009

Subject: TC Systems Inc

Sample(s): 0909052-01

Project No: 0909052

TC Systems, Inc. (Everett)
SIT

Officer(s): Andrew Kallus

By: Dickey Huntamer

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Toxics Cleanup Program

Semivolatiles
BNASQS-PAH

Analytical Method(s)

This sample was analyzed by SW846 Method 8270 using capillary GC and a mass spectrometer detector. Sediments were prepared by Soxtherm extraction with acetone using glass fiber extraction thimbles muffled at 450 deg C for 30 minutes. The extracts were analyzed without Gel Permeation Chromatography (GPC) cleanup to minimize contamination.

Holding Times

The samples were stored frozen until extraction. All samples extracts were analyzed within the method holding times.

Instrument Tuning

Calibration against DFTPP is acceptable for the initial calibration, continuing calibration and all associated sample analyses.

Calibration

Instrument calibrations and calibration checks were performed in accordance with the appropriate method. The August 7, 2009 initial calibration coefficients of determination were within the acceptance range of 1.000 - 0.995 for linear curve, $\geq$ 0.99 for quadratic fit or an average response of $\leq$15%.

Initial calibration back calculations for most of the compounds were within the +/- 20% acceptance limits. At the lowest standard the acceptance limit is +/- 50%. Benzoic acid, di-n-octylphthalate, indeno(1, 2 ,3-cd)pyrene, dibenzo(ah)anthracene, and 4-nonylphenol were biased high. These were not detected so no qualifiers were added. Pentachlorophenol, and n-nitrosodiphenylamine were low and all results for these compounds were qualified J if detected near the lowest level and UJ if not detected.

The Initial Calibration Verification (ICV) was within the acceptable limits of ±30% for the August 7, 2009 calibration except for cholesterol and coprostanol which were low. All detects for these compounds were qualified as estimates, J and all non-detects UJ.

QC Limits for the Continuing Calibration (CC) are +/- 20%.

The first October 7, 2009 continuing calibration used with samples B09I170-BLK1, and -BS1 had a low response for n-nitrosodiphenylamine, acenaphthylene, naphthalene, phenanthrene, anthracene, carbazole and pyrene. All results for these compounds were qualified as estimates, J. Cholesterol was biased high. All detects for cholesterol were qualified, J.

The second October 7, 2009 continuing calibration used with sample 0909052-01 had a low response for benzyl alcohol, n-nitrosodiphenylamine, naphthalene, acenaphthylene, anthracene, carbazole and pyrene. All results for these compounds were qualified as estimates, J. Cholesterol, and 2-methylphenol were biased high but were not detected so no qualifiers were added.

Blanks

Benzoic acid and di-n-butylphthalate were detected in the blank B09I170-BLK1.

Compounds that were found in the sample and in the blank were considered native to the sample if the area counts in the sample are greater than or equal to five times the area counts in the associated method blank except for di-n-butylphthalate and bis-(2-ethylhexyl)phthalate where ten times the area was required.

Surrogates

The surrogate recoveries were reasonable, acceptable, and within QC limits except for acid surrogates 2-fluorophenol (628%) and phenol-D5 (115%) which were high in sample 0909052-01. No acid compounds were detected except for benzoic acid which was qualified J. 2-Fluorophenol (141%) was also high in QC sample B09I170-BS1.

Matrix Spikes

No matrix spikes were analyzed with this sample.

Duplicates

No duplicates were run with these samples.

Laboratory Control Samples

Laboratory fortified blank (LFB) B09I170-BS1 recoveries were within the 50% to 150% acceptance limits except for benzoic acid (10%), 4-nonylphenol (40%), coprostanol (43%), cholesterol (39%), 2, 4-dimethylphenol (6%), benzo(a)pyrene (20%), anthracene (23%), and n-nitrosodiphenylamine (6%) which were low. Results for benzoic acid, 4-nonylphenol, coprostanol, cholesterol, benzo(a)pyrene, and anthracene were qualified J if detected and UJ if not detected in all associated samples and blanks.

All results for 2, 4-dimethylphenol, and n-nitrosodiphenylamine were rejected, REJ.

Internal Standards

All internal standards were within the acceptance limits of 50% to 200%.

Other QA/QC Measures

The samples contained high concentrations of hydrocarbons which required diluting the samples before analysis.

Data Qualifier Codes

U	-	The analyte was not detected at or above the reported result.
J	-	The analyte was positively identified. The associated numerical result is an estimate.
UJ	-	The analyte was not detected at or above the reported estimated result.
REJ	-	The data are unusable for all purposes.
NAF	-	Not analyzed for.
N	-	For organic analytes there is evidence the analyte is present in this sample.
NJ	-	There is evidence that the analyte is present. The associated numerical result is an estimate.
NC	-	Not Calculated
E	-	The concentration exceeds the known calibration range.
bold	-	The analyte was present in the sample. (Visual Aid to locate detected compounds on report sheet.)

Washington State Department of Ecology

Manchester Environmental Laboratory
Final Analysis Report for
Base/Neutral/Acids

Project: TC Systems Inc. **Field ID: TC-CB-01**

Work Order: 0909052
Project Officer: Kallus, Andrew
Initial Vol: 20.136 g
Final Vol: 10 mL

Lab ID #: 0909052-01
Collected: 9/16/2009
Prep Method: SW3541
Analysis Method: SW8270
% Solids: 51.6

Batch ID: B09I170
Prepared: 9/18/2009
Analyzed: 10/7/2009
Matrix: Sediment/Soil
Units: ug/kg dw

CAS#	Analyte	Result	Qualifier	RL	MDL
95-50-1	1,2-Dichlorobenzene	2400	U	2400	
541-73-1	1,3-Dichlorobenzene	2400	U	2400	
106-46-7	1,4-Dichlorobenzene	2400	U	2400	
90-12-0	1-Methylnaphthalene	2400	U	2400	12000
105-67-9	2,4-Dimethylphenol		REJ	24000	10000
91-58-7	2-Chloronaphthalene	4800	U	4800	11000
91-57-6	2-Methylnaphthalene	2400	U	2400	12000
95-48-7	2-Methylphenol	24000	U	24000	12000
360-68-9	3B-Coprostanol	24000	UJ	24000	4600
106-44-5	4-Methylphenol	24000	U	24000	12000
104-40-5	4-nonyl-phenol	2400	UJ	2400	240
83-32-9	Acenaphthene	2400	U	2400	7400
208-96-8	Acenaphthylene	2400	UJ	2400	7700
120-12-7	Anthracene	2400	UJ	2400	2500
56-55-3	Benzo(a)anthracene	2400	U	2400	1600
50-32-8	Benzo(a)pyrene	2400	UJ	2400	
205-99-2	Benzo(b)fluoranthene	2400	U	2400	
191-24-2	Benzo(ghi)perylene	4800	U	4800	2300
207-08-9	Benzo(k)fluoranthene	2400	U	2400	2000
65-85-0	**Benzoic Acid**	**22000**	J	24000	3400
100-51-6	Benzyl Alcohol	24000	UJ	24000	15000
117-81-7	**Bis(2-Ethylhexyl) Phthalate**	**96000**		4800	2300
85-68-7	Butyl benzyl phthalate	4800	U	4800	1700
58-08-2	Caffeine	4800	U	4800	9400
86-74-8	Carbazole	4800	U	4800	
57-88-5	Cholesterol	2400	UJ	2400	240
218-01-9	**Chrysene**	**100**	J	2400	
53-70-3	Dibenzo(a,h)anthracene	4800	U	4800	1700
132-64-9	Dibenzofuran	4800	U	4800	6700
84-66-2	Diethyl phthalate	2400	U	2400	4900
131-11-3	Dimethyl phthalate	2400		2400	4400
84-74-2	Di-N-Butylphthalate	2400	U	2400	2300
117-84-0	Di-N-Octyl Phthalate	4800	U	4800	
206-44-0	Fluoranthene	2400	U	2400	1800
86-73-7	Fluorene	2400	U	2400	4900
118-74-1	Hexachlorobenzene	2400	U	2400	3200
87-68-3	Hexachlorobutadiene	2400	U	2400	
93-39-5	Indeno(1,2,3-cd)pyrene	48000	U	48000	
59-1	Isophorone	4800	U	4800	9200
20-3	Naphthalene	2400	UJ	2400	14000
0-6	N-Nitrosodiphenylamine		REJ	4800	3700
5	Pentachlorophenol	24000	UJ	24000	1900
	Phenanthrene	2400	UJ	2400	2900
2	Phenol	9600	U	9600	14000
	Pyrene	2400	UJ	2400	1700
	Retene	2400	U	2400	

Manchester Environmental Laboratory
Final Analysis Report for
Base/Neutral/Acids

Project: TC Systems Inc. **Field ID: TC-CB-01**

Work Order: 0909052
Project Officer: Kallus, Andrew
Initial Vol: 20.136 g
Final Vol: 10 mL

Lab ID #: 0909052-01
Collected: 9/16/2009
Prep Method: SW3541
Analysis Method: SW8270
% Solids: 51.6

Batch ID: B09I170
Prepared: 9/18/2009
Analyzed: 10/7/2009
Matrix: Sediment/Soil
Units: ug/kg dw

Surrogate Recovery:

CAS#	Analyte	Result	Qualifier	Spike Level	% Recovery	%Rec.Limits
2199-69-1	1,2-Dichlorobenzene-D4	218		770	28	20-130
93951-73-6	2-Chlorophenol-D4	467		770	61	20-130
321-60-8	2-Fluorobiphenyl	603		770	78	30-115
367-12-4	2-Fluorophenol	4840		770	628	25-121
4165-60-0	Nitrobenzene-D5	444		770	58	23-130
4165-62-2	Phenol-D5	884		770	115	24-113
1718-52-1	Pyrene-D10	614		770	80	50-150
1718-51-0	Terphenyl-D14	540		770	70	18-137

by: _____ Release Date: 11/16/09 Printed: 11/16/2009

Manchester Environmental Laboratory
Final Analysis Report for
Base/Neutral/Acids

Project: TC Systems Inc. **QC Type : Method Blank**

Work Order: 0909052
Project Officer: Kallus, Andrew
Initial Vol: 10 g
Final Vol: 0.5 mL

Lab ID #: B09I170-BLK1
Prep Method: SW3541
Analysis Method: SW8270
Source Field ID: Blank

Batch ID: B09I170
Prepared: 9/18/2009
Analyzed: 10/7/2009
Matrix: Sediment/Soil
Units: ug/kg dw

CAS#	Analyte	Result	Qualifier	RL	MDL
95-50-1	1,2-Dichlorobenzene	12	U	12	
541-73-1	1,3-Dichlorobenzene	12	U	12	
106-46-7	1,4-Dichlorobenzene	12	U	12	
90-12-0	1-Methylnaphthalene	12	U	12	62
105-67-9	2,4-Dimethylphenol		REJ	120	52
91-58-7	2-Chloronaphthalene	25	U	25	55
91-57-6	2-Methylnaphthalene	12	U	12	64
95-48-7	2-Methylphenol	120	U	120	61
360-68-9	3B-Coprostanol	120	UJ	120	24
106-44-5	4-Methylphenol	120	U	120	61
104-40-5	4-nonyl-phenol	12	UJ	12	1.2
83-32-9	Acenaphthene	12	U	12	38
208-96-8	Acenaphthylene	12	UJ	12	40
120-12-7	Anthracene	12	UJ	12	13
56-55-3	Benzo(a)anthracene	12	U	12	8.3
50-32-8	Benzo(a)pyrene	12	UJ	12	
205-99-2	Benzo(b)fluoranthene	12	U	12	
191-24-2	Benzo(ghi)perylene	25	U	25	12
207-08-9	Benzo(k)fluoranthene	12	U	12	11
65-85-0	**Benzoic Acid**	**680**	J	120	18
100-51-6	Benzyl Alcohol	120	UJ	120	79
117-81-7	Bis(2-Ethylhexyl) Phthalate	25	U	25	12
85-68-7	Butyl benzyl phthalate	25	U	25	9.0
58-08-2	Caffeine	25	U	25	49
86-74-8	Carbazole	25	UJ	25	
57-88-5	Cholesterol	12	UJ	12	1.2
218-01-9	Chrysene	12	U	12	
53-70-3	Dibenzo(a,h)anthracene	25	U	25	8.9
132-64-9	Dibenzofuran	25	U	25	35
84-66-2	Diethyl phthalate	12	U	12	26
131-11-3	Dimethyl phthalate	12	U	12	23
84-74-2	**Di-N-Butylphthalate**	**26**		12	12
117-84-0	Di-N-Octyl Phthalate	25	U	25	
206-44-0	Fluoranthene	12	U	12	9.5
86-73-7	Fluorene	12	U	12	25
118-74-1	Hexachlorobenzene	12	U	12	17
87-68-3	Hexachlorobutadiene	12	U	12	
193-39-5	Indeno(1,2,3-cd)pyrene	250	U	250	
78-59-1	Isophorone	25	U	25	48
91-20-3	Naphthalene	12	UJ	12	72
6-30-6	N-Nitrosodiphenylamine		REJ	25	19
-86-5	Pentachlorophenol	120	UJ	120	9.7
01-8	Phenanthrene	12	UJ	12	15
95-2	Phenol	50	U	50	74
0-0	Pyrene	12	UJ	12	8.6
-8	Retene	12	U	12	

e Recovery:

Analyte	Result	Qualifier	Spike Level	% Recovery	%Rec.Limits
1,2-Dichlorobenzene-D4	505		800	63	20-130

Washington State Department of Ecology

Manchester Environmental Laboratory
Final Analysis Report for
Base/Neutral/Acids

Project: TC Systems Inc. **QC Type : Method Blank**

Work Order: 0909052
Project Officer: Kallus, Andrew
Initial Vol: 10 g
Final Vol: 0.5 mL

Lab ID #: B09I170-BLK1
Prep Method: SW3541
Analysis Method: SW8270
Source Field ID: Blank

Batch ID: B09I170
Prepared: 9/18/2009
Analyzed: 10/7/2009
Matrix: Sediment/Soil
Units: ug/kg dw

Surrogate Recovery:

CAS#	Analyte	Result	Qualifier	Spike Level	% Recovery	%Rec.Limits
93951-73-6	2-Chlorophenol-D4	534		800	67	20-130
321-60-8	2-Fluorobiphenyl	582		800	73	30-115
367-12-4	2-Fluorophenol	825		800	103	25-121
4165-60-0	Nitrobenzene-D5	586		800	73	23-130
4165-62-2	Phenol-D5	583		800	73	24-113
1718-52-1	Pyrene-D10	561		800	70	50-150
1718-51-0	Terphenyl-D14	575		800	72	18-137

by: _____ Release Date: 11/16/09

Printed: 11/16/2009

Washington State Department of Ecology

Manchester Environmental Laboratory
Final Analysis Report for
Base/Neutral/Acids

Project: TC Systems Inc. **QC Type : LCS**

Work Order: 0909052
Project Officer: Kallus, Andrew
Initial Vol: 10 g
Final Vol: 0.5 mL

Lab ID #: B09I170-BS1
Prep Method: SW3541
Analysis Method: SW8270
Source Field ID: LCS

Batch ID: B09I170
Prepared: 9/18/2009
Analyzed: 10/7/2009
Matrix: Sediment/Soil
Units: ug/kg dw

Analyte	Spike Result	RL	Spike Level	%Rec	%Rec Limits
1,2-Dichlorobenzene	636	12	1000	64	50-150
1,3-Dichlorobenzene	630	12	1000	63	50-150
1,4-Dichlorobenzene	654	12	1000	65	50-150
1-Methylnaphthalene	675	12	1020	66	50-150
2,4-Dimethylphenol	62.0	120	1000	6	50-150
2-Chloronaphthalene	615	25	1000	62	50-150
2-Methylnaphthalene	722	12	1000	72	50-150
2-Methylphenol	622	120	1000	62	50-150
3B-Coprostanol	426	120	1000	43	50-150
4-Methylphenol	804	120	1000	80	50-150
4-nonyl-phenol	397	12	1000	40	50-150
Acenaphthene	1120	12	1000	112	50-150
Acenaphthylene	556	12	1000	56	50-150
Anthracene	234	12	1000	23	50-150
Benzo(a)anthracene	636	12	1000	64	50-150
Benzo(a)pyrene	202	12	1000	20	50-150
Benzo(b)fluoranthene	990	12	1000	99	50-150
Benzo(ghi)perylene	1010	25	1000	101	50-150
Benzo(k)fluoranthene	951	12	1000	95	50-150
Benzoic Acid	101	120	1000	10	50-150
Benzyl Alcohol	431	120	1000	43	50-150
Bis(2-Ethylhexyl) Phthalate	791	25	1000	79	50-150
Butyl benzyl phthalate	835	25	1000	84	50-150
Caffeine	794	25	1000	79	50-150
Carbazole	666	25	1000	67	50-150
Cholesterol	387	12	1000	39	50-150
Chrysene	762	12	1000	76	50-150
Dibenzo(a,h)anthracene	930	25	1000	93	50-150
Dibenzofuran	734	25	1000	73	50-150
Diethyl phthalate	813	12	1000	81	50-150
Dimethyl phthalate	762	12	1000	76	50-150
Di-N-Butylphthalate	735	12	1000	74	50-150
Di-N-Octyl Phthalate	910	25	1000	91	50-150
Fluoranthene	710	12	1000	71	50-150
Fluorene	745	12	1000	74	50-150
Hexachlorobenzene	696	12	1000	70	50-150
Hexachlorobutadiene	635	12	1000	63	50-150
ndeno(1,2,3-cd)pyrene	983	250	1000	98	50-150
ophorone	552	25	1000	55	50-150
hthalene	602	12	1000	60	50-150
trosodiphenylamine	291	25	5000	6	50-150
chlorophenol	506	120	1000	51	50-150
threne	673	12	1000	67	50-150
	973	50	1000	97	50-150
	654	12	1000	65	50-150
	783	12	1000	78	50-150

Washington State Department of Ecology

Manchester Environmental Laboratory
Final Analysis Report for
Base/Neutral/Acids

Project: TC Systems Inc. **QC Type : LCS**

Work Order: 0909052
Project Officer: Kallus, Andrew
Initial Vol: 10 g
Final Vol: 0.5 mL

Lab ID #: B09I170-BS1
Prep Method: SW3541
Analysis Method: SW8270
Source Field ID: LCS

Batch ID: B09I170
Prepared: 9/18/2009
Analyzed: 10/7/2009
Matrix: Sediment/Soil
Units: ug/kg dw

Analyte	Spike Result	RL	Spike Level	%Rec	%Rec Limits

Surrogate Recovery:

CAS#	Analyte	Result	Qualifier	Spike Level	% Recovery	%Rec.Limits
2199-69-1	1,2-Dichlorobenzene-D4	559		800	70	20-130
93951-73-6	2-Chlorophenol-D4	728		800	91	20-130
321-60-8	2-Fluorobiphenyl	576		800	72	30-115
367-12-4	2-Fluorophenol	1130		800	141	25-121
4165-60-0	Nitrobenzene-D5	597		800	75	23-130
4165-62-2	Phenol-D5	863		800	108	24-113
1718-52-1	Pyrene-D10	602		800	75	50-150
1718-51-0	Terphenyl-D14	539		800	67	18-137

I by: _____ Release Date: 11/16/09 Printed: 11/16/2009

Manchester Environmental Laboratory

7411 Beach Drive East, Port Orchard, Washington 98366

October 28, 2009

Subject: **TC Systems**

Sample ID: 0909052-01

Laboratory: Columbia Analytical Services

Project Officer: Andy Kallus

By: Karin Feddersen KF

Hexachrome

Summary

The sample was sent to the contract laboratory on ice. However, the sample arrived at a temperature slightly greater than 6°C (6.9°C). It is not known what effect this brief elevation of temperature might have had on the sample.

Analytical Methods

These samples were prepared and analyzed using EPA SW-846 method 7196A. Routine QA/QC procedures were performed.

Blanks

No hexachrome was detected in the method blank.

Holding Times

The sample was analyzed within the method holding time of 28 days from collection.

Duplicate Samples

Duplicate analyses were performed on this sample. The Relative Percent Difference (RPD) between the two results was 11%.

Matrix Spike and Matrix Spike Duplicate

A matrix spike and matrix spike duplicate analysis were performed on the sample. Recoveries were outside laboratory limits of 75% to 125%. The sample digestate was spiked and analyzed with similar results (<1% recovery). These results indicate that the sample consists of a reducing matrix. Results are therefore likely biased low and have been qualified as estimates, "J".

Laboratory Control Sample (LCS)

Recovery was within laboratory limits of 80% to 120%.

Data Qualifier Codes

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Washington State Department of Ecology	**Service Request No.:**	K0909194
Project:	Hex Chrome	**Date Received:**	09/30/09
Sample Matrix:	Sediment		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

One sediment sample was received for analysis at Columbia Analytical Services on 09/30/09. The sample was received in good condition and consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

Hexavalent Chromium by 7196A;
The matrix spike recoveries of <1% and <1% for Hexavalent Chromium for sample 0909052-01 were outside the CAS control limit due to the reducing characteristic of the sample matrix. As per the methodology, a post-spike was analyzed, but produced recovery outside acceptance criteria. A test for reducing properties was then conducted by measuring Redox Potential and pH. The results of that test indicated the sample consisted of a reducing matrix. The results were reported from the initial determination. No further corrective action was required.

No other anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 10/22/09

Analytical Results

Client:	Washington State Department of Ecology	**Service Request:**	K0909194
Project:	Hex Chrome		
Sample Matrix:	Sediment		

Total Solids

Prep Method:	NONE	**Units:**	PERCENT
Analysis Method:	160.3M	**Basis:**	Wet
Test Notes:			

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
0909052-01	K0909194-001	09/16/2009	09/30/2009	10/08/2009	57.3	

QA/QC Report

Client:	Washington State Department of Ecology	**Service Request:**	K0909194
Project:	Hex Chrome	**Date Collected:**	09/16/2009
Sample Matrix:	Sediment	**Date Received:**	09/30/2009
		Date Analyzed:	10/08/2009

Duplicate Sample Summary
Total Solids

Prep Method:	NONE	**Units:**	PERCENT
Analysis Method:	160.3M	**Basis:**	Wet
Test Notes:			

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
0909052-01	K0909194-001	57.3	56.3	56.8	2	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Washington State Department of Ecology
Project Name : Hex Chrome
Project Number : NA
Sample Matrix : SEDIMENT

Service Request : K0909194
Date Collected : 09/16/09
Date Received : 09/30/09

Chromium, Hexavalent

Prep Method : EPA 3060A
Analysis Method 7196A
Test Notes :

Units : mg/Kg
Basis : Dry

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Result	Result Notes
0909052-01	K0909194-001	0.88	0.14	1	10/14/2009	10/15/09	0.18	J
Method Blank	K0909194-MB	0.88	0.14	1	10/14/2009	10/15/09	~~ND~~ 0.88 U KF	

Report By: MKANALY

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Washington State Department of Ecology
Project Name : Hex Chrome
Project Number : NA
Sample Matrix : SEDIMENT

Service Request : K0909194
Date Collected : 9/16/2009
Date Received : 9/30/2009
Date Prepared : 10/14/09
Date Analyzed : 10/15/09

Duplicate Summary
Inorganic Parameters

Sample Name : 0909052-01
Lab Code : K0909194-001DUP
Test Notes :

Units : mg/Kg
Basis : Dry

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Chromium, Hexavalent	EPA 3060A	7196A	0.88	0.18	0.20	0.19	11	J

Report By: MKANALY

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Washington State Department of Ecology	**Service Request :**	K0909194
Project Name :	Hex Chrome	**Date Collected :**	9/16/2009
Project Number :	NA	**Date Received :**	9/30/2009
Sample Matrix :	SEDIMENT	**Date Prepared :**	10/14/09
		Date Analyzed :	10/15/09

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name :	0909052-01		Units :	mg/Kg
Lab Code :	K0909194-001MS	K0909194-001DMS	Basis :	Dry
Test Notes :				

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	EPA 3060A	7196A	0.88	34.8	67.2	0.18	0.23	0.24	<1	<1	75-125	NC	*J

Report By: MKANALY

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Washington State Department of Ecology	**Service Request :**	K0909194
Project Name :	Hex Chrome	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	SOIL	**Date Prepared :**	10/14/09
		Date Analyzed :	10/15/09

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/Kg
Lab Code :	K0909194-LCS	Basis :	Dry
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chromium, Hexavalent	EPA 3060A	7196A	214	205	96	80-120	

Report By: MKANALY

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Washington State Department of Ecology	**Service Request:**	K0909194
Project:	Hex Chrome	**Date Collected:**	9/16/2009
Sample Matrix:	Extract	**Date Received:**	9/30/2009
		Date Prepared:	NA
		Date Analyzed:	10/15/2009

Post Matrix Spike Summary
Chromium, Hexavalent

Sample Name:	0909052-01	Units:	mg/L (ppm)
Lab Code:	K0909194-001PS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chromium, Hexavalent	EPA 3060A	7196A	0.050	0.40	0.010	0.014	<1	85-115	*

Chemical Parameter	Dry Wt. Equivalent to "SQS"	Dry Wt. Equivalent to "CSL"	Sample #
Conventionals	Reporting Convention		
TOC	0.1 %		
TVS	0.1 %		
Total Solids	0.1 % wet wt		
Ammonia	100 mg/L		
Total Sulfides	10 mg/Kg		
Grain Size			
Gravel	0.1% by wt		
Sand	0.1% by wt		
Silt	0.1% by wt		
Clay	0.1% by wt		
Fines (Silt + Clay)	0.1% by wt		
Metals	mg/kg dry wt	mg/kg dry wt	
Arsenic	57	93	
Cadmium	5.1	6.7	
Chromium	260	270	
Copper	390	390	
Lead	450	530	
Mercury	0.41	0.59	
Silver	6.1	6.1	
Zinc	410	960	
Nonionizable Organic Compounds			
Aromatic Hydrocarbons	ug/kg dry wt	ug/kg dry wt	
Total LPAH	5200	5200	
Naphthalene	2100	2100	
Acenaphthylene	1300	1300	
Acenaphthene	500	500	
Fluorene	540	540	
Phenanthrene	1500	1500	
Anthracene	960	960	
2-Methylnaphthalene	670	670	
Total HPAH	12000	17000	
Fluoranthene	1700	2500	
Pyrene	2600	3300	
Benz[a]anthracene	1300	1600	
Chrysene	1400	2800	
Total benzofluoranthenes	3200	3600	
Benzo[a]pyrene	1600	1600	
Indeno[1,2,3-c,d]pyrene	600	690	
Dibenzo[a,h]anthracene	230	230	
Benzo[g,h,i]perylene	670	720	
Chlorinated Benzenes			
1,2-Dichlorobenzene	35	50	
1,4-Dichlorobenzene	110	110	
1,2,4-Trichlorobenzene	31	51	
Hexachlorobenzene	22	70	

Chemical Parameter	SQS	CSL	Sample #
Conventionals	Reporting Convention		
TOC	0.1 %		
TVS	0.1 %		
Total Solids	0.1 % wet wt		
Ammonia	100 mg/L		
Total Sulfides	10 mg/Kg		
Grain Size			
Gravel	0.1% by wt		
Sand	0.1% by wt		
Silt	0.1% by wt		
Clay	0.1% by wt		
Fines (Silt + Clay)	0.1% by wt		
Metals	mg/kg dry wt	mg/kg dry wt	
Arsenic	57	93	
Cadmium	5.1	6.7	
Chromium	260	270	
Copper	390	390	
Lead	450	530	
Mercury	0.41	0.59	
Silver	6.1	6.1	
Zinc	410	960	
Nonionizable Organic Compounds			
Aromatic Hydrocarbons	mg/kg carbon	mg/kg carbon	
Total LPAH	370	780	
Naphthalene	99	170	
Acenaphthylene	66	66	
Acenaphthene	16	57	
Fluorene	23	79	
Phenanthrene	100	480	
Anthracene	220	1200	
2-Methylnaphthalene	38	64	
Total HPAH	960	5300	
Fluoranthene	160	1200	
Pyrene	1000	1400	
Benz[a]anthracene	110	270	
Chrysene	110	460	
Total benzofluoranthenes	230	450	
Benzo[a]pyrene	99	210	
Indeno[1,2,3-c,d]pyrene	34	88	
Dibenzo[a,h]anthracene	12	33	
Benzo[g,h,i]perylene	31	78	
Chlorinated Benzenes			
1,2-Dichlorobenzene	2.3	2.3	
1,4-Dichlorobenzene	3.1	9.0	
1,2,4-Trichlorobenzene	0.81	1.8	
Hexachlorobenzene	0.38	2.3	
Phthalate Esters j			
Dimethyl phthalate	53	53	

Analytical Services Quotation

storm drain sediments - Kallus

Bid Date: 08/26/2009

storm drain sediments - Kallus STD Bid 26 Aug 09 0903_rev1 (2).xls

Matrix	Parameters	Method	#	TAT (days)	Unit Price	Extended Price	
Sediment/Soil	PPMETS	various	4	30	$190.00	$760.00	Metals
Sediment/Soil	Fixed and Volatile Solids Ignited @ 550 degrees C	EPA 160.4	4	30	$11.00	$44.00	% Solids??
Sediment/Soil	Puget Sound Estuary Protocols analysis for TOC 70	PSEP-TOC	4	30	$42.00	$168.00	TOC
Sediment/Soil	Total, Fixed, and Volatile Solids in Solid and Sem	SM2540G	4	30	$22.00	$88.00	TVS
Sediment/Soil	**PCBs only**	**8082**	4		**$160.00**	**$640.00**	PCB
Sediment/Soil	Semivolatile Organics	SW8270	4	30	**$275.00**	$1,100.00	BNA
Sediment/Soil	Hexachrome	SW3060A	4	30	$100.00	$400.00	CR 6
Sediment/Soil	Semivolatile Petroleum Products Method for Soil an	NWTPH-DX	4	30	$145.00	$580.00	TPH-Dx

Item	Description	Item Type	Quantity	Price	Rate	ItemTotal
LineItem	No Line Items	-	0	0	0	0

$3,780.00

Optional

Sediment/Soil	PAHs w/ silica clean-up	SW8270	6	30	$315.00	$1,890.00
Sediment/Soil	BNASQS less PAHs	SW8270	6	30	-$50.00	-$300.00

$5,370.00

'sen
'ance Coordinator
'hester Environmental Laboratory

Analytical Services Quotation

storm drain sediments - Kallus Bid Date: 08/26/2009

storm drain sediments - Kallu STD BID 26 AUG 09 0903 (2).xls

Matrix	Parameters	Method	#	TAT (days)	Unit Price	Extended Price
Sediment/ Soil	PPMETS	varies	6	30	$190.00	$1,140.00
Sediment/ Soil	Fixed and Volatile Solids Ignited @ 550 degrees C	EPA160.4	4	30	$11.00	$44.00
Sediment/ Soil	Puget Sound Estuary Protocols analysis for TOC 70	PSEP-TOC	4	30	$42.00	$168.00
Sediment/ Soil	Total, Fixed, and Volatile Solids in Solid and Sem	SM2540G	4	30	$22.00	$88.00
Sediment/ Soil	Semivolatile Organics	SW8270	6	30	$375.00	$2,250.00
Sediment/ Soil	Hexachrome	SW3060A	4	30	$100.00	$400.00
Sediment/ Soil	Semivolatile Petroleum Products Method for Soil an	NWTPH-DX	4	30	$145.00	$580.00

Item	Description	ItemType	Quantity	Price	Rate	ItemTotal
LineItem	No Line Items	-	0	0	0	0

$4,670.00

Optional

Sediment/ Soil	PAHs w/ silica clean-up	SW8270	6	30	$315.00	$1,890.00
Sediment/ Soil	BNASQS less PAHs	SW8270	6	30	-$50.00	-$300.00

$6,260.00

Karin Feddersen
Quality Assurance Coordinator
Ecology Manchester Environmental Laboratory

TC Systems, Inc. (Everett)
SIT

GROFF MURPHY
LAWYERS

Kristi D. Favard
E-Mail: kfavard@groffmurphy.com

December 7, 2009

RECEIVED
DEC 09 2009
Dept. of Ecology
Toxics Cleanup Program

Mr. Tim L. Nord, Manager
Land and Aquatic Lands Cleanup Section
Toxics Cleanup Program
WA State Dept. of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

Re: Reported Release of a Hazardous Substance and Potential Liability for the Release at TC Systems, Inc., 1032 West Marine View Drive, Everett, WA 98201

Dear Mr. Nord:

This office has been retained by Norton Industries, Inc. ("Norton") in response to your November 20, 2009, letter regarding its potential liability at the TC Systems, Inc. site located at 1032 West Marine View Drive, Everett, Washington 98201-1577, Snohomish County Tax Parcels 29051800200700 and 29051800201300, which has been assigned site number 10587741.

We understand that a response to Norton's alleged PLP status is due within 30 days of the receipt of your letter, which was received November 24, 2009. That would make Norton's response currently due on December 24, 2009. We have made a Public Records Act request relating to the Site to the Department of Ecology ("Ecology") on December 1, 2009. Ecology has indicated that it will not have responsive documents available until approximately December 11, 2009.

We respectfully request an additional 30 days to January 23, 2010, to provide our written response. This should allow sufficient time to review the documents and prepare a response. We appreciate your accommodation on this matter.

If you have any questions, please call me.

Very truly yours,

GROFF MURPHY, PLLC

Kristi D. Favard

KDF:dk

cc: James Schack

11279 0002 ml071101

Alexander, Sally (ECY)

From:	Perkins, Sally (ECY)
Sent:	Wednesday, December 02, 2009 8:34 AM
To:	Alexander, Sally (ECY)
Subject:	FW: Records request
Attachments:	20091202080520606.pdf

-----Original Message-----
From: Anderson, Linda (ECY)
Sent: Wednesday, December 02, 2009 8:31 AM
To: 'Kristi D. Favard'
Cc: Dorn, Carol (ECY); Powell, Becky (ECY); Hallengren, Jenny (ECY); Perkins, Sally (ECY)
Subject: Records request

Let this email acknowledge that the Washington State Department of Ecology is in receipt of your public disclosure request. If Ecology is the custodian of the requested records, the records it will be provided to you per RCW 42.56. Please be advised that there is a fifteen cent per page fee for the duplication of records but records may also be viewed for free. Also, the records must be identifiable to the agency.

I have searched the agency's Facility/Site database and found several interactions. I am forwarding your request to Becky Powell in the Water Quality Program, Carol Dorn in the Toxic Cleanup Program Jenny Hallengren in the Hazardous Waste Program and to Sally Perkins in the Northwest Regional Office as Snohomish County is in her jurisdiction. You will be contacted directly within the next three weeks with any information they may have.

If I can be of further assistance please contact me.

Linda J. Anderson
Acting Records Officer/
Public Disclosure Officer
Department of Ecology
Phone: 360-407-6040
Fax: 360-407-7060
E-mail: lian@ecy.wa.gov

TC Systems.

email 12/2
Linda did 5 day

GROFF MURPHY, PLLC
LAWYERS
300 East Pine
Seattle, Washington 98122
(206) 628-9500 Fax: (206) 628-9506

FAX COVER SHEET

DATE:	December 1, 2009	FAX NO.:	360-407-7060
TO:	Public Disclosure Officer	PHONE:	360-407-6040
OF:	WA Dept. of Ecology	CLIENT/ MATTER NO:	11279-0002
FROM:	Kristi D. Favard	NO. OF PAGES: (including cover)	2
RE:	Facility/Site Number: 10587741		
Site Name:	TC Systems, Inc.		
Address:	1032 West Marine View Drive, Everett, WA 98201-1557		

Snohomish County Tax Parcel Nos.
29051800200700 and
29051800201300

Time Sent 11:40 am Operator: Lisa Nelson (206-832-1469, Direct)

DELIVER THE FOLLOWING MATERIAL AS SOON AS POSSIBLE.
PLEASE NOTIFY US IMMEDIATELY AT (206) 628-9500
IF NOT RECEIVED PROPERLY.

Tri-Coatings
Division of Marpac Products Inc.
"Aerospace and Commercial Finishers"
1028 W. Marine View Dr., Bldg. B
Everett, WA 98201
(206) 284-9818 258-4055

December 16, 1991

Norton Industries
Attn: John Shack
1210 W. Marine View Dr.
Everett WA 98201

Re: Chemical Spill Cleanup

Dear John;

This letter is a followup to our recent conversation. Please find enclosed a copy of the memo outlining our incident on Monday, December 9th. If you require any additional information, please call me.

Sincerely,

Fred Owen
General Manager

Tri-Coatings Memo

Date 12/13/91

To: File

From: Fred Owen

Re: 12/9/91 Chemical Spill

In this memo, reference is made to the sketch of the site make by Gene Bennett from the City of Everett Pretreatment department. Catch basin numbers are from that document.

At about 10:20 AM on 12/9/91 a 3 person crew was pumping a chromic acid solution from the anodizing tank to an exterior holding tank. The outlet hose from the pump became dislodged and a quantity later estimated at 7 gallons of anodize solution spilled on the parking lot and entered the storm sewer catch basin. The pump was immediately stopped and a cleanup effort organized. The City of Everett Pretreatment department, the 911 Emergency Service, the Washington State Department of Ecology and the United States Coast Guard were notified. Only the Pretreatment Department and the 911 Emergency service chose to respond to the scene. The 911 Emergency crew left the scene shortly after arriving. Gene Bennett of the Pretreatment department remained and was very helpful in formulating a response to the problem.

At catch basin 2 the initial response was to pull the cover from the basin and use a wet and dry vacuum to retrieve the spill. This effort was hampered by the fact that the non-contact cooling water tank was overflowing into the same catch basin. This flow was diverted to catch basin number 4 until about 1500 gallons of water had been diverted. The storm sewer system was traced out and it was determined that catch basin 12 was the final point. Concurrent with the cleanup operation at basin 2, we also began pumping the water from basin 12 with a small submersible pump. The city provided an inflatable plug that was inserted in basin 10 to prohibit any more contaminated water from passing through the system.

A 3000 gallon vacuum truck and a 6500 gallon storage tank were ordered to the scene. All water and all sediment sludge was methodically removed from the storm system and pumped into the storage tank. Some of the sludge could not be pumped into the tank and was washed out of the truck into barrels. This cleanup effort was complete by about 10:30 PM on the night of 12/9/91.

Gene Bennett returned to the scene the following morning and together we observed a small amount of green flow into basin 4. It was agreed that

we would pump this basin daily for the remainder of the week. All of this water was retained as well.

As of 12/12/91 a visual inspection of the system shows no evidence of contamination and a titration test of the water removed from the system shows no chrome. We consider the cleanup complete and have notified the DOE of the completion of the task.

We are currently holding about 5000 gallons of water, 17 - 55 gallon barrels of sludge and water combined and we have processed 1160 gallons of the water initially pumped from basin 12. Northwest Enviroservice is formulating a bid on the treatment and disposal of the water and sludge. We have been given permission from the City of Everett to treat the water through our treatment system if it proves feasible.

10th Street

368'

320'

fence

O & W
Glass

Tri Coatings
Bldg C

Tri Coatings
Bldg B

Non contact cooling water
Treatment tanks
Holding Tank
Process Tank
Spill area

inflow somewhere in this line

process flow ?

Plug.

fence

from prints
not field verified

inlet

100'
Scale

APPENDIX E

PORT OF EVERETT DOCUMENTS

8/28/74

CITY OF EVERETT

PERMIT FOR SUBSTANTIAL DEVELOPMENT

Pursuant to Section 14, Chapter 286, Laws of 1971 Extra Session, a permit is hereby granted to The Port of Everett, Pier 1, Everett, Washington, to undertake the following development:

A trailer boat launch facility including:

(1) the diking and filling of 15.4 acres of tidelands to an average elevation of approximately +17.0 feet MLLW, by hydraulic dredging of approximately 483,000 cubic yards of sand and silt from the lower Snohomish River Channel, and (2) the construction thereon of a trailer boat launch facility to include (a) a boat launching ramp with capacity for simultaneous launching of up to 18 trailered boats, (b) ramp access and temporary tieup floats, (c) floating drift booms and wave breaks, (d) parking areas for approximately 600 cars, (e) a service building to include office space, public restrooms, a small maintenance shop, etc., (f) a waterfront park and picnic area, with transient moorage float, and marine view points, (g) paved access roadways and a combination bike and pedestrian access path, and (h) appropriate landscaping.

upon the following described property:

See attachment "A"

Development pursuant to this permit shall be undertaken pursuant to the following terms and conditions:

1. That the project conform to Washington State Department of Fisheries criteria on marinas.

2. The dredging shall be conducted in a manner which minimizes the impact on water quality and aquatic life.

3. That the disposal of spoils behind the diked area shall be carried out in a manner which minimizes the adverse effects on the Snohomish River. Design of the disposal ponds and dikes shall consider the location of the inlet and outlet to prevent short circuiting, installation of adequate discharge controls, and providing a capacity and detention time based on the settling characteristics.

(1)

4. That pedestrian/bike access be provided to the project. This will connect with the bike path along Norton Avenue.

5. That the potential visual impact be mitigated by an extensive landscaping plan addressing the following areas:

   a. The access road from Norton Avenue to the site.

   b. The 10 acres of parking provided for autos and boats.

   c. The marine park, picnic and view area.

6. That the Department of Community Development be notified 7 days prior to commencing of dredging.

Nothing in this permit shall be construed as excusing the applicant from compliance with any federal, state, or local statutes, ordinances or regulations applicable to this project other than the permit requirements of the Shoreline Management Act of 1971.

This permit may be rescinded pursuant to Section 14(7) of the Shoreline Management Act of 1971 in the event the permittee fails to comply with any condition hereof.

Construction pursuant to a permit will not begin or be authorized until forty-five days from the date of final approval by the local government, or until all review proceedings are terminated within forty-five days from the date of final approval by the local government.

August 28, 1974
Date

Frank H. Bennett, Director
Department of Community Development

June 3, 1974
File No. 7.90J/4

NORTON AVENUE BOAT LAUNCH PROJECT

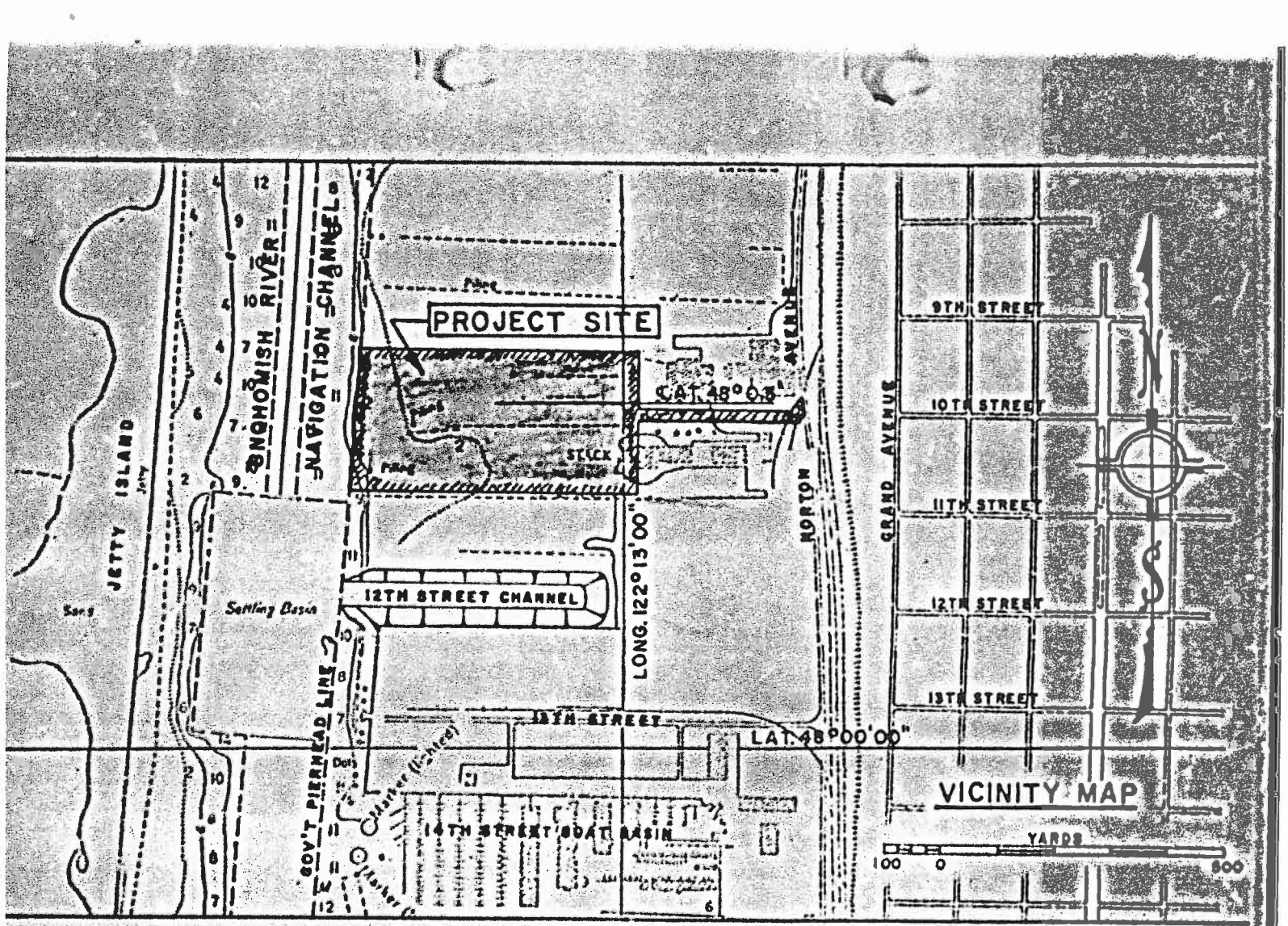
AGGREGATE DESCRIPTION FOR LANDS INCLUDED IN PROJECT

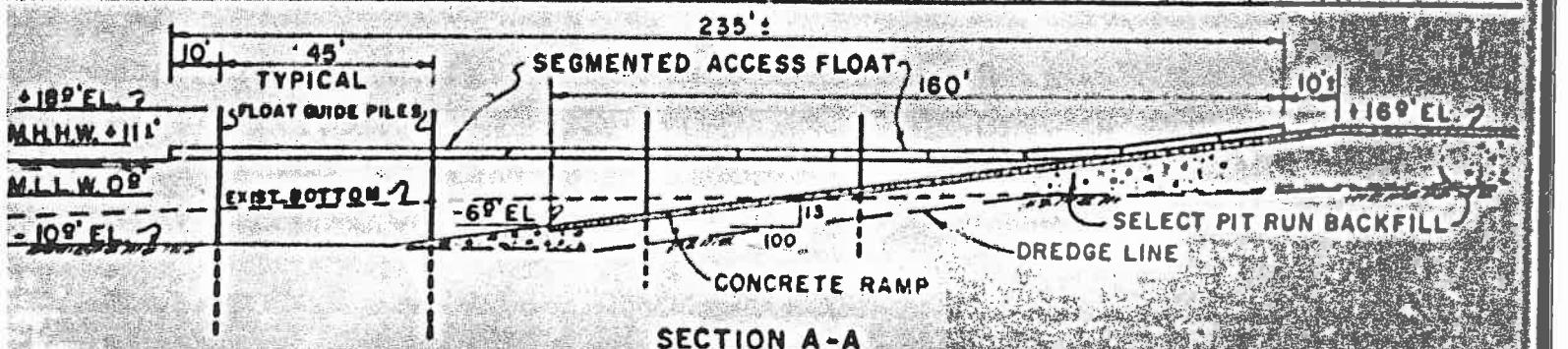
That portion of the First Class Tidelands lying westerly of Government Lots 1 and 2, Section 18, Township 29 North, Range 5 East W.M., described as follows: Commencing at the intersection of the Monument Line of Grand Avenue with the Monument Line of 14th Street in the City of Everett; thence N89°52'00"W, along the Monument Line of 14th Street produced, for 587.78 feet to an intersection with the westerly margin of the Northern Pacific Railway Company's right-of-way; thence N1°15'00"W, along the westerly margin of the Northern Pacific Railway Company's right-of-way, for 1831.53 feet; thence N89°52'00"W, for 732.94 feet to the True Point of Beginning; thence S0°08'00"W, for 350.00 feet; thence N89°52'00"W, for 1393.05 feet to an intersection with the Government Harbor or Pierhead Line; thence N3°49'50"E, along said Government Harbor or Pierhead Line, for 709.47 feet; thence S89°52'00"E for 1347.26 feet; thence S0°08'00"W, for 358.00 feet to the True Point of Beginning.

TOGETHER WITH an easement for ingress, egress and utilities over, under, across, through and upon that portion of the First Class Tidelands lying westerly of Government Lots 1 and 2, Section 18, Township 29 North, Range 5 East W.M., described as follows: Commencing at the intersection of the Monument Line of Grand Avenue with the Monument Line of 14th Street in the City of Everett; thence N89°52'00"W, along the Monument Line of 14th Street produced, for 587.78 feet to an intersection with the westerly margin of the Northern Pacific Railway Company's right-of-way; thence N1°15'00"W, along the westerly margin of the Northern Pacific Railway Company's right-of-way, for 1831.53 feet to the True Point of Beginning of this description; thence N89°52'00"W for 732.94 feet; thence N0°08'00"E for 60.00 feet; thence S89°52'00"E for 647.10 feet to the point of a curve of a curve to the left having a radius of 100.00 feet; thence easterly, along the arc of said curve to the left and consuming a central angle of 56°25'46", an arc distance of 98.49 feet; thence N33°42'14"E for 93.87 feet to the point of curve of a curve to the right having a radius of 50.00 feet; thence easterly, along the arc of said curve to the right and consuming a central angle of 51°52'53", an arc distance of 45.28 feet to an intersection with the westerly margin of Norton Avenue, said westerly margin being the arc of a curve having a radius of 6074.65 feet and from which intersection the radius point of the latter said curve bears N85°35'07"E; thence southerly, along the westerly margin of Norton Avenue and the arc of the latter said curve, being a curve to the left, to an intersection with the westerly line of that certain triangular parcel of land containing 16/100 acres more or less, being that parcel of land formerly belonging to the C. B. Lumber & Shingle Company in front of Government Lots 1 and 2, Section 18, Township 29 North, Range 5 East, W.M. and conveyed to Jamison Mill Company by deed dated November 4, 1926, and recorded in Volume 232 of Deeds, page 378, records of Snohomish County; thence southwesterly, along the westerly line of said certain triangular parcel of land, to a point which bears S89°52'00"E from the True Point of Beginning; thence N89°52'00"W to the True Point of Beginning.

REID, MIDDLETON & ASSOCIATES
Engineers • Surveyors • Planners
324 Main St. 775-3434
EDMONDS, WASHINGTON

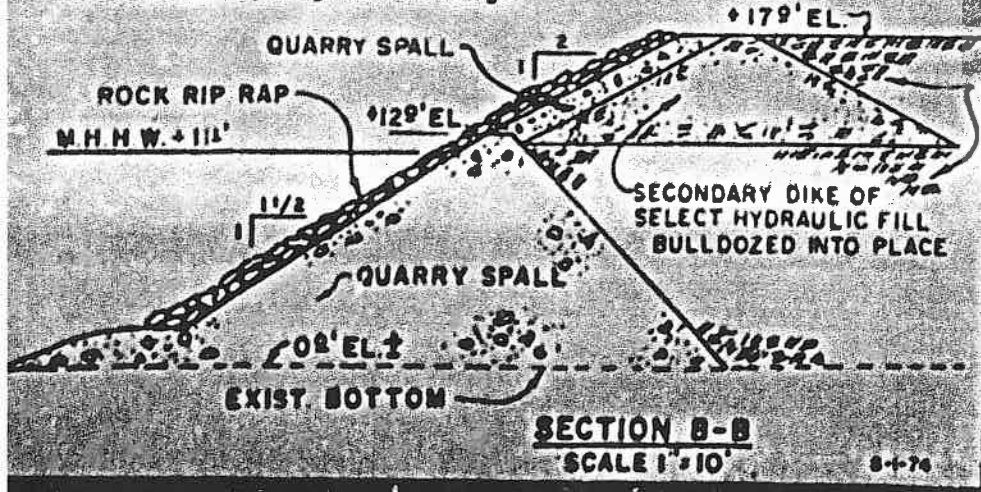
Attachment "A"





SECTION A-A
SCALE 1"=40'

8,600 Tons Rip Rap & 107,000 Tons Quarry Spall, placed by dragline from Barge.



SECTION B-B
SCALE 1"=10'

8-1-74

Revised 10-3-74

PROPOSED TRAILER BOAT LAUNCH AND MARINE PARK
IN: SNOHOMISH RIVER, at 10th Street
City of Everett, Snohomish County,
State of Washington
Application by: PORT OF EVERETT
Prepared by: Reid, Middleton & Assoc., Inc.
Edmonds, Washington

2. INTRODUCTION TO FINAL SUPPLEMENT

A. General Background Data

Following the conception of the Norton Avenue Trailer Boat Launch project in 1972 (at which time it was referred to also as the "Water Gate Boat Launch), a draft environmental impact statement was compiled and issued in May 1973 for review by appropriate City, County, State and Federal agencies. In July 1973 a final environmental impact statement was issued, which included the comments received from the reviewing agencies, together with analysis of and response to those comments.

For some months thereafter the Port of Everett engaged in difficult negotiations and some court actions directed toward acquisition of lands required for the project site. Acquisitions were finally consummated in the first half of 1974, but on the basis of certain compromises under which all lands easterly of a line 800 feet west of Norton Avenue were excluded from acquisition, except for an easement access road. This reduced the area of the project site, and necessitated modifications in details of the project development plan.

Upon consummation of site acquisition, the Port proceeded with an application to the City of Everett for a shoreline management permit for project construction. At that point City staff concluded that the differences between the development plan as depicted in the 1973 environmental impact statement and the modified plan portrayed in the application for shoreline management permit should be made the subject of a supplement to the 1973 impact statement. Such a supplement was compiled, and in the first week of July 1974 was distributed to appropriate City, County, State and Federal agencies.

Pursuant to the receipt of comments on the Draft Supplement, a Final Supplement has been compiled and is here presented in this bound document.

B. Format

The contents and format of this Final Supplement is indicated in the foregoing Table of Contents. It may be noted that preceding impact statements are included in their entirety, and that this Final Supplement adds the following:

(1) A new Summary Sheet
(2) This Introduction
(3) Statement of Project Action Subsequent to Issuance of Draft Supplement
(4) Agencies Receiving and Replying to Draft Supplement
(5) Copies of Letters of Comment
(6) Response to Review Comments
(7) Miscellaneous Exhibits

4. OTHER MODIFICATIONS TO FINAL ENVIRONMENTAL IMPACT STATEMENT OF JULY 1973

A. The Proposed Action

1. Type of Action

The type of action is basically unchanged; and only certain details of the proposed action have been modified, in the interest of more efficient land use, avoidance of disruption to existing desirable industry, and improvement of the overall facility plan. Area of acquisition has been reduced from the 33 acres of the former plan to 22.3 acres purchased, plus 1.3 acres in access easement, under the new plan "C". Creation of new uplands is modified as follows:

Fill Category	Reclaimed Acreage 1973 Plan	Reclaimed Acreage 1974 Plan "C"
On Port Project Site	17.0	15.4
Supplemental	-	4.3
Total	17.0	19.7

The item of "Supplemental" fill entered in the foregoing tabulation consists of projected subsequent filling of low areas on lands of Saginaw Shingle Company and Summit Company lying between the project site and Norton Avenue. Portions of these low areas are flooded at high tide and bare at low tide. The condition, location and configuration of these areas is such as to constitute generally an unsightly nuisance, and a future detriment to the marine ecology. In consummating acquisition of the project site, the Port of Everett has made a commitment to designate these low areas as a site for disposal of approximately 60,000 cubic yards of spoil from future maintenance dredging in the lower Snohomish River channel. This supplemental filling will be preceded by cleanup operations to remove a forest of unsightly deteriorated piling and other extensive debris remaining from abandoned mill operations and other activities, and will result in elimination of potential marine life entrapment areas and the creation of an attractive usable site for waterfront-oriented industry.

A rather thorough description of other modifications in the project development plan is provided in the preceding section, entitled "3. Description of Changes in Project", and need not be repeated here.

2. Justification of the Proposed Action

Justification for the proposed action was well-expressed in the Environmental Statement of 1973. The need for a boat launching facility of this character in the Everett area is very acute, and strongly increases year by year. Public interest in the early development of this project is very strong.

It is noted that the Draft Environmental Impact Statement of June 1973 suggested a desirability of two acres of uplands to be provided for each

of certain other factors is recognized. Some transitory light oil film will be left on the water surface of the boat-launching basin in the wakes of outboard motor driven boats, to the detriment of water quality. However, the total actual quantity of such pollutant is small, and the surface effect in the launching basin will not be cumulative, by reason of continual dissipation and flushing effect by the river currents and tidal action. Tradeoff of this minor pollution against the probably substantially greater pollution resulting from the log handling and wet storage operations presently carried on at this site should appear as an environmental gain.

Some noise pollution will result from startup and operation of boat motors. This level of noise might be entirely unacceptable in a quiet residential district or even adjacent to professional offices. However, the boat launching basin is remote from any use or occupancy to which the motor noise could create a problem or nuisance, with the exception only of the waterfront park. Considering that one of the real interests to visitors at this park is the activity engendered by the launching and operation of boats, the noise attendent thereto does not appear incompatible to the nearby park.

E. Alternatives to the Proposed Action

The comments appearing in Section E (same heading), page 7, of the Draft E.I.S. of June 1973, remain applicable. Notwithstanding, this E.I.S. Supplement reflects the conclusions of an even further analysis of alternatives, brought about by the need to bring the proposed project development into fuller compatability with the needs of contiguous industrial enterprises of a desirable character.

F. Relationship Between Short-Term Environmental Uses and the Maintenance and Enhancement of Long-Term Productivity

The comments of Section F (same heading), page 7, Draft E.I.S. of June 1973, remain fully applicable.

G. Irreversible and Irretrievable Commitments of Resources

The comments of Section G (same heading), page 7, Draft E.I.S. of June 1973, remain applicable excepting that the area of tidelands to be dredged is reduced from 10 acres to 5 acres, and the area of tidelands to be filled on Port property is reduced from 17 acres to 15.4 acres. Contemplated action,however,includes future filling of an additional 4.4 acres of presently severely impacted tidelands situated between the project site and Norton Avenue on properties of Saginaw Shingle Company and Summit Timber Company, as both an environmental and economic improvement.

H. Response to Review Comments

The comments appearing in Part 4 of the Final Environmental Impact Statement of July 1973, made in response to comments from reviewers of the Draft E.I.S. of June 1973, are deemed still valid except as noted following:

AMERICAN TUGBOAT COMPANY

SNOHOMISH RIVER NAVIGATION CHANNEL

EBB

FLOOD

GOVERNMENT HARBOR OR PIERHEAD LINE

S 3°49'30" W 109.47'

1347.26

N 89°52'30" W

1341.05

N 89°52'30" E

HULBERT MILL COMPANY

12th STREET CHANNEL (DREDGED TO -20.0 M.L.L.W.)

PROPERTY LINE

EXISTING 13th STREET FILL
(PORT OF EVERETT)

WET LANDS

SUMMIT TIMBER COMPANY

DRY LANDS

LINE OF EXTREME HIGH TIDE

(SAGA CRUISE-A-HOME COMPANY)
(ANDERSON)

CRUISE-A-HOME

S 89°52'00" E

210.90'

100.00'

100.03'

NORTON AVENUE

BURLINGTON NORTHERN RLY CO RIGHT OF WAY

CENTRACON
(HULBERT MILL COMPANY)

SOUTHERN PAC RLY CO R/W

GRAND AVENUE

MONUMENT LINE

14th STREET

100' 50' 0 100' 200' 300' 400'

GRAPHIC SCALE

PORT OF EVERETT, WASHINGTON

NORTON AVENUE BOAT LAUNCH FACILI

GENERAL PLAN "C"

REID, MIDDLETON & ASSOCIATES,
CONSULTING ENGINEERS & LAND SURVEYORS
324 MAIN ST., EDMONDS WASH. 1818 PACIFIC AVE., EVERETT, WASH

PORT OF EVERETT TRAILER BOAT LAUNCH FACILITY

WATER GATE BOAT LAUNCH

SUMMARY SHEET

Nature of This Report: Final Statement

Sponsor: Sponsoring Agency: Port of Everett, Pier 1, Everett, Washington 98201
Direct Inquiries to: Reid, Middleton & Associates, Inc.
324 Main Street, Edmonds, Washington 98020

Type of Proposed Action: Project

Official Title of Proposed Action and Summary of the Proposed Action: Construct boat launch facility for trailered boats at Everett, Washington. The purpose being to provide access to the waters of Puget Sound and to meet the needs of the recreational boating public owning trailer size boats utilizing dry land storage.

Summary of Environmental Impacts: No significant displacement, endangerment, or destruction of any wildlife or natural vegetation. Social environment is improved. Water quality may be affected during construction from dredging operation.

Summary of Alternatives: No action, alternate location, larger or smaller facility.

Review Period: (Length of time and deadline date for review comments.)
Thirty days review period, deadline for review comments - June 30, 1973.

Recipients of the Document: (Reviewers)
See attached list.

4. Historical Background - Past Planning and Decisions

The Everett waterfront in its past has been nearly totally occupied by wood product mills and related activities. Over the years these mills slowly have disappeared. Of recent demise were the Saginaw and Summit Timber Mills, located on the site contemplated for the new public boat launch.

In the past, Snohomish County has been overly dependent on a single industry, and present planning goals indicate a desire to diversify to reduce the prominence of one industry. Because of its ideal location, the development of the site as planned aids in the development of the boating, recreational, and tourist industries.

Agencies involved in the formulation of this plan include the Snohomish County and City of Everett Planning Departments, Snohomish County and City of Everett Park Departments and the Port of Everett.

5. Public Participation - Information, Hearings and Controversy

A public hearing was held on April 17, 1972, whereat the Port of Everett amended the Port's comprehensive scheme to include this project. The opportunity for additional public review and comment will be provided through the procedures established by the Shorelines Management Act of 1971, and through the distribution of this impact statement.

Although this project is being pursued under the jurisdiction of the Port of Everett, it is in fact a joint project and effort between three agencies, the Port of Everett, the City of Everett and Snohomish County.

6. Proposed Method of Financing and Financial Sponsors

The proposed method of financing is through the Interagency Committee for Outdoor Recreation, with matching funds coming from and divided equally between the Port of Everett, Snohomish County and the City of Everett.

7. Relationship with Existing Laws, Policies, Plans

The Port of Everett possesses the statutory and legal authority to acquire and improve public outdoor recreation land, to undertake planning activities incident thereto, and to receive and expend funds involved for the purposes described when such facilities are necessary to more fully utilize boat landings.

8. Actions/Decisions Remaining for Implementation

The following actions and decisions remaining for implementation of this project include application for and issuance of Shorelines Management permit, application for and issuance of U. S. Corps of Engineers Permit, application for and issuance of Department of Game Hydraulics permit, and application to and funding from the State Interagency Committee for Outdoor Recreation.

B. EXISTING CONDITIONS

1. General

The proposed boat launch site is a 37-acre segment of a much larger strip of tideland extending along the Snohomish River channel from its mouth north to Preston Point, encompassing an area of perhaps 800 acres. Since the undeveloped parts of these tidelands are all very similar, the proposed boat launching site can best be described in ecological context with the overall area.

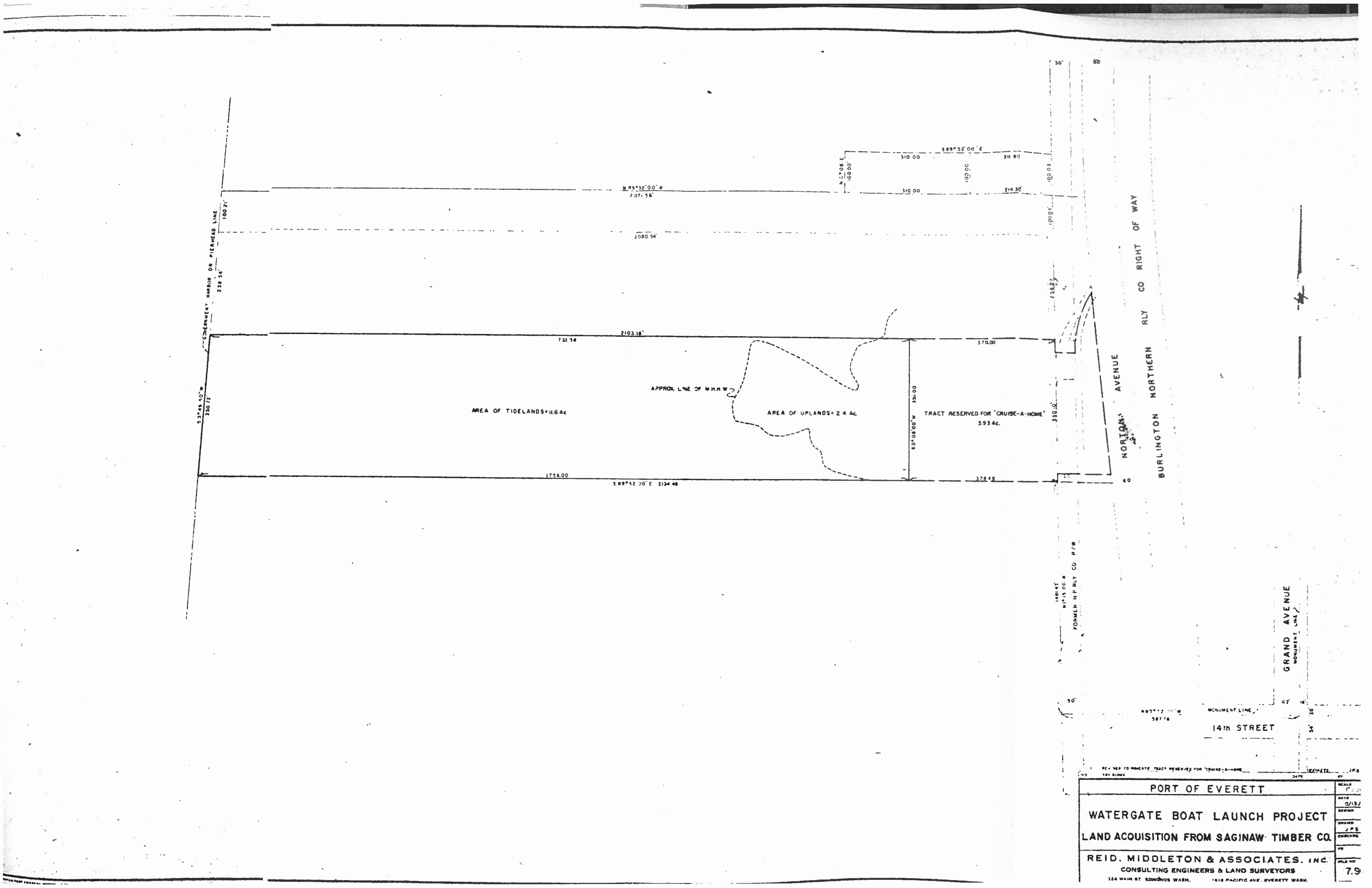
The eastern approximately one-fourth of the 37-acre site which borders on Norton Avenue is upland, and the remaining three-fourths, adjacent to the Snohomish River channel, is an intertidal mud flat.

2. Upland Portion

The upland portion of the site is apparently an old fill approximately six feet above high tide. Two lumber mills occupied this part of the property until 1967, when both burned. Since that time considerable rubbish and other fill material has been hauled in and spread. The site of one mill is marked by many charred dock pilings, brick, concrete and pieces of rusting machinery. A low area nearby is being used currently as a dumping area for industrial refuse from an adjacent boat-works. Various weeds, grasses, blackberry vines, and a few small alder seedlings have managed to colonize parts of this area and establish a pioneer community of vegetation. A few nesting pairs of small birds (killdeer, redwing blackbird, song sparrow) are using the area during the spring months, and from the evidence of tracks, fecal droppings and general habitat, there is probably a fair resident population of rats. The general appearance is of a greatly disturbed area which offers little to attract or sustain wildlife of any kind. Its general appearance is most unattractive.

3. Intertidal Portion

The remaining three-fourths of this property lies offshore and borders the Snohomish River channel, and with the exception of a narrow strip adjacent to the channel, it is a tide flat which is exposed at lower tides and covered with as much as 12 feet of water at the highest tides. The bottom is similar in every way to the bottom at the proposed Norton Avenue Terminal, 3000 feet south, which has been reported on in detail in the Preliminary Environmental Impact Statement for Norton Avenue Marine Terminal and Boat Harbor, April, 1972. The bottom at that location contains so little, both in diversity and numbers of organisms, that virtually no biological community of significance is present. The entire intertidal mud flat, from the 13th Street fill to the E. A. Nord mill at the north, has for many years been used as a log storage area. The logs are usually in large bundles enclosed by log booms, which, in turn, are moored to rows of piling driven into the muddy bottom. There is a continual traffic of log rafts into and out of the area, with the logs alternately sitting on the bottom at low tide and floating a few feet above it at higher tides. This is a desirable log storage site primarily because of the fresh-water influence of the Snohomish River, which prevents the logs from being destroyed by marine boring organisms. The highly variable salinity, which makes this a good log storage area, and the continual physical disturbance of the bottom by log bundles and tug boats, as well as perhaps less obvious factors, quite effectively prevent the establishment of any signigicant biological community. This is further evidenced by


GOVERNMENT HARBOR DR PIERHEAD LINE
100.21'
S 89°52'00" E 2134.46
1755.00
S 0°08'00" W 330.00
AREA OF TIDELANDS = 11.6 Ac
APPROX LINE OF M.H.H.W.
AREA OF UPLANDS = 2.4 Ac.
TRACT RESERVED FOR "CRUISE-A-HOME"
3.93 Ac.
370.00
2103.58'
2080.54'
N 89°52'00" W
207.56'
S 89°52'00" E
310.00
214.30'
100.00
100.03'
NORTON AVENUE
BURLINGTON NORTHERN RLY CO RIGHT OF WAY
FORMER N P RLY CO R/W
GRAND AVENUE
MONUMENT LINE
14th STREET
PORT OF EVERETT
WATERGATE BOAT LAUNCH PROJECT
LAND ACQUISITION FROM SAGINAW TIMBER CO.
REID, MIDDLETON & ASSOCIATES, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
324 MAIN ST. EDMONDS WASH. 1918 PACIFIC AVE. EVERETT WASH.

the fact that few waterfowl or shorebirds are to be seen feeding here at any time of the year. There are approximately 40 piling driven into the bottom which do provide a surface firm enough for the attachment of a sparse growth of fucus, balanus, and mytilus (brown algae, barnacles and mussels,) respectively. The tops of piling also afford resting sites for seagulls and an occasional blue heron.

C. ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION

The anticipated beneficial impact of the proposal would be a cleaning up of what literally could now be called a junk yard, and would displace the storage of logs within the intertidal portion of the property. Deepening the approach will attract some herring during the winter months, as has been the case at the 14th Street moorage. The development and cleanup of the area will displace and destroy a present rat habitat.

The anticipated adverse impacts of the proposal will be the displacement of some small birds previously mentioned. However, the proposed work will not endanger or destroy these birds.

No significant natural vegetation exists on the site. Vegetation will be greatly enhanced by planting and landscaping of the final project.

One construction operation with a significant problem potential which will require much care is the dredging necessary to provide the boat basin and hydraulic fill. Extreme muddying of the adjacent river channel could create a hazard for downstream migrant salmon. This possibility is to be avoided to the full extent possible by approved procedures, by avoiding dredging during critical migrating periods of April and May, and by controlling the ponding time in the fill. Also, requirements as set forth in the Department of Game Hydraulics Permit are to be complied with.

A number of new jobs relating directly to operation of the boat launch and also to supporting facilities such as marine-oriented sales, gas sales and service, will be created.

The aesthetics of the area will be greatly improved, with grounds being maintained in a park-like atmosphere.

D. UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS

1. Effects

The unavoidable adverse effects are those that will occur during the construction of the project from the dredging and filling operations. There are no significant permanent adverse effects to any wildlife or natural vegetation.

2. Diminishing or Mitigating Measures

The boat launch facility will provide a much-needed access to the state's many recreational resources for a great number of people.

RESOLUTION NO. 482

A RESOLUTION OF THE PORT COMMISSION OF THE PORT OF EVERETT ADOPTING A SUPPLEMENTAL COMPREHENSIVE SCHEME OF HARBOR IMPROVEMENT OF THE PORT DISTRICT OF THE PORT OF EVERETT TO SUPPLEMENT AND BE IN ADDITION TO THE COMPREHENSIVE SCHEME AND SUPPLEMENTAL COMPREHENSIVE SCHEMES HERETOFORE ADOPTED.

BE IT RESOLVED by the Port Commission of the Port of Everett, as follows:

That the Port Commission of the Port of Everett, Snohomish County, Washington, does hereby officially adopt a Supplemental Comprehensive Scheme of Harbor Improvement in the Port District of the Port of Everett after having held a public hearing thereon after ten (10) day's notice thereof, published on April 13, 14, 15, 17, 18, 19, 20, 21, 22, and 24, 1972, inclusive, in the Everett Daily Herald, a daily newspaper published in said Port District and having a general circulation in said Port District, such supplemental comprehensive scheme of harbor improvement being supplemental to and in addition to the comprehensive schemes of harbor improvement and supplemental comprehensive schemes of harbor improvement of and for said Port of Everett heretofore officially adopted and ratified as provided by law; this Supplemental Comprehensive Scheme of Harbor Improvement being as follows:

GENERAL FEATURES:

The acquisition and/or use of all of such portion of those lands situate in Government Lot 1, Section 18, Township 29 North, Range 5 E.W.M., Snohomish County, Washington, described generally as follows, to-wit:

> A tract of approximately 37 acres of uplands and tidelands bounded on the East by Norton Avenue, bounded on the West by the Snohomish River channel, bounded on the North by the Westerly extension of 9th Street, and bounded on the South by the Westerly extension of 11th Street, exclusive of that portion of said tract presently occupied by Cruise-a-Home, Inc. facilities and being approximately the East 150 ft. of the South 300 ft. of said tract, and which said tract is legally described in Exhibit "A" attached hereto and hereby made a part hereof.

Said tracts, not already owned by the Port District, to be acquired from time to time as the Port Commission deems wise, by gift, purchase, lease and/or condemnation. Said lands are to be improved by dredging, filling and bulk-heading as needed and required and by the construction, installation and development of the following additional improvements, to-wit:

1. A concrete ramp for the launching and retrieving of trailered boats.
2. Car and trailer parking lots.
3. Bathing beach.
4. Mooring floats.
5. Floating timber wave breaks.
6. Access and service roads.
7. Water, sewer and electrical services.
8. Storm drainage and solid waste collection and facilities to serve said property.
9. Building or buildings to accommodate a park operations office, supply and equipment storage, public restrooms, bath house facilities, and such other miscellaneous work and/or items reasonably required for a marine park and boat launch facility.

Such acquisition and construction is to be by said Port of Everett, itself, or in conjunction or cooperation with Snohomish County, the City of Everett, the State or Federal Government, any agency of said governments, and any commercial waterway district that may be hereinafter created in said Port District or in conjunction or cooperation with any of them as provided by law.

DATED April 25, 1972.

COMMISSIONER

COMMISSIONER

COMMISSIONER

ATTEST:

SECRETARY

EXHIBIT "A"
To Resolution No. 482

A portion of Government Lot 1, Section 18, Township 29, North Range 5, East W.M., situate in Snohomish County, Washington, and described as follows, to-wit:

a) Commencing at the intersection of the monument line of Grand Ave. and 14th St. in the City of Everett, thence westerly along the monument line of 14th Street produced for 587.78 feet to the westerly line of the Northern Pacific Railway Company's right-of-way; thence angle to the right 88°37' and following the westerly line of the Northern Pacific Railway Company's right-of-way 1481.43 feet to True Place of Beginning; thence continuing on the same straight line for 708.20 feet; thence angle to the left of 88°37' for 2071.16 feet, more or less, to the Government Harbor or Pier Head Line; thence angle to the left 86°18'10" and following the Government Harbor or Pier Head Line for 709.47 feet; thence angle to the left 93°41'50" for 2134.45 feet, to the westerly line of the Northern Pacific Railway Company's right-of-way, the True Place of Beginning.

b) Commencing at the intersection of the monument lines of Grand Ave. and 14th Street in the City of Everett; thence westerly along the monument line of 14th Street produced in its present direction 587.78 feet to the Westerly line of the Northern Pacific Railway Company's right-of-way; thence angle to right 88°37' and following the westerly line of said Northern Pacific Railway Company's right-of-way for 1831.53 feet; thence angle to right of 91°23' for 50.01 feet to the East line of said Northern Pacific Railway Company's right-of-way, the True Point of Beginning; thence angle to the left 91°23' and following the said East line of the Northern Pacific Railway Company's right-of-way for 358.10 feet; thence angle to right of 91°23' for 52.00 feet to the West line of a strip of land deeded to Snohomish County for a road; thence angle to right 87°05'30" to tangent to curve; thence on a curved line to the left with a radius of5855.00 feet, consuming an angle of 3°06' for 310 feet to a point; thence on tangent to last described curve for 48.85 feet; thence angle to right 96°00'30" for 76.00 feet to True Point of Beginning.

c) Commencing at the monument at the intersection of the monument lines of 14th Street and Grand Avenue in the City of Everett; thence westerly and following the monument line of 14th Street produced for 587.78 feet to the westerly property line of the Northern Pacific Railway Company's right-of-way; thence angle to the right of 88°37' and following the West property line of the Northern Pacific Railway Company's right-of-way for 2189.63 feet to the True Point of Beginning; thence angle to the left of 88°37' for 500.00 feet thence North 75 feet; thence East 650 feet more or less to the West margin of Norton Avenue; thence southerly along the West margin of Norton Ave. to a point East of the Point of Beginning; thence West to the Point of Beginning. EXCEPT Northern Pacific Right-of-Way.

RESOLUTION NO. 531

A RESOLUTION authorizing the Manager to execute an Interlocal Governmental Agreement between the City of Everett, Snohomish County and the Port of Everett for development of the Norton Avenue Boat Launch Facility.

WHEREAS, the Port of Everett, along with the City of Everett and Snohomish County, together with financial assistance from the State of Washington Interagency for Outdoor Recreation, did jointly purchase certain real property for a boat launch facility; and

WHEREAS, these same three agencies are now desirous of jointly developing said property for the use of the general public; and

WHEREAS, an application will be made to the State of Washington Interagency Committee for Outdoor Recreation for seventy-five (75%) percent of the development cost;

NOW, THEREFORE, BE IT RESOLVED BY THE COMMISSION OF THE PORT OF EVERETT that it authorize Manager John G. Belford to execute an Interlocal Agreement to participate in the development of said boat launch facility on a one-third (1/3) share of the three local participants development cost.

DATED this 23rd day of December, 1974.

PORT OF EVERETT

By _____
President

Attest:

_____
Secretary

RESOLUTION NO. 525

BE AND IT IS HEREBY RESOLVED, that the Treasurer of Snohomish County be and he is hereby directed and empowered to establish a special trust fund, to be known as the "NORTON AVENUE BOAT LAUNCH FUND". The entire monthly credits to this fund to be deposited to a special savings account at Pioneer First Federal Savings & Loan. Interest on earnings to be reinvested.

The credits to this fund are to be derived solely from rentals of American Tug Boat Company to Saginaw Timber Company under existing lease arrangement between these parties. The proceeds from said rental agreement are and have been the property of the Port of Everett by reason of condemnation of all right, title and interest of said Saginaw Timber Company.

The principal and interest are to be held by the County Treasurer in said trust fund until directed otherwise by the Port of Everett.

Dated this 15th day of August, 1974.

PORT OF EVERETT

Robert Shriber
President

Paul Kinnune
Acting Secretary

RESOLUTION NO. 502

RESOLUTION OF THE PORT COMMISSION OF THE PORT OF EVERETT DIRECTING AND AUTHORIZING THE ACQUISITION BY PURCHASE OR CONDEMNATION OF CERTAIN REAL PROPERTY FOR PUBLIC USE

WHEREAS, by Resolution No. 482 adopted by the Port Commission of the Port of Everett on April 25, 1972, the Comprehensive Scheme of Harbor Improvement, the port district of the Port of Everett supplemented to include within said comprehensive scheme certain property not owned by the Port of Everett for public use and improvement, all as more particularly described in said resolution;

WHEREAS, said resolution did authorize the acquisition of such property by gift, purchase, lease and/or condemnation;

WHEREAS, said property is necessary for the public use of the Port as described in said resolution and has not been acquired by the Port of Everett.

NOW, THEREFORE, be it resolved that the real property described in Exhibit "A" attached hereto and made a part hereof is hereby found and declared to be necessary for the public uses and purposes described in Resolution No. 482.

IT IS FURTHER RESOLVED that the attorneys for the Port of Everett be and hereby are authorized and directed to institute and pursue to completion condemnation proceedings against the owners of such properties so as to complete the acquisition of said properties in the name of the Port of Everett.

DATED this 5th day of February, 1973.

Port Commissioner

Port Commissioner

Port Commissioner

Attest:

Secretary

I, W. PAUL KINNUNE, Secretary of the Board of Commissioners of the Port of Everett, Washington, DO HEREBY CERTIFY that the foregoing is a true and correct copy of Resolution No. 502 of the Board of Commissioners, duly adopted on the 13th day of February, 1973.

Secretary of the Port Commission

July 25, 1972
File No. 7.90

LEGAL DESCRIPTION FOR PROPOSED NORTON AVENUE BOAT LAUNCHING PARK

PARCEL "A" SUMMIT TIMBER COMPANY

That portion of Government Lot 1 in Section 18, Township 29 North, Range 5 East, W.M., in Snohomish County, Washington, described as follows: Commencing at the intersection of the monument line of Grand Avenue with the monument line of 14th Street in the City of Everett; thence N 89°52'00"W, along the monument line of 14th Street produced, for 587.78 feet to an intersection with the westerly margin of the Northern Pacific Railway Company's right-of-way; thence N 1°15'00"W, along the westerly margin of the Northern Pacific Railway Company's right-of-way for 1831.53 feet to the True Point of Beginning; thence N 89°52'00"W, for 2103.38 feet to an intersection with the Government Harbor or Pierhead Line; thence N 3°49'50"E, along the Government Harbor or Pierhead Line for 358.75 feet; thence S 89°52'00"E, for 1547.26 feet to a point which bears N 89°52'00"W, a distance of 524.30 feet from the westerly margin of the Northern Pacific Railway Company's right-of-way; thence N 0°08'00"E, for 100.00 feet; thence S 89°52'00"E, to an intersection with the westerly margin of the right-of-way for Norton Avenue; thence southerly along the westerly margin of the right-of-way for Norton Avenue to a point from which the True Point of Beginning bears N 89°52'00"W; thence N 89°52'00"W, to the True Point of Beginning.

EXCEPT a triangular parcel of land containing 16/100 acres, more or less, being that parcel of land formerly belonging to the C. B. Lumber & Shingle Company in front of Government Lots 1 and 2, Section 18, Township 29 North, Range 5 East, W.M. and conveyed to Jamison Mill Company by deed dated November 4, 1926, and recorded in Volume 232 of Deeds, page 378, records of Snohomish County, Washington. The said tract is bounded as follows: On the East by the west line of Norton Avenue; on the South by a line drawn parallel to and 1831 feet North of the monument line of 14th Street produced and bounded on the West by a line drawn parallel to and 7-1/2 feet westerly of the Center Line of a Spur Track described as follows, to wit:

Commencing at the intersection of the North Line of said Lot 1 with the Center Line of the main track of the Great Northern Railway Company as now located, constructed and operated; thence southerly along said Center Line of main tract 793.3 feet; thence along a 4° curve to the right 104 feet; thence tangent 15.2 feet; thence along a 12°30' curve to the right 228 feet to the beginning of said Spur Track; thence along a 7°30' curve to the left 85 feet; thence along an 18° curve to the left 174.2 feet; thence southerly on tangent 297.3 feet.

Containing 19.3 acres.

REID, MIDDLETON & ASSOCIATES
Consulting Engineers - Land Surveyors
324 MAIN ST. EDMONDS, WASH.

EXHIBIT A

July 24, 1972
File No. 7.90

LEGAL DESCRIPTION FOR PROPOSED NORTON AVENUE BOAT LAUNCHING PARK

PARCEL "B" SAGINAW SHINGLE COMPANY

That portion of Government Lots 1 and 2 in Section 18, Township 29 North, Range 5 East, W.M., in Snohomish County, Washington, described as follows: Commencing at the intersection of the monument line of Grand Avenue with the monument line of 14th Street in the City of Everett; thence N 89°52'00"W, along the monument line of 14th Street produced, for 587.78 feet to an intersection with the westerly margin of the Northern Pacific Railway Company's Right-of-Way; thence N 1°15'00"W, along the Westerly margin of the Northern Pacific Railway Company's Right-of-Way for 1481.43 feet; thence N 89°52'00"W, for 378.45 feet to the True Point of Beginning; thence continuing N 89°52'00"W, for 1756.00 feet to an intersection with the Government Harbor or Pierhead Line; thence N 3°49'50"E, along the Government Harbor or Pierhead Line for 350.72 feet; thence S 89°52'00"E, for 1733.38 feet to a point from which the True Point of Beginning bears S 0°08'00"W, thence S 0°08'00"W, for 350.00 feet to the True Point of Beginning.

Containing 14.0 acres.

REID, MIDDLETON & ASSOCIATES
Consulting Engineers - Land Surveyors
324 MAIN ST. EDMONDS, WASH.

DENNIS GREGOIRE

CITY OF EVERETT

PERMIT FOR SUBSTANTIAL DEVELOPMENT

Pursuant to Section 14, Chapter 286, Laws of 1971 Extra Session, a permit is hereby granted to The Port of Everett, Pier 1, Everett, Washington, to undertake the following development:

A trailer boat launch facility including:

(1) the diking and filling of 15.4 acres of tidelands to an average elevation of approximately +17.0 feet MLLW, by hydraulic dredging of approximately 483,000 cubic yards of sand and silt from the lower Snohomish River Channel, and (2) the construction thereon of a trailer boat launch facility to include (a) a boat launching ramp with capacity for simultaneous launching of up to 18 trailered boats, (b) ramp access and temporary tieup floats, (c) floating drift booms and wave breaks, (d) parking areas for approximately 600 cars, (e) a service building to include office space, public restrooms, a small maintenance shop, etc., (f) a waterfront park and picnic area, with transient moorage float, and marine view points, (g) paved access roadways and a combination bike and pedestrian access path, and (h) appropriate landscaping.

upon the following described property:

See attachment "A"

Development pursuant to this permit shall be undertaken pursuant to the following terms and conditions:

1. That the project conform to Washington State Department of Fisheries criteria on marinas.

2. The dredging shall be conducted in a manner which minimizes the impact on water quality and aquatic life.

3. That the disposal of spoils behind the diked area shall be carried out in a manner which minimizes the adverse effects on the Snohomish River. Design of the disposal ponds and dikes shall consider the location of the inlet and outlet to prevent short circuiting, installation of adequate discharge controls, and providing a capacity and detention time based on the settling characteristics.

(1)

4. That pedestrian/bike access be provided to the project. This will connect with the bike path along Norton Avenue.

5. That the potential visual impact be mitigated by an extensive landscaping plan addressing the following areas:

   a. The access road from Norton Avenue to the site.

   b. The 10 acres of parking provided for autos and boats.

   c. The marine park, picnic and view area.

6. That the Department of Community Development be notified 7 days prior to commencing of dredging.

Nothing in this permit shall be construed as excusing the applicant from compliance with any federal, state, or local statutes, ordinances or regulations applicable to this project other than the permit requirements of the Shoreline Management Act of 1971.

This permit may be rescinded pursuant to Section 14(7) of the Shoreline Management Act of 1971 in the event the permittee fails to comply with any condition hereof.

Construction pursuant to a permit will not begin or be authorized until forty-five days from the date of final approval by the local government, or until all review proceedings are terminated within forty-five days from the date of final approval by the local government.

August 28, 1974
Date

Frank H. Bennett, Director
Department of Community Development

MINUTES OF THE REGULAR MEETING OF THE EVERETT PORT COMMISSION

August 11, 1975

Present: Paul Kinnune, President
Robert Shriber, Secretary
John G. Belford, Manager
Lewis A. Bellt,, Attorney
Belva P. Staeheli, Auditor

Absent: John Martinis, Vice President

Also Present: (See Attendance Register)

CALL TO ORDER:

The meeting was called to order by Chairman Kinnune at 8:00 p.m. It was noted that Commissioner Martinis was out of town commercial fishing and was excused from this meeting.

APPROVAL OF MINUTES:

On motion by Commissioner Shriber, seconded by Commissioner Kinnune, the minutes of the Regular meeting of July 8, 1975, and the Special meeting of August 4, 1975, were approved.

NORTON AVENUE TERMINAL PERMIT:

Manager Belford reported that the objection of the Coast Guard has now been satisfied and the Port is now awaiting signature on the permit from the District Engineer, Corps of Engineers.

NORTON AVENUE BOAT LAUNCH:

Manager Belford reported that Reid, Middleton & Associates have been given authority to go ahead with final design. It appears there will be two contracts. The Corps of Engineers will have one for the dredging and the City/County/Port will have a second contract for the diking because of the considerable difference in cost estimates to do with work. Expect contract for diking will be called for around the end of September, with letting around the middle to October.

Total cost estimated to be $610,000.00 with Corps of Engineers participating in $120,000.00, IAC from $390,000.00 to $400,000.00 and the balance by the Port/City/County, which will be from $40,000.00 to $50,000.00 each, depending on the bids.

GENERAL TELEPHONE CO. EASEMENT:

On motion by Commissioner Shriber, seconded by Commissioner Kinnune, Manager Belford was authorized to grant General Telephone Co. easement as proposed.

MINUTES OF THE SPECIAL MEETING OF THE EVERETT PORT COMMISSION

November 3, 1975 -- 7:00 p.m.

Present: Paul Kinnune, President
John Martinis, Vice President
John G. Belford, Manager
Lewis A. Bell, Attorney
Belva P. Staeheli, Auditor

Absent: Robert Shriber, Secretary

Also Present: Jim Reid, Reid, Middleton & Assoc.
Frank Harthorne, Harthorne, Hagen, Gross & Assoc.

CALL TO ORDER: The meeting was called to order at 7:00 p.m. by Chairman Kinnune.

AWARD OF BID FOR DIKING AND RIPRAP FOR HYDRAULIC FILL -- NORTON AVENUE BOAT LAUNCH PROJECT:

Engineer Jim Reid read from his written recommendation to the Commission that the low bid by Stoen Construction Co. of Monroe had been studied, the construction materials for the project are to come from the quarry owned and operated by that company. Quarry materials have been examined by engineers and soils consultant and found to be satisfactory. The conclusion was that Stoen Construction Co. was responsive and their bid constituted the lowest and best received and Mr. Reid, therefore, recommended that it be accepted subject to the following conditions: (a) Alternate Item 4A, in the amount of $2,400.00, be accepted; (b) Roadway related items Nos. 8, 10 and 11, inclusive, be accepted subject to concurrence by the Interagency Committee for Outdoor Recreation, that cost of the said items will be eligible for payment from I.A.C. grant funds.

On motion by Commissioner Martinis, seconded by Commissioner Kinnune, Stoen Construction Co. was awarded the contract for Norton Avenue Boat Launch Project riprap and diking in the amount of $381,358.50 which included the $2,400.00 Alternate Item 4A.

ADJOURN:

On motion by Commissioner Martinis, seconded by Commissioner Kinnune, the meeting was adjourned.

Paul Kinnune
President

John Martinis
Secretary

MINUTES OF THE REGULAR MEETING OF THE EVERETT PORT COMMISSION
November 12, 1974

NORTON AVENUE BOAT LAUNCH:

On motion by Commissioner Martinis, seconded by Commissioner Kinnune, signing of transfer of deed of this property to the City of Everett and Snohomish County was approved.

Manager Belford reported that he is still working with the City and County towards equal participation in the diking and filling in 1975. Application for IAC participation must be submitted by January 1, 1975. This application cannot be submitted without having some idea where the 25% funding will come from. It is hoped that the Port will receive an answer from the other two agencies by the next work session.

It was noted that if the boat launch site cannot be used as a site for deposit of spoils for the settling basin dredging project, the Port will be forced to look for another site for spoils. In the past, Jetty Island has been used for disposal of maintenance dredge spoils.

On motion by Commissioner Kinnune, seconded by Commissioner Martinis, Manager Belford was authorized to proceed with the way the Port is going to obtain permits for disposal on the boat launch site and if this is not possible, to then seek authorization to proceed with summary judgment action for disposal on Jetty Island, based on Attorney Bell's recommendation.

LEASES -- AMERICAN BOILER WORKS//AMENDMENT TO EVERETT BOAT HOUSE LEASE:

American Boiler Works is expanding their facilities, which takes place on Everett Boat House lease property. Amendment decreasing the size and rental by $200.00 for Everett Boat House Lease, as well as a new lease with American Boiler Works for this property in the amount of $233.00 was submitted to the Commission.

On recommendation by Manager Belford, it was moved by Commissioner Kinnune and seconded by Commissioner Martinis, that the new lease and amendment be approved.

ITEMS FOR DECEMBER AGENDA:

According to the Commission working rules adopted, persons from the audience may request items to be set on the agenda of the next regular meeting. None were received from the floor.

At this time the Commission went on record, with correspondence to be sent to the City of Everett, for reconsideration of closure of the 13th Street Fire Station (No. 3).

APPROVAL OF BILLS:

Vouchers 8417 thru 8616, inclusive, in the amount of $123,398.43 were approved for payment.

ADJOURN:

On motion by Commissioner Martinis, seconded by Commissioner Kinnune, the meeting was adjourned.

MINUTES OF THE SPECIAL MEETING OF THE EVERETT PORT COMMISSION

December 23, 1974 -- 3:00 p.m.

Present: Robert Shriber, President
Paul Kinnune, Vice President
John Martinis, Secretary
John G. Belford, Manager
Lewis A. Bell, Attorney
Belva P. Staeheli, Auditor

CALL TO ORDER: The meeting was called to order at 3:00 p.m. by Chairman Shriber.

CALL FOR BIDS ON EARTH MOVING PORTION OF THE 13th STREET CHANNEL TERMINAL:

On motion by Commissioner Kinnune, seconded by Commissioner Martinis, call for bids on the earth moving portion of the 13th Street Channel Terminal was authorized, with bid opening set for 7:00 p.m. January 6, 1975.

RESOLUTIONS NO. 531 and 532, ENDORSING PORT OF EVERETT PARTICIPATION IN THE NORTON AVENUE BOAT LAUNCH FACILITY:

On motion by Commissioner Martinis, seconded by Commissioner Kinnune, Resolutions No. 531 and 532 enabling the three participating agencies to submit an application to IAC for funding were approved.

ADJOURN:

On motion by Commissioner Martinis, seconded by Commissioner Kinnune, the meeting was adjourned.

Robert J. Shriber
President

Secretary

MINUTES OF THE SPECIAL MEETING OF THE EVERETT PORT COMMISSION

October 7, 1975 -- 7:00 p.m.

Present: Paul Kinnune, President
Robert Shriber, Secretary
John G. Belford, Manager
Lewis A. Bell, Attorney
Belva P. Staeheli, Auditor

Absent: John Martinis, Vice President

Also Present: (See Attendance Register)

CALL TO ORDER:

The meeting was called to order at 7:00 p.m. by Chairman Kinnune.

ADOPTION OF FINAL BUDGET FOR 1976, RESOLUTION NO. 539:

On motion by Commissioner Shriber, seconded by Commissioner Kinnune, Resolution No. 539 setting the budget for the year 1976 in the amount of $7,639,546.00 was adopted.

AUTHORIZATION FOR CALL FOR BIDS FOR DIKING AND RIPRAPPING FOR HYDRAULIC FILL--NORTON AVENUE BOAT LAUNCH:

Engineer Jim Reid, in submitting plans and specifications for diking and riprapping for hydraulic fill for Norton Avenue Boat Launch, informed the Commission he had received verbal approval from IAC to be followed by letter. Mr. Reid also presented soils report.

Through the process of developing plans, the project has been discussed with the Corps of Engineers and they have indicated their concurrence, however, authorization has not yet been received from the Chief of Engineers in Washington, D.C. regarding the Corps participation.

Plans and specifications as prepared meet all the requirements as agreed to at the time of purchase of the Summit and Saginaw properties. Mr. Reid also said he thought it would be well for Port's attorney, Lewis Bell to put attorneys for Summit on notice re disposition of unsuitable materials out of the easement approach area.

Mr. Reid requested authorization from the Commission to call for bids with bid opening to be set for October 23, 1975, at 10:00 a.m., with award of bid to be set for a later date which will enable the City/County/Port and IAC to review the bids as submitted.

On motion by Commissioner Shriber, seconded by Commissioner Kinnune, Engineer Reid was given authorization to call for bids on the diking and riprapping for hydraulic fill for the Norton Avenue Boat Launch, subject to the clarification of the City and County participation and the Corps of Engineers participation. Bid opening set for October 23, 1975, at 10:00 a.m. In conjunction with this bid authorization, it was moved by Commissioner Shriber, seconded by Commissioner Kinnune that Resolution 540, Authorizing the sale of the old burner on the Norton Avenue Boat Launch site was approved.

JAMES H. REID
L. ROY E. MIDDLETON
C. WAYNE JONES
LLOYD H. NELSON

Reid, Middleton & Associates, Inc. ENGINEERS • SURVEYORS • PLANNERS

324 Main Street • Edmonds, Washington 98020 • (206) 775-3434

April 21, 1976
File No. 7.90N

Mr. Ken Kirkland
Port of Everett
Pier 1
Everett, Washington 98020

Re: Old Burner Base at Norton Avenue Boat Launch

Dear Ken:

We have reviewed the old burner base at Norton Avenue Boat Launch and the attached sketch shows elevations of the various parts of the structure. What appears to be the upper fire box or base has a top elevation of 19.27 feet and is resting on a foundation base at elevation 12.9 feet. It does not seem economically practical to remove the entire structure, but we feel that the base should be removed to the foundation at elevation 12.9 feet.

The upper fire box appears to be a ring wall about 3 feet thick with circumferential cable reinforcing wire. We felt that this could be broken up and pushed off the foundation using a large dozer and a man with a cutting torch.

In estimating the cost of the large dozer available at the Stoen quarry (D-9 Caterpillar), we found the costs to be excessive, i.e.:

Move In and Out	$ 600.00
8 hour Cat and Operator	800.00
8 hour Labor and Cutting Torch	200.00
	$ 1,600.00

The other possibilities that exist are to (a) try a smaller local dozer, also with a man and cutting torch, which would be a much lower operating cost, but may take longer, and (b) drill and shoot to break up concrete, then using a small dozer push debris off foundation.

Based on the high estimated cost for the benefit, we would recommend that you try to obtain a firm price from a local contractor using alternate (a) and/or (b).

Ken & Ed, contract for $500.00

Please let me know if we can be of further help on this.

Very truly yours,

REID, MIDDLETON & ASSOCIATES, INC.

John O. Olsen

JOO:bb
Encl.

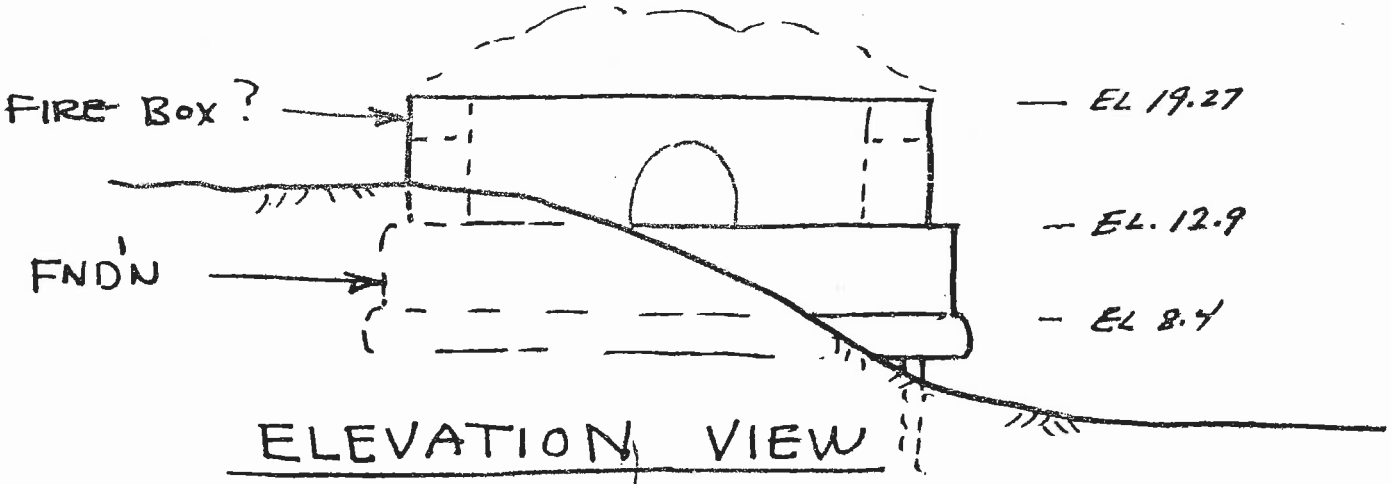
JO. DATE

HKD. BY DATE

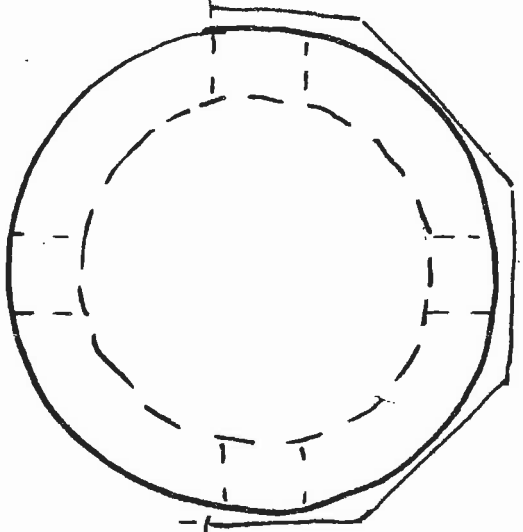
SUBJECT Norton Ave Boat Launch

SHEET NO. 1 OF 1

JOB NO. 7.90 N



ELEVATION VIEW



Datum - MLLW

PLAN VIEW

OLD BURNER BASE @ NORTON AVE BOAT LAUNCH

5415

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
PO BOX C-3755
SEATTLE, WASHINGTON 98124

NPSOP-NF

22 January 1976

John G. Belford, Manager
Port of Everett
P. O. Box 538
Everett, Washington 98206

Dear Mr. Belford:

Reference Fiscal Year 1976 Everett Harbor and Snohomish River maintenance dredging. Inclosed is a draft resolution, in triplicate, for deposit of $34,000 with the Treasurer of the United States or in escrow for Port of Everett's portion of the work.

This work includes dredging the entrance channel from the Federal Channel to the Norton Avenue trailer boat launch facility estimated to cost $30,000, and construction of approximately 2,650 lineal feet of retaining dike at the Pacific Towboat disposal site on Smith Island, estimated to cost $4,000 for a total contribution of $34,000.

We suggest the commissioners act on the resolution at their next meeting so that advertising for bids on the dredging scheduled for 23 February 1976 will not be delayed. Please return the signed original copy along with the $34,000 deposit or the executed escrow agreement, prior to advertising.

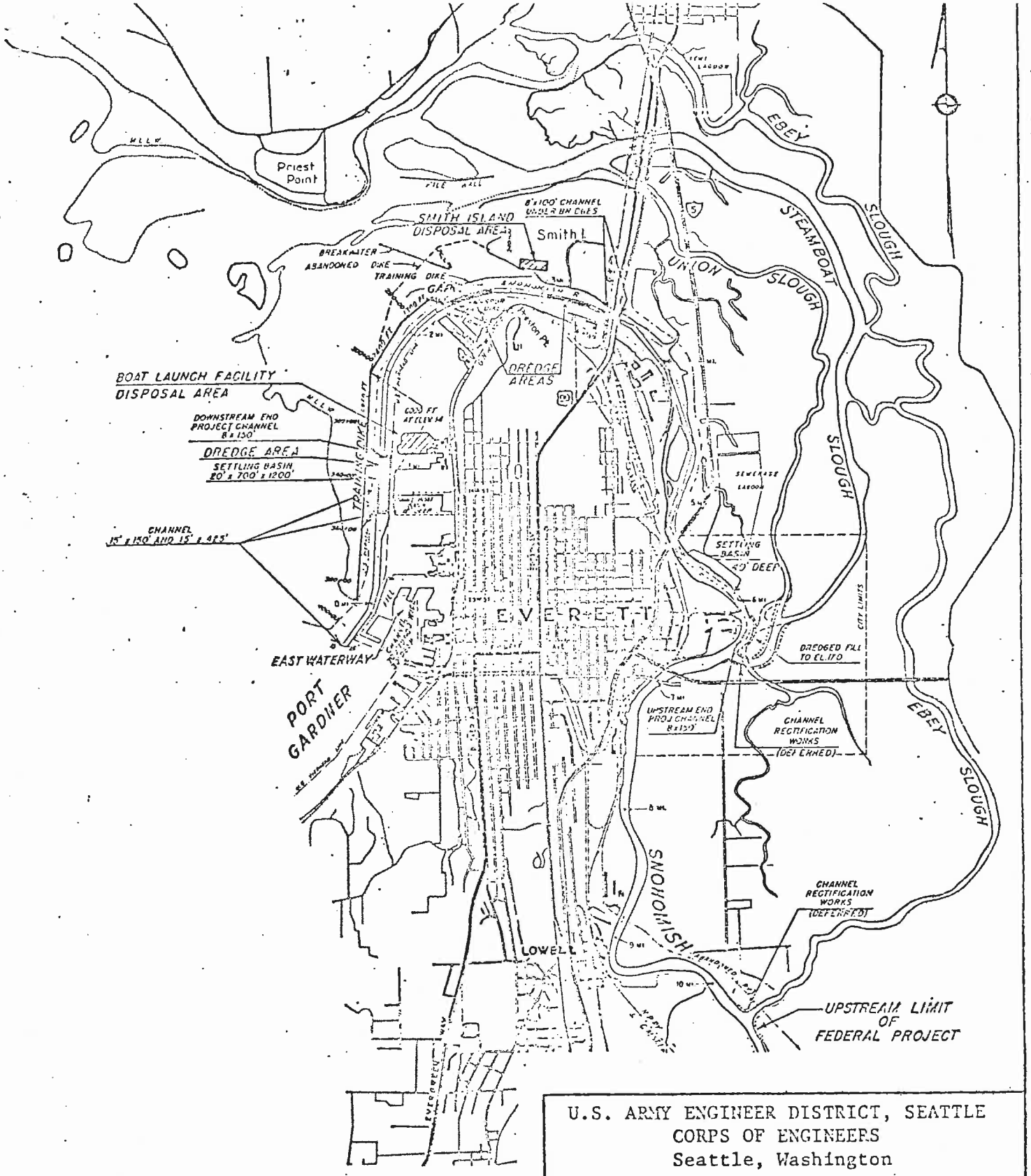
If you have any questions on the resolution, please contact our project manager, Mr. E. A. Dorner, phone 764-3401/3400.

Sincerely yours,

W. C. Gilmore for

R. H. LATTA
Chief, Operations Division

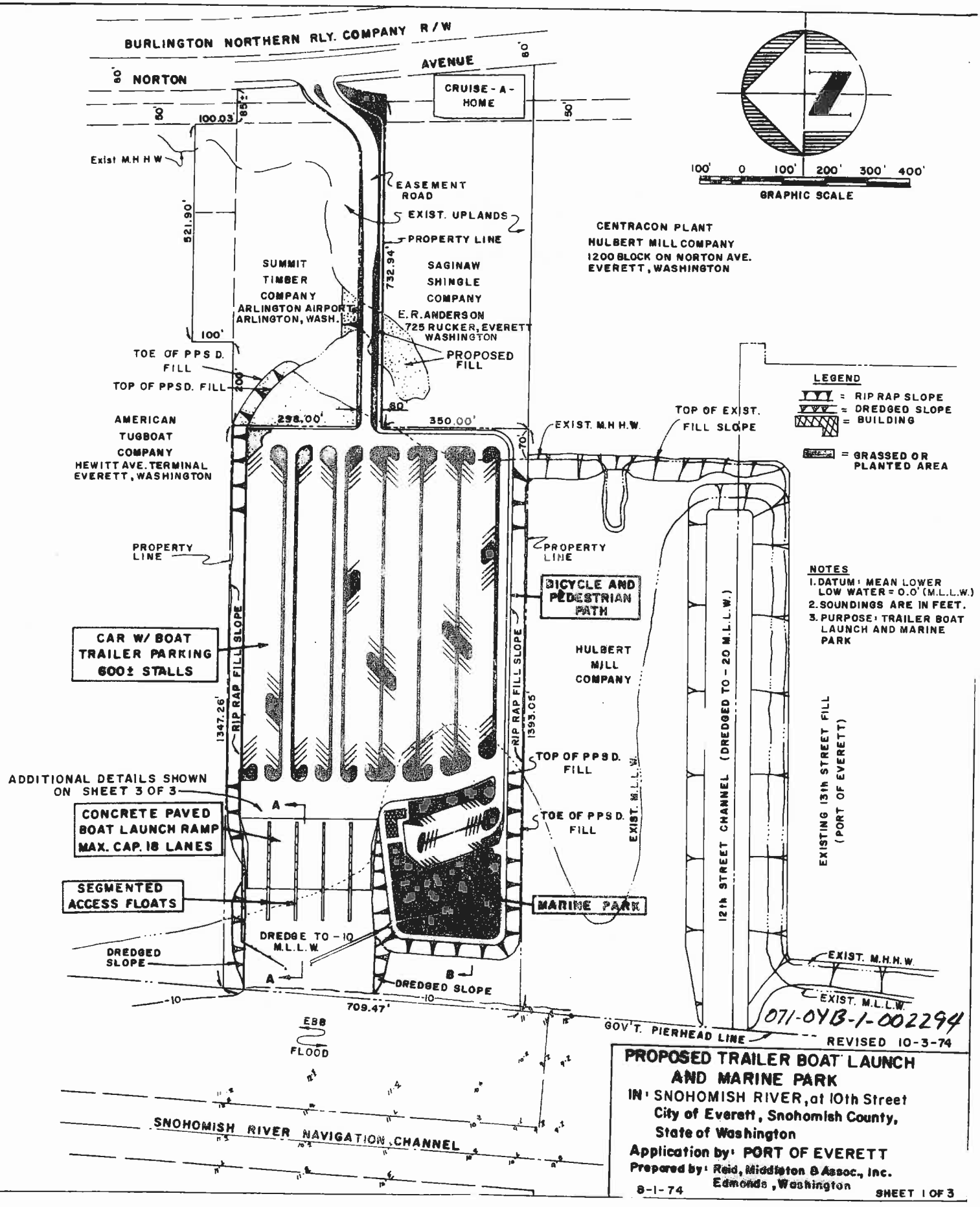
1 Incl
As stated



U.S. ARMY ENGINEER DISTRICT, SEATTLE
CORPS OF ENGINEERS
Seattle, Washington

EVERETT HARBOR and SNOHOMISH RIVER,
WASHINGTON
Fiscal Year 1976 Dredging

DATE	PUBLIC NOTICE	SHT
Nov 1975	Ref No. NPSOP-NF-09	1 of 1



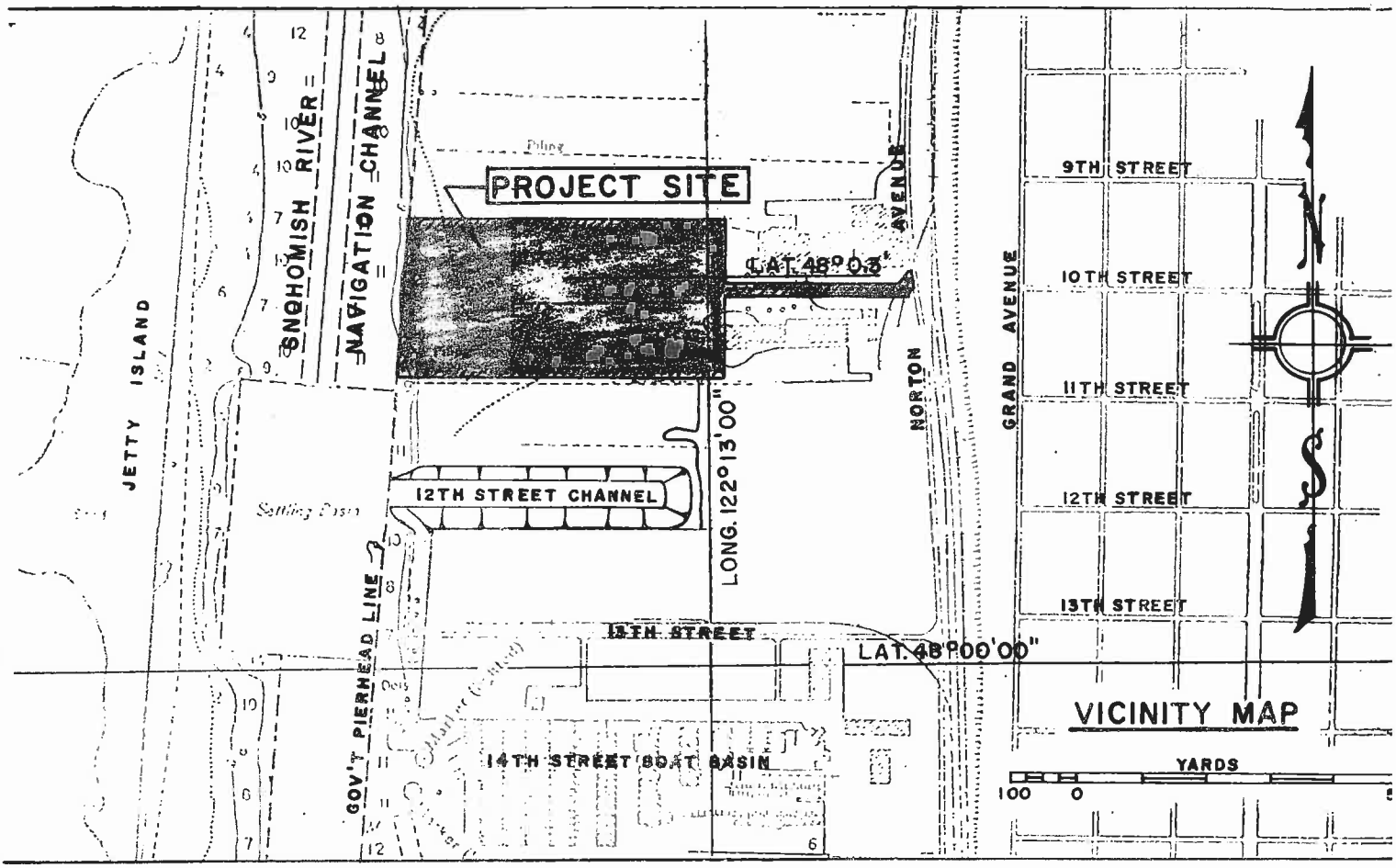
PROPOSED TRAILER BOAT LAUNCH AND MARINE PARK

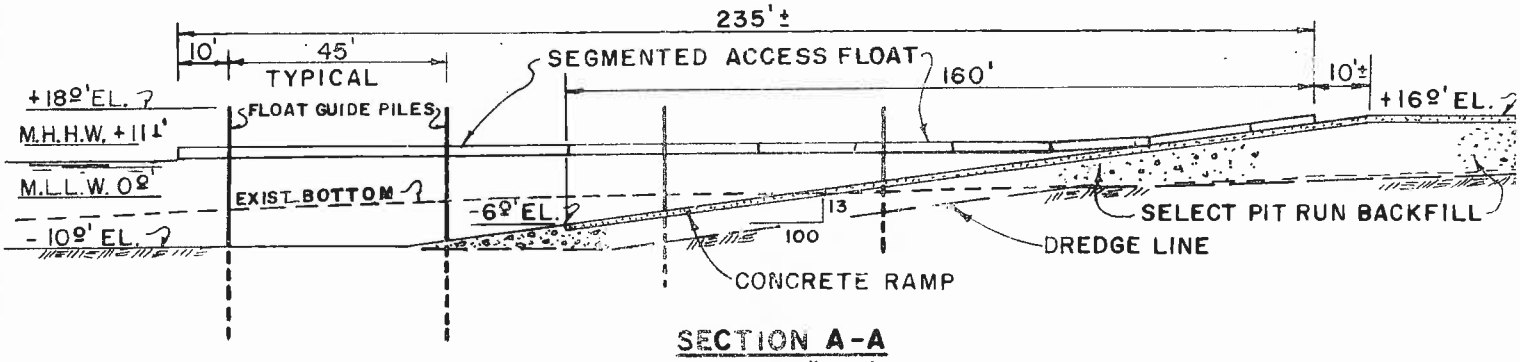
IN: SNOHOMISH RIVER, at 10th Street
City of Everett, Snohomish County,
State of Washington

Application by: PORT OF EVERETT

Prepared by: Reid, Middleton & Assoc., Inc.
Edmonds, Washington

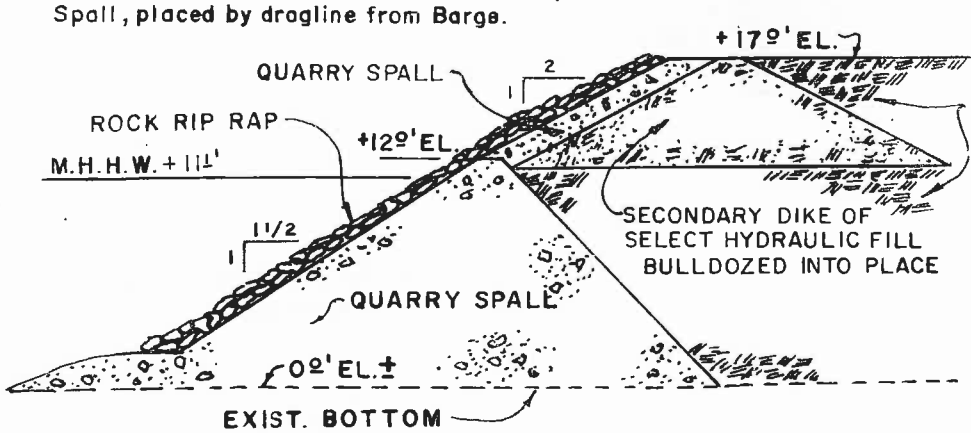
8-1-74





SECTION A-A
SCALE 1"=40'

8,600 Tons Rip Rap & 107,000 Tons Quarry Spall, placed by dragline from Barge.



SECTION B-B
SCALE 1"=10'

8-1-74

071-0YB-1-CC2294

HYDRAULIC FILL, FINE SAND, PUMPED INTO PLACE, 458,000 C.Y. FROM MAINTENANCE DREDGING SNOHOMISH RIVER CHANNEL & SETTLING BASIN, 25,000 C.Y. FROM DREDGING PROJECT BOAT BASIN

Revised 10-11-74

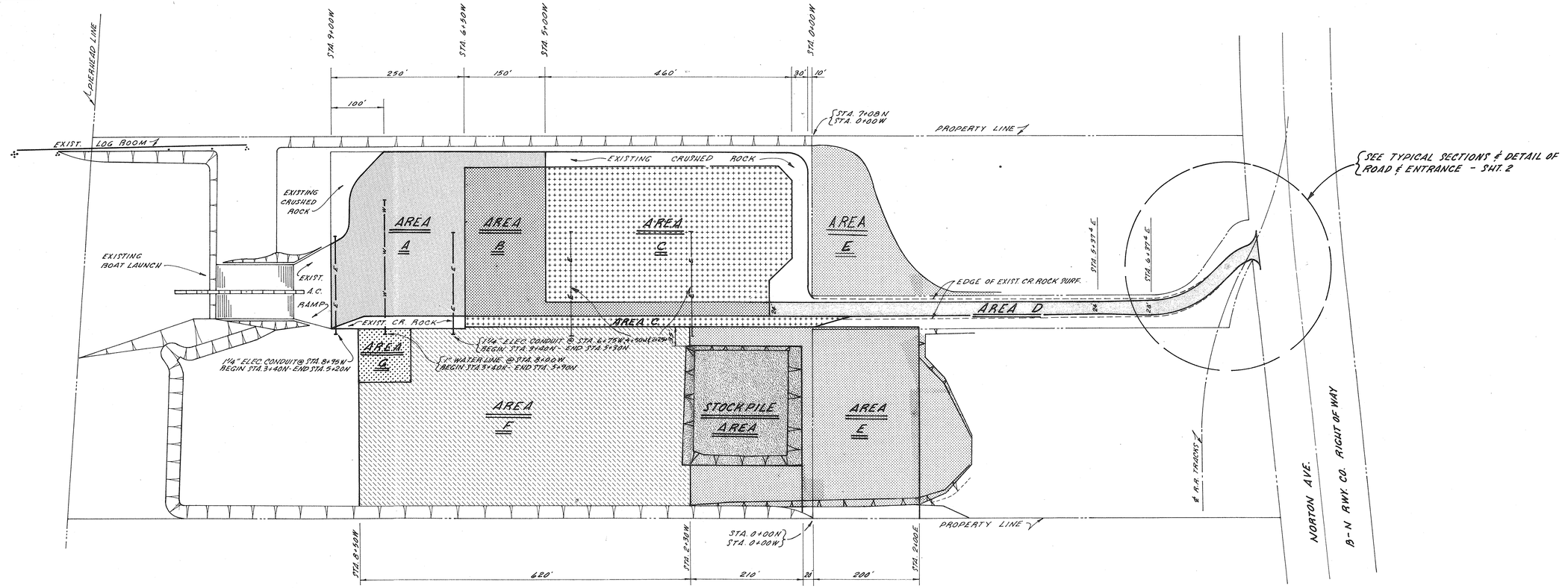
PROPOSED TRAILER BOAT LAUNCH AND MARINE PARK

IN: SNOHOMISH RIVER, at 10th Street
City of Everett, Snohomish County,
State of Washington

Application by: PORT OF EVERETT

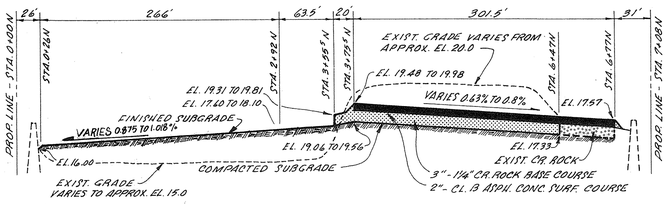
Prepared by: Reid, Middleton & Assoc., Inc.
Edmonds, Washington

SHEET 2 OF



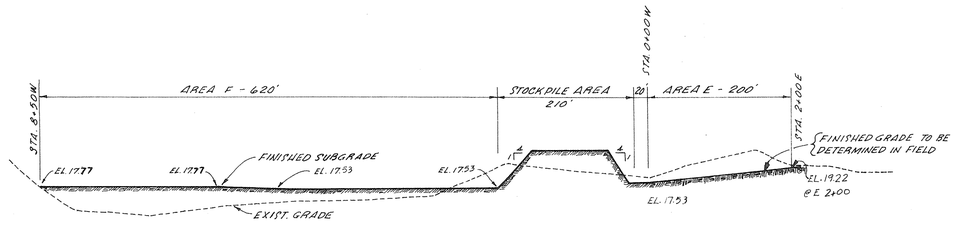
SITE PLAN

1" = 100'



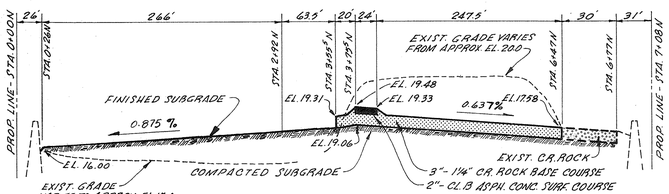
TYPICAL SECTION

STA. 5+00W TO STA. 6+50W
N.T.S.



TYPICAL SECTION @ STA. 2+00N

STA. 2+00E TO STA. 8+50N
N.T.S.

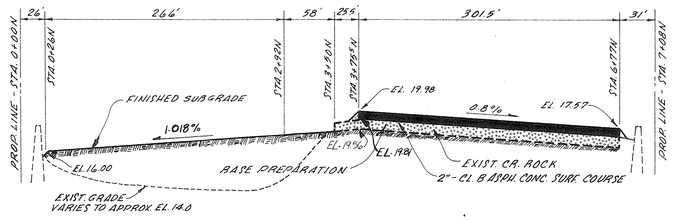


STA. 2+30W TO STA. 5+00W

STA. 0+40 W TO STA. 5+00W

TYPICAL SECTION

STATIONS AS NOTED
N.T.S.



TYPICAL SECTION

STA. 6+50W TO STA. 8+50W
N.T.S.

Area Designation

Scope of Work

Area A
1. Prepare Existing Crushed Rock Base.
2. Place 2" Class 'B' Asphalt Concrete Surfacing.
3. Install Underground Conduit and Pipe for Future Service.
4. Install Extruded Curb.
5. Paint Traffic Markings.

Area B
1. Excavate and Prepare Subgrade.
2. Place 3" Compacted Depth of 1½" Minus Crushed Rock Base.
3. Place 2" Class 'B' Asphalt Concrete Surfacing.
4. Paint Traffic Markings.

Area C
1. Excavate and Prepare Subgrade.
2. Place 3" Compacted Depth of 1½" Minus Crushed Rock Surface.

Area D
1. Prepare Existing Crushed Rock Base.
2. Construct Embankment and 3" Compacted Depth of 1½" Minus Crushed Rock Base where needed.
3. Place 2" Class 'B' Asphalt Concrete Surfacing.
4. Construct Sanitary Sewer Manhole and Install 6" Cement Concrete Pipe.
5. Paint Traffic Markings.

Area E
1. Excavate and Grade.

Area F
1. Deposit Excavated Material.
2. Construct and Grade Embankment.

Area G
1. Deposit Excavated Material in Compacted Layers.
2. Construct Embankment and Prepare Subgrade.
3. Place 3" Compacted Depth of 1½" Minus Crushed Rock Surfacing.

JAMES H. REID — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER

NO.	REVISIONS	DATE	BY
1	AS BUILT	12-19-77	TT

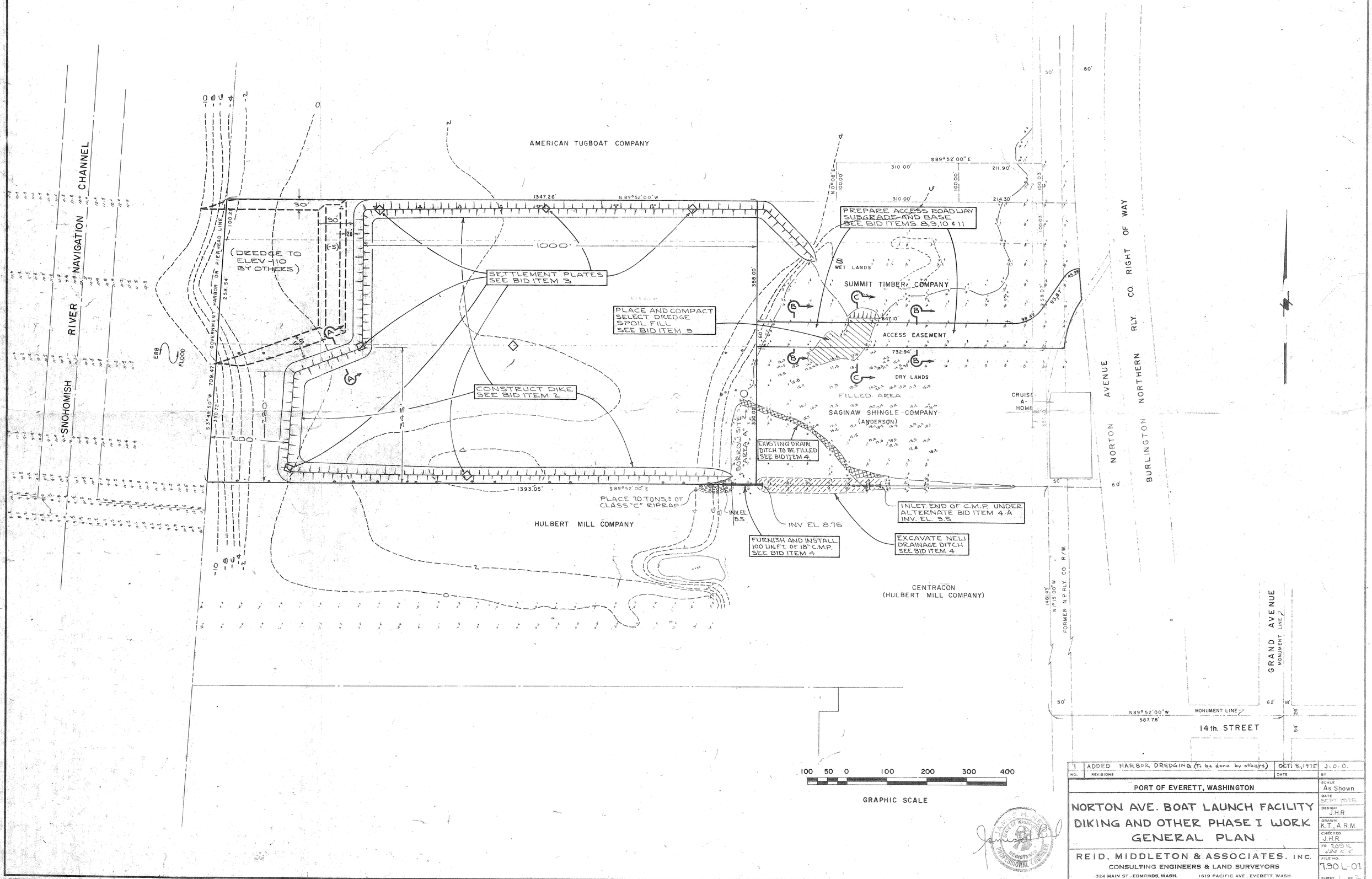
PORT OF EVERETT

NORTON AVENUE BOAT LAUNCH PHASE IIB

GENERAL PLAN & SECTIONS

Reid, Middleton & Associates, Inc.
ENGINEERS • SURVEYORS • PLANNERS
324 MAIN ST., EDMONDS, WASH.

SCALE	AS NOTED
DATE	MAR. 1977
DESIGN	J.D., F.R.
DRAWN	A.M.
CHECKED	J.H.R.
FB	209-0
FILE NO.	7.90 S2
SHEET	1 OF 2



NO.	REVISIONS	DATE	BY
1	ADDED HARBOR DREDGING (to be done by others)	OCT. 8, 1975	J.O.O.

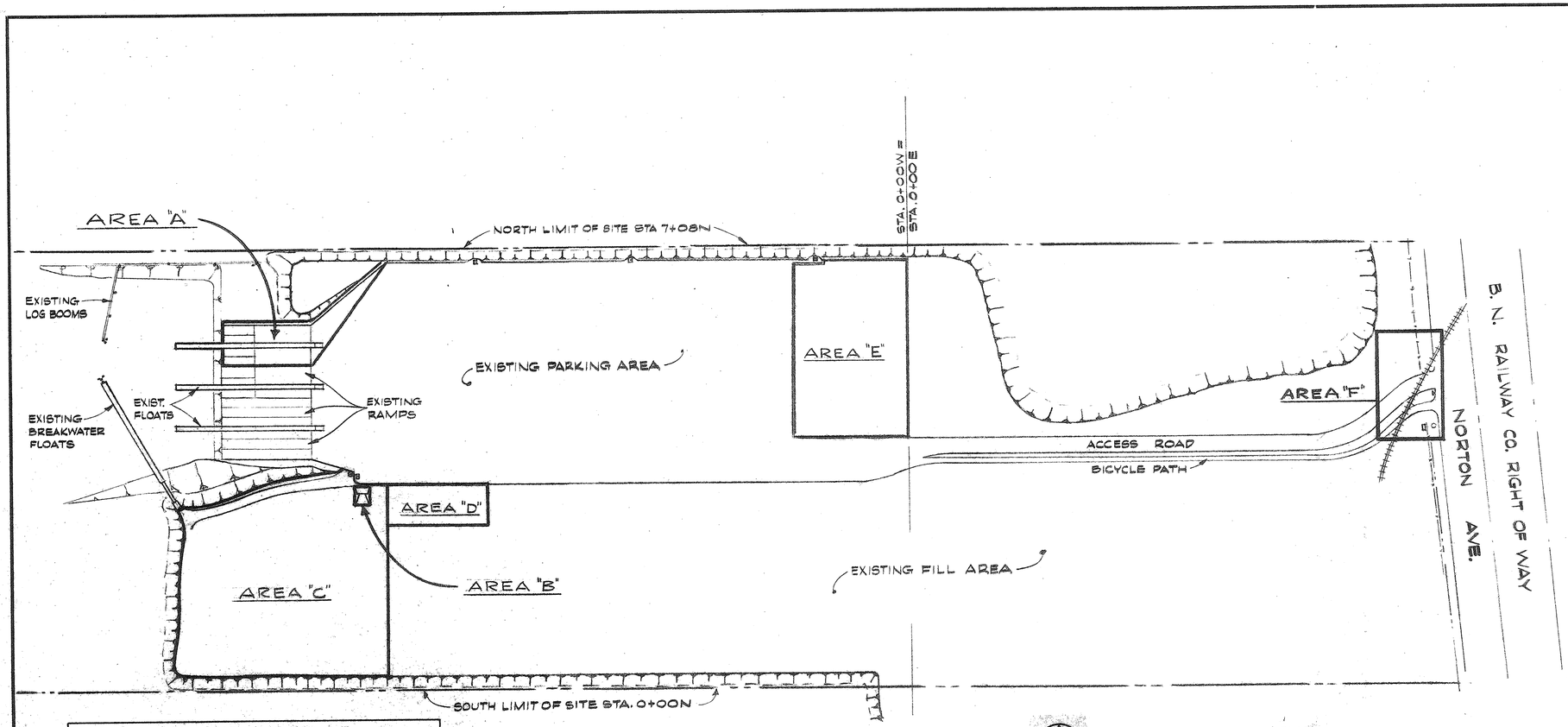
PORT OF EVERETT, WASHINGTON

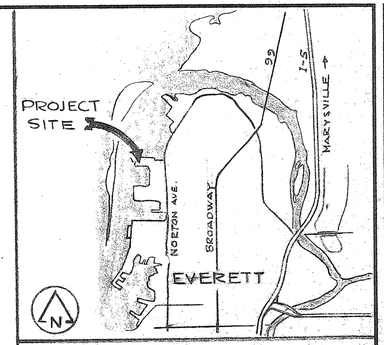
NORTON AVE. BOAT LAUNCH FACILITY DIKING AND OTHER PHASE I WORK GENERAL PLAN

REID, MIDDLETON & ASSOCIATES, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
324 MAIN ST., EDMONDS, WASH. 1619 PACIFIC AVE., EVERETT, WASH.

SCALE	As Shown
DATE	SEPT 1975
DESIGN	J.H.R.
DRAWN	K.T., A.R.M.
CHECKED	J.H.R.
FB	209 K 224 A, E
FILE NO.	7.90 L-01
SHEET	1 OF 2

DIETERICH-POST COMPANY SEATTLE (3-71)





VICINITY MAP
(NTS)

BOAT LAUNCH SITE
SCALE: 1"=100'

DRAWING SCHEDULE	
SHT. No.	SHEET TITLE
1 OF 14	COVER SHEET
2 OF 14	SCOPE OF WORK
3 OF 14	LAYOUT AND GRADING PLAN FOR GENERAL SITE AREA
4 OF 14	LAUNCH RAMP DETAILS
5 OF 14	SERVICE FLOAT DETAILS
6 OF 14	RESTROOM & OFFICE BUILDING DETAILS & SITE PLAN
7 OF 14	RESTROOM & OFFICE BUILDING ELEVATIONS & FLOOR PLAN
8 OF 14	RESTROOM & OFFICE BUILDING SECTIONS & DETAILS
9 OF 14	ROOM, PLUMBING SCHEDULES & ELECTRICAL DIAGRAMS
10 OF 14	LAYOUT PLAN FOR PARK & BUILDING SITE
11 OF 14	GRADING PLAN FOR PARK & BUILDING SITE
12 OF 14	IRRIGATION PLAN FOR PARK & BUILDING SITE
13 OF 14	PLANTING PLAN FOR PARK & BUILDING SITE
14 OF 14	SITE DETAILS

SCOPE OF WORK	
AREA	DESCRIPTION
A	GRADING AND PAVING INSTALL RAMP AND FLOATS
B	RESTROOM FACILITIES AND PUMP STATION
C	FILLING, GRADING, PAVING AND LANDSCAPING
D	GRADING AND PAVING
E	GRADING AND PAVING
F	ENTRANCE-SIGNS, LANDSCAPING AND BOLLARD'S

LEGEND

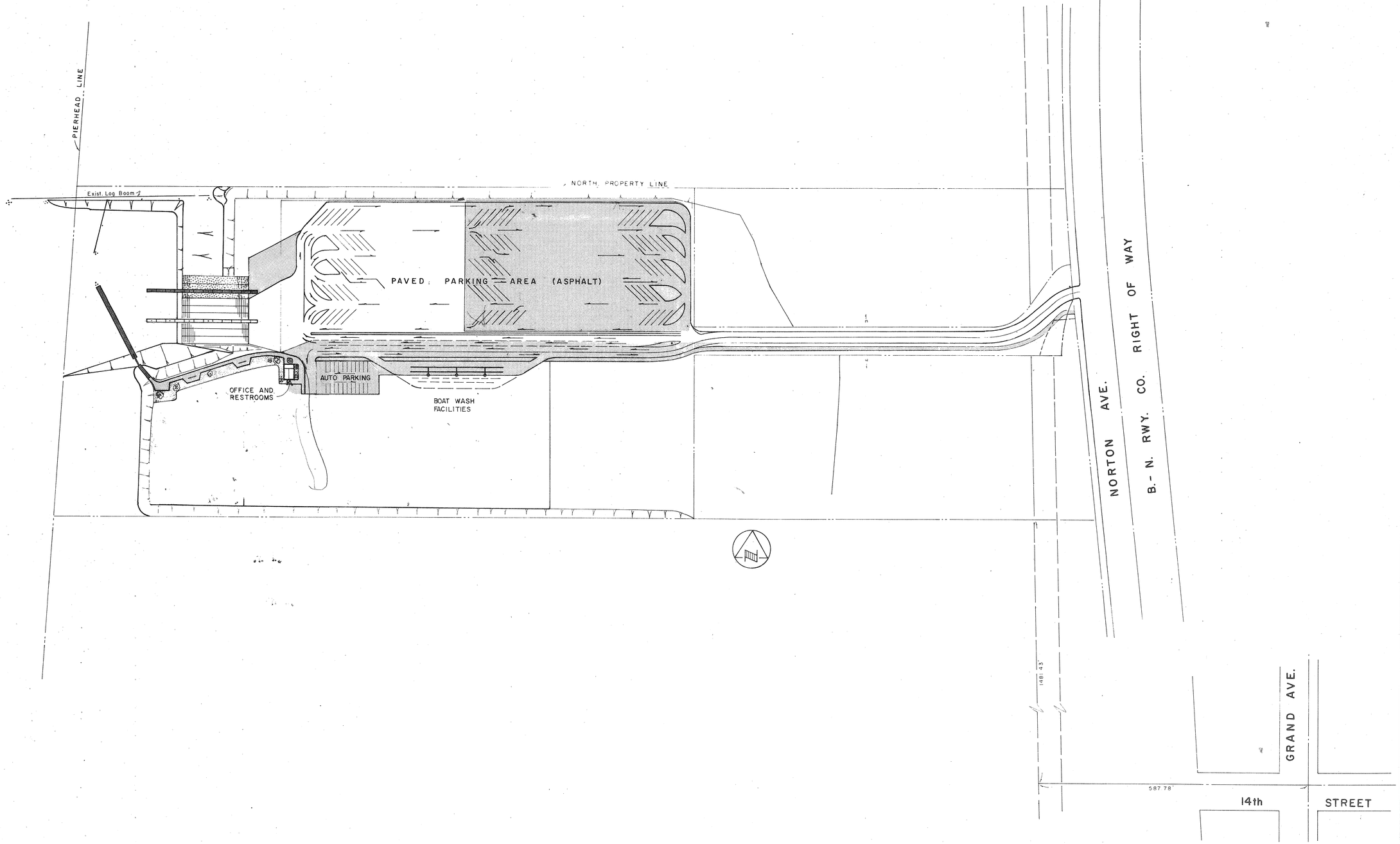
DESCRIPTION	EXISTING	NEW
WATER LINE	W	W
SANITARY SEWER (F.M.)	FM	FM
ELECTRICAL CONDUIT	E	E
FIRE HYDRANT		
WATER VALVE		
WATER METER	WM	WM
LIGHT STANDARD	LS	LS
SIGN POST	SP	SP
JUNCTION BOX	JB	JB
CHAIN LINK FENCE		
RAILROAD TRACK		
BENCH MARK NOTATION		
PK NAIL		
TACK		
HUB		
IRON PIN (REBAR)	IP	

REID, MIDDLETON & ASSOCIATES, INC.
Engineers • Surveyors • Planners
324 Main St., Edmonds, Wash.

NO.	DATE	BY	REVISION

PORT OF EVERETT
NORTON AVE BOAT LAUNCH
SCOPE OF WORK
PHASE IV CONSTRUCTION

SCALE	AS SHOWN
DES.	JB
DR.	RBB
CH.	FR
F.B.	
DATE	JUNE 1980
FILE NO.	7906/D
SHEET No.	2
OF SHEETS	14



NO.	REVISIONS	DATE	BY

PORT OF EVERETT, WASHINGTON

NORTON AVENUE BOAT LAUNCH
CONDITION UPON COMPLETION
OF
PHASE III CONSTRUCTION

Reid, Middleton & Associates, Inc.
ENGINEERS ◦ SURVEYORS ◦ PLANNERS
324 MAIN ST. EDMONDS, WASH

SCALE 1" = 100'
DATE March 1977
DESIGN J.O., J.H.R.
DRAWN A.R.M.
CHECKED J.O., J.H.R.
FB
FILE NO. 7.90 K/3
SHEET 1 OF 1

EXHIBIT 8

Corrective Action Report

prepared by

David T. Johnson, P.E.

for

TC Systems
1028 W. Marine View Drive
Everett, WA 98201
City of Everett Permit No. 7708-94

for submittal to

City of Everett
Public Works Department
3200 Cedar Street
Everett, WA 98201

May 29, 1998

David T. Johnson Engineering
Chemical Engineering - Manufacturing Processes - Water Treatment - Waste Processing - Materials of Construction

May 29, 1998

Clair Olivers, P. E.
Director of Public Works
City of Everett
3200 Cedar Street
Everett, WA 98201

Dear Mr. Olivers:

TC Systems has received Mr. Don McKinney's letter dated April 28, 1998 regarding the proposed compliance schedule for preparation of a Corrective Action Report or an Engineering Report. TC Systems has requested that I perform a survey their pretreatment facilities in accordance with the process outlined in TC Systems April 14, 1998 letter.

Please find enclosed a Corrective Action Report which addresses the issues described in your letter of March 27, 1998 and Mr. Don McKinney's letter of April 28, 1998. Please call me at the number below if you have any questions.

Sincerely,

David T. Johnson, P.E.

cc: D. Miracle (TC Systems)
D. McKinney (City of Everett)
B. Britten (City of Everett)

14966 NE 31st Circle, Redmond, WA 98052
Tel: (425) 883-6043 Fax: (425) 556-9547 E-Mail: djohnson@isomedia.com

Corrective Action Report

prepared by

David T. Johnson, P.E.

for

TC Systems
1028 W. Marine View Drive
Everett, WA 98201
City of Everett Permit No. 7708-94

for submittal to

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3200 Cedar Street
Everett, WA 98201

May 29, 1998

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1.0 BACKGROUND

TC Systems operates a metal surface treatment facility at 1028 W. marine View Drive in Everett, Washington. The processes used by TC Systems at this facility produce wastewater that is discharged the City of Everett under Industrial Waste Discharge Permit No. 7708-94. This permit establishes wastewater discharge limits for a number of parameters that potentially could be present in TC Systems wastewater. Wastewater discharged by TC Systems exceeded the parameter established by the City for zinc during the months of December, 1997 and January, 1998. As a result, in a letter dated March 27, 1998, the City required TC Systems to submit an Engineering Report and a revised Operations and Maintenance Manual for modifications to be made to TC System's wastewater pretreatment facilities to comply with the City's effluent discharge limits.

To comply with this requirement, TC Systems sent a letter to the City on April 14, 1998 which stated its intent to obtain the services of a licensed engineer to survey its pretreatment system. This engineer was to determine if modifications to TC Systems pretreatment facilities are required to comply with the City's permit requirements. If modifications are required, the engineer would prepare an engineering report meeting the requirements of WAC 173-240 for review by the City and the Washington State Department of Ecology. If the engineer determined that operational changes alone could achieve compliance, the engineer would instead prepare a Corrective Action Report to be submitted to the City on May 29, 1998.

In compliance with this process, TC Systems obtained the services of David T. Johnson Engineering (DTJE) whose principal engineer is David T. Johnson P.E., an independent chemical engineer licensed in the State of Washington. DTJE has performed the required survey of TC System's pretreatment facilities and has prepared this report in accordance with the procedure described above.

2.0 SURVEY OF PROBLEMS

A survey was performed by DTJE of the industrial wastewater pretreatment facilities operated by TC Systems at 1028 W. Marine View Drive in Everett, Washington. As a part of this survey, visits were made to the site to obtain information regarding the facilities, observe operations, take photographs, meet with treatment system operators, gather operational data, and other such information as was needed to identify the

sources of wastewater, wastewater characterization, treatment processes used, and methods of operation.

2.1 Process Description

TC Systems operates a total of 17 process tanks which are used to perform up to six chemical surface treatment processes on a variety of fabricated metal parts. Most of these metal parts are composed of aluminum alloys. The attached Figure 1 shows these 17 tanks in the sequential order that they exist at TC Systems. These 17 tanks are used for the six processes as described below.

2.1.1 Alkaline Cleaning

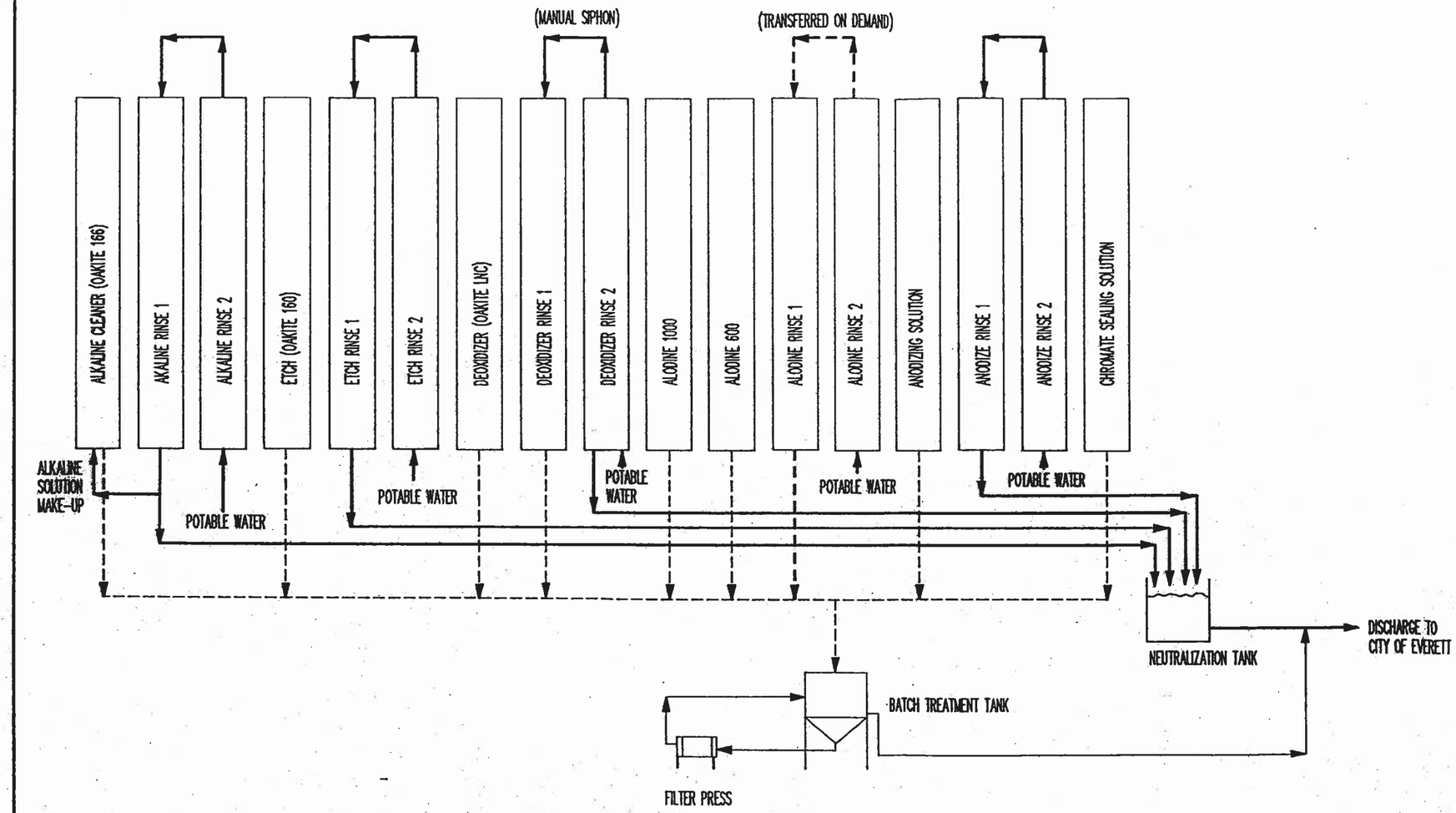
An alkaline cleaning solution is used in the Alkaline Cleaner Tank to remove soils such as inks, light oil, grease and grime residues left on metal parts from previous manufacturing steps without removing the underlying metal substrate. TC systems is presently using a solution of "Oakite 166" to perform the alkaline cleaning process. Following immersion in the alkaline cleaning tank, the cleaned parts are sequentially rinsed in Alkaline Rinse Tank 1 and then Alkaline Rinse Tank 2 to remove residual cleaning solution from the metal surfaces. To comply with specifications for aircraft parts, the cleaning solution is prepared at a concentration of 5 - 8 oz Oakite 166 powder per gallon of water.

2.1.2 Chemical Etching

The fourth in the tank sequence is the Etch Tank. The etching solution consists of "Oakite 160" added at a concentration of 3-5 oz per gallon along with nitric acid added at a concentration of 25-43 grams per liter. The etching solution both etches and cleans the aluminum surface preparatory to subsequent surface treatment. Following immersion in the Etch Tank, the etched parts are sequentially rinsed in Etch Rinse Tank 1 and then Etch Rinse Tank 2 to remove any etching solution from the metal surfaces.

2.1.3 Deoxidizer Treatment

In this step, a deoxidizing solution is used to remove oxides, smut, mill scale, and discoloration from aluminum and aluminum alloys. Deoxidization is required prior to chromate conversion coating to remove aluminum oxide from the metal surface. The deoxidizer solution consists of "Oakite Deoxidizer LNC" prepared in solution at a diluted concentration of 15 vol% Oakite LNC liquid. Nitric acid is added at a concentration of 25-43 grams per liter of solution. Following immersion in the



WASTE PROCESSING FLOW DIAGRAM

TC SYSTEMS
1028 W. MARINE VIEW DRIVE
EVERETT, WASHINGTON 98201
(425) 258-4055

David T. Johnson Engineering
Chemical Engineering – Water Treatment – Waste Processing
14966 NE 31st Circle
Redmond, WA 98052
TEL: (425) 883-6043
FAX: (425) 556-9547

Deoxidizer Tank, the etched parts are sequentially rinsed in Deoxidizer Rinse Tank 1 and then Deoxidizer Rinse Tank 2 to remove any deoxidizer solution from the metal surfaces.

2.1.4 Chromate Conversion Coating

In this step, products containing chromic acid are used to provide a chromate conversion coating to the surface of aluminum and aluminum alloy parts. TC Systems uses two commercial products for performing this coating process, "Alodine 600" and "Alodine 1000." The Alodine 1000 is used at a concentration of 0.14-0.18 oz powder per gallon and imparts a clear coating. The Alodine 600 is used at a concentration of 1.3-3.0 oz/gallon and imparts a colored coating. The Alodine 600 tank is used predominantly. Following immersion in either of the Alodine Tanks, the coated parts are sequentially rinsed in Alodine Rinse Tank 1 and then Alodine Rinse Tank 2 to remove any Alodine solution from the metal surfaces.

2.1.5 Boric/Sulfuric Anodizing

Anodizing is an electrochemical process used to increase the thickness of the natural aluminum oxide on the surface of aluminum and aluminum alloy parts. During anodizing, the aluminum parts become the anode of an electrochemical cell during which time the oxide film increases in thickness as a result of an applied external DC current. The anodizing solution consists of a mixture of sulfuric acid liquid at a concentration of 30.5-52.0 grams per liter and boric acid powder at a concentration of 5.2-10.7 grams per liter. Following immersion in the Anodizing Tank, the anodized parts are sequentially rinsed in Anodizing Rinse Tank 1 and then Anodizing Rinse Tank 2 to remove any residual Anodizing solution from the metal surfaces.

2.1.6 Chromate Sealing

The Chromate Sealing Tank is the 17th tank in the tankline and contains a dilute chromic acid solution at a concentration of 50 - 150 parts per million.

2.2 Wastewater Sources

Two types of process wastes are produced during operation of the six processes described above, dilute rinsewater and batch treatment wastes.

2.2.1 Dilute Rinsewater

Dilute rinsewater is produced from Alkaline Rinse Tank 1, Etch Rinse Tank 1, Deoxidizer Rinse Tank 2, and Anodizing Rinse Tank 1. These four rinsewater streams are routed to the neutralization tank where pH neutralization occurs prior to their discharge. The rinsewater discharge flows through a V-notch weir. An ultrasonic level meter is installed above the weir to measure the height of liquid in the weir and provide a flow measure of the discharge.

2.2.2 Batch Treatment Wastes

Wastes from the Alodine Rinse Tanks, the Alkaline Cleaning Tank, the Etch Tank, the Deoxidizer Tank, the Alodine Tanks, the Anodizing Tank, and the Chromate Sealing Tank are segregated and treated in a batch treatment process as shown on Figure 1.

The batch treatment process uses a conventional treatment process to these wastes. To begin treatment, the operator transfers the waste stream to the batch treatment tank. The batch treatment tank is a 2600 gallon polyethylene conical bottom tank with a vertical axial-flow agitator to provide mixing during treatment. Prior to beginning this treatment, the operator performs a simple colorimetric test to determine the presence and concentration of hexavalent chromium (chromic acid) present in the waste. If hexavalent chromium is found to be present, the pH is reduced to approximately 2 by adding dilute sulfuric acid, if necessary. Sodium metabisulfite solution is then added to chemically reduce hexavalent chromium to trivalent chromium. After this reduction is complete, the pH is increased to approximately 6.5 and a proprietary coagulant and a flocculating polymer agent are added. After a prescribed length of time, 25% sodium hydroxide is added to increase the pH to approximately 8 and an additional flocculating agent is added. At this point, the addition of reagents is complete and mixing continues until the reagents have been properly mixed. After mixing is complete, the mixer is turned off and the precipitated metal hydroxide solids in the tank are allowed to settle to the bottom of the tank cone. After settling is complete, the settled solids are visually decanted from the bottom of the tank and transferred to the filter press feed tank. The supernatant treated water is sampled and tested for compliance with effluent discharge parameters prior to being discharged.

2.3 Compliance Problems

Treated water produced from the batch treatment process has not exceeded the effluent limits established in TC Systems Industrial Waste Discharge Permit. However, the total zinc concentration measured by TC Systems in the dilute rinsewater stream was found to have exceeded the monthly average maximum concentration established in the permit of 1.48 mg/l during the months of December, 1997 and January, 1998. During

each of these two months, TC Systems collected one monthly 24-hour composite sample of the dilute rinsewater and submitted it to an outside laboratory (CCI Analytical Laboratories) for analysis. In December, 1997, CCI found the total zinc concentration in the composite sample to be 2.3 mg/l using the EPA-289.1 method. In January, 1998, the zinc concentration was found to be 2.5 mg/l. No exceedances of other permit effluent limits were observed.

3.0 SOURCE OF COMPLIANCE PROBLEMS

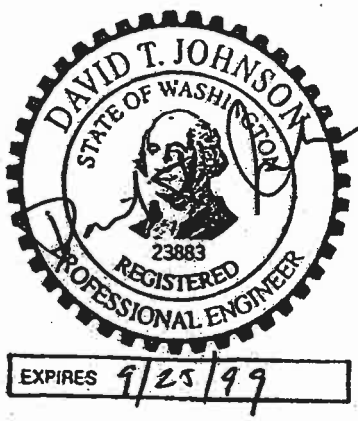
A review of the chemicals and reagents used in the six surface treatment processes described in Section 2.1 found that only one chemical contains a significant quantity of zinc.

The Oakite 166 used in the alkaline cleaning process contains approximately 5 weight percent zinc sulfate. Based on this concentration, the alkaline cleaning solution would have a zinc concentration of approximately 650 parts per million when prepared to the recommended concentration described in 2.1.1. When parts are removed from the alkaline cleaning solution, a small quantity of cleaning solution remains on the part and is transferred to the rinsewater. This loss is typically referred to as 'dragout.' Observations show that this dragout loss is approximately 75 to 150 gallons per week. At the cleaning solution concentration, this dragout loss equates to a total zinc monthly dragout of as much as 3.7 lbs. Some of this probably settles in the rinse tank where it is removed during periodic tank cleaning. However, a significant proportion could ultimately be in the dilute rinsewater. The total zinc concentration in the 127,111 gallons of effluent discharged during January, 1998 was 2.5 mg/l which would equate to a monthly discharge of 2.6 lbs of zinc if the 2.5 mg/l concentration existed during the entire month. It appears, therefore, that rinsewater from the alkaline cleaning process could potentially be the major source of effluent zinc. A second source of zinc would be the zinc found in the metal alloys being treated as some aluminum alloys contain zinc. However, the metal loss from the parts being processed is, of necessity, small and this does not therefore appear to be a significant source of effluent zinc.

4.0 RECOMMENDED CORRECTIVE ACTIONS

If the alkaline cleaning rinsewater is a source of effluent zinc, this could be controlled in two ways. The first way would be to install additional treatment equipment on the rinsewater to specifically remove zinc. However, a better approach than this 'end-of-pipe' treatment would be to take a Pollution Prevention approach and find a substitute, but equally effective, alkaline cleaning material that did not contain zinc or other metals. One such alkaline cleaner is "Oakite Inpro-Clean 3000" which does not contain

zinc or other metals and is being successfully used in similar applications. It is therefore recommended that the Oakite 166 cleaning material be removed from the Alkaline Cleaning Tank and replaced with Oakite Inpro-Clean 3000 or another acceptable zinc-free alkaline cleaning product. If this operational change is made and if the other processing tanks are cleaned at sufficiently frequent intervals to prevent a buildup of trace zinc concentrations in their contents, it appears that the dilute rinsewater would not have a zinc concentration that exceeded the effluent permit limits.



5.0 SUPPLEMENTARY INFORMATION

Calculations

MSDS's and Technical Data Sheets:

- Oakite 166
- Oakite Inpro-Clean 3000
- Oakite 160
- Oakite LNC Deoxidizer
- Alodine 600
- Alodine 1000

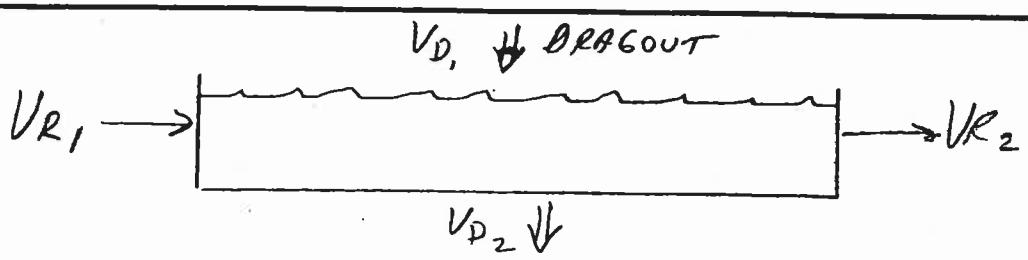
BY _____ DATE 5/26/98 SHEET 1 OF 2

CHKD BY _____ DATE _____

CLIENT TC SYSTEMS

PROJECT 98011

SUBJECT _____



DRAGOUT LOSSES: 1-2 INCHES / WEEK IN ALKALINE TANK.

TANK DIMENSIONS: 48' LENGTH
9' DEPTH
30" WIDTH

$$\text{GAL/INCH} = (48\text{ FT})\left(\frac{30}{12}\text{ FT}\right)\left(\frac{1''}{12}\right)\left(7.4805\ \frac{\text{GAL}}{\text{FT}^3}\right)$$

$$= 74.8\ \text{GAL/INCH}$$

$$(2\text{ IN/WK})\left(74.8\ \frac{\text{GAL}}{\text{IN}}\right) = 149.6\ \text{GAL DRAGOUT}$$

ESTIMATE ZINC CONC. IN DRAGOUT SOLUTION

~~Zn MW = 65~~

$ZnSO_4 \cdot 7H_2O$ = 288 MOLECULAR WEIGHT

ZINC SULFATE CONC = 5 WT % IN OAKITE 166

OAKITE 166 CONC = 8 OZ. POWER PER GALLON

$$\text{OAKITE 166 WT FRACT.} = \frac{(8\text{ OZ}/(16\text{ OZ/LB}))}{8.308 + (8/16)} = .057$$

$$\text{ZINC CONC. IN SOLUTION} = (.05)(.057)\left(\frac{65}{288}\right)(10^6) = 643\text{ PPM}$$

BY _____ DATE 5/26/98

CHKD BY _____ DATE _____

SHEET 2 OF 2

CLIENT TC SYSTEMS

PROJECT _____

SUBJECT _____

CALCULATE ZINC MASS IN EFFLUENT

	VOLUME, GAL	ZN, mg/l
DEC 97	69,044	2.3
JAN 98	127,111	2.5

$$\text{EFF. ZINC MASS} = (\text{VOL})(8.3\ ^{LB}/_{GAL})\left(\frac{ZN}{10^6}\right)$$

$$\text{DEC ZN LBS} = (69044)(8.3)\left(\frac{2.3}{10^6}\right) = 1.3 \text{ LBS}$$

$$\text{JAN ZN LBS} = (127,111)(8.3)\left(\frac{2.5}{10^6}\right) = 2.6 \text{ LBS}$$

$$\text{DRAGOUT ZINC} = (V_D)\left(8.3\frac{LB}{GAL}\right)\left(\frac{643}{10^6}\right)$$

$$\text{DEC } V_D = \left(150\ GAL/WK\right)\left(4.6\ \frac{WK}{MON}\right) = 690 \text{ GAL MAX}$$

$$\text{JAN } V_D = (150\ GAL/WK)\left(4.4\ \frac{WK}{MON}\right) = 660 \text{ GAL MAX}$$

$$\text{DEC ZN DRAGOUT} = (690)(8.3)\left(\frac{643}{10^6}\right) = 3.7 \text{ LBS MAX}$$

$$\text{JAN ZN DRAGOUT} = (660)(8.3)\left(\frac{643}{10^6}\right) = 3.5 \text{ LBS MAX}$$

DRAGOUT LOSSES LESS IF: 1) TANK CONC. LESS
2) DRAGOUT VOLUME LESS

Oakite®

3142

MATERIAL SAFETY DATA SHEET

PRODUCT CODE: 3142
OAKITE ALUMINUM CLEANER 166
60-C-505

HMIS 2 0 0 J

SECTION I - PRODUCT IDENTIFICATION

ADE NAME	OAKITE ALUMINUM CLEANER 166
EMICAL NAME	
D SYNONYMS	NA-Mixture
NUFACTURER'S NAME	
D TELEPHONE NO.	OAKITE PRODUCTS INC. (908) 464-6900 (8am-5pm)
	A Member of The CHEMETALL Group
DRESS	50 Valley Road Berkeley Heights NJ 07922
TE OF PREPARATION	08-22-95

EMERGENCY TELEPHONE NUMBER:
(800) 424-9300 (CHEMTREC)

SECTION II - HAZARDOUS INGREDIENTS

	CAS NO.	% BY WT	ACGIH TLV (TWA)	OSHA PEL (TWA)	UNITS
ium tetraborate	0001330434	60-70	1	NE	mg/m^3
c sulfate(+)	0007733020	<5	NE	NE	
ium nitrate(+)	0007631994	<5	NE	NE	
-hazardous ingredients		Bal.			

dentified ingredients are considered not hazardous under Federal Hazard
mmunication Standard (29 CFR 1910.1200).

components of this material are on the US TSCA Inventory.

This product contains ingredient(s) identified in Section II with (+) which subject to the reporting requirements of section 313 of SARA Title III and CFR 372.

CINOGENICITY: No substance in this product is listed by IARC, NTP, or ulated by OSHA as a carcinogen.

SECTION III - PHYSICAL DATA

- Not Applicable

NE - Not Established

LING POINT (F)	NA	SPECIFIC GRAVITY (H20=1)	0.97
OR PRESSURE (mm Hg)	NA	Bulk Density	8.1 lb/gal
OR DENSITY (Air=1)	NA	PERCENT VOLATILE	
UBILITY IN WATER	Appreciable	BY WEIGHT(%) Excludes H20	NA
PORATION RATE	NA	PH 40 g/l	9.1
EARANCE AND ODOR	White powder; odorless.	PH (concentrate)	NA

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

SH POINT (Method Used): NONE
MMABLE LIMITS: LEL: NA UEL: NA

INGUISHING MEDIA: Use media suitable for surrounding materials.

CIAL FIRE FIGHTING PROCEDURES: No special procedures required.

SUAL FIRE AND EXPLOSION HAZARDS: See Section VII.(WHMIS)
See Section VI.(U.S.)

SECTION V - HEALTH HAZARD INFORMATION

TE(S) OF ENTRY:	INHALATION:	SKIN:	INGESTION:
	X	X	X

ICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.
PTOMS/EFFECTS OF OVEREXPOSURE:
Inhalation of dust or mist causes irritation of mucous membranes. Skin irritation. Possible dermatitis. Although absorption of borates through intact skin is unlikely, contact with burned or abraded skin may result in systemic poisoning. Symptoms include nausea, abdominal pain, diarrhea, vomiting, headache and weakness. Severe cases may be characterized by shock, rapid heartbeat and cyanosis. Direct contact with eyes causes irritation. No evidence of adverse chronic respiratory exposure effects from available information.

FIRST AID

S: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get prompt medical attention.

- Not Applicable NE - Not Established

KIN: Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists get medical attention. Wash clothing before reuse.

NGESTION: Contact local poison control center or physician IMMEDIATELY!

NHALATION: Move victim to fresh air. Get medical help if irritation persists.

SECTION VI - REACTIVITY DATA

ABILITY: NORMALLY STABLE
NCOMPATIBLE MATERIALS: Strong acids.
ZARDOUS DECOMPOSITION PRODUCTS: Phosphorous oxides, Boron oxides.

SECTION VII - SPILL OR LEAK PROCEDURES

ROCEDURES: Wear personal protective equipment (See Section VIII). Carefully clean up spilled material and place in dry containers for disposal. Avoid dust generation.

STE DISPOSAL METHOD: Dispose of in accordance with Local State and Federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

SPIRATORY: If TLV is exceeded, or For symptoms of overexposure, wear a NIOSH-approved dust/mist respirator.

EWEAR: Wear chemical safety goggles.

OTHING/GLOVES: Wear chemical-resistant gloves and clothing as needed to prevent skin contact.

NTILATION: Local exhaust may be necessary for some handling/use conditions. Specific needs should be addressed by supervisory or health/safety personnel.

SECTION IX - SPECIAL PRECAUTIONS

ore in closed container in dry area.

- Not Applicable

NE - Not Established

Oakite®

3142

MATERIAL SAFETY DATA SHEET

APPROVAL Michael Chang Mgr. Health & Environmental Dept. 08/22/1995
NAME TITLE DATE OF PRINTING

-- Not Applicable

NE - Not Established

Oakite
A MEMBER OF THE CHEMETALL GmbH GROUP

PRODUCT PROFILE

OAKITE PRODUCTS, INC., P.O. BOX 602, 50 VALLEY ROAD, BERKELEY HEIGHTS, NJ 07922
OAKITE CANADA LIMITED, 115 EAST DRIVE, BRAMALEA, ONT L6T 1B7
Subsidiaries and Distributors World-wide Tel. (908) 464-6900 FAX (908) 464-6031

TECHNICAL DATA

OAKITE® INPRO-CLEAN 3000: An alkaline tank immersion cleaner for aluminum and aluminum alloys

PRIMARY APPLICATION

Inpro-Clean 3000 is an alkaline immersion cleaner for aluminum, clad aluminum and aluminum alloys, magnesium and titanium alloys. Inpro-Clean 3000 has been designed to remove soils such as stencil ink, light oil, grease, grime, from metal surfaces without attacking the substrate.

CHEMICAL CHARACTERISTICS

chemical composition	surfactants and alkaline salts, including silicates
physical form	as received: pale-yellow liquid as used: colorless solution
odor	mild
bulk density	1129 g/ℓ 20°C (9.4 lb/gal at 68°F)
viscosity	not applicable
flash point	none
hygroscopic tendency	not applicable
foaming tendency	moderate
recommended diluent	water
maximum solubility	complete
behavior in hard water	sequesters
rinsability	good
biodegradable surfactants	yes
phosphate-free	no
normal working temperatures	49-82°C (120°-180°F)
normal working concentrations	5-10% by volume
pH at working concentrations	12.7 ± 0.2
effect of prolonged boiling	none
effect of working solutions on metals	rate of metal loss from 24-hour static immersion in Inpro-Clean 3000, 65 grams/ℓ at 150°F, projected for one year, is as follows:

Metal (alloy)	mm/yr	in/yr
aluminum:		
1100	0.0270	0.0010
2024	0.0200	0.0008
3003	0.0220	0.0009
steel	0.0000	0.0000
stainless steel (316)	0.0000	0.0000
galvanized steel	0.0220	0.0009
copper*	0.0380	0.0015
brass*	0.0680	0.0027
magnesium	0.0170	0.0007

* Copper, brass and copper alloys are discolored.

APPLICATION PROCEDURE

1. **Light Duty Cleaning:**
   5% by volume of Inpro-Clean 3000, 140-180°F, 10 minutes immersion or until soil is removed.
2. **Heavy Duty Cleaning:**
   5-10% by volume of Inpro-Clean 3000, 140-180°F, 10 minutes immersion or until soil is removed.

NOTE: When possible, agitate parts during processing, for optimum results.

Solution Control: Concentrations of Inpro-Clean 3000 can be titrated by Procedures 92 or Test Kit Procedure 121. For Procedure 92, the sample volume is 25 ml and Multiplying Factor (F) is 2.2. For TK 121, the sample volume is 10 ml and Multiplying Factor (F) is 5.6.

For Free and Total Alkali use Procedures 13 or TK 123.

NOTES ON USE - See Material Safety Data Sheet

Safety and Handling Precautions: Inpro-Clean 3000 is a moderately alkaline industrial product containing biodegradable surfactants. May cause burns of eyes. Causes skin irritation. Harmful if swallowed. Avoid contact with eyes, skin and clothing. Wear rubber gloves, safety goggles or face shield, and suitable protective clothing when handling dry powder or solutions. Wash thoroughly after using. Do not take internally.

First Aid in Case of Contact: Flush skin or eyes with plenty of water for at least 15 minutes. For eyes, get medical attention. If swallowed, give several glasses of water or milk to drink. Contact a physician.

KEEP OUT OF REACH OF CHILDREN

DISPOSAL

Dispose of according to all federal, state and local regulations.

PACKAGING

Packaged in nonreturnable plastic drums.
large drum: 517 lb net

SHIPMENT

May be shipped by any common carrier. Freight classification is "Cleaning Compound, NOIBN, Liquid". Product Code #4396.

STORAGE

Suitable for general indoor storage. Keep container closed when not in use.

effect of high temperature storage	None
effect of low temperature storage	None*
effect of aging	None

*Solution may appear hazy below 50°F. Solution reconstitutes to a homogeneous solution at room temperature. Mix well before use.

Oakite® MATERIAL SAFETY DATA SHEET

PRODUCT CODE: 4396
OAKITE INPRO CLEAN 3000
60-DI-1

HMIS 3 0 0 J

SECTION I - PRODUCT IDENTIFICATION

TRADE NAME	OAKITE INPRO CLEAN 3000	**EMERGENCY TELEPHONE NUMBER:** (800) 424-9300 (CHEMTREC)
CHEMICAL NAME AND SYNONYMS	NA; Mixture	
MANUFACTURER'S NAME AND TELEPHONE NO.	OAKITE PRODUCTS INC. (908) 464-6900 (8am-5pm)	
	A Member of The CHEMETALL Group	
ADDRESS	50 Valley Road Berkeley Heights NJ 07922	
DATE OF PREPARATION	01-03-95	

SECTION II - HAZARDOUS INGREDIENTS

	CAS NO.	% BY WT	ACGIH TLV (TWA)	OSHA PEL (TWA)	UNITS
Trade secret registry (735517)	-5033P	<5	NE	NE	
Amine Ethoxylate	0073138279	<5	NE	NE	
Nonionic surfactant	0060828786	<5	NE	NE	
[redacted]	0001344098	<5	NE	NE	
Non-hazardous ingredients		Bal.			

Unidentified ingredients are considered not hazardous under Federal Hazard Communication Standard (29 CFR 1910.1200).

All components of this material are on the US TSCA Inventory.

CARCINOGENICITY: No substance in this product is listed by IARC, NTP, or regulated by OSHA as a carcinogen.

SECTION III - PHYSICAL DATA

BOILING POINT (F)	NE	SPECIFIC GRAVITY (H20=1)	1.131
VAPOR PRESSURE (mm Hg)	NE	Bulk Density	9.44 lb/gal
VAPOR DENSITY (Air=1)	NE	PERCENT VOLATILE	

NA - Not Applicable **NE - Not Established**

Oakite® MATERIAL SAFETY DATA SHEET

SOLUBILITY IN WATER	Complete	BY WEIGHT(%) Excludes H2O	<5
EVAPORATION RATE (BuAc=1)	<1	PH 8% solution	12.7
APPEARANCE AND ODOR	Pale yellow liquid; mild odor.	PH (concentrate)	13.8

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used): None
FLAMMABLE LIMITS: LEL: NA UEL: NA

EXTINGUISHING MEDIA: Use media suitable for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES: Wear Self-Contained Breathing Apparatus (SCBA).

UNUSUAL FIRE AND EXPLOSION HAZARDS: See Section VII.(WHMIS)
See Section VI.(U.S.)

SECTION V - HEALTH HAZARD INFORMATION

ROUTE(S) OF ENTRY:	INHALATION:	SKIN:	INGESTION:
	x	x	x

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known
SYMPTOMS/EFFECTS OF OVEREXPOSURE:
Inhalation of mist may cause respiratory irritation. Direct contact with skin causes irritation and possible burns. Eye contact is irritating and may cause damage.

FIRST AID

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.

SKIN: Immediately flush skin with plenty of water for at least 15 minutes. Get medical attention.

INGESTION: Contact local poison control center or physician IMMEDIATELY!

INHALATION: Move victim to fresh air.

SECTION VI - REACTIVITY DATA

NA - Not Applicable NE - Not Established

Oakite® MATERIAL SAFETY DATA SHEET

STABILITY: NORMALLY STABLE
INCOMPATIBLE MATERIALS: Strong acids.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Carbon dioxide, Silicon dioxide.

SECTION VII - SPILL OR LEAK PROCEDURES

PROCEDURES: Wear personal protective equipment (See Section VIII). Clean up with absorbant material. Neutralize with a mild acid. Flush area with water.

WASTE DISPOSAL METHOD: Dispose of in accordance with Local State and Federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY: Respirator not normally required. For symptoms of overexposure, wear a NIOSH-approved dust/mist respirator.

EYEWEAR: Wear chemical safety goggles.

CLOTHING/GLOVES: Wear chemical-resistant gloves and clothing as needed to prevent skin contact.

VENTILATION: Local exhaust may be necessary for some handling/use conditions. Specific needs should be addressed by supervisory or health/safety personnel.

SECTION IX - SPECIAL PRECAUTIONS

Store in closed container.

APPROVAL: Michael Chang Mgr.Health & Environmental Dept. 01/03/1995

NAME **TITLE** **DATE OF PRINTING**

NA - Not Applicable **NE - Not Established**

Oakite

1600

MATERIAL SAFETY DATA SHEET

PRODUCT CODE: 1600
OAKITE 160
60-U-161

HMIS 3 0 1 F

SECTION I

RADE NAME	OAKITE 160	EMERGENCY TELEPHONE NUMBER: (800) 424-9300 (CHEMTREC)
EMICAL NAME / D SYNONYMS	NA; Mixture	
ANUFACTURER'S NAME / D TELEPHONE NO.	OAKITE PRODUCTS INC. (908) 464-6900 (8am-5pm)	
DDRESS	50 Valley Road Berkeley Heights NJ 07922	

SECTION II - HAZARDOUS INGREDIENTS

	CAS NO.	% BY WT	TLV	PEL	UNITS
dium hydroxide -(ceiling)	0001310732	80-90	2	2	mg/m^3
dium carbonate	0000497198	<10	NE	NE	
n-hazardous ingredients		Bal.			

nidentified ingredients are considered not hazardous under Federal Hazard mmunication Standard (29 CFR 1910.1200).

ll component of this material are on the US TSCA Inventory.

SECTION III - PHYSICAL DATA

OILING POINT (F)	NA	SPECIFIC GRAVITY (H20=1)	1.17
APOR PRESSURE (mm Hg)	NA	Bulk Density	
APOR DENSITY (Air=1)	NA	PERCENT VOLATILE	
OLUBILITY IN WATER	Appreciable	BY VOLUME(%) Excludes H2O	NA
VAPORATION RATE	NA	PH 4% solution	13.5
PPEARANCE AND ODOR	White powder; odorless.	Concentrate	NA

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

A - Not Applicable

NE - Not Established

LASH POINT (Method Used): None
LAMMABLE LIMITS: LEL: NA UEL: NA

TINGUISHING MEDIA: Use media suitable for surrounding materials.

PECIAL FIRE FIGHTING PROCEDURES: Carbon dioxide, dry chemical, or foam.

NUSUAL FIRE AND EXPLOSION HAZARDS: Wear Self-Contained Breathing Apparatus (SCBA).

SECTION V - HEALTH HAZARD INFORMATION

ROUTE(S) OF ENTRY:	INHALATION:	SKIN:	INGESTION:
	X	X	X

EDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known
YMPTOMS/EFFECTS OF OVEREXPOSURE:
Severe irritation of the nose, mouth, and respiratory tract; coughing, difficulty breathing; chemical pneumonitis. Severe skin irritation and burns. Eye contact causes severe or permanent damage.

FIRST AID

YES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get prompt medical attention.

SKIN: Immediately remove contaminated clothing. Wash skin with large amounts of water for at least 15 minutes. Get prompt medical attention. Wash clothing before reuse.

INGESTION: Contact local poison control center or physician IMMEDIATELY!

INHALATION: Move victim to fresh air and restore breathing if necessary. Stay with victim until emergency medical help arrives.

SECTION VI - REACTIVITY DATA

STABILITY: NORMALLY STABLE
INCOMPATIBLE MATERIALS: Acids, Hot water. Contact with certain metals may yield explosive hydrogen gas.
HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen.

SECTION VII - SPILL OR LEAK PROCEDURES

NA - Not Applicable NE - Not Established

ROCEDURES: Wear personal protective equipment (See Section VIII). Carefully clean up spilled material and place in dry containers for disposal. Avoid dust generation.

ASTE DISPOSAL METHOD: Dispose of in accordance with Local State and Federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

ESPIRATORY: If TLV is exceeded, or for symptoms of overexposure, wear a NIOSH-approved dust/mist respirator.

YEWEAR: Wear chemical safety goggles.

LOTHING/GLOVES: If potential for skin contact exists, wear neoprene or other chemical resistant gloves and apron or coveralls and/or foot coverings, as needed.

ENTILATION: Local exhaust may be necessary for some handling/use conditions. Specific needs should be addressed by supervisory or health/safety personnel.

SECTION IX - SPECIAL PRECAUTIONS

ORROSIVE. Store in closed container in dry, well-ventilated area. NOTE: IF ILUTING (OR DISSOLVING) ALWAYS ADD THIS PRODUCT TO WATER SLOWLY AND WITH ONSTANT STIRRING. This product does not contain any carcinogens (at 0.1% or reater) as defined by IARC, NTP, or OSHA.

PPROVAL Michael Chang Mgr. Health & Environmental Dept. 03/23/1992

NAME TITLE DATE

NA - Not Applicable

NE - Not Established

Oakite® 160

Chelated alkaline material for uniformly cleaning and etching aluminum surfaces in one step.

PRIMARY APPLICATION

Oakite 160 is an alkaline material which uniformly and rapidly etches aluminum while simultaneously removing light soils from the surface. It contains ingredients which minimize the formation of aluminum scale in solution tanks and on heating coils to cut maintenance costs and downtime. Oakite 160 also rinses easily, controls foaming to minimize alkali mist and fumes.

CHEMICAL CHARACTERISTICS

chemical composition	caustic soda and other alkaline salts, sequestrants, surfactants
physical form	as received: white powder as used: clear solution
odor	none
bulk density	1164 g/l (9.7 lb/gal)
hygroscopic tendency	high (keep drum closed when not in use)
foaming tendency	slight
recommended diluent	water
maximum solubility	150 g/l at 77°C (20 oz/gal at 170°F)
behavior in hard water	sequesters
rinsability	good
biodegradable	no
phosphate-free	yes
normal working concentrations	15 to 45 g/l (2 to 6 oz/gal)
norm al operating temperatures	38° to 71°C (100° to 160°F)
pH at working concentrations	13.0 to 13.6 at 21°C (70°F)
effect of working solutions on metals	rate of metal loss from 24-hour immersion in Oakite 160, 40 g/l (5.3 oz/gal) at 40°C (120°F), projected for one year, is as follows:

metal (alloy)	mm/yr	in/yr
steel (1010)	0 00	0 000
stainless steel (316)	0.00	0 000
aluminum (1100)	attacks	attacks
brass	*0.03	*0 001
copper	*0 00	*0 000
magnesium	0.03	0.001
zinc	2.94	0.116

*discolors

APPLICATION PROCEDURE

Oakite 160 is a tank immersion material used between 15 and 45 g/l (2 and 6 oz/gal) at temperatures between 38° and 71°C (100° and 160°F). Exposure time varies from 30 seconds to several minutes. Exact time, temperature and concentration will depend upon the degree of etch required.

Oakite.

Solution Control: Concentrations are titrated using Test Kit Procedure 121. For aluminum etch activity, use Procedure 17. For free and total alkali, use Test Kit Procedure 123.

NOTES ON USE

See Material Safety Data Sheet

Tanks and heating coils which are coated with heat-retarding scale should be treated with an Oakite descalant (before using Oakite 160) to restore proper heat transfer and extend the solution life.

When preparing new solutions or adding to existing ones, slowly sprinkle product over surface of solution while stirring to avoid violent spattering. Do not add large amounts of dry powder to solution at any one time. **Do not add to hot water or hot solution warmer than 43° to 49°C (110° to 120°F).**

Under certain operating conditions, new solutions may foam excessively. This can be controlled by reducing the concentration or lowering the temperature, or both.

Safety and Handling Precautions: Oakite 160 is a highly alkaline material containing sodium hydroxide. Direct contact causes burns of eyes and skin. It is harmful if swallowed or inhaled. Avoid contact with eyes, skin and clothing. Wear rubber gloves, safety goggles or face shield, and suitable protective clothing when handling dry powder solutions. Wash thoroughly after handling. Avoid breathing dust or mist. Use with adequate ventilation. Do not take internally.

First Aid in Case of Contact: Immediately flush **eyes** or **skin** with plenty of water for at least 15 minutes. For **eyes**, get medical attention. For **skin**, remove contaminated clothing and shoes. Wash them before reuse. If **swallowed**, wash out mouth thoroughly with water. Give several glasses of water or milk to drink. Contact a physician immediately.

KEEP OUT OF REACH OF CHILDREN.

DISPOSAL

Dispose of according to all federal, state and local regulations.

SHIPMENT

May be shipped by any common carrier. Freight classification is "Corrosive Solid, NOS, (Sodium Hydroxide)8. UN-1759". Product Code No.1600.

STORAGE

Suitable for general indoor storage. Keep container closed when not in use.

effect of high temperature storage ..... no adverse effect
effect of low temperature storage ..... no adverse effect
effect of aging ..... no adverse

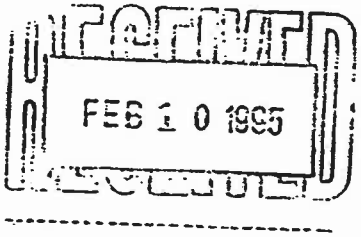
Oakite®
Oakite Products, Inc. P.O. Box 602, 50 Valley Road, Berkeley Heights, NJ 07922
Oakite Canada Limited 115 East Drive, Bramalea, Ontario L6T1B7
Tel. (800) 526-4473 (908) 464-6900 FAX (908) 464-4658
Distributors and Licensees Worldwide

F12382R4 195
Printed in the USA

Oakite

MATERIAL SAFETY DATA SHEET

3850



PRODUCT CODE: 3850
OAKITE DEOXIDIZER LNC
60-FD-33

HMIS 3 0 1 J

SECTION I - PRODUCT IDENTIFICATION

TRADE NAME	OAKITE DEOXIDIZER LNC	EMERGENCY TELEPHONE NUMBER: (800) 424-9300 (CHEMTREC)
CHEMICAL NAME AND SYNONYMS	NA-Mixture	
MANUFACTURER'S NAME AND TELEPHONE NO.	OAKITE PRODUCTS INC. (908) 464-6900 (8am-5pm)	
ADDRESS	50 Valley Road Berkeley Heights NJ 07922	

SECTION II - HAZARDOUS INGREDIENTS

	CAS NO.	% BY WT	ACGIH TLV (TWA)	OSHA PEL (TWA)	UNITS
Trade Secret Registry (735517) -(Soluble salts, as Fe)	-5020P	30-40	1	NE	mg/m^3
Nitric acid(+)	0007697372	15-25	2	2	ppm
Trade Secret Registry (735517)	-5053P	<5	NE	NE	
Non-hazardous ingredients		Bal.			

Unidentified ingredients are considered not hazardous under Federal Hazard Communication Standard (29 CFR 1910.1200).

All component of this material are on the US TSCA Inventory.

(+) This product contains ingredient(s) identified in Section II with (+) which are subject to the reporting requirements of section 313 of SARA Title III and 40 CFR 372.

CARCINOGENICITY: No substance in this product is listed by IARC, NTP, or regulated by OSHA as a carcinogen.

SECTION III - PHYSICAL DATA

NA - Not Applicable

NE - Not Established

BOILING POINT (F)	NE	SPECIFIC GRAVITY (H20=1)	1.440
VAPOR PRESSURE (mm Hg)	NE	Bulk Density	12.0 lbs/gal
VAPOR DENSITY (Air=1)	>1	PERCENT VOLATILE	
SOLUBILITY IN WATER	Complete	BY WEIGHT(%) Excludes H20	0
EVAPORATION RATE (BuAc=1)	<1	PH	
APPEARANCE AND ODOR	Dark amber liquid; sharp odor.	Concentrate	<1.0

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used): NONE
FLAMMABLE LIMITS: LEL: NA UEL: NA

EXTINGUISHING MEDIA: Use media suitable for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES: Use water spray to cool fire-exposed containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS: May have oxidizing properties, therefore, fire risk on contact with combustible materials.

SECTION V - HEALTH HAZARD INFORMATION

ROUTE(S) OF ENTRY:	INHALATION:	SKIN:	INGESTION:
	X	X	X

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.
SYMPTOMS/EFFECTS OF OVEREXPOSURE:
Inhalation of dust or mist may cause severe respiratory irritation. Exposure to high concentrations may cause pneumonitis and pulmonary edema. Symptoms include coughing, chest pain and difficulty breathing. ONSET OF SYMPTOMS MAY BE DELAYED BY INHALATION. Severe skin burns. Eye contact causes severe or permanent damage. No evidence of adverse chronic respiratory exposure effects from available information.

FIRST AID

EYES: Immediately flush eyes with large amounts of water for at least 15 minutes while holding eyelids open. Get prompt medical attention.

SKIN: Immediately remove contaminated clothing. Wash skin with large amounts of water for at least 15 minutes. Get prompt medical attention. Wash clothing before reuse.

NA - Not Applicable NE - Not Established

INGESTION: Contact local poison control center or physician IMMEDIATELY!

INHALATION: Move victim to fresh air and restore breathing if necessary. Stay with victim until emergency medical help arrives.

SECTION VI - REACTIVITY DATA

STABILITY: NORMALLY STABLE
Avoid direct sunlight.

INCOMPATIBLE MATERIALS: Alkalies, Combustibles. Contact with certain metals may yield explosive hydrogen gas. Avoid prolonged contact of concentrate with glass or ceramic.

HAZARDOUS DECOMPOSITION PRODUCTS: Sulfur dioxide, Nitrogen dioxide. Hydrogen.

SECTION VII - SPILL OR LEAK PROCEDURES

PROCEDURES: Wear personal protective equipment (See Section VIII). Ventilate area. Clean up with noncombustible absorbant material. Neutralize using sodium bicarbonate.

WASTE DISPOSAL METHOD: Dispose of in accordance with Local State and Federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY: If TLV is exceeded, wear a NIOSH-approved chemical cartridge respirator or gas mask containing non-oxidizable sorbent.

EYEWEAR: If splash potential exists wear chemical splash goggles or faceshield.

CLOTHING/GLOVES: If potential for skin contact exists, wear neoprene or other chemical resistant gloves and apron or coveralls and/or foot coverings, as needed.

VENTILATION: Local exhaust may be necessary for some handling/use conditions. Specific needs should be addressed by supervisory or health/safety personnel.

SECTION IX - SPECIAL PRECAUTIONS

NA - Not Applicable

NE - Not Established

CORROSIVE. Store in closed container in well-ventilated area. NOTE: IF DILUTING (OR DISSOLVING) ALWAYS ADD THIS PRODUCT TO WATER SLOWLY AND WITH CONSTANT STIRRING. Do not add this product to chlorine-releasing materials.

APPROVAL [signature] Mgr. Health & Environmental Dept. 09/15/199:

NAME TITLE DATE

NA - Not Applicable

NE - Not Established

Oakite Deoxidizer LNC

Non-chromated, liquid acidic material for deoxidizing and desmutting aluminum and aluminum alloys

PRIMARY APPLICATION

Oakite Deoxidizer LNC is a non-chromated, non-foaming acidic material for removing oxides, smut, mill scale and discoloration from aluminum and aluminum alloys. It is used before spot welding, anodizing, barrel burnishing, conversion coating or after alkaline etching.

It performs well in hard water, requires no heat, deoxidizes rapidly and rinses freely. Oakite Deoxidizer LNC meets the deoxidizing requirements of Military Specification MIL-W-6858.

CHEMICAL CHARACTERISTICS

chemical composition	non-chromated blend of inorganic salts, nitric acid and fluorides
physical form	as received: dark reddish brown liquid as used: light yellow solution
odor	none
specific gravity (approx.)	1.433 at 20°C (68°F)
bulk density	1433 g/ℓ at 20°C (11.9 lb/gal at 68°F)
viscosity	10 cps, Brookfield Spindle 1, 60 rpm
flash point	none
foaming tendency	none
recommended diluent	water
maximum solubility	complete
behavior in hard water	performs well
rinsability	good
biodegradable surfactants	not applicable (non-surfactant material)
phosphate-free	yes
normal working concentrations	10 to 20% by volume
normal operating temperatures	ambient: 10° to 38°C (50° to 100°F)
pH at working concentrations	0.8 to 1.0 at 10% by volume
effect of working solutions on metals	rate of metal loss from 24 hour immersion in Oakite Deoxidizer LNC, 20% by volume at 49°C (120°F), projected for one year, is as follows:

metal (alloy)	mm/yr	in/yr
steel (1010)	43.26	1.703
stainless steel (316)	0.00	0.000
stainless steel (403)	0.00	0.000
copper	44.53	1.753
brass	52.83	2.080
aluminum (3003)	23.27	0.916
magnesium	attacks	attacks
galvanized steel	attacks	attacks

APPLICATION PROCEDURE

For Deoxidizing Aluminum Prior to Spot Welding, Anodizing, Barrel Burnishing, Conversion Coating

After surfaces have been pre-cleaned (with a suitable detergent such as Oakite Aluminum Cleaner NSS for spray washing or Oakite Aluminum Cleaner NST for tank cleaning), immerse in a solution of Oakite Deoxidizer LNC, 10% by volume at ambient temperature-- 10° to 38°C (50° to 100°F). Immersion time-- in an **air-agitated tank**--is normally 1 to 5 minutes, although heat treated alloys may require more time. Rinse thoroughly in clear, cold water, 24°C (75°F) or lower.

For Desmutting Aluminum After Alkaline Etching

Once surfaces have been etched in an Oakite enchant (such as Oakite 360 L), a 2-to-5-minute immersion in an unheated--but **air-agitated**--solution of Oakite Deoxidizer LNC, 15 to 20% by volume, is recommended. Follow with a thorough rinse in cold water.

It has an etch rate on 2024-T3 alloy aluminum that ranges between 0.03 and 0.10 mils/surface/hour--depending upon the age and concentration of the bath.

Solution Control: Concentrations are titrated using procedure 150 (by acidity) or procedure 25 (by ferric iron content).

NOTES ON USE

(See Material Safety Sheet)

Tanks should be constructed of stainless steel (type 316, 304, 347 ELC). However, ordinary steel tanks lined with Koroseal (pvc) can be used.

Keep concentrate away from combustible, organic and readily oxidizable materials. Avoid prolonged contact of concentrate with glass, ceramic or concrete. If contact is made, rinse surface promptly and thoroughly with water. Avoid contact or mixing with chlorine-releasing materials.

Safety and Handling Precautions: Oakite Deoxidizer LNC is a highly acidic material. It contains nitric acid and hydrofluoric acid as minor constituents. Direct contact causes severe burns that may or may not be immediately painful or visible. It is harmful if swallowed or inhaled.

Avoid contact with eyes, skin and clothing. Wear safety goggles, rubber gloves and other suitable protective clothing when handling. Wash thoroughly after handling. Use with adequate ventilation. Avoid breathing vapor. Do not take internally.

First Aid in Case of Contact-- Or Suspicion of Contact: Prompt Medical Attention is Absolutely Necessary. Eyes: Immediately flush with cool water for 15 to 30 minutes. Hold eyelids apart while flushing to ensure contact of water with all surfaces of eyes and lids. Get prompt medical attention. **Skin:** Immediately flush with large quantities of cool water until all acid is removed, paying particular attention to skin under the nails. Immediately remove contaminated clothing and shoes. In case medical attention is delayed, apply a generous amount of paste made from powdered magnesium oxide or milk of magnesia and glycerin, freshly prepared. Wash clothing and shoes before reuse. If **swallowed:** Rinse out mouth thoroughly with water. Give water to drink without delay. Follow with milk or 60 milliliters (two ounces) of milk of magnesia. Get prompt medical attention. If **inhaled:** Remove from exposure. Get medical attention.

KEEP OUT OF REACH OF CHILDREN.

DISPOSAL

(See Material Safety Data Sheet)

Dispose of according to all federal, state and local regulations.

SHIPMENT

May be shipped by any common carrier. Freight classification is "Compound Cleaning Liquid, Corrosive Material--NA 1760". Product Code No. 3850.

STORAGE

Suitable for general indoor storage away from oxidizable materials or reducing agents. Store out of direct sunlight and away from heat. Keep container closed when not in use. Keep from freezing. Before opening drum, loosen bung slowly to relieve any pressure build-up.

effect of high temperature storage ..... none
effect of low temperature storage ..... will freeze at -9.4°C (15°F); restores on thawing
effect of aging ..... none

Oakite®

Oakite Products, Inc. P.O. Box 602, 50 Valley Road, Berkeley Heights, NJ 07922
Oakite Canada Limited 115 East Drive, Bramalea, Ontario L6T1B7
Tel. (800) 526-4473 (908) 464-6900 FAX (908) 464-4658
Distributors and Licensees Worldwide

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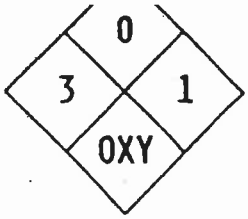
32100 Stephenson Highway
Madison Heights, Michigan 48071



MATERIAL SAFETY DATA SHEET

CUSTOMER #

PRODUCT TRADE NAME	ALODINE® 600
DOT PROPER SHIPPING NAME	Chromic acid mixture, dry, NA1463.
DOT HAZARD CLASSIFICATION	Oxidizer.
TECHNICAL CONTACT (NAME)	Product Acceptance Office
TELEPHONE NUMBER	(313) 583-9300 EMERGENCY NUMBER 1-517-263-9430

1 HAZARDOUS INGREDIENTS

MATERIAL	CAS NO.	CONTENTS (% WT/WT)	HAZARD	TLV/PEL
+Chromic Acid	1333-82-0	30-40	Carcinogen,	0.05 mg/m³ as Cr
			NTP, IARC	0.5 mg/m³ as Cr
			Oxidizer	
Sodium Fluoborate	13755-29-8	40-50	Irritant	2.5 mg/m³ as F
				2.5 mg/m³ as F
Potassium Fluozirconate	16923-95-8	10-15	Irritant	2.5 mg/m³ as F
				2.5 mg/m³ as F

This product contains a chemical (+) subject to the reporting requirements of Section 313, Title III of SARA, Part 372.

2 PHYSICAL DATA

APPEARANCE	Yellow to orange powder containing reddish-brown crystals.		
SOLUBILITY IN WATER	Appreciable		
ODOR	None	pH of CONCENTRATE	Not applicable
SPECIFIC GRAVITY	Not applicable	BOILING POINT, °F.	Not applicable
OTHER:	Not applicable		

3 FIRE & EXPLOSION DATA

FLASH POINT None.

TEST METHOD Not applicable.

EXTINGUISHING MEDIA Water.

UNUSUAL FIRE OR EXPLOSION HAZARDS

Violent reactions may occur with organic materials or reducing agents.

SPECIAL FIRE FIGHTING PROCEDURES

Wear positive pressure self-contained breathing apparatus and full protective clothing.

4 REACTIVITY DATA

STABLE ☒ UNSTABLE ☐

CONDITIONS TO AVOID

Not applicable.

INCOMPATIBLE MATERIALS

Organic materials, reducing agents, alkaline materials.

HAZARDOUS POLYMERIZATION WILL OCCUR ☐

WILL NOT OCCUR ☒

CONDITIONS TO AVOID

Excessive heat.

HAZARDOUS DECOMPOSITION PRODUCTS

Hydrogen fluoride

5 HEALTH HAZARD DATA

EYES: Eye contact may result in loss of vision with severe burns.

SKIN: Skin contact is corrosive to tissues.

INGESTION: Ingestion could result in tissue destruction of the digestive tract and severe irritation in the respiratory tract.

INHALATION: Inhalation of dust can cause damage to mucous membranes, perforation of nasal septum and irritation of the respiratory system.

CHRONIC: Prolonged or repeated skin contact may cause "chrome sores". Long-term exposure can cause liver damage, kidney damage and dermatitis. Prolonged or repeated inhalation of mist may cause ulceration and performation of the nasal septum.

CHRONIC: Contains fluorides. Exposure to fluorides over years may cause fluorosis.

POSSIBLE CANCER HAZARD: There is laboratory evidence that aqueous sodium dichromate administered directly into the lung, at the highest tolerated dose, over the lifetime of rats, causes a significantly increased incidence of lung cancer. It is expected that if chromic acid was tested in the manner as aqueous sodium dichromate, it would give similar response. There is sufficient evidence for the carcinogenicity of chromium and certain chromium compounds both in humans and experimental animals.
Reference: NTP (National Toxicology Program), Annual Report on Carcinogens, 1983.
IARC (International Agency for Research on Cancer), Annual Report, 1982.

Medical Conditions Generally Aggravated by Exposure: Persons with a history of asthma, allergies or known sensitizations to chromic acid or chromates.

6 FIRST AID RECOMMENDATIONS

EYES: Immediately flush eyes in a directed stream of water for at least 15 minutes while forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. GET MEDICAL ATTENTION.

SKIN: Immediately remove contaminated clothing and shoes. Flush skin thoroughly with water for at least 15 minutes. Rinse clothing. If irritation persists, GET MEDICAL ATTENTION.

INGESTION: Drink large quantities of water. CORROSIVE. DO NOT INDUCE VOMITING. If vomiting occurs, drink more water. GET MEDICAL ATTENTION. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If breathing is difficult, give oxygen. GET MEDICAL ATTENTION.

7 SPILL PROCEDURES & WASTE DISPOSAL

SPILL PROCEDURES

Transfer any excess to a clean polyethylene container. Treat the residue with a dilute solution of metabisulfate to reduce the chrome. Neutralize with lime to pH = 7-8.

WASTE TREATMENT

This chemical contains chromium compounds and fluoride compounds Waste treatment and neutralization may be required prior to discharge to a sewer.
This chemical is a hazardous waste as defined by EPA Hazardous Waste and Consolidated Permit Regulations (or consult equivalent state regulations).
Hazardous Waste Characteristic: Ignitability, Title 40, Code of Federal Regulations, 261.21, Hazardous Waste Number D001. (Contains an oxidizer.)
Hazardous Waste Characteristic: EP Toxicity, Title 40, Code of Federal Regulations, 261.24, Hazardous Waste Number D007.
Dispose of in compliance with all applicable federal, state and local regulations.

8 PERSONAL PROTECTION

VENTILATION REQUIREMENTS	GENERAL AREA EXHAUST	☐
	LOCAL EXHAUST	☒
	NO EXHAUST NECESSARY	☐

PERSONAL PROTECTIVE EQUIPMENT

EYE PROTECTION	Chemical goggles or face shield.
SKIN PROTECTION	Neoprene or polyvinyl gloves and appropriate protective clothing.
RESPIRATORY PROTECTION	Use NIOSH-approved respirator as required to prevent overexposure. Provide sufficient mechanical (general and/or local exhaust ventilation to maintain exposure below TLV(s).
OTHER REQUIRED EQUIPMENT	Eye wash facility and emergency shower should be in close proximity.

9 SPECIAL PRECAUTIONS & STORAGE

DO NOT GET IN EYES, ON SKIN OR ON CLOTHING.

For industrial use only.

Contact with combustible material may cause fire.

Clothing contaminated with contents of this package is DANGEROUSLY FLAMMABLE. Immediately remove contaminated clothing and rinse thoroughly with water.

DO NOT TAKE INTERNALLY.

DO NOT BREATHE DUST.

Wash thoroughly after handling.

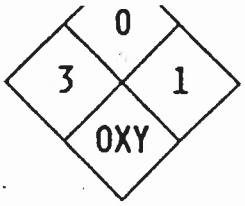
PREPARED BY Product Acceptance Office DATE 09/06/90

TITLE

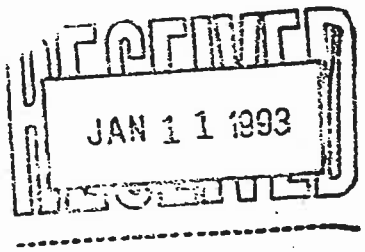
CHEMICAL EMERGENCY TELEPHONE 1-800-424-9300

HENKEL CORPORATION
32100 Stephenson Highway
Madison Heights,Michigan 48071

0560



MATERIAL SAFETY DATA SHEET



CUSTOMER #

PRODUCT TRADE NAME	ALODINE 1000
DOT PROPER SHIPPING NAME	Chromic acid mixture, dry, oxidizer, NA1463 (NA-1463A)
DOT HAZARD CLASSIFICATION	Oxidizer
TECHNICAL CONTACT (NAME)	Product Acceptance Office
TELEPHONE NUMBER	(313) 583-9300 EMERGENCY NUMBER 1-517-263-9430

1 HAZARDOUS INGREDIENTS

MATERIAL	CAS NO.	CONTENTS (% WT/WT)	HAZARD	TLV/PEL
+Chromic Acid	1333-82-0	60-70	Carcinogen, IARC,NTP	0.05 mg/m³ C 0.1 mg/m³
Potassium Fluozirconate	16923-95-8	30-40	Irritant	2.5 mg/m³ as F* 2.5 mg/m³ as F*

*5 mg/m³ as Zr, STEL = 10 mg/m³ as Zr
This product contains a chemical (+) subject to the reporting requirements of Section 313, Title III of SARA, Part 372.

2 PHYSICAL DATA

APPEARANCE	Light orange powder		
SOLUBILITY IN WATER	Complete		
ODOR	Slight acid	pH of CONCENTRATE	Not applicable
SPECIFIC GRAVITY	Not applicable	BOILING POINT, °F.	Not applicable
OTHER:	Not applicable		

3 FIRE & EXPLOSION DATA

FLASH POINT None

TEST METHOD Not applicable

EXTINGUISHING MEDIA As required to extinguish surrounding fire.

UNUSUAL FIRE OR EXPLOSION HAZARDS

Clothing contaminated with the chemical is dangerously flammable. Immediately remove and rinse thoroughly with water. Contact with combustible material may cause fire.

SPECIAL FIRE FIGHTING PROCEDURES

Wear positive pressure self-contained breathing apparatus and full protective clothing.

4 REACTIVITY DATA

STABLE ☒ UNSTABLE ☐

CONDITIONS TO AVOID

None

INCOMPATIBLE MATERIALS

Keep separate from alkalies.
Organic materials, paint thinners or reducing agents.

HAZARDOUS POLYMERIZATION WILL OCCUR ☐
WILL NOT OCCUR ☒

CONDITIONS TO AVOID

None

HAZARDOUS DECOMPOSITION PRODUCTS

At elevated temperatures, various fluoride compounds will be liberated, including hydrogen fluoride.

5 HEALTH HAZARD DATA

EYES: Eye contact can cause severe burns and loss of vision.

SKIN: Contact can cause severe burns. Chromic acid may be absorbed through skin, especially if skin is damaged. Fatal kidney damage was reported in a person who evidently absorbed chromium trioxide into the body.

INHALATION: Inhalation of dust can cause damage to mucous membranes, perforation of nasal septum and irritation of the respiratory system.

INGESTION: Can result in gastrointestinal damage; burns of the digestive tract. Chromic acid is considered very toxic. (As sodium dichromate, oral-rat LD50: 51.10 +/- 5.93 mg/kg.)

CHRONIC: Prolonged or repeated skin contact may cause "chrome sores". Long-term exposure can cause liver damage, kidney damage and dermatitis. Prolonged or repeated inhalation of mist may cause ulceration and performation of the nasal septum.

POSSIBLE CANCER HAZARD: There is laboratory evidence that aqueous sodium dichromate administered directly into the lung, at the highest tolerated dose, over the lifetime of rats, causes a significantly increased incidence of lung cancer. It is expected that if chromic acid was tested in the manner as aqueous sodium dichromate, it would give similar response. There is sufficient evidence for the carcinogenicity of chromium and certain chromium compounds both in humans and experimental animals.
Reference: NTP (National Toxicology Program), Annual Report on Carcinogens, 1983.
IARC (International Agency for Research on Cancer), Annual Report, 1982.

CHRONIC: Contains fluorides. Exposure to fluorides over years may cause fluorosis.

Medical Conditions Generally Aggravated by Exposure: Persons with a history of asthma, allergies or known sensitizations to chromic acid or chromates.

6 FIRST AID RECOMMENDATIONS

EYES: Immediately flush eyes in a directed stream of water for at least 15 minutes while forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. GET MEDICAL ATTENTION.

SKIN: Immediately remove contaminated clothing and shoes. Flush skin thoroughly with water for at least 15 minutes. Rinse clothing. If irritation persists, GET MEDICAL ATTENTION.

INHALATION: Remove to fresh air. If breathing is difficult, give oxygen. GET MEDICAL ATTENTION.

INGESTION: DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION. Drink milk of magnesia, aluminum hydroxide gel or limewater followed by water.

7 SPILL PROCEDURES & WASTE DISPOSAL

SPILL PROCEDURES

Wear respiratory protection.
Wear protective clothing.
Sweep up or otherwise collect and store in suitable drum.

WASTE TREATMENT

This chemical is a hazardous waste as defined by EPA Hazardous Waste and Consolidated Permit Regulations (or consult equivalent state regulations).
Hazardous Waste Characteristic: EP Toxicity, Title 40, Code of Federal Regulations, 261.24, Hazardous Waste Number D007.
This chemical contains chromium compounds and fluoride compounds Waste treatment and neutralization may be required prior to discharge to a sewer.
Waste Treatment Information Bulletin No. 1004 (Available on request.)
Dispose of in compliance with all applicable federal, state and local regulations.

8 PERSONAL PROTECTION

VENTILATION REQUIREMENTS	GENERAL AREA EXHAUST	☐
	LOCAL EXHAUST	☒
	NO EXHAUST NECESSARY	☐

PERSONAL PROTECTIVE EQUIPMENT

EYE PROTECTION	Safety goggles
SKIN PROTECTION	Neoprene or polyvinyl gloves and appropriate protective clothing.
RESPIRATORY PROTECTION	MSHA/NIOSH dust filter mask or respirator if dusting occurs. Provide sufficient mechanical (general and/or local exhaust ventilation to maintain exposure below TLV(s).
OTHER REQUIRED EQUIPMENT	Eye wash facility and emergency shower should be in close proximity.

9 SPECIAL PRECAUTIONS & STORAGE

Keep separate from organic materials and reducing agents. Do not breathe dust or get in eyes or on skin.

MATERIAL IS TOXIC.

Contact with combustible material may cause fire.

Wash thoroughly after handling.

For industrial use only.

PREPARED BY Product Acceptance Office DATE 10/03/89

TITLE

CHEMICAL EMERGENCY TELEPHONE 1-800-424-9300

Henkel Surface Technologies

Technical Process Bulletin

Technical Process Bulletin No. 1182
This Revision: 05/19/92

ALODINE® 600
Conversion Coating Process for Aluminum

1. Introduction:

ALODINE 600 is a powdered chemical used to produce a chromate conversion coating on aluminum and its alloys, which ranges in color from light, iridescent gold to tan. ALODINE 600 can be applied by immersion or spray method, does not contain complex cyanides, and is particularly recommended where a low dielectric resistance coating is desired.

ALODINE 600 is approved under MIL-C-81706 for use by Application Methods A and C, classes 1A and 3: and it's listing on QPL 81706 indicates its acceptance under the MIL-C-5541 document of current issue.

2. Operating Summary:

Chemical	Bath Preparation per 100 gallons:
ALODINE 600 Chemical	12.5 pounds
*ALODINE TONER 22	9.9 pounds (1.0 gallons)
*Not required when processing to meet class 3 of MIL-C-5541.	

Operation and Control:	
ALODINE Titration	7.4 to 9.4 ml
Temperature	70° to 100° Fahrenheit
Time	1 to 5 minutes
pH	1.5 to 2.0

3. The Process:

The complete process sequence for the ALODINE 600 treatment normally consists of the following steps:

A. Cleaning
B. Water rinsing
C. Deoxidizing (Optional)
D. Water rinsing
E. Treating with the ALODINE 600 processing solution
F. Water rinsing
G. Post treatment
H. Drying.

4. Materials:

ALODINE 600
ALODINE TONER 22
Nitric Acid
Testing Reagents and Apparatus

5. Equipment:

Process tank and housing should be fabricated from stainless steel, such as 316L or 304L. The 316L being preferred for maximum tank life. In all cases, approved welding techniques must be used. Polyvinyl chloride (PVC) or CPVC lined mild steel can be used. In spray applications, nozzles fabricated from 300 series stainless steel are preferred.

Process piping and pumps should be constructed of 316 or 304 stainless steel alloys. Various formulations of plastic pipe may be used with recommended support spacing, Schedule-80 being generally recommended. PVC Type I is limited to maximum process temperatures of 140° Fahrenheit. CPVC and PP may be used up to a maximum process temperature of 190° Fahrenheit. PVDF may be used for all expected operating temperatures.

Heat exchanger plates should be polished 316 stainless steel. Gas fired burner tubes are not recommended. All process circulation pump seals, valve seats, door seals, etc., which come into contact with the process solution and occasional acid equipment cleaners, should be EPDM, Viton™ or Teflon™.

Chemical feed pump parts and other elastomers which may come into contact with the concentrated replenishing chemical should be Viton or Teflon.

Support equipment available from Henkel Surface Technologies for this process includes: chemical feed pumps, level controls, transfer pumps and bulk storage tanks.

Our sales representative should be consulted for information on Henkel Surface Technologies automatic process control equipment for this process and any additional questions. In addition, the "Henkel Surface Technologies Equipment Design Manual" may be consulted.

6. Surface Preparation:

Cleaning:
All metal to be treated with the processing solution must be free from grease, oil and other foreign matter before the treatment. A complete line of cleaners is available and our representative should be consulted.

Water Rinsing:
After cleaning, the metal must be thoroughly rinsed with water. The rinse should be overflowed continuously at a rate which will keep it clean and free from scum and contamination.

Deoxidizing (optional):
When aluminum to be treated with ALODINE 600 processing chemical has corrosion products or heavy oxide on the surface, it should be cleaned by installing two additional stages between the post cleaner rinse and the ALODINE 600 treatment stage. One is for deoxidizing with a deoxidizing chemical and one is for an additional cold water rinse.

7. Treating with the ALODINE 600 Processing Solution:

Buildup:
Fill the tank about three-fourths full with cold water. For each 100 gallons of final solution volume, add 12.5 pounds of pre-dissolved ALODINE 600 chemical and circulate until thoroughly mixed; add, while mixing, 9.9 pounds (1.0 gallon) of ALODINE TONER 22 chemical. Finally, add sufficient water to bring the solution up to the working level and then heat, if necessary, to the operating temperature.

Operation:
Time: 1 to 5 minutes.
Temperature: 70° to 100° Fahrenheit.

Each alloy reacts with the ALODINE 600 solution to produce a coating that is characteristic of that alloy. The bath should produce a light, iridescent, gold to tan coating within the operating conditions selected.

If the Coating is Powdery:
a. The pH of the bath may be too low for the bath concentration selected.
b. The work may have been improperly cleaned and/or rinsed.
c. The ALODINE 600 bath may have become contaminated with phosphates, sulfates, or some other contaminant. In most cases, phosphate contamination will stop-off the coating completely.
d. The bath temperature may be too high.
e. The process time may be too long.

If the Coating is too Light or too Iridescent:
a. The temperature of the ALODINE 600 bath may be too low for the process time selected.
b. The process time may be too short
c. The concentration of the bath may be too low.
d. The pH of the bath may be outside of the proper range.

8. Testing and Control:
Never pipet by mouth, use a pipet filler.

ALODINE Titration:
Pipet a 5 ml sample of the ALODINE 600 bath into an iodimetric flask and dilute to approximately 100 ml with water. Add approximately 1 gm (1/2 teaspoonful) of Reagent 2 and agitate the solution until the compound is dissolved. Add approximately 10 ml of Reagent Solution 49 in 5 ml increments to the lip of the flask, raising the stopper slightly after each addition to allow the acid to run into the flask. Rinse the lip several times with water and replace the stopper. Let sit for approximately one minute.

Titrate with Titrating Solution 104 until a straw color is obtained. Do not rezero the buret. Add several milliliters of Indicator 10 to the sample and continue the titration until the blue-black color disappears. The milliliters of Titrating Solution 104 used is the ALODINE titration.

ALODINE titration range: 7.4 - 9.4 ml.

To increase the value 1.0 ml: 1.5 pounds of ALODINE 600 chemical per 100 gallons of bath.

pH Adjustment:
As the bath is used, the pH has a tendency to rise. Nitric acid is added to restore the pH to its proper operating level.

pH range: 1.5 to 2.0

Large additions of nitric acid are to be avoided in favor of frequent small additions.

9. After Treatment:

Water Rinsing:
After treating with ALODINE 600 the work should be thoroughly rinsed in cold water. The rinse should be continuously overflowed such that the main body of the rinse never becomes excessively contaminated.

Post Treatment:
The ALODINE 600 treated metal is treated with an acidic post treatment solution. The post treatment adds to the overall quality of the coating and prevents the formation of hard water rinse blistering. In some cases the post treatment stage may be heated to facilitate work drying.

Drying:
Parts coming from the post treatment stage should be dried as soon as possible in an indirectly fired oven or by any other means which will not contaminate the metal with fumes, oil, or partially burnt gases. Peak metal temperature should not exceed 140° Fahrenheit.

10. Storage Requirements:

ALODINE 600 chemical should be stored in a dry ventilated area. ALODINE TONER 22 freezes as 3° Fahrenheit. Should freezing occur, the chemical should be agitated after thawing.

11. Waste Disposal Information:

Applicable regulations covering disposal and discharge of chemicals should be consulted and followed.

Disposal information for ALODINE 600 and ALODINE TONER 22 is given on the Material Safety Data Sheet for each product.

The processing bath is acidic and contains chromium and complex fluorides. Waste treatment and neutralization will be required prior to the discharge to the sewer. (Refer to Waste Treatment Information Bulletin WT1004, available on request.)

Testing Reagents and Apparatus
(Order only those items which are not already on hand.)

Code	Quantity	Item
205957	1	Bucket, Graduated, Plastic, 10 liter
205700	1	Buret Assembly, 25-ml Automatic, Glass
205897	2*	Flasks, iodimetric, 250-ml
205852	2*	Graduated Cylinder, 50-ml, Glass
205010	1/2 pt	Indicator 10 (0.5% starch solution)
205590	1	Indicator Dropping Bottle, 2 oz
205876	2	Pipet, 5-ml, plastic
205082	1 lb	Reagent 2 (KI)
205249	5 pt	Reagent Solution 49 (C.P. HCl)
205960	1	Scale, 24-lb capacity
205966	1	Spoon, plastic, 1/2 teaspoon
205980	1	Thermometer, Floating
205104	2 qts	Titrating Solution 104 (0.1N $Na_2S_2O_3$)

- * * * * * -

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Henkel Surface Technologies
32100 Stephenson Highway
Madison Heights, MI 48071
Telephone: 248-583-9300
Fax: 248-583-2976

Form Revised 16 May 1997

APPENDIX F

EVERETT PUBLIC WORKS DOCUMENTS

NOTICE OF VIOLATION

SNO.

TC SYSTEMS
Everett, SNO.
7708

PUBLIC WORKS
EVERETT

RECEIVED
APR 3 0 1999
DEPT. OF ECOLOGY

April 28, 1999

Mr. Doug Knutson
Pretreatment Engineer
NWRO Department of Ecology
3190 - 160th Ave SE
Bellevue, WA 98008-5452

Dear Doug,

Attached is a copy of the renewed permit for TC Systems Inc., Industrial Pretreatment Permit #7708. The permit renewal reflects only minor changes to update reference to the City Ordinance and contact phone numbers.

If you have any questions please contact me at (425) 257-8240.

Sincerely,

Arthur Britton
Industrial Waste Inspector

Attachment: Copy of Industrial Pretreatment Permit # 7708

c:	Jim Langus	Everett/Admin
	Dan Lowell	Everett/Utilities
	Robert Waddle	Everett/Utilities
	Chron. File	(1)
	Industry File	(1)

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PUBLIC WORKS
EVERETT

COPY

Issue Date: April 23, 1999
Expiration Date: April 30, 2004

CITY OF EVERETT
INDUSTRIAL WASTE DISCHARGE PERMIT

In compliance with the provisions of The Federal Clean Water Act,
The State of Washington Water Pollution Control Law, as amended
(Chapter 90.48 Revised Code of Washington) and
The City of Everett Industrial Pretreatment Ordinance No. 2034-95 (as amended by No. 2247-97)
An Industrial Waste Discharge Permit is Issued to:

TC Systems
1132 10th Street
Everett, WA 98201

Permit Number:	7708
Authorized Rep:	K. Douglas Miracle
Plant Location:	1028 10th St., Everett, WA. 98201
Receiving Water:	Everett Water Pollution Control Facility
Industry Type:	Metal Finisher SIC No. 3471 40 CFR 433.17 (PSNS)
Discharge Location:	1028 10th St.
Sample Site:	Sample box on waste treatment outlet. (Effluent weir)

TC Systems is authorized to discharge pretreated industrial wastewater to the City of Everett sewer system in compliance with the City's Ordinance, any applicable provisions of Federal or State law or regulation, and in accordance with discharge point(s), effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit is granted in accordance with the permit application form filed on March 17, 1999, in the office of the City of Everett Department of Public Works, and in conformity with plans, specifications, and other data submitted to the City in support of the above data disclosure form.

Clair Olivers, P.E.
Director of Public Works

4/16/99
Date

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- G. Test Procedures
- H. Bypass
- I. Right of Entry
- J. Severability
- K. Property Rights
- L. Falsifying Information or Tampering With Monitoring Equipment
- M. Enforcement Provision
- N. Duty to Reapply
- O. New or Supplemental Application for Changes
- P. Limitation of Permit Transfer
- Q. Emergency Suspension of Service and Revocation of Permit
- R. Modification or Revision of the Permit
- S. Analytical Requirements

I. EMERGENCY NOTIFICATION

A. In the event that a petroleum or other hazardous material spill reaches the sewer system, the Everett Water Pollution Control Facility shall be notified immediately.

Hours 7:30 AM to 4:00 PM Monday - Friday	(425) 257-8240
After Hours, Weekends and Holidays	(425) 257-8200

B. In the event that a spill of oil or hazardous material reaches the storm sewer or the waters of the State, Everett Surface Water Management and the Department of Ecology shall be notified immediately.

Everett Surface Water Management Hours 7:30 AM to 4:00 PM Monday - Friday	(425) 257-8800
After Hours, Weekends and Holidays	(425) 257-8200
Washington State Dept. of Ecology 24 hours	(425) 649-7000

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Limitations and Monitoring Requirements

After issuance and lasting through midnight April 30, 2004, the Permittee is authorized to discharge treated industrial wastewater to the City of Everett sanitary sewerage system subject to the following limitations and monitoring requirements.

Sample location: Sample box on waste treatment outlet (Effluent weir)

REQUIREMENTS	EFFLUENT LIMITATIONS				MONITORING	
Parameter	Daily[a] Maximum		Monthly[b] Average		Minimum[c] Frequency	Sample Type
NONCONVENTIONALS						
Arsenic (T)	0.50	mg/L[k]	NA[d]		1/Month	Composite[g]
Cadmium (T)	0.11	mg/L[k]	0.07	mg/L[j]	1/Month	Composite
Chromium (T)	2.77	mg/L[j]	1.71	mg/L	1/Month	Composite
Copper (T)	3.00	mg/L[k]	2.07	mg/L	1/Month	Composite
Lead (T)	0.69	mg/L[j]	0.43	mg/L	1/Month	Composite
Mercury (T)	0.10	mg/L[k]	NA		1/Month	Composite
Nickel (T)	2.83	mg/L[k]	2.38	mg/L	1/Month	Composite
Silver (T)	0.43	mg/L[j]	0.24	mg/L	1/Month	Composite
Zinc (T)	2.61	mg/L[j]	1.48	mg/L	1/Month	Composite
Cyanide(T)	0.65	mg/L[k]	0.65	mg/L	2/Year	Composite[h]
TTO[i]	2.13	mg/L[j]	NA		2/Year (Jun/Dec)	Grab[n]
Process Flow	No Limit				Daily	Metered
CONVENTIONALS						
pH	5.0 - 10.0[e,k]		NA		Daily	Recording pH Meter
Total FOG	NA[f]		NA		1/Month	Grab[o]
FOG/Nonpolar	200	mg/L[k]	NA		1/Month	Grab[o]
Closed Cup Flashpoint	140°F[l]				2/Year	Grab[p]

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS (continued)

B. Sample Site/Dilution

All samples shall be collected at an approved sample site at the point of discharge from the treatment system, prior to mixing with any other dilution stream. The effluent limits apply to industrial wastewater prior to dilution with wastewaters other than those generated by the regulated process. The Permittee shall not use dilution to meet the limitations. See Sections VI.H. and VI.I.

C. Footnotes

a. The daily maximum is defined as the greatest allowable value for any calendar day.

b. The monthly average is defined as the arithmetic mean of samples collected during a calendar month.

If self monitoring is performed only once per month, then the daily maximum will become as stringent as the monthly average. The Permittee may choose to monitor more frequently than is required by this permit, with the understanding that all sampling and analytical data shall be submitted with the monthly report.

c. The City may reduce or increase the frequency of sampling based on compliance history, including analytical results.

d. NA means not applicable.

e. pH is measured in standard units. See Section V.C.

f. If Total FOG (fats, oils and grease) is greater than 50 mg/L, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged FOG interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge, the Permittee for the cost of treatment.

g. Composite shall mean a flow-proportioned sample taken during the hours of discharge using an automatic sampler approved by the City or at least four grab samples taken in accordance with City of Everett Sampling Guidelines and composited according to flow. See Section V.D.

h. Each of four (4) grab samples for cyanide shall be immediately preserved with NaOH to a pH of >12.0 then combined and refrigerated until analyzed. Analysis shall occur within fourteen (14) days of taking the sample.

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

C. **Footnotes** (continued)

i. TTO (Total Toxic Organics) is the summation of all values greater than 0.01 mg/L for each of the Toxic Organics specified in ***40 CFR 433.11(e)***, where reasonably expected to be present. Results are due in June and December and shall contain the calculated TTO value defined above. If the Permittee is in compliance with the TTO limit, it may develop a solvent management plan. See Sections III.B. and V.E.

j. These limits based upon limitations contained in 40 CFR 433.17, Pretreatment Standards for New Sources (PSNS).

k. These limits based upon local limitations contained in Everett City Ordinance No. 2034-95 (as amended by No. 2247-97).

l. Any wastewater with a closed cup flash point of less than 140°F or 60° Celsius using the test methods specified in 40 CFR 261.21 is prohibited from discharge. See Section VII.A.3.

m. If TSS (Total Suspended Solids) or BOD_5 (5-day Biochemical Oxygen Demand) exceeds 250 mg/L, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged TSS or BOD_5 interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge the Permittee for the cost of treatment and any additional maintenance costs incurred by the City.

n. A minimum of four grab samples must be taken during the sampling event for TTO's. Semi volatiles are then composited in the field for sample analysis, volatiles are composited in the laboratory when analyzed.

o. A minimum of four individual grab samples to be taken during the sampling event for FOG. The samples are to be taken and contained in separate containers and not to be composited or split.

p. A single separate grab sample must be taken and analyzed for Flash Point.

III. SUMMARY OF REPORTS

The Permittee shall submit reports to the City according to the schedule listed below.

A. Final Compliance Report/90 Day Report

Frequency:	Once only
Due Date:	90 days following the commencement of discharge or permit issuance, whichever is later.
Content:	Characterizing discharge. Statement of compliance. See Section IV.A.

B. Accidental Spill Prevention Plan

Frequency:	Once, update as needed.
Due Date:	Submit 90 days following the commencement of discharge or permit issuance whichever is later. Implement within 6 months.
Content:	Strategy for spill prevention, including training and emergency response. See Section IV.B.

C. Solvent Management Plan (SMP)

Frequency:	Once, update as needed.
Content:	Regulated Toxic Organics on site, disposal method and spill prevention procedures. See Section V.E.

D. Notification of Hazardous Waste Discharges

Frequency:	Once only for each hazardous waste (HW)
Due Date:	Within 90 day of permit issuance
Content:	HW name, EPA HW Number & type of discharge. See Section IV.C.

E. Notification of New Hazardous Waste Discharges

Frequency:	Whenever new regulations designate wastes or constituents as hazardous.
Due Date:	Within 90 days of the effective date of the published regulation.
Content:	See Section IV.D. and 40 CFR 403.12(p).

F. O & M Manual

Frequency:	As needed prior to installation or changes of pretreatment equipment.
Due Date:	Approval required prior to completion of construction.
Content:	O & M instructions and pretreatment system "as-builts". See Section IV.E. and WAC 173-240.

III. SUMMARY OF REPORTS (continued)

G. Self Monitoring Report

Frequency:	As required.
Due Date:	Commencing on date of Permit issuance. To be submitted no later than the last day of each month following self monitoring.
Content:	Data required in Section II.A or, if appropriate, a notification that no discharge has occurred. See Section IV.F.

H. Notification of Violation

Frequency:	As needed.
Due Date:	Notify the City within 24 hrs. of discovery and submit a written report within 5 days.
Content:	Reason for violation and corrective action taken. See Section IV.G.

I. Changes To Discharge

Frequency:	As needed.
Due Date:	90 days prior to changes in discharge that result in altered wastewater pollutants.
Content:	See Section IV.H.

J. Spill Report

Frequency:	As needed.
Due Date:	Notify City within 24 hrs of discovery and a written report within 5 days.
Content:	Characteristics of and reason for spill, and corrective action taken. See Section IV.I.

K. Upset Report

Frequency:	As needed
Due Date:	Notify the City within 24 hrs of discovery and submit a written report within 5 days.
Content:	Characteristics of and reason for noncompliance, and corrective action taken. See Section IV.J.

L. Engineering Report

Frequency:	As needed prior to installation or changes of the pretreatment equipment.
Due Date:	Approval required prior to installation.
Content:	Per WAC 173-240. See Section IV.K.

IV. REPORTING REQUIREMENTS

The Permittee shall monitor their discharge to the sanitary sewer as specified in Section II of this permit. The Permittee shall also submit to the City of Everett, Department of Public Works, all of the reports according to the following schedule and content requirements.

A. Final Compliance Report/90 Day Report

The Permittee shall submit, not later than 90 days from the effective date of this permit, a report confirming compliance or indicating noncompliance with permit discharge limits and requirements. The report shall include flow, measurement of pollutants and a certification statement. See 40 CFR 403.12(d).

B. Accidental Spill Prevention Plan

The Permittee shall continue with implementation of their approved Accidental Spill Prevention Plan to eliminate or minimize the accidental slug discharge of pollutants into the sewer system which could have an effect on the City's wastewater treatment plant, biosolids and biosolids utilization plans, or cause the City to violate it's National Pollutant Discharge Elimination System (NPDES) permit.

C. Notification of Hazardous Waste Discharges

The Permittee shall notify the City, the EPA RCRA Director and State Dangerous Wastes Director, in writing within 90 days of the effective date of this permit, of any discharge of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other).

Notification need be submitted only once for each hazardous waste discharged. The notification requirement in this section does not apply to pollutants already reported under the self-monitoring requirements in Section II of this permit. The Permittee shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated.

D. Notification of New Hazardous Wastes

Whenever the EPA publishes new RCRA rules identifying additional hazardous wastes or new characteristics of hazardous wastes, the Permittee must notify the City, EPA RCRA Director and State Hazardous Wastes Director if any of these wastes are discharged to the City's treatment system. The notification must occur within 90 days of the effective date of the published regulation.

IV. REPORTING REQUIREMENTS (continued)

E. Operation and Maintenance Manual

As needed with installation or changes of pretreatment equipment. The Permittee shall submit an operation and maintenance manual and "as-built" drawings for the pretreatment system, to the City, for approval prior to completion of construction. This does not apply to equipment replaced with operationally identical parts during repair or maintenance activities. See WAC 173-240.

F. Self Monitoring Reports

The Permittee shall monitor the parameters specified in Section II.A of this permit. All monitoring results obtained during the month shall be summarized and reported on a form approved by the City, to be submitted no later than the last day of the month following the completed reporting period. The Permittee shall include the daily pH highs and lows and daily flows. The report shall be signed and certified in accordance with the requirements of Section VII.B. and submitted to the following address:

City of Everett
Department of Public Works
Industrial Pretreatment Program
3200 Cedar St.
Everett, WA. 98201
Attn.: Arthur Britton

In the event that **additional monitoring** (other than that required in Section II.A) is conducted, the Permittee shall report **all** results in the report. Note that reporting TTO monitoring data is not required monthly. The December and June self monitoring reports shall contain TTO discharge monitoring data or certification statement.

G. Notification of Violation

If self monitoring data indicates that a discharge limit has been exceeded, the Permittee shall notify the City within 24 hours of becoming aware of the violation. The Permittee shall repeat the sampling and submit the analysis to the City within 30 days after becoming aware of the violation. Formal written notification discussing circumstances and remedies shall be submitted to the City within five (5) days of becoming aware of the violation or as required.

H. Notification of Changed Discharge

The Permittee shall notify the City 90 days prior to the introduction of new wastewater pollutants, changes in manufacturing operations or any substantial change in the volume or character of pollutants in their discharge, including the listed or characteristic hazardous wastes for which the Permittee has submitted initial notification under 40 CFR 403.12(p). The Permittee shall obtain approval from the City prior to any substantial change in their discharge.

IV. REPORTING REQUIREMENTS (continued)

I. Spill/Slug Discharge Reports

The Permittee shall notify the City immediately, either in person or by phone (see Section I Emergency Notification), upon accidental spill or slug discharge to the sanitary sewer. Formal written notification discussing circumstances and remedies shall be submitted to the City within five (5) days of the occurrence or as required.

J. Upset Reporting

1. Definition

For the purpose of this section, "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with applicable pretreatment standards because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance or careless or improper operation.

2. Effect of an Upset

An upset shall constitute an affirmative defense to action brought for noncompliance with applicable pretreatment standards if the requirements of paragraph 3 are met.

3. Conditions Necessary for a Demonstration of Upset:

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs or other relevant evidence that:

a. an upset occurred and the permittees can identify the specific cause(s) of the upset;

b. the facility was, at the time, being operated in a prudent and workman-like manner and in compliance with applicable operation and maintenance procedures; and

c. the Permittee has submitted the following information to the City within 24 hours of becoming aware of the upset (if this information is provided verbally a written submission must be provided within five days):

(1) a description of the discharge and cause of noncompliance;
(2) the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to be corrected; and
(3) steps being taken and/or planned to reduce, eliminate and prevent recurrence of the noncompliance.

IV. REPORTING REQUIREMENTS (continued)

J. Upset Reporting (continued)

4. Burden of Proof

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset shall have the burden of proof.

5. Permittee Responsibility in Case of Upset

The Permittee shall control production or all discharges to the extent necessary to maintain compliance with applicable pretreatment standards upon reduction, loss or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost or fails.

K. Engineering Report

Prior to constructing or modifying any wastewater control facilities, detailed plans shall be submitted to the City and the Washington Department of Ecology for approval in accordance with WAC 173-240. Facilities shall be constructed and operated in accordance with the approved plans.

V. SPECIAL CONDITIONS/COMPLIANCE SCHEDULES

A. Batch Discharge Log

The Permittee shall maintain a log containing the date and time of discharge, contents, and the volume and number of batches discharged per day.

B. Effluent Meter

The Permittee shall install and maintain a continuous flow meter, monitoring flow through the discharge/sample site.

C. Recording pH Meter

The Permittee shall maintain a continuously recording pH meter with an audible alarm system and shall report the high and low pH values for each day the Permittee discharges. Any discharge without a pH record shall be considered a violation of this permit.

The Permittee shall maintain a log that includes a record of calibration for the instrument used with: the date, time, name of the person doing the calibration, and the method used. The chart shall be dated and initialed on working days.

D. Autosampler

The Permittee shall use an autosampler approved by the City to flow proportion composite samples of the treatment discharge to be monitored per Section II.A of this permit. Samples may be flow proportioned by hand if use of an autosampler is impractical. See Sections II.B and VI.I concerning the sample site.

V. SPECIAL CONDITIONS/COMPLIANCE SCHEDULES (continued)

E. Solvent Management Plan/TTO

1. Requirements

If the Permittee demonstrates compliance with the TTO limits, it may elect to develop a solvent management plan in lieu of sampling for TTO's. The plan must be submitted to the City for review and approval. The plan must include:

a. a list of the Total Toxic Organic's used;
b. the method of disposal, i.e., reclamation, contract hauling or incineration; and
c. the procedures that are used to insure that TTO's do not routinely spill or leak into the wastewater.

2. TTO Status

Status reports are due each June and December as part of the Self Monitoring Report. List any changes to the last plan on file or state there have been no changes to the plan. The Permittee shall make the following certification statement:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation or pretreatment standard for TTO, I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the solvent management plan submitted to the City." See 40 CFR 403.12(e).

VI. OPERATIONS AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures. The Permittee shall keep and maintain an operation and maintenance log on all facilities and systems of treatment and control.

Water conservation practices shall be used to reduce total effluent volume. Waste prevention practices shall be used to reduce or eliminate contaminant loading to the POTW. These include, but are not limited to, minimizing excessive dragout of cleaning, stripping, etching, and plating solutions used during metal finishing operations. In addition, the following practices shall be used:

A. Chemical Storage

Chemicals shall be stored in a manner which will prevent the entry into the municipal sewer system or the waters of the State. All liquid chemicals will be stored in a no outlet area, approved by the City.

1. Oils, waste oils, solvents, chemicals, and waste chemical solution shall be stored in a curbed and covered area with an impervious surface to prevent the contamination of the ground, ground water, storm sewer system or the sanitary sewer system. Empty barrels shall be adequately stoppered and stored in a designated area.

2. Incompatible chemicals shall be segregated.

3. Adequate dikes, sumps, and valves shall be installed to intercept and contain overflows and spills from all chemical cleaning and metal finishing tanks. Wastes from the sumps shall be collected for disposal in a manner that will prevent its entry into waters of the state or, be adequately treated and analyzed before discharge to the POTW.

B. Spill Prevention

1. All plating process tanks shall be stored in bermed, roofed, secured, no outlet areas.

2. Process tanks shall be located in an area capable of containing 110 percent of the volume of the largest tank. This area can have no outlet to the sewer system or the waters of the State.

3. All process tanks and chemical storage containers shall be adequately labeled. Emergency phone numbers shall be posted.

VI. OPERATIONS AND MAINTENANCE (continued)

B. Spill Prevention (continued)

4. In the event of a concentrated solution spill, such as a tank failure, the Permittee shall not discharge any spilled solution into the municipal sewer system unless laboratory test results indicate that the substance meets the conditions of this permit. The Permittee shall receive approval from the City prior to the discharge of any untreated spilled solution.

5. The Permittee shall use spill prevention practices to preclude the discharge of liquids, solids, or gasses, which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosions.

C. Required Process Changes

The Permittee shall make the process changes required and/or install whatever pretreatment equipment is necessary to meet the discharge conditions of this permit.

D. Shutoff Devices

1. The Permittee shall provide a functional shutoff device downstream of the pretreatment system.

2. Incoming rinse waters shall be turned off and shut off devices shall be closed at all times when the plant is not operating (i.e., nights, weekends and holidays), and in the event of an emergency spill. Rinse water to specific processes shall be turned off when process is not in operation.

E. Housekeeping

1. No plating or process bath filter shall be flushed over the processing floor, rinse tanks, or in any area where they may drain into the sanitary sewer system.

2. All filters shall be placed inside the processing tanks or over other containers to prevent any leaks to the sanitary sewer system.

3. The Permittee shall maintain and inspect all process solution and rinse tanks on a regular basis. Any leaks shall be repaired promptly.

F. Proper Disposal of Sludges and Spent Chemicals

1. The Permittee shall comply with the provisions of WAC 173-303 (Dangerous Waste Regulations).

VI. OPERATIONS AND MAINTENANCE (continued)

F. Proper Disposal of Sludges and Spent Chemicals (continued)

2. If it has not already done so and if applicable, the Permittee shall obtain a Hazardous Waste generator number from the US EPA or the WDOE for proper disposal of wastes.

3. Spent plating, etching and other concentrated process solutions shall not be disposed of to the sanitary sewer system.

4. The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into waters of the State.

5. For all liquid wastes and sludges removed by waste disposal companies, the Permittee shall record and retain for a period of three (3) years:

   a. chemical name and trade name of the substance;
   b. volume of each substance;
   c. date that it was hauled away;
   d. identity of the waste hauler and, if applicable, an EPA registration number; and
   e. receipt from the waste hauler.

G. Flowmeter

The Permittee shall maintain a water or sewer meter which provides accurate information regarding industrial process wastewater discharges to the sewer. The Permittee shall maintain a daily log of flowmeter readings and daily flows.

H. Dilution

Excess water usage shall be minimized to prevent dilution. No Industrial User shall increase the use of potable or process water, or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

I. Sample Site

An approved sampling site shall be maintained downstream of the final pretreatment system and upstream of any mixing with unregulated flows for the monitoring of the industrial discharge. City personnel shall have access to the sample site during normal business hours and in the event of an emergency. All process wastewater shall flow through the sampling point. All process wastewater shall be hard-piped to the sampling point. All wastewater monitoring samples shall be collected from the approved sample site. Sample sites are to remain unobstructed at all times to allow access. .All sample sites shall have a suitable, City approved, primary device installed for the purpose of monitoring industrial discharge flow to the Sanitary Sewer.

VII. GENERAL CONDITIONS

A. Compliance

1. All discharges to the City sanitary sewer system shall be in accordance with the requirements and ordinances of the City.

2. All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

3. The Permittee shall comply with all the general prohibitive discharge standards in Ordinance 2034-95 (as amended by No. 2247-97) and is responsible to take whatever steps are necessary to ensure discharge requirements of this permit are met.

4. Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

5. All applicable requirements of 40 CFR 403 and 40 CFR 433 are incorporated into this permit by reference.

6. Sanitary sewage shall be disposed of in accordance with the requirements of the Snohomish County Health District.

B. Signatory Requirements

All reports and information submitted to the City shall be signed by an executive officer, or his/her designated official, testifying to the accuracy of the results and representativeness of the sample by making the following statement:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

C. Confidential Information

Except for data determined to be confidential under Section 7 of the City's Industrial Pretreatment Ordinance No. 2034-95 (as amended by No. 2247-97), all reports required by this permit shall be available for public inspection at the office of the City of Everett, Department of Public Works.

VII. GENERAL CONDITIONS

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"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

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VII. GENERAL CONDITIONS (continued)

D. Records Retention

The Permittee shall retain for a minimum of three years all records of monitoring activities and results, including all reports of recordings from continuous monitoring instrumentation. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the City.

E. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information:

1. the date, exact place, person collecting the sample, and time of sampling;
2. the date the analyses were performed;
3. who performed the analyses;
4. the analytical techniques or methods used;
5. the results of all the analyses; and
6. provide certification of representativeness.

F. Representative Sampling

Samples and measurements taken to meet the requirements of this condition shall be representative of the volume and the nature of the monitored discharge.

G. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless approved otherwise in writing by the City, conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants, contained in 40 CFR 136. Where 40 CFR 136 does not include a sampling or analytical technique for the pollutant in question, sampling and analyses shall be performed in accordance with any other sampling and analysis procedure approved by the EPA Administrator.

H. Bypass

The intentional bypass of wastes from all or any portion of a treatment works to the extent that permit effluent limitations cannot be met is prohibited unless the following four conditions are met:

1. Bypass is:

   (a) unavoidable to prevent loss of life, personal injury, or severe property damage; or
   (b) necessary to perform construction or maintenance related activities essential to meet the requirements of the Clean Water Act and authorized by administrative order;

VII. GENERAL CONDITIONS (continued)

H. Bypass (continued)

2. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or temporary reduction or termination of production;

3. The Permittee submits notice of an anticipated bypass in accordance with Section IV.H. Where the Permittee knows or should have known in advance of the need for a bypass, this prior notification shall be submitted for approval to the City, if possible, at least 10 days before the date of bypass; and

4. This bypass is allowed under conditions determined to be necessary by the City to minimize any adverse effects. The public shall be notified and be given the opportunity to comment on bypass incidents of significant duration, to the extent feasible.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic impact caused by delays in production.

After consideration of the factors above and the adverse effects of the proposed bypass, the City may approve the request.

I. Right of Entry

The Permittee shall allow an authorized representative of the City, upon the presentation of credentials and such other documents as may be required by law and at reasonable hours:

1. To enter the Permittee's premises where a discharge source is located or where any records must be kept under the terms and conditions of the permit;

2. To have access to and copy any records that must be kept under terms and conditions of the permit;

3. To inspect any monitoring equipment or method required in the permit;

4. To inspect any collection, treatment, pollution management, or discharge facilities required under the permit;

5. To sample any discharge of pollutants (sampling sites are to remain unobstructed at all times); and

VII. GENERAL CONDITIONS (continued)

I. Right of Entry (continued)

6. Where a user has security measures in force which require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the Director will be permitted to enter without delay for the purposes of performing specific responsibilities. Unreasonable delays in allowing the Director access to the user's premises shall be a violation of this Permit.

J. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Property rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringement of Federal, State, or Local regulations.

L. Falsifying Information or Tampering With Monitoring Equipment

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under the criminal laws of the City, as well as being subject to civil penalties and relief.

VII. GENERAL CONDITIONS (continued)

M. Enforcement Provision

The City may seek any or all of the remedies or penalties (including civil and judicial action) provided in City ordinances, including recovering costs incurred by the City, in response to the following:

1. Any violation by the Permittee of the provision of the Industrial Wastewater Discharge Permit;

2. Any violation by the Permittee of the provisions of the City Code; or

3. Any violation by the Permittee of any order of the Director with respect to provisions set forth in this Industrial Wastewater Discharge Permit or the City Code.

The range or severity of remedial actions taken against the Permittee may include, but not be limited to, notices of violation, compliance schedules, fines of up to $10,000 per day per violation, show cause hearings and/or cease discharge notices and be determined, in part, by the nature, duration and frequency of the violation (including significant non-compliance status).

N. Duty to Reapply

The City shall notify the Permittee 180 days prior to the expiration of the Permitee's permit. Within 90 days of the notification, the Permittee shall apply for reissuance of the permit on a form provided by the City.

O. New or Supplemental Application for Changes

The City may require the Permittee to submit a new application or supplement to the previous application where facility expansions, production increases, or process modifications will result in:

1. New or substantially increased discharges of pollutants;

2. A substantial increase in flow; or

3. Violation of the terms and conditions of the existing permit.

The Permittee shall notify the City 60 days prior to such changes. Formal written notification shall follow within 30 days. Submission of such an application does not relieve the discharger of the duty to comply with the existing permit until it is modified or reissued.

VII. GENERAL CONDITIONS (continued)

P. Limitation of Permit Transfer

Permits are issued to a specific User for a specific operation and are not assignable to another User or transferable to any other location without the prior written approval of the City. Sale of a User shall obligate the purchaser to seek prior written approval from the City for continued discharge to the POTW.

Q. Emergency Suspension of Service and Revocation of Permit

The City may, without advance notice, order the suspension of the wastewater treatment service and revoke the Industrial Waste Discharge Permit from a Permittee when it appears to the City that an actual or threatened discharge:

1. presents or threatens an imminent or substantial danger to the health or welfare of persons or substantial danger to the environment; or

2. threatens to interfere with the operation of the POTW, or violate any pretreatment limits.

Any Permittee notified of the City's suspension order shall immediately cease all discharges. In the event of failure of the Permittee to comply with a suspension order, the City may immediately take all necessary steps to halt or prevent any further discharge by such Permittee into the POTW. See Ordinance 2034-95 (as amended by No. 2247-97), section 9.7.

R. Modification or Revision of the Permit

This permit may be modified, terminated, or revoked during its term for:

1. Failure of the Permittee to disclose fully all relevant facts or the misrepresentation of any relevant facts by the Permittee in the application or during the permit issuance process;

2. A violation of any term or condition of the permit;

3. EPA promulgating a new federal pretreatment standard;

4. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit;

5. Information indicating that the permitted discharge poses a threat to human health or welfare;

VII. GENERAL CONDITIONS (continued)

R. Modification or Revision of the Permit (continued)

6. A change in ownership or control of the source;

7. A change in City Ordinances or other just cause; or

8. Incorporating special conditions resulting from the issuance of a special order.

Permit transfer fee shall be $500.00

Permit modification fee shall be $500.00. Permit modification fees will only be charged in a case where changes in the user's operation require the modification, or when the user requests a modification.

Any permit modification which results in new conditions in the permit will include a reasonable time schedule for compliance, if necessary. Permit modification, revocation and reissuance, or termination may be initiated by the City or requested by any interested person.

S. Analytical Requirements

All analyses performed to establish compliance and used in compliance reporting shall be performed by a laboratory accredited by the Quality Assurance Division of the Washington State Department of Ecology in accordance with WAC 173-50. Laboratories must be accredited for the analyses that they are performing.

==========

PROGRAM/ORGANIZATION: WATER QUALITY
WATER QUALITY
CONTACT: GLYNN, JOHN (F41)
REFERRAL DATE: 08/04/1999 URGENT RESPONSE?: N PRIMARY?: Y

The City of Everett Manages this permit. It sounds like they have things under control. Doug Kenter 08/09/99

OTHER PROGRAM/ORGANIZATIONS REFERRED TO: CENTRAL PROGRAMS - SPILLS

ADDITIONAL INFO: MAY REQUIRE FOLLOW UP FROM SPILLS?

==========

COORDINATOR: MUSA, DONNA REPORT 1 OF 1

DATE/TIME REC'D: 08/04/1999 8:42 AM REPORT TYPE: INITIAL
ACTUAL DATE: 08/04/1999

==========

CALLER NAME: MIRACLE, DOUG ANONYMOUS?: N
TC SYSTEMS
ADDRESS: 1028 WEST MARINE VIEW DR

EVERETT WA 98201

CONTACT 1:
PHONE: W 425-258-4055 EXT: TYPE:

==========

COUNTY: SNOHOMISH CITY: EVERETT

WEATHER: RAIN TIDE: UNKNOWN

WATERWAY:

LATITUDE: LONGITUDE:

TOWNSHIP: RANGE: E/W: SECTION:

LOCATION INFO: CALLER'S ADDRESS

==========

MEDIUM: OTHER

MATERIAL: CHEMICAL QTY: 200 UNIT: GALLON HAZARDOUS: Y
OTHER: DILUTED CHROMIC CONVERSION COATING

CAUSE: EQUIPMENT FAILURE

==========

IMPACT: UNKNOWN

SOURCE: COMMERCIAL ACTIVITY: ROUTINE/NORMAL OPERATIONS

==========

ALLEGED VIOLATOR 1: TC SYSTEMS
TC SYSTEMS
ADDRESS: 1028 W MARINE VIEW DR

EVERETT WA 98201

CONTACT 1: DOUG MIRACLE
PHONE: 425-258-4055 EXT: TYPE:

ADDITIONAL INFO:

==========

ADDITIONAL INFORMATION ON INCIDENT:

POWER OUTAGE LAST NIGHT CAUSED A MALFUNCTION, AND THERE WAS A SPILL TO THEIR WASTEWATER TREATMENT PLANT. CITY OF EVERETT IS ASSISTING IN CLEANUP. NO SPILL BEYOND THERE SYSTEM IS APPARENT AT THIS TIME. COVERING AND SEALING STORM DRAINS AS A PRECAUTION.

PUBLIC WORKS

EVERETT

RECEIVED

AUG 23 1999

DEPT. OF ECOLOGY

August 19, 1999

CERTIFIED MAIL RECEIPT NO. P 267 172 669

Mr. Douglas Miracle
General Manager
TC Systems
1028 W. Marine View Drive
Everett, WA 98201

NOTICE OF VIOLATION

Dear Mr. Miracle:

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of your Industrial Waste Discharge Permit No. 7708.

On July 7, 1999, the City received your Discharge Monitoring Report form for the month of June. On June 23, 1999, sample results from your wastewater showed a non-polar oil and grease concentration of 320 mg/L. Section II, entitled Effluent Limits and Monitoring Requirements, establishes the discharge limits for non-polar oil and grease at 200 mg/L. TC Systems is in violation of this limit. In addition the non-polar oil and grease concentration also exceeded the daily average limit of 200 mg/L by an amount greater than the Technical Review Criteria (TRC), which is used to determine Significant Non Compliance (SNC).

Section III. H, and IV. G, require notification of violation within 24 hours of becoming aware of the violation. These sections also require formal written notification discussing the circumstances and remedies within five days of becoming aware of the violation. This office did not receive any notification. Both failures to notify are considered separate violations of your discharge permit.

While TC Systems is not in Significant Non Compliance at this time, further violations of a similar nature could result in a determination of this. Once it has been determined that an industry is in Significant Non Compliance, the City's enforcement policy mandates a minimum fine of $1000.00 and publication in the local newspaper. Significant Non Compliance is defined as:

Chronic Violations. Sixty-six percent or more of the measurements exceed the same daily maximum/minimum limit in a 6-month period.

Technical Review Criteria Violations. Thirty-three percent or more of the measurements exceed the same daily maximum/minimum limit or the same average limit by more than the Technical Review Criteria in a 6-month period.

You are required to respond in writing within five (5) days of receipt of this notice, outlining the circumstances and remedies regarding these violations. Please send a written response to:

City of Everett
Industrial Pretreatment
3200 Cedar St.
Everett, WA 98201
Attn: Arthur Britton

Compliance with the requirements of this notice does not excuse these violations. Please be advised that enforcement proceedings are of an escalating nature. If violations continue, fines of up to $10,000.00 per day may be assessed. Fines, in part, are determined by the nature, duration, and frequency of the violation, and by the good faith of the business in promptly returning to compliance.

Please direct any questions or comments concerning this Notice of Violation to Arthur Britton, Industrial Waste Inspector at (425) 257-8240.

Sincerely,

Clair Olivers, P.E.
Director of Public Works

c:	Doug Knutson,	WDOE
	Jim Langus,	Everett/ADM
	Dan Lowell,	Utilities
	Robert Waddle	EQD
	Chron. File	(1)
	Industry File	(1)

S:\#COMMON\IPT\WORD\TCSYSTEMS\NOV9906

PUBLIC WORKS
EVERETT

RECEIVED
OCT 26 1999
DEPT OF ECOLOGY

October 20, 1999

Mr. K. Douglas Miracle
General Manager, TC Systems
1028 W. Marine View Dr.
Everett, WA 98201

Dear Mr. Miracle:

During the inspection Don McKinney and I performed at your facility on October 1, 1999 we noted some deficiencies in your flow measurement system. Specifically, the weir plate is undersized for the flow regimes that need to be measured, the weir plate is too thick and the level measurement system was out of calibration.

The following corrections need to be made with the associated timelines:

1.	Recalibrate the level measuring system	5 days
2.	Replace/rework weir plate	45 days.

If you have any questions or concerns about these requirements, feel free to contact me at 257-8240.

Sincerely,

Gene D. Bennett,
Industrial Waste Inspector

c: Doug Knutson, WDOE
Robert Waddle, Everett Utilities
Chron File (1)
IPT File (1)

S:*Common\ipt\WORD\TC System\LTR99_10.doc

PUBLIC WORKS
EVERETT

RECEIVED
APR 27 2000
DEPT OF ECOLOGY

April 18, 2000

CERTIFIED MAIL RECEIPT NO. P 221 748 632 **NOTICE OF VIOLATION**

TC Systems
Mr. Charles Souder; General Manager
1028 W. Marine View Drive
Everett, WA 98201

Dear Mr. Souder:

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of your Industrial Waste Discharge Permit No. 7708.

On March 8, 2000, the City received your Discharge Monitoring Report form for the month of February. On February 24 and 25, sample results from your wastewater showed pH levels below the minimum specified in you Discharge Permit. On the 24th the low pH for the day was recorded as 3.10 s.u. and on the 25th it was recorded as 4.62 s.u. Section II, entitled Effluent Limits and Monitoring Requirements, establishes the discharge limits for pH to be no less than 5.0 s.u. TC Systems is in violation of this limit.

Section III. H, and IV. G, require notification of violation within 24 hours of becoming aware of the violation. These sections also require formal written notification discussing the circumstances and remedies within five days of becoming aware of the violation. This office did not receive any notification. Both failures to notify are considered separate violations of your discharge permit.

You are required to respond in writing within five (5) days of receipt of this notice, outlining the circumstances and remedies regarding these violations. Please send a written response to: City of Everett
Industrial Pretreatment
3200 Cedar St.
Everett, WA 98201

Please direct any questions or comments concerning this Notice of Violation to Gene Bennett, Industrial Waste Inspector at (425) 257-8240.

Sincerely,

Clair Olivers, P.E.
Director of Public Works

c:	Doug Knutson	WDOE
	Jim Langus	Everett/ADM
	Robert Waddle	Utilities
	Chron. File	(1)
	Industry File	(1)

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PUBLIC WORKS

EVERETT

May 12, 2000

CERTIFIED MAIL NO P 221 748 635

NOTICE OF VIOLATION

TC Systems
Mr. Charles Souder; General Manager
1028 W. Marine View Drive
Everett, WA 98201

Dear Mr. Souder:

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of your Industrial Waste Discharge Permit No. 7708.

Your monthly self-monitoring report for the month of March reported several pH violations. The causes and remedies that you are pursuing were included in a letter dated April 27, 2000. No further action is required for these violations. Please ensure that timely notification to the City of all violations of your permit conditions continues.

Please direct any questions or comments concerning this Notice of Violation to Gene Bennett, Industrial Waste Inspector at (425) 257-8240.

Sincerely,

Clair Olivers
Public Works Director

c:	Doug Knutson	WDOE
	Jim Langus	Everett/ADM
	Robert Waddle	Utilities
	Chron. File	(1)
	Industry File	(1)

PUBLIC WORKS

EVERETT

COPY

October 17, 2001

CERTIFIED MAIL NO 7000 0520 0012 2545 6205

TC Systems
Mr. Charles Souder; General Manager
1028 W. Marine View Drive
Everett, WA 98201

NOTICE OF VIOLATION/ADMINISTRATIVE FINE

Dear Mr. Souder:

The Self-Monitoring Report for the month of August, 2001, which was required to be delivered no later than September 30, 2001, was faxed to us on October 12, 2001.

ADMINISTRATIVE FINE:

As the timing of reports is completely within the control of the Permitee, the City of Everett Enforcement Response Plan requires the imposition of an Administrative Fine of $30/day if the report is less than 30 days late and does not show discharge violations. The Fine that will be on your next invoice is $360.

APPEAL RIGHTS

You have the right to appeal this enforcement action as provided in Sections 9.6 C and 9.9 of the City's Pretreatment Ordinance (2034-95 as amended by 2247-97.) This written appeal must be filed with the Director of Public Works within 10 calendar days of your receipt of this Notice and must be accompanied by full payment of the fine amount of $360. Upon receipt of a timely appeal the Director will set a hearing within 30 calendar days. You will be notified in writing of the date, time and place of this hearing.

Please direct any questions or comments concerning this Notice of Violation to Gene Bennett, Industrial Waste Inspector at (425) 257-8240.

Sincerely,

Tom Thetford

Tom Thetford, P.E.
Acting Public Works Director

RECEIVED
OCT 19 2001
DEPT OF ECOLOGY

cc:	Doug Knutson	WDOE	Jim Langus	Everett/ADM	
	Robert Waddle	Utilities	Chron. File	(1)	
	Industry File	(1)			

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PUBLIC WORKS

EVERETT

COPY

April 8, 2002

RECEIVED
APR 10 2002
DEPT OF ECOLOGY

CERTIFIED MAIL NO 7000 0520 0012 2545 6809

TC Systems
Mr. Charles Souder; General Manager
1028 W. Marine View Drive
Everett, WA 98201

NOTICE OF VIOLATION/ADMINISTRATIVE ORDER

Dear Mr. Souder:

This Notice is to inform you that the City has noted a violation of your Industrial Pretreatment Discharge Permit. On March 21, 2002 Don McKinney and Gene Bennett were compliance sampling at your facility. When they returned to the site at 1:15 PM to collect grab samples they noted that the sampler hose had been removed from the wastestream and that the wastestream had large amounts of floc and foam. The tampering with the sampling apparatus was a knowing violation of Section VII, L. of your discharge permit. Testing of the discharge showed that heavy metals were not present in amounts that exceeded the pretreatment limitations included in your permit.

ADMINISTRATIVE ORDER

There are two requirements that arise from this violation; training of the treatment plant operator(s) and ensuring the security of future sampling. Within 10 days of receipt of this Order you shall submit a plan to the Industrial Pretreatment office to train the treatment plant operator(s) in their responsibilities regarding compliance with the requirements of your discharge permit.

To ensure the security of future sampling you shall construct a new sampling point in such a manner that City personnel can secure it against tampering. At a minimum this will require a cage around the sampling weirbox that has adequate room for the City's flow monitoring and sampling apparatus. Please consult with Gene Bennett regarding location and cage size.

APPEAL RIGHTS

You have the right to appeal this enforcement action as provided in Sections 9.6 C and 9.9 of the City's Pretreatment Ordinance (2034-95 as amended by 2247-97.) This written appeal must be filed with the Director of Public Works within 10 calendar days of your receipt of this Notice

and must be accompanied by full payment of the fine amount of $360. Upon receipt of a timely appeal the Director will set a hearing within 30 calendar days. You will be notified in writing of the date, time and place of this hearing.

Please direct any questions or comments concerning this Notice of Violation to Gene Bennett, Industrial Waste Inspector at (425) 257-8240.

Sincerely,

Tom Thetford, P.E.
Utilities Director

cc: Doug Knutson WDOE
Robert Waddle Utilities
Chron. File (1)
Industry File (1)

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PUBLIC WORKS

EVERETT

COPY

September 30, 2002

CERTIFIED MAIL NO 7000 0520 0012 2545 7400

TC Systems
Mr. Charles Souder; General Manager
1028 W. Marine View Drive
Everett, WA 98201

NOTICE OF VIOLATION

Dear Mr. Souder:

This Notice is to inform you that the City has noted a violation of your Industrial Pretreatment Discharge Permit. You reported that on August 14, 2002 your pH dropped to 3.6 s.u., which is below your minimum limit of 5.0 s.u. The low pH lasted approximately 1.5 hours.

As you properly reported the violation and have already taken appropriate corrective action, no further action is required as a consequence of this Notice of Violation.

Please direct any questions or comments concerning this Notice of Violation to Gene Bennett, Industrial Waste Inspector at (425) 257-8240.

Sincerely,

Tom Thetford, P.E.
Utilities Director

cc: Doug Knutson WDOE
Michael D. Robinson EWPCF
Chron. File (1)
Industry File (1)

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PUBLIC WORKS
EVERETT

March 24, 2003

Mr. Charles Souder
General Manager
TC Systems
1028 West Marine View Drive
Everett, WA 98201

Subject: Pretreatment Changes

Dear Mr. Souder:

The City of Everett's Pretreatment Program is making a couple of changes that will affect you. This letter is to inform you of the changes and the one new requirement for your Self-Monitoring Reports.

To comply with recent guidance from an EPA pretreatment representative on their interpretation of 40 CFR 403.8 (f) (2) (vi) we will be requiring that a copy of the laboratory chain of custody and a copy of the laboratory report be included with all Self-Monitoring Reports. We will be considering this a compliance issue beginning with the Self-Monitoring Reports for the month of April, which are due in May. If the chain of custody and laboratory report are not included your Self-Monitoring Report will be considered incomplete.

The contract laboratory that the City uses for Oil & Grease testing has received certification to perform EPA Method 1664, Hexane Extractable Material. Shortly, all of the oil & grease testing that we send to them will be done by the new method. While the US EPA has stated that the new method is comparable to the Freon extraction method (Method 413), hexane does extract a slightly different variety of chemical species than Freon. You may see a slight change in the average concentrations of oil & grease in City compliance monitoring, depending upon the characteristics of your particular wastestream. Also, the data we will be getting will no longer be termed FOG and Polar FOG but will be HEM (Hexane Extractable Material) and SGT-HEM (Silica Gel Treated HEM). As the US EPA considers SGT-HEM to be equivalent to non-polar Oil & Grease,

the current local limit of 200 mg/L for non-polar fats, oil and grease in Section 2.4 of the Pretreatment Ordinance will be applied on the SGT-HEM value.

Method 1664 allows for laboratory compositing of samples, which was not part of Method 413. For those users where we take composite samples, this will allow us to have the HEM samples composited in the laboratory, reducing the cost that we recover from the users. For those users, the recovered cost for FOG vs. HEM sampling will decrease from $320/sampling event to $80/sampling event. For the users with batch discharges, there will be no reduction in cost recovery.

If you have any questions or concerns about these requirements, feel free to contact the Industrial Waste Inspector assigned to your business at 425/257-8240.

Sincerely,

Jeff Kerwin,
Pretreatment Program Manager

c:	Doug Knutson,	WA DOE
	Robert Waddle,	Everett Utilities
	Michael D. Robinson,	EWPCF
	Chron File	(1)
	IPT File	(1)

PUBLIC WORKS

EVERETT

COPY

October 22, 2003

RECEIVED
OCT 2 9 2003
DEPT OF ECOLOGY

Charles Souder,
General Manager
TC Systems
1032 West Marine View Drive
Everett, WA 98201-1557

CERTIFIED MAIL #7000 0520 0012 2549 0186

Dear Mr. Souder:

This letter is in response to your request for a reduction in the required monitoring frequency. After examining your compliance history and taking into account the current workload reduction the City is granting your request.

Effective immediately you are required to self-monitor all regulated pollutants other than flow, pH, flashpoint, cyanide and TTO on a quarterly basis with reports to be submitted in March, June, September and December. Flow and pH shall be recorded continuously with reports being submitted quarterly. Cyanide and flashpoint shall be monitored semiannually with all data being reported in June and December. You may continue to certify compliance with TTO standards as you are currently doing; these certification statements are due in June and December. If additional monitoring is performed using EPA approved methods, that data shall be submitted in the next required self-monitoring report.

Enclosed is a modified page 5 to be inserted in your Discharge Permit and a modified Self-Monitoring Report Form with the updated monitoring requirements. The SMR is available as an electronic file upon request.

If you have any questions please contact Gene Bennett at (425) 257-8240.

Sincerely,

Tom Thetford, P.E.
Utilities Director

Enc: Page 5, Permit #7708
SMR Form

cc: Doug Knutson WDOE
Michael D. Robinson EWPCF
Chron. File (1)
Industry File (1)

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II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Limitations and Monitoring Requirements

After issuance and lasting through midnight April 30, 2004, the Permittee is authorized to discharge treated industrial wastewater to the City of Everett sanitary sewerage system subject to the following limitations and monitoring requirements.

Sample location: Sample box on waste treatment outlet (Effluent weir)

REQUIREMENTS	EFFLUENT LIMITATIONS		MONITORING	
Parameter	Daily[a] Maximum	Monthly[b] Average	Minimum[c] Frequency	Sample Type
NONCONVENTIONALS				
Arsenic (T)	0.50 mg/L[k]	NA[d]	1/Quarter	Composite[g]
Cadmium (T)	0.11 mg/L[j]	0.07 mg/L[j]	1/Quarter	Composite
Chromium (T)	2.77 mg/L[j]	1.71 mg/L	1/Quarter	Composite
Copper (T)	3.00 mg/L[k]	2.07 mg/L	1/Quarter	Composite
Lead (T)	0.69 mg/L[k]	0.43 mg/L	1/Quarter	Composite
Mercury (T)	0.10 mg/L[k]	NA	1/Quarter	Composite
Nickel (T)2.83	mg/L[j] 2.38	mg/L 1/Quarter	Composite	
Silver (T) 0.43	mg/L[j] 0.24	mg/L 1/Quarter	Composite	
Zinc (T)	2.61 mg/L[k]	1.48 mg/L	1/Quarter	Composite
Cyanide(T)	0.65 mg/L[j]	0.65 mg/L	2/Year	Composite[h]
TTO[i]	2.13 mg/L	NA	2/Year	Grab[n]
Process Flow	No Limit		Daily	Metered
CONVENTIONALS				
pH	5.0 - 10.0[e,k]	NA	Daily	Recording pH Meter
Total FOG	NA[f]	NA	1/Quarter	Grab[o]
FOG/Nonpolar	200 mg/L[k]	NA	1/Quarter	Grab[o]
Closed Cup Flashpoint	140°F[l]		2/Year	Grab[p]

NAME TC Systems
ADDRESS 1032 W Marine View Drive
Everett, Washington 98201

SAMPLE SITE: Effluent Weir

DISCHARGE MONITORING REPORT (DMR)

PERMIT NUMBER 7708

MONITORING PERIOD

FROM Month Year TO Month Year

DATE AND TIME OF SAMPLE

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				DETECTION LEVEL	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Flow (Record monthly maximum and average here. Attach daily flow record per permit.)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	No Limit	No Limit	Gallons						Daily	Metered
pH (Record monthly high and low here. Attach pH record per Permit.)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT				5.0		10.0	s.u.		Daily	Metered
Arsenic (T)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					NA	0.50	mg/L		Quarterly	Composite
Cadmium (T)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					0.07	0.11	mg/L		Quarterly	Composite
Chromium (T)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					1.71	2.77	mg/L		Quarterly	Composite
Copper (T)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					2.07	3.00	mg/L		Quarterly	Composite
Lead (T)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					0.43	0.69	mg/L		Quarterly	Composite
Mercury (T)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					NA	0.10	mg/L		Quarterly	Composite
Nickel (T)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					2.38	2.83	mg/L		Quarterly	Composite

NAME/TITLE EXECUTIVE OFFICER

Charles Souder
General Manager

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW, THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE NUMBER

DATE: Month Day Year

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE MONITORING REPORT (DMR)

NAME TC Systems
ADDRESS 1032 W Marine View Drive
Everett, Washington 98201

SAMPLE SITE: Effluent Weir

PERMIT NUMBER	7708		
MONITORING PERIOD			
FROM Month	Year	TO Month	Year

DATE AND TIME OF SAMPLE

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				DETECTION LEVEL	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Silver (T)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					0.24	0.43	mg/L		Quarterly	Composite
Zinc (T)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					1.48	2.61	mg/L		Quarterly	Composite
Cyanide (T)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					0.65	0.65	mg/L		2/Year	Composite
TTO	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					NA	2.13	mg/L		2/Year	Grab
Total FOG	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					NA	NA	mg/L		Quarterly	Grab
Non Polar FOG	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT					NA	200	mg/L		Quarterly	Grab
Closed Cup Flashpoint	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT				140	NA		°F		2/Year	Grab
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE EXECUTIVE OFFICER		TELEPHONE	DATE
Charles Souder General Manager	I CERTIFY UNDER PENALTY OF LAW, THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE / NUMBER / Month / Day / Year

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PUBLIC WORKS
EVERETT

RECEIVED
MAR 0 8 2004
DEPT OF ECOLOGY

March 4, 2004

Mr. Doug Knutson
Pretreatment Engineer
NWRO Department of Ecology
3190 160th Ave SE
Bellevue, WA 98008-5452

RE: **Draft TC Systems Discharge Permit**

Dear Doug:

A copy of the DRAFT Industrial Waste Discharge Permit renewal for TC Systems is attached for your review. I understand that if the City does not receive any comments back from your office within thirty days we may go ahead and issue the Permit as submitted.

Please feel free to contact me at 425/257-8240 if you have any questions or comments.

Sincerely,

Gene D. Bennett
Industrial Waste Inspector

c: Chron File (1)
IPT File (1)

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Issuance Date: April 30, 2004
Expiration Date: April 29, 2009

CITY OF EVERETT
INDUSTRIAL WASTE DISCHARGE PERMIT

In compliance with the provisions of The Federal Clean Water Act,
The State of Washington Water Pollution Control Law, as amended
(Chapter 90.48 Revised Code of Washington) and
The City of Everett Industrial Pretreatment Ordinance No. 2034-95 (as amended)
An Industrial Waste Discharge Permit is Issued to:

TC Systems
1032 West Marine View Drive
Everett, WA 98201

DRAFT

Permit Number:	7708-04
Authorized Rep:	Charles Souder
Plant Location:	1032 West Marine View Drive, Everett, WA 98201
Receiving Water:	Everett Water Pollution Control Facility
Industry Type:	Metal Finisher SIC No. 3471 40 CFR 433.17 (PSNS)
Sample Site:	Sample box on waste treatment outlet (Effluent weir)

TC Systems is authorized to discharge pretreated industrial wastewater to the City of Everett sewer system in compliance with the City's Ordinance, any applicable provisions of Federal or State law or regulation, and in accordance with discharge point(s), effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit is granted in accordance with the permit application form filed on February 4, 2004, in the office of the City of Everett Department of Public Works, and in conformity with plans, specifications, and other data submitted to the City in support of the above data disclosure form.

Tom Thetford, P.E.
Utilities Director

Date

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II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Limitations and Monitoring Requirements

After issuance and lasting through midnight April 29, 2009, the Permittee is authorized to discharge treated industrial wastewater to the City of Everett sanitary sewerage system subject to the following limitations and monitoring requirements.

Sample location: Sample box on waste treatment outlet (Effluent weir) DRAFT

REQUIREMENTS	EFFLUENT LIMITATIONS				MONITORING	
Parameter	Daily[a] Maximum		Monthly[b] Average		Minimum[c] Frequency	Sample Type
NONCONVENTIONALS						
Arsenic (T)	0.50	mg/L[k]	NA[d]		1/Quarter	Composite[g]
Cadmium (T)	0.11	mg/L[k]	0.07	mg/L[j]	1/Quarter	Composite
Chromium (T)	2.77	mg/L[j]	1.71	mg/L	1/Quarter	Composite
Copper (T)	3.00	mg/L[k]	2.07	mg/L	1/Quarter	Composite
Lead (T)	0.69	mg/L[j]	0.43	mg/L	1/Quarter	Composite
Mercury (T)	0.10	mg/L[k]	NA		1/Quarter	Composite
Nickel (T)	2.83	mg/L[k]	2.38	mg/L	1/Quarter	Composite
Silver (T)	0.43	mg/L[j]	0.24	mg/L	1/Quarter	Composite
Zinc (T)	2.61	mg/L[j]	1.48	mg/L	1/Quarter	Composite
Cyanide(T)	0.65	mg/L[k]	0.65	mg/L	2/Year	Composite[h]
TTO[i]	2.13	mg/L[j]	NA		2/Year (Jun/Dec)	Grab[n]
Process Flow	No Limit				Daily	Metered
CONVENTIONALS						
pH	5.0 - 10.0[e,k]		NA		Daily	Recording pH Meter
Total FOG	NA[f]		NA		1/Quarter	Grab[o]
FOG/Nonpolar	200	mg/L[k]	NA		1/Quarter	Grab[o]
Closed Cup Flashpoint	140°F[l]				2/Year	Grab[p]

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

C. Footnotes (continued)

i. TTO (Total Toxic Organics) is the summation of all values greater than 0.01 mg/L for each of the Toxic Organics specified in 40 CFR 433.11(e), where reasonably expected to be present. Results are due in June and December and shall contain the calculated TTO value defined above. If the Permittee is in compliance with the TTO limit, it may develop a solvent management plan. See Sections III.B. and V.E.

j. These limits based upon limitations contained in 40 CFR 433.17, Pretreatment Standards for New Sources (PSNS).

k. These limits based upon local limitations contained in Everett City Ordinance No. 2034-95 (as amended).

l. Any wastewater with a closed cup flash point of less than 140°F or 60° Celsius using the test methods specified in 40 CFR 261.21 is prohibited from discharge. See Section VII.A.3.

m. If TSS (Total Suspended Solids) or BOD_5 (5-day Biochemical Oxygen Demand) exceeds 250 mg/L, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged TSS or BOD_5 interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge the Permittee for the cost of treatment and any additional maintenance costs incurred by the City.

n. A minimum of four grab samples must be taken during the sampling event for TTO's. Semi volatiles are then composited in the field for sample analysis, volatiles are composited in the laboratory when analyzed.

o. A minimum of four individual grab samples to be taken during the sampling event for FOG. The samples are to be taken and contained in separate containers and not to be composited or split.

p. A single separate grab sample must be taken and analyzed for Flash Point.

III. SUMMARY OF REPORTS (continued)

G. Self Monitoring Report

Frequency:	As required.
Due Date:	Commencing on date of Permit issuance. To be submitted no later than the last day of each month following self monitoring.
Content:	Data required in Section II.A or, if appropriate, a notification that no discharge has occurred. See Section IV.F.

H. Notification of Violation

Frequency:	As needed.
Due Date:	Notify the City within 24 hrs. of discovery and submit a written report within 5 days.
Content:	Reason for violation and corrective action taken. See Section IV.G.

I. Changes To Discharge

Frequency:	As needed.
Due Date:	90 days prior to changes in discharge that result in altered wastewater pollutants.
Content:	See Section IV.H.

J. Spill Report

Frequency:	As needed.
Due Date:	Notify City within 24 hrs of discovery and a written report within 5 days.
Content:	Characteristics of and reason for spill, and corrective action taken. See Section IV.I.

K. Upset Report

Frequency:	As needed
Due Date:	Notify the City within 24 hrs of discovery and submit a written report within 5 days.
Content:	Characteristics of and reason for noncompliance, and corrective action taken. See Section IV.J.

L. Engineering Report

Frequency:	As needed prior to installation or changes of the pretreatment equipment.
Due Date:	Approval required prior to installation.
Content:	Per WAC 173-240. See Section IV.K.

IV. REPORTING REQUIREMENTS (continued)

E. Operation and Maintenance Manual

As needed with installation or changes of pretreatment equipment. The Permittee shall submit an operation and maintenance manual and "as-built" drawings for the pretreatment system, to the City, for approval prior to completion of construction. This does not apply to equipment replaced with operationally identical parts during repair or maintenance activities. See WAC 173-240.

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F. Self Monitoring Reports

The Permittee shall monitor the parameters specified in Section II.A of this permit. All monitoring results obtained during the month shall be summarized and reported on a form approved by the City, to be submitted no later than the last day of the month following the completed reporting period. The Permittee shall include the daily pH highs and lows and daily flows. The report shall be signed and certified in accordance with the requirements of Section VII.B. and submitted to the following address:

City of Everett
Industrial Pretreatment Program
3200 Cedar St.
Everett, WA. 98201
Attn.: Gene Bennett

In the event that additional monitoring (other than that required in Section II.A) is conducted, the Permittee shall report all results in the report. Note that reporting TTO monitoring data is not required monthly. The December and June self monitoring reports shall contain TTO discharge monitoring data or certification statement.

G. Notification of Violation

If self monitoring data indicates that a discharge limit has been exceeded, the Permittee shall notify the City within 24 hours of becoming aware of the violation. The Permittee shall repeat the sampling and submit the analysis to the City within 30 days after becoming aware of the violation. Formal written notification discussing circumstances and remedies shall be submitted to the City within five (5) days of becoming aware of the violation or as required.

H. Notification of Changed Discharge

The Permittee shall notify the City 90 days prior to the introduction of new wastewater pollutants, changes in manufacturing operations or any substantial change in the volume or character of pollutants in their discharge, including the listed or characteristic hazardous wastes for which the Permittee has submitted initial notification under 40 CFR 403.12(p). The Permittee shall obtain approval from the City prior to any substantial change in their discharge.

IV. REPORTING REQUIREMENTS (continued)

J. Upset Reporting (continued)

c. the Permittee has submitted the following information to the City within 24 hours of becoming aware of the upset (if this information is provided verbally a written submission must be provided within five days):

(1) a description of the discharge and cause of noncompliance;
(2) the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to be corrected; and
(3) steps being taken and/or planned to reduce, eliminate and prevent recurrence of the noncompliance.

4. Burden of Proof

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset shall have the burden of proof.

5. Permittee Responsibility in Case of Upset

The Permittee shall control production or all discharges to the extent necessary to maintain compliance with applicable pretreatment standards upon reduction, loss or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost or fails.

K. Engineering Report

Prior to constructing or modifying any wastewater control facilities, detailed plans shall be submitted to the City and the Washington Department of Ecology for approval in accordance with WAC 173-240. Facilities shall be constructed and operated in accordance with the approved plans.

V. SPECIAL CONDITIONS/COMPLIANCE SCHEDULES (continued)

E. Solvent Management Plan/TTO

1. Requirements

If the Permittee demonstrates compliance with the TTO limits, it may elect to develop a solvent management plan in lieu of sampling for TTO's. The plan must be submitted to the City for review and approval. The plan must include:

a. a list of the Total Toxic Organic's used;
b. the method of disposal, i.e., reclamation, contract hauling or incineration; and
c. the procedures that are used to insure that TTO's do not routinely spill or leak into the wastewater.

2. TTO Status

Status reports are due each June and December as part of the Self Monitoring Report. List any changes to the last plan on file or state there have been no changes to the plan. The Permittee shall make the following certification statement:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation or pretreatment standard for TTO, I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the solvent management plan submitted to the City." See 40 CFR 403.12(e).

VI. OPERATIONS AND MAINTENANCE (continued)

B. Spill Prevention (continued)

4. In the event of a concentrated solution spill, such as a tank failure, the Permittee shall not discharge any spilled solution into the municipal sewer system unless laboratory test results indicate that the substance meets the conditions of this permit. The Permittee shall receive approval from the City prior to the discharge of any untreated spilled solution.

5. The Permittee shall use spill prevention practices to preclude the discharge of liquids, solids, or gasses, which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosions.

C. Required Process Changes

The Permittee shall make the process changes required and/or install whatever pretreatment equipment is necessary to meet the discharge conditions of this permit.

D. Shutoff Devices

1. The Permittee shall provide a functional shutoff device downstream of the pretreatment system.

2. Incoming rinse waters shall be turned off and shut off devices shall be closed at all times when the plant is not operating (i.e., nights, weekends and holidays), and in the event of an emergency spill. Rinse water to specific processes shall be turned off when process is not in operation.

E. Housekeeping

1. No plating or process bath filter shall be flushed over the processing floor, rinse tanks, or in any area where they may drain into the sanitary sewer system.

2. All filters shall be placed inside the processing tanks or over other containers to prevent any leaks to the sanitary sewer system.

3. The Permittee shall maintain and inspect all process solution and rinse tanks on a regular basis. Any leaks shall be repaired promptly.

F. Proper Disposal of Sludges and Spent Chemicals

1. The Permittee shall comply with the provisions of WAC 173-303 (Dangerous Waste Regulations).

VII. GENERAL CONDITIONS

DRAFT

A. Compliance

1. All discharges to the City sanitary sewer system shall be in accordance with the requirements and ordinances of the City.

2. All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

3. The Permittee shall comply with all the general prohibitive discharge standards in Ordinance 2034-95 (as amended) and is responsible to take whatever steps are necessary to ensure discharge requirements of this permit are met.

4. Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

5. All applicable requirements of 40 CFR 403 and 40 CFR 433 are incorporated into this permit by reference.

6. Sanitary sewage shall be disposed of in accordance with the requirements of the Snohomish County Health District.

B. Signatory Requirements

All reports and information submitted to the City shall be signed by an executive officer, or his/her designated official, testifying to the accuracy of the results and representativeness of the sample by making the following statement:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

C. Confidential Information

Except for data determined to be confidential under Section 7 of the City's Industrial Pretreatment Ordinance No. 2034-95 (as amended), all reports required by this permit shall be available for public inspection at the office of the City of Everett, Department of Public Works.

VII. GENERAL CONDITIONS (continued)

H. Bypass

The intentional bypass of wastes from all or any portion of a treatment works to the extent that permit effluent limitations cannot be met is prohibited unless the following four conditions are met:

1. Bypass is:

   (a) unavoidable to prevent loss of life, personal injury, or severe property damage; or
   (b) necessary to perform construction or maintenance related activities essential to meet the requirements of the Clean Water Act and authorized by administrative order;

2. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or temporary reduction or termination of production;

3. The Permittee submits notice of an anticipated bypass in accordance with Section IV.H. Where the Permittee knows or should have known in advance of the need for a bypass, this prior notification shall be submitted for approval to the City, if possible, at least 10 days before the date of bypass; and

4. This bypass is allowed under conditions determined to be necessary by the City to minimize any adverse effects. The public shall be notified and be given the opportunity to comment on bypass incidents of significant duration, to the extent feasible.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic impact caused by delays in production.

After consideration of the factors above and the adverse effects of the proposed bypass, the City may approve the request.

VII. GENERAL CONDITIONS (continued)

M. Enforcement Provision

The City may seek any or all of the remedies or penalties (including civil and judicial action) provided in City ordinances, including recovering costs incurred by the City, in response to the following:

1. Any violation by the Permittee of the provision of the Industrial Wastewater Discharge Permit;

2. Any violation by the Permittee of the provisions of the City Code; or

3. Any violation by the Permittee of any order of the Director with respect to provisions set forth in this Industrial Wastewater Discharge Permit or the City Code.

The range or severity of remedial actions taken against the Permittee may include, but not be limited to, notices of violation, compliance schedules, fines of up to $10,000 per day per violation, show cause hearings and/or cease discharge notices and be determined, in part, by the nature, duration and frequency of the violation (including significant non-compliance status).

N. Duty to Reapply

The City shall notify the Permittee 180 days prior to the expiration of the Permitee's permit. Within 90 days of the notification, the Permittee shall apply for reissuance of the permit on a form provided by the City.

O. New or Supplemental Application for Changes

The City may require the Permittee to submit a new application or supplement to the previous application where facility expansions, production increases, or process modifications will result in:

1. New or substantially increased discharges of pollutants;

2. A substantial increase in flow; or

3. Violation of the terms and conditions of the existing permit.

The Permittee shall notify the City 60 days prior to such changes. Formal written notification shall follow within 30 days. Submission of such an application does not relieve the discharger of the duty to comply with the existing permit until it is modified or reissued.

VII. GENERAL CONDITIONS (continued)

R. Modification or Revision of the Permit (continued)

6. A change in ownership or control of the source;

7. A change in City Ordinances or other just cause

8. Incorporating special conditions resulting from the issuance of a special order; or

9. Failure to pay pretreatment charges that causes the user's account to be sent to a collection agency.

Permit transfer fee shall be $500.00

Permit modification fee shall be $500.00. Permit modification fees will only be charged in a case where changes in the user's operation require the modification, or when the user requests a modification.

Any permit modification which results in new conditions in the permit will include a reasonable time schedule for compliance, if necessary. Permit modification, revocation and reissuance, or termination may be initiated by the City or requested by any interested person.

S. Analytical Requirements

All analyses performed to establish compliance and used in compliance reporting shall be performed by a laboratory accredited by the Quality Assurance Division of the Washington State Department of Ecology in accordance with WAC 173-50. Laboratories must be accredited for the analyses that they are performing.

PUBLIC WORKS
EVERETT

May 19, 2004

CERTIFIED MAIL NO 7000 0520 0012 2549 0254

TC Systems
Mr. Charles Souder; General Manager
1028 W. Marine View Drive
Everett, WA 98201

NOTICE OF VIOLATION/DISCHARGE PERMIT SUSPENSION

Dear Mr. Souder:

This Notice is to inform you that the City has noted a violation of your Industrial Pretreatment Discharge Permit. You have fallen in arrears on your Utility bills, including Pretreatment Fees, to the point where the balance of $4,382.78 is being sent to a collection agency. Failure to pay fees violates Section 14.1 of the Pretreatment Ordinance (Ordinance 2034-95, as amended) and Section VII. R. 9. of Discharge Permit #7708-04.

Effective at 11:59 PM, May 31, 2004 your authorization to discharge pretreated industrial wastewater to the City of Everett sewer system is suspended. This suspension will remain in effect until your delinquent charges are brought current, or a payment plan acceptable to the Utility Billing Department is agreed to. If a payment plan is agreed to and authorization is restored, any failure to comply with said payment plan would result in immediate suspension of authorization to discharge.

APPEAL RIGHTS

You have the right to appeal this enforcement action as provided in Sections 9.6 C and 9.9 of the City's Pretreatment Ordinance (2034-95 as amended.) This written appeal must be filed with the Director of Public Works within 10 calendar days of your receipt of this Notice. Upon receipt of a timely appeal the Director will set a hearing within 30 calendar days. You will be notified in writing of the date, time and place of this hearing.

Please direct any questions or comments concerning this Notice of Violation to Gene Bennett, Industrial Waste Inspector at (425) 257-8240.

Sincerely,

Tom Thetford, P.E.
Utilities Director

cc: Doug Knutson WDOE
Michael D. Robinson EWPCF
Chron. File (1)
Industry File (1)

S:\#Common\ipt\WORD\TC System\nov0405.doc

PUBLIC WORKS

EVERETT

RECEIVED

SEP 28 2004

DEPT OF ECOLOGY

COPY

September 21, 2004

CERTIFIED MAIL NO 7000 0520 0012 2549 028

TC Systems
Mr. Charles Souder; General Manager
1028 W. Marine View Drive
Everett, WA 98201

NOTICE OF VIOLATION

Dear Mr. Souder:

This Notice is to inform you that the City has noted a violation of your Industrial Pretreatment Discharge Permit. In your self-monitoring report for the second quarter of 2004 you indicated that on July 27 you discharged outside the limits for pH, both high and low. The pH levels were a low of 2.6 s.u. and a high of 10.6 s.u. You properly reported this violation via telephone with a written follow-up within the required time limit.

As you have identified the cause of the violations and have taken action to ensure that it does not happen again, no action is required in response to this Notice.

Please direct any questions or comments concerning this Notice of Violation to Gene Bennett, Industrial Waste Inspector at (425) 257-8240.

Sincerely,

Tom Thetford, P.E.
Utilities Director

cc: Doug Knutson WDOE
Chron. File (1)
Industry File (1)

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PUBLIC WORKS
EVERETT

COPY

October 26, 2004

RECEIVED
OCT 27 2004
DEPT OF ECOLOGY

CERTIFIED MAIL NO 7003 1010 0005 0240 3316

TC Systems
Mr. Charles Souder; General Manager
1028 W. Marine View Drive
Everett, WA 98201

NOTICE OF VIOLATION

Dear Mr. Souder:

This Notice is to inform you that the City has noted a violation of your Industrial Pretreatment Discharge Permit. You reported that on October 14, 2004 you discharged water from the anodize final rinse that had a pH of 3.3 s.u. The discharge was apparently due to a malfunctioning pH meter and your letter states that only a properly calibrated, laboratory pH meter will be used to screen tanks for discharge in the future. You properly reported this violation via telephone with a written follow-up within the required time limit.

As you have identified the cause of the violations and have taken action to ensure that it does not happen again, no action is required in response to this Notice.

Please direct any questions or comments concerning this Notice of Violation to Gene Bennett, Industrial Waste Inspector at (425) 257-8240.

Sincerely,

Tom Thetford, P.E.
Utilities Director

cc: Doug Knutson WDOE
Chron. File (1)
Industry File (1)

PUBLIC WORKS

EVERETT

COPY

December 27, 2004

CERTIFIED MAIL NO 7000 0520 0012 2549 0322

TC Systems
Mr. Charles Souder; General Manager
1028 W. Marine View Drive
Everett, WA 98201

NOTICE OF VIOLATION

Dear Mr. Souder:

This Notice is to inform you that the City has noted a violation of your Industrial Pretreatment Discharge Permit. In the sample that you took on September 30, 2004 the lead concentration was 0.852 mg/L, exceeding your permitted daily average limit of 0.69 mg/L; this level also exceeds the monthly average limit of 0.43 mg/L. You also failed to accurately report this violation as required in Section III. H. of your Discharge Permit.

Within 30 days of receipt of this Notice, you shall take the following actions; sample your discharge for lead once per week for four weeks and investigate for a source of lead in the discharge. Within 15 days of completing these actions you shall provide a letter summarizing the data and investigation.

Please direct any questions or comments concerning this Notice of Violation to Gene Bennett, Industrial Waste Inspector at (425) 257-8240.

Sincerely,

Tom Thetford, P.E.
Utilities Director

RECEIVED
DEC 27 2004
DEPT OF ECOLOGY

cc: Doug KnutsonWDOE
Chron. File (1)
Industry File (1)

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PUBLIC WORKS
EVERETT

COPY

RECEIVED
SEP 23 2005
DEPT OF ECOLOGY

September 20, 2005

CERTIFIED MAIL NO 7000 0520 0012 2549 0445

TC Systems
Mr. Charles Souder; General Manager
1028 W. Marine View Drive
Everett, WA 98201

NOTICE OF VIOLATION; ADMINISTRATIVE FINE

Dear Mr. Souder:

This Notice is to inform you that the City has noted a violation of your Industrial Pretreatment Discharge Permit. The required Self-Monitoring Report (SMR) for the second quarter of 2005 was faxed on August 5, 2005. Sections III. G. and IV. F. of your permit require that the SMR be submitted no later than the last day of the month following the reporting period. This report should have been submitted no later than July 31, 2005. Also, the lab report from Federal Testing Laboratories shows a Closed Cup Flashpoint of 136° F, lower than the minimum allowable level of 140° F. The self-monitoring report you filled out indicates a Closed Cup Flashpoint of 158° F, not in agreement with the laboratory report.

REQUIRED ACTION

Investigate the cause of the transcription error, institute corrective actions to ensure proper transcription, and report the findings to Gene Bennett, Industrial Waste Inspector, within 30 days of receipt of this Notice.

NOTICE OF ADMINISTRATIVE FINE

As the timing of report submittal is fully within the control of the User, our approved Enforcement Response Plan calls for a mandatory Administrative Fine of $60 per day if the report is 1-30 days late and shows a discharge violation. As your report was 5 days late, the calculated fine is $300.

APPEAL RIGHTS

You have the right to appeal this enforcement action as provided in Sections 9.6 C and 9.9 of the City's Pretreatment Ordinance (2034-95 as amended by 2247-97.) This written appeal

must be filed with the Director of Public Works within 10 calendar days of your receipt of this Notice and must be accompanied by full payment of the fine amount of $300. Upon receipt of a timely appeal the Director will set a hearing within 30 calendar days. You will be notified in writing of the date, time and place of this hearing.

Please direct any questions or comments concerning this Notice of Violation to Gene Bennett, Industrial Waste Inspector, at (425) 257-8240.

Sincerely,

Tom Thetford, P.E.
Utilities Director

cc: Doug Knutson WDOE
Chron. File (1)
Industry File (1)

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PUBLIC WORKS
EVERETT

RECEIVED
FEB 04 2008
DEPT OF ECOLOGY

January 31, 2008

CERTIFIED MAIL NO 7005 2570 0000 8480 8495

TC Systems
Mr. Charles Souder; General Manager
1028 W. Marine View Drive
Everett, WA 98201

NOTICE OF VIOLATION; ADMINISTRATIVE FINE; NOTICE OF SIGNIFICANT NON-COMPLIANCE; ADMINISTRATIVE ORDER

Dear Mr. Souder:

This Notice is to inform you that the City has noted a violation of your Industrial Pretreatment Discharge Permit. You failed to conduct required monitoring of your discharge or to submit required reports for the first three quarters of 2007. These failures are serious violations and put you into Significant Non-Compliance as defined in Everett Ordinance 2034-95 (as amended) and 40 CFR 403.

REQUIRED ACTION

Investigate the cause of the failures to monitor and report, institute corrective actions to ensure proper monitoring and reporting, and report the findings to Gene Bennett, Industrial Waste Inspector, within 30 days of receipt of this Notice.

NOTICE OF ADMINISTRATIVE FINE

The City has the authority to issue Administrative Fines that can range up to $10,000.00 per day for each violation. Once it has been determined that an industry is in Significant Non Compliance, the City's enforcement policy, as approved by the Washington State Department of Ecology, mandates a minimum fine of $1,000.00. As one of the main purposes of fines is to encourage compliance, and the City has determined that the minimum fine amount should have the desired effect, we are imposing an Administrative Fine of $1000 that will be included in your next Industrial Pretreatment billing.

NOTICE OF SIGNIFICANT NON-COMPLIANCE

The failure to monitor is a serious enough violation to place TC Systems into Significant Non-Compliance with pretreatment requirements. We are required to impose a minimum Administrative Fine as laid out above. The City also is also required to publish annually, in the largest daily newspaper published in the municipality, a list of the users that during the previous twelve months were in Significant Non-Compliance with applicable pretreatment standards and requirements.

ADMINISTRATIVE ORDER

Effective on receipt of this notice, your monitoring frequency will be increased to monthly as laid out in the attached Section II pages of your discharge permit. This frequency will be in effect for at least 12 months at which time you may request a reduction in monitoring frequency.

APPEAL RIGHTS

You have the right to appeal this enforcement action as provided in Sections 9.6 C and 9.9 of the City's Pretreatment Ordinance (2034-95 as amended.) This written appeal must be filed with the Director of Public Works within 10 calendar days of your receipt of this Notice and must be accompanied by full payment of the fine amount of $1000. Upon receipt of a timely appeal the Director will set a hearing within 30 calendar days. You will be notified in writing of the date, time and place of this hearing.

Please direct any questions or comments concerning this Notice to Gene Bennett, Industrial Waste Inspector, at (425) 257-8240.

Sincerely,

Tom Thetford, P.E.
Utilities Director

Enc: SNC Sampling.doc

c: [redacted] DOE
Industry File (1)
Chron. File (1)
OTL Chron File (1)

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II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Limitations and Monitoring Requirements

After issuance and lasting through midnight April 29, 2009, the Permittee is authorized to discharge treated industrial wastewater to the City of Everett sanitary sewerage system subject to the following limitations and monitoring requirements.

Sample location: Sample box on waste treatment outlet (Effluent weir)

REQUIREMENTS	EFFLUENT LIMITATIONS				MONITORING	
Parameter	Daily[a] Maximum		Monthly[b] Average		Minimum[c] Frequency	Sample Type
NONCONVENTIONALS						
Arsenic (T)	0.50	mg/L[k]	NA[d]		1/Month	Composite[g]
Cadmium (T)	0.11	mg/L[k]	0.07	mg/L[j]	1/Month	Composite
Chromium (T)	2.77	mg/L[j]	1.71	mg/L	1/Month	Composite
Copper (T)	3.00	mg/L[k]	2.07	mg/L	1/Month	Composite
Lead (T)	0.69	mg/L[j]	0.43	mg/L	1/Month	Composite
Mercury (T)	0.10	mg/L[k]	NA		1/Month	Composite
Nickel (T)	2.83	mg/L[k]	2.38	mg/L	1/Month	Composite
Silver (T)	0.43	mg/L[j]	0.24	mg/L	1/Month	Composite
Zinc (T)	2.61	mg/L[j]	1.48	mg/L	1/Month	Composite
Cyanide(T)	0.65	mg/L[k]	0.65	mg/L	2/Year	Composite[h]
TTO[i]	2.13	mg/L[j]	NA		2/Year (Jun/Dec)	Grab[n]
Process Flow	No Limit				Daily	Metered
CONVENTIONALS						
pH	5.0 - 10.0[e,k]		NA		Daily	Recording pH Meter
Total FOG	NA[f]		NA		1/Month	Grab[o]
FOG/Nonpolar	200	mg/L[k]	NA		1/Month	Grab[o]
Closed Cup Flashpoint	140°F[l]				2/Year	Grab[p]

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS (continued)

B. Sample Site/Dilution

All samples shall be collected at an approved sample site at the point of discharge from the treatment system, prior to mixing with any other dilution stream. The effluent limits apply to industrial wastewater prior to dilution with wastewaters other than those generated by the regulated process. The Permittee shall not use dilution to meet the limitations. See Sections VI.H. and VI.I.

C. Footnotes

a. The daily maximum is defined as the greatest allowable value for any calendar day.

b. The monthly average is defined as the arithmetic mean of samples collected during a calendar month.

If self monitoring is performed only once per month, then the daily maximum will become as stringent as the monthly average. The Permittee may choose to monitor more frequently than is required by this permit, with the understanding that all sampling and analytical data shall be submitted with the monthly report.

c. The City may reduce or increase the frequency of sampling based on compliance history, including analytical results.

d. NA means not applicable.

e. pH is measured in standard units. See Section V.C.

f. If Total FOG (fats, oils and grease) is greater than 50 mg/L, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged FOG interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge, the Permittee for the cost of treatment.

g. Composite shall mean a flow-proportioned sample taken during the hours of discharge using an automatic sampler approved by the City or at least four grab samples taken in accordance with City of Everett Sampling Guidelines and composited according to flow. See Section V.D.

h. Each of four (4) grab samples for cyanide shall be immediately preserved with NaOH to a pH of >12.0 then combined and refrigerated until analyzed. Analysis shall occur within fourteen (14) days of taking the sample.

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

C. Footnotes (continued)

i. TTO (Total Toxic Organics) is the summation of all values greater than 0.01 mg/L for each of the Toxic Organics specified in 40 CFR 433.11(e), where reasonably expected to be present. Results are due in June and December and shall contain the calculated TTO value defined above. If the Permittee is in compliance with the TTO limit, it may develop a solvent management plan. See Sections III.B. and V.E.

j. These limits based upon limitations contained in 40 CFR 433.17, Pretreatment Standards for New Sources (PSNS).

k. These limits based upon local limitations contained in Everett City Ordinance No. 2034-95 (as amended).

l. Any wastewater with a closed cup flash point of less than 140°F or 60° Celsius using the test methods specified in 40 CFR 261.21 is prohibited from discharge. See Section VII.A.3.

m. If TSS (Total Suspended Solids) or BOD_5 (5-day Biochemical Oxygen Demand) exceeds 250 mg/L, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged TSS or BOD_5 interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge the Permittee for the cost of treatment and any additional maintenance costs incurred by the City.

n. A minimum of four grab samples must be taken during the sampling event for TTO's. Semi volatiles are then composited in the field for sample analysis, volatiles are composited in the laboratory when analyzed.

o. A minimum of four individual grab samples to be taken during the sampling event for FOG. The samples are to be taken and contained in separate containers and not to be composited or split.

p. A single separate grab sample must be taken and analyzed for Flash Point.

PUBLIC WORKS
EVERETT

RECEIVED
JUN 17 2008
DEPT OF ECOLOGY

June 17, 2008

CERTIFIED MAIL NO 7005 2570 0000 8480 7825

TC Systems
Mr. Charles Souder: General Manager
1028 W. Marine View Drive
Everett, WA 98201

NOTICE OF VIOLATION; ADMINISTRATIVE FINE

Dear Mr. Souder:

This Notice is to inform you that the City has noted a violation of your Industrial Pretreatment Discharge Permit. Your required self-monitoring report for April, due May 31, 2008, was not submitted until June 11, 2008.

REQUIRED ACTION

Investigate the cause of the failure to report, institute corrective actions to ensure proper reporting, and report the findings to Gene Bennett, Industrial Waste Inspector, within 30 days of receipt of this Notice. The corrective actions shall include, at a minimum, a written policy/procedure assigning specific duties regarding preparation of self-monitoring reports to specific job titles in your organization.

When planning the actions you will be taking to come into compliance, keep in mind that Congress clearly stated the level of effort required to comply with regulations adopted under the Clean Water Act:

> "The Act requires industry to take extraordinary efforts if the vital and ambitious goals of the Congress are to be met. This means that business-as-usual is not enough. Prompt, vigorous, and in many cases, expensive pollution control measures must be initiated and completed as promptly as possible. In assessing the good faith of a discharger, the discharger is to be judged against these criteria." Legislative History of the Clean Water Act No. 95-14, Vol. 3 p. 463

NOTICE OF ADMINISTRATIVE FINE

The City has the authority to issue Administrative Fines that can range up to $10,000.00 per day for each violation. As the timing of self-monitoring reports is completely within the control of the User, the City's approved Enforcement Response Plan requires mandatory fines for late reports. As this is a repeat violation, the Administrative Fine for a report not showing a discharge limit violation is $60/day. Your report was 11 days late, so we are imposing an Administrative Fine of $660, which will be included in your next Industrial Pretreatment billing.

APPEAL RIGHTS

You have the right to appeal this enforcement action as provided in Sections 9.6 C and 9.9 of the City's Pretreatment Ordinance (3070-08.) This written appeal must be filed with the Director of Public Works within 10 calendar days of your receipt of this Notice and must be accompanied by full payment of the fine amount of $660. Upon receipt of a timely appeal the Director will set a hearing within 30 calendar days. You will be notified in writing of the date, time and place of this hearing.

Please direct any questions or comments concerning this Notice to Gene Bennett, Industrial Waste Inspector, at (425) 257-8240.

Sincerely,

Tom Thetford, P.E.
Utilities Director

c:	Doug Knutson	DOE
	Industry File	(1)
	Chron. File	(1)
	OTL Chron File	(1)

PUBLIC WORKS
EVERETT

October 30, 1998

Mr. Doug Knutson
Pretreatment Engineer
NWRO Department of Ecology
3190 - 160th Ave SE
Bellevue, WA 98008-5452

Dear Doug,

Please find enclosed a copy of the Engineering Report and Operations Manual for TC Systems Inc., Industrial Pretreatment Permit #7708. In reviewing these reports I find they meet the requirements set forth in the WAC 173-240. Please provide written documentation of your approval after your review of these reports.

If you have any questions regarding this matter, please contact me at (425) 257-8240.

Sincerely,

Arthur Britton
Industrial Waste Inspector

c:

Doug Knutson,	WDOE
Jim Langus	Admin
Dan Lowell	Utilities
Robert Waddle	EQD
Chron. File	(1)
Industry File	(1)

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Issuance Date: April 30, 2009
Expiration Date: April 29, 2014

CITY OF EVERETT
INDUSTRIAL WASTE DISCHARGE PERMIT

In compliance with the provisions of The Federal Clean Water Act,
The State of Washington Water Pollution Control Law, as amended
(Chapter 90.48 Revised Code of Washington) and
The City of Everett Industrial Pretreatment Ordinance No. 3070-08 (as amended)
An Industrial Waste Discharge Permit is Issued to:

TC Systems
1032 West Marine View Drive
Everett, WA 98201

Permit Number:	7708-09	
Authorized Rep:	Charles Souder	
Plant Location:	1032 West Marine View Drive, Everett, WA 98201	
Receiving Water:	Everett Water Pollution Control Facility	
Industry Type:	Metal Finisher	SIC No. 3471 40 CFR 433.17 (PSNS)
Sample Site:	Sample box on waste treatment outlet (Effluent weir)	

TC Systems is authorized to discharge pretreated industrial wastewater to the City of Everett sewer system in compliance with the City's Ordinance, any applicable provisions of Federal or State law or regulation, and in accordance with discharge point(s), effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit is granted in accordance with the permit application form filed in the office of the City of Everett Department of Public Works, and in conformity with plans, specifications, and other data submitted to the City in support of the above data disclosure form.

Tom Thetford, P.E. Date
Utilities Director

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I. EMERGENCY NOTIFICATION

A. In the event that a petroleum or other hazardous material spill reaches the sewer system, the Everett Water Pollution Control Facility shall be notified immediately.

Hours 7:30 AM to 4:00 PM Monday - Friday	(425) 257-8240
After Hours, Weekends and Holidays	(425) 257-8200

B. In the event that a spill of oil or hazardous material reaches the storm sewer or the waters of the State, Everett Surface Water Management and the Department of Ecology shall be notified immediately.

Everett Surface Water Management Hours 7:30 AM to 4:00 PM Monday - Friday	(425) 257-8800
After Hours, Weekends and Holidays	(425) 257-8200
Washington State Dept. of Ecology 24 hours	(425) 649-7000

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Limitations and Monitoring Requirements

After issuance and lasting through midnight April 29, 2014, the Permittee is authorized to discharge treated industrial wastewater to the City of Everett sanitary sewerage system subject to the following limitations and monitoring requirements.

Sample location: Sample box on waste treatment outlet (Effluent weir)

REQUIREMENTS	**EFFLUENT LIMITATIONS**				**MONITORING**	
Parameter	Daily[a] Maximum		Monthly[b] Average		Minimum[c] Frequency	Sample Type
NONCONVENTIONALS						
Arsenic (T)	0.50	mg/L[k]	NA[d]		1/Month	Composite[g]
Cadmium (T)	0.11	mg/L[k]	0.07	mg/L[j]	1/Month	Composite
Chromium (T)	2.77	mg/L[j]	1.71	mg/L	1/Month	Composite
Copper (T)	3.00	mg/L[k]	2.07	mg/L	1/Month	Composite
Lead (T)	0.69	mg/L[j]	0.43	mg/L	1/Month	Composite
Mercury (T)	0.10	mg/L[k]	NA		1/Month	Composite
Nickel (T)	2.83	mg/L[k]	2.38	mg/L	1/Month	Composite
Silver (T)	0.43	mg/L[j]	0.24	mg/L	1/Month	Composite
Zinc (T)	2.61	mg/L[j]	1.48	mg/L	1/Month	Composite
Cyanide(T)	0.65	mg/L[k]	0.65	mg/L	2/Year	Composite[h]
TTO[i]	2.13	mg/L[j]	NA		2/Year (Jun/Dec)	Grab[n]
Process Flow	No Limit				Daily	Metered
CONVENTIONALS						
pH	5.0 - 10.0[e,k]		NA		Daily	Recording pH Meter
Total FOG	NA[f]		NA		1/Month	Grab[o]
FOG/Nonpolar	200	mg/L[k]	NA		1/Month	Grab[o]
Closed Cup Flashpoint	140°F[l]				2/Year	Grab[p]

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS (continued)

B. Sample Site/Dilution

All samples shall be collected at an approved sample site at the point of discharge from the treatment system, prior to mixing with any other dilution stream. The effluent limits apply to industrial wastewater prior to dilution with wastewaters other than those generated by the regulated process. The Permittee shall not use dilution to meet the limitations. See Sections VI.H. and VI.I.

C. Footnotes

a. The daily maximum is defined as the greatest allowable value for any calendar day.

b. The monthly average is defined as the arithmetic mean of samples collected during a calendar month.

If self monitoring is performed only once per month, then the daily maximum will become as stringent as the monthly average. The Permittee may choose to monitor more frequently than is required by this permit, with the understanding that all sampling and analytical data shall be submitted with the monthly report.

c. The City may reduce or increase the frequency of sampling based on compliance history, including analytical results.

d. NA means not applicable.

e. pH is measured in standard units. See Section V.C.

f. If Total FOG (fats, oils and grease) is greater than 50 mg/L, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged FOG interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge, the Permittee for the cost of treatment.

g. Composite shall mean a flow-proportioned sample taken during the hours of discharge using an automatic sampler approved by the City or at least four grab samples taken in accordance with City of Everett Sampling Guidelines and composited according to flow. See Section V.D.

h. Each of four (4) grab samples for cyanide shall be immediately preserved with NaOH to a pH of >12.0 then combined and refrigerated until analyzed. Analysis shall occur within fourteen (14) days of taking the sample.

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

C. Footnotes (continued)

i. TTO (Total Toxic Organics) is the summation of all values greater than 0.01 mg/L for each of the Toxic Organics specified in 40 CFR 433.11(e), where reasonably expected to be present. Results are due in June and December and shall contain the calculated TTO value defined above. If the Permittee is in compliance with the TTO limit, it may develop a solvent management plan. See Sections III.B. and V.E.

j. These limits based upon limitations contained in 40 CFR 433.17, Pretreatment Standards for New Sources (PSNS).

k. These limits based upon local limitations contained in Everett City Ordinance No. 3070-08 (as amended).

l. Any wastewater with a closed cup flash point of less than 140°F or 60° Celsius using the test methods specified in 40 CFR 261.21 is prohibited from discharge. See Section VII.A.3.

m. If TSS (Total Suspended Solids) or BOD_5 (5-day Biochemical Oxygen Demand) exceeds 250 mg/L, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged TSS or BOD_5 interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge the Permittee for the cost of treatment and any additional maintenance costs incurred by the City.

n. A minimum of four grab samples must be taken during the sampling event for TTO's. Semi volatiles are then composited in the field for sample analysis, volatiles are composited in the laboratory when analyzed.

o. A minimum of four individual grab samples to be taken during the sampling event for FOG. The samples are to be taken and contained in separate containers and not to be composited or split.

p. A single separate grab sample must be taken and analyzed for Flash Point.

III. SUMMARY OF REPORTS

The Permittee shall submit reports to the City according to the schedule listed below.

A. Reserved

B. Accidental Spill Prevention Plan

Frequency:	Once, update as needed.
Due Date:	Submit 90 days following the commencement of discharge or permit issuance whichever is later. Implement within 6 months.
Content:	Strategy for spill prevention, including training and emergency response. See Section IV.B.

C. Solvent Management Plan (SMP)

Frequency:	Once, update as needed.
Content:	Regulated Toxic Organics on site, disposal method and spill prevention procedures. See Section V.E.

D. Notification of Hazardous Waste Discharges

Frequency:	Once only for each hazardous waste (HW)
Due Date:	Within 90 day of permit issuance
Content:	HW name, EPA HW Number & type of discharge. See Section IV.C.

E. Notification of New Hazardous Waste Discharges

Frequency:	Whenever new regulations designate wastes or constituents as hazardous.
Due Date:	Within 90 days of the effective date of the published regulation.
Content:	See Section IV.D. and 40 CFR 403.12(p).

F. O & M Manual

Frequency:	As needed prior to installation or changes of pretreatment equipment.
Due Date:	Approval required prior to completion of construction.
Content:	O & M instructions and pretreatment system "as-builts". See Section IV.E. and WAC 173-240.

III. SUMMARY OF REPORTS (continued)

G. Self Monitoring Report

Frequency:	As required.
Due Date:	Commencing on date of Permit issuance. To be submitted no later than the last day of each month following self monitoring.
Content:	Data required in Section II.A or, if appropriate, a notification that no discharge has occurred. See Section IV.F.

H. Notification of Violation

Frequency:	As needed.
Due Date:	Notify the City within 24 hrs. of discovery and submit a written report within 5 days.
Content:	Reason for violation and corrective action taken. See Section IV.G.

I. Changes To Discharge

Frequency:	As needed.
Due Date:	90 days prior to changes in discharge that result in altered wastewater pollutants.
Content:	See Section IV.H.

J. Spill Report

Frequency:	As needed.
Due Date:	Notify City within 24 hrs of discovery and a written report within 5 days.
Content:	Characteristics of and reason for spill, and corrective action taken. See Section IV.I.

K. Upset Report

Frequency:	As needed
Due Date:	Notify the City within 24 hrs of discovery and submit a written report within 5 days.
Content:	Characteristics of and reason for noncompliance, and corrective action taken. See Section IV.J.

L. Engineering Report

Frequency:	As needed prior to installation or changes of the pretreatment equipment.
Due Date:	Approval required prior to installation.
Content:	Per WAC 173-240. See Section IV.K.

IV. REPORTING REQUIREMENTS

The Permittee shall monitor their discharge to the sanitary sewer as specified in Section II of this permit. The Permittee shall also submit to the City of Everett, Department of Public Works, all of the reports according to the following schedule and content requirements.

A. Reserved

B. Accidental Spill Prevention Plan

The Permittee shall continue with implementation of their approved Accidental Spill Prevention Plan to eliminate or minimize the accidental slug discharge of pollutants into the sewer system which could have an effect on the City's wastewater treatment plant, biosolids and biosolids utilization plans, or cause the City to violate it's National Pollutant Discharge Elimination System (NPDES) permit.

C. Notification of Hazardous Waste Discharges

The Permittee shall notify the City, the EPA RCRA Director and State Dangerous Wastes Director, in writing within 90 days of the effective date of this permit, of any discharge of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other).

Notification need be submitted only once for each hazardous waste discharged. The notification requirement in this section does not apply to pollutants already reported under the self-monitoring requirements in Section II of this permit. The Permittee shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated.

D. Notification of New Hazardous Wastes

Whenever the EPA publishes new RCRA rules identifying additional hazardous wastes or new characteristics of hazardous wastes, the Permittee must notify the City, EPA RCRA Director and State Hazardous Wastes Director if any of these wastes are discharged to the City's treatment system. The notification must occur within 90 days of the effective date of the published regulation.

IV. REPORTING REQUIREMENTS (continued)

E. Operation and Maintenance Manual

As needed with installation or changes of pretreatment equipment. The Permittee shall submit an operation and maintenance manual and "as-built" drawings for the pretreatment system, to the City, for approval prior to completion of construction. This does not apply to equipment replaced with operationally identical parts during repair or maintenance activities. See WAC 173-240.

F. Self Monitoring Reports

The Permittee shall monitor the parameters specified in Section II.A of this permit. All monitoring results obtained during the month shall be summarized and reported on a form approved by the City, to be submitted no later than the last day of the month following the completed reporting period. The Permittee shall include the daily pH highs and lows and daily flows. The report shall be signed and certified in accordance with the requirements of Section VII.B. and submitted to the following address:

City of Everett
Industrial Pretreatment Program
3200 Cedar St.
Everett, WA. 98201

In the event that additional monitoring (other than that required in Section II.A) is conducted, the Permittee shall report all results in the report. Note that reporting TTO monitoring data is not required monthly. The December and June self monitoring reports shall contain TTO discharge monitoring data or certification statement.

G. Notification of Violation

If self monitoring data indicates that a discharge limit has been exceeded, the Permittee shall notify the City within 24 hours of becoming aware of the violation. The Permittee shall repeat the sampling and submit the analysis to the City within 30 days after becoming aware of the violation. Formal written notification discussing circumstances and remedies shall be submitted to the City within five (5) days of becoming aware of the violation or as required.

H. Notification of Changed Discharge

The Permittee shall notify the City 90 days prior to the introduction of new wastewater pollutants, changes in manufacturing operations or any substantial change in the volume or character of pollutants in their discharge, including the listed or characteristic hazardous wastes for which the Permittee has submitted initial notification under 40 CFR 403.12(p). The Permittee shall obtain approval from the City prior to any substantial change in their discharge.

IV. REPORTING REQUIREMENTS (continued)

I. Spill/Slug Discharge Reports

The Permittee shall notify the City immediately, either in person or by phone (see Section I Emergency Notification), upon accidental spill or slug discharge to the sanitary sewer. Formal written notification discussing circumstances and remedies shall be submitted to the City within five (5) days of the occurrence or as required.

J. Upset Reporting

1. Definition

   For the purpose of this section, "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with applicable pretreatment standards because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance or careless or improper operation.

2. Effect of an Upset

   An upset shall constitute an affirmative defense to action brought for noncompliance with applicable pretreatment standards if the requirements of paragraph 3 are met.

3. Conditions Necessary for a Demonstration of Upset:

   A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs or other relevant evidence that:

   a. An upset occurred and the permittee can identify the specific cause(s) of the upset;

   b. The facility was, at the time, being operated in a prudent and workman-like manner and in compliance with applicable operation and maintenance procedures; and

IV. REPORTING REQUIREMENTS (continued)

J. Upset Reporting (continued)

c. The Permittee has submitted the following information to the City within 24 hours of becoming aware of the upset (if this information is provided verbally a written submission must be provided within five days):

(1) A description of the discharge and cause of noncompliance;
(2) The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to be corrected; and
(3) Steps being taken and/or planned to reduce, eliminate and prevent recurrence of the noncompliance.

4. Burden of Proof

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset shall have the burden of proof.

5. Permittee Responsibility in Case of Upset

The Permittee shall control production or all discharges to the extent necessary to maintain compliance with applicable pretreatment standards upon reduction, loss or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost or fails.

K. Engineering Report

Prior to constructing or modifying any wastewater control facilities, detailed plans shall be submitted to the City and the Washington Department of Ecology for approval in accordance with WAC 173-240. Facilities shall be constructed and operated in accordance with the approved plans.

V. SPECIAL CONDITIONS/COMPLIANCE SCHEDULES

A. Batch Discharge Log

The Permittee shall maintain a log containing the date and time of discharge, contents, and the volume and number of batches discharged per day.

B. Effluent Meter

The Permittee shall install and maintain a continuous flow meter, monitoring flow through the discharge/sample site.

C. Recording pH Meter

The Permittee shall maintain a continuously recording pH meter with an audible alarm system and shall report the high and low pH values for each day the Permittee discharges. Any discharge without a pH record shall be considered a violation of this permit.

The Permittee shall maintain a log that includes a record of calibration for the instrument used with: the date, time, name of the person doing the calibration, and the method used. The chart shall be dated and initialed on working days.

D. Autosampler

The Permittee shall use an autosampler approved by the City to flow proportion composite samples of the treatment discharge to be monitored per Section II.A of this permit. Samples may be flow proportioned by hand if use of an autosampler is impractical. See Sections II.B and VI.I concerning the sample site.

V. SPECIAL CONDITIONS/COMPLIANCE SCHEDULES (continued)

E. Solvent Management Plan/TTO

1. Requirements

If the Permittee demonstrates compliance with the TTO limits, it may elect to develop a solvent management plan in lieu of sampling for TTOs. The plan must be submitted to the City for review and approval. The plan must include:

a. A list of the Total Toxic Organics used;
b. The method of disposal, i.e., reclamation, contract hauling or incineration; and
c. The procedures that are used to insure that TTOs do not routinely spill or leak into the wastewater.

2. TTO Status

Status reports are due each June and December as part of the Self Monitoring Report. List any changes to the last plan on file or state there have been no changes to the plan. The Permittee shall make the following certification statement:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation or pretreatment standard for TTO, I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the solvent management plan submitted to the City." See 40 CFR 403.12(e).

VI. OPERATIONS AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures. The Permittee shall keep and maintain an operation and maintenance log on all facilities and systems of treatment and control.

Water conservation practices shall be used to reduce total effluent volume. Waste prevention practices shall be used to reduce or eliminate contaminant loading to the POTW. These include, but are not limited to, minimizing excessive dragout of cleaning, stripping, etching, and plating solutions used during metal finishing operations. In addition, the following practices shall be used:

A. Chemical Storage

Chemicals shall be stored in a manner which will prevent the entry into the municipal sewer system or the waters of the State. All liquid chemicals will be stored in a no outlet area, approved by the City.

1. Oils, waste oils, solvents, chemicals, and waste chemical solution shall be stored in a curbed and covered area with an impervious surface to prevent the contamination of the ground, ground water, storm sewer system or the sanitary sewer system. Empty barrels shall be adequately stoppered and stored in a designated area.

2. Incompatible chemicals shall be segregated.

3. Adequate dikes, sumps, and valves shall be installed to intercept and contain overflows and spills from all chemical cleaning and metal finishing tanks. Wastes from the sumps shall be collected for disposal in a manner that will prevent its entry into waters of the state or, be adequately treated and analyzed before discharge to the POTW.

B. Spill Prevention

1. All plating process tanks shall be stored in bermed, roofed, secured, no outlet areas.

2. Process tanks shall be located in an area capable of containing 110 percent of the volume of the largest tank. This area can have no outlet to the sewer system or the waters of the State.

3. All process tanks and chemical storage containers shall be adequately labeled. Emergency phone numbers shall be posted.

VI. OPERATIONS AND MAINTENANCE (continued)

B. Spill Prevention (continued)

4. In the event of a concentrated solution spill, such as a tank failure, the Permittee shall not discharge any spilled solution into the municipal sewer system unless laboratory test results indicate that the substance meets the conditions of this permit. The Permittee shall receive approval from the City prior to the discharge of any untreated spilled solution.

5. The Permittee shall use spill prevention practices to preclude the discharge of liquids, solids, or gasses, which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosions.

C. Required Process Changes

The Permittee shall make the process changes required and/or install whatever pretreatment equipment is necessary to meet the discharge conditions of this permit.

D. Shutoff Devices

1. The Permittee shall provide a functional shutoff device downstream of the pretreatment system.

2. Incoming rinse waters shall be turned off and shut off devices shall be closed at all times when the plant is not operating (i.e., nights, weekends and holidays), and in the event of an emergency spill. Rinse water to specific processes shall be turned off when process is not in operation.

E. Housekeeping

1. No plating or process bath filter shall be flushed over the processing floor, rinse tanks, or in any area where they may drain into the sanitary sewer system.

2. All filters shall be placed inside the processing tanks or over other containers to prevent any leaks to the sanitary sewer system.

3. The Permittee shall maintain and inspect all process solution and rinse tanks on a regular basis. Any leaks shall be repaired promptly.

F. Proper Disposal of Sludges and Spent Chemicals

1. The Permittee shall comply with the provisions of WAC 173-303 (Dangerous Waste Regulations).

VI. OPERATIONS AND MAINTENANCE (continued)

F. Proper Disposal of Sludges and Spent Chemicals (continued)

2. If it has not already done so and if applicable, the Permittee shall obtain a Hazardous Waste generator number from the US EPA or the WDOE for proper disposal of wastes.

3. Spent plating, etching and other concentrated process solutions shall not be disposed of to the sanitary sewer system.

4. The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into waters of the State.

5. For all liquid wastes and sludges removed by waste disposal companies, the Permittee shall record and retain for a period of three (3) years:

   a. Chemical name and trade name of the substance;
   b. Volume of each substance;
   c. Date that it was hauled away;
   d. Identity of the waste hauler and, if applicable, an EPA registration number; and
   e. Receipt from the waste hauler.

G. Flowmeter

The Permittee shall maintain a water or sewer meter which provides accurate information regarding industrial process wastewater discharges to the sewer. The Permittee shall maintain a daily log of flowmeter readings and daily flows.

H. Dilution

Excess water usage shall be minimized to prevent dilution. No Industrial User shall increase the use of potable or process water, or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

I. Sample Site

An approved sampling site shall be maintained downstream of the final pretreatment system and upstream of any mixing with unregulated flows for the monitoring of the industrial discharge. City personnel shall have access to the sample site during normal business hours and in the event of an emergency. All process wastewater shall flow through the sampling point. All process wastewater shall be hard-piped to the sampling point. All wastewater monitoring samples shall be collected from the approved sample site. Sample sites are to remain unobstructed at all times to allow access. All sample sites shall have a suitable, City approved, primary device installed for the purpose of monitoring industrial discharge flow to the Sanitary Sewer.

VII. GENERAL CONDITIONS

A. Compliance

1. All discharges to the City sanitary sewer system shall be in accordance with the requirements and ordinances of the City.

2. All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

3. The Permittee shall comply with all the general prohibitive discharge standards in Ordinance 3070-08 (as amended) and is responsible to take whatever steps are necessary to ensure discharge requirements of this permit are met.

4. Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

5. All applicable requirements of 40 CFR 403 and 40 CFR 433 are incorporated into this permit by reference.

6. Sanitary sewage shall be disposed of in accordance with the requirements of the Snohomish County Health District.

B. Signatory Requirements

All reports and information submitted to the City shall be signed by an executive officer, or his/her designated official, testifying to the accuracy of the results and representativeness of the sample by making the following statement:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

C. Confidential Information

Except for data determined to be confidential under Section 7 of the City's Industrial Pretreatment Ordinance No. 3070-08 (as amended), all reports required by this permit shall be available for public inspection at the office of the City of Everett, Department of Public Works.

VII. GENERAL CONDITIONS (continued)

D. Records Retention

The Permittee shall retain for a minimum of three years all records of monitoring activities and results, including all reports of recordings from continuous monitoring instrumentation. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the City.

E. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information:

1. The date, exact place, person collecting the sample, and time of sampling;
2. The date the analyses were performed;
3. Who performed the analyses;
4. The analytical techniques or methods used;
5. The results of all the analyses;
6. Provide certification of representativeness.

F. Representative Sampling

Samples and measurements taken to meet the requirements of this condition shall be representative of the volume and the nature of the monitored discharge.

G. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless approved otherwise in writing by the City, conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants, contained in 40 CFR 136. Where 40 CFR 136 does not include a sampling or analytical technique for the pollutant in question, sampling and analyses shall be performed in accordance with any other sampling and analysis procedure approved by the EPA Administrator.

VII. GENERAL CONDITIONS (continued)

H. Bypass

The intentional bypass of wastes from all or any portion of a treatment works to the extent that permit effluent limitations cannot be met is prohibited unless the following four conditions are met:

1. Bypass is:

   (a) Unavoidable to prevent loss of life, personal injury, or severe property damage; or
   (b) Necessary to perform construction or maintenance related activities essential to meet the requirements of the Clean Water Act and authorized by administrative order.

2. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or temporary reduction or termination of production.

3. The Permittee submits notice of an anticipated bypass in accordance with Section IV.H. Where the Permittee knows or should have known in advance of the need for a bypass, this prior notification shall be submitted for approval to the City, if possible, at least 10 days before the date of bypass.

4. This bypass is allowed under conditions determined to be necessary by the City to minimize any adverse effects. The public shall be notified and be given the opportunity to comment on bypass incidents of significant duration, to the extent feasible.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic impact caused by delays in production.

After consideration of the factors above and the adverse effects of the proposed bypass, the City may approve the request.

VII. GENERAL CONDITIONS (continued)

I. Right of Entry

The Permittee shall allow an authorized representative of the City, upon the presentation of credentials and such other documents as may be required by law and at reasonable hours:

1. To enter the Permittee's premises where a discharge source is located or where any records must be kept under the terms and conditions of the permit;

2. To have access to and copy any records that must be kept under terms and conditions of the permit;

3. To inspect any monitoring equipment or method required in the permit;

4. To inspect any collection, treatment, pollution management, or discharge facilities required under the permit;

5. To sample any discharge of pollutants (sampling sites are to remain unobstructed at all times); and

6. Where a user has security measures in force which require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the Director will be permitted to enter without delay for the purposes of performing specific responsibilities. Unreasonable delays in allowing the Director access to the user's premises shall be a violation of this Permit.

J. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Property rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringement of Federal, State, or Local regulations.

L. Falsifying Information or Tampering With Monitoring Equipment

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under the criminal laws of the City, as well as being subject to civil penalties and relief.

VII. GENERAL CONDITIONS (continued)

M. Enforcement Provision

The City may seek any or all of the remedies or penalties (including civil and judicial action) provided in City ordinances, including recovering costs incurred by the City, in response to the following:

1. Any violation by the Permittee of the provision of the Industrial Wastewater Discharge Permit;

2. Any violation by the Permittee of the provisions of the City Code; or

3. Any violation by the Permittee of any order of the Director with respect to provisions set forth in this Industrial Wastewater Discharge Permit or the City Code.

The range or severity of remedial actions taken against the Permittee may include, but not be limited to, notices of violation, compliance schedules, fines of up to $10,000 per day per violation, show cause hearings and/or cease discharge notices and be determined, in part, by the nature, duration and frequency of the violation (including significant non-compliance status).

N. Duty to Reapply

The City shall notify the Permittee 180 days prior to the expiration of the Permitee's permit. Within 90 days of the notification, the Permittee shall apply for reissuance of the permit on a form provided by the City.

O. New or Supplemental Application for Changes

The City may require the Permittee to submit a new application or supplement to the previous application where facility expansions, production increases, or process modifications will result in:

1. New or substantially increased discharges of pollutants;

2. A substantial increase in flow; or

3. Violation of the terms and conditions of the existing permit.

The Permittee shall notify the City 60 days prior to such changes. Formal written notification shall follow within 30 days. Submission of such an application does not relieve the discharger of the duty to comply with the existing permit until it is modified or reissued.

VII. GENERAL CONDITIONS (continued)

P. Limitation of Permit Transfer

Permits are issued to a specific User for a specific operation and are not assignable to another User or transferable to any other location without the prior written approval of the City. Sale of a User shall obligate the purchaser to seek prior written approval from the City for continued discharge to the POTW.

Q. Emergency Suspension of Service and Revocation of Permit

The City may, without advance notice, order the suspension of the wastewater treatment service and revoke the Industrial Waste Discharge Permit from a Permittee when it appears to the City that an actual or threatened discharge:

1. Presents or threatens an imminent or substantial danger to the health or welfare of persons or substantial danger to the environment; or

2. threatens to interfere with the operation of the POTW, or violate any pretreatment limits.

Any Permittee notified of the City's suspension order shall immediately cease all discharges. In the event of failure of the Permittee to comply with a suspension order, the City may immediately take all necessary steps to halt or prevent any further discharge by such Permittee into the POTW. See Ordinance 3070-08 (as amended), section 9.7.

R. Modification, Revision or Termination of the Permit

This permit may be modified, terminated, or revoked during its term for:

1. Failure of the Permittee to disclose fully all relevant facts or the misrepresentation of any relevant facts by the Permittee in the application or during the permit issuance process;

2. A violation of any term or condition of the permit;

3. EPA promulgating a new federal pretreatment standard;

4. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit;

5. Information indicating that the permitted discharge poses a threat to human health or welfare;

VII. GENERAL CONDITIONS (continued)

R. Modification or Revision of the Permit (continued)

6. A change in ownership or control of the source;

7. A change in City Ordinances or other just cause;

8. Incorporating special conditions resulting from the issuance of a special order; or

9. Failure to pay pretreatment charges that causes the user's account to be sent to a collection agency.

Permit transfer fee shall be $500.00

Permit modification fee shall be $500.00. Permit modification fees will only be charged in a case where changes in the user's operation require the modification, or when the user requests a modification.

Any permit modification which results in new conditions in the permit will include a reasonable time schedule for compliance, if necessary. Permit modification, revocation and reissuance, or termination may be initiated by the City or requested by any interested person.

S. Analytical Requirements

All analyses performed to establish compliance and used in compliance reporting shall be performed by a laboratory accredited by the Quality Assurance Division of the Washington State Department of Ecology in accordance with WAC 173-50. Laboratories must be accredited for the analyses that they are performing.

TC SYSTEMS (AKA TRICOATINGS)
Everett, SNO. CITY OF EVERETT
PERMIT #7708 92-98

FI C

13/96

City of everett

April 6, 1990

CERTIFIED MAIL

Mr. Fred Owen
General Manager
Tri-Coatings
1028 W.Marine View Drive
Everett, WA 98201

RECEIVED
APR 10 1990
DEPT. OF ECOLOGY

NOTICE OF VIOLATION

Dear Mr. Owen,

This letter serves as a Notice of Violation (NOV) of pretreatment regulations. Specifically, discharges from Tri-Coatings have exceeded effluent limitations for pH and Heavy Metals. While much progress has been made by Tri-Coatings in the areas of waste reduction and reducing water consumption, a more determined effort needs to be made to achieve compliance with the discharge limitations in your permit.

Self monitoring reports indicate a possible reduction of pollutants from some processes due to compliance efforts. The LNC Rinse, and the Etch Rinse have not had a metals violation since October, 1989, however, the L-25 Rinse continues to exceed discharge standards for Chromium. Even though progress is being made on the compliance schedule Tri-Coatings submitted in September 1989, the continuous violations of the pretreatment regulations cannot be excused.

It also appears as though Tri-Coatings may be in need of some sort of an automated pH neutralization system. This system should be equipped with a recording pH meter as required in your permit. Also, a sampling point downstream of the pretreatment system should be equipped with an effluent flow meter and a flow paced composite sampler. Although this may be a considerable capital expense, a single sample location may reduce the amount of sampling and analyses that is currently being performed, and should provide some savings.

You are required to respond, in writing or in person, within seven (7) days of receipt of this notice. Your response should include an acknowledgment of this letter and a statement specifying your intent and the actions you will be taking to reach compliance. Also, please include a narrative detailing what progress has been made concerning the items on the September Compliance Schedule.

Within 30 days of your receipt of this letter you must submit an updated compliance schedule. This schedule should include the equipment indentified on your previous compliance schedule which has not yet been installed as well as the new dates of installation. Any new pretreatment equipment needed to achieve compliance should also be included, also with installation dates. The pH, flow monitoring, and sampling equipment, and subsequent installation dates should also be addressed. The Final Compliance date for this schedule shall be no later than October 1st, 1990. If you have any questions or concerns, please contact Mr. Jeff Kerwin, at 259-8819.

While the City is required to publish a notice of this violation, and any ensuing actions in a local newspaper, let me point out that Tri-Coatings has always been very cooperative with the City's Pretreatment personnel. In addition to your commitment to the environment, Tri-Coatings has shown a great deal of imagination, and energy in its efforts to achieve a "zero discharge" from its processing lines. The City looks forward to working with Tri-Coatings to achieve compliance and maintaining the good working relationship we currently enjoy.

Sincerely,

Clair Olivers, P.E.,
Assistant Public Works Director

cc: Doug Knutson, WDOE NWRO
Jerry Vrooman, City of Everett
Dan Lowell, City of Everett
Chron. File (2)
IPT File (1)

CO/jk

PUBLIC WORKS
EVERETT

March 6, 1991

Mr. Fred Owen
General Manager
Tri Coatings
1028 W.Marine View Dr. Bldg. B
Everett, WA 98201

Compliance Inspection

Dear Fred,

Thank you for the opportunity to meet with you last Thursday, and for your help and cooperation during the Compliance Inspection.

I would like to complement you and your staff on the progress that has been made towards reducing the amount of effluent and pollutant loading to the Everett sewer system. It appears that the additional rinse tanks and the evaporator systems that have been installed have been effective in eliminating the discharge from the Nitric acid passivation line as well as the Alodine (L25) and the Chromic acid anodizing lines.

Please proceed with your plans to plumb the Aluminum Deoxidizing (LNC) rinse water tank to your pretreatment system. The LNC line is the only process for which you are currently experiencing violations of pretreatment standards. While your completion date of May 1st, 1991 seems reasonable, I would recommend expediting that process to prevent any further violations. Please be advised that you may continue to have violations for March and April without adequate treatment. Perhaps some interim measures can be implemented to prevent any further violations.

I have enclosed the Accidental Spill Prevention Plan (ASPP) information as I had promised. You may find some of the information will be useful in reestablishing your hazardous waste storage area.

No violations of pretreatment regulations were detected during the inspection, and on the whole, I found the shop area to be clean, well maintained, and operating in a professional manner.

I look forward to working with you in the future. If you have any questions or concerns regarding the inspection or other matters, please feel free to call me at 259-8819.

Sincerely,

Jeff Kerwin

Pretreatment Program Manager

Enclosure: Accidental Spill Prevention Plan

cc: [redacted], Department of Ecology
Jerry Vrooman, Administration
Dan Lowell, Utilities

PUBLIC WORKS
EVERETT

RECEIVED
MAR 25 1991
DEPT. OF ECOLOGY

March 19, 1991

Certified Mail No. P 666 435 567

Mr. Fred Owen
General Manager
Tri Coatings
1028 W. Marine View Dr.
Everett, WA 98201

Notice of Violation

Dear Mr. Owen,

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of effluent discharge standards.

Tri Coatings has exceeded City of Everett pretreatment standards for Zinc and Copper. The magnitude and duration of these violations has placed Tri Coatings in Significant Noncompliance (SNC).

The City is required by law to publish at least once a year, the names of those industries in Significant Noncompliance. In this publication, the City must summarize the violation, any enforcement action taken by the city, and any steps taken by the industry to return to compliance. For your information, a definition of Significant Noncompliance is provided in Attachment "1".

I understand that Tri Coatings has already installed most of the pretreatment equipment needed to achieve compliance, and that the LNC rinse tank is the only process for which you are still experiencing violations. While the May 1st date for connecting the LNC rinse tank to the waste treatment system may concur with your compliance schedule, I would encourage you to accelerate your plans to prevent any further violations.

In the interim, it is still your responsibility to take whatever steps are necessary to prevent these violations. These steps include decreasing production or ceasing production altogether if necessary.

When all effluent is routed thru the waste treatment system, the sample point will need to be moved to a point downstream of the treatment system. A flow paced composite sampler must be installed to comply with changes in Federal Regulations. A recording pH meter should also be installed.

If you have any questions or concerns about this Notice or the additional requirements, please call Jeff Kerwin at 259-8819.

Sincerely,

Clair Olivers, P.E.
Assistant Director of Public Works

Attachments: SNC Definitions

c: [redacted] [redacted]
Jerry Vrooman, Everett/ADM
Dan Lowell, Everett/UTIL
Ken Housden, Everett/PUB WKS
Chron File (1)
IPT File (1)

G:\DATA\IBFP\WORD\TRICOAT\NOV91MAR.DOC

Attachment "1"

Significant Noncompliance (SNC). An industrial user is in Significant Noncompliance if its violation meets one or more of the following criteria:

1. Chronic violations of wastewater discharge limits, defined here as those in which sixty-six percent (66%) or more of all the measurements taken during a six month period exceeded (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter.

2. Technical Review Criteria (TRC) violations, defined herein as those in which thirty three percent (33%) or more of all the measurements for each pollutant parameter taken during a six month period equal to or exceeded the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, fats, oil, and grease (FOG) and 1.2 for all other pollutants except pH).

3. Any other violation of a pretreatment effluent limit (daily maximum or longer termed average) that the City determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of city personnel or the general public);

4. Any discharge of a pollutant that has caused imminent endangerment to human health, welfare, or to the environment or has resulted in the city's exercise of its emergency authority to halt or prevent such a discharge;

5. Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance;

6. Failure to provide within 30 days after the due date, required reports, 90-day compliance reports, periodic self monitoring reports, and reports on compliance with compliance schedules;

7. Failure to accurately report noncompliance;

8. Any other violation or group of violations which the City determines will significantly affect the operation or implementation of the local pretreatment program.

PUBLIC WORKS
EVERETT

RECEIVED
FEB 5 1992
DEPT. OF ECOLOGY

January 29, 1992

CERTIFIED MAIL NO. P-691-863-363

Mr. Fred Owen
General Manager
Tri-Coatings
1028 W. Marine View Dr.
Everett, WA 98201

PERMIT MODIFICATION

Dear Mr. Owen:

This letter is to notify you of a modification to your Discharge Permit that corrects a typographical error and lowers your limit on the discharge of copper.

Section G8 of Discharge Permit No. 7708 allows the City to initiate a modification to your Permit. It also allows for a public hearing if you desire.

On page 1 of Permit No. 7708 Tri-Coatings' Industry Type is listed a "Metal Finisher...40 CFR 433 (PSES)..." This should read "Metal Finisher...40 CFR 433 (PSNS)..."

Section S1 of your Permit includes a total copper limit of 3.38 mg/L, maximum for any one day. Though this is correct for the Federal Categorical Standard, the Local Limit is 3.0 mg/L, daily maximum discharge concentration (Ordinance No. 1308-86, Section 4G.)

Effective on receipt of this notification, the total copper limit for Tri-Coatings is 3.0 mg/L Maximum for any 1 day; the Monthly average shall not exceed 2.07 mg/L.

If you have any questions please contact Gene Bennett at 259-8874.

Sincerely,

Ken Housden
Director of Public Works
City of Everett

c: [redacted] WDOE
Jerry Vrooman, Everett/ADM
Dan Lowell, Everett/UTIL
Clair Olivers Everett/PW
Chron File (1)
IPT File (1)

G:\DATA\IPT\WORD\TRICOAT\MOD92_1.DOC

PUBLIC WORKS
EVERETT

April 13, 1992

CERTIFIED MAIL NO. P-691-863-370

Mr. Fred Owen
General Manager
TC Systems
1028 W. Marine View Dr.
Everett, WA 98201

PERMIT MODIFICATION

Dear Mr. Owen:

This letter is to notify you of a modification to your discharge permit that changes your required frequency of cyanide testing and increases your maximum allowed flow. These changes are being made in accordance with your verbal request on March 29, 1992.

Section G8 of Discharge Permit No. 7708 allows the City to initiate a modification to your permit. It also allows for a public hearing if you desire.

Section S1 of your permit requires testing for cyanide once each month and sets a limit of 5000 GPD flow. As you have never used cyanide based processes this testing is not required on a monthly basis. 40 CFR 403.12(e) requires sampling and reporting for all regulated pollutants at least twice per year. Because of your increased production and innovative pretreatment process changes, the flow limit of 5000 GPD is too restrictive.

Effective on receipt of this notification, the requirement for cyanide testing shall be two (2) times per year with results to be included in the Self Monitoring Reports due in June and December. The allowable process flow limit is hereby increased to 10,000 GPD, maximum in any one day.

If you have any questions please contact Gene Bennett at 259-8874.

Sincerely,

Ken Housden
Director of Public Works, City of Everett

c: [redacted] WDOE
Jerry Vrooman, Everett/ADM
Dan Lowell, Everett/UTIL
Clair Olivers Everett/PW
Chron File (1)
IPT File (1)

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PUBLIC WORKS

EVERETT

COPY

July 30, 1992

CERTIFIED MAIL NO. P-988-183-484

Mr. Fred Owen
General Manager, TC Systems
1028 W. Marine View Dr.
Everett, WA 98201

NOTICE OF VIOLATION

Dear Mr. Owen:

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of your discharge permit.

TC Systems has exceeded Federal Categorical pretreatment standards for Zinc in the sample you took on June 15, 1992. The Zinc concentration was 3.70 mg/L and the discharge limit is 2.61 mg/L.

The cover letter for your monthly report indicates that you have taken steps to identify the problem and modified your procedures to prevent its recurrence. This is considered an adequate response to the violation.

If you have any questions or concerns about this Notice please call Gene Bennett at 259-8874.

Sincerely,

Clair Olivers, P.E.
Assistant Director of Public Works

c:	Doug Knutson,	WDOE
	Jerry Vrooman,	Everett/ADM
	Dan Lowell,	Everett/UTIL
	Ken Housden,	Everett/PUB WKS
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	IPT File	(1)

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PUBLIC WORKS
EVERETT

February 23, 1994

COPY

CERTIFIED MAIL P-050-918-120

Fred Owen
General Manager
TC Systems
1028 W Marine View Dr, Bldg B
Everett, WA 98201

PERMIT EXTENSION

Dear Mr. Owen:

This letter is to extend the term of Discharge Permit #7708 for your plant to April 29, 1994. We are doing this to allow time for a more complete review of your reapplication.

If you have any questions please call Gene Bennett at 259-8874.

Sincerely,

Clair Olivers, P.E.
Director of Public Works

c: [redacted], Ecology
Dan Lowell, Utilities
Jim Langus, Admin
IPT File
Chron File

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PUBLIC WORKS
EVERETT

March 10, 1994

COPY

Fred Owen
General Manager
TC Systems
1028 W Marine View Dr, Bldg B
Everett, WA 98201

DRAFT Permit for TC Systems

Dear Mr. Owen:

Attached is a copy of the DRAFT Industrial Waste Discharge Permit for the TC Systems. Please review the draft and feel free to make comments. I have forwarded a copy to Doug Knutson of Ecology who has 30 days to review the Draft and make comments. After that time period, taking into consideration all comments, the City can issue an Industrial Waste Discharge Permit.

If you have any questions, please call me at 259-8874.

Sincerely,

Gene D. Bennett
Industrial Waste Inspector

enc: DRAFT Permit #7708-94

c:

[redacted]	[redacted]
Dan Lowell	Utl
Jim Langus	Adm
Mike Weight	Adm
Chron File	(1)
IPT File	(1)

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PUBLIC WORKS
EVERETT

RECEIVED
MAR 15 1994
DEPT. OF ECOLOGY

March 10, 1994

Mr. Doug Knutson
Pretreatment Engineer
NWRO Department of Ecology
3190 160th Ave SE
Bellevue, WA 98008-5452

RE: **Draft TC Systems Permit**

Dear Doug,

A copy of the DRAFT Industrial Waste Discharge Permit for TC Systems is attached for your review. I understand that if the City does not receive any comments back from your office within thirty days we may go ahead and issue the Permit as submitted.

Please feel free to contact me at 259-8874 if you have any questions or comments.

Sincerely,

Gene D. Bennett
Industrial Waste Inspector

enc: DRAFT Permit #7708-94

c:

	Dan Lowell	Utl
	Jim Langus	Adm
	Mike Weight	Adm
	Chron File	(1)
	IPT File	(1)

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INDUSTRIAL WASTE DISCHARGE PERMIT FACT SHEET
CITY OF EVERETT

DATE:	March 10, 1994
IS PERMIT NEW, REVISION, OR RENEWAL?	Renewal
COMPANY NAME:	TC Systems (formerly Tri Coatings)
NATURE OF BUSINESS:	Metal Finishing
TYPE OF WASTES GENERATED:	Metals, FOG, CN^-, TTO
PERMITTED INDUSTRIAL VOLUME:	
CATEGORY OF DISCHARGE LIMITS:	40 CFR 433.17 (NSPS)
COMBINED WASTE STREAM FORMULA USED?	No
DATE APPLICATION RECEIVED:	February 15, 1994
PERMIT DRAFTED BY:	Gene D Bennett
COMMENTS RECEIVED FROM:	none

SPECIAL COMMENTS:

DRAFT

Issuance Date: 29 Apr, 1994
Expiration Date: 29 Apr, 1999

CITY OF EVERETT
INDUSTRIAL WASTE DISCHARGE PERMIT

In compliance with the provisions of The Federal Clean Water Act,
The State of Washington Water Pollution Control Law, as amended
(Chapter 90.48 Revised Code of Washington) and
The City of Everett Industrial Pretreatment Ordinance (No. 1308-86)
An Industrial Waste Discharge Permit is Issued to:

TC Systems
1132 10th Street
Everett, WA 98201

Plant Location:	1028 10th St, Everett, WA 98201
Receiving Water:	Everett Wastewater Treatment Plant
Industry Type:	Metal Finisher SIC No. 3471 40 CFR 433.17 (PSNS)
Discharge Location:	1028 10th St
Sample Site:	Sample box on waste treatment outlet

TC Systems is authorized to discharge pretreated industrial wastewater to the City of Everett sewer system in compliance with the City's Ordinance, any applicable provisions of Federal or State law or regulation, and in accordance with discharge point(s), effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit is granted in accordance with the permit application form filed on 15 February, 1994, in the office of the City of Everett Department of Public Works, and in conformity with plans, specifications, and other data submitted to the City in support of the above data disclosure form.

Clair Olivers, P.E.
Director of Public Works

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I. EMERGENCY NOTIFICATION

A. In the event that a petroleum or other hazardous material spill reaches the sewer system, the Everett Wastewater Treatment Plant shall be notified immediately.

Hours 7:30 AM to 4:00 PM Monday - Friday	259-8874
After Hours, Weekends and Holidays	259-8821

B. In the event that a spill of oil or hazardous material reaches the storm sewer or the waters of the State, the Department of Ecology shall be notified immediately.

Washington State Dept. of Ecology 24 hours	649-7000
Everett Surface Water Management 24 hours	259-8821

C. As applicable in WAC 173-303-640(d)

National Response Center	1 (800) 424-8802

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

After issuance and lasting through midnight April 29, 1999, the Permittee is authorized to discharge treated industrial wastewater to the City of Everett sanitary sewerage system subject to the following limitations and monitoring requirements.

DRAFT

Parameter	EFFLUENT LIMITATIONS Daily[a] Maximum		Monthly[b] Average		MONITORING REQUIREMENTS Minimum[c] Frequency	Sample Type
Heavy Metals						
Arsenic (T)	0.5	mg/l[k]	NA		1/Month	Composite[g]
Cadmium (T)	0.69	mg/l[j]	0.26	mg/l	1/Month	Composite
Chromium (T)	2.77	mg/l[j]	1.71	mg/l	1/Month	Composite
Copper (T)	3.00	mg/l[k]	2.07	mg/l[j]	1/Month	Composite
Lead (T)	0.69	mg/l[j]	0.43	mg/l	1/Month	Composite
Mercury (T)	0.1	mg/l[k]	NA		1/Month	Composite
Nickel (T)	3.98	mg/l[j]	2.38	mg/l	1/Month	Composite
Silver (T)	0.43	mg/l[j]	0.24	mg/l	1/Month	Composite
Zinc (T)	2.61	mg/l[j]	1.48	mg/l	1/Month	Composite
Process Flow	No Limit		NA[d]		Daily	Metered
Conventionals						
pH	5.0 - 10.0[e,k]		NA		Continuous	Recording Meter
FOG/Polar	200	ppm[f,k]	NA		1/Month	Composite
FOG/Nonpolar	100	ppm[f,k]	NA		1/Month	Composite
Cyanide(T)	1.20	mg/l[j]	0.65	mg/l	1/Month	Composite[h]
TTO[i]	2.13	mg/l[j]	NA		2/Year (Jun/Dec)	Composite

A. Sample Site/Dilution

All samples shall be collected at an approved sample site at the point of discharge from the treatment system, prior to mixing with any other dilution stream. The effluent limits apply to industrial wastewater prior to dilution with wastewaters other than those generated by the regulated process. The Permittee shall not use dilution to meet the limitations. See Sections VI.H. and VI.I.

II. **EFFLUENT LIMITS AND MONITORING REQUIREMENTS** (continued)

B. **Footnotes**

a. The **daily maximum** is defined as the greatest allowable value for any calendar day.

b. The **monthly average** is defined as the arithmetic mean of samples collected during a calendar month.

If **self monitoring** is performed **only once per month**, then the daily maximum will become as stringent as the monthly average. The Permittee may choose to monitor more frequently than is required by this permit, with the understanding that all sampling and analytical data shall be submitted with the monthly report.

c. The City may reduce or increase the **frequency** of sampling based on compliance history, including analytical results.

d. **NA** means not applicable.

e. The **pH** shall not be less than 5.0 nor greater than 10.0. pH is in standard units. See Section V.C.

f. If the **Total FOG** (fats, oils and grease) is greater than the 50 mg/l, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged FOG interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge, the Permittee for the cost of treatment.

g. **Composite** shall mean a **flow-proportioned sample** taken during the hours of discharge using an automatic sampler approved by the City or at least four grab samples during the same time period, but no more frequently than every 2 hours, and composited according to flow. See Section V.D.

h. **Cyanide** each of the 4 grab samples shall be immediately preserved with NaOH to a pH >12.0 then combined and refrigerated until analyzed. Analysis shall occur within fourteen (14) days of taking the sample.

i. **TTO (Total Toxic Organics)** is the summation of all values greater than 0.01 mg/L for each of the Toxic Organics specified in 40 CFR 433.11(e). Results are due in June and December and shall contain the calculated TTO value defined above. If the Permittee is in compliance with the TTO limit, it may develop a **solvent management plan**. See Sections III.C., III.H. and V.E.

j. These limits based upon limitations contained in 40 CFR 433.15, Pretreatment Standards for Existing Sources (PSES).

k. These limits based upon local limitations contained in Section 4G of Everett City Ordinance No. 1308-86.

l. Any wastewater with a closed cup flash point of less than 140°F or 60° Celsius using the test methods specified in 40 CFR 261.21 is prohibited from discharge. See Section VII.A.3.

III. SUMMARY OF REPORTS

The Permittee shall submit reports to the City according to the schedule listed below.

A. Accidental Spill Prevention Plan

Frequency:	Update as needed.
Due Date:	When needed.
Content:	Strategy for spill prevention, including training and emergency response. See Section IV.B.

B. Solvent Management Plan (SMP)

Frequency:	Upgraded twice per year.
Due Date:	Within 90 days of permit issuance.
Content:	TTO's on site, disposal method and spill prevention procedures. See Section V.E.

C. Notification of Hazardous Waste Discharges

Frequency:	Once only per each hazardous waste (HW)
Due Date:	Within 90 day of permit issuance
Content:	HW name, EPA HW Number & type of discharge. See Section IV.C.

D. Notification of New Hazardous Waste Discharges

Frequency:	Whenever new regulations designate wastes or constituents as hazardous.
Due Date:	Within 90 days of the effective date of the published regulation.
Content:	Same as Section IV.D. See 40 CFR 403.12(p).

E. O & M Manual

Frequency:	As needed with installation or upgrade of pretreatment equipment.
Due Date:	180 days following the commencement of discharge.
Content:	O & M instructions and pretreatment system "as-builts". See Section IV.E.

F. Self Monitoring Report

Frequency:	Monthly
Due Date:	Commencing on date of Permit issuance. To be filed no later than the last day of each month following self monitoring.
Content:	Data required in Section I or, if appropriate, a notification that no discharge has occurred. See Sections II.B.b and IV.F.

III. **SUMMARY OF REPORTS** (continued)

DRAFT

G. TTO Status (as part of Self Monitoring Report)

Frequency:	Twice per year
Due Date:	June and December of each year.
Content:	List any changes to Solvent Management Plan as part of the Self Monitoring Report. See Section V.E.2.

H. Notification of Violation

Frequency:	As needed
Due Date:	Within 24 hours; written within 5 days.
Content:	Reason for violation and corrective action taken. See Section IV.G.

I. Changes To Discharge

Frequency:	As needed
Due Date:	90 days prior to the introduction of new wastewater pollutants.
Content:	City approval needed. See Section IV.H.

J. Spill Report

Frequency:	As needed
Due Date:	Within 24 hours; written within 5 days.
Content:	Characteristics of and reason for spill, and corrective action taken. See Section IV.I.

K. Upset Report

Frequency:	As needed
Due Date:	Within 24 hours; written within 5 days.
Content:	Characteristics of and reason for noncompliance, and corrective action taken. See Section IV.J.

L. Engineering Report

Frequency:	As needed prior to installation or upgrade of pretreatment equipment.
Due Date:	N/A
Content:	Per WAC 173-240. Approval required prior to installation. See Section IV.K.

DRAFT

IV. REPORTING REQUIREMENTS

The Permittee shall monitor their discharge to the sanitary sewer as specified in Section II of this permit. The Permittee shall also submit to the City of Everett, Department of Public Works, all of the reports according to the following schedule and content requirements.

A. Accidental Spill Prevention Plan

The Permittee shall continue with implementation of their approved **Accidental Spill Prevention Plan** to eliminate or minimize the accidental slug discharge of pollutants into the sewer system which could have an effect on the City's wastewater treatment plant, sludge and sludge utilization plans, or cause the City to violate it's National Pollutant Discharge Elimination System (NPDES) permit.

B. Notification of Hazardous Waste Discharges

The Permittee shall notify the City, the EPA RCRA Director and State Dangerous Wastes Director, in writing within 90 days of the effective date of this permit, of any discharge of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other).

Notification need be submitted only once for each hazardous waste discharged. The notification requirement in this section does not apply to pollutants already reported under the self-monitoring requirements in Section II of this permit. The Permittee shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated.

C. Notification of New Hazardous Wastes

Whenever the EPA publishes new RCRA rules identifying additional hazardous wastes or new characteristics of hazardous wastes, the Permittee must notify the City, EPA RCRA Director and State Hazardous Wastes Director if any of these wastes are discharged to the City's treatment system. The notification must occur within 90 days of the effective date of the published regulation.

D. Operation and Maintenance Manual

As needed with installation or upgrade of pretreatment equipment, the Permittee shall submit within 180 days of the installation or up grade, an operation and maintenance manual and "as-built" drawings for the pretreatment system. This does not apply to equipment replaced with operationally identical parts during repair or maintenance activities.

DRAFT

IV. REPORTING REQUIREMENTS (continued)

E. Monthly Self Monitoring Reports

The Permittee shall monitor the parameters specified in Section II of this permit. All monitoring results obtained during the month shall be summarized and reported on a form approved by the City, to be submitted no later than the **last day of the month** following the completed reporting period. The Permittee shall include the daily pH highs and lows and TTO, if appropriate. The report shall be signed and certified in accordance with the requirements of Section VII.B. and submitted to the following address:

City of Everett
Department of Public Works
Industrial Pretreatment Program
3200 Cedar St.
Everett, WA. 98201
Attn: Gene D. Bennett

In the event that **additional monitoring** (other than that required in Section II) is conducted, the Permittee shall report **all** results in the monthly report. Note that **reporting TTO** monitoring data is not required monthly. The December and June self monitoring reports shall contain TTO discharge monitoring data.

F. Notification of Violation

If self monitoring data indicates that a discharge limit has been exceeded, the Permittee shall notify the City within 24 hours of becoming aware of the violation. The Permittee shall repeat the sampling and submit the analysis to the City within 30 days after becoming aware of the violation. Formal written notification discussing circumstances and remedies shall be submitted to the City within five (5) days of becoming aware of the violation or as required.

G. Notification of Changed Discharge

The Permittee shall notify the City 90 days prior to the introduction of new wastewater pollutants, changes in manufacturing operations or any substantial change in the volume or character of pollutants in their discharge, including the listed or characteristic hazardous wastes for which the Permittee has submitted initial notification under 40 CFR 403.12(p). The Permittee shall obtain approval from the City prior to any substantial change in their discharge.

IV. **REPORTING REQUIREMENTS** (continued)

DRAFT

H. Spill/Slug Discharge Reports

The Permittee shall notify the City immediately, either in person or by phone (see Section I Emergency Notification), upon accidental spill or slug discharge to the sanitary sewer. Formal written notification discussing circumstances and remedies shall be submitted to the City within five (5) days of the occurrence or as required.

I. Upset Reporting

1. Definition

For the purpose of this section, "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with applicable pretreatment standards because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance or careless or improper operation.

2. Effect of an Upset

An upset shall constitute an affirmative defense to action brought for noncompliance with applicable pretreatment standards if the requirements of paragraph 3 are met.

3. Conditions Necessary for a Demonstration of Upset:

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs or other relevant evidence, that:

a. an upset occurred and the permittees can identify the specific cause(s) of the upset;

b. the facility was, at the time, being operated in a prudent and workman-like manner and in compliance with applicable operation and maintenance procedures; and

c. the Permittee has submitted the following information to the City within 24 hours of becoming aware of the upset (if this information is provided orally, a written submission must be provided within five days).

(1) A description of the discharge and cause of noncompliance.

(2) The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue.

(3) Steps being taken and/or planned to reduce, eliminate and prevent recurrence of the noncompliance.

IV. **REPORTING REQUIREMENTS** (continued)

I. **Upset Reporting** (continued)

DRAFT

4. Burden of Proof

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset shall have the burden of proof.

5. Permittee Responsibility in Case of Upset

The Permittee shall control production or all discharges to the extent necessary to maintain compliance with applicable pretreatment standards upon reduction, loss or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost or fails.

J. **Engineering Report**

Prior to **constructing or modifying** any wastewater control facilities, detailed plans shall be submitted to the City and the Washington Department of Ecology for approval in accordance with WAC 173-240. Facilities shall be constructed and operated in accordance with the approved plans.

V. SPECIAL CONDITIONS/COMPLIANCE SCHEDULES

DRAFT

A. Batch Discharge Log

The Permittee shall maintain a log containing the date time of discharge, contents (rinse tank or process tank) and the volume and number of batches discharged.

B. Effluent Meter

The Permittee shall install and maintain a continuous flow meter monitoring flow thru the discharge/sample site. (The flow meter may not be required if accurate records of batches and influent volumes are maintained by the Permittee; provided that composite samples are flow proportioned.)

C. Recording pH Meter

The Permittee shall maintain a continuous recording pH meter with an audible alarm system and shall report the high and low pH values for each day the Permittee discharges. Any discharge without a pH record shall be considered a violation of this permit.

The Permittee shall maintain a log that shall include a record of calibration for the instrument used, the date, time, the name of the person doing the calibration and the method used. The chart shall be dated and initialed on working days.

D. Autosampler

The Permittee shall use an autosampler approved by the City to flow proportion composite samples of the treatment discharge to be monitored as per Section II of this permit. Samples may be flow proportioned by hand if use of an autosampler is impractical and for constituents such as CN^- and FOG that degrade rapidly or adhere to sampler tubing. See Sections II.A and VI.I concerning the sample site.

E. Solvent Management Plan/TTO

1. Requirements

If the Permittee demonstrates compliance with the TTO limits (as demonstrated in the Permittee's Final Compliance Report) and elects to develop a solvent management plan in lieu of sampling for TTO, the plan must be developed within 90 days from the effective date of this permit. The plan must be submitted to the City for review and approval. The plan must include:

a. A list of the Total Toxic Organic's used.
b. The method of disposal, i.e., reclamation, contract hauling or incineration.
c. The procedures that are used to insure that TTO's do not routinely spill or leak into the wastewater.

DRAFT

V. **SPECIAL CONDITIONS/COMPLIANCE SCHEDULES** (continued)

E. **Solvent Management Plan/TTO** (continued)

2. TTO Status

Status reports are due each December and June as part of the Self Monitoring Report. List any changes to the last plan on file or state there have been no changes to the plan. The Permittee shall make the following certification statement:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation or pretreatment standard for TTO, I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the solvent management plan submitted to the City." See 40 CFR 403.12(e).

DRAFT

VI. OPERATIONS AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures. The Permittee shall keep and maintain **an operation and maintenance log** on all facilities and systems of treatment and control.

Water conservation practices shall be used to reduce total effluent volume. Waste preventative practices shall be used to reduce or eliminate contaminant loading to the municipal sewer system. These include, but are not limited to, minimizing excessive dragout of cleaning, stripping, etching, and plating solutions used during metal finishing operations. In addition, the following practices shall be used:

A. Chemical Storage

Chemicals shall be stored in a manner which will prevent the entry of these solutions into the municipal sewer system or the waters of the State. All liquid chemicals will be stored in a no outlet area, approved by the City.

1. Oils, waste oils, solvents, chemicals, and waste chemical solution shall be stored in a curbed and covered area with an impervious surface to prevent the contamination of the ground, ground water, storm sewer system or the sanitary sewer system. Empty barrels shall be adequately stoppered and stored in a designated area.

2. Incompatible chemicals shall be segregated.

3. Adequate dikes, sumps, and valves shall be installed to intercept and contain overflows and spills from all chemical cleaning and metal finishing tanks. Wastes from the sumps shall be collected for disposal in a manner that will prevent its entry into waters of the state or, be adequately treated and analyzed before discharge to the sanitary sewer system.

B. Spill Prevention

1. All plating processing tanks shall be stored in bermed, roofed, secured, no outlet drain areas.

2. Process tanks shall be located in an area capable of containing 110 percent of the volume of the largest tank. This area can have no outlet to the sewer system or the waters of the State of Washington.

3. All process tanks and chemical storage containers shall be adequately labeled. Emergency phone numbers shall be posted.

4. In the event of a concentrated solution spill, such as a tank failure, the Permittee shall not discharge any spilled solution into the municipal sewer system unless laboratory test results indicate that the substance meets the conditions of this permit. The Permittee shall receive approval from the City prior to the discharge of any untreated spilled solution.

DRAFT

VI. **OPERATIONS AND MAINTENANCE** (continued)

B. Spill Prevention (continued)

5. The Permittee shall use spill prevention practices to preclude the discharge of liquids, solids, or gasses, which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosions.

C. Required Process Changes

The Permittee shall make the process changes required and/or install whatever pretreatment equipment is necessary to meet the discharge conditions of this permit.

D. Shutoff Devices

1. The Permittee shall provide a functional shutoff device for the industrial wastewater outlet of the processing lines downstream of the pretreatment system.

2. Incoming rinse waters shall be turned off and shut off devices shall be closed at all times when the plant is not operating (i.e., nights, weekends and holidays), and in the event of an emergency spill. Rinse water to specific processes shall be turned off when process is not in operation.

E. Housekeeping

1. No plating or process bath filter shall be flushed over the processing floor, rinse tanks, or in any area where they may drain into the sanitary sewer system.

2. All filters shall be placed inside the processing tanks or over other containers to prevent any leaks to the sanitary sewer system.

3. The Permittee shall maintain and inspect all process solution and rinse tanks on a regular basis. Any leaks shall be repaired promptly.

F. Proper Disposal of Sludges and Spent Chemicals

1. The Permittee shall comply with the provisions of WAC 173-303 (Dangerous Waste Regulations).

2. If it has not already done so, the Permittee shall obtain a Hazardous Waste generator number from the US EPA or the WDOE for proper disposal of wastes, if applicable.

3. Spent plating, etching and other concentrated process solutions shall not be disposed of to the sanitary sewer system.

4. The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface waters.

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VI. **OPERATIONS AND MAINTENANCE** (continued)

F. Proper Disposal of Sludges and Spent Chemicals (continued)

5. For all liquid wastes and sludges removed by waste disposal companies, the Permittee shall record and retain for a period of three (3) years:

   A. Chemical name and trade name of the substance if the constituents are not known.
   B. Volume of each substance.
   C. Date that it was hauled away.
   D. Identity of the waste hauler.
   E. Receipt from the waste hauler.

G. Flowmeter

The Permittee shall maintain a water or sewer meter which can provide accurate information regarding industrial process wastewater discharges to the sewer. The Permittee shall maintain a daily log of flowmeter readings and daily flows.

H. Dilution

Excess water usage shall be minimized to prevent illegal dilution. No Industrial user shall increase the use of potable or process water, or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

I. Sample Site

An approved sampling site/sampling manhole shall be maintained downstream of the final pretreatment system and upstream of any mixing with unregulated flows for the monitoring of the industrial discharge. City personnel shall have access to the sample site during normal business hours and in the event of an emergency. All process wastewater shall flow through the sampling point. All process wastewater shall be hard-piped to the sampling point. All wastewater monitoring samples shall be collected from the approved sample site. Sample sites are to remain unobstructed at all times to allow access. Sample site shall have a suitable primary device installed for the purpose of monitoring industrial discharge flow to the Sanitary Sewer.

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VII. GENERAL CONDITIONS

A. Compliance

1. All discharges to the City sanitary sewer system shall be in accordance with the requirements and ordinances of the City.

2. All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

3. The Permittee shall comply with all the general prohibitive discharge standards in Ordinance 1308-86 and is responsible to take whatever steps are necessary to ensure discharge requirements of this permit are met.

4. Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

5. All requirements of 40 CFR 403 and 40 CFR 433 are incorporated into this permit by reference.

6. Sanitary sewage shall be disposed of in accordance with the requirements of the Snohomish County Health District.

B. Signatory Requirements

All reports and information submitted to the City shall be signed by an executive officer, or his/her designated official, testifying to the accuracy of the results and representativeness of the sample by making the following statement:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

C. Confidential Information

Except for data determined to be confidential under Section 8L of the City's Industrial Pretreatment Ordinance (No. 1308-86), all reports required by this permit shall be available for public inspection at the office of the City of Everett, Department of Public Works.

D. Records Retention

The Permittee shall retain for a minimum of three years all records of monitoring activities and results, including all reports of recordings from continuous monitoring instrumentation. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the City.

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VII. GENERAL CONDITIONS (continued)

E. Recording Of Results

For each measurement or sample taken, the Permittee shall record the following information:

1. The date, exact place, and time of sampling;
2. the date the analyses were performed;
3. who performed the analyses;
4. the analytical techniques or methods used;
5. the results of all the analysis and
6. provide certification of representativeness.

F. Representative Sampling

Samples and measurements taken to meet the requirements of this condition shall be representative of the volume and the nature of the monitored discharge.

G. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless approved otherwise in writing by the City, conform to the **Guidelines Establishing Test Procedures for the Analysis of Pollutants**, contained in 40 CFR Section 136. Where 40 CFR Section 136 does not include a sampling or analytical technique for the pollutant in question, sampling and analyses shall be performed in accordance with any other sampling and analyses procedures approved by the EPA Administrator.

H. Bypass

The intentional **bypass** of wastes from all or any portion of a treatment works to the extent that permit effluent limitations cannot be met is prohibited unless the following four conditions are met:

1. Bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage; or (2) necessary to perform construction or maintenance related activities essential to meet the requirements of the Clean Water Act and authorized by administrative order;

2. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or temporary reduction or termination of production;

3. The Permittee submits notice of an unanticipated bypass in accordance with Section IV.F. Where the Permittee knows or should have known in advance of the need for a bypass, this prior notification shall be submitted for approval to the City, if possible, at least 10 days before the date of bypass (or longer if specified in the special condition); and

4. This bypass is allowed under conditions determined to be necessary by the City to minimize any adverse effects. The public shall be notified and be given the opportunity to comment on bypass incidents of significant duration, to the extent feasible.

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VII. **GENERAL CONDITIONS** (continued)

H. **Bypass** (continued)

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic caused by delays in production.

After consideration of the factors above and the adverse effects of the proposed bypass, the City may approve the request.

I. **Right of Entry**

The Permittee shall allow an authorized representative of the City, upon the presentation of credentials and such other documents as may be required by law and at reasonable hours:

1. To enter the Permittee's premises where a discharge source is located or where any records must be kept under the terms and conditions of the permit;

2. To have access to and copy any records that must be kept under terms and conditions of the permit;

3. To inspect any monitoring equipment or method required in the permit;

4. To inspect any collection, treatment, pollution management, or discharge facilities required under the permit;

5. To sample any discharge of pollutants. Sampling sites are to remain unobstructed at all times.

Reasonable hours, in regard to inspection and sampling, includes any time that the Permittee is operating any process which results in a process wastewater discharge to the City's sewerage system. **Unreasonable delays in allowing the Director access to the user's premises shall be a violation of this permit.**

J. **Severability**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. **Property rights**

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringement of Federal, State, or Local regulations.

VII. GENERAL CONDITIONS (continued)

L. Falsifying Information or Tampering With Monitoring Equipment

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under the criminal laws of the City, as well as being subject to civil penalties and relief.

M. Enforcement Provision

The City may seek any or all of the remedies or penalties (including civil and judicial action) provided in the City ordinance, including recovery costs incurred by the City, in response to the following:

1. any violation by the Permittee of the provision of the Industrial Wastewater Discharge Permit;

2. any violation by the Permittee of the provision of the City Code; or

3. any violation by the Permittee of any order of the City with respect to provisions set forth in the Industrial Wastewater Discharge Permit of the City Code.

The range or severity of remedial actions taken against the Permittee will include, but not be limited to, notices of violation, compliance schedules, fines up to $10,000 per day per violation, show cause hearings and/or cease discharge notices and be determined, in part, by the nature, duration and frequency of the violation (including significant non-compliance status).

N. Duty to Reapply

The City shall notify the Permittee 180 days prior to the expiration of the Permitee's permit. Within 90 days of the notification, the Permittee shall reapply for reissuance of the permit on a form provided by the City.

O. New or Supplemental Application for Changes

The City may require the Permittee to submit a new application or supplement to the previous application where facility expansions, production increases, or process modifications will result in:

1. new or substantially increased discharges of pollutants,
2. a substantial increase in flow, or
3. violate the terms and conditions of the existing permit.

The Permittee shall notify the City 60 days prior to such changes. Formal written notification shall follow within 30 days. Submission of such an application does not relieve the discharger of the duty to comply with the existing permit until it is modified or reissued.

P. Limitation Of Permit Transfer

Permits are issued to a specific user for a specific operation and are not assignable to another User or transferable to any other location without the prior written approval of the City. Sale of a User shall obligate the purchaser to seek prior written approval of the City for continued discharge to the sewerage system.

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VII. GENERAL CONDITIONS (continued)

Q. Emergency Suspension Of Service And Revocation Of Permit

The City may, without advance notice, order the suspension of the wastewater treatment service and revoke the Wastewater Discharge Permit from a Permittee when it appears to the City that an actual or threatened discharge:

1. presents or threatens an imminent or substantial danger to the health or welfare of persons or substantial danger to the environment, or

2. threatens to interfere with the operation of the POTW, or to violate any pretreatment limits imposed by the Code.

The Permittee notified of the City's suspension order shall immediately cease all discharges. In the event of failure of the Permittee to comply with suspension order, the City may immediately take all necessary steps to halt or prevent any further discharge by such Permittee into a POTW. See Ordinance 1308-86 section 9.A.

R. Modification or Revision of the Permit

This permit may be modified, terminated, or revoked during its term for:

1. Failure of the Permittee to disclose fully all relevant facts or the misrepresentation of any relevant facts by the Permittee in the application or during the permit issuance process;

2. A violation of any term or condition of the permit;

3. EPA promulgating a new federal pretreatment standard;

4. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit;

5. Information indicating that the permitted discharge poses a threat to human health or welfare;

6. A change in ownership or control of the source;

7. A change in City Ordinances or other just cause;

8. Incorporating special conditions resulting from the issuance of a special order;

Any permit modification which result in new conditions in the permit include a reasonable time schedule for compliance, if necessary. Permit modification, revocation and reissuance, or termination may be initiated by the City or requested by any interested person.

S. Analytical Requirements

All analysis performed to establish compliance and used in compliance reporting shall be performed by a laboratory accredited by the Washington State Department of Ecology Quality Assurance Division in accordance with 173-50 WAC. Laboratories must be accredited for the analyses for which they are performing.

PUBLIC WORKS

EVERETT

February 16, 1995

COPY

CERTIFIED MAIL NO. 027 172 347

Mr. Fred Owen
General Manager, TC Systems
1028 W. Marine View Dr.
Everett, WA 98201

NOTICE OF VIOLATION

Dear Mr. Owen:

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of your discharge permit.

TC Systems exceeded Federal Categorical pretreatment standards for copper and zinc in the sample taken on December 22, 1994. The copper concentration was reported at 2.23 ppm and the monthly average limit is 2.07 mg/L. The zinc concentration was reported at 2.83 ppm and exceeded the daily maximum limit of 2.61 mg/L and the monthly average limit of 1.48 mg/L. As there was only one sample taken in the month of December, the monthly average is the controlling limit.

For your information the reported zinc concentration is above the Technical Review Criteria (TRC) level of 1.78 mg/L. If only one sample is taken per month, two violations above the TRC level in a six-month period would place TC Systems in Significant Non Compliance (SNC).

TC Systems also failed to notify the City of this discharge limit violation within 24 hours as required in Section IV. F. of Permit Number 7708-94.

REQUIRED ACTION:

Within 5 days of receipt of this NOV, please reply in writing giving the cause(s) of the noncompliance and the action(s) that you will take to prevent any future violations of the pretreatment standards.

If you have any questions or concerns about this NOV please call Don McKinney at 259–8874.

Sincerely,

Clair Olivers, P.E.,
Director of Public Works

---

c: [redacted] WDOE
Jim Langus, Everett/ADM
Dan Lowell, Everett/UTIL
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IPT File (1)

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PUBLIC WORKS
EVERETT

RECEIVED
APR 17 1995
DEPT. OF ECOLOGY

April 7, 1995

CERTIFIED MAIL NO. P 009 837 618

COPY

Mr. Fred Owen
General Manager
TC Systems
1028 W. Marine View Drive
Everett, WA 98201

NOTICE OF VIOLATION

Dear Mr. Owen:

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of your discharge permit.

TC Systems exceeded Federal Categorical pretreatment standards for zinc in the sample taken on January 29, 1995. The zinc concentration was reported at 2.54 ppm and exceeded the monthly average limit of 1.48 mg/L by an amount greater than the Technical Review Criteria (TRC) which is used to determine Significant Non Compliance (SNC). As there was only one sample taken in the month of January, the monthly average is the controlling limit.

TC Systems also failed to notify the City of this discharge limit violation within 24 hours as required in Section IV.F. of Permit No. #7708-94.

You have previously been notified (NOV of February 16, 1995) that TC Systems had exceeded Federal Categorical pretreatment standards for zinc in the sample taken on December 22, 1994. The zinc concentration was reported at 2.83 ppm and exceeded the daily maximum limit of 2.61 mg/L and the monthly average limit of 1.48 mg/L. The reported value exceeded the monthly average limit by an amount greater than the TRC.

Exceeding the TRC of the same parameter for two months during a six month period has placed TC Systems in **Significant Non Compliance** (SNC) as stated in 40 CFR 403.8 vii. SNC is defined under the following:

> *Chronic Violations. Sixty-six percent or more of the measurements exceed the daily maximum/minimum limit or average limit for the same pollutant parameter by any amount in a 6 month period.*

Technical Review Criteria (TRC) Violations. Thirty-three percent or more of the measurements equals or exceeds the product of the daily maximum/minimum limit or the average limit multiplied by the applicable criteria (1.2 times the limit for metals) in a 6 month period.

The City has the authority to issue Administrative Fines which can range up to $10,000.00 per day for each violation. Once it has been determined that an industry is in SNC, the City's enforcement policy, as approved by the Washington State Department of Ecology, mandates a minimum fine of $1,000.00. The City also is required to publish annually, in the largest daily newspaper published in the municipality, a list of the users which, during the previous twelve months, were in significant non-compliance with applicable pretreatment standards and requirements.

TC Systems also exceeded Federal Categorical pretreatment standards for zinc in the sample taken on February 23, 1995 by City personnel and split with TC Systems personnel. The zinc concentration was reported at 2.58 ppm on the self monitoring report. Analysis by the Everett Environmental Laboratory reported a zinc concentration of 3.34 mg/L. The average of the two reported values (2.96 mg/L) exceeds the monthly average limit of 1.48 mg/L by an amount greater than the TRC. The Everett Environmental Laboratory results exceed the daily maximum limit of 2.61 mg/L by an amount greater than the TRC.

REQUIRED ACTION

TC Systems is hereby assessed a penalty of $1,000.00 for the above described violations. You will be billed for this amount through the usual billing procedure. Please be advised that further violations of a similar nature will result in escalating enforcement actions.

Since additional data may be useful in determining why the violations are occurring and how to further prevent reoccurrence, TC Systems is required to sample for zinc once a week for four consecutive weeks, to commence within 7 calendar days of receipt of this notice. Four consecutive weeks refers to a week in which discharge occurs. All samples shall be 24 hour composites. This sampling must be separate from any sampling required under your permit and satisfies the 30 day resampling required by your permit. The results of each sample must be received by the City within five days from when you have knowledge of the results, but in no event longer than thirty days from the date the sample was taken. Your Industrial Waste Inspector is, as always, available to assist TC System personnel in sampling techniques and interpreting analysis reults to find a solution to the zinc problem.

Within 5 days of receipt of this NOV, please reply in writing, giving the cause(s) of the noncompliance and the action(s) that you will take to prevent any future violations of the pretreatment standards.

If you have any questions or concerns about this NOV please call Don McKinney at 259-8874.

Sincerely,

Clair Olivers, P.E.
Director of Public Works

c:

Doug Knutson	WDOE
Jim Langus	Admin
Dan Lowell	Util
IPT File	(1)
IPT Chron File	(1)
WPCF Chron File	(1)

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PUBLIC WORKS
EVERETT

April 26, 1995

CERTIFIED MAIL NO. P 009 837 621

Mr. Fred Owen
General Manager, TC Systems
1028 W. Marine View Dr.
Everett, WA 98201

NOTICE OF VIOLATION

Dear Mr. Owen:

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of your discharge permit.

While reviewing our computer database we discovered two violations of the monthly average limitation for zinc that were not addressed when they occurred. For March, 1994 the monthly average for zinc was 1.575 mg/L, and for June 1994 it was 1.71 mg/L. In both cases, the average concentrations exceeded the monthly average limitation for zinc of 1.48 mg/L. Due to a glitch in our compliance monitoring software we did not identify these violations when they occurred. In both cases, because these averages included compliance sampling performed by the City, you did not have all the information needed to identify and report noncompliance. Therefore, you will not be held responsible for failing to report the noncompliance.

These instances of noncompliance have no bearing on the current Significant Noncompliance for zinc. Since you are currently addressing zinc problems, there will be no additional required action.

If you have any questions or concerns about this NOV please call Don McKinney at 259–8874.

Sincerely,

Dan Lowell for C.O.

Clair Olivers, P.E.,
Director of Public Works

c: [redacted] WDOE
Jim Langus Everett/ADM
Dan Lowell Everett/UTIL
Chron File (1)
IPT File (1)

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PUBLIC WORKS
EVERETT

June 21, 1995

CERTIFIED MAIL NO. P 027 172 350

Mr. Fred Owen
General Manager, TC Systems
1028 W. Marine View Dr.
Everett, WA 98201

NOTICE OF VIOLATION

Dear Mr. Owen:

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of your discharge permit.

TC Systems failed to include analysis for fats, oils and grease (FOG) and pH in the March self monitoring report as required by Industrial Waste Discharge Permit Number 7708-94. In addition the monthly penetrant rinse flow was not recorded or submitted.

TC Systems exceeded Federal Categorical pretreatment standards for zinc in the sample taken on April 24, 1995 by City personnel and split with TC System personnel. Analysis by the Everett Environmental Laboratory reported a zinc concentration of 3.69 mg/L which exceeded the daily maximum limit of 2.61 mg/L by an amount greater than the TRC.

TC Systems also exceeded Federal Categorical pretreatment standard monthly average limits for zinc and copper in the month of April. The average of all zinc samples reported for the month of April was 2.13 mg/L which exceeded the monthly average limit of 1.48 mg/L by an amount greater than the TRC. The copper concentration of the sample taken on April 24 by City personnel was 2.79 mg/L and the copper concentration of the sample taken by TC System personnel on April 28 was 1.44 mg/L. The average of these two samples is 2.12 mg/L which exceeds the monthly average limit of 2.07 mg/L.

REQUIRED ACTION

You have completed the additional sampling for zinc as required by the NOV dated April 7, 1995 with the results of the last two samples (May 1 and May 14) showing compliance. No additional explanation of the situation surrounding these violations is required at this time.

Since additional data may be useful in determining why the copper violations have occurred and to prevent reoccurrence of any violations, TC Systems is required to sample for zinc and copper once a week for four consecutive weeks, to commence within 7 calendar days of receipt of this notice. Four consecutive weeks refers to a week in which discharge occurs. All samples shall be 24 hour composites. This sampling must be separate from any sampling required under your permit and satisfies the 30 day resampling required by your permit. The results of each sample must be received by the City within five days from when you have knowledge of the results, but in no event longer than thirty days from the date the sample was taken.

If you have any questions or concerns about this NOV please call Don McKinney at 259-8874.

Sincerely,

Clair Olivers, P.E.,
Director of Public Works

c: [redacted]
Jim Langus, Everett/ADM
Dan Lowell, Everett/UTIL
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IPT File (1)

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PUBLIC WORKS
EVERETT

August 29, 1995

COPY

Mr. Fred Owen
General Manager
T.C. Systems, Inc.
1028 West Marine View Drive
Everett, WA 98201

Dear Mr. Owen;

I have reviewed your request for an appeal regarding actions associated with TC Systems being in Significant Non Compliance (SNC). An appeal hearing has been scheduled for September 14, 1995 at 9:00 AM.

After considering the mitigating circumstances which you presented, I have the following comments:

1) Since your signature appears on the monthly self monitoring reports which show the violations, TC Systems management must have been aware of the situation.

2) The $1,000 fine for Significant Non Compliance is the minimum fine recommended in the City's Enforcement Response Plan and Administrative Fine Policy. The City considers SNC to be very serious and has not reduced any minimum fines for SNC in the past. Please note that the effluent violations leading up to and subsequent to your being in SNC could have justifiably resulted in more than $57,000 in fines. However, TC Systems' working relationship with the City, its past compliance history, and good faith effort to return to compliance prompted us to assess the minimum penalty of $1,000 for SNC.

3) The City does not have the authority to "set aside" the Federal requirement for public notification. Waiving this requirement would be a violation of our NPDES permit and subject the City to fines and possible legal action.

At your option, you may present additional evidence which might influence this decision to the hearing examiner at the hearing. If it is your desire to continue with the appeal process, please call Don McKinney at 259-8874 to confirm the appointment.

Sincerely,

Clair Olivers, P.E.
Director of Public Works

c: [redacted] WDOE
Jim Langus, Everett/Admin
Dan Lowell, Everett Utilities
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IPT File (1)

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PUBLIC WORKS
EVERETT

RECEIVED
FEB 2 1996
DEPT. OF ECOLOGY

January 26, 1996

COPY

CERTIFIED MAIL NO. P 009 836 627

Mr. K. Douglas Miracle
General Manager, TC Systems
1028 W. Marine View Dr.
Everett, WA 98201

NOTICE OF VIOLATION

Dear Mr. Miracle:

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of your discharge permit #7708-94.

Section II A (Effluent Limits and Monitoring Requirements) of your discharge permit, states that pH shall not be less than 5.0 nor greater than 10.0 SU (standard units). Your letter dated January 9, 1996 indicates that during a twelve-hour period on January 4th and 5th, there was a discharge of rinsate water with a pH of 2.5. This is close to being characterized as a Dangerous Waste as described in WAC 173-303, "aqueous, and has a pH of less than or equal to 2, or greater than or equal to 12.5".

Your January 9 letter provided information regarding the cause of the violation and the required affirmative action that you are proposing, therefore a written response to this Notice Of Violation is not necessary.

If you have any questions or concerns about this NOV please call Don McKinney at 259-8874.

Sincerely,

Clair Olivers, P.E.,
Director of Public Works

c: [redacted] WDOE
Jim Langus Everett/ADM
Dan Lowell Everett/UTIL
Chron File (1)
IPT File (1)

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Issuance Date: April 29, 1994
Expiration Date: April 29, 1999

CITY OF EVERETT
INDUSTRIAL WASTE DISCHARGE PERMIT

In compliance with the provisions of The Federal Clean Water Act,
The State of Washington Water Pollution Control Law, as amended
(Chapter 90.48 Revised Code of Washington) and
The City of Everett Industrial Pretreatment Ordinance (No. 2034-95)
An Industrial Waste Discharge Permit is Issued to:

TC Systems
1132 10th Street
Everett, WA 98201

Permit Number:	7708-94
Authorized Rep:	K. Douglas Miracle
Plant Location:	1028 10th St., Everett, WA 98201
Receiving Water:	Everett Water Pollution Control Facility
Industry Type:	Metal Finisher SIC No. 3471 40 CFR 433.17 (PSNS)
Discharge Location:	1028 10th St.
Sample Site:	Sample box on waste treatment outlet (Effluent weir)

TC Systems is authorized to discharge pretreated industrial wastewater to the City of Everett sewer system in compliance with the City's Ordinance, any applicable provisions of Federal or State law or regulation, and in accordance with discharge point(s), effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit is granted in accordance with the permit application form filed on 15 February, 1994, in the office of the City of Everett Department of Public Works, and in conformity with plans, specifications, and other data submitted to the City in support of the above data disclosure form.

Clair Olivers, P.E.
Director of Public Works

Date 3/14/96

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- R. Modification or Revision of the Permit
- S. Analytical Requirements

I. EMERGENCY NOTIFICATION

A. In the event that a petroleum or other hazardous material spill reaches the sewer system, the Everett Water Pollution Control Facility shall be notified immediately.

Hours 7:30 AM to 4:00 PM Monday - Friday	259-8874
After Hours, Weekends and Holidays	259-8821

B. In the event that a spill of oil or hazardous material reaches the storm sewer or the waters of the State, Everett Surface Water Management and the Department of Ecology shall be notified immediately.

Everett Surface Water Management Hours 7:30 AM to 4:00 PM Monday - Friday	259-8800
After Hours, Weekends and Holidays	259-8821
Washington State Dept. of Ecology 24 hours	649-7000

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Limitations and Monitoring Requirements

After issuance and lasting through midnight April 29, 1999, the Permittee is authorized to discharge treated industrial wastewater to the City of Everett sanitary sewerage system subject to the following limitations and monitoring requirements.

Sample location: Sample box on waste treatment outlet (Effluent weir)

REQUIREMENTS	EFFLUENT LIMITATIONS		MONITORING	
Parameter	Daily[a] Maximum	Monthly[b] Average	Minimum[c] Frequency	Sample Type
NONCONVENTIONALS				
Arsenic (T)	0.50 mg/L[k]	NA[d]	1/Month	Composite[g]
Cadmium (T)	0.11 mg/L[k]	0.07 mg/L[j]	1/Month	Composite
Chromium (T)	2.77 mg/L[j]	1.71 mg/L	1/Month	Composite
Copper (T)	3.00 mg/L[k]	2.07 mg/L	1/Month	Composite
Lead (T)	0.69 mg/L[j]	0.43 mg/L	1/Month	Composite
Mercury (T)	0.10 mg/L[k]	NA	1/Month	Composite
Nickel (T)	2.83 mg/L[k]	2.38 mg/L	1/Month	Composite
Silver (T)	0.43 mg/L[j]	0.24 mg/L	1/Month	Composite
Zinc (T)	2.61 mg/L[j]	1.48 mg/L	1/Month	Composite
Cyanide(T)	0.65 mg/L[k]	0.65 mg/L	1/Month	Composite[h]
TTO[i]	2.13 mg/L[j]	NA	2/Year (Jun/Dec)	Grab[n]
Process Flow	No Limit		Daily	Metered
CONVENTIONALS				
pH	5.0 - 10.0[e,k]	NA	Daily	Recording pH Meter
BOD_5	NA[m]	NA	1/Month	Composite[g]
TSS	NA[m]	NA	1/Month	Composite[g]
Total FOG	NA[f]	NA	1/Month	Grab[o]
FOG/Nonpolar	200 mg/L[k]	NA	1/Month	Grab[o]
Closed Cup Flashpoint	140°F[l]		1/Month	Grab[p]

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS (continued)

B. Sample Site/Dilution

All samples shall be collected at an approved sample site at the point of discharge from the treatment system, prior to mixing with any other dilution stream. The effluent limits apply to industrial wastewater prior to dilution with wastewaters other than those generated by the regulated process. The Permittee shall not use dilution to meet the limitations. See Sections VI.H. and VI.I.

C. Footnotes

a. The daily maximum is defined as the greatest allowable value for any calendar day.

b. The monthly average is defined as the arithmetic mean of samples collected during a calendar month.

If self monitoring is performed only once per month, then the daily maximum will become as stringent as the monthly average. The Permittee may choose to monitor more frequently than is required by this permit, with the understanding that all sampling and analytical data shall be submitted with the monthly report.

c. The City may reduce or increase the frequency of sampling based on compliance history, including analytical results.

d. NA means not applicable.

e. pH is measured in standard units. See Section V.C.

f. If Total FOG (fats, oils and grease) is greater than 50 mg/L, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged FOG interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge, the Permittee for the cost of treatment.

g. Composite shall mean a flow-proportioned sample taken during the hours of discharge using an automatic sampler approved by the City or at least four grab samples taken in accordance with City of Everett Sampling Guidelines and composited according to flow. See Section V.D.

h. Each of four (4) grab samples for cyanide shall be immediately preserved with NaOH to a pH of >12.0 then combined and refrigerated until analyzed. Analysis shall occur within fourteen (14) days of taking the sample.

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

C. Footnotes (continued)

i. TTO (Total Toxic Organics) is the summation of all values greater than 0.01 mg/L for each of the Toxic Organics specified in ***40 CFR 433.11(e)***, where reasonably expected to be present. Results are due in June and December and shall contain the calculated TTO value defined above. If the Permittee is in compliance with the TTO limit, it may develop a solvent management plan. See Sections III.B. and V.E.

j. These limits based upon limitations contained in 40 CFR 433.17, Pretreatment Standards for New Sources (PSNS).

k. These limits based upon local limitations contained in Everett City Ordinance No. 2034-95.

l. Any wastewater with a closed cup flash point of less than 140°F or 60° Celsius using the test methods specified in 40 CFR 261.21 is prohibited from discharge. See Section VII.A.3.

m. If TSS (Total Suspended Solids) or BOD_5 (5-day Biochemical Oxygen Demand) exceeds 250 mg/L, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged TSS or BOD_5 interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge the Permittee for the cost of treatment and any additional maintenance costs incurred by the City.

n. A minimum of four grab samples must be taken during the sampling event for TTO's. Semi volatiles are then composited in the field for sample analysis, volatiles are composited in the laboratory when analyzed.

o. A minimum of four individual grab samples to be taken during the sampling event for FOG. The samples are to be taken and contained in separate containers and not to be composited or split.

p. A single separate grab sample must be taken and analyzed for Flash Point.

III. SUMMARY OF REPORTS

The Permittee shall submit reports to the City according to the schedule listed below.

A. Final Compliance Report/90 Day Report

Frequency:	Once only
Due Date:	90 days following the commencement of discharge or permit issuance, whichever is later.
Content:	Characterizing discharge. Statement of compliance. See Section IV.A.

B. Accidental Spill Prevention Plan

Frequency:	Once, update as needed.
Due Date:	Submit 90 days following the commencement of discharge or permit issuance whichever is later. Implement within 6 months.
Content:	Strategy for spill prevention, including training and emergency response. See Section IV.B.

C. Solvent Management Plan (SMP)

Frequency:	Once, update as needed.
Content:	Regulated Toxic Organics on site, disposal method and spill prevention procedures. See Section V.E.

D. Notification of Hazardous Waste Discharges

Frequency:	Once only for each hazardous waste (HW)
Due Date:	Within 90 day of permit issuance
Content:	HW name, EPA HW Number & type of discharge. See Section IV.C.

E. Notification of New Hazardous Waste Discharges

Frequency:	Whenever new regulations designate wastes or constituents as hazardous.
Due Date:	Within 90 days of the effective date of the published regulation.
Content:	See Section IV.D. and 40 CFR 403.12(p).

F. O & M Manual

Frequency:	As needed prior to installation or changes of pretreatment equipment.
Due Date:	Approval required prior to completion of construction.
Content:	O & M instructions and pretreatment system "as-builts". See Section IV.E. and WAC 173-240.

III. SUMMARY OF REPORTS (continued)

G. Self Monitoring Report

Frequency:	As required.
Due Date:	Commencing on date of Permit issuance. To be submitted no later than the last day of each month following self monitoring.
Content:	Data required in Section II.A or, if appropriate, a notification that no discharge has occurred. See Section IV.F.

H. Notification of Violation

Frequency:	As needed.
Due Date:	Notify the City within 24 hrs. of discovery and submit a written report within 5 days.
Content:	Reason for violation and corrective action taken. See Section IV.G.

I. Changes To Discharge

Frequency:	As needed.
Due Date:	90 days prior to changes in discharge that result in altered wastewater pollutants.
Content:	See Section IV.H.

J. Spill Report

Frequency:	As needed.
Due Date:	Notify City within 24 hrs of discovery and a written report within 5 days.
Content:	Characteristics of and reason for spill, and corrective action taken. See Section IV.I.

K. Upset Report

Frequency:	As needed
Due Date:	Notify the City within 24 hrs of discovery and submit a written report within 5 days.
Content:	Characteristics of and reason for noncompliance, and corrective action taken. See Section IV.J.

L. Engineering Report

Frequency:	As needed prior to installation or changes of the pretreatment equipment.
Due Date:	Approval required prior to installation.
Content:	Per WAC 173-240. See Section IV.K.

IV. REPORTING REQUIREMENTS

The Permittee shall monitor their discharge to the sanitary sewer as specified in Section II of this permit. The Permittee shall also submit to the City of Everett, Department of Public Works, all of the reports according to the following schedule and content requirements.

A. Final Compliance Report/90 Day Report

The Permittee shall submit, not later than 90 days from the effective date of this permit, a report confirming compliance or indicating noncompliance with permit discharge limits and requirements. The report shall include flow, measurement of pollutants and a certification statement. See 40 CFR 403.12(d).

B. Accidental Spill Prevention Plan

The Permittee shall continue with implementation of their approved Accidental Spill Prevention Plan to eliminate or minimize the accidental slug discharge of pollutants into the sewer system which could have an effect on the City's wastewater treatment plant, biosolids and biosolids utilization plans, or cause the City to violate it's National Pollutant Discharge Elimination System (NPDES) permit.

C. Notification of Hazardous Waste Discharges

The Permittee shall notify the City, the EPA RCRA Director and State Dangerous Wastes Director, in writing within 90 days of the effective date of this permit, of any discharge of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other).

Notification need be submitted only once for each hazardous waste discharged. The notification requirement in this section does not apply to pollutants already reported under the self-monitoring requirements in Section II of this permit. The Permittee shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated.

D. Notification of New Hazardous Wastes

Whenever the EPA publishes new RCRA rules identifying additional hazardous wastes or new characteristics of hazardous wastes, the Permittee must notify the City, EPA RCRA Director and State Hazardous Wastes Director if any of these wastes are discharged to the City's treatment system. The notification must occur within 90 days of the effective date of the published regulation.

IV. REPORTING REQUIREMENTS (continued)

E. Operation and Maintenance Manual

As needed with installation or changes of pretreatment equipment. The Permittee shall submit an operation and maintenance manual and "as-built" drawings for the pretreatment system, to the City, for approval prior to completion of construction. This does not apply to equipment replaced with operationally identical parts during repair or maintenance activities. See WAC 173-240.

F. Self Monitoring Reports

The Permittee shall monitor the parameters specified in Section II.A of this permit. All monitoring results obtained during the month shall be summarized and reported on a form approved by the City, to be submitted no later than the last day of the month following the completed reporting period. The Permittee shall include the daily pH highs and lows and daily flows. The report shall be signed and certified in accordance with the requirements of Section VII.B. and submitted to the following address:

City of Everett
Department of Public Works
Industrial Pretreatment Program
3200 Cedar St.
Everett, WA. 98201
Attn.: Don Mc Kinney

In the event that **additional monitoring** (other than that required in Section II.A) is conducted, the Permittee shall report **all** results in the report. Note that reporting TTO monitoring data is not required monthly. The December and June self monitoring reports shall contain TTO discharge monitoring data or certification statement.

G. Notification of Violation

If self monitoring data indicates that a discharge limit has been exceeded, the Permittee shall notify the City within 24 hours of becoming aware of the violation. The Permittee shall repeat the sampling and submit the analysis to the City within 30 days after becoming aware of the violation. Formal written notification discussing circumstances and remedies shall be submitted to the City within five (5) days of becoming aware of the violation or as required.

H. Notification of Changed Discharge

The Permittee shall notify the City 90 days prior to the introduction of new wastewater pollutants, changes in manufacturing operations or any substantial change in the volume or character of pollutants in their discharge, including the listed or characteristic hazardous wastes for which the Permittee has submitted initial notification under 40 CFR 403.12(p). The Permittee shall obtain approval from the City prior to any substantial change in their discharge.

IV. REPORTING REQUIREMENTS (continued)

I. Spill/Slug Discharge Reports

The Permittee shall notify the City immediately, either in person or by phone (see Section I Emergency Notification), upon accidental spill or slug discharge to the sanitary sewer. Formal written notification discussing circumstances and remedies shall be submitted to the City within five (5) days of the occurrence or as required.

J. Upset Reporting

1. Definition

For the purpose of this section, "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with applicable pretreatment standards because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance or careless or improper operation.

2. Effect of an Upset

An upset shall constitute an affirmative defense to action brought for noncompliance with applicable pretreatment standards if the requirements of paragraph 3 are met.

3. Conditions Necessary for a Demonstration of Upset:

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs or other relevant evidence that:

a. an upset occurred and the permittees can identify the specific cause(s) of the upset;

b. the facility was, at the time, being operated in a prudent and workman-like manner and in compliance with applicable operation and maintenance procedures; and

c. the Permittee has submitted the following information to the City within 24 hours of becoming aware of the upset (if this information is provided verbally a written submission must be provided within five days):

(1) a description of the discharge and cause of noncompliance;
(2) the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to be corrected; and
(3) steps being taken and/or planned to reduce, eliminate and prevent recurrence of the noncompliance.

IV. REPORTING REQUIREMENTS (continued)

J. Upset Reporting (continued)

4. Burden of Proof

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset shall have the burden of proof.

5. Permittee Responsibility in Case of Upset

The Permittee shall control production or all discharges to the extent necessary to maintain compliance with applicable pretreatment standards upon reduction, loss or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost or fails.

K. Engineering Report

Prior to constructing or modifying any wastewater control facilities, detailed plans shall be submitted to the City and the Washington Department of Ecology for approval in accordance with WAC 173-240. Facilities shall be constructed and operated in accordance with the approved plans.

V. SPECIAL CONDITIONS/COMPLIANCE SCHEDULES

A. Batch Discharge Log

The Permittee shall maintain a log containing the date and time of discharge, contents, and the volume and number of batches discharged per day.

B. Effluent Meter

The Permittee shall install and maintain a continuous flow meter, monitoring flow through the discharge/sample site.

C. Recording pH Meter

The Permittee shall maintain a continuously recording pH meter with an audible alarm system and shall report the high and low pH values for each day the Permittee discharges. Any discharge without a pH record shall be considered a violation of this permit.

The Permittee shall maintain a log that includes a record of calibration for the instrument used with: the date, time, name of the person doing the calibration, and the method used. The chart shall be dated and initialed on working days.

D. Autosampler

The Permittee shall use an autosampler approved by the City to flow proportion composite samples of the treatment discharge to be monitored per Section II.A of this permit. Samples may be flow proportioned by hand if use of an autosampler is impractical. See Sections II.B and VI.I concerning the sample site.

V. SPECIAL CONDITIONS/COMPLIANCE SCHEDULES (continued)

E. Solvent Management Plan/TTO

1. Requirements

If the Permittee demonstrates compliance with the TTO limits, it may elect to develop a solvent management plan in lieu of sampling for TTO's. The plan must be submitted to the City for review and approval. The plan must include:

a. a list of the Total Toxic Organic's used;
b. the method of disposal, i.e., reclamation, contract hauling or incineration; and
c. the procedures that are used to insure that TTO's do not routinely spill or leak into the wastewater.

2. TTO Status

Status reports are due each June and December as part of the Self Monitoring Report. List any changes to the last plan on file or state there have been no changes to the plan. The Permittee shall make the following certification statement:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation or pretreatment standard for TTO, I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the solvent management plan submitted to the City." See 40 CFR 403.12(e).

VI. OPERATIONS AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures. The Permittee shall keep and maintain an operation and maintenance log on all facilities and systems of treatment and control.

Water conservation practices shall be used to reduce total effluent volume. Waste prevention practices shall be used to reduce or eliminate contaminant loading to the POTW. These include, but are not limited to, minimizing excessive dragout of cleaning, stripping, etching, and plating solutions used during metal finishing operations. In addition, the following practices shall be used:

A. Chemical Storage

Chemicals shall be stored in a manner which will prevent the entry into the municipal sewer system or the waters of the State. All liquid chemicals will be stored in a no outlet area, approved by the City.

1. Oils, waste oils, solvents, chemicals, and waste chemical solution shall be stored in a curbed and covered area with an impervious surface to prevent the contamination of the ground, ground water, storm sewer system or the sanitary sewer system. Empty barrels shall be adequately stoppered and stored in a designated area.

2. Incompatible chemicals shall be segregated.

3. Adequate dikes, sumps, and valves shall be installed to intercept and contain overflows and spills from all chemical cleaning and metal finishing tanks. Wastes from the sumps shall be collected for disposal in a manner that will prevent its entry into waters of the state or, be adequately treated and analyzed before discharge to the POTW.

B. Spill Prevention

1. All plating process tanks shall be stored in bermed, roofed, secured, no outlet areas.

2. Process tanks shall be located in an area capable of containing 110 percent of the volume of the largest tank. This area can have no outlet to the sewer system or the waters of the State.

3. All process tanks and chemical storage containers shall be adequately labeled. Emergency phone numbers shall be posted.

VI. OPERATIONS AND MAINTENANCE (continued)

B. Spill Prevention (continued)

4. In the event of a concentrated solution spill, such as a tank failure, the Permittee shall not discharge any spilled solution into the municipal sewer system unless laboratory test results indicate that the substance meets the conditions of this permit. The Permittee shall receive approval from the City prior to the discharge of any untreated spilled solution.

5. The Permittee shall use spill prevention practices to preclude the discharge of liquids, solids, or gasses, which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosions.

C. Required Process Changes

The Permittee shall make the process changes required and/or install whatever pretreatment equipment is necessary to meet the discharge conditions of this permit.

D. Shutoff Devices

1. The Permittee shall provide a functional shutoff device downstream of the pretreatment system.

2. Incoming rinse waters shall be turned off and shut off devices shall be closed at all times when the plant is not operating (i.e., nights, weekends and holidays), and in the event of an emergency spill. Rinse water to specific processes shall be turned off when process is not in operation.

E. Housekeeping

1. No plating or process bath filter shall be flushed over the processing floor, rinse tanks, or in any area where they may drain into the sanitary sewer system.

2. All filters shall be placed inside the processing tanks or over other containers to prevent any leaks to the sanitary sewer system.

3. The Permittee shall maintain and inspect all process solution and rinse tanks on a regular basis. Any leaks shall be repaired promptly.

F. Proper Disposal of Sludges and Spent Chemicals

1. The Permittee shall comply with the provisions of WAC 173-303 (Dangerous Waste Regulations).

VI. OPERATIONS AND MAINTENANCE (continued)

F. Proper Disposal of Sludges and Spent Chemicals (continued)

2. If it has not already done so and if applicable, the Permittee shall obtain a Hazardous Waste generator number from the US EPA or the WDOE for proper disposal of wastes.

3. Spent plating, etching and other concentrated process solutions shall not be disposed of to the sanitary sewer system.

4. The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into waters of the State.

5. For all liquid wastes and sludges removed by waste disposal companies, the Permittee shall record and retain for a period of three (3) years:

   a. chemical name and trade name of the substance;
   b. volume of each substance;
   c. date that it was hauled away;
   d. identity of the waste hauler and, if applicable, an EPA registration number; and
   e. receipt from the waste hauler.

G. Flowmeter

The Permittee shall maintain a water or sewer meter which provides accurate information regarding industrial process wastewater discharges to the sewer. The Permittee shall maintain a daily log of flowmeter readings and daily flows.

H. Dilution

Excess water usage shall be minimized to prevent dilution. No Industrial User shall increase the use of potable or process water, or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

I. Sample Site

An approved sampling site shall be maintained downstream of the final pretreatment system and upstream of any mixing with unregulated flows for the monitoring of the industrial discharge. City personnel shall have access to the sample site during normal business hours and in the event of an emergency. All process wastewater shall flow through the sampling point. All process wastewater shall be hard-piped to the sampling point. All wastewater monitoring samples shall be collected from the approved sample site. Sample sites are to remain unobstructed at all times to allow access. .All sample sites shall have a suitable, City approved, primary device installed for the purpose of monitoring industrial discharge flow to the Sanitary Sewer.

VII. GENERAL CONDITIONS

A. Compliance

1. All discharges to the City sanitary sewer system shall be in accordance with the requirements and ordinances of the City.

2. All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

3. The Permittee shall comply with all the general prohibitive discharge standards in Ordinance 2034-95 and is responsible to take whatever steps are necessary to ensure discharge requirements of this permit are met.

4. Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

5. All applicable requirements of 40 CFR 403 and 40 CFR 433 are incorporated into this permit by reference.

6. Sanitary sewage shall be disposed of in accordance with the requirements of the Snohomish County Health District.

B. Signatory Requirements

All reports and information submitted to the City shall be signed by an executive officer, or his/her designated official, testifying to the accuracy of the results and representativeness of the sample by making the following statement:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

C. Confidential Information

Except for data determined to be confidential under Section 7 of the City's Industrial Pretreatment Ordinance (No. 2034-95), all reports required by this permit shall be available for public inspection at the office of the City of Everett, Department of Public Works.

VII. GENERAL CONDITIONS (continued)

D. Records Retention

The Permittee shall retain for a minimum of three years all records of monitoring activities and results, including all reports of recordings from continuous monitoring instrumentation. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the City.

E. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information:

1. the date, exact place, person collecting the sample, and time of sampling;
2. the date the analyses were performed;
3. who performed the analyses;
4. the analytical techniques or methods used;
5. the results of all the analyses; and
6. provide certification of representativeness.

F. Representative Sampling

Samples and measurements taken to meet the requirements of this condition shall be representative of the volume and the nature of the monitored discharge.

G. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless approved otherwise in writing by the City, conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants, contained in 40 CFR 136. Where 40 CFR 136 does not include a sampling or analytical technique for the pollutant in question, sampling and analyses shall be performed in accordance with any other sampling and analysis procedure approved by the EPA Administrator.

H. Bypass

The intentional bypass of wastes from all or any portion of a treatment works to the extent that permit effluent limitations cannot be met is prohibited unless the following four conditions are met:

1. Bypass is:

   (a) unavoidable to prevent loss of life, personal injury, or severe property damage; or
   (b) necessary to perform construction or maintenance related activities essential to meet the requirements of the Clean Water Act and authorized by administrative order;

VII. GENERAL CONDITIONS (continued)

H. Bypass (continued)

2. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or temporary reduction or termination of production;

3. The Permittee submits notice of an anticipated bypass in accordance with Section IV.H. Where the Permittee knows or should have known in advance of the need for a bypass, this prior notification shall be submitted for approval to the City, if possible, at least 10 days before the date of bypass; and

4. This bypass is allowed under conditions determined to be necessary by the City to minimize any adverse effects. The public shall be notified and be given the opportunity to comment on bypass incidents of significant duration, to the extent feasible.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic impact caused by delays in production.

After consideration of the factors above and the adverse effects of the proposed bypass, the City may approve the request.

I. Right of Entry

The Permittee shall allow an authorized representative of the City, upon the presentation of credentials and such other documents as may be required by law and at reasonable hours:

1. To enter the Permittee's premises where a discharge source is located or where any records must be kept under the terms and conditions of the permit;

2. To have access to and copy any records that must be kept under terms and conditions of the permit;

3. To inspect any monitoring equipment or method required in the permit;

4. To inspect any collection, treatment, pollution management, or discharge facilities required under the permit;

5. To sample any discharge of pollutants (sampling sites are to remain unobstructed at all times); and

VII. GENERAL CONDITIONS (continued)

I. Right of Entry (continued)

6. Where a user has security measures in force which require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the Director will be permitted to enter without delay for the purposes of performing specific responsibilities. Unreasonable delays in allowing the Director access to the user's premises shall be a violation of this Permit.

J. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Property rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringement of Federal, State, or Local regulations.

L. Falsifying Information or Tampering With Monitoring Equipment

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under the criminal laws of the City, as well as being subject to civil penalties and relief.

VII. GENERAL CONDITIONS (continued)

M. Enforcement Provision

The City may seek any or all of the remedies or penalties (including civil and judicial action) provided in City ordinances, including recovering costs incurred by the City, in response to the following:

1. Any violation by the Permittee of the provision of the Industrial Wastewater Discharge Permit;

2. Any violation by the Permittee of the provisions of the City Code; or

3. Any violation by the Permittee of any order of the Director with respect to provisions set forth in this Industrial Wastewater Discharge Permit or the City Code.

The range or severity of remedial actions taken against the Permittee may include, but not be limited to, notices of violation, compliance schedules, fines of up to $10,000 per day per violation, show cause hearings and/or cease discharge notices and be determined, in part, by the nature, duration and frequency of the violation (including significant non-compliance status).

N. Duty to Reapply

The City shall notify the Permittee 180 days prior to the expiration of the Permitee's permit. Within 90 days of the notification, the Permittee shall apply for reissuance of the permit on a form provided by the City.

O. New or Supplemental Application for Changes

The City may require the Permittee to submit a new application or supplement to the previous application where facility expansions, production increases, or process modifications will result in:

1. New or substantially increased discharges of pollutants;

2. A substantial increase in flow; or

3. Violation of the terms and conditions of the existing permit.

The Permittee shall notify the City 60 days prior to such changes. Formal written notification shall follow within 30 days. Submission of such an application does not relieve the discharger of the duty to comply with the existing permit until it is modified or reissued.

VII. GENERAL CONDITIONS (continued)

P. Limitation of Permit Transfer

Permits are issued to a specific User for a specific operation and are not assignable to another User or transferable to any other location without the prior written approval of the City. Sale of a User shall obligate the purchaser to seek prior written approval from the City for continued discharge to the POTW.

Q. Emergency Suspension of Service and Revocation of Permit

The City may, without advance notice, order the suspension of the wastewater treatment service and revoke the Industrial Waste Discharge Permit from a Permittee when it appears to the City that an actual or threatened discharge:

1. presents or threatens an imminent or substantial danger to the health or welfare of persons or substantial danger to the environment; or

2. threatens to interfere with the operation of the POTW, or violate any pretreatment limits.

Any Permittee notified of the City's suspension order shall immediately cease all discharges. In the event of failure of the Permittee to comply with a suspension order, the City may immediately take all necessary steps to halt or prevent any further discharge by such Permittee into the POTW. See Ordinance 2034-95 section 9.7.

R. Modification or Revision of the Permit

This permit may be modified, terminated, or revoked during its term for:

1. Failure of the Permittee to disclose fully all relevant facts or the misrepresentation of any relevant facts by the Permittee in the application or during the permit issuance process;

2. A violation of any term or condition of the permit;

3. EPA promulgating a new federal pretreatment standard;

4. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit;

5. Information indicating that the permitted discharge poses a threat to human health or welfare;

VII. GENERAL CONDITIONS (continued)

R. Modification or Revision of the Permit (continued)

6. A change in ownership or control of the source;

7. A change in City Ordinances or other just cause; or

8. Incorporating special conditions resulting from the issuance of a special order.

Permit transfer fee shall be $500.00

Permit modification fee shall be $500.00. Permit modification fees will only be charged in a case where changes in the user's operation require the modification, or when the user requests a modification.

Any permit modification which results in new conditions in the permit will include a reasonable time schedule for compliance, if necessary. Permit modification, revocation and reissuance, or termination may be initiated by the City or requested by any interested person.

S. Analytical Requirements

All analyses performed to establish compliance and used in compliance reporting shall be performed by a laboratory accredited by the Quality Assurance Division of the Washington State Department of Ecology in accordance with WAC 173-50. Laboratories must be accredited for the analyses that they are performing.

PUBLIC WORKS
EVERETT

RECEIVED
JUN 28 1996
DEPT. OF ECOLOGY

June 26, 1996

Mr. Doug Knutson
Pretreatment Engineer
NWRO Department of Ecology
3190 160TH Ave SE
Bellevue, WA 98008-5452

RE: TC Systems Monitoring Requirements

Dear Doug:

In March of this year, the City of Everett notified you of our desire to modify TC Systems' existing Permit (#7708-94) to make it consistant with our new pretreatment ordinance. After speaking with the industry about the changes, we feel that it is not unreasonable to further modify the monitoring requirements of this permit. Because of the extensive background data that we have available from this industry and the reluctance to incur additional costs monitoring pollutants that we do not reasonably expect to find, we would like to decrease the frequency of industry required sampling for cyanide and flash point from once a month to twice a year. We also do not feel a need to require monthly monitoring of BOD and TSS.

Enclosed you will find a modified "EFFLUENT LIMITS AND MONITORING REQUIREMENTS" (page 5 of 25) to replace the one that was mailed to your office earlier. I understand that if the City does not receive any comments back from your office within thirty days, we may go ahead and issue the Permit modification as submitted.

Please feel free to contact me at 259-8874 if you have any questions or comments.

Sincerely,

Don Mc Kinney

Don Mc Kinney
Water Quality Technician

Enc. EFFLUENT LIMITS AND MONITORING REQUIREMENTS
Permit No. 7708-94

c: Dan Lowell Util.
IPT File (1)
IPT Chron (1)
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II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Limitations and Monitoring Requirements

After issuance and lasting through midnight April 29, 1999, the Permittee is authorized to discharge treated industrial wastewater to the City of Everett sanitary sewerage system subject to the following limitations and monitoring requirements.

Sample location: Sample box on waste treatment outlet (Effluent weir)

REQUIREMENTS	EFFLUENT LIMITATIONS		MONITORING		
Parameter	Daily[a] Maximum		Monthly[b] Average		Minimum[c] Frequency	Sample Type
NONCONVENTIONALS						
Arsenic (T)	0.50	mg/L[k]	NA[d]		1/Month	Composite[g]
Cadmium (T)	0.11	mg/L[j]	0.07	mg/L[j]	1/Month	Composite
Chromium (T)	2.77	mg/L[j]	1.71	mg/L	1/Month	Composite
Copper (T)	3.00	mg/L[k]	2.07	mg/L	1/Month	Composite
Lead (T)	0.69	mg/L[j]	0.43	mg/L	1/Month	Composite
Mercury (T)	0.10	mg/L[k]	NA		1/Month	Composite
Nickel (T)	2.83	mg/L[j]	2.38	mg/L	1/Month	Composite
Silver (T)	0.43	mg/L[j]	0.24	mg/L	1/Month	Composite
Zinc (T)	2.61	mg/L[k]	1.48	mg/L	1/Month	Composite
Cyanide(T)	0.65	mg/L[j]	0.65	mg/L	2/Year	Composite[h]
TTO[i]	2.13	mg/L[j]	NA		2/Year (Jun/Dec)	Grab[n]
Process Flow	No Limit				Daily	Metered
CONVENTIONALS						
pH	5.0 - 10.0[e,k]		NA		Daily	Recording pH Meter
Total FOG	NA[f]		NA		1/Month	Grab[o]
FOG/Nonpolar	200	mg/L[k]	NA		1/Month	Grab[o]
Closed Cup Flashpoint	140°F[l]				2/Year	Grab[p]

PUBLIC WORKS
EVERETT

RECEIVED
JAN 8 1997
DEPT. OF ECOLOGY

January 3, 1997

COPY

CERTIFIED MAIL NO. P 267 172 660

Mr. K. Douglas Miracle
General Manager, TC Systems
1028 W. Marine View Dr.
Everett, WA 98201

NOTICE OF VIOLATION
PENALTY ASSESSMENT

Dear Mr. Miracle:

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of your discharge permit #7708-94.

Section II A (Effluent Limits and Monitoring Requirements) of your discharge permit, states that the Permittee is authorized to discharge treated industrial wastewater to the City of Everett sanitary sewerage system subject to the following monitoring requirements. Minimum frequency for monitoring Arsenic, Calcium, Chromium, Copper, Lead, Mercury, Nickel, Silver, Zinc, and total and nonpolar FOG is once per month.

Your October Self Monitoring Report indicated that you failed to sample for these parameters for the month of October, resulting in eleven violations of your permit requirements.

Your December 18th letter provided information regarding the cause of the violations and the required affirmative action that you are proposing to prevent recurrence, therefore a written response to this Notice Of Violation is not necessary.

TC Systems is hereby assessed a penalty of $30.00 for the above described violations. Please be advised that further violations of a similar nature will result in escalating enforcement actions.

If you have any questions or concerns about this NOV please call Don McKinney at 257-8240.

Sincerely,

Clair Olivers, P.E.,
Director of Public Works

c:	[redacted]	WDOE
	Jim Langus	Everett/ADM
	Dan Lowell	Everett/UTIL
	Chron File	(1)
	IPT File	(1)

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TC Systems, Inc.

1028 W. Marine View Dr.
Everett. Washington 98201
Fax 206-252-6855
206-258-4055

COPY

December 18, 1996

ATTN: Don McKinney
City of Everett
Utility Services
3101 Cedar Street
Everett WA 98201-4073

Dear Don,
Our previous Maint / Waste treatment person, Joe Elkens was terminated in September of this year. At that time I hired Bart Holliman as a full time waste treatment person.
While he was a well qualified individual, he became sick and began missing large blocks of time. Regretfully, I had to let him go simply because the job had to be done and his attendance record, while justifiable and supported by doctor's notes, etc., did not allow this to happen.

Consequently, he had not completed some of the testing within the allowed time frame, thereby, leaving us with no data to report. After he was dismissed from his duties, I began looking for another person to fill this position. During this time we trained our current maintenance engineer so that we would have some back up in this area. In addition, I personally sat down with Don McKinney and created a report form,complete with dates for sampling and all of the particulars involved. A space was provided to check off each item when completed, along with a signature and date.

We have subsequently hired another person by the name of Les Detherage. Les is now taking care of the waste treatment and is required to turn in the above mentioned form as proof that all samples have been taken in a timely manor. In addition, if Les is out, our maintenance manager can fill in for him.

As always, we want to comply with all applicable requirements and maintain a clean record. Thank you for your consideration in this matter.

Respectfully,

K/Douglas Miracle

PUBLIC WORKS

EVERETT

January 30, 1997

COPY

CERTIFIED MAIL NO. P 267-172-662

Mr. K. Douglas Miracle
General Manager, TC Systems
1028 W. Marine View Dr.
Everett, WA 98201

NOTICE OF VIOLATION
PENALTY ASSESSMENT

FEB 04 1997

Dear Mr. Miracle:

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of your discharge permit #7708-94.

Section II A (Effluent Limits and Monitoring Requirements) of your discharge permit, states that the Permittee is authorized to discharge treated industrial wastewater to the City of Everett sanitary sewerage system subject to the following monitoring requirements. Minimum frequency for monitoring total and nonpolar FOG is once per month.

Your November Self Monitoring Report indicated that you failed to sample for these parameters for the month of November, resulting in two violations of your permit requirements. As noted in the Notice of Violation sent Certified Mail No. P 267 172 660, you had failed to sample for total and nonpolar FOG in October, resulting in a two month period where FOG was not sampled. In addition section IV G of your discharge permit states that, "the Permittee shall notify the City within 24 hours of becoming aware of a violation", which you failed to do.

Within 5 days of reciept of this NOV you shall reply in writing giving the cause(s) of the noncompliance and the action(s) that you will take to prevent any further violations of the pretreatment standards.

PENALTY ASSESSMENT

TC Systems is hereby assessed a penalty of $250.00 for the above described violations. Please be advised that further violations of a similar nature will result in escalating enforcement actions.

If you have any questions or concerns about this NOV please call Don McKinney at 257-8240.

Sincerely,

Clair Olivers, P.E.,
Director of Public Works

c: [redacted] WDOE
Jim Langus Everett/ADM
Dan Lowell Everett/UTIL
Chron File (1)
IPT File (1)

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PUBLIC WORKS
EVERETT

May 19, 1997

COPY

CERTIFIED MAIL NO. 267 174 483

Mr. K. Douglas Miracle
General Manager, TC Systems
1028 W. Marine View Dr.
Everett, WA 98201

NOTICE OF VIOLATION

Dear Mr. Miracle:

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of your discharge permit #7708-94.

TC Systems exceeded Federal Categorical pretreatment standards for zinc in the sample taken by City of Everett personnel on March 17, 1997. The zinc concentration was determined to be 2.96 mg/L. and exceeded the daily maximum limit of 2.61 mg/L. When this number is averaged with the zinc sample reported in your March Self Monitoring Report of 1.96 mg/L. (sampled on March 25, 1997), the average is 2.46 mg/L. This value exceeds the monthly average limit of 1.48 mg/L by an amount greater than the Technical Review Criteria (TRC) which is used to determine Significant Non Compliance (SNC).

Exceeding the TRC of the same parameter for two months during a six month period would place TC Systems in **Significant Non Compliance** (SNC) as stated in 40 CFR 403.8 vii. SNC is defined under the following:

> *Chronic Violations. Sixty-six percent or more of the measurements exceed the daily maximum/minimum limit or average limit for the same pollutant parameter by any amount in a 6 month period.*
>
> *Technical Review Criteria (TRC) Violations. Thirty-three percent or more of the measurements equals or exceeds the product of the daily maximum/minimum limit or the average limit multiplied by the applicable criteria (1.2 times the limit for metals) in a 6 month period.*

The City has the authority to issue Administrative Fines which can range up to $10,000.00 per day for each violation. Once it has been determined that an industry is in SNC, the City's enforcement policy, as approved by the Washington State Department of Ecology, mandates a minimum fine of $1,000.00. The City also is required to publish annually, in the largest daily newspaper published in the municipality, a list of the users which, during the previous twelve months, were in significant non-compliance with applicable pretreatment standards and requirements.

REQUIRED ACTION

Since additional data may be useful in determining why the violations are occurring and how to further prevent reoccurrence, TC Systems is required to sample for zinc once a week for four consecutive weeks, to commence within 7 calendar days of receipt of this notice. Four consecutive weeks refers to a week in which discharge occurs. All samples shall be 24 hour composites. This sampling must be separate from any sampling required under your permit and satisfies the 30 day resampling required by your permit. The results of each sample must be received by the City within five days from when you have knowledge of the results, but in no event longer than thirty days from the date the sample was taken. Your Industrial Waste Inspector is, as always, available to assist TC System personnel in sampling techniques and interpreting analysis results to find a solution to the zinc problem.

If you have any questions or concerns about this NOV please call Don McKinney at 257-8240.

Sincerely,

Dan Lowell for C.O.

Clair Olivers, P.E.,
Director of Public Works

c: [redacted]VDOE
Jim Langus Everett/ADM
Dan Lowell Everett/UTIL
Chron File (1)
IPT File (1)
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PUBLIC WORKS
EVERETT

June 5, 1997

CERTIFIED MAIL NO. P 267 174 485

Mr. Douglas Miracle
General Manager
TC Systems
1028 W. Marine View Drive
Everett, WA 98201

COPY

NOTICE OF VIOLATION
PENALTY ASSESSMENT

Dear Mr. Miracle:

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of your discharge permit.

TC Systems exceeded Federal Categorical pretreatment standards for zinc in the results reported on your April 1997 self monitoring report. The zinc concentration was reported at 3.23 mg/L and exceeded the daily maximum limit of 2.61 mg/L and the monthly average limit of 1.48 mg/L by an amount greater than the Technical Review Criteria (TRC) which is used to determine Significant Non Compliance (SNC).

You have previously been notified (NOV of May 19, 1997) that TC Systems had exceeded Federal Categorical pretreatment standards for the monthly average for zinc by an amount greater than the TRC during March of 1997.

Exceeding the TRC of the same parameter for two months during a six month period has placed TC Systems in **Significant Non Compliance** (SNC) as stated in 40 CFR 403.8 vii. SNC is defined under the following:

> *Chronic Violations. Sixty-six percent or more of the measurements exceed the daily maximum/minimum limit or average limit for the same pollutant parameter by any amount in a 6 month period.*
>
> *Technical Review Criteria (TRC) Violations. Thirty-three percent or more of the measurements equals or exceeds the product of the daily maximum/minimum limit or the average limit multiplied by the applicable criteria (1.2 times the limit for metals) in a 6 month period.*

RECEIVED
JUN 16 1997

The City has the authority to issue Administrative Fines which can range up to $10,000.00 per day for each violation. Once it has been determined that an industry is in SNC, the City's enforcement policy, as approved by the Washington State Department of Ecology, mandates a minimum fine of $1,000.00. The City also is required to publish annually, in the largest daily newspaper published in the municipality, a list of the users which, during the previous twelve months, were in significant non-compliance with applicable pretreatment standards and requirements.

PENALTY ASSESSMENT

TC Systems is hereby assessed a penalty of $1,000.00 for the above described violations. You will be billed for this amount through the usual billing procedure. Please be advised that further violations of a similar nature will result in escalating enforcement actions.

Within 5 days of receipt of this NOV, please reply in writing, giving the cause(s) of the noncompliance and the action(s) that you will take to prevent any future violations of the pretreatment standards.

If you have any questions or concerns about this NOV please call Don McKinney at 257-8240.

Sincerely,

Clair Olivers, P.E.
Director of Public Works

c:

Doug Knutson	WDOE
Jim Langus	Admin
Dan Lowell	Util
IPT File	(1)
IPT Chron File	(1)

PUBLIC WORKS

EVERETT

AUG 07 1997

July 31, 1997

COPY

CERTIFIED MAIL NO. P 009 836 615

Mr. Douglas Miracle
General Manager
TC Systems
1028 W. Marine View Drive
Everett, WA 98201

NOTICE OF VIOLATION

Dear Mr. Miracle:

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of your discharge permit.

TC Systems exceeded Federal Categorical pretreatment standards for zinc in the results reported on your May 1997 self monitoring report. The zinc concentration was reported at 1.85 mg/L and exceeded the monthly average limit of 1.48 mg/L by an amount greater than the Technical Review Criteria (TRC) which is used to determine Significant Non Compliance (SNC).

You have previously been notified (NOV of June 5, 1997) that TC Systems was placed in SNC by exceeding Federal Categorical pretreatment standard monthly average for zinc by an amount greater than the TRC during March and April of 1997. The most recent violation extends the period of time that TC Systems will remain in SNC.

The City recognizes that TC Systems has acted in good faith to correct problems in their pretreatment system and are actively seeking solutions to prevent further violations, therefor we feel that a penalty assessment would not be appropriate at this time. The City will view future violations and enforcement on an individual basis.

Within 5 days of receipt of this NOV, please reply in writing, giving the cause(s) of the noncompliance and the action(s) that you will take to prevent any future violations of the pretreatment standards.

If you have any questions or concerns about this NOV please call Don McKinney at 257-8240.

Sincerely,

Clair Olivers, P.E.
Director of Public Works

c:

[redacted]	WDOE
Jim Langus	Admin
Dan Lowell	Util
IPT File	(1)
IPT Chron File	(1)

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PUBLIC WORKS
EVERETT

September 12, 1997

CERTIFIED MAIL NO. #P 221 745 751

Mr. Douglas Miracle
General Manager
TC Systems
1028 W. Marine View Drive
Everett, WA 98201

NOTICE OF VIOLATION

Dear Mr. Miracle:

This Notice of Violation (NOV) serves as written documentation to you that the City of Everett has observed violations of your discharge permit # 7708-94.

TC Systems violated the conditions of Compliance Order No. P267 174 482, which required installation of a primary device and an approved flow meter by August 7, 1997. Failure to meet this timeline by more than 90 days will place TC systems in Significant Non Compliance again resulting in a minimum of an additional $1,000 fine.

In regard to your letter dated August 27th, you have provided an explanation of why the installation has not been completed, but you have failed to provide a timeline as to when installation will be complete.

The City wishes to work with TC Systems to achieve compliance, however compliance deadlines will not be postponed indefinitely. Within 7 days of receipt of this letter, you shall submit a timeline which includes dates for submittal of plans, start of construction and completion of the new pretreatment system, including installation of the flow measuring device. If the proposed timeline is acceptable to the City, those dates will be incorporated into a new compliance schedule. However, if the timeline is unrealistic or prolonged, the existing compliance order will remain in effect.

If you have any questions or concerns about this NOV please call Don McKinney at 257-8240.

Sincerely,

Clair Olivers, P.E.
Director of Public Works

c:

[redacted]	WDOE
Jim Langus	Admin
Dan Lowell	Util
IPT File	(1)
IPT Chron File	(1)

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PUBLIC WORKS

EVERETT

February 18, 1998

CERTIFIED MAIL NO. P 221 746 252

COPY

Mr. K. Douglas Miracle
General Manager, TC Systems
1028 W. Marine View Dr.
Everett, WA 98201

NOTICE OF VIOLATION

Dear Mr. Miracle:

This Notice of Violation serves as written documentation to you that the City of Everett has observed a violation of your discharge permit #7708-94.

TC Systems exceeded Federal Categorical pretreatment standards for zinc in the results reported on your December 1997 self monitoring report. The zinc concentration was reported at 2.3 mg/L and exceeded the monthly average limit of 1.48 mg/L by an amount greater than the Technical Review Criteria which is used to determine Significant Non Compliance. In addition TC Systems failed to notify the City of Everett within 24 hours of becoming aware that a discharge limit has been exceeded as required in Section IV. G.of your Discharge Permit.

Exceeding the Technical Review Criteria of the same parameter for two months during a six month period would place TC Systems in **Significant Non Compliance** as stated in 40 CFR 403.8 vii. Significant Non Compliance is defined under the following:

> *Chronic Violations. Sixty-six percent or more of the measurements exceed the daily maximum/minimum limit or average limit for the same pollutant parameter by any amount in a 6 month period.*
>
> *Technical Review Criteria Violations. Thirty-three percent or more of the measurements equals or exceeds the product of the daily maximum/minimum limit or the average limit multiplied by the applicable criteria (1.2 times the limit for metals) in a 6 month period.*

The City has the authority to issue Administrative Fines which can range up to $10,000.00 per day for each violation. Once it has been determined that an industry is in Significant Non Compliance, the City's enforcement policy, as approved by the Washington State Department of Ecology, mandates a minimum fine of $1,000.00. The City also is required to publish annually, in the largest daily newspaper published in the municipality, a list of the users which, during the previous twelve months, were in significant non-compliance with applicable pretreatment standards and requirements.

REQUIRED ACTION

Since additional data may be useful in determining why the violations are occurring and how to further prevent reoccurrence, TC Systems is required to sample for zinc once a week for four consecutive weeks, to commence within 7 calendar days of receipt of this notice. Four consecutive weeks refers to a week in which discharge occurs. All samples shall be 24 hour composites. This sampling must be separate from any sampling required under your permit and satisfies the 30 day resampling required by your permit. The results of each sample must be received by the City within thirty days from the date the sample was taken. Your Industrial Waste Inspector is, as always, available to assist TC System personnel in sampling techniques and interpreting analysis results to find a solution to the zinc problem.

If you have any questions or concerns about this Notice of Violation please call Don McKinney at 257-8240.

Sincerely,

Clair Olivers, P.E.,
Director of Public Works

c: [redacted]OE
Jim Langus Everett/ADM
Dan Lowell Everett/UTIL
Chron File (1)
IPT File (1)

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PUBLIC WORKS
EVERETT

March 27, 1998

CERTIFIED MAIL NO. P 027 172 358

Mr. K. Douglas Miracle
General Manager, TC Systems
1028 W. Marine View Dr.
Everett, WA 98201

Response to letter dated March 23, 1998

Dear Mr. Miracle:

While the City appreciates your eagerness to comply with pretreatment requirements, please note that your discharge permit states, in Section IV. Reporting Requirements, Item K. Engineering Report that: "Prior to constructing or modifying any wastewater control facilities, detailed plans shall be submitted to the City and the Washington Department of Ecology for approval and in accordance with WAC 173-240. Facilities shall be constructed and operated in accordance with the approved plans."

You must submit an Engineering Report and a new Operations and Maintenance Manual prior to making any changes in your pretreatment system. Making changes without submitting this report and having it approved is a violation of your permit and will result in enforcement action including monetary fines and possible revocation of your discharge permit.

The requirement for these reports will not be waived as the City feels that complying with the requirements of these reports will help ensure that the system you install is professionally designed to meet your specific discharge requirements and that it is properly operated and maintained.

The requirements for these reports may be found in WAC 173-240 (attached). Please note that these reports must be prepared under the supervision of a professional engineer licensed in the State of Washington, and bear the seal of that engineer.

Please include dates for the design and submission of these plans and reports in the compliance schedule that you submit, which is due by April 18, 1998.

If you have any questions or concerns about this requirement, please contact Don McKinney at 257-8240 as soon as possible.

Sincerely,

Clair Olivers, P.E.,
Director of Public Works

Attachment: WAC 173-240

w/o attachments

c:	[redacted]	WDOE
	Jim Langus	Everett/ADM
	Dan Lowell	Everett/UTIL
	Chron File	(1)
	IPT File	(1)

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PUBLIC WORKS
EVERETT

May 15, 1998

CERTIFIED MAIL NO. P 221 748 665

Mr. Douglas Miracle
General Manager
TC Systems
1028 W Marine View Drive
Everett WA 98201

DETERMINATION OF SIGNIFICANT NON COMPLIANCE
PENALTY ASSESSMENT

Dear Mr. Miracle

In compliance with the requirements of 40 CFR 403.8 viii in the enforcement of national pretreatment standards, the City of Everett has determined that violations of your discharge permit during the six month period from October 1997 through March 1998 have placed TC Systems in Significant Non Compliance.

You have previously been notified (Notice of Violation of February 18, 1998) that TC Systems had exceeded Federal Categorical Pretreatment Standards for the monthly average for zinc by an amount greater than the Technical Review Criteria during December of 1997.

You have also received notification (Notice of Violation of March 17,1998) that TC Systems had exceeded Federal Categorical Pretreatment Standards for the monthly average for zinc by an amount greater than the Technical Review Criteria during the month of January 1998.

Exceeding the Technical Review Criteria of the same parameter for two months during a six month period has placed TC Systems in Significant Non Compliance.

The City has the authority to issue Administrative Fines which can range up to $10,000.00 per day for each violation. Once it has been determined that an industry is in Significant Non Compliance the City's enforcement policy, as approved by the Washington State Department of Ecology, mandates a minimum fine of $1,000.00. The City is also required to publish annually, in the largest daily newspaper published in the municipality, a list of the users which, during the previous twelve months, were in significant non-compliance with applicable pretreatment standards and requirements.

PENALTY ASSESSMENT

This is the second time within a twelve month periond that TC Systems has been in Significant Non Compliance with pretreatment standards for the same parameter. TC Systems is hereby assessed a penalty of $3650.00 for the above described violations as determined by the City of Everett Administrative Fine Policy. You will be billed for this amount through the usual billing procedure. Under Section 9.6.C. of the Pretreatment Ordinance, you may appeal this fine by filing a written request with this office within 10 calendar days. This request must be accompanied by full payment of the fine. Please be advised that further violations of a similar nature will result in escalating enforcement actions.

If you have any questions or concerns about this Notice of Violation please call Don McKinney at 257-8240.

Sincerely

Clair Olivers, P.E.
Director of Public Works

c:

Doug Knutson	WDOE
Jim Langus	Admin
Dan Lowell	Util
IPT File	(1)
IPT Chron File	(1)

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PUBLIC WORKS
EVERETT

March 17, 1998

COPY

CERTIFIED MAIL NO. P 009 836 643

Mr. K. Douglas Miracle
General Manager, TC Systems
1028 W. Marine View Dr.
Everett, WA 98201

NOTICE OF VIOLATION
COMPLIANCE ORDER

Dear Mr. Miracle:

This Notice of Violation serves as written documentation to you that the City of Everett has observed a violation of your discharge permit #7708-94.

TC Systems exceeded Federal Categorical pretreatment standards for zinc in the results reported on your January 1998 self monitoring report. The zinc concentration was reported at 2.5 mg/L and exceeded the monthly average limit of 1.48 mg/L by an amount greater than the Technical Review Criteria which is used to determine Significant Non Compliance.

You have previously been notified (Notice of Violation of February 18, 1998) that TC Systems had exceeded Federal Categorical pretreatment standards for the monthly average for zinc by an amount greater than the Technical Review Criteria during December of 1997.

Exceeding the Technical Review Criteria of the same parameter for two months during a six month period has placed TC Systems in Significant Non Compliance as stated in 40 CFR 403.8 vii. The official determination of Significant Non Compliance and subsequent action will not occur until the end of the six month period, October 1997 through March 1998, and the self monitoring report for the month of March is recorded.

CITY OF EVERETT • 3200 Cedar Street • Everett, WA 98201 • (425) 257-8240 • Fax (425) 257-8243

The City has the authority to issue Administrative Fines which can range up to $10,000.00 per day for each violation. Once it has been determined that an industry is in Significant Non Compliance, the City's enforcement policy, as approved by the Washington State Department of Ecology, mandates a minimum fine of $1,000.00. The City also is required to publish annually, in the largest daily newspaper published in the municipality, a list of the users which, during the previous twelve months, were in significant non-compliance with applicable pretreatment standards and requirements.

TC systems has been aware of this non compliant situation for some time, as zinc violations were documented in March, April and May of 1997, as well as December of 1997 and January of 1998. These violations have placed TC Systems in Significant Non Compliance twice in less than a year and the City cannot allow these violations to continue.

TC Systems was also under a Compliance Order to install a flow measuring system and did not meet the conditions of that order. While a flow meter was eventually installed, it was operational for only a short time and TC Systems is presently having to use an instrument on loan from the City. The loan of this equipment cannot go on indefinitely.

In addition to specific effluent violations noted above, the City finds that TC System is in violation of Section VI., C of your discharge permit as well as Section 2.8.A of Pretreatment Ordinance 2034-95 as amended by Ordinance 2247-97. Section VI. C. of your permit states: "The Permittee shall make the process changes required and/or install whatever pretreatment equipment is necessary to meet the discharge conditions of this permit." ; while Section 2.8.A. of the Ordinance states "Users shall provide all known, available, and reasonable methods of prevention, control, and treatment (AKART) as required to comply with this ordinance and shall achieve compliance with all applicable pretreatment standards and requirements set out in this ordinance within the time limitations specified by the EPA, the State, or the Director, whichever is more stringent."

While TC Systems letter dated September 16, 1997, stated that a treatment system was being budgeted for, that letter gave no specific dates for installation.

COMPLIANCE ORDER

TC Systems shall install an acceptable flow meter within 30 days of receipt of this letter.

TC Systems shall provide the City with a Compliance schedule for a pretreatment system within 30 days of receipt of this letter. This schedule shall include dates for design, construction, completion and system start up, with the system to be operational no more than 180 days of receipt of this letter. Please note that the review and approval of this system by the Department of Ecology may take at least 30 days alone.

Until the pretrement system is operational, TC Systems shall make whatever process changes are necessary to achieve compliance. TC Systems shall also increase self monitoring frequency requirements to once a week until the pretreatment system is operational and consistant compliance can be demonstrated.

If you have any questions or concerns about this Notice of Violation please call Don McKinney at 257-8240.

Sincerely,

Dan Lowell for CO.

Clair Olivers, P.E.,
Director of Public Works

c:

[redacted]	WDOE
Jim Langus	Everett/ADM
Dan Lowell	Everett/UTIL
Chron File	(1)
IPT File	(1)

PUBLIC WORKS
EVERETT

July 28, 1998

Mr. Douglas Miracle
General Manager
TC Systems
1028 W Marine View Drive
Everett WA 98201

Dear. Mr. Miracle;

This letter is to notify you that TC systems has fulfilled the requirement to provide a Corrective Action Report of your pretreatment system. Sample analysis provided by you indicates that the steps taken have been effective in meeting the discharge limits as set forth in your Industrial Discharge Permit.

In accordance with the WAC 173-240 and as a requirement of your Industrial Discharge Permit #7708-94, TC Systems is required to submit an Engineering Report and an Operations and Maintenance Manual. A copy of the WAC 173-240 outlining the information required is attached. The Engineering Report and the O&M Manual shall be submitted no later than September 30, 1998.

Please feel free to call me at (425) 257-8240 should you have any questions regarding this letter.

Sincerely.

Arthur Britton
Industrial Waste Inspector

enc: cc WAC 173-240

c: [redacted] WDOE
Jim Langus Admin
Robert Waddle EQD
Dan Lowell Utilities
Chron File (1)
IPT File (1)

RECEIVED
JUL 30 1998
DEPT. OF ECOLOGY

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PUBLIC WORKS
EVERETT

RECEIVED
AUG 12 1998
DEPT. OF ECOLOGY

August 11, 1998

Mr. Doug Knutson
Pretreatment Engineer
NWRO Department of Ecology
3190 - 160th Ave. SE
Bellevue, WA 98008-5452

Dear Doug;

Please find a copy of the Corrective Action Report for TC Systems (Industrial Waste Discharge Permit #7708-94) attached for your review.

To briefly summarize the report, it shows that the Oakite 166 used in the alkaline cleaning process contained approximately 5% zinc sulfate. This gave the alkaline cleaning solution a concentration of 650 ppm zinc. The corrective action taken was to replace the Oakite 166 with Oakite Inpro-Clean 3000, which does not contain zinc.

Analyses performed since the corrective action was initiated in late May show a significant reduction of zinc in their plating rinse. We will, however continue to monitor this closely.

Please contact me at (425) 257-8240 if you have any questions or comments.

Sincerely,

Arthur Britton
Industrial Waste Inspector

Attachment: Corrective Action Report for TC Systems

c:	Dan Lowell	Utilities	W/O Attachment
	Robert Waddle	EQD	" " "
	Doug Miracle	TC Systems	" " "
	TC Systems File	(1)	" " "
	IPT Chron File	(1)	" " "

H:\IPT\WORD\TCSYSTEM\DOELTR98.DOC

Pretreatment Engineering Report

prepared by

David T. Johnson, P.E.

for

TC Systems
1028 W. Marine View Drive
Everett, WA 98201
City of Everett Permit No. 7708-94

for submittal to

City of Everett
Public Works Department
3200 Cedar Street
Everett, WA 98201

September 30, 1998

Pretreatment Engineering Report

prepared by

David T. Johnson, P.E.

for

TC Systems
1028 W. Marine View Drive
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City of Everett Permit No. 7708-94

for submittal to

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3200 Cedar Street
Everett, WA 98201

September 30, 1998

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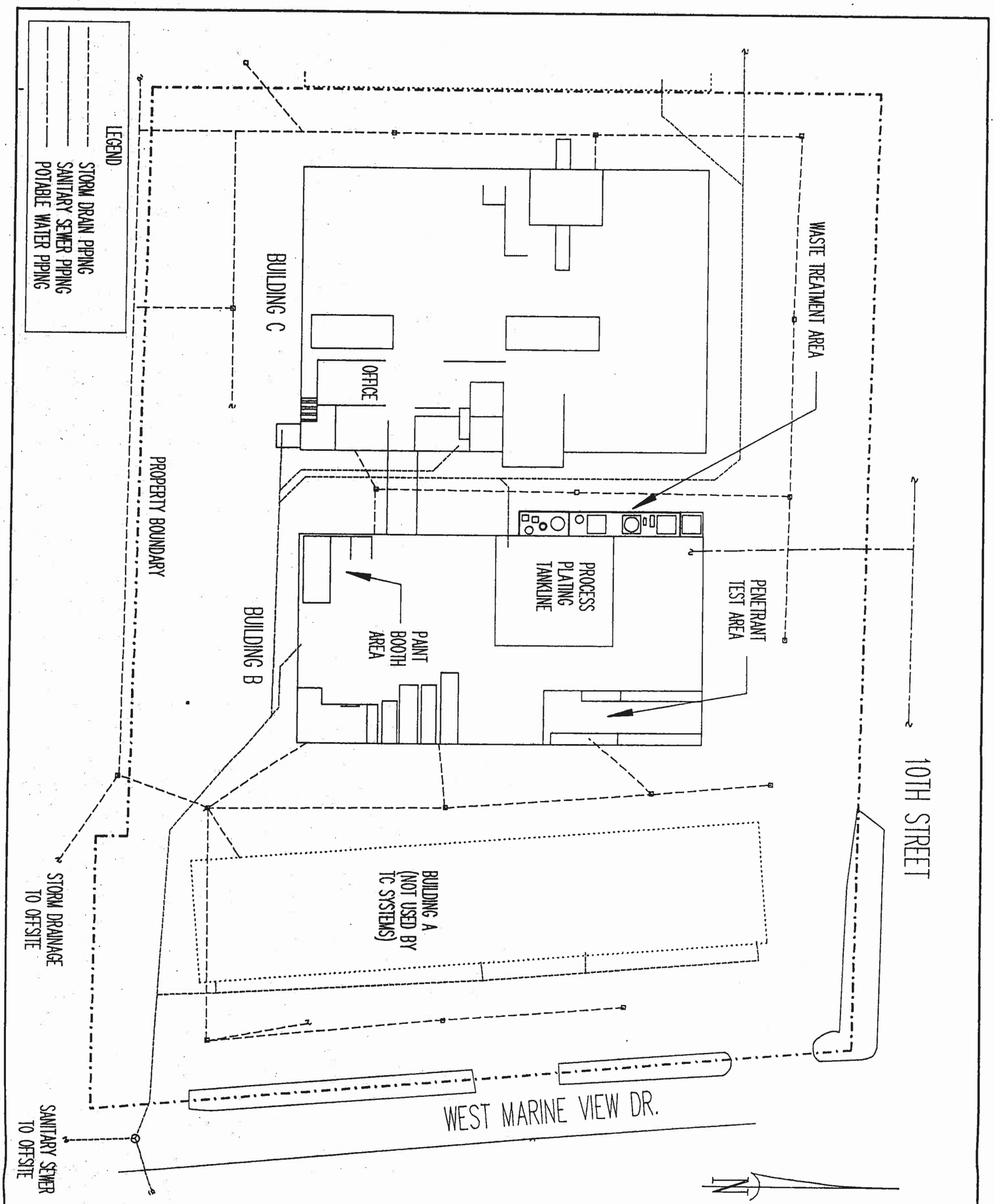
1. INTRODUCTION

TC Systems Inc. operates a manufacturing facility at 1028 W. Marine View Drive in Everett, Washington. A variety of processes are used at this location which apply various surface treatments and coatings to prefabricated metal parts shipped to the location from offsite. These metal finishing processes include powder coating, spray coating, chromate conversion coating, boric sulfuric anodizing, cleaning and etching. A large majority of the parts processed are aluminum-alloy parts used in a variety of aerospace-related applications. Approximately 2,000 parts are processed each week. Figure 1-1 shows the location and overall arrangement of the facilities.

The processes used by TC Systems at this facility produce wastewater that is discharged the City of Everett under Industrial Waste Discharge Permit No. 7708-94. This permit establishes wastewater discharge limits for a number of parameters that potentially could be present in TC Systems wastewater. To ensure compliance with these discharge parameters, TC Systems operates a wastewater pretreatment system at their facility that provides wastewater treatment before it is discharged to the City of Everett sewer system.

Wastewater discharged by TC Systems exceeded the permit parameter established for zinc during the months of December, 1997 and January, 1998. In response to this, TC Systems obtained the services of David T. Johnson Engineering (DTJE) whose principal engineer is David T. Johnson P.E., an independent chemical engineer licensed in the State of Washington. DTJE performed a survey of TC System's pretreatment facilities and determined that the primary source of the zinc was in an alkaline cleaning product used to prepare metal parts prior to further treatment. A Compliance Action Report was prepared and submitted to the City of Everett on May 29, 1998 which described this problem and recommended that a zinc-free product be used to eliminate the source of zinc. TC systems subsequently switched to a zinc-free cleaning product.

On July 29, 1998, the City of Everett requested that TC Systems prepare an updated Engineering Report and an Operations and Maintenance Manual for their wastewater pretreatment system which meet the requirements of WAC 173-240. This report has been prepared in response to this request.



0 25 50 100

SCALE: 1" = 50'

98019-1-1

DRAWN: DTJ

DATE: 20 AUGUST 1998

David T. Johnson Engineering
Chemical Engineering - Water Treatment - Waste Processing
14966 NE 31st Circle, Redmond, WA 98052
TEL: (425) 883-6043 FAX: (425)556-9547

FIGURE 1-1
TC SYSTEMS INC. GENERAL SITE MAP
1028 W. MARINE VIEW DRIVE
EVERETT, WA 98201

2. MANUFACTURING PROCESS DESCRIPTION

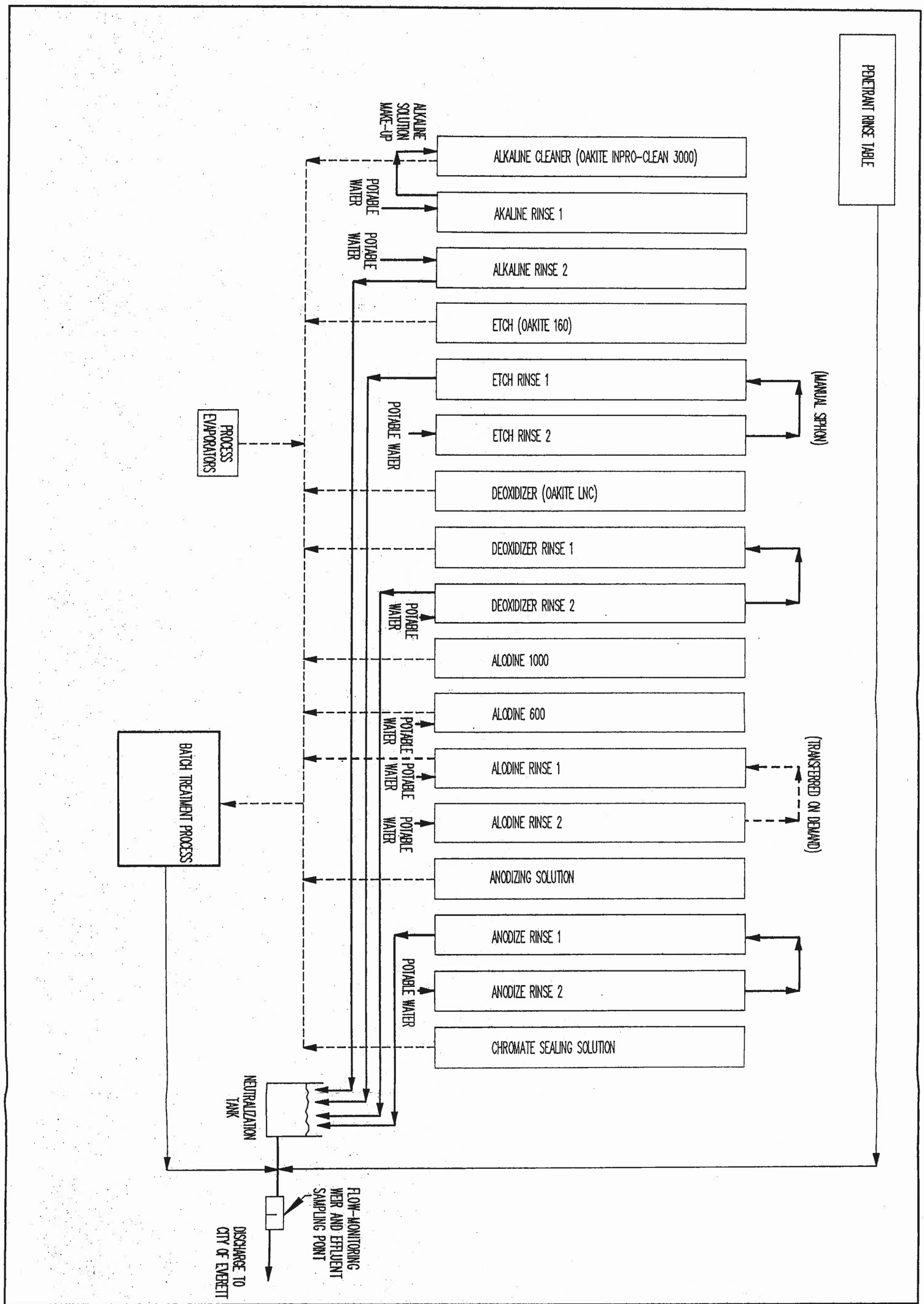
TC Systems provides metal finishing services using several processes that are located in two large industrial warehouse buildings. Cleaning, etching, deoxidizing, chromate conversion coating, and anodizing steps are performed in 17 process tanks located in Building B. The process tanks have dimensions of approximately 48 feet in length, 2.5 feet in width, and 9 feet in depth. Each process tank contains a liquid volume of approximately 7,500 gallons. Spray coating and powder coating are performed in booths located in both Buildings B and C. Penetrant oil rinsing is performed in the northeast corner of Building B. Each of these processes is described below.

2.1 Process Tanks

TC Systems operates 17 process tanks located in Building B which are used to perform six chemical surface treatment processes on a variety of prefabricated aluminum-alloy parts. Figure 2-1 shows these 17 tanks in the sequential order that they are used at TC Systems. The six processes used in these 17 tanks are described below.

2.1.1 Alkaline Cleaning

An alkaline cleaning solution is used in the Alkaline Cleaner tank to remove soils such as inks, light oil, grease and grime residues left on metal parts from previous manufacturing steps without removing the underlying metal substrate. TC systems formerly used a solution of "Oakite 166" to perform the alkaline cleaning process. However, they have recently begun using a substitute zinc-free cleaning product "Oakite Inpro-Clean 3000." Following immersion in the alkaline cleaning tank, the cleaned parts are sequentially rinsed in Alkaline Rinse Tank 1 and then Alkaline Rinse Tank 2 to remove residual cleaning solution from the metal surfaces. To comply with specifications for aircraft parts, the cleaning solution is prepared at a concentration of 5-10 percent Oakite 3000 by volume.



NO SCALE	David T. Johnson Engineering Chemical Engineering – Water Treatment – Waste Processing 14966 NE 31st Circle, Redmond, WA 98052 TEL: (425) 883-6043 FAX: (425)556-9547	FIGURE 2-1 PROCESS TANKS AND WASTEWATER SOURCE STREAMS
98019-2-1 DRAWN: DTJ DATE: 26 AUGUST 1998		

2.1.2 *Chemical Etching*

The fourth in the tank sequence is the Etch Tank. The etching solution consists of "Oakite 160" added at a concentration of 3-5 oz per gallon along with nitric acid added at a concentration of 25-43 grams per liter. The etching solution both etches and cleans the aluminum surface preparatory to subsequent surface treatment. Following immersion in the Etch Tank, the etched parts are sequentially rinsed in Etch Rinse Tank 1 and then Etch Rinse Tank 2 to remove any etching solution from the metal surfaces.

2.1.3 *Deoxidizer Treatment*

In this step, a deoxidizing solution is used to remove oxides, smut, mill scale, and discoloration from aluminum and aluminum alloys. Deoxidization is required prior to chromate conversion coating to remove aluminum oxide from the metal surface. The deoxidizer solution consists of "Oakite Deoxidizer LNC" prepared in solution at a diluted concentration of 15 vol% Oakite LNC liquid. Nitric acid is added at a concentration of 25-43 grams per liter of solution. Following immersion in the Deoxidizer Tank, the etched parts are sequentially rinsed in Deoxidizer Rinse Tank 1 and then Deoxidizer Rinse Tank 2 to remove any deoxidizer solution from the metal surfaces.

2.1.4 *Chromate Conversion Coating*

In this step, products containing chromic acid are used to provide a chromate conversion coating to the surface of aluminum and aluminum alloy parts. TC Systems uses two commercial products for performing this coating process, "Alodine 600" and "Alodine 1000." The Alodine 1000 is used at a concentration of 0.14-0.18 oz powder per gallon and imparts a clear coating. The Alodine 600 is used at a concentration of 1.3-3.0 oz/gallon and imparts a colored coating. The Alodine 600 tank is used predominantly. Following immersion in either of the Alodine Tanks, the coated parts are sequentially rinsed in Alodine Rinse Tank 1 and then Alodine Rinse Tank 2 to remove any Alodine solution from the metal surfaces.

2.1.5 *Boric/Sulfuric Anodizing*

Anodizing is an electrochemical process used to increase the thickness of the natural aluminum oxide on the surface of aluminum and aluminum alloy parts. During anodizing, the aluminum parts become the anode of an electrochemical cell during which time the oxide film increases in thickness as a result of an applied external DC

current. The anodizing solution consists of a mixture of sulfuric acid liquid at a concentration of 30.5-52.0 grams per liter and boric acid powder at a concentration of 5.2-10.7 grams per liter. Following immersion in the Anodizing Tank, the anodized parts are sequentially rinsed in Anodizing Rinse Tank 1 and then Anodizing Rinse Tank 2 to remove any residual Anodizing solution from the metal surfaces.

2.1.6 Chromate Sealing

The Chromate Sealing Tank is the 17th tank in the tankline and contains a dilute chromic acid solution at a concentration of 50 - 150 parts per million.

2.2 Penetrant Washing

Penetrant oil is applied to metal parts as a part of non-destructive testing of metal parts. After application, excess penetrant is removed by water rinsing of the parts. TC Systems uses 'Dubl-Chek' penetrant oils in this process and collects the rinsewater in a sump located in the penetrant washing area. A sump pump transfers the rinsewater to the sewer discharge line prior to the flow measurement weir.

2.3 Spray Coating

TC Systems operates paint spray booths in Buildings B and C which are used to apply various spray coatings to metal parts. At present, all of the spray booths are dry booths and do not produce wastewater during their operation.

2.4 Powder Coating

Powder coating is a dry metal finishing process in which finely ground particles of electrostatically charged pigment and resin are sprayed onto a part to be coated. The parts being coated are electrically grounded so that the charged powder particles adhere to the parts and are held there until melted and fused into a smooth coating in a curing oven. TC Systems performs powder coating operations in Building C. No wastewater is produced by this process.

3. WASTEWATER CHARACTERIZATION

A survey of the TC facilities established that five types of wastewater are generated. These five streams are sanitary wastewater, once-through cooling water, penetrant rinsewater, continuous-flow rinsewater, and batch treatment process wastes. Each of these streams is described below. Table 3-1 summarizes the water balance for TC systems.

Table 3-1 TC Systems Water Balance

WATER USE	GPD
Sanitary Wastewater	1,000
Once-through cooling water	5,800
Batch treatment discharge	400
Continuous-flow rinsewater	1,500
Penetrant Rinsewater	1,200
Evaporation from process tanks	140
TOTAL	**10,000**
Water purchased (2 yr. ave.)	10,000

3.1 Sanitary Wastewater

TC Systems operations are located in two industrial warehouse buildings. Building B contains an area of approximately 21,000 square feet and Building C covers approximately 29,000 square feet. Approximately 80 workers are employed at TC Systems in these two buildings. Using a typical sanitary wastewater generation factor of 13 gallons per employee per day (Metcalf and Eddy, 1991) the daily sanitary wastewater generation rate would be approximately 1,040 gallons per day.

3.2 Once-through Cooling Water

Once-through cooling water is used to cool a large rotary air compressor located on the east side of Building C. In addition, once-through cooling water is used in the "accu-chiller" process water cooling unit located on the west side of Building B. The accu-chiller provides process cooling required to maintain the alodine 600 tank and the anodizing tank at 80F when ambient temperatures exceed this temperature. The once-through cooling water is discharged directly to the sanitary sewer. The discharge volume of once-through cooling water is not measured but is estimated to average

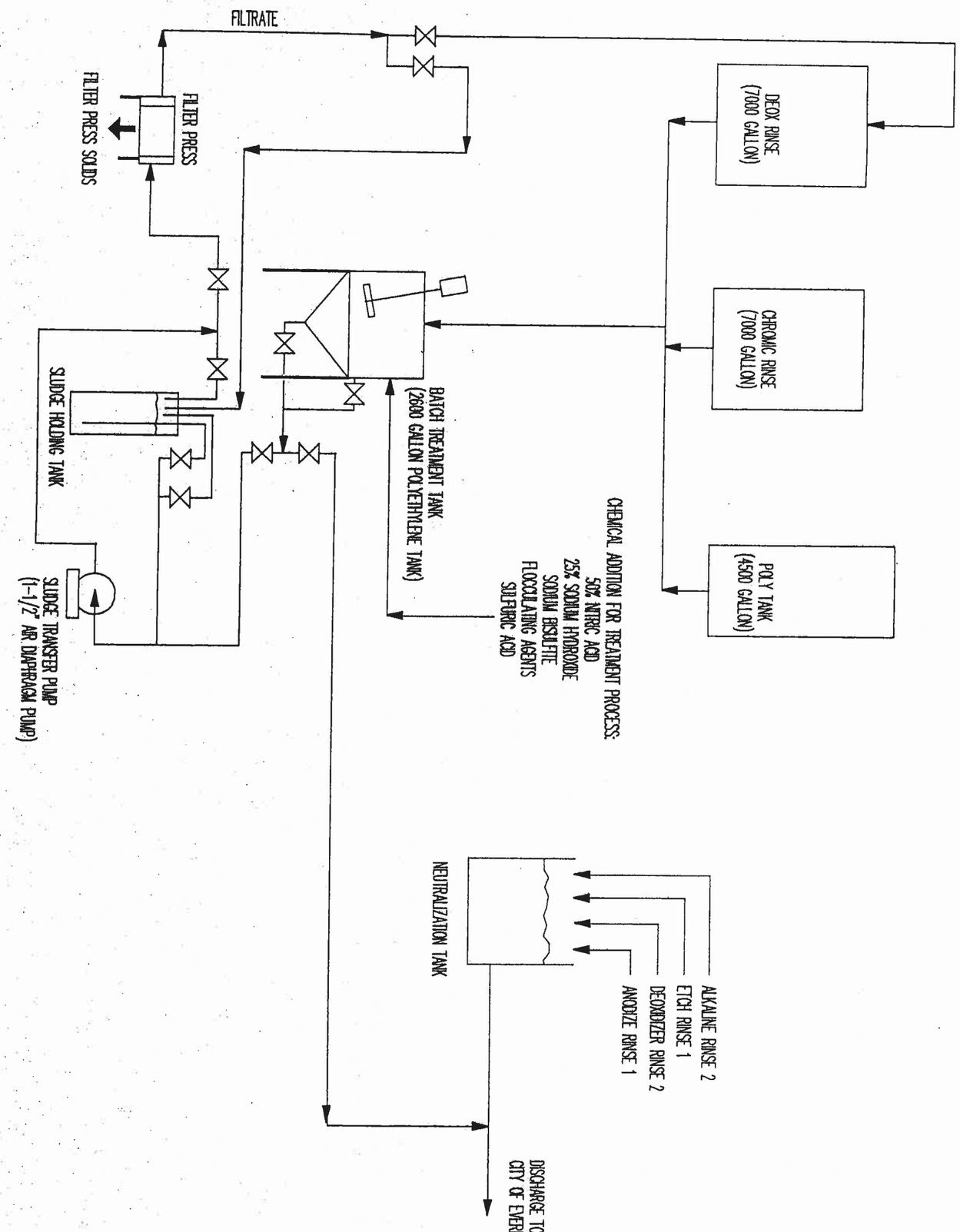
approximately 5800 gallons per day based on a water balance of TC Systems water usage for the months of December, 1997 through March 1998.

3.3 Batch Treatment Wastes

Wastes from the alkaline cleaning tank, the etch tank, the deoxidizer tank, the alodine 1000 tank, the alodine 600 tank, the alodine rinse tanks 1 and 2, and the chromate sealing tank are segregated and treated in a batch treatment process as shown on Figure 3-1. Each of these waste streams is described below. The following Table 3-3 summarizes the waste stream quantities and properties. The waste quantities were determined by TC Systems based on process specifications established by its customers and on its past operational history.

Table 3-2 Summary of Batch Treatment Waste Properties

WASTE SOURCE	GALLONS/YR.	TDS	METALS	OTHER SALTS	PH
Alkaline Cleaning Tank	7,500	111,500	Al	Na, SiO_4	13
Etch Tank	3,750	79,000	Al	Na, CO_3	13+
Deoxidizer Tank	15,000	169,000	Al, Fe^{3+}	NO_3	1
Deox. Rinse Tank 1	390,000	3,700	Al, Fe^{3+}	NO_3	<5
Alodine 1000 Tank	3,750	1,400	Al, Cr^{6+}	K, ZrF_6	<2
Alodine 600 Tank	3,750	22,000	Al, Cr^{6+}	Na, BF_4, K, ZrF_6	<2
Alodine Rinse Tank 1	390,000	450	Al, Cr^{6+}	Na, BF_4, K, ZrF_6	<5
Alodine Rinse Tank 2	195,000	114	Al, Cr^{6+}	Na, BF_4, K, ZrF_6	<5
Anodizing Tank	24,000	59,000	Al, Cu	BO_3, SO_4	1
Chromate Sealing Tank	195,000	250	Al, Cr^{6+}		<2



NO SCALE	David T. Johnson Engineering Chemical Engineering - Water Treatment - Waste Processing 14966 NE 31st Circle, Redmond, WA 98052 TEL: (425) 883-6043 FAX: (425)556-9547	FIGURE 3-1 BATCH TREATMENT PROCESS
98019-3-1 DRAWN: DTJ DATE: 25 AUGUST 1998		

3.4 Continuous-flow Rinsewater

A continuous-flow rinsewater stream is generated from Alkaline Rinse Tank 2, Etch Rinse Tank 1, Deoxidizer Rinse Tank 2, and Anodizing Rinse Tank 1. These four rinsewater streams are routed to the neutralization tank where pH neutralization occurs prior to their discharge. The rinsewater discharge flows through a V-notch weir. An ultrasonic level meter is installed above the weir to measure the height of liquid in the weir and provide a flow measure of the discharge. Flowmeters are not installed on the four individual continuous-flow rinsewater streams. However, based on visual observation of the streams as they enter the neutralization tank, the flowrates are approximately equal. Based on a water balance of TC Systems water usage for the months of December, 1997 through March, 1998, the rinsewater volume is estimated to average 1500 gallons per day. Two rinsing steps after alodine application also generate rinsewater. The alodine-sourced rinsewater does not flow continuously but is transferred periodically to the treatment area for treatment prior to discharge based on the dissolved solids content.

Table 3-3 Continuous-flow Rinsewater Characteristics

RINSEWATER SOURCE	PH
Alkaline Rinse 1 and 2	>11
Etch Rinse 1 and 2	>11
Deoxidizer Rinse 2	<5
Anodize Rinse 1 and 2	<5

3.4.1 Alkaline Rinse 1 and 2

Potable water is added for makeup to both the alkaline rinse 1 and 2 tanks. The alkaline cleaner tank preceding these rinse tanks contains "Oakite Inpro-Clean 3000" cleaning solution. This cleaning solution is a moderately alkaline cleaner containing biodegradable surfactants and is silicate-based. The alkaline rinsewater is slightly alkaline and requires pH neutralization before discharge. Formerly, "Oakite 166" was used which contained approximately 5 wt. percent zinc sulfate. The use of Oakite 166 resulted in difficulties with zinc exceedances in effluent (Johnson, 1998) and was discontinued.

3.4.2 *Etch Rinse 1 and 2*

Chemical etching is peformed in the etch tank using Oakite 160. Oakite 160 contains approximately 90 wt. percent sodium hydroxide, 10 wt. percent sodium carbonate, small amounts of other non-hazardous ingredients. Rinsewater following etching is generated from etch rinse tank 1 and 2. As shown on Figure 2-1, potable water is added to etch rinse tank 2 which then is then siphoned to etch rinse tank 1. Water from etch rinse tank 1 flows continuously to the neutralization tank. The etching rinsewater is alkaline and requires pH neutralization before discharge.

3.4.3 *Deoxidizer Rinse 2*

"Oakite Deoxidizer LNC" is used in the deoxidizer tank. This product contains approximately 40 wt. percent proprietary iron salts, 25 wt. percent nitric acid, and other proprietary non-hazardous ingredients. Rinsewater following deoxidizing is generated from deoxidizer rinse tanks 1 and 2. As shown on Figure 2-1, potable water is added to deoxidizer rinse tank 2 which then flows countercurrently to deoxidizer rinse tank 1. Rinsewater from deoxidizer rinse tank 1 is removed for treatment in the batch treatment process. Rinsewater from deoxidizer rinse tank 2 flows continuously to the neutralization tank. The deoxidizer rinsewater is acidic and requires pH neutralization prior to discharge. The rinsewater also contains small amounts of the iron salts present in the deoxidizer. Assuming this iron is present as the ferric ion, it will precipitate as a solid hydroxide during neutralization.

3.4.4 *Anodize Rinse 1 and 2*

TC Systems uses a boric sulfuric anodizing solution made up of boric and sulfuric acid. Both products are obtained as fresh product from the manufacturer and are not obtained from recycled sources. Rinsewater following anodizing is generated from anodize rinse tank 1 and 2. As shown on Figure 2-1, potable water is added to anodize rinse tank 2 which then flows countercurrently to anodize rinse tank 1. Rinsewater from anodize rinse tank 1 flows continuously to the neutralization tank. The anodizing rinsewater is acidic and requires pH neutralization prior to discharge.

3.5 Penetrant Rinsewater

Penetrant rinsewater is generated when excess penetrant is rinsed from parts undergoing nondestructive inspection. TC Systems uses 'Dubl-Chek' penetrants manufactured by Sherwin Inc. MSDS information for these products shows two ingredients, hydrotreated middle distillate (CAS No. 64742-46-7) and a nonionic ethoxylated C11-C15 secondary alcohol mixture (CAS No. 94133-50-8) used as a

wetting agent. Neither of these ingredients are believed to contain TTO substances as listed in 40 CFR 433.11.

3.6 Evaporative Water Losses

TC Systems operates five tanks which are heated to temperatures above ambient conditions. These are the alkaline cleaner tank (130F), the alodine 1000 tank (145F), The alodine 600 tank (80F), the anodizing tank (80F), and the chromate sealing tank (195F). The alkaline cleaning tank, alodine 1000 tank and chromate sealing tanks are typically covered when not in use to prevent evaporation energy loss. In addition, the anodizing tank is partially covered with floating balls to control evaporative losses. The quantity of water which evaporates from these tanks, as well as the other non-heated tanks is not measured and is difficult to quantify through analytical methods. Using approximate methods, the evaporation loss for these five tanks is estimated to be 140 gallons per day. Evaporation also occurs from the rinse tanks but is not significant. Two evaporators are also in operation and are described further in Section 5. Evaporation from the evaporators is estimated to be approximately 900 gallons per day during optimal conditions in the summer months. However, these evaporators were not in evaporation during the time period from December, 1997 through March, 1998 and are not included in Table 3-1.

4. WASTEWATER DISCHARGE

TC Systems is permitted to discharge industrial process water under Permit No. 7708-94 issued through the pretreatment program administered by the City of Everett, Washington.

4.1 Treatment Requirements

The Industrial Waste Discharge Permit issued to TC Systems by the City of Everett establishes treatment requirements for metals, cyanide, total toxic organics (TTO), pH, nonpolar FOG, and flashpoint. The permit includes concentration-based effluent limits for metals based on the Categorical Pretreatment Standards promulgated by the U.S. Environmental Protection Agency under 40 CFR Part 413 and 40 CFR 433 as well as local limits established under the City of Everett pretreatment ordnance.

4.2 Discharge System

The three process wastewater streams described in sections 3.4, 3.5, and 3.6 are discharged through an effluent weir located on the west side of Building B. Figure 1-1 shows the sanitary sewer line as it leaves Building B at this point. Composite samples are collected at the effluent weir and analyzed for the effluent compliance parameters. Sanitary wastewater and non-contact cooling water are discharged to the sanitary sewer system at separate points and do not flow through the effluent weir. Figure 2-1 provides a schematic representation of the discharge system.

5. WASTEWATER TREATMENT PROCESS

TC Systems has an existing system that provides pretreatment for the wastes described in Section 3.3 and 3.4. The functional aspects of the pretreatment system for these waste types are described below.

5.1 Continuous-flow Rinsewater Treatment

Rinsewater is generated from four rinsing processes as described in Section 3.3.

5.1.1 Normal Operation

The four rinsewater streams are combined in the neutralization tank where pH neutralization occurs as the acidic and alkaline streams are combined. The chemical products used in the steps prior to the rinsing do not contain metals subject to the effluent limits. Metals such as zinc and copper could be present in the rinsewater streams if parts constructed from aluminum alloys containing these metals are processed and a significant portion of the metal is chemically dissolved during cleaning, etching, or deoxidizing. Historical monitoring performed by TC Systems has not identified problems with effluent exceedances for copper. Zinc exceedances in rinsewater have occurred but are believed to have originated from the alkaline cleaning solution as described in Section 1.

5.1.2 Provisions for Bypass

At times, a rinsewater tank may contain water which does not require pH neutralization and which does not contain contaminants exceeding the concentrations established in the effluent permit. For example, equipment testing is peformed at certain times during which a clean rinse tank is filled with uncontaminated potable water. At the conclusion of the testing, it is desired to remove and dispose of the testing water as quickly as possible so that the testing tank can be returned to production. This water could be discharged at a significantly higher discharge rate than the normal continuous-flow and could disrupt the neutralization and treatment process. The clean testing water could also be a source of dilution of the rinsewater streams. To prevent this, TC Systems will discharge such testing water directly to the effluent weir after first testing the water for compliance with the effluent concentration limits established in its

discharge permit. A direct discharge would be accomplished using a temporary hose rather than permanent piping.

5.2 Batch Treatment of Process Wastes

The existing batch treatment process uses a conventional treatment process to treat the process wastes described in section 3.5. To begin treatment, the operator transfers the waste stream to the batch treatment tank. The batch treatment tank is a 2600 gallon polyethylene conical bottom tank with a vertical axial-flow agitator to provide mixing during treatment. Prior to beginning this treatment, the operator performs a simple colorimetric test using a Hach DR700 colorimeter system to determine the presence and concentration of hexavalent chromium (chromic acid) in the waste. If hexavalent chromium is found to be present, the pH is reduced to approximately 2 by adding dilute sulfuric acid, if necessary. Sodium metabisulfite solution is then added to chemically reduce hexavalent chromium to trivalent chromium. After this reduction is complete, the pH is increased to approximately 6.5 and a proprietary coagulant and a flocculating polymer agent are added. After a prescribed length of time, 25 wt. percent sodium hydroxide is added to increase the pH to approximately 8 and an additional flocculating agent is added. At this point, the addition of reagents is complete and mixing continues until the reagents have been properly mixed. After mixing is complete, the mixer is turned off and the precipitated metal hydroxide solids in the tank are allowed to settle to the bottom of the tank cone. After settling is complete, the settled solids are visually decanted from the bottom of the tank and transferred to the filter press feed tank. The supernatant treated water is sampled and tested for compliance with effluent discharge parameters prior to being discharged.

5.3 Treatment System Modifications

The following describes modifications to the pretreatment system to improve capacity, reliability, and effectiveness. Figure 5-1 shows the schematic arrangement of the modified treatment system and Figure 5-2 shows the general equipment arrangement for the new system. Table 5-1 summarizes the estimated costs for the modifications.

Table 5-1 Summary of Estimated Costs for Pretreatment System Modifications

Item	Estimated Cost, $
Evaporators	30,000
pH Controls	5,000
Rinsewater Clarifier and Mixer	20,000
Treatment Tank Capacity	30,000
Filter Press	18,000
TOTAL (w/o Evaporators)	73,000
TOTAL	103,000

Note: These costs are approximate and are not based upon detailed engineering design information. Requirements for items such as excavation, foundation, piping, electrical service, engineering or other areas could result in final costs substantially different from the costs shown here.

5.3.1 Evaporators

The alodine rinse streams contain chromium and have a low pH but are relatively dilute (see table 3-3). The deoxidizer rinse 1 stream also has a low pH but contains primarily iron rather than chromium and is less dilute. Streams such as these can be processed through a evaporator which evaporates water from the stream but leaves the dissolved solids and metals behind. Over time, these materials accumulate in the evaporator boiloff tank and their concentration increases until evaporation is not effective. At that point, the concentrated liquid residue is removed from the evaporator and transferred to the batch treatment process for neutralization and metals removal via precipitation followed by sedimentation. The use of an evaporation process for waste streams such as this has been identified by the EPA as an innovative technology and is a fully developed, commercially available wastewater treatment system (EPA 1982).

TC Systems will place two evaporators into operation with a third evaporator installed as a backup system and/or to provide additional capacity. Each evaporator system will have a boiloff tank located at floor level to which wastes to be evaporated will be transferred. The boiloff tank is heated with heated process water from the existing hot water heater to maintain a boiloff temperature of approximately 140F. This liquid is continuously pumped from the boiloff tank to an overhead evaporation unit which contains internal packing to provide increased surface area to facilitate evaporation. A large blower on each evaporator moves air through the internal packing and then

through a mist eliminator section to remove liquid droplets entrained in the air prior to its exit from the system. Liquid which is not evaporated flows by gravity down through the internal packing and back to the boiloff tank. The air flow through each evaporator is estimated to be approximately 3000 cfm and exits the building through 18-inch diameter duct systems. The evaporation capacity of each evaporator varies depending on the outside relative humidity and air temperature as well as the dissolved solids content of the boiloff tank contents. Under optimal conditions, the evaporation capacity is estimated to be approximately 60 gallons per hour for each evaporator unit. However, it is estimated that two evaporators, one processing deox rinse and one processing alodine rinse would together process approximately 310,000 gallons per year.

The residue from the evaporated water remains behind in the evaporator boiloff tank and must be periodically removed and treated in the batch treatment system. However, the installation and operation of the evaporators will increase the capacity of the pretreatment system by concentrating the waste and reducing the physical volume of the waste to be treated. It will also increase the effectiveness of the metals precipitation and removal process by increasing the metals concentration and reducing the proportion of metals which do not precipitate as a metal hydroxide. These effects will be manifested as a reduced volume of batch treatment effluent after treatment is complete. The estimated cost for three evaporator units is approximately $30,000. Figure 5-1 shows the process configuration a typical evaporator system. Figure 5-4 shows the approximate location of the evaporators.

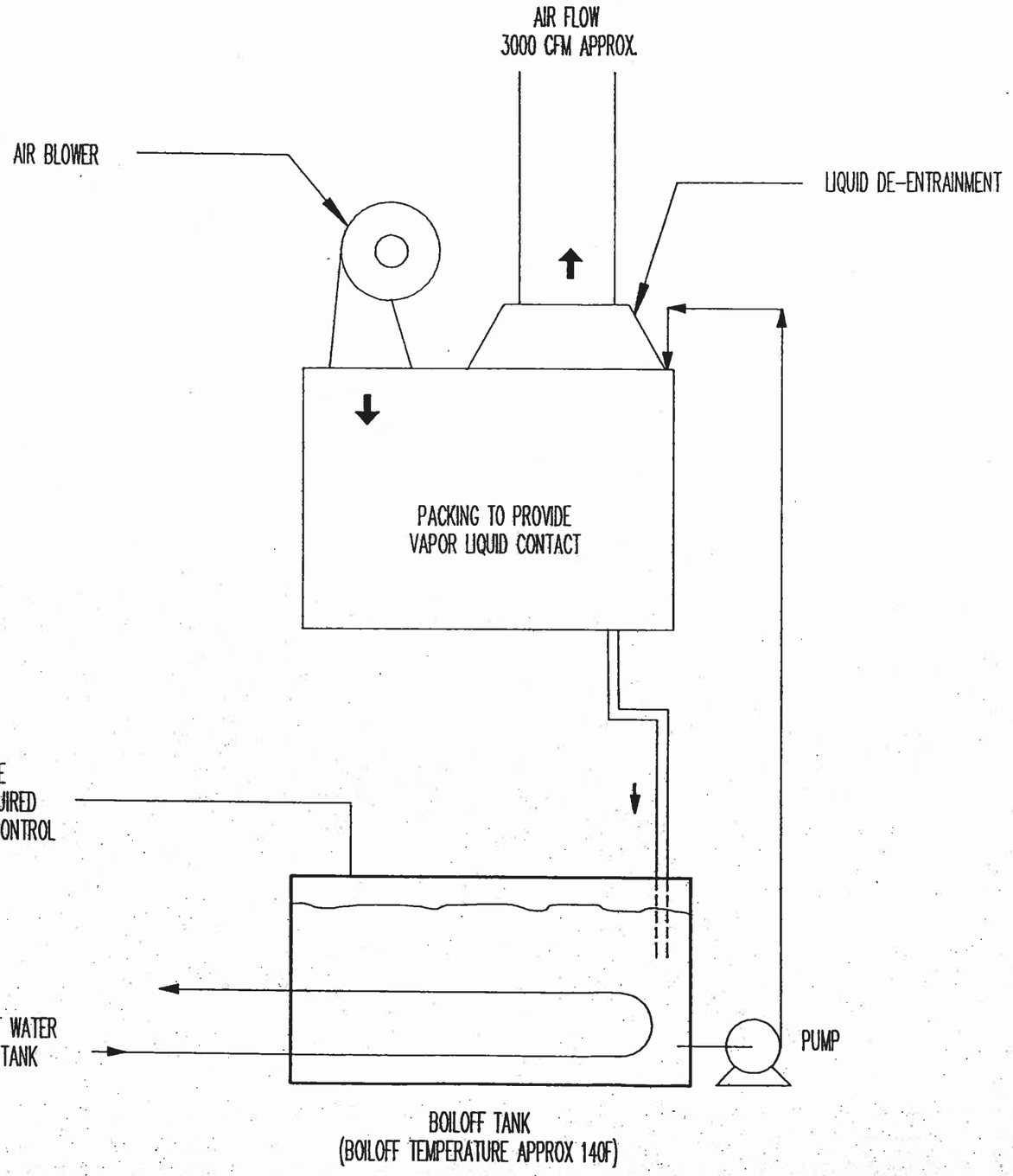


FIGURE 5-1
TYPICAL EVAPORATOR SYSTEM

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NO SCALE

DRAWN: DTJ

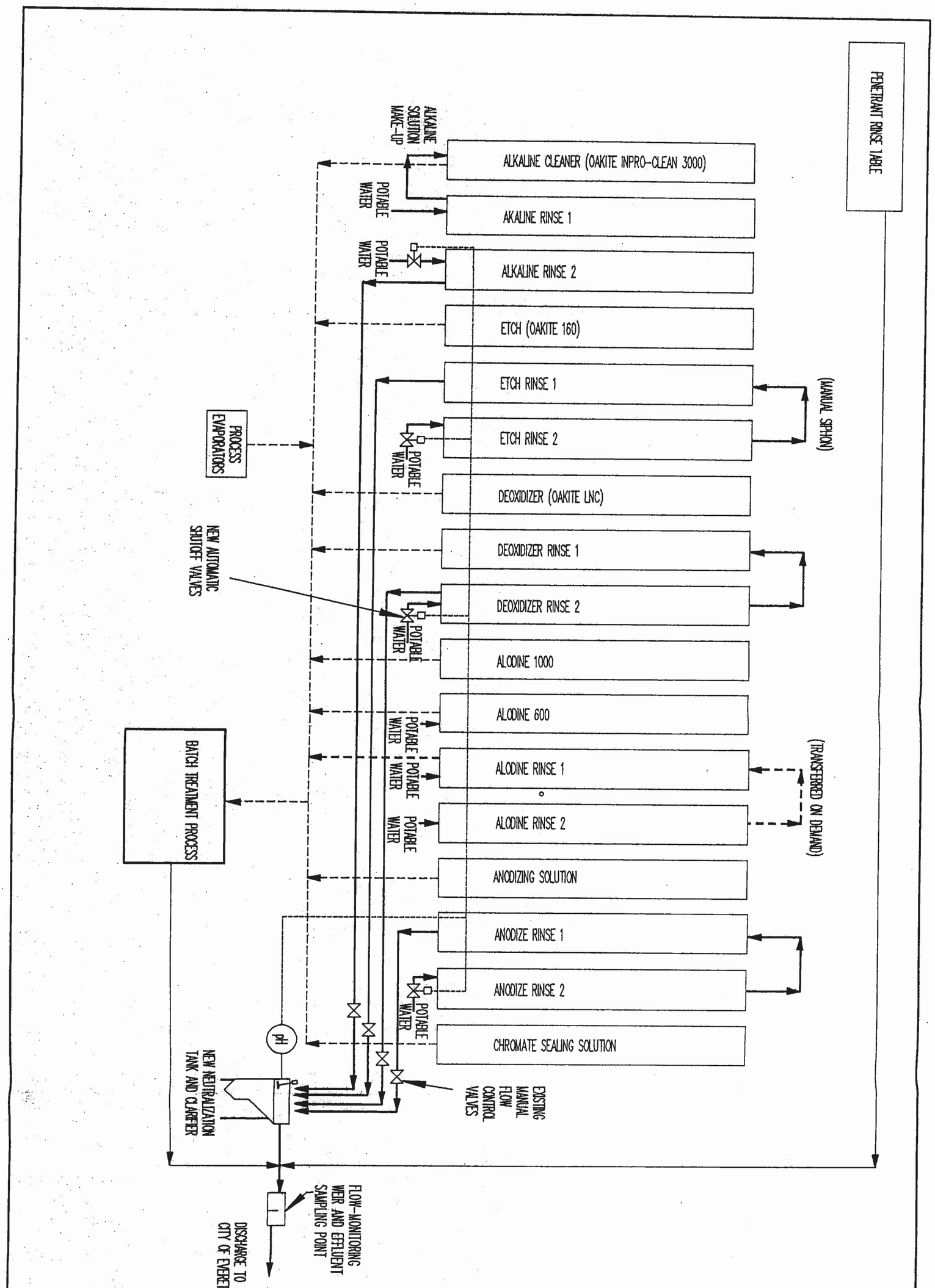
DATE: 20 AUGUST 1998

98019-5-1

5.3.2 pH Controls

pH controls are used at two points in the existing pretreatment system. A pH indicator with chart recorder is installed at the effluent weir to monitor the pH of the discharge stream. A pH sensor is also installed in the batch treatment tank and used to monitor the pH of the treatment tank contents during the course of the treatment process. The neutralization of the continuous-flow rinsate stream occurs as two acidic and two alkaline streams are combined in the neutralization tank. The flowrates of these four streams are manually set using PVC ball-type valves. If a flow is set incorrectly or if one of the flows is interrupted, the pH of the outlet stream from the neutralization tank could stray outside of the permit limits of 5 minimum and 10 maximum. There is no history of this occurring, however. Such an event could be prevented by the installation of a pH sensor in the neutralization tank in conjunction with automatic shutoff solenoid valves on the four inlet streams. If the pH exceeded the high-range setting (say 9.5), the shutoff valves would be closed on the inlet lines for the alkaline rinse and etch rinse. If the pH decreased below a low setting (say 6, the shutoff valves would be closed on the deoxidizer rinse inlet and the anodize rinse inlet. An alarm light would activate to notify the operator and the valves would not reopen until the operator had cleared the alarm and the pH had returned to the proper range. The estimated cost of this modification is approximately $3,000.

In addition to a neutralization tank pH monitoring system, a new pH system would be installed on the batch treatment tank to improve the monitoring of treatment tank pH and provide faster batch turnaround. The estimated cost of this system would be approximately $2,000. Figure 5-2 schematically depicts the new pH controls on the continuous-flow rinsewater stream.



NO SCALE	David T. Johnson Engineering Chemical Engineering – Water Treatment – Waste Processing 14966 NE 31st Circle, Redmond, WA 98052 TEL: (425) 883-6043 FAX: (425)556-9547	FIGURE 5-2 REVISED CONTINUOUS-FLOW PRETREATMENT SYSTEM
98019-5-2 DRAWN: DTJ DATE: 22 SEPTEMBER 1998		

5.3.3 *Rinsewater Clarifier and Mixer*

The existing neutralization tank uses an air sparging lance to mix the rinsewater streams as they enter the tank. The mixed and neutralized stream then flows by gravity to the effluent weir where it is discharged to the sanitary sewer system. Based on historical sampling, metals are not normally present in the rinsewater streams at concentrations exceeding the effluent permit limitations. However, exceedances of metals limits have occurred at infrequent intervals resulting in permit violations. A new clarifier and mixing system can be installed on the existing rinsewater pretreatment system as a replacement for the existing neutralization tank to improve treatment effectiveness for metals should they be present and prevent permit exceedances. The clarifier would be an inclined-plate design and would have an electric mixer installed on the inlet section to evenly mix the entering streams. The mixed and neutralized stream would then flow to the inclined plate clarifier section where sedimentation of any metal hydroxides present would occur. Clarified effluent would then flow by gravity to the existing effluent weir. Settled solids would slowly accumulate in the clarifier where they would be periodically transferred to the sludge holding tank for filtration. The estimated cost for the mixer, clarifier, and associated piping is approximately $20,000. Figure 5-2 and 5-3 show the schematic installation of the new clarifier. Figure 5-4 shows the approximate location.

5.3.4 *Treatment Tank Capacity*

The existing batch treatment process has a single 2600 gallon cone-bottom polyethylene tank which is used for treatment, sedimentation, and effluent storage prior to discharge. As a result, the overall treatment system capacity is constrained by the time required to perform these steps. In a typical treatment, approximately 8 hours are required for waste transfer and treatment followed by an additional 24 hours of sedimentation time during which time laboratory analysis is performed on a sample of the treated waste. It is estimated that under ideal conditions, the present system can process approximately 400,000 gallons of waste per year if 3 batches are processed each week. This capacity is substantially less than the estimated waste volumes in Table 3-3. The capacity of the treatment system will be effectively increased if a flow-through clarifier unit and effluent storage tanks are purchased so that treatment, sedimentation, and effluent storage are performed in separate equipment. A clarifier unit with a flow capacity of approximately 20 gpm and a projected area of 100 sq. ft. would allow the treated waste to be transferred from the treatment tank and clarified in approximately 3 hours. Two new 2800 gallon effluent storage tanks would be provided to allow storage of treated effluent for sampling and analysis prior to discharge. A clarifier feed pump and an transfer pump and associated piping would be provided to facilitate operation. The estimated cost for the clarifier and storage tanks would be $25,000. If these changes are made, the estimated treatment capacity of the batch treatment system would be

approximately 1,100,000 gallons per year which would essentially meet the anticipated requirements even if the contribution from the new evaporators is small. Figure 5-3 shows the processing configuration of the revised batch treatment system. Figure 5-4 shows the approximate arrangement of the new and existing equipment.

5.3.5 Filter Press

The existing filter press has 12 recessed 24-inch plates giving it a total filter cake capacity of approximately 3 cubic feet. Based on the current waste quantities and estimated waste composition, an estimated capacity of 2.3 cubic feet per 8-hr day on an annual basis would be required to keep up with slurry production when treating the deox rinse waste. However, peak demands can occur when processing unusually-concentrated waste, and when backlogs develop for reasons such as equipment breakdown. The existing press essentially has no catch-up capacity under the anticipated loadings and it is possible that filtration could limit treatment operations. T

The manufacturer of the existing filter press is Quantum Technologies in Jones Mill, AK and is apparently no longer in business. Therefore, expansion of the existing press by adding additional plates does not appear to be an option. Increased capacity could also be obtained by installing an additional filter press to be operated in parallel with the existing press. However, this would increase space requirements and operating complexity with small savings in the cost of a new filter press. If a new press is obtained, it would be advisable to obtain a press with a significant increase in capacity as the cost factor for increased capacity is relatively small. A new 6 cubic foot filter press would cost approximately $18,000 and would provide a significant capacity increase.

5.3.6 Sludge Tank

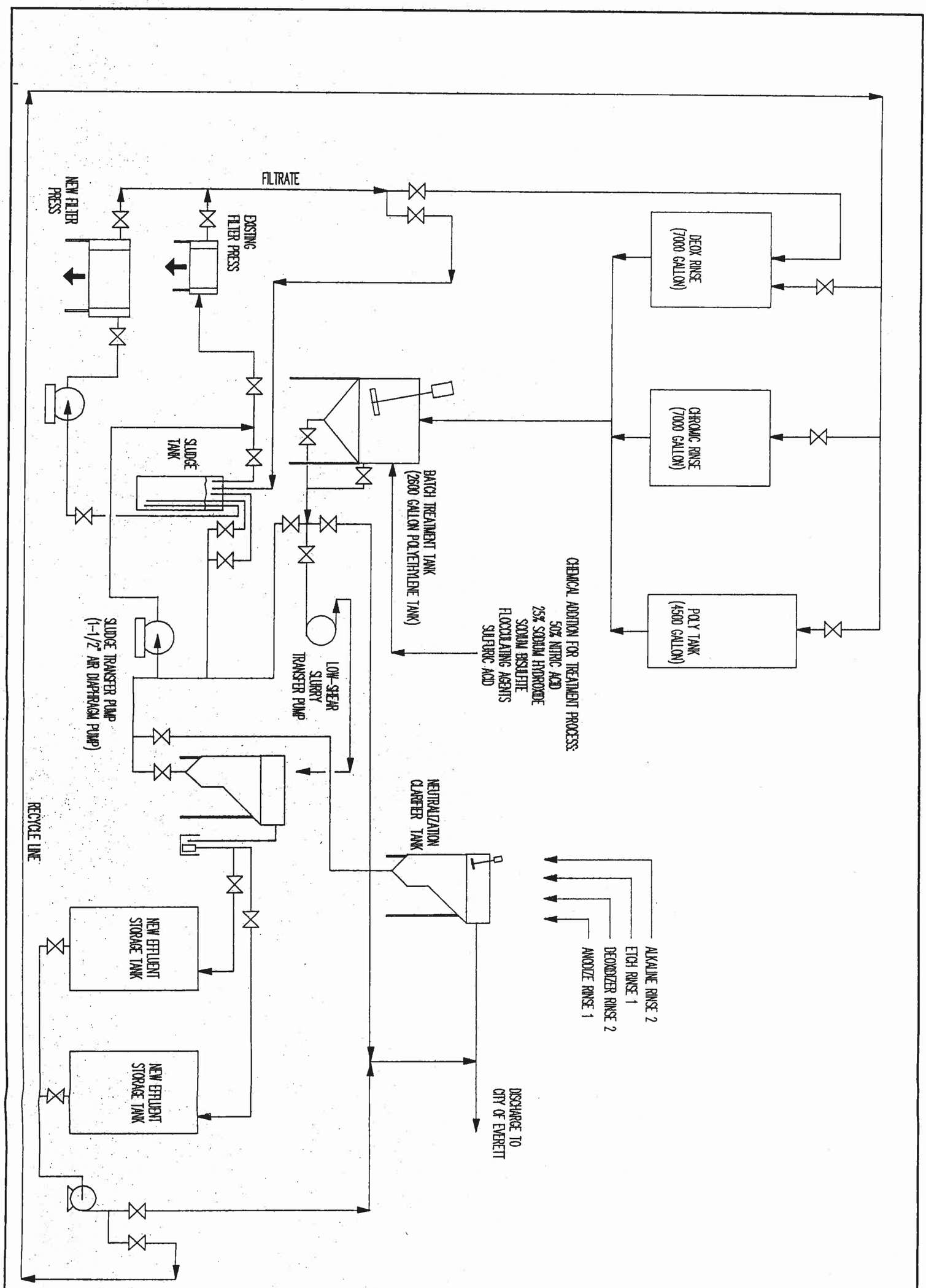
The existing sludge tank is a rectangular steel tank with a volume of approximately 700 gallons. The estimated sludge volume generated daily when processing deox rinsewater is approximately 870 gallons per day at an assumed solids content of 0.5 wt. percent. This sludge storage volume would be sufficient if the filter press is operated continuously and unexpected problems do not occur. At certain times during the year, however, sludge production can dramatically increase for a few days if waste containing large amounts of metals are processed. During such times, the filter press can be momentarily overwhelmed and additional sludge storage capacity may be required. During such a time, any of the three existing waste storage tanks could be temporarily converted to sludge storage until the filter press can work the inventory of sludge down.

5.3.7 Tank Secondary Containment

TC Systems is required to maintain secondary containment systems around process tanks with a volume equal to 110 percent of the largest tank in the containment. The treatment system shown in Figure 5-4 contains the deox and chromic rinse tanks which each have a nominal capacity of 190 bbl or 7,980 gallons. The secondary containment requirements for these tanks would be a volume of 8,800 gallons which appears to be somewhat greater than the capacity of the existing containment. Figure 5-4 shows revisions to the secondary containment system which will increase its capacity to approximately 9,300 gallons and create a smaller containment area for the alkaline hazardous materials such as sodium hydroxide and sodium metabisulfite. The revisions consist of the installation a new containment structure adjacent to the existing containment. The new containment also provides containment and foundation support for the new equipment.

5.4 Treated Water Quality

The categorical pretreatment standards in 40 CFR 413 and 40 CFR 433 are based upon hydroxide precipitation followed by sedimentation (EPA 1984). Hydroxide precipitation is used to precipitate dissolved metals by control of the pH through chemical addition. After precipitation, the metals can be removed by sedimentation and filtration. The processes of hydroxide precipitation and sedimentation have been demonstrated as being capable of achieving the categorical pretreatment standards (EPA 1982). As a result, the treated water will achieve the effluent limits described in section 4.1. The modifications described in section 5.3 will provide capacity sufficient to treatment the waste volume generated by the manufacturing activities described.



NO SCALE	David T. Johnson Engineering Chemical Engineering - Water Treatment - Waste Processing 14966 NE 31st Circle, Redmond, WA 98052 TEL: (425) 883-6043 FAX: (425)556-9547	FIGURE 5-3 BATCH TREATMENT PROCESS WITH PROPOSED MODIFICATIONS
98019-5-3 DRAWN: DTJ DATE: 18 SEPTEMBER 1998		

NEW CLARIFIER
TO REPLACE NEUTRALIZATION TANK

EXISTING RAINWATER
COLLECTION TANK
(TO BE REMVED)

NEW EVAPORATORS

NITRIC ACID

DEOX TANK

TREATMENT
TANK

CHROMIC TANK

STORAGE
TANK

SODIUM
METABISULFITE

SODIUM
HYDROXIDE

7.5'

SULFURIC ACID

ALKALI
STORAGE

STORM DRAIN

DEOXIDIZER STORAGE

NEW BERM
DIVIDER

NEW EFFLUENT
STORAGE
TANKS (2800 GAL EA.)

NEW CLARIFIER

NEW FILTER
PRESS

FIGURE 5-4
GENERAL ARRANGEMENT OF
REVISED PRETREATMENT SYSTEM

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SCALE 1" = 100'

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DRAWN: DTJ

DATE: 20 SEPTEMBER 1998

98019-5-4

6. SLUDGE DISPOSAL

Sludge generated by the filter press is managed as a dangerous waste under the WAC 173-303 Dangerous Waste Regulations. These regulations establish requirements for waste characterization, waste storage, waste packaging, and disposal. TC Systems utilizes the services of a licensed transporter of dangerous wastes to transfer this waste to a TSD facility. When economically and technically feasible, TC Systems will transport sludge wastes to a recycling facility for metals recovery prior to disposal rather than directly to a disposal facility. TC Systems submits an annual report on its dangerous waste generation to the Washington State Department of Ecology which details waste generation, transport, and disposal.

7. COMMITTED FUTURE PLANS

Anticipated future plans are described here. The implementation of these future plans will upon resources and market conditions.

7.1 Wet-curtain Spray Booth Conversion

TC Systems is currently evaluating the feasibility of converting dry spray booths to a wet-curtain type. The current dry booths require frequent changes of air filters to maintain proper operation. After changing, the spent filters must be disposed of as a regulated dangerous waste. As a part of its waste minimization program, TC Systems could reduce the volume of dangerous waste generated by converting to a wet-curtain spray booth. A wet-curtain spray booth would use a water curtain to contain particulate and liquid coating material. The water for the curtain is recycled through the booth and eventually requires replacement with fresh water. The waste paint booth water would be transferred to the batch treatment system for treatment and disposal. This water would be expected to require pH adjustment, coagulation, flocculation, and sedimentation prior to its disposal. The total volume of water would be small (approximately 1000 gallons per year per booth converted) and would not present difficulties when processed through the upgraded system described in Section 5.

7.2 Alternate Deoxidizer Product

TC Systems is currently using the "Deoxidizer LNC" product described in Section 2.1.3. This product contains significant amounts of iron salts and generally provides satisfactory performance. For production purposes, TC Systems is considering the use of a substitute chromated deoxidizer product (Oakite Deoxidizer 34) which would contains significant quantities of chromic acid. If this conversion is made, the deoxidizer rinsewater treatment would have to occur in the batch treatment system to accomplish Cr^{+6} reduction. The process evaporators described in Section 5 could also be used to process deoxidizer rinsewater. Modifications to the continuous-flow rinsewater treatment system would be required if deoxidizer rinsewater were to be processed through it.

8. SCHEDULE

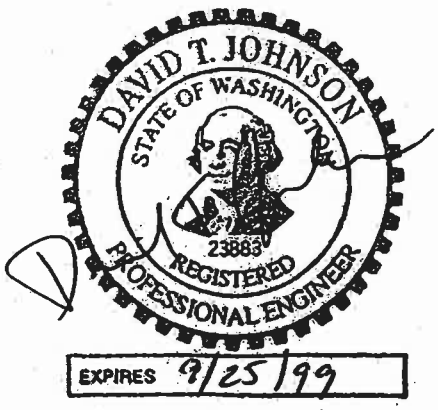
Modifications to the treatment system will proceed in stages. The evaporators described in section 5.3.1 are available for immediate operation. The anticipated schedule for the remaining modifications is as follows:

8 weeks	Detailed Design
12 weeks	Procure Equipment
6 weeks	Install Equipment
4 weeks	Startup and Testing
30 weeks	**TOTAL**

9. COMPLIANCE

9.1 Professional Engineering Assessment

This report has been prepared by David T. Johnson, a register professional engineer licensed to practice in the State of Washington in accordance with chapter 18.43 RCW. The waste pretreatment systems described here will incorporate the technologies of metal hydroxide precipitation followed by sedimentation. As noted in Section 5.4, the categorical pretreatment standards in 40 CFR 413 and 40 CFR 433 are based upon hydroxide precipitation followed by sedimentation. It is the opinion of this engineer that the implementation of these technologies, as described in Section 5 of this report, will be sufficient to allow effluent from the pretreatment systems to meet applicable permit effluent limitations and pretreatment standards.



9.2 System Ownership

TC Systems Inc. will own, operate, and maintain the pretreatment systems described in this report after construction is complete.

9.3 Compliance with Water Quality Management Plans

All effluent from the pretreatment systems is discharged for further monitoring and treatment at facilities owned and operated by the City of Everett, Washington. The City of Everett administers an industrial pretreatment program under the authority of Pretreatment Ordinance 2034-95 as amended by Ordinance 2247-97 in October, 1997. The facilities described in this report appear to be in compliance with the requirements of the City of Everett pretreatment program. The size and composition of the effluent discharges to the City of Everett are very small relative to the total of flow of all industrial pretreatment effluent received. Therefore, it does not appear that effluent wastewater discharged by TC Systems will have a significant effect on the City of Everett's ability to transport and treat the effluent without exceeding its allocated industrial capacity and on the city's utilization and disposal of its municipal sludge.

9.4 SEPA/NEPA Compliance

The State Environmental Protection Act (SEPA) rules set forth in WAC 197-11-310 require that a threshold determination be made for any proposal which meets the definition of action and is not categorically exempt. The system operated by TC Systems is an existing permitted facility. Under WAC 197-11-800(3), repairs, maintenance, or minor alteration of existing public and private facilities, equipment, and utilities would be categorically exempt from SEPA threshold determination and EIS requirements.

10. REFERENCES

EPA 1984. *Guidance Manual for Electroplating and Metal Finishing Pretreatment Standards*. U.S. EPA Office of Water, EPA 440/1-84-091-g, Washington D.C. February, 1984.

EPA 1982. *Development Document for Effluent Limitations Guidelines and Standards for the Metal Finishing Point Source Category*. U.S. EPA Effluent Guidelines Division, EPA 440/1-82/091-b, Washington D.C. August, 1982.

EVERETT 1997. *Pretreatment Ordinance*. City of Everett, Washington, Ordinance #2034-95, Everett, Washington. October, 1997.

JOHNSON 1998. *Corrective Action Report for TC Systems Inc.*, D. T. Johnson, Redmond, Washington, May 29, 1998.

METCALF AND EDDY 1991. *Wastewater Engineering -- Treatment, Disposal, and Reuse*. Metcalf & Eddy, Inc. 3rd Edition, pp20. McGraw-Hill, New York. 1991.

11. APPENDIX A - PRODUCT MATERIAL SAFETY DATA SHEETS

Oakite 166
Oakite Inpro-Clean 3000
Oakite 160
Oakite LNC Deoxidizer
Alodine 600
Alodine 1000
Dubl-Chek Penetrant
Oakite Deoxidizer 34

Oakite.

3142

MATERIAL SAFETY DATA SHEET

PRODUCT CODE: 3142
OAKITE ALUMINUM CLEANER 166
60-C-505

HMIS 2 0 0 J

SECTION I - PRODUCT IDENTIFICATION

RADE NAME	OAKITE ALUMINUM CLEANER 166
HEMICAL NAME ND SYNONYMS	NA-Mixture
ANUFACTURER'S NAME ND TELEPHONE NO.	OAKITE PRODUCTS INC. (908) 464-6900 (8am-5pm)
DDRESS	A Member of The CHEMETALL Group 50 Valley Road Berkeley Heights NJ 07922
ATE OF PREPARATION	08-22-95

EMERGENCY TELEPHONE NUMBER:
(800) 424-9300 (CHEMTREC)

SECTION II - HAZARDOUS INGREDIENTS

	CAS NO.	% BY WT	ACGIH TLV (TWA)	OSHA PEL (TWA)	UNITS
dium tetraborate	0001330434	60-70	1	NE	mg/m^3
nc sulfate(+)	0007733020	<5	NE	NE	
dium nitrate(+)	0007631994	<5	NE	NE	
n-hazardous ingredients		Bal.			

identified ingredients are considered not hazardous under Federal Hazard mmunication Standard (29 CFR 1910.1200).

l components of this material are on the US TSCA Inventory.

) This product contains ingredient(s) identified in Section II with (+) which e subject to the reporting requirements of section 313 of SARA Title III and CFR 372.

RCINOGENICITY: No substance in this product is listed by IARC, NTP, or gulated by OSHA as a carcinogen.

SECTION III - PHYSICAL DATA

- Not Applicable

NE - Not Established

LING POINT (F)	NA	SPECIFIC GRAVITY (H20=1)	0.97
OR PRESSURE (mm Hg)	NA	Bulk Density	8.1 lb/gal
OR DENSITY (Air=1)	NA	PERCENT VOLATILE	
UBILITY IN WATER	Appreciable	BY WEIGHT(%) Excludes H2O	NA
PORATION RATE	NA	PH 40 g/l	9.1
EARANCE AND ODOR	White powder; odorless.	PH (concentrate)	NA

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

SH POINT (Method Used): NONE
MMABLE LIMITS: LEL: NA UEL: NA

INGUISHING MEDIA: Use media suitable for surrounding materials.

CIAL FIRE FIGHTING PROCEDURES: No special procedures required.

SUAL FIRE AND EXPLOSION HAZARDS: See Section VII.(WHMIS)
See Section VI.(U.S.)

SECTION V - HEALTH HAZARD INFORMATION

TE(S) OF ENTRY:	INHALATION:	SKIN:	INGESTION:
	X	X	X

ICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.
PTOMS/EFFECTS OF OVEREXPOSURE:
Inhalation of dust or mist causes irritation of mucous membranes. Skin irritation. Possible dermatitis. Although absorption of borates through intact skin is unlikely, contact with burned or abraded skin may result in systemic poisoning. Symptoms include nausea, abdominal pain, diarrhea, vomiting, headache and weakness. Severe cases may be characterized by shock, rapid heartbeat and cyanosis. Direct contact with eyes causes irritation. No evidence of adverse chronic respiratory exposure effects from available information.

FIRST AID

S: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get prompt medical attention.

- Not Applicable NE - Not Established

SKIN: Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists get medical attention. Wash clothing before reuse.

INGESTION: Contact local poison control center or physician IMMEDIATELY!

INHALATION: Move victim to fresh air. Get medical help if irritation persists.

SECTION VI - REACTIVITY DATA

STABILITY: NORMALLY STABLE
INCOMPATIBLE MATERIALS: Strong acids.
HAZARDOUS DECOMPOSITION PRODUCTS: Phosphorous oxides, Boron oxides.

SECTION VII - SPILL OR LEAK PROCEDURES

PROCEDURES: Wear personal protective equipment (See Section VIII). Carefully clean up spilled material and place in dry containers for disposal. Avoid dust generation.

WASTE DISPOSAL METHOD: Dispose of in accordance with Local State and Federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY: If TLV is exceeded, or For symptoms of overexposure, wear a NIOSH-approved dust/mist respirator.

EYEWEAR: Wear chemical safety goggles.

CLOTHING/GLOVES: Wear chemical-resistant gloves and clothing as needed to prevent skin contact.

VENTILATION: Local exhaust may be necessary for some handling/use conditions. Specific needs should be addressed by supervisory or health/safety personnel.

SECTION IX - SPECIAL PRECAUTIONS

Store in closed container in dry area.

- Not Applicable

NE - Not Established

Oakite®

3142

MATERIAL SAFETY DATA SHEET

PROVAL Michael Chang Mgr. Health & Environmental Dept. 08/22/1995

NAME TITLE DATE OF PRINTING

- Not Applicable

NE - Not Established

PRODUCT PROFILE

OAKITE PRODUCTS, INC., P.O. BOX 602, 50 VALLEY ROAD, BERKELEY HEIGHTS, NJ 07922
OAKITE CANADA LIMITED, 115 EAST DRIVE, BRAMALEA, ONT L6T 1B7
Subsidiaries and Distributors World-wide Tel. (908) 464-6900 FAX (908) 464-6031

TECHNICAL DATA

OAKITE® INPRO-CLEAN 3000: An alkaline tank immersion cleaner for aluminum and aluminum alloys

PRIMARY APPLICATION

Inpro-Clean 3000 is an alkaline immersion cleaner for aluminum, clad aluminum and aluminum alloys, magnesium and titanium alloys. Inpro-Clean 3000 has been designed to remove soils such as stencil ink, light oil, grease, grime, from metal surfaces without attacking the substrate.

CHEMICAL CHARACTERISTICS

chemical composition	surfactants and alkaline salts, including silicates
physical form	as received: pale-yellow liquid as used: colorless solution
odor	mild
bulk density	1129 g/ℓ 20°C (9.4 lb/gal at 68°F)
viscosity	not applicable
flash point	none
hygroscopic tendency	not applicable
foaming tendency	moderate
recommended diluent	water
maximum solubility	complete
behavior in hard water	sequesters
rinsability	good
biodegradable surfactants	yes
phosphate-free	no
normal working temperatures	49-82°C (120°-180°F)
normal working concentrations	5-10% by volume
pH at working concentrations	12.7 ± 0.2
effect of prolonged boiling	none
effect of working solutions on metals	rate of metal loss from 24-hour static immersion in Inpro-Clean 3000, 65 grams/ℓ at 150°F, projected for one year, is as follows:

Metal (alloy)	mm/yr	in/yr
aluminum:		
1100	0.0270	0.0010
2024	0.0200	0.0008
3003	0.0220	0.0009
steel	0.0000	0.0000
stainless steel (316)	0.0000	0.0000
galvanized steel	0.0220	0.0009
copper*	0.0380	0.0015
brass*	0.0680	0.0027
magnesium	0.0170	0.0007

* Copper, brass and copper alloys are discolored.

APPLICATION PROCEDURE

1. **Light Duty Cleaning:**
   5% by volume of Inpro-Clean 3000, 140-180°F, 10 minutes immersion or until soil is removed.

2. **Heavy Duty Cleaning:**
   5-10% by volume of Inpro-Clean 3000, 140-180°F, 10 minutes immersion or until soil is removed.

NOTE: When possible, agitate parts during processing, for optimum results.

Solution Control: Concentrations of Inpro-Clean 3000 can be titrated by Procedures 92 or Test Kit Procedure 121. For Procedure 92, the sample volume is 25 ml and Multiplying Factor (F) is 2.2. For TK 121, the sample volume is 10 ml and Multiplying Factor (F) is 5.6.

For Free and Total Alkali use Procedures 13 or TK 123.

NOTES ON USE - See Material Safety Data Sheet

Safety and Handling Precautions: Inpro-Clean 3000 is a moderately alkaline industrial product containing biodegradable surfactants. May cause burns of eyes. Causes skin irritation. Harmful if swallowed. Avoid contact with eyes, skin and clothing. Wear rubber gloves, safety goggles or face shield, and suitable protective clothing when handling dry powder or solutions. Wash thoroughly after using. Do not take internally.

First Aid in Case of Contact: Flush skin or eyes with plenty of water for at least 15 minutes. For eyes, get medical attention. If swallowed, give several glasses of water or milk to drink. Contact a physician.

KEEP OUT OF REACH OF CHILDREN

DISPOSAL

Dispose of according to all federal, state and local regulations.

PACKAGING

Packaged in nonreturnable plastic drums.
large drum: 517 lb net

SHIPMENT

May be shipped by any common carrier. Freight classification is "Cleaning Compound, NOIBN, Liquid". Product Code #4396.

STORAGE

Suitable for general indoor storage. Keep container closed when not in use.

effect of high temperature storage	None
effect of low temperature storage	None*
effect of aging	None

*Solution may appear hazy below 50°F. Solution reconstitutes to a homogeneous solution at room temperature. Mix well before use.

Oakite® MATERIAL SAFETY DATA SHEET

PRODUCT CODE: 4396
OAKITE INPRO CLEAN 3000
60-DI-1

HMIS 3 0 0 J

SECTION I - PRODUCT IDENTIFICATION

TRADE NAME	OAKITE INPRO CLEAN 3000	**EMERGENCY TELEPHONE NUMBER:**
CHEMICAL NAME AND SYNONYMS	NA; Mixture	(800) 424-9300 (CHEMTREC)
MANUFACTURER'S NAME AND TELEPHONE NO.	OAKITE PRODUCTS INC. (908) 464-6900 (8am-5pm) A Member of The CHEMETALL Group	
ADDRESS	50 Valley Road Berkeley Heights NJ 07922	
DATE OF PREPARATION	01-03-95	

SECTION II - HAZARDOUS INGREDIENTS

	CAS NO.	% BY WT	ACGIH TLV (TWA)	OSHA PEL (TWA)	UNITS
Trade secret registry (735517)	-5033P	<5	NE	NE	
Amine Ethoxylate	0073138279	<5	NE	NE	
Nonionic surfactant	0060828786	<5	NE	NE	
Sodium silicate	0001344098	<5	NE	NE	
Non-hazardous ingredients		Bal.			

Unidentified ingredients are considered not hazardous under Federal Hazard Communication Standard (29 CFR 1910.1200).

All components of this material are on the US TSCA Inventory.

CARCINOGENICITY: No substance in this product is listed by IARC, NTP, or regulated by OSHA as a carcinogen.

SECTION III - PHYSICAL DATA

BOILING POINT (F)	NE	SPECIFIC GRAVITY (H2O=1)	1.131
VAPOR PRESSURE (mm Hg)	NE	Bulk Density	9.44 lb/gal
VAPOR DENSITY (Air=1)	NE	PERCENT VOLATILE	

NA - Not Applicable **NE - Not Established**

Oakite® MATERIAL SAFETY DATA SHEET

SOLUBILITY IN WATER	Complete	BY WEIGHT(%) Excludes H2O	<5
EVAPORATION RATE (BuAc=1)	<1	PH 8% solution	12.7
APPEARANCE AND ODOR	Pale yellow liquid; mild odor.	PH (concentrate)	13.8

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used): None
FLAMMABLE LIMITS: LEL: NA UEL: NA

EXTINGUISHING MEDIA: Use media suitable for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES: Wear Self-Contained Breathing Apparatus (SCBA).

UNUSUAL FIRE AND EXPLOSION HAZARDS: See Section VII.(WHMIS)
See Section VI.(U.S.)

SECTION V - HEALTH HAZARD INFORMATION

ROUTE(S) OF ENTRY:	INHALATION:	SKIN:	INGESTION:
	x	x	x

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known
SYMPTOMS/EFFECTS OF OVEREXPOSURE:
Inhalation of mist may cause respiratory irritation. Direct contact with skin causes irritation and possible burns. Eye contact is irritating and may cause damage.

FIRST AID

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.

SKIN: Immediately flush skin with plenty of water for at least 15 minutes. Get medical attention.

INGESTION: Contact local poison control center or physician IMMEDIATELY!

INHALATION: Move victim to fresh air.

SECTION VI - REACTIVITY DATA

NA - Not Applicable NE - Not Established

Oakite® MATERIAL SAFETY DATA SHEET

STABILITY: NORMALLY STABLE
INCOMPATIBLE MATERIALS: Strong acids.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Carbon dioxide, Silicon dioxide.

SECTION VII - SPILL OR LEAK PROCEDURES

PROCEDURES: Wear personal protective equipment (See Section VIII). Clean up with absorbant material. Neutralize with a mild acid. Flush area with water.

WASTE DISPOSAL METHOD: Dispose of in accordance with Local State and Federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY: Respirator not normally required. For symptoms of overexposure, wear a NIOSH-approved dust/mist respirator.

EYEWEAR: Wear chemical safety goggles.

CLOTHING/GLOVES: Wear chemical-resistant gloves and clothing as needed to prevent skin contact.

VENTILATION: Local exhaust may be necessary for some handling/use conditions. Specific needs should be addressed by supervisory or health/safety personnel.

SECTION IX - SPECIAL PRECAUTIONS

Store in closed container.

APPROVAL: Michael Chang Mgr.Health & Environmental Dept. 01/03/1995

NAME **TITLE** **DATE OF PRINTING**

NA - Not Applicable **NE - Not Established**

Oakite

1600

MATERIAL SAFETY DATA SHEET

PRODUCT CODE: 1600
OAKITE 160
60-U-161

HMIS 3 0 1 F

SECTION I

TRADE NAME	OAKITE 160	EMERGENCY TELEPHONE NUMBER: (800) 424-9300 (CHEMTREC)
CHEMICAL NAME AND SYNONYMS	NA; Mixture	
MANUFACTURER'S NAME AND TELEPHONE NO.	OAKITE PRODUCTS INC. (908) 464-6900 (8am-5pm)	
ADDRESS	50 Valley Road Berkeley Heights NJ 07922	

SECTION II - HAZARDOUS INGREDIENTS

	CAS NO.	% BY WT	TLV	PEL	UNITS
Sodium hydroxide -(ceiling)	0001310732	80-90	2	2	mg/m^3
Sodium carbonate	0000497198	<10	NE	NE	
Non-hazardous ingredients		Bal.			

Unidentified ingredients are considered not hazardous under Federal Hazard Communication Standard (29 CFR 1910.1200).

All component of this material are on the US TSCA Inventory.

SECTION III - PHYSICAL DATA

BOILING POINT (F)	NA	SPECIFIC GRAVITY (H2O=1)	1.17
VAPOR PRESSURE (mm Hg)	NA	Bulk Density	
VAPOR DENSITY (Air=1)	NA	PERCENT VOLATILE	
SOLUBILITY IN WATER	Appreciable	BY VOLUME(%) Excludes H2O	NA
EVAPORATION RATE	NA	PH 4% solution	13.5
APPEARANCE AND ODOR	White powder; odorless.	Concentrate	NA

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

NA - Not Applicable

NE - Not Established

FLASH POINT (Method Used): None
FLAMMABLE LIMITS: LEL: NA UEL: NA

EXTINGUISHING MEDIA: Use media suitable for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES: Carbon dioxide, dry chemical, or foam.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Wear Self-Contained Breathing Apparatus (SCBA).

SECTION V - HEALTH HAZARD INFORMATION

ROUTE(S) OF ENTRY:	INHALATION:	SKIN:	INGESTION:
	X	X	X

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known
SYMPTOMS/EFFECTS OF OVEREXPOSURE:
Severe irritation of the nose, mouth, and respiratory tract; coughing, difficulty breathing; chemical pneumonitis. Severe skin irritation and burns. Eye contact causes severe or permanent damage.

FIRST AID

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get prompt medical attention.

SKIN: Immediately remove contaminated clothing. Wash skin with large amounts of water for at least 15 minutes. Get prompt medical attention. Wash clothing before reuse.

INGESTION: Contact local poison control center or physician IMMEDIATELY!

INHALATION: Move victim to fresh air and restore breathing if necessary. Stay with victim until emergency medical help arrives.

SECTION VI - REACTIVITY DATA

STABILITY: NORMALLY STABLE
INCOMPATIBLE MATERIALS: Acids, Hot water. Contact with certain metals may yield explosive hydrogen gas.
HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen.

SECTION VII - SPILL OR LEAK PROCEDURES

NA - Not Applicable NE - Not Established

PROCEDURES: Wear personal protective equipment (See Section VIII). Carefully clean up spilled material and place in dry containers for disposal. Avoid dust generation.

WASTE DISPOSAL METHOD: Dispose of in accordance with Local State and Federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY: If TLV is exceeded, or for symptoms of overexposure, wear a NIOSH-approved dust/mist respirator.

EYEWEAR: Wear chemical safety goggles.

CLOTHING/GLOVES: If potential for skin contact exists, wear neoprene or other chemical resistant gloves and apron or coveralls and/or foot coverings, as needed.

VENTILATION: Local exhaust may be necessary for some handling/use conditions. Specific needs should be addressed by supervisory or health/safety personnel.

SECTION IX - SPECIAL PRECAUTIONS

CORROSIVE. Store in closed container in dry, well-ventilated area. NOTE: IF DILUTING (OR DISSOLVING) ALWAYS ADD THIS PRODUCT TO WATER SLOWLY AND WITH CONSTANT STIRRING. This product does not contain any carcinogens (at 0.1% or greater) as defined by IARC, NTP, or OSHA.

APPROVAL Michael Chang Mgr. Health & Environmental Dept. 03/23/1992

NAME TITLE DATE

NA - Not Applicable NE - Not Established

Oakite® 160

Chelated alkaline material for uniformly cleaning and etching aluminum surfaces in one step.

PRIMARY APPLICATION

Oakite 160 is an alkaline material which uniformly and rapidly etches aluminum while simultaneously removing light soils from the surface. It contains ingredients which minimize the formation of aluminum scale in solution tanks and on heating coils to cut maintenance costs and downtime. Oakite 160 also rinses easily, controls foaming to minimize alkali mist and fumes.

CHEMICAL CHARACTERISTICS

chemical composition	caustic soda and other alkaline salts, sequestrants, surfactants
physical form	as received: white powder as used: clear solution
odor	none
bulk density	1164 g/l (9.7 lb/gal)
hygroscopic tendency	high (keep drum closed when not in use)
foaming tendency	slight
recommended diluent	water
maximum solubility	150 g/l at 77°C (20 oz/gal at 170°F)
behavior in hard water	sequesters
rinsability	good
biodegradable	no
phosphate-free	yes
normal working concentrations	15 to 45 g/l (2 to 6 oz/gal)
normal operating temperatures	38° to 71°C (100° to 160°F)
pH at working concentrations	13.0 to 13.6 at 21°C (70°F)
effect of working solutions on metals	rate of metal loss from 24-hour immersion in Oakite 160, 40 g/l (5.3 oz/gal) at 40°C (120°F), projected for one year, is as follows:

metal (alloy)	mm/yr	in/yr
steel (1010)	0 00	0 000
stainless steel (316)	0.00	0 000
aluminum (1100)	attacks	attacks
brass	*0.03	*0 001
copper	*0 00	*0 000
magnesium	0.03	0.001
zinc	2.94	0.116

*discolors

APPLICATION PROCEDURE

Oakite 160 is a tank immersion material used between 15 and 45 g/l (2 and 6 oz/gal) at temperatures between 38° and 71°C (100° and 160°F). Exposure time varies from 30 seconds to several minutes. Exact time, temperature and concentration will depend upon the degree of etch required.

Oakite.

Solution Control: Concentrations are titrated using Test Kit Procedure 121. For aluminum etch activity, use Procedure 17. For free and total alkali, use Test Kit Procedure 123.

NOTES ON USE

See Material Safety Data Sheet

Tanks and heating coils which are coated with heat-retarding scale should be treated with an Oakite descalant (before using Oakite 160) to restore proper heat transfer and extend the solution life.

When preparing new solutions or adding to existing ones, slowly sprinkle product over surface of solution while stirring to avoid violent spattering. Do not add large amounts of dry powder to solution at any one time. **Do not add to hot water or hot solution warmer than 43° to 49°C (110° to 120°F).**

Under certain operating conditions, new solutions may foam excessively. This can be controlled by reducing the concentration or lowering the temperature, or both.

Safety and Handling Precautions: Oakite 160 is a highly alkaline material containing sodium hydroxide. Direct contact causes burns of eyes and skin. It is harmful if swallowed or inhaled. Avoid contact with eyes, skin and clothing. Wear rubber gloves, safety goggles or face shield, and suitable protective clothing when handling dry powder solutions. Wash thoroughly after handling. Avoid breathing dust or mist. Use with adequate ventilation. Do not take internally.

First Aid in Case of Contact: Immediately flush **eyes** or **skin** with plenty of water for at least 15 minutes. For **eyes**, get medical attention. For **skin**, remove contaminated clothing and shoes. Wash them before reuse. If **swallowed**, wash out mouth thoroughly with water. Give several glasses of water or milk to drink. Contact a physician immediately.

KEEP OUT OF REACH OF CHILDREN.

DISPOSAL

Dispose of according to all federal, state and local regulations.

SHIPMENT

May be shipped by any common carrier. Freight classification is "Corrosive Solid, NOS, (Sodium Hydroxide)8. UN-1759". Product Code No.1600.

STORAGE

Suitable for general indoor storage. Keep container closed when not in use.

effect of high temperature storage	no adverse effect
effect of low temperature storage	no adverse effect
effect of aging	no adverse

Oakite®
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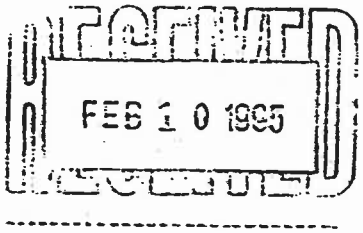
Oakite

3850

MATERIAL SAFETY DATA SHEET



PRODUCT CODE: 3850
OAKITE DEOXIDIZER LNC
60-FD-33

HMIS 3 0 1 J

SECTION I - PRODUCT IDENTIFICATION

TRADE NAME	OAKITE DEOXIDIZER LNC	EMERGENCY TELEPHONE NUMBER:
CHEMICAL NAME AND SYNONYMS	NA-Mixture	(800) 424-9300 (CHEMTREC)
MANUFACTURER'S NAME AND TELEPHONE NO.	OAKITE PRODUCTS INC. (908) 464-6900 (8am-5pm)	
ADDRESS	50 Valley Road Berkeley Heights NJ 07922	

SECTION II - HAZARDOUS INGREDIENTS

	CAS NO.	% BY WT	ACGIH TLV (TWA)	OSHA PEL (TWA)	UNITS
Trade Secret Registry (735517) -(Soluble salts, as Fe)	-5020P	30-40	1	NE	mg/m^3
Nitric acid(+)	0007697372	15-25	2	2	ppm
Trade Secret Registry (735517)	-5053P	<5	NE	NE	
Non-hazardous ingredients		Bal.			

Unidentified ingredients are considered not hazardous under Federal Hazard Communication Standard (29 CFR 1910.1200).

All component of this material are on the US TSCA Inventory.

(+) This product contains ingredient(s) identified in Section II with (+) which are subject to the reporting requirements of section 313 of SARA Title III and 40 CFR 372.

CARCINOGENICITY: No substance in this product is listed by IARC, NTP, or regulated by OSHA as a carcinogen.

SECTION III - PHYSICAL DATA

NA - Not Applicable

NE - Not Established

BOILING POINT (F)	NE	SPECIFIC GRAVITY (H20=1)	1.440
VAPOR PRESSURE (mm Hg)	NE	Bulk Density	12.0 lbs/gal
VAPOR DENSITY (Air=1)	>1	PERCENT VOLATILE	
SOLUBILITY IN WATER	Complete	BY WEIGHT(%) Excludes H2O	0
EVAPORATION RATE (BuAc=1)	<1	PH	
APPEARANCE AND ODOR	Dark amber liquid; sharp odor.	Concentrate	<1.0

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used): NONE
FLAMMABLE LIMITS: LEL: NA UEL: NA

EXTINGUISHING MEDIA: Use media suitable for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES: Use water spray to cool fire-exposed containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS: May have oxidizing properties, therefore, fire risk on contact with combustible materials.

SECTION V - HEALTH HAZARD INFORMATION

ROUTE(S) OF ENTRY:	INHALATION:	SKIN:	INGESTION:
	X	X	X

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.
SYMPTOMS/EFFECTS OF OVEREXPOSURE:
Inhalation of dust or mist may cause severe respiratory irritation. Exposure to high concentrations may cause pneumonitis and pulmonary edema. Symptoms include coughing, chest pain and difficulty breathing. ONSET OF SYMPTOMS MAY BE DELAYED BY INHALATION. Severe skin burns. Eye contact causes severe or permanent damage. No evidence of adverse chronic respiratory exposure effects from available information.

FIRST AID

EYES: Immediately flush eyes with large amounts of water for at least 15 minutes while holding eyelids open. Get prompt medical attention.

SKIN: Immediately remove contaminated clothing. Wash skin with large amounts of water for at least 15 minutes. Get prompt medical attention. Wash clothing before reuse.

NA - Not Applicable NE - Not Established

INGESTION: Contact local poison control center or physician IMMEDIATELY!

INHALATION: Move victim to fresh air and restore breathing if necessary. Stay with victim until emergency medical help arrives.

SECTION VI - REACTIVITY DATA

STABILITY: NORMALLY STABLE
Avoid direct sunlight.

INCOMPATIBLE MATERIALS: Alkalies, Combustibles. Contact with certain metals may yield explosive hydrogen gas. Avoid prolonged contact of concentrate with glass or ceramic.

HAZARDOUS DECOMPOSITION PRODUCTS: Sulfur dioxide, Nitrogen dioxide. Hydrogen.

SECTION VII - SPILL OR LEAK PROCEDURES

PROCEDURES: Wear personal protective equipment (See Section VIII). Ventilate area. Clean up with noncombustible absorbant material. Neutralize using sodium bicarbonate.

WASTE DISPOSAL METHOD: Dispose of in accordance with Local State and Federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY: If TLV is exceeded, wear a NIOSH-approved chemical cartridge respirator or gas mask containing non-oxidizable sorbent.

EYEWEAR: If splash potential exists wear chemical splash goggles or faceshield.

CLOTHING/GLOVES: If potential for skin contact exists, wear neoprene or other chemical resistant gloves and apron or coveralls and/or foot coverings, as needed.

VENTILATION: Local exhaust may be necessary for some handling/use conditions. Specific needs should be addressed by supervisory or health/safety personnel.

SECTION IX - SPECIAL PRECAUTIONS

NA - Not Applicable

NE - Not Established

CORROSIVE. Store in closed container in well-ventilated area. NOTE:IF DILUTING (OR DISSOLVING) ALWAYS ADD THIS PRODUCT TO WATER SLOWLY AND WITH CONSTANT STIRRING. Do not add this product to chlorine-releasing materials.

APPROVAL Mirbeck Chang Mgr. Health & Environmental Dept. 09/15/199:

NAME TITLE DATE

NA - Not Applicable NE - Not Established

Oakite Deoxidizer LNC

Non-chromated, liquid acidic material for deoxidizing and desmutting aluminum and aluminum alloys

PRIMARY APPLICATION

Oakite Deoxidizer LNC is a non-chromated, non-foaming acidic material for removing oxides, smut, mill scale and discoloration from aluminum and aluminum alloys. It is used before spot welding, anodizing, barrel burnishing, conversion coating or after alkaline etching.

It performs well in hard water, requires no heat, deoxidizes rapidly and rinses freely. Oakite Deoxidizer LNC meets the deoxidizing requirements of Military Specification MIL-W-6858.

CHEMICAL CHARACTERISTICS

chemical composition	non-chromated blend of inorganic salts, nitric acid and fluorides
physical form	as received: dark reddish brown liquid as used: light yellow solution
odor	none
specific gravity (approx.)	1.433 at 20°C (68°F)
bulk density	1433 g/ℓ at 20°C (11.9 lb/gal at 68°F)
viscosity	10 cps, Brookfield Spindle 1, 60 rpm
flash point	none
foaming tendency	none
recommended diluent.	water
maximum solubility	complete
behavior in hard water	performs well
rinsability	good
biodegradable surfactants	not applicable (non-surfactant material)
phosphate-free	yes
normal working concentrations	10 to 20% by volume
normal operating temperatures	ambient: 10° to 38°C (50° to 100°F)
pH at working concentrations	0.8 to 1.0 at 10% by volume
effect of working solutions on metals	rate of metal loss from 24 hour immersion in Oakite Deoxidizer LNC, 20% by volume at 49°C (120°F), projected for one year, is as follows:

metal (alloy)	mm/yr	in/yr
steel (1010)	43.26	1.703
stainless steel (316)	0.00	0.000
stainless steel (403)	0.00	0.000
copper	44.53	1.753
brass	52.83	2.080
aluminum (3003)	23.27	0.916
magnesium	attacks	attacks
galvanized steel	attacks	attacks

Oakite.

APPLICATION PROCEDURE

For Deoxidizing Aluminum Prior to Spot Welding, Anodizing, Barrel Burnishing, Conversion Coating

After surfaces have been pre-cleaned (with a suitable detergent such as Oakite Aluminum Cleaner NSS for spray washing or Oakite Aluminum Cleaner NST for tank cleaning), immerse in a solution of Oakite Deoxidizer LNC, 10% by volume at ambient temperature-- 10° to 38°C (50° to 100°F). Immersion time-- in an **air-agitated tank**--is normally 1 to 5 minutes, although heat treated alloys may require more time. Rinse thoroughly in clear, cold water, 24°C (75°F) or lower.

For Desmutting Aluminum After Alkaline Etching

Once surfaces have been etched in an Oakite enchant (such as Oakite 360 L), a 2-to-5-minute immersion in an unheated--but **air-agitated**--solution of Oakite Deoxidizer LNC, 15 to 20% by volume, is recommended. Follow with a thorough rinse in cold water.

It has an etch rate on 2024-T3 alloy aluminum that ranges between 0.03 and 0.10 mils/surface/hour--depending upon the age and concentration of the bath.

Solution Control: Concentrations are titrated using procedure 150 (by acidity) or procedure 25 (by ferric iron content).

NOTES ON USE

(See Material Safety Sheet)

Tanks should be constructed of stainless steel (type 316, 304, 347 ELC). However, ordinary steel tanks lined with Koroseal (pvc) can be used.

Keep concentrate away from combustible, organic and readily oxidizable materials. Avoid prolonged contact of concentrate with glass, ceramic or concrete. If contact is made, rinse surface promptly and thoroughly with water. Avoid contact or mixing with chlorine-releasing materials.

Safety and Handling Precautions: Oakite Deoxidizer LNC is a highly acidic material. It contains nitric acid and hydrofluoric acid as minor constituents. Direct contact causes severe burns that may or may not be immediately painful or visible. It is harmful if swallowed or inhaled.

Avoid contact with eyes, skin and clothing. Wear safety goggles, rubber gloves and other suitable protective clothing when handling. Wash thoroughly after handling. Use with adequate ventilation. Avoid breathing vapor. Do not take internally.

First Aid in Case of Contact-- Or Suspicion of Contact: Prompt Medical Attention is Absolutely Necessary. Eyes: Immediately flush with cool water for 15 to 30 minutes. Hold eyelids apart while flushing to ensure contact of water with all surfaces of eyes and lids. Get prompt medical attention. **Skin:** Immediately flush with large quantities of cool water until all acid is removed, paying particular attention to skin under the nails. Immediately remove contaminated clothing and shoes. In case medical attention is delayed, apply a generous amount of paste made from powdered magnesium oxide or milk of magnesia and glycerin, freshly prepared. Wash clothing and shoes before reuse. **If swallowed:** Rinse out mouth thoroughly with water. Give water to drink without delay. Follow with milk or 60 milliliters (two ounces) of milk of magnesia. Get prompt medical attention. **If inhaled:** Remove from exposure. Get medical attention.

KEEP OUT OF REACH OF CHILDREN.

DISPOSAL

(See Material Safety Data Sheet)

Dispose of according to all federal, state and local regulations.

SHIPMENT

May be shipped by any common carrier. Freight classification is "Compound Cleaning Liquid, Corrosive Material--NA 1760". Product Code No. 3850.

STORAGE

Suitable for general indoor storage away from oxidizable materials or reducing agents. Store out of direct sunlight and away from heat. Keep container closed when not in use. Keep from freezing. Before opening drum, loosen bung slowly to relieve any pressure build-up.

effect of high temperature storage ..... none
effect of low temperature storage .....will freeze at -9.4°C (15°F); restores on thawing
effect of aging ..... none

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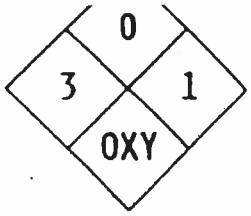


MATERIAL SAFETY DATA SHEET

CUSTOMER #

PRODUCT TRADE NAME	ALODINE® 600
DOT PROPER SHIPPING NAME	Chromic acid mixture, dry, NA1463.
DOT HAZARD CLASSIFICATION	Oxidizer.
TECHNICAL CONTACT (NAME)	Product Acceptance Office
TELEPHONE NUMBER	(313) 583-9300 EMERGENCY NUMBER 1-517-263-9430

1 HAZARDOUS INGREDIENTS

MATERIAL	CAS NO.	CONTENTS (% WT/WT)	HAZARD	TLV/PEL
+Chromic Acid	1333-82-0	30-40	Carcinogen,	0.05 mg/m³ as Cr
			NTP, IARC	0.5 mg/m³ as Cr
			Oxidizer	
Sodium Fluoborate	13755-29-8	40-50	Irritant	2.5 mg/m³ as F
				2.5 mg/m³ as F
Potassium Fluozirconate	16923-95-8	10-15	Irritant	2.5 mg/m³ as F
				2.5 mg/m³ as F

This product contains a chemical (+) subject to the reporting requirements of Section 313, Title III of SARA, Part 372.

2 PHYSICAL DATA

APPEARANCE	Yellow to orange powder containing reddish-brown crystals.		
SOLUBILITY IN WATER	Appreciable		
ODOR	None	pH of CONCENTRATE	Not applicable
SPECIFIC GRAVITY	Not applicable	BOILING POINT, °F.	Not applicable
OTHER:	Not applicable		

3 FIRE & EXPLOSION DATA

FLASH POINT None.

TEST METHOD Not applicable.

EXTINGUISHING MEDIA Water.

UNUSUAL FIRE OR EXPLOSION HAZARDS

Violent reactions may occur with organic materials or reducing agents.

SPECIAL FIRE FIGHTING PROCEDURES

Wear positive pressure self-contained breathing apparatus and full protective clothing.

4 REACTIVITY DATA

STABLE ☒ UNSTABLE ☐

CONDITIONS TO AVOID

Not applicable.

INCOMPATIBLE MATERIALS

Organic materials, reducing agents, alkaline materials.

HAZARDOUS POLYMERIZATION WILL OCCUR ☐

WILL NOT OCCUR ☒

CONDITIONS TO AVOID

Excessive heat.

HAZARDOUS DECOMPOSITION PRODUCTS

Hydrogen fluoride

5 HEALTH HAZARD DATA

EYES: Eye contact may result in loss of vision with severe burns.

SKIN: Skin contact is corrosive to tissues.

INGESTION: Ingestion could result in tissue destruction of the digestive tract and severe irritation in the respiratory tract.

INHALATION: Inhalation of dust can cause damage to mucous membranes, perforation of nasal septum and irritation of the respiratory system.

CHRONIC: Prolonged or repeated skin contact may cause "chrome sores". Long-term exposure can cause liver damage, kidney damage and dermatitis. Prolonged or repeated inhalation of mist may cause ulceration and performation of the nasal septum.

CHRONIC: Contains fluorides. Exposure to fluorides over years may cause fluorosis.

POSSIBLE CANCER HAZARD: There is laboratory evidence that aqueous sodium dichromate administered directly into the lung, at the highest tolerated dose, over the lifetime of rats, causes a significantly increased incidence of lung cancer. It is expected that if chromic acid was tested in the manner as aqueous sodium dichromate, it would give similar response. There is sufficient evidence for the carcinogenicity of chromium and certain chromium compounds both in humans and experimental animals.
Reference: NTP (National Toxicology Program), Annual Report on Carcinogens, 1983.
IARC (International Agency for Research on Cancer), Annual Report, 1982.

Medical Conditions Generally Aggravated by Exposure: Persons with a history of asthma, allergies or known sensitizations to chromic acid or chromates.

6 FIRST AID RECOMMENDATIONS

EYES: Immediately flush eyes in a directed stream of water for at least 15 minutes while forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. GET MEDICAL ATTENTION.

SKIN: Immediately remove contaminated clothing and shoes. Flush skin thoroughly with water for at least 15 minutes. Rinse clothing. If irritation persists, GET MEDICAL ATTENTION.

INGESTION: Drink large quantities of water. CORROSIVE. DO NOT INDUCE VOMITING. If vomiting occurs, drink more water. GET MEDICAL ATTENTION. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If breathing is difficult, give oxygen. GET MEDICAL ATTENTION.

7 SPILL PROCEDURES & WASTE DISPOSAL

SPILL PROCEDURES

Transfer any excess to a clean polyethylene container. Treat the residue with a dilute solution of metabisulfate to reduce the chrome. Neutralize with lime to pH = 7-8.

WASTE TREATMENT

This chemical contains chromium compounds and fluoride compounds Waste treatment and neutralization may be required prior to discharge to a sewer.
This chemical is a hazardous waste as defined by EPA Hazardous Waste and Consolidated Permit Regulations (or consult equivalent state regulations).
Hazardous Waste Characteristic: Ignitability, Title 40, Code of Federal Regulations, 261.21, Hazardous Waste Number D001. (Contains an oxidizer.)
Hazardous Waste Characteristic: EP Toxicity, Title 40, Code of Federal Regulations, 261.24, Hazardous Waste Number D007.
Dispose of in compliance with all applicable federal, state and local regulations.

8 PERSONAL PROTECTION

VENTILATION REQUIREMENTS	GENERAL AREA EXHAUST	☐
	LOCAL EXHAUST	☒
	NO EXHAUST NECESSARY	☐

PERSONAL PROTECTIVE EQUIPMENT

EYE PROTECTION	Chemical goggles or face shield.
SKIN PROTECTION	Neoprene or polyvinyl gloves and appropriate protective clothing.
RESPIRATORY PROTECTION	Use NIOSH-approved respirator as required to prevent overexposure. Provide sufficient mechanical (general and/or local exhaust ventilation to maintain exposure below TLV(s).
OTHER REQUIRED EQUIPMENT	Eye wash facility and emergency shower should be in close proximity.

9 SPECIAL PRECAUTIONS & STORAGE

DO NOT GET IN EYES, ON SKIN OR ON CLOTHING.

For industrial use only.

Contact with combustible material may cause fire.

Clothing contaminated with contents of this package is DANGEROUSLY FLAMMABLE. Immediately remove contaminated clothing and rinse thoroughly with water.

DO NOT TAKE INTERNALLY.

DO NOT BREATHE DUST.

Wash thoroughly after handling.

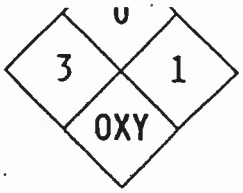
PREPARED BY Product Acceptance Office DATE 09/06/90

TITLE

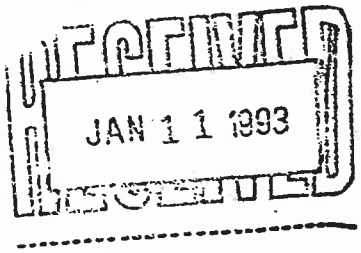
CHEMICAL EMERGENCY TELEPHONE 1-800-424-9300

HENKEL CORPORATION
32100 Stephenson Highway
Madison Heights, Michigan 48071

050



MATERIAL SAFETY DATA SHEET



CUSTOMER #

PRODUCT TRADE NAME	ALODINE 1000
DOT PROPER SHIPPING NAME	Chromic acid mixture, dry, oxidizer, NA1463 NA-1463A
DOT HAZARD CLASSIFICATION	Oxidizer
TECHNICAL CONTACT (NAME)	Product Acceptance Office
TELEPHONE NUMBER	(313) 583-9300 EMERGENCY NUMBER 1-517-263-9430

1 HAZARDOUS INGREDIENTS

MATERIAL	CAS NO.	CONTENTS (% WT/WT)	HAZARD	TLV/PEL
+Chromic Acid	1333-82-0	60-70	Carcinogen, IARC, NTP	0.05 mg/m³ C 0.1 mg/m³
Potassium Fluozirconate	16923-95-8	30-40	Irritant	2.5 mg/m³ as F* 2.5 mg/m³ as F*

*5 mg/m³ as Zr, STEL = 10 mg/m³ as Zr
This product contains a chemical (+) subject to the reporting requirements of Section 313, Title III of SARA, Part 372.

2 PHYSICAL DATA

APPEARANCE	Light orange powder		
SOLUBILITY IN WATER	Complete		
ODOR	Slight acid	pH of CONCENTRATE	Not applicable
SPECIFIC GRAVITY	Not applicable	BOILING POINT, °F.	Not applicable
OTHER:	Not applicable		

3 FIRE & EXPLOSION DATA

FLASH POINT None

TEST METHOD Not applicable

EXTINGUISHING MEDIA As required to extinguish surrounding fire.

UNUSUAL FIRE OR EXPLOSION HAZARDS

Clothing contaminated with the chemical is dangerously flammable. Immediately remove and rinse thoroughly with water. Contact with combustible material may cause fire.

SPECIAL FIRE FIGHTING PROCEDURES

Wear positive pressure self-contained breathing apparatus and full protective clothing.

4 REACTIVITY DATA

STABLE ☒ UNSTABLE ☐

CONDITIONS TO AVOID

None

INCOMPATIBLE MATERIALS

Keep separate from alkalies.
Organic materials, paint thinners or reducing agents.

HAZARDOUS POLYMERIZATION WILL OCCUR ☐

WILL NOT OCCUR ☒

CONDITIONS TO AVOID

None

HAZARDOUS DECOMPOSITION PRODUCTS

At elevated temperatures, various fluoride compounds will be liberated, including hydrogen fluoride.

5 HEALTH HAZARD DATA

EYES: Eye contact can cause severe burns and loss of vision.

SKIN: Contact can cause severe burns. Chromic acid may be absorbed through skin, especially if skin is damaged. Fatal kidney damage was reported in a person who evidently absorbed chromium trioxide into the body.

INHALATION: Inhalation of dust can cause damage to mucous membranes, perforation of nasal septum and irritation of the respiratory system.

INGESTION: Can result in gastrointestinal damage; burns of the digestive tract. Chromic acid is considered very toxic. (As sodium dichromate, oral-rat LD50: 51.10 +/- 5.93 mg/kg.)

CHRONIC: Prolonged or repeated skin contact may cause "chrome sores". Long-term exposure can cause liver damage, kidney damage and dermatitis. Prolonged or repeated inhalation of mist may cause ulceration and performation of the nasal septum.

POSSIBLE CANCER HAZARD: There is laboratory evidence that aqueous sodium dichromate administered directly into the lung, at the highest tolerated dose, over the lifetime of rats, causes a significantly increased incidence of lung cancer. It is expected that if chromic acid was tested in the manner as aqueous sodium dichromate, it would give similar response. There is sufficient evidence for the carcinogenicity of chromium and certain chromium compounds both in humans and experimental animals.
Reference: NTP (National Toxicology Program), Annual Report on Carcinogens, 1983.
IARC (International Agency for Research on Cancer), Annual Report, 1982.

CHRONIC: Contains fluorides. Exposure to fluorides over years may cause fluorosis.

Medical Conditions Generally Aggravated by Exposure: Persons with a history of asthma, allergies or known sensitizations to chromic acid or chromates.

6 FIRST AID RECOMMENDATIONS

EYES: Immediately flush eyes in a directed stream of water for at least 15 minutes while forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. GET MEDICAL ATTENTION.

SKIN: Immediately remove contaminated clothing and shoes. Flush skin thoroughly with water for at least 15 minutes. Rinse clothing. If irritation persists, GET MEDICAL ATTENTION.

INHALATION: Remove to fresh air. If breathing is difficult, give oxygen. GET MEDICAL ATTENTION.

INGESTION: DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION. Drink milk of magnesia, aluminum hydroxide gel or limewater followed by water.

7 SPILL PROCEDURES & WASTE DISPOSAL

SPILL PROCEDURES

Wear respiratory protection.
Wear protective clothing.
Sweep up or otherwise collect and store in suitable drum.

WASTE TREATMENT

This chemical is a hazardous waste as defined by EPA Hazardous Waste and Consolidated Permit Regulations (or consult equivalent state regulations).
Hazardous Waste Characteristic: EP Toxicity, Title 40, Code of Federal Regulations, 261.24, Hazardous Waste Number D007.
This chemical contains chromium compounds and fluoride compounds Waste treatment and neutralization may be required prior to discharge to a sewer.
Waste Treatment Information Bulletin No. 1004 (Available on request.)
Dispose of in compliance with all applicable federal, state and local regulations.

8 PERSONAL PROTECTION

VENTILATION REQUIREMENTS	GENERAL AREA EXHAUST	☐
	LOCAL EXHAUST	☒
	NO EXHAUST NECESSARY	☐

PERSONAL PROTECTIVE EQUIPMENT

EYE PROTECTION	Safety goggles
SKIN PROTECTION	Neoprene or polyvinyl gloves and appropriate protective clothing.
RESPIRATORY PROTECTION	MSHA/NIOSH dust filter mask or respirator if dusting occurs. Provide sufficient mechanical (general and/or local exhaust ventilation to maintain exposure below TLV(s).
OTHER REQUIRED EQUIPMENT	Eye wash facility and emergency shower should be in close proximity.

9 SPECIAL PRECAUTIONS & STORAGE

Keep separate from organic materials and reducing agents. Do not breathe dust or get in eyes or on skin.

MATERIAL IS TOXIC.

Contact with combustible material may cause fire.

Wash thoroughly after handling.

For industrial use only.

PREPARED BY Product Acceptance Office DATE 10/03/89

TITLE

CHEMICAL EMERGENCY TELEPHONE 1-800-424-9300

Henkel Surface Technologies

Technical Process Bulletin

Technical Process Bulletin No. 1182
This Revision: 05/19/92

ALODINE® 600
Conversion Coating Process for Aluminum

1. Introduction:

ALODINE 600 is a powdered chemical used to produce a chromate conversion coating on aluminum and its alloys, which ranges in color from light, iridescent gold to tan. ALODINE 600 can be applied by immersion or spray method, does not contain complex cyanides, and is particularly recommended where a low dielectric resistance coating is desired.

ALODINE 600 is approved under MIL-C-81706 for use by Application Methods A and C, classes 1A and 3: and it's listing on QPL 81706 indicates its acceptance under the MIL-C-5541 document of current issue.

2. Operating Summary:

Chemical	Bath Preparation per 100 gallons:
ALODINE 600 Chemical	12.5 pounds
*ALODINE TONER 22	9.9 pounds (1.0 gallons)
*Not required when processing to meet class 3 of MIL-C-5541.	

Operation and Control:	
ALODINE Titration	7.4 to 9.4 ml
Temperature	70° to 100° Fahrenheit
Time	1 to 5 minutes
pH	1.5 to 2.0

3. The Process:

The complete process sequence for the ALODINE 600 treatment normally consists of the following steps:

A. Cleaning
B. Water rinsing
C. Deoxidizing (Optional)
D. Water rinsing
E. Treating with the ALODINE 600 processing solution
F. Water rinsing
G. Post treatment
H. Drying.

4. Materials:

ALODINE 600
ALODINE TONER 22
Nitric Acid
Testing Reagents and Apparatus

5. Equipment:

Process tank and housing should be fabricated from stainless steel, such as 316L or 304L. The 316L being preferred for maximum tank life. In all cases, approved welding techniques must be used. Polyvinyl chloride (PVC) or CPVC lined mild steel can be used. In spray applications, nozzles fabricated from 300 series stainless steel are preferred.

Process piping and pumps should be constructed of 316 or 304 stainless steel alloys. Various formulations of plastic pipe may be used with recommended support spacing, Schedule-80 being generally recommended. PVC Type I is limited to maximum process temperatures of 140° Fahrenheit. CPVC and PP may be used up to a maximum process temperature of 190° Fahrenheit. PVDF may be used for all expected operating temperatures.

Heat exchanger plates should be polished 316 stainless steel. Gas fired burner tubes are not recommended. All process circulation pump seals, valve seats, door seals, etc., which come into contact with the process solution and occasional acid equipment cleaners, should be EPDM, Viton™ or Teflon™.

Chemical feed pump parts and other elastomers which may come into contact with the concentrated replenishing chemical should be Viton or Teflon.

Support equipment available from Henkel Surface Technologies for this process includes: chemical feed pumps, level controls, transfer pumps and bulk storage tanks.

Our sales representative should be consulted for information on Henkel Surface Technologies automatic process control equipment for this process and any additional questions. In addition, the "Henkel Surface Technologies Equipment Design Manual" may be consulted.

6. Surface Preparation:

Cleaning:
All metal to be treated with the processing solution must be free from grease, oil and other foreign matter before the treatment. A complete line of cleaners is available and our representative should be consulted.

Water Rinsing:
After cleaning, the metal must be thoroughly rinsed with water. The rinse should be overflowed continuously at a rate which will keep it clean and free from scum and contamination.

Deoxidizing (optional):
When aluminum to be treated with ALODINE 600 processing chemical has corrosion products or heavy oxide on the surface, it should be cleaned by installing two additional stages between the post cleaner rinse and the ALODINE 600 treatment stage. One is for deoxidizing with a deoxidizing chemical and one is for an additional cold water rinse.

7. Treating with the ALODINE 600 Processing Solution:

Buildup:
Fill the tank about three-fourths full with cold water. For each 100 gallons of final solution volume, add 12.5 pounds of pre-dissolved ALODINE 600 chemical and circulate until thoroughly mixed; add, while mixing, 9.9 pounds (1.0 gallon) of ALODINE TONER 22 chemical. Finally, add sufficient water to bring the solution up to the working level and then heat, if necessary, to the operating temperature.

Operation:
Time: 1 to 5 minutes.
Temperature: 70° to 100° Fahrenheit.

Each alloy reacts with the ALODINE 600 solution to produce a coating that is characteristic of that alloy. The bath should produce a light, iridescent, gold to tan coating within the operating conditions selected.

If the Coating is Powdery:
a. The pH of the bath may be too low for the bath concentration selected.
b. The work may have been improperly cleaned and/or rinsed.
c. The ALODINE 600 bath may have become contaminated with phosphates, sulfates, or some other contaminant. In most cases, phosphate contamination will stop-off the coating completely.
d. The bath temperature may be too high.
e. The process time may be too long.

If the Coating is too Light or too Iridescent:
a. The temperature of the ALODINE 600 bath may be too low for the process time selected.
b. The process time may be too short
c. The concentration of the bath may be too low.
d. The pH of the bath may be outside of the proper range.

8. Testing and Control:
Never pipet by mouth, use a pipet filler.

ALODINE Titration:
Pipet a 5 ml sample of the ALODINE 600 bath into an iodimetric flask and dilute to approximately 100 ml with water. Add approximately 1 gm (1/2 teaspoonful) of Reagent 2 and agitate the solution until the compound is dissolved. Add approximately 10 ml of Reagent Solution 49 in 5 ml increments to the lip of the flask, raising the stopper slightly after each addition to allow the acid to run into the flask. Rinse the lip several times with water and replace the stopper. Let sit for approximately one minute.

Titrate with Titrating Solution 104 until a straw color is obtained. Do not rezero the buret. Add several milliliters of Indicator 10 to the sample and continue the titration until the blue-black color disappears. The milliliters of Titrating Solution 104 used is the ALODINE titration.

ALODINE titration range: 7.4 - 9.4 ml.

To increase the value 1.0 ml: 1.5 pounds of ALODINE 600 chemical per 100 gallons of bath.

pH Adjustment:
As the bath is used, the pH has a tendency to rise. Nitric acid is added to restore the pH to its proper operating level.

pH range: 1.5 to 2.0

Large additions of nitric acid are to be avoided in favor of frequent small additions.

9. After Treatment:

Water Rinsing:
After treating with ALODINE 600 the work should be thoroughly rinsed in cold water. The rinse should be continuously overflowed such that the main body of the rinse never becomes excessively contaminated.

Post Treatment:
The ALODINE 600 treated metal is treated with an acidic post treatment solution. The post treatment adds to the overall quality of the coating and prevents the formation of hard water rinse blistering. In some cases the post treatment stage may be heated to facilitate work drying.

Drying:
Parts coming from the post treatment stage should be dried as soon as possible in an indirectly fired oven or by any other means which will not contaminate the metal with fumes, oil, or partially burnt gases. Peak metal temperature should not exceed 140° Fahrenheit.

10. Storage Requirements:

ALODINE 600 chemical should be stored in a dry ventilated area. ALODINE TONER 22 freezes as 3° Fahrenheit. Should freezing occur, the chemical should be agitated after thawing.

11. Waste Disposal Information:

Applicable regulations covering disposal and discharge of chemicals should be consulted and followed.

Disposal information for ALODINE 600 and ALODINE TONER 22 is given on the Material Safety Data Sheet for each product.

The processing bath is acidic and contains chromium and complex fluorides. Waste treatment and neutralization will be required prior to the discharge to the sewer. (Refer to Waste Treatment Information Bulletin WT1004, available on request.)

Testing Reagents and Apparatus
(Order only those items which are not already on hand.)

Code	Quantity	Item
205957	1	Bucket, Graduated, Plastic, 10 liter
205700	1	Buret Assembly, 25-ml Automatic, Glass
205897	2*	Flasks, iodimetric, 250-ml
205852	2*	Graduated Cylinder, 50-ml, Glass
205010	1/2 pt	Indicator 10 (0.5% starch solution)
205590	1	Indicator Dropping Bottle, 2 oz
205876	2	Pipet, 5-ml, plastic
205082	1 lb	Reagent 2 (KI)
205249	5 pt	Reagent Solution 49 (C.P. HCl)
205960	1	Scale, 24-lb capacity
205966	1	Spoon, plastic, 1/2 teaspoon
205980	1	Thermometer, Floating
205104	2 qts	Titrating Solution 104 (0.1N $Na_2S_2O_3$)

- * * * * * -

®Registered trademark of Henkel Corporation.

Henkel Surface Technologies
32100 Stephenson Highway
Madison Heights, MI 48071
Telephone: 248-583-9300
Fax: 248-583-2976

Form Revised 16 May 1997

Material Safety Data Sheet

Used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200

SHERWIN INCORPORATED
5530 Borwick Avenue
South Gate, California 90280
562.861.8324 fax: 562.923.8370

IDENTITY (As on label and list)	DUBL-CHEK PENETRANTS HM-1, HM-2D, HM-3A, HM406, HM412 & HM420C	Blank spaces are not permitted. Non-applicable items or unavailable information must be so noted	

Section I

Manufacturer's Name	SHERWIN INCORPORATED	Emergency phone No.	Transportation Emergency: 800-424-9300 Sherwin Incorporated: 562-861-6324
Address	5530 BORWICK AVENUE	Information phone No.	562-861-6324
	SOUTH GATE, CA 90280	Date Prepared	June 1997
		Preparer's Signature	

Section II — Hazardous Ingredients Identity Information

Hazardous Components (Specific Chemical Name; Common Name(s))		OSHA PEL	ACGIH TLV	other limits recommended	% optional
Ethoxylated C11-C15 Secondary Alcohols mixture. A nonionic surface active agent or "wetting" agent (detergent)	CAS no. 84133-50-6	unlisted	unlisted		
		While exposure limits not established, a general guideline for products of this type is 5mg/m³ (8-hour time-weighted average.)			
Aliphatic oil refined, hydrotreated middle distillate.	CAS no. 64742-46-7 & 8042-47-5	5mg/m³	5mg/m³		

* (SEE SEPARATE MSDS FOR HM3A AND HM406 PACKAGED IN AEROSOL CANS)

HMIS - F-1, H-2, R-0, S-0

Section III — Physical/Chemical Characteristics

Boiling Point	440° F	Specific Gravity (H₂0 = 1) approximately	0.97
Vapor Pressure (mm Hg.)	n/a	Melting Point	n/a
Vapor Density (AIR = 1)	n/a	Evaporation Rate (Butyl Acetate = 1)	n/a
Solubility in Water	Emulsifiable		
Appearance and Odor	Yellow-green liquid, petroleum odor		

Section IV — Fire and Explosion Hazard Data

Flash Point (method used)	>200° F ASTM D 93	Flammable Limits n/a	LEL n/a	UEL n/a
Extinguishing Media	Large fires: apply alcohol-type or all-purpose-type foam by mfr's recommended techniques. Small fires: use carbon dioxide or dry chemical media.			
Special Fire Fighting Procedures	Do not direct a solid stream of water or foam into hot, burning pools; this may cause frothing and increase the intensity. Firefighters should use self-contained breathing apparatus and protective clothing.			
Unusual Fire & Explosion Hazards	On burning, this product can release toxic fumes and vapors. This material may produce a floating fire hazard.			

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid: Open flames and hazards normally incompatible with petroleum oils.
	Stable	x	
Incompatibility (materials to avoid)			Normally unreactive; however, avoid strong oxidizing agents.
Hazardous Decomposition or Byproducts			Burning can produce toxic vapors which are harmful if inhaled as well as the following products: carbon monoxide and/or carbon dioxide.
Hazardous Polymerization	May Occur		Conditions to Avoid:
	Will Not Occur	x	

Section VI — Health Hazard Data

Routes of Entry: Inhalation? primary Skin? primary Ingestion? not likely

Health Hazards (acute and chronic): Swallowing: May cause irritation of the mouth and throat, abdominal discomfort, nausea, vomiting and diarrhea. Skin absorption: Prolonged or widespread contact may result in the absorption of potentially harmful amounts of material. Inhalation: Short term harmful effects are not expected from vapor generated at ambient temperature. Skin contact: causes irritation w/ discomfort, local redness and swelling. Prolonged contact may cause severe irritation. Effects may be prolonged. Eye contact: Causes moderate to sever irritation, experienced as discomfort or pain, excess blinking and tear production, w/ marked excess redness and swelling of the conjunctiva. Corneal injury may occur.

Carcinogenicity: NTP? N/A IARC monographs? N/A OSHA regulated? N/A

Signs & Symptoms of Exposure: Repeated skin contact may cause dermatitis.

Medical Conditions Generally Aggravated by Exposure: Skin contact may aggravate existing dermatitis.

Emergency & First Aid Procedures: Swallowing: DO NOT INDUCE VOMITING. Obtain medical attention. Skin: Remove contaminated clothing. Wash skin w/ soap and water. If irritation persists or if contact has been prolonged, obtain medical attention. Inhalation: Remove to fresh air. Eyes: Immediately flush eyes w/ water and continue washing for at least 15 minutes. Obtain medical attention w/o delay, preferably from an ophthalmologist.

Section VII — Precautions for Safe Handling and Use

Steps to be taken if material is released or spilled: Wear eye and skin protection. Floor may be slippery; use care to avoid falling. Contain spills immediately w/ inert materials (e.g. sand, earth). Avoid discharge to natural waters. Transfer liquids and solids, diking material to suitable containers for recovery or disposal. The material is water-miscible and final clean-up w/ water to remove surface residue is permissable. Immediately extinguish all flames and sources of ignition.

Waste Disposal Method: Incinerate in a furnace where permitted under Federal, State and Local regulations.

Storing & Handling Precautions: Handling: Do not splash or create mists or vapors. Storage: Store away from high temperatures and open flames. Keep containers closed.

Other Precautions: Use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions. Emptied containers retain vapor and product residues. DO NOT cut or weld on or near the container.

Section VIII — Control Measures

Specific Respiratory Protection: Use NIOSH approved respirator if vapors or mist is generated.

Ventilation	Local Exhaust		Special
	Mechanical (general)	room ventilation is expected to be satisfactory	Other
Protective Gloves	Chemical resistant	Eye Protection	Monogoggles or chemical safety when possibility of splashing.
Other Protective Clothing/Equipment	Chemical apron, eye bath, safety shower.		
Work/Hygenic Practices	Wash thoroughly after handling.		

Oakite® DEOXIDIZER 34

Aluminum deoxidizer/desmutter

PRIMARY APPLICATION

Oakite Deoxidizer 34 removes smut, oxides and stains from aluminum. After processing, parts often show an improvement over the original mill finish. Solutions work at room temperatures; no heat is required.

Oakite Deoxidizer 34 may be used to:

1) Remove oxides to produce a uniform surface prior to spot or "Heliarc" welding on aluminum
2) Remove smut resulting from alkaline etching
3) Deoxidize prior to conversion coating to insure optimum protection and paint adhesion
4) Deoxidize prior to anodizing or barrel burnishing operations
5) Remove oxide discoloration resulting from heat treating

CHEMICAL CHARACTERISTICS

chemical composition.....a blend of acids, including chromium and fluoride salts
physical form.....as received: orange-red powder
as used: orange-red solution
odor.....none
bulk density.....1332 g/ℓ (11.1 lb./gal)
flash point.....none
hydroscopic tendency.....slight
foaming tendency.....none
recommended diluent.....water
maximum solubility.....150 g/ℓ (1.25 lb/gal)
behavior in hard water.....good
rinsability.....good
biodegradable.....not applicable (non-surfactant material)
phosphate-free.....yes
normal operating temperature range.....16° to 43°C (60° to 110°F)
Normal working concentrations.....60 to 120 g/ℓ (8 to 16 oz/gal)
pH at working concentration.....1.1 at 60 g/ℓ (.8 oz/gal)
effect of working solutions on metal.....rate of metal loss from 1-hour immersion in Oakite Deoxidizer 34, 60 g/ℓ (8 oz/.gal) at 23°C (74°F) projected for one year, is as follows:

Metal(alloy)	mm/yr	in/yr
steel (1010)	108.59	4.275
stainless steel (316)	0.53	0.021
stainless steel (410)	0.64	0.025
aluminum (3003)	20.37	0.802
magnesium (AZ31B)	attacks	attacks
zinc	111.91 (attacks)	4.406
copper	82.07	3.231
brass	70.92	2.792
titanium (T75A)	0.86	0.034

DISPOSAL

Use method acceptable to federal, state and local authorities for disposing solutions containing chromium and fluoride. Oakite Dispoz Aid 1 may be used to reduce hexavalent chromium to the trivalent form. Oakite Dispoz Aid 2 may be used to precipitate trivalent chromium and fluorides if required. Allow precipitate to settle. Remove sludge (consisting of insoluble chromium and calcium salts). Dispose of sludge in any practicable manner. Neutralize, dilute and discharge remaining solution.

SHIPMENT

May be shipped by any common carrier. Freight classification is "RQ Chromium trioxide, anhydrous, Class 5.1, UN 1463, PG II". Product Code No: 3860.

STORAGE

Suitable for general storage in a dry place.. Keep container closed when not in use.

effect of high temperature storage.....none
effect of low temperature storage .....none
effect of aging .....none

Oakite®
Oakite Products, Inc. P.O. Box 602, 50 Valley Road, Berkeley Heights, NJ 07922
Oakite Canada Limited 115 East Drive, Brampton, Ontario L6T1B7
Tel. (800) 526-4473 (908) 464-6900 FAX (908) 464-4658 Internet Address: http://www.oakite.com
Distributors and Licensees Worldwide

F.12678R4-398
Printed in the USA

Oakite. MATERIAL SAFETY DATA SHEET

PRODUCT CODE: 3860
OAKITE DEOXIDIZER 34
60-FA-46

HMIS 3 0 1 J

SECTION I - PRODUCT IDENTIFICATION

TRADE NAME	OAKITE DEOXIDIZER 34
CHEMICAL NAME AND SYNONYMS	NA;Mixture
MANUFACTURER'S NAME AND TELEPHONE NO. ADDRESS	OAKITE PRODUCTS INC. (908) 464-6900 (8am-5pm) 50 Valley Road Berkeley Heights NJ 07922
DATE OF PREPARATION	09-15-92

EMERGENCY TELEPHONE NUMBER:
(800) 424-9300 (CHEMTREC)

SECTION II - HAZARDOUS INGREDIENTS

	CAS NO.	% BY WT	ACGIH TLV (TWA)	OSHA PEL (TWA)	UNITS
Sodium bisulfate	0007681381	80-90	NE	NE	
Chromic oxide(+) -(chromium VI)	0001333820	5-15	0.05	0.1	mg/m^3
Potassium dichromate(+) *	0007778509	<5	0.05	0.1	mg/m^3
Sodium silicofluoride -(Fluorides,as F)	0016893859	<5	2.5	2.5	mg/m^3
Sodium dichromate(+) *	0010588019	<5	0.05	0.1	mg/m^3

(+) This product contains ingredient(s) identified in Section II with (+) which are subject to the reporting requirements of section 313 of SARA Title III and 40 CFR 372.

*As Chromium VI soluble

SECTION III - PHYSICAL DATA

BOILING POINT (F)	NA	SPECIFIC GRAVITY (H2O=1)	1.33
VAPOR PRESSURE (mm Hg)	NA	Bulk Density	11.1 lb/gal
VAPOR DENSITY (Air=1)	NA	PERCENT VOLATILE	
SOLUBILITY IN WATER	Appreciable	BY WEIGHT(%) Excludes H2O	NA

NA - Not Applicable NE - Not Established

Oakite. MATERIAL SAFETY DATA SHEET

EVAPORATION RATE	NA	PH 6% solution	1.1
APPEARANCE AND ODOR	Reddish-white granular powder; odorless.	Concentrate	NA

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used): None
FLAMMABLE LIMITS: LEL: NA UEL: NA

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, or foam.

SPECIAL FIRE FIGHTING PROCEDURES: Wear Self-Contained Breathing Apparatus (SCBA).

UNUSUAL FIRE AND EXPLOSION HAZARDS: May have oxidizing properties, therefore, fire risk on contact with combustible materials.

SECTION V - HEALTH HAZARD INFORMATION

ROUTE(S) OF ENTRY:	INHALATION:	SKIN:	INGESTION:
	x	x	x

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known
SYMPTOMS/EFFECTS OF OVEREXPOSURE:
Inhalation of dust or mist may cause severe respiratory irritation. Chronic inhalation may lead to perforation of the nasal septum. Severe skin irritation and burns. Eye contact causes severe or permanent damage. Chronic overexposure to some Chromium VI compounds can cause bronchitis, skin sensitization, and kidney and liver damage. Some Chromium VI compounds are known carcinogens (IARC, NTP).

FIRST AID

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get prompt medical attention.

SKIN: Immediately remove contaminated clothing. Wash skin with large amounts of water for at least 15 minutes. Get prompt medical attention. Wash clothing before reuse.

INGESTION: Contact local poison control center or physician IMMEDIATELY!

NA - Not Applicable NE - Not Established

Oakite. MATERIAL SAFETY DATA SHEET

INHALATION: Move victim to fresh air and restore breathing if necessary. Stay with victim until emergency medical help arrives.

SECTION VI - REACTIVITY DATA

STABILITY: NORMALLY STABLE

INCOMPATIBLE MATERIALS: Alkalies, Combustibles, Reducing agents. Contact with certain metals may yield explosive hydrogen gas.

HAZARDOUS DECOMPOSITION PRODUCTS: Sulfur dioxide, Sulfur oxides, Chromium trioxide. Hydrogen.

SECTION VII - SPILL OR LEAK PROCEDURES

PROCEDURES: Wear personal protective equipment (See Section VIII). Remove all ignition sources. Carefully clean up spill and place in dry, noncombustible container. Avoid dust generation.

WASTE DISPOSAL METHOD: Dispose of in accordance with Local State and Federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY: If TLV is exceeded, or for symptoms of overexposure, wear a NIOSH-approved dust/mist respirator.

EYEWEAR: Wear chemical safety goggles.

CLOTHING/GLOVES: If potential for skin contact exists, wear neoprene or other chemical resistant gloves and apron or coveralls and/or foot coverings, as needed.

VENTILATION: Local exhaust may be necessary for some handling/use conditions. Specific needs should be addressed by supervisory or health/safety personnel.

SECTION IX - SPECIAL PRECAUTIONS

CORROSIVE. Oxidizing properties. Store in closed container in well-ventilated area. NOTE:IF DILUTING (OR DISSOLVING) ALWAYS ADD THIS PRODUCT TO WATER SLOWLY AND WITH CONSTANT STIRRING. Do not add this product to chlorine-releasing materials.

NA - Not Applicable NE - Not Established

Oakite. MATERIAL SAFETY DATA SHEET

APPROVAL: Michael Chang Mgr.Health & Environmental Dept. 02/28/1994

NAME TITLE DATE OF PRINTING

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NA - Not Applicable NE - Not Established

12. APPENDIX B - CALCULATIONS

Estimate Evaporative Loss From Uncovered Tank

Loss From Evaporators

Alkaline Cleaning Solution

Etch Tank

Estimate Deoxidizer LNC Tank Composition

Deoxidizer Rinse Tank 1

Alodine 1000 Tank

Alodine 600 Tank

Alodine Rinse 1

Alodine Rinse 2

Anodizing Solution

Chromate Sealing Tank

Secondary Containment of Waste Tank Area

Batch Treatment System Capacity (New Configuration)

Batch Treatment System Capacity (Old Configuration)

Filter Press Capacity

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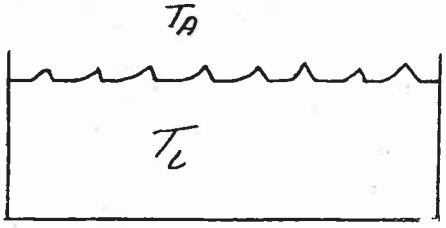
ESTIMATE EVAPORATIVE LOSS FROM UNCOVERED TANK



ASSUME

STAGNANT AIR CONDITIONS

$T_A = 60\,F$

RELATIVE HUMIDITY = 70%

ESTIMATE INFILTRATION / NATURAL VENTILATION

$q_I = EAV$ $\quad E = 0.3$ FOR PERPENDICULAR

$A = 200\ FT^2$

V = WIND VELOCITY = 5 MPH = 440 FPM

$q_I = (0.3)(200)(440) = 26{,}400\ FT^3/MIN$

$$q_V = 10A\left(H t_i - t_o\right)^{1/2}$$

$A = 100\ FT^2$ = UPPER VENT AREA

H = DIFF HEIGHT = 20 FT

$t_i = 60\,F$ INSIDE

$t_o = 50\,F$ OUTSIDE

$$q_V = (10)(100)\left(20(60-50)\right)^{1/2} = 14{,}000\ CFM$$

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COMBINED FLOW FROM FIG 135

TOTAL FLOW = $2(q_V)$ = 28,000 CFM

BUILDING VOLUME = 100 × 200 × 20 = 400,000 FT^3

AIR CHANGES/HR = $\frac{(28,000)(60)}{400,000}$ = 4 CHANGES/HR

APPROXIMATE AIR VELOCITY = 200 × 4 = 800 FT/HR
= 13 FT/MIN

~~TANK~~ DIMENSION = 2.5' × 48'

$$W_V = S\,\frac{201 + .88V}{\lambda_V}\,(e_w - e_A)$$

λ_V = 1000 BTU/LB WATER EVAPORATED

TEMP	e_w, IN. HG (WATER VAPOR PRESSURE)
80	1.0
130	4.5
145	6.8
195	21

$e_A = (.52)(0.70) = .36$ IN HG
(e_w @ 60F) ↑ 70% RH @ 60

$S = (2.5)(48) = 120$ FT^2

~~V = 13 FT/MIN~~

$$W_V = (120)\left[\frac{201 + .88(13)}{1000}\right](1.0 - .36) =$$

W_V LB/HR	W_V GAL/DAY	T_L	EXPOSURE, HR/DAY	NET GPD
16.3	47	80F	24	47
106	305	130F	4	51
164	473	145F	1/2	10
526	1517	195F	1/2	32
				140

LOSS FROM EVAPORATORS

NORTH (DEOX RINSE 1) ~ 10 GPH

$$\frac{(10)(24)(5)}{(7)} = 171 \text{ GPD}$$

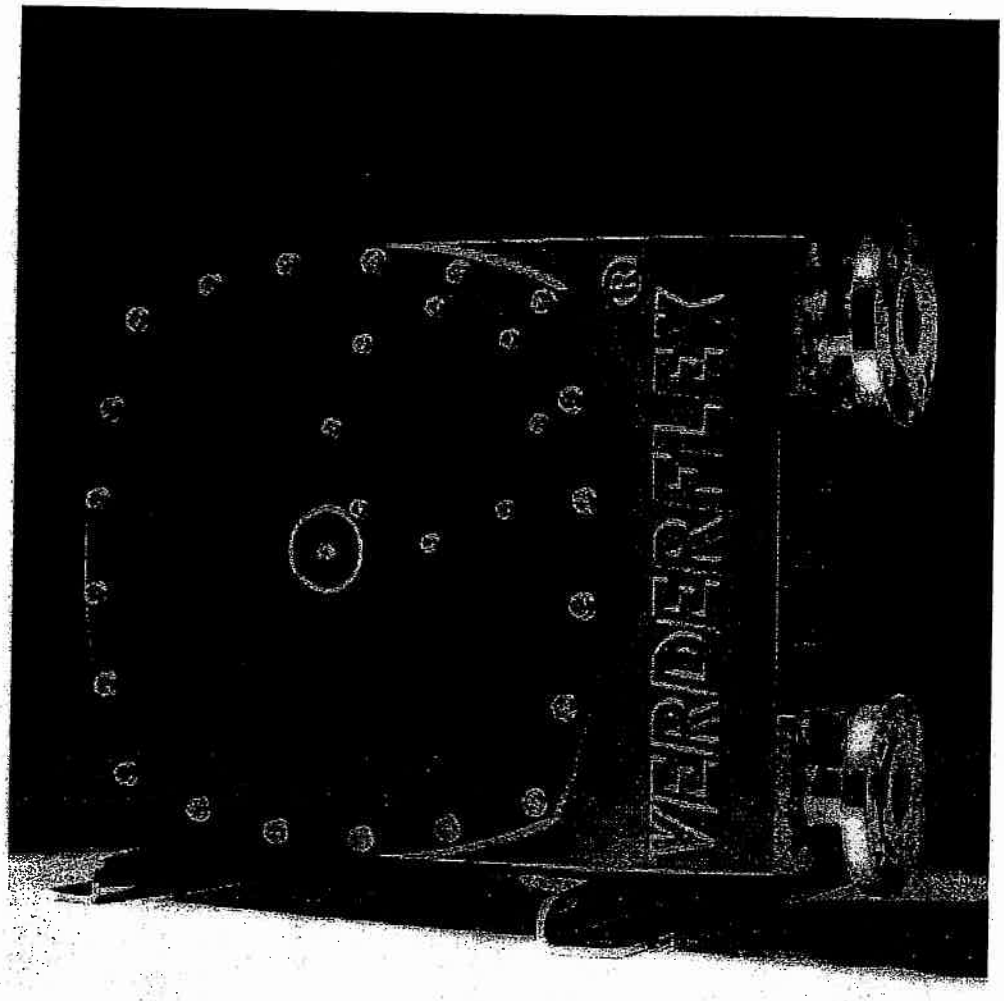
ANNUAL CAPACITY = (171)(365) = 62,415 GAL

SOUTH (ALODINE RINSE 1) ~ 40 GPH

$$\frac{(40)(24)(5)}{(7)} = 685 \text{ GPD}$$

ANNUAL CAPACITY = (685)(365) = 250,000 GAL

VERDERFLEX Pump (Close this browser window to return to the VERDERFLEX page)



f1

ALKALINE CLEANING SOLUTION

ASSUME OAKITE 3000 @ 10% SOLUTION BY VOLUME
OAKITE 3000 DENSITY 9.4 LB/GAL

COMPOSITION
SURFACTANTS 15 WT %
SODIUM SILICATE 5 WT %

$$TDS = \frac{(9.4)(0.10)}{(9.4)(0.10) + (8.32)(0.90)} \times 10^6 = 111{,}500 \text{ PPM}$$

ETCH TANK

ASSUME OAKITE 160 @ 5 OZ/GALLON
NITRIC ACID @ 43 GRAM/L

$$\left(\frac{43\,g}{L}\right)\left(\frac{.0022046\ LB}{g}\right)\left(\frac{L}{.2642\ GAL}\right) = .36\ LB\ HNO_3/GAL$$

HNO_3 ADDED AS 50 WT % SOL'N (SP. GR = 1.32)

$$\frac{.36\ LB}{0.5} = .72\ LB\ 50\%\ SOL'N\ ADDED/GAL$$

$$\frac{.72\ LB}{(1.32)(8.32)} = .065\ GAL\ 50\%\ HNO_3\ ADDED$$

$$\frac{5\ OZ}{16\ OZ/LB} = .31\ LB\ OAKITE\ 160\ PER\ GALLON$$

$$TDS \approx \frac{.31 + .36}{(8.32)(1-.065) + (.065)(11)} \times 10^6 = 79{,}000 \text{ PPM}$$

ESTIMATE DEOXIDIZER LNC TANK COMPOSITION

ASSUME:

USE DEOX LNC PRODUCT FROM OAKITE (SP. GR = 1.44)
DRAGOUT LOSSES 150 GAL/WEEK
TANK COMPOSITION:
15 VOL% OAKITE LNC
(40 WT% $Fe(NO_3)_3$ & 25 WT% HNO_3)
43 g/l HNO_3 ADDED

$$\left(\frac{43\ g}{\ell}\right)\left(\frac{.0022046\ LB}{g}\right)\left(\frac{\ell}{.2642\ GAL}\right) = .36\ LB/GAL$$

HNO_3 ADDED AS 50 WT% SOLUTION (SP. GR = 1.32)

HNO_3 DENSITY = (8.32)(1.32) = 11.0 LB/GAL

$$\frac{.36\ LB}{0.5} = .72\ LB\ 50\%\ SOLN\ ADDED/GAL$$

$$\frac{.72\ LB}{11\ LB/GAL} = .065\ GAL\ 50\%\ HNO_3\ ADDED$$

$$\text{DENSITY OF TANK CONTENTS} = \left[(.15)(1.44) + (.065)(1.32) + (1-.15-.065)\right]8.32$$

$$= 9.04\ LB/GAL$$

$$TDS = \frac{(.15)(1.44)(.4+.25)(8.32) + .36}{9.04\ LB} \times 10^6 = 169{,}000\ PPM$$

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$Fe(NO_3)_3$ $MW = 242$

Fe $MW = 56$

$$[Fe] = \frac{(.15)(1.44)(.4)\left(\frac{56}{242}\right)(8.32)}{9.04} \times 10^6 = 18,400 \text{ PPM}$$

BY_____ DATE_____ SHEET 8 OF 15

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SUBJECT _____

ALODINE 600 TANK

ASSUME ALODINE 600 @ 3 OZ/GALLON

COMPOSITION:

CHROMIC ACID	CrO_3	40% WT	MW = 100
K_2ZrF_6		15 WT %	MW = 283
$NaBF_4$		45 WT %	MW = 110

$$TDS = \left(\frac{3\text{ oz}}{16\frac{\text{oz}}{\text{LB}}}\right)\left(\frac{1\text{ GAL}}{8.32 + \frac{3}{16}\text{ LB}}\right)\times 10^6 = 22{,}000\text{ PPM}$$

$$[Cr]^{+6} = \left(\frac{3}{16}\right)(.40)\left(\frac{52}{100}\right)\left(\frac{1}{8.32+\frac{3}{16}}\right)\times 10^6 = 4600\text{ PPM}$$

ALODINE RINSE 1

ASSUME 150 GAL/WEEK DRAGOUT
ASSUME 7500 GAL/WEEK RINSE VOLUME
ASSUME DRAGOUT IS FROM ~~ALODINE 600~~/1000 TANK ON A 80%/20% BASIS

TDS OF DRAGOUT = $(.80)(22{,}000) + (.20)(1400) = 17{,}900$ PPM

LBS TDS = $\left(\frac{17{,}900}{10^6}\right)(150)(8.32) = 22$ LBS

$$TDS = \frac{22}{(7500)(8.32)}\times 10^6 = 353\text{ PPM} + 100 = 453$$

(ASSUMED TDS OF SUPPLY)

$$[Cr]^{+6} = \left[(.80)\left(\frac{4600}{22000}\right) + .20\left(\frac{490}{1400}\right)\right](353) = 84\text{ PPM}$$

ALODINE RINSE 2

ASSUME 150 GAL/WK DRAGOUT
ASSUME 3750 GAL/WK RINSE VOLUME
ASSUME 33/67 SPLIT ALODINE 600 / ALODINE 1000

TDS OF DRAGOUT = 353 PPM

$$\text{LBS TDS} = \left(\frac{353}{10^6}\right)(150)(8.32) = .44 \text{ LBS}$$

$$TDS = \frac{.44}{(3750)(8.32)} \times 10^6 = 14$$

ASSUME
TDS OF POTABLE WATER $\simeq$ 100 PPM

$\therefore$ TOTAL TDS $\cong$ 114 PPM

$[CR]^{+6} \simeq$ 1 PPM

ANODIZING SOLUTION

COMPOSITION:

98% H_2SO_4 52 g/l MW = 98

BORIC ACID 10.7 g/l MW = 62
H_3BO_3

$$TDS = \frac{52g + 10.7g}{1000 + 52 + 10.7} \times 10^6 = 59{,}000 \text{ PPM}$$

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SUBJECT _____

BATCH TREATMENT SYSTEM CAPACITY (NEW CONFIGURATION)

ASSUME: SAMPLE WILL BE ANALYZED FOR EACH TREATMENT BATCH

MIN. LAB TURNAROUND TIME = 24 HOURS
16 HRS/DAY TREATMENT @ 5 DAY/WEEK
TREATMENT BATCH SIZE = 2600 GALLONS

STEP	TIME
TRANSFER WASTE	1.5 HR
PRE-TESTING	1.0
TREATMENT	3.0 HR
TRANSFER TO CLARIFIER	2.5
	8.0

DAY	1	2	3	4	5
6-2	2600	2600	2600	2600	2600
2-10	2600	—	2600	—	2600
	5200	2600	5200	2600	5200

WEEKLY TOTAL = 20,800 GALLONS

ANNUAL TOTAL = (20,800)(52 WKS) = 1,081,600 GALLONS

BATCH TREATMENT SYSTEM CAPACITY (OLD CONFIGURATION)

DAY	1	2	3	4	5
6-2	2600	—	2600	—	2600
2-10	—	—	—	—	—
	2600		2600		2600

WEEKLY TOTAL = 2600 + 2600 + 2600 = 7800 GAL

ANNUAL TOTAL = (7800)(52) = 405,600 GAL

FILTER PRESS CAPACITY

HEAVIEST LOADING IS FROM DEOXIDIZER RINSE TANK 1

390,000 GAL/YR
TDS = 3,700 PPM
[Fe] = 403 PPM

ASSUME SLURRY METAL HYDROXIDE SOLIDS = 0.5 % WT.
ASSUME FILTER CAKE = 20 WT % SOLIDS
ASSUME AL CONTRIBUTION TO SLUDGE IS SMALL < 20%
ASSUME CAKE DENSITY = 80 LB/FT3.

$Fe(OH)_3$ MW = 107 & Fe MW = 56

$Fe(OH)_3$ SOLIDS = $(403)\left(\frac{107}{56}\right)$ = 770 PPM

LBS $Fe(OH)_3$ SOLIDS $= (390000)(8.32)\left(\frac{770}{10^6}\right) = 2500$ LB/YR

$$\frac{2500 \text{ LB}}{0.20} = 12,500 \text{ LB CAKE @ 20\% SOLIDS}$$

$$\text{DAILY} = \frac{12,500}{(260 \text{ DAY})\left(\frac{390000}{1,220,000}\right)} = 150 \text{ LB/DAY}$$

$$\frac{150 \text{ LB/DAY}}{80 \text{ LB/FT}^3} = 1.9 \text{ FT}^3/\text{DAY}$$

ADD 20% FOR AL, OTHER METALS

$1.9 \times 1.2 = 2.3 \text{ FT}^3/\text{DAY}$

FOR AN 8 HR FILTER CYCLE, CAPACITY IS 2.3 FT^3/DAY

$$\text{SLURRY VOLUME} = \frac{(2500)(1.2)}{(0.005)(8.32)} = 72,115 \frac{\text{GAL}}{\text{YR}}$$

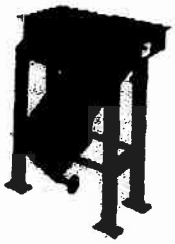
$$\frac{72,115}{(260)\left(\frac{390,000}{1,220,000}\right)} = 800 \frac{\text{GAL}}{\text{DAY}}$$

LANCO CLARIFIERS

Available in 2 to 400 gpm

MODEL 40
(40 gpm)

MODEL 20
(20 gpm)



MODEL 2
(2 gpm)

Clarifier Features

- Utilized to separate suspended solids leaving effluent clear for discharge
- Compact size for limited space
- Internally designed flocculation/mixing tanks for increased efficiency
- Heavy duty 1/4" steel construction
- Sandblasted, primed and epoxy coated for superior chemical resistance
- 1/4" PVC removable settling plates
- Oversize dual sludge outlet flanges
- Large access hatch
- Sludge sampling ports

Options Available:

- All stainless steel construction
- Dual function (allows processing of two independent streams within the same clarifier)
- Mixers and feed pump
- Custom sizes

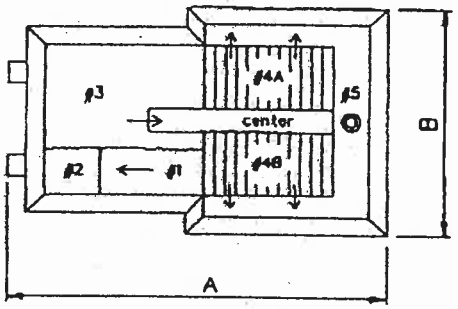
LANCO

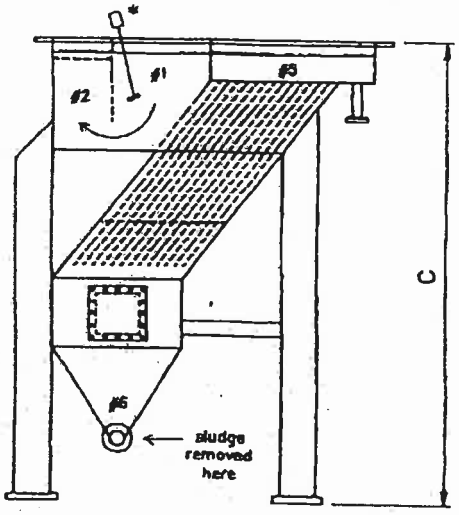
LANCO ENVIRONMENTAL PRODUCTS
Manufacturers of Filter Presses • Clarifiers • Sludge Dryers
1766 Stehouwer, N.W. • Grand Rapids, MI 49504
Telephone: (616) 791-9100 • Fax: (616) 453-1832

Clarifier Specifications:

Model (GPM)	Length (A)	Width (B)	Height (C)	No. & Size of Plates	Area (Projected)	Shipping Weight
Mini (2)	3'-4 1/2"	1'-11"	4'-6"	8 (6"x32")	11 sq. ft. (6.3)	500 lbs.
20	6'-4"	5'-0"	7'-9"	16 (1.5'x4')	96 sq. ft. (55)	3,000 lbs.
40	7'-10"	5'-0"	9'-2"	24 (1.5'x5')	180 sq. ft. (103)	3,700 lbs.
80	9'-2"	6'-0"	10'-8"	30 (2'x6')	360 sq. ft. (206)	4,700 lbs.
150	10'-11"	6'-0"	12'-3"	40 (2'x8')	640 sq. ft. (367)	6,500 lbs.
200 (STD)	12'-11"	6'-0"	12'-3"	60 (2'x8')	960 sq. ft. (551)	9,000 lbs.
200 (OPT)	10'-11"	8'-0"	12'-3"	40 (3'x8')	960 sq. ft. (551)	9,000 lbs.
300*	12'-11"	10'-0"	12'-3"	60 (3'x8')	1,440 sq. ft. (826)	12,418 lbs.
400*		Consult Factory				

*Two-Piece Flanged Construction





Operation:

1. Wastewater is pumped into Section #1.
2. Water flows under a baffle into Section #2.
3. Water flows over a baffle into Section #3.
4. Water flows into center section which takes it to the bottom sludge thickening area. It then flows back up the slant plate Section #4A and #4B where solids are settled out.
5. Clear liquid flows out of drilled ports into Section #5 where it is discharged.
6. Solids slide down into the lower discharge Section #6 where they are pumped to a Lanco Filter Press for further reduction.

*Optional mixers can be installed in flocculation tanks as shown.

LANCO ENVIRONMENTAL PRODUCTS
Manufacturers of Filter Presses • Clarifiers • Sludge Dryers
1766 Stehouwer, N.W. • Grand Rapids, MI 49504
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MANUAL FILTER PRESS PRICE LIST

LANCO ENVIRONMENTAL PRODUCTS

1766 Stehouwer, NW Grand Rapids, MI 49504
Phone: (616) 791-9100 Fax: (616) 453-1832

Model	Capacity	Plate Size	Type	No. of Plates	Shipping Weight	Price
320-.1M	.1 cu'	320mm	Manual / Hydraulic	3	490	3,500.00
320-.2M	.2 cu'	320mm	Manual / Hydraulic	5	510	3,950.00
320-.3M	.3 cu'	320mm	Manual / Hydraulic	7	530	4,400.00
320-.4M	.4 cu'	320mm	Manual / Hydraulic	9	550	4,850.00
320-.5M*	.5 cu'	320mm	Manual / Hydraulic	11	580	5,300.00
320-1M*	1 cu'	320mm	Manual / Hydraulic	18	650	6,700.00
Heavy Duty Mobile Cart for 320mm Filter Press (60" x 42" x 48" H) - 1 1/4" Pipe Rail and 4" industrial castor wheels - Wilden or Aro 1" Double Diaphragm air pump plumbed and installed - Air filter, regulator and lubricator						1,900.00
Complete Mini-System includes: - Heavy Duty Mobile Cart with pump installation (as above) - 2 GPM Clarifier with flocculation tanks and 320mm Filter Press (up to .5 cu') - Mixer, clamp mount (air or electric) - Assembled with interconnecting pipework and valves						12,500.00
2-.5M	.5 cu'	470mm	Manual / Hydraulic	4	1,820	5,700.00
2-1 M	1 cu'	470mm	Manual / Hydraulic	8	1,870	6,500.00
2-2 M*	2 cu'	470mm	Manual / Hydraulic	14	1,960	7,900.00
2-3 M	3 cu'	470mm	Manual / Hydraulic	20	2,150	9,400.00
2-4 M*	4 cu'	470mm	Manual / Hydraulic	26	2,240	10,700.00
4-2 M	2 cu'	630mm	Manual / Hydraulic	9	2,540	9,300.00
4-3 M	3 cu'	630mm	Manual / Hydraulic	11	2,660	9,900.00
4-4 M*	4 cu'	630mm	Manual / Hydraulic	15	2,780	11,200.00
4-5 M	5 cu'	630mm	Manual / Hydraulic	19	2,920	12,300.00
4-6 M*	6 cu'	630mm	Manual / Hydraulic	23	3,060	13,500.00
4-8 M*	8 cu'	630mm	Manual / Hydraulic	29	3,190	15,000.00
Optional Air/Hydraulic Pump for the above Manual Presses						850.00
25-5M	5 cu'	800mm	Air / Hydraulic	11	3,900	14,500.00
25-6M	6 cu'	800mm	Air / Hydraulic	13	4,100	15,500.00
25-8M*	8 cu'	800mm	Air / Hydraulic	17	4,150	17,000.00
25-10M	10 cu'	800mm	Air / Hydraulic	21	4,200	18,500.00

* Standard frame sizes normally in stock Other sizes available upon request.

High Pressure 225 PSI (16 Bar) Membrane Presses also available. Call for quotation.

Prices subject to change without notice. January 1996

CLARIFIER & ACCESSORIES PRICE LIST

LANCO ENVIRONMENTAL PRODUCTS
1766 Stehouwer NW Grand Rapids, MI 49504
Phone: (616) 791-9100 Fax: (616) 453-1832

CLARIFIERS

Model (GPM)	Length	Width	Height	No. & Size of Plates	Area (Projected)	Shipping Weight	Price
Mini (2)	3'-4 1/2"	1'-11"	4'-6"	8 (6"x32")	11 sq. ft. (6.3)	500 lbs.	4,500.00
10	3'-6"	5'-2"	5'-9"	16 (1'x3')	48 sq. ft. (28)	1,400 lbs.	8,500.00
20 (STD)	6'-4"	5'-0"	7'-9"	16 (1.5'x4')	96 sq. ft. (55)	3,000 lbs.	9,750.00
20(OPT)	6'-4"	4'-6"	6'-6"	16 (1.5'x4')	96 sq. ft. (55)	2,800 lbs.	9,750.00
40	7"-10"	5'-0"	9'-2"	24 (1.5'x5')	180 sq. ft. (103)	3,700 lbs.	14,000.00
80	9'-2"	6'-0"	10'-8"	30 (2'x6')	360 sq. ft. (206)	4,700 lbs.	19,500.00
150	10'-11"	6'-0"	12'-3"	40 (2'x8')	640 sq. ft. (367)	6,500 lbs.	27,000.00
200 (STD)	12'-11"	6'-0"	12'-3"	60 (2'x8')	960 sq. ft. (551)	9,000 lbs.	39,000.00
200 (OPT)	10'-11"	8'-0"	12'-3"	40 (3'x8')	960 sq. ft. (551)	9,000 lbs.	40,000.00
300*	12'-11"	10'-0"	12'-3"	60 (3'x8')	1,440 sq. ft. (826)	12,418 lbs.	49,000.00
400*	13'-7"	10'-0"	12'-3"	70 (3'x8')	1,680 sq. ft. (964)	14,000 lbs.	57,000.00

*Two Piece Hanged Construction Stainless Steel available. Call for quotation

SLUDGE THICKENERS (4" Inlet, 2" Overflow, 2" Sludge Outlet)

800 Gallon	4' x 4' x 8' OAH, 3/16" Plate, epoxy coated and 3" Frame.	$2,200.00
1800 Gallon	6' x 6' x 9' OAH, 3/16" Plate, epoxy coated and 4" Frame	$4,500.00
4000 Gallon	8' x 8' x 12' OAH, 1/4" Plate, epoxy coated and 4" Frame	$7,900.00

MIXERS

Standard Features: All wetted parts 316SS, Clamp mount, TEFC Motor (3 phase available), 5/8" shaft

LD 25/33	1750 RPM, 115V	$750.00
LDA 25/33	Variable Speed with air motor	$900.00
LDC 25/33	Variable Speed with DC Motor, 115V	$1,350.00
LG 25/33	435 RPM Gear Drive, 115V	$1,200.00
BGM 75	350 RPM Heavy Duty Gear Drive with 1" shaft for Sludge Thickener, 115V	$2,400.00

PUMPS

	Pump Only	Installed
1 1/2" Double Diaphragm Cast Iron Air Pump w/ Neoprene Elastomers	$875.00	$1,250.00
2" Double Diaphragm Cast Iron Air Pump w/ Neoprene Elastomers	$1,100.00	$1,500.00

POLYMERE FEED

1 - 100 GPH (.01 - 2.0 GPH Neat)	Polyblend System	$3,900.00
10 - 200 GPH (.01 - 2.0 GPH Neat)	Polyblend System	$4,600.00
60 - 1200 GPH (.01 - 8.0 GPH Neat)	Polyblend System	$6,200.00

Other options available upon request
Prices subject to change without notice

January 1996

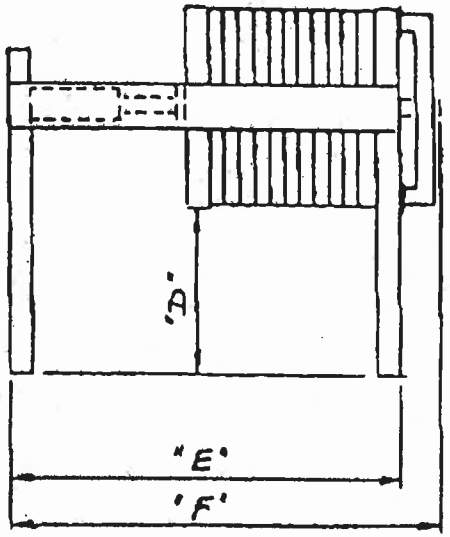
LANCO MINI PRESS

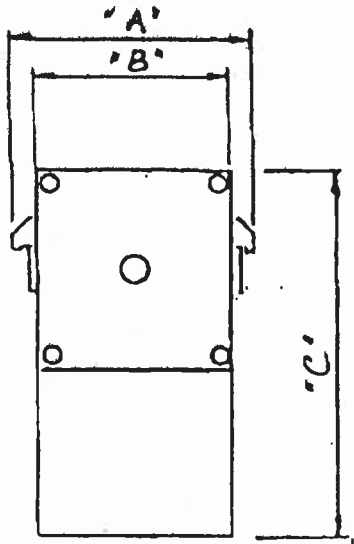
FEATURES:

- Manual/Hydraulic System for efficient closure.
- Heavy duty, epoxy coated structural steel frame.
- All plates made of corrosion-resistant polypropylene, type RAL7032.
- Plates are center fed with 4-corner discharge, ported and valved to provide drier cakes and allow backwash of cakes when required.
- Operating manual blowdown is provided as standard to assure driest possible cake.
- Automatic Opening.

OPTIONAL: Cart PRICE: $1900.00

- Heavy Duty 1/4" Construction (60" x 42" x 48" H)
- 1 1/4" Pipe rail
- 4 Industrial castor whee
- Wilden or Aro 1" double diaphragm air pump plumbed and installed.
- Air Regulator with filter/lubricator





Dimensions (in inches)

Model No.	Cu. Ft.	"A"	"B"	"C"	"D"	"E"	"F"	No. of Plates
320-.1	.1	17	13	20	7	29 1/2	37 1/2	3
320-.2	.2	17	13	20	7	33	41	5
320-.3	.3	17	13	20	7	38	46	7
320-.4	.4	17	13	20	7	42 1/2	50 1/4	9
320-.5	.5	17	13	20	7	46 1/2	54 1/2	11

MODEL NO. 320-320mm. (.06 cu. ft.) GASKETED PLATES

Additional Filter Plates		Filter Cloths	
Head & Tail	Int.	Head & Tail	Int.
$225.00ea.	$250.00ea.	$11.00ea.	$22.00ea.

Cloth Installation Wedge	$15.00
14" Spatula Scraper	$22.00
Precoat Manifold	$200.00

LANCO CORPORATION
Waste Treatment Equipment
1766 Stehouwer N.W.
Grand Rapids, MI 49504
Tel: (616) 791-9100
Fax: (616) 453-1832

Post-it™ brand fax transmittal memo 7671 | # of pages ▸
To David Johnson | From John Bosch
Co. | Co.
Dept. | Phone # (616) 791-9100
Fax # (206) 556-7547

January 1995

Prices subject to change without notice.

SCHOTT GREAT LAKES INSTRUMENTS

OPERATING INSTRUCTION MANUAL

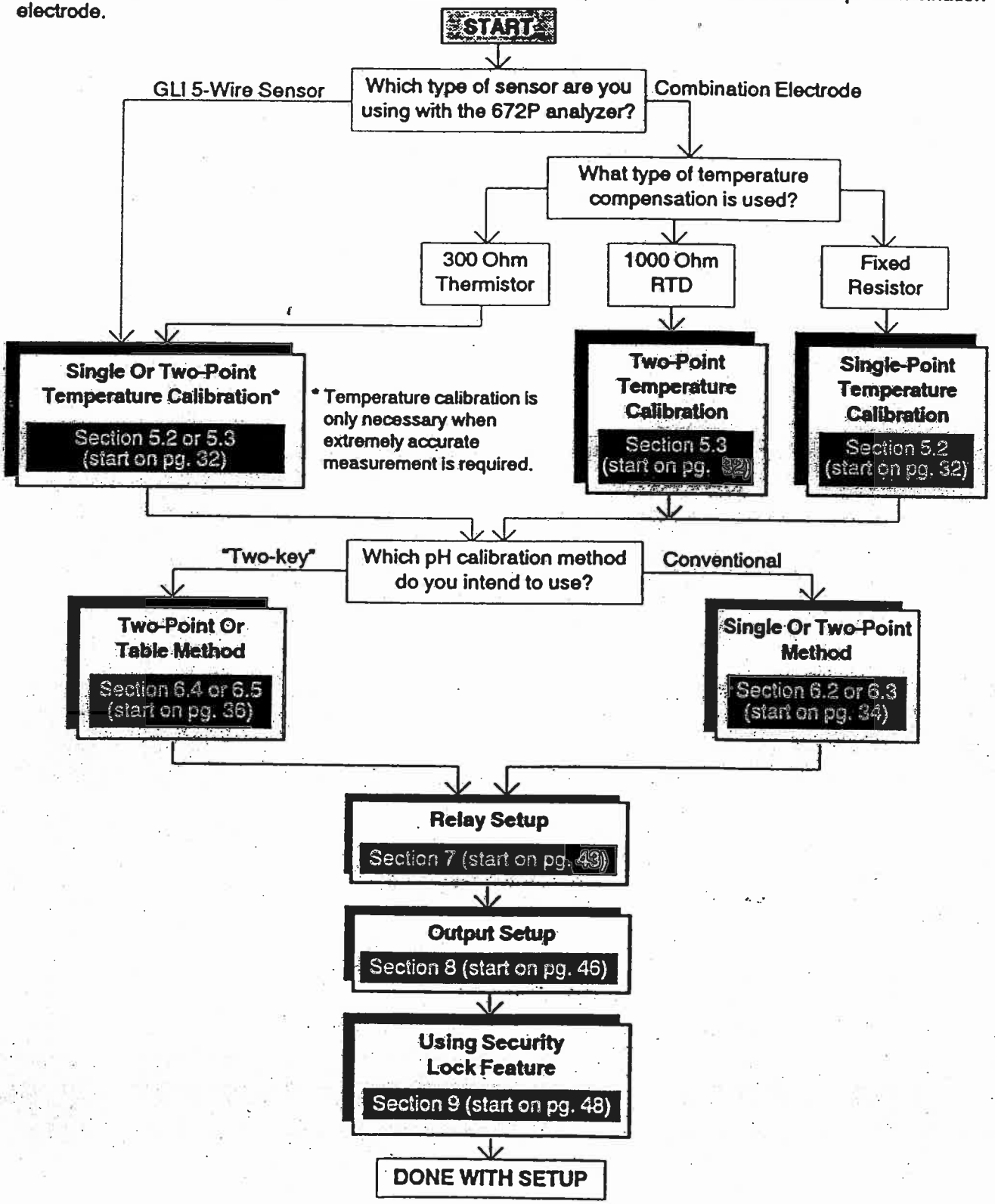
Manual No. 672P
Revision 8-193

MODEL 672P
pH ANALYZER

Great Lakes Instruments, Inc.
8855 North 55th Street, Milwaukee, Wisconsin 53223 • Telephone (414) 355-3601 • Telefax (414) 355-8364

INSTRUMENT SETUP GUIDE

This manual contains detailed instructions for all operating aspects of this instrument. Read Part One for a general description of the Model 672P. Part Two explains how to install and wire the instrument. To familiarize yourself with the basic operation of the 672P, read Part Three, Sections 1, 2 and 3. For instrument startup, perform the setup steps in Section 4. The following guide shows which subsections of Sections 5 and 6 to use for calibration when using a GLI 5-wire Differential Technique sensor or a conventional pH combination electrode.



2. **NEXT** key (Figure 3-1)

   - With display in measurement mode:

     This key has no effect.

   - With display in "examination" mode:

     Scrolls display to show next setup variable with each press. Refer to Table B in Section 3 for a complete listing of all setup variables.

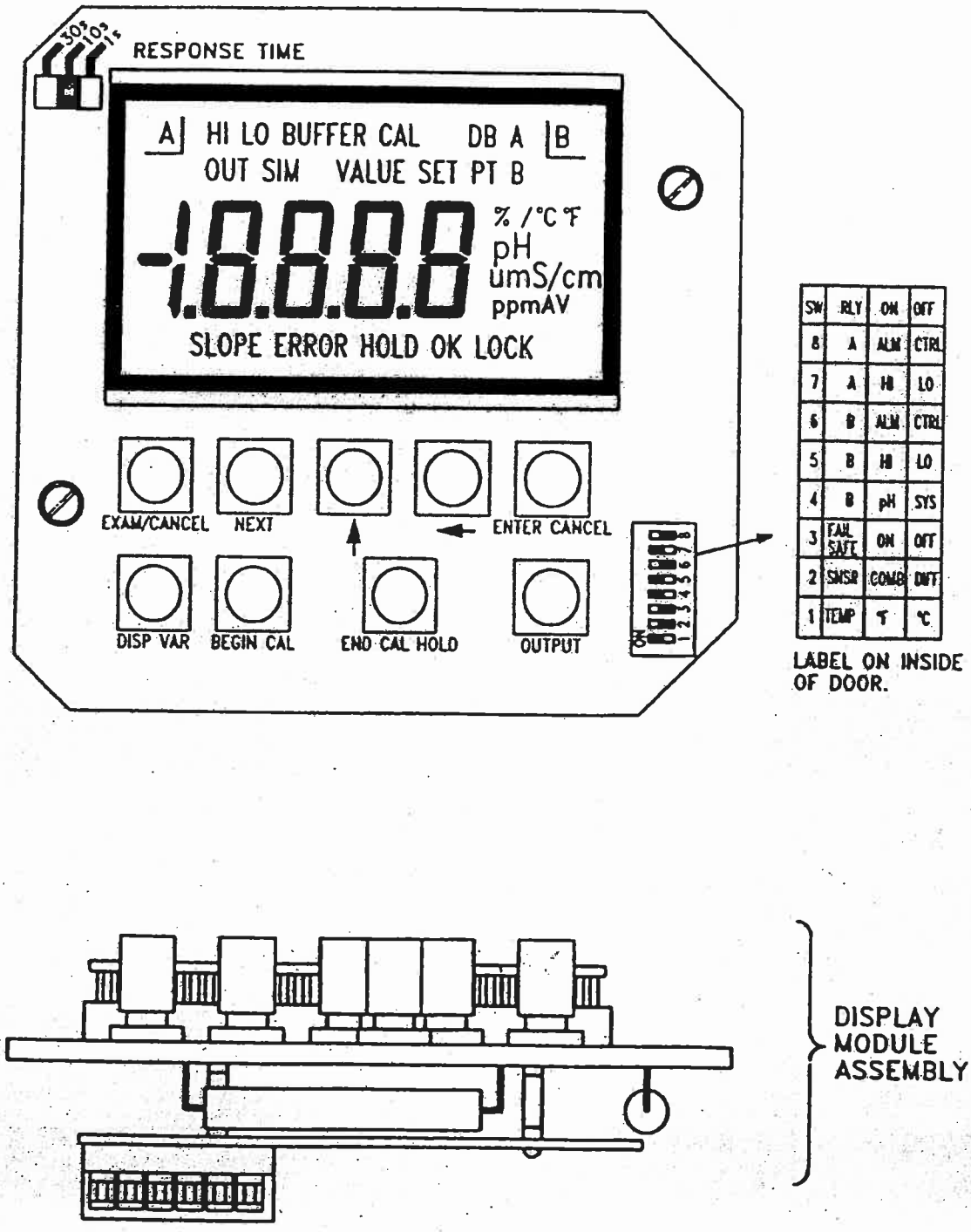
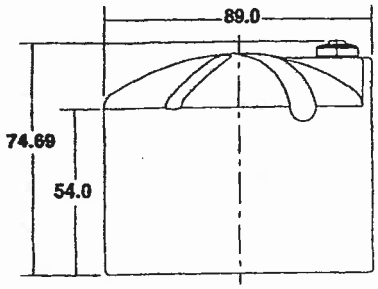
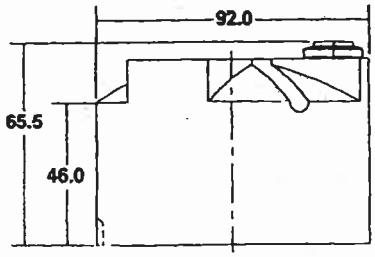


FIGURE 3-1 Display Module Assembly — Operating And Setup Controls

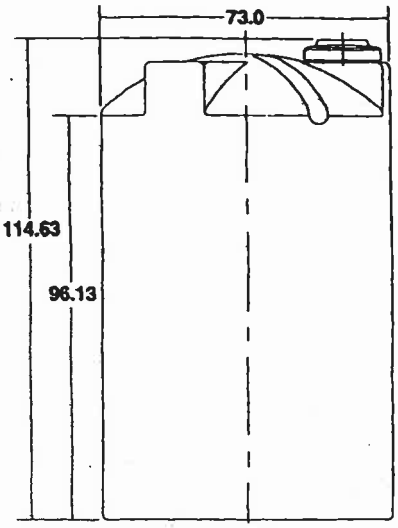
Poly Processing Company - Western Region offers integrally molded Flanged Outlets (IMFO™) and molded-in side manways on many tank sizes.



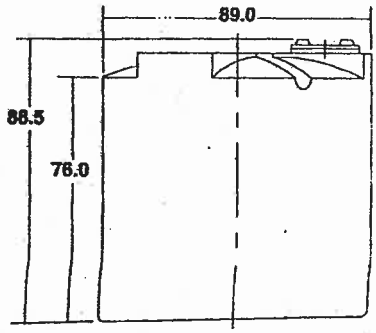
Stock number 661-U, 1550 gallons
Lid style: 12" screw cap



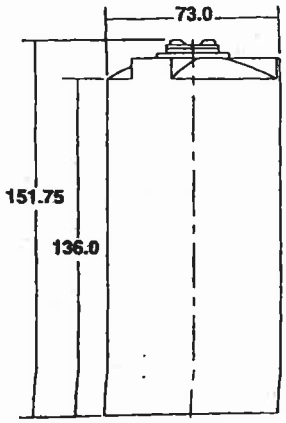
Stock number 08-U, 1600 gallons
Lid style: 17" screw cap



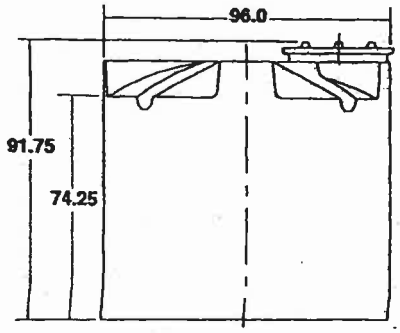
Stock number SP084-U, 1850 gallons
Lid style: 17" screw cap



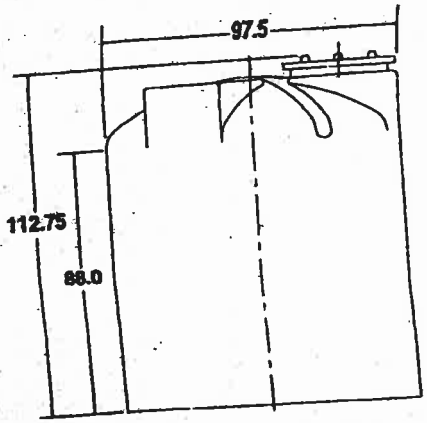
Stock number 09-U, 2000 gallons
Lid style: 17" screw cap



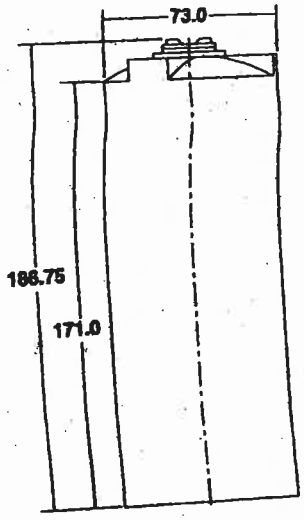
Stock number SP086-U, 2400 gallons
Lid style: 17" screw cap



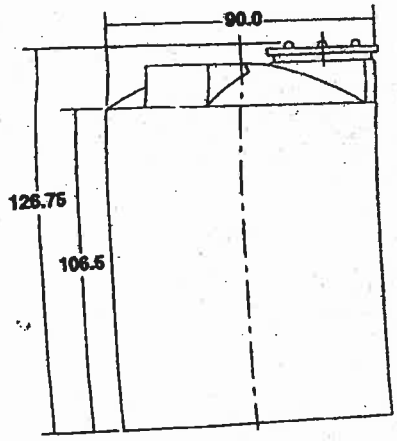
Stock number 010-U, 2500 gallons
Lid style: 24" screw cap



Stock number SP726-U, 3000 gallons
Lid style: 24" screw cap



Stock number SP087-U, 3050 gallons
Lid style: 17" screw cap



Stock number 012-U, 3100 gallons
Lid style: 24" screw cap

POLY PROCESSING Company
Division of Abell Corporation

Western Region
P.O. Box 80
8055 S. Ash St.
French Camp, CA 95231
(209) 982-4904
FAX (209) 982-0455

Central Region
P.O. Box 4150 (71211)
2201 Old Sterlington Rd.
Monroe, LA 71203
(318) 343-7565
FAX (318) 343-8795

Eastern Region
161 McGhee Rd.
Winchester, VA 22603
(540) 665-9062
FAX (540) 665-3067

VERDERFLEX® Industrial Hose Pumps

The long experience of VERDER in industrial hose pumps has resulted in a brand new concept of this pump. The main objectives were to develop a compact and robust pump according to a contemporary industrial design. The result is the VERDERFLEX hose pump.

The VERDERFLEX at a glance:

View large picture (143K) in a separate window

- Sealless
- No contamination
- No flaps or valves
- Simple hose replacement
- Few wearing parts
- Pressure independent from capacity
- Close and long coupled versions
- Easy maintenance
- Capacity 10 l/h to 80m³/h (2,6 to 20800 USGPH)
- Dosing applications
- Pressure to 16 bar (230 psi)
- Suction lift to 9,5 metres
- Value engineered

Close Coupled | Flange Connection | Hose | Models | Reduced Wearing Parts | Drain Plug Sealless | Pressure | Drive | Options | Complete System | Warranty | Materials | Performance Curves | Applications

Close coupled drive unit

The direct mounting of the gear motor on the pump housing results in a lighter unit than the traditionally long coupled unit.

Simplified flange connection

The simplified flange connections enable the hose to be easily withdrawn and replaced by loosening a few bolts. This reduces maintenance downtime. The lubrication oil can be easily monitored, filled or drained, utilizing the special pump housing design.

The hose

The core component of a hose pump is the hose, which has been specifically developed for the VERDERFLEX. This results in increased hose life. The differential pressure is 16 bar (230 psi), static pressure up to 48 bar (690 psi).

Models

The ten VERDERFLEX models from size 10 to 125 reach a capacity from 10 l/h to 80m³/h.

Reduced wearing parts

The only wearing parts in the pump are those in contact with the liquid, ie hose and flanges. The simple construction of the pump facilitates maintenance.

Drain Plug

The VERDERFLEX hose pump has been fitted with a drain plug at the lowest part of the pump. The removal of this plug will drain the pump unit fully. Emptying the lubricant - the branded VerderLube - in this way ensures that the process of replacing the hose is a clean and simple operation.

Sealless

The advantage of hose pumps is that the pump unit does not come into contact with any rotating parts. The only parts in contact with the product are the hose and the flange connections.

Pressure independent from capacity

The capacity is proportional to the speed as the hose pump is a positive displacement pump and thus suitable for dosing applications. The pump also has a suction lift capability of 9,5m (50 mbar(a)), 31.2feet (0.7psi(a)).

Drive concept

Models ranging from 10 to 80 can be supplied in either long or close coupled versions. This feature offers the possibility to supply the pump in a compact form or with a customised drive. Models 100 and 125 are only supplied in the long coupled version.

Options

The following options can be supplied with the pump:

- ☐ Vacuum installation to improve suction capacity
- ☐ Pulsation damper
- ☐ Leakage detector
- ☐ Customised coating
- ☐ Customised drive specifications
- ☐ ANSI flanges
- ☐ Mobile unit

Complete system

Because the VERDERFLEX is very suitable for filter press applications, VERDER offers you a complete system consisting of a pump, a pressure sensor and a pulsation damper. Please do not hesitate to ask for detailed information.

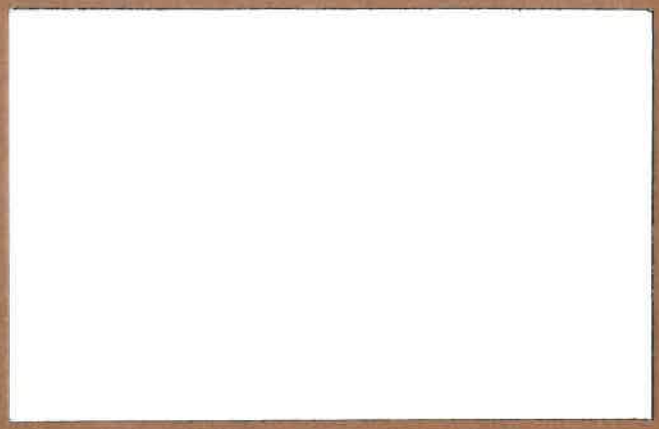
Warranty

All VERDERFLEX pumps are subject to a 2-year European warranty on material and faulty workmanship (rent excluded). This warranty is not applicable for wearing and rotating parts or for misuse of the pump.

APPENDIX G

REAL ESTATE APPRAISALS

APPRAISAL REPORT



Nov 1984

4,000

MACAULAY & ASSOCIATES, LTD.
EVERETT, WASHINGTON

2500 00 Appraisal

CHARLES R. MACAULAY
M.A.I. - S.R.E.A.
MACAULAY & ASSOCIATES, LTD.

650 MEDICAL-DENTAL BLDG.
EVERETT, WASHINGTON 98201

AREA CODE 206
OFFICE: 258-2611
HOME: 252-7588

IMPROVED LIGHT-INDUSTRIAL REAL ESTATE

Located at

1028 West Marine View Drive
Everett, Washington

Owner

Norton Industries, Inc.

Prepared for

Mr. John Schack

Date of Valuation

November 26, 1984

Appraised by

C.R. Macaulay, MAI, SREA
MACAULAY & ASSOCIATES, LTD.
Everett, Washington

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MACAULAY & ASSOCIATES LTD.
REAL ESTATE APPRAISERS & CONSULTANTS
610 MEDICAL-DENTAL BUILDING
2722 COLBY AVENUE
EVERETT, WASHINGTON 98201
(206) 258-2611

November 29, 1984

Mr. John B. Schack
1028 West Marine View Drive
Everett, WA 98201

RE: Appraisal Report for Improved-Light Industrial Real Estate

Dear Mr. Schack:

As requested, a personal inspection has been made of the property located at 1028 West Marine View Drive, Everett, Washington, together with a study of current market data, for the purpose of forming an opinion as to the market value of the fee simple interest in the subject property.

This report is based on the assumption that the building improvements have been constructed and finished to the quality and specifications set forth in the cost estimate by Commercial Industries Co., Inc., and that the site improvements, including asphalt paving, striping, chain link fencing, storm drainage with oil separator, are in place.

Your attention is invited to the following 63 page report for the narrative description, analysis, and conclusion of value.

Based on the investigation and analysis of all the elements which reasonably affect value, I have formed the opinion that the market value of the subject property, as of November 26, 1984, is:

Parcel A

THREE MILLION SIX HUNDRED AND FIFTY DOLLARS ($3,650,000)

Parcel B

THREE HUNDRED AND FIFTY THOUSAND DOLLARS ($350,000)

Total Estimated Market Value

FOUR MILLION DOLLARS ($4,000,000)

Respectfully submitted,

MACAULAY & ASSOCIATES, LTD.

Charles R. Macaulay, MAI, SREA

CRM/lr

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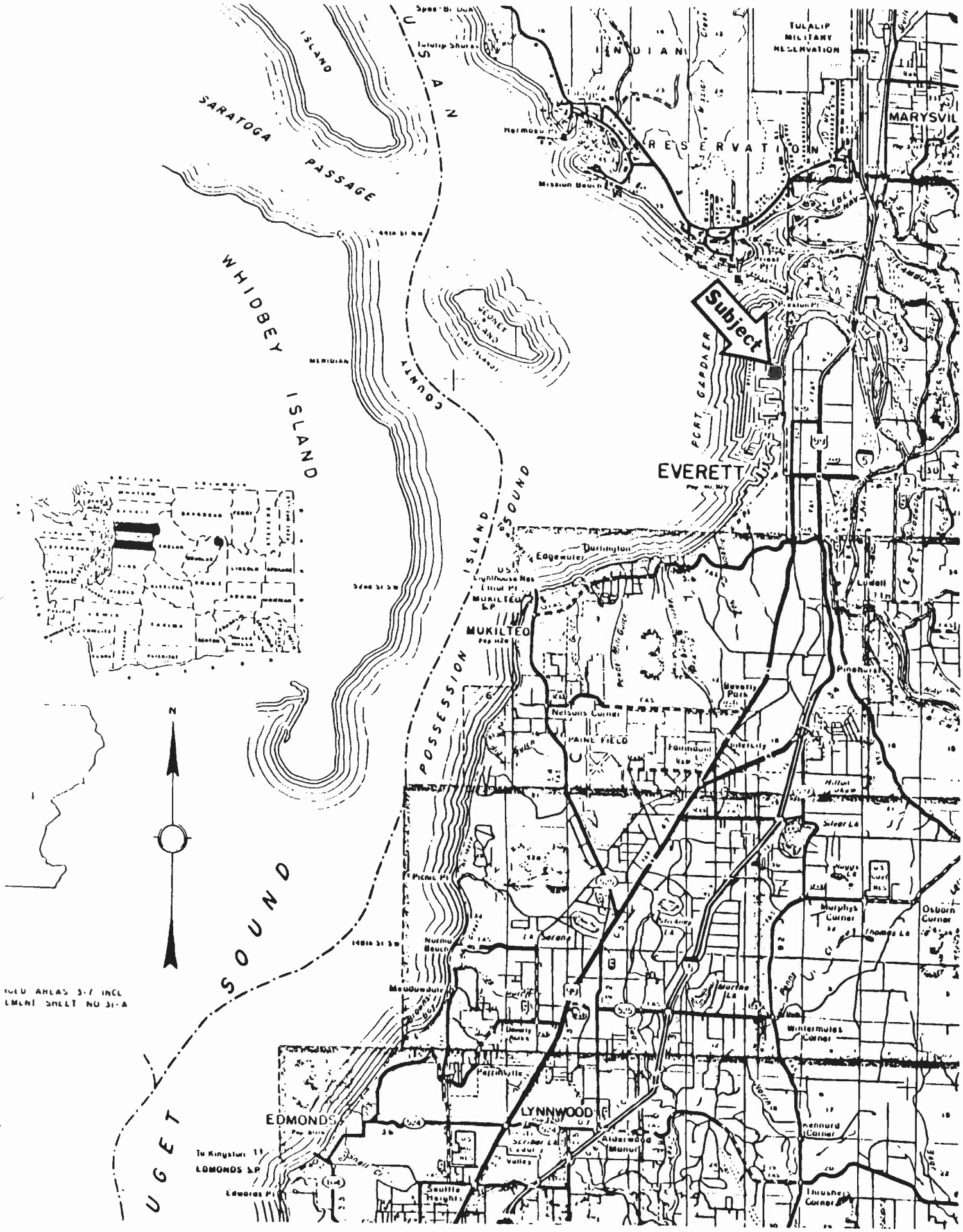
Vicinity Map



SUBJECT PROPERTY PHOTOGRAPHS

Looking easterly along boat launch access road; Parcel B to the left and Parcel A to the right.

South end of Building A, looking northwesterly at office space area (with windows).

SUBJECT PROPERTY PHOTOGRAPHS

Office space at south end of Building A, looking east.

Building A warehouse space.

SUBJECT PROPERTY PHOTOGRAPHS

Looking southeasterly at Building A.

Looking northwesterly at Building B.

SUBJECT PROPERTY PHOTOGRAPHS

West side of Building C, looking northeasterly.

Interior of Building C.

SUBJECT PROPERTY PHOTOGRAPHS

Looking southeasterly at Building C.

Building site for construction of proposed Building D, looking northwesterly.

SUBJECT PROPERTY PHOTOGRAPHS

Street scene looking south down West Marine View Drive.

Looking northeasterly across boat launch access road at eastern portion of Parcel B.

SUBJECT PROPERTY PHOTOGRAPHS

Wetland area of Parcel B, looking easterly from parking lot of public boat launch facility.

INTRODUCTION

Purpose of the Appraisal

The purpose of the appraisal is to estimate the market value of the fee simple interest of the subject property.

Appraisal - Definition

A written statement, independently and impartially prepared by a qualified appraiser, setting forth an opinion of defined value of an adequately described property as of a specific date, supported by the presentation and analysis of relevant market information.

Definition of Market Value

The most probable price in cash, terms equivalent to cash, or in other precisely revealed terms, for which the appraised property will sell in a competitive market under all conditions requisite to fair sale, with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue stress.

(The Appraisal of Real Estate, 8th Edition).

The market value estimate is based on cash to the seller or its equivalent.

Appraisal Problem

The problem is to estimate the market value of the subject Parcels A and B, assuming that Parcel A is fully improved as described herein. Parcel B is appraised as it exists; vacant and unimproved.

The appraisal report is based on the assumption that the construction of the building improvements and the site improvements on Parcel A have been completed to the description provided herein.

It is assumed that the buildings have been leased at the market rates documented under the Income Approach to valuation as of the date of the appraisal.

SUMMARY OF FACTS AND CONCLUSIONS

Land Area

Parcel A

(South tract) 302,822 sq. ft.

Parcel B

(North tract) total area: 359,562 sq. ft., including:

road easement	51,000 sq. ft.
wet land	174,240 sq. ft.
filled land	134,322 sq. ft.

Land Value Estimate

Parcel A

$2.50 per sq. ft. or $757,055

Parcel B

Road easement area; nominal
Wet land @ $.50 per sq. ft. = $87,120
Filled land @ $2.00/sq. ft. = $268,644
Total Parcel B = $355,764

Total Estimated Land Value = $1,112,800

Improvements (All improvements are located on Parcel A)

All buildings are Soule, pre-engineered metal buildings fully insulated on concrete slab.

Building A	16,500 sq. ft. X 16' height
Building B	20,000 sq. ft. X 20' height
Building C	28,000 sq. ft. X ~~14~~ 20' height
Building D	55,000 sq. ft. X ~~14~~ 27' height

Site Improvements

Gravel ballast or underlying concrete paving, asphalt surfacing with thickened edge, striping, storm drain system with oil separator, and chain link wire fencing.

Estimated Contribution Value Improvements

$2,900,00

Estimated Market Value

Parcel A

THREE MILLION SIX HUNDRED AND FIFTY THOUSAND DOLLARS ($3,650,000)

Parcel B

THREE HUNDRED AND FIFTY THOUSAND DOLLARS ($350,000)

Total Estimated Market Value

FOUR MILLION DOLLARS ($4,000,000)

REGIONAL DATA

The Pacific Northwest includes the States of Washington, Oregon, and Idaho. Washington is divided into two distinct areas by the Cascades mountain range, which runs north and south through the state. Snohomish County is located on Puget Sound in the north central portion of Western Washington.

The State of Washington--and particularly Western Washington--enjoys a widespread reputation as being a "nice place to live". Temporary visitors, such as students, military personnel, and vacationers, are instrumental in publicizing Western Washington and the high quality of life offered here. Popular activities include outdoor recreation--both water-oriented, such as boating and fishing, as well as a professional symphony orchestra and numerous other cultural activities. Public higher educational facilities available to Snohomish County residents include the University of Washington in Seattle, with a student body in excess of 32,000; as well as the Puget Sound campus of Central Washington University, which is located in Lynnwood. Snohomish County community colleges include Everett Community College and Edmonds Community College.

Historically, the Washington State economy has been tied to agriculture and resource-based industry. The harvesting and processing of forest products for the Western U. S. market and into export goods such as lumber and plywood, as well as pulp and paper, have been particularly important to the region. The major deepwater ports in Bellingham, Everett, Seattle, and Tacoma on Puget Sound have played a large role in exporting these resource-based products.

The trend of the changing economic base in recent years has been toward non-resource-based industries, such as machinery and equipment, motor vehicles, shipbuilding, electronics industry, and aerospace manufacturing. These non-resource-based manufacturing activities now make up the bulk of the Pacific Northwest industrial base.

The major employers in Snohomish County include companies that are representative of the Western Washington industrial base. These companies include the Boeing Company, John Fluke Manufacturing Company, General Telephone Company of the Northwest, and Scott Paper Company. The Hewlett-Packard Company continues to expand its facilities and has a current employment base of approximately 800.

Deepwater ports via the Columbia River and Puget Sound--an arm of the Pacific Ocean--are significantly closer to Japan and other North Pacific industries than many U. S. ports located further south. Historically, Snohomish County's deepwater port in Everett has been devoted to pleasure-boat moorage, log exporting, and aluminum raw material importing. The Port of Everett has been aggressively seeking diversification in waterfront activities. The recently-completed Norton Terminal and the acquisition of the Weyerhaeuser Company demolished pulp mill site provides a further opportunity toward diversification of the Port of Everett.

The Burlington Northern Railroad provides rail linkage with the rest of the Continental United States; and the Port of Everett is the western terminus of the northern railroad route. U. S. Interstate Highway 5--the major north-south arterial on the coast--and Interstate Highway 90--the major east-west arterial--provide major freeway links with the rest of the country.

Snohomish County had an estimated population of 360,900 in March of 1984. The county has been one of the fastest-growing counties in the State of Washington for several years prior to the beginning of the most recent economic recession. The county has increased its population by 50% during each of the past two decades and is forecasted to reach 510,200 by the year 2000, according to the Puget Sound Council of Governments.

The opening of the Boeing Company 747 assembly plant in 1967 represented the basic change in the industrial base makeup of Snohomish County. Since that time, numerous manufacturers of electronics and electrical equipment have been added to the economic base. These events represented a shift away from the forest products harvesting and processing as a primary employer in Snohomish County.

The Boeing Company began operation of the 747 assembly plant in early 1967, employing approximately 3,300 people. In early 1969, employment reached a peak of 25,200, only to drop below 4,000 during the sharp recession experienced in the Puget Sound region in the early 1970's. Boeing employment has climbed steadily since the early 1970's, reaching a peak during the 1979-1980 period. Falling profits among the world's major airlines has resulted in decreasing jetliner demands in recent years. However, Boeing's employment base bottomed out at around 9,000 employees in the Everett plant and is expected to climb to approximately 10,000 employees within the next 12 months.

Changes in the national economic picture have traditionally been reflected strongly within the Everett-Seattle metropolitan area; and the most recent economic recession was no exception. An easing of the mortgage loan interest rates, during the first quarter of 1984, for residential real estate resulted in an increase in new-home construction and housing sales activity, along with increased activity for the forest products industry. However, as interest rates have been increasing in recent months, the residential real estate market has also slowed considerably. Although the region is expected to have an upturn in economic activity during the coming months, full recovery is projected to be on a relatively-slow basis and extended over a period of the next few years.

Because of the unique location relative to the dense metropolitan area of Seattle to the south, along with its superior deepwater port at its western edge and the recreational-oriented Cascade Mountains to the east, Snohomish County has excellent potential for future growth and expansion. In this connection, it should be noted that the Eldec Corporation will have a new branch facility located at the intersection of the Bothell-Everett Highway and Interstate Highway 405, with an employment base of approximately 400; and Advanced Technology Laboratories (ATL) recently broke ground at this same intersection, in connection with development of new facilities, with a projected employment base of approximately 1,200. In addition, Honeywell Corporation recently opened the first phase of their new facilities located at Harbour Pointe--south of Mukilteo--and announced plans to hire 300 employees by 1986 and approximately 1,600 by 1990.

Hewlett-Packard is completing a $25,000,000 instrument division facility at Lake Stevens on a 133-acre site, with the completion date scheduled for October 29, 1984. The Company predicts a work force of approximately 1,800 by 1990. John Fluke Manufacturing Company plans expansion on its 516-acre site on Seaway Boulevard in southwest Everett. Completion date of the first of a 4-phase project is scheduled for April 1, 1985, and is expected to produce 400 new jobs.

In summary, the outlook for the Puget Sound region is toward an expanding economic base and greater stability of the growing employment base.

CITY DATA

The City of Everett is located in the Port Gardner Bay area of Possession Sound in Western Central Snohomish County. Everett is the commercial and financial focal point for the rural areas of Snohomish County to the north and east, as well as the residential communities to the south.

The population in 1980, according to census data, was 55,000, with current estimates of the city population at 56,000 to 57,000 people. According to a study by the Thoresen Peterson Planning Group, commissioned by the City of Everett, the Everett urban area population could approach 120,000 people by 1990. Most of Snohomish County's population is centered around the area from Marysville--just north of Everett--southerly to the south Snohomish County line, and from the coast of Puget Sound easterly for 25 to 30 miles. The Thoresen-Peterson Planning Group Study reports that, although the population of Everett is just over 55,000, the trade area is nearly double that--or almost 100,000 residents. The study concludes that this population base is adequate to support both the Central Business District and a retail shopping mall.

Everett is the County Seat for Snohomish County, which has a population in excess of 356,000. There are approximately 5,300 people currently employed in the Everett core area. Employment is distributed among financial, professional, governmental, and general office activities. Although two major department stores remain in the Central Business District, much of the retailing activity has moved to the Everett Mall in South Everett and to the Alderwood Mall in Lynnwood. Many of the stores in the Central Business District are outdated; and increasing vacancy rates have been noted in the retail space.

Although recent street improvements along Colby and Hewitt Avenues--the main commercial streets of the Central Business District--have been somewhat cosmetic in nature, the area is regarded as visually attractive. According to the Thoresen-Peterson study, the ratio of assessed building value to assessed land value in the core area is relatively low--especially from Colby Avenue westerly to the waterfront--leading to a conclusion that a general under-utilization exists.

One of Everett's great assets is its location on Port Gardner Bay. The Port of Everett has closer access to the Pacific Ocean than the larger ports of Seattle and Tacoma.

The Port of Everett has been actively seeking diversification from its basic exporting activities of logs and aluminum. Large backup acreage is needed to attract shipping, such as the highly-competitive container business. The jetty area offers the potential for a major development by the Port of Everett. It would be very desirable if the City of Everett and the Port of Everett would mesh long-term plans and develop the lower Hewitt Avenue, Pier Three area, into a commercial, office, recreational-type use. This would enhance the city retail core area, provide income to the Port, and offer a front door to the city by utilizing the scenic amenity of Port Gardner Bay. Development of the offices, shops, and restaurants is underway between the Port of Everett 2,200 slip marina and the proposed U. S. Navy Homeporting site.

In summary, Everett and the surrounding metropolitan area are expected to share in improved economic opportunities and greater employment growth and stability in the foreseeable future.

NEIGHBORHOOD DATA

Primary land use on the west side of West Marine View Drive is industrial. Three main exceptions to this are the Port of Everett marina, public boat launch, and the recently completed Everett Marina Village, comprised of retail shops and restaurants. A significant number of the industrial uses on this level land next to Port Gardner Bay are marine-oriented.

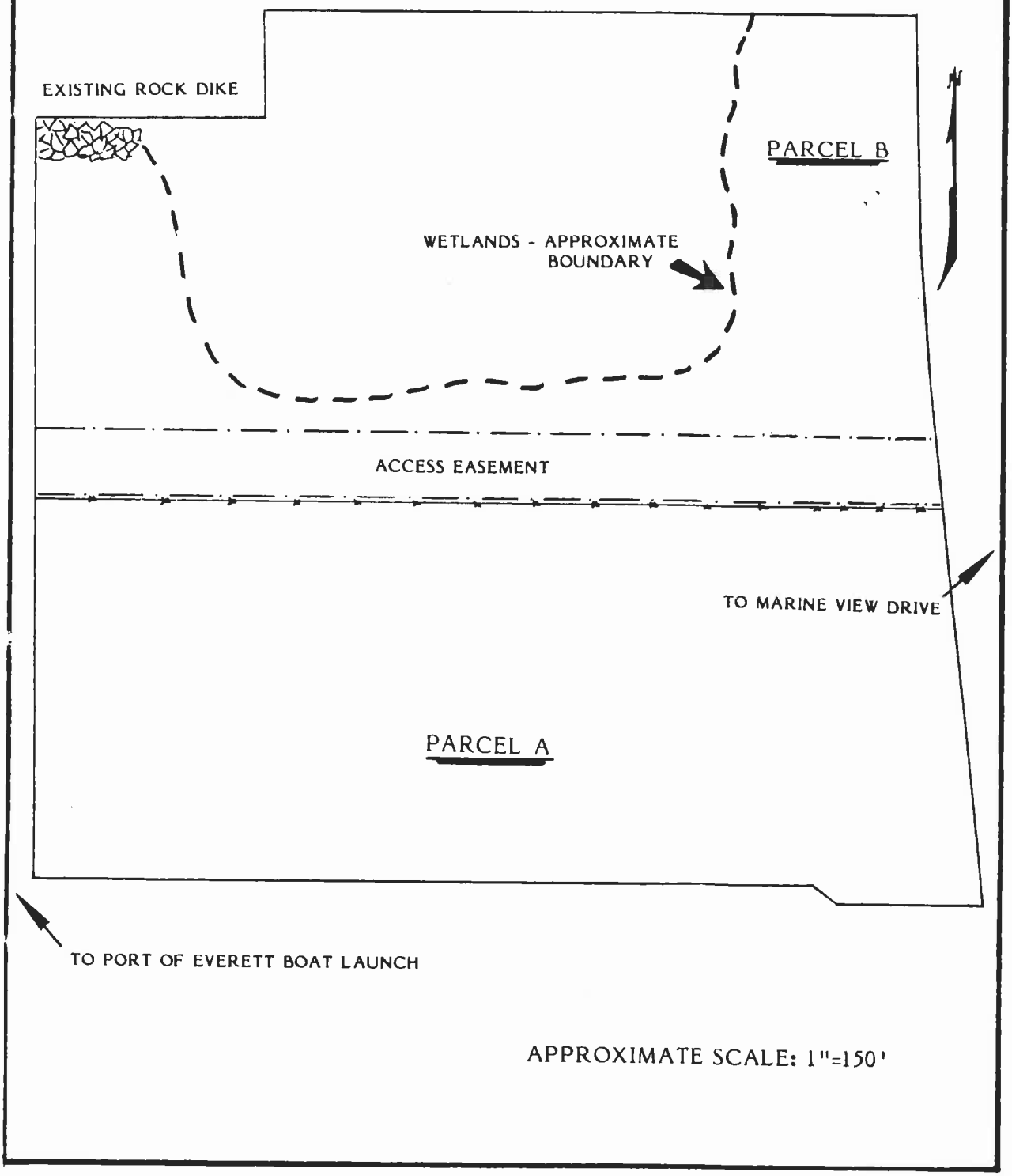
The neighborhood extends southerly past Pier 1 to include a large tract recently purchased by the Port of Everett from the Weyerhaeuser Company. The Burlington Northern railway and abrupt upward-sloping terrain form the east boundary, while the neighborhood extends north to the mouth of the Snohomish River, approximately one mile north of the subject property. Everett's Central Business District is about a mile to the southeast of the subject property.

The land area described above is zoned M-1; City of Everett Heavy Manufacturing Zone. Primary use to the north of the subject property is for wet log storage. To the south, metal industrial buildings, similar to those of the subject, occupy street frontage on Marine View Drive and house a variety of tenants. Property owned by the Port of Everett is also leased for industrial use; buildings on its property are of widely varying age and design.

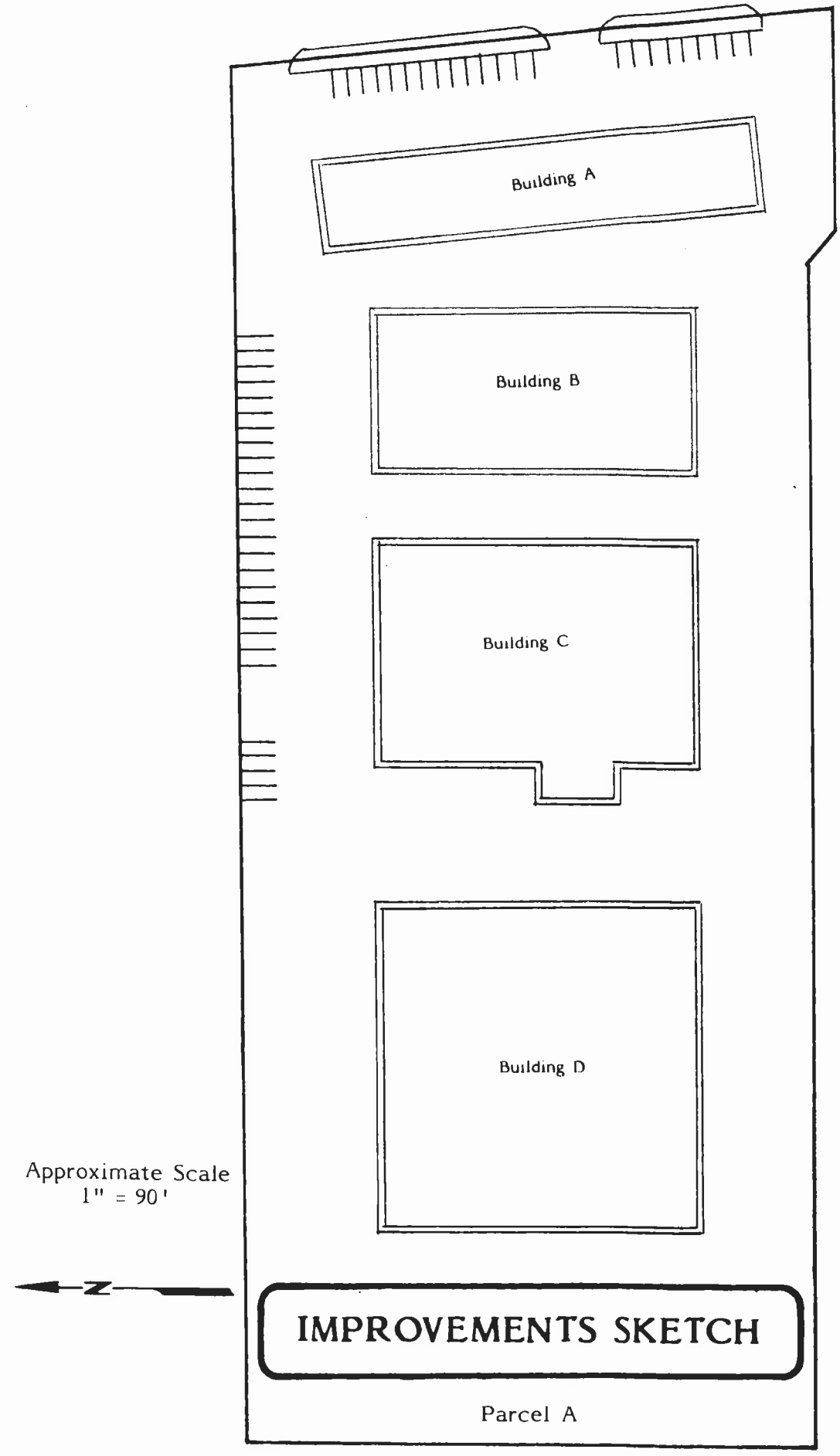
The neighborhood also contains large expanses of asphalt and gravel surfaces utilized for truck distribution activity, machine and equipment storage, and parking. The Burlington Northern, Inc., railroad switchyard is located directly east of Marine View Drive.

The neighborhood in the vicinity of the subject property is undergoing a transition from heavy industrial to light industrial and commercial use, with an increasing intensity of use and value. The outlook is favorable for a continuation of this trend. Another significant factor influencing favorable real estate trends in the area has been news of the U.S. Navy's proposed Homeporting site on Port Gardner Bay. If the project becomes a reality, it will have an even more significant positive impact on value trends in the subject neighborhood.

SITE SKETCH



MACAULAY & ASSOCIATES, LTD.
EVERETT, WASHINGTON



IMPROVEMENTS SKETCH

Parcel A

MACAULAY & ASSOCIATES, LTD.
EVERETT, WASHINGTON

PROPERTY DATA

Presumptive Owner

Norton Properties, Inc.

Property Location

1028 West Marine View Drive

Legal Description

Parcel A

Portion of the Northwest quarter of Section 18, Township 29 North, Range 5 East, W.M., also known as tax lots, etc.; together with tidelands in Everett, Snohomish County, Washington (complete legal description contained in the appraiser's files). See subject property site sketch.

Parcel B

Portion of the Northwest quarter of Section 18, Township 29 North, Range 5 East, W.M., Snohomish County, Washington (complete legal description contained in the appraiser's files). See subject property site sketch.

Date of Inspections

Several times in October and November of 1984, with the last inspection on November 23, 1984.

Five-Year Ownership History

Parcel A

Grantor:	William E. Boeing, Jr.
Grantee:	Norton Properties
Sale Date:	December 9, 1983

Sale Price: $1,450,000

(Note: the sale included approximately 30,000 sq. ft. of metal buildings, together with an older frame building which has since been demolished).

Parcel B

Grantor:	Summit Timber Company
Grantee:	Norton Industries, Inc.
Sale Date:	November 9, 1984 (July 1984 option)
Sale Price:	$300,000

Property Description

The subject property is located on the westerly side of West Marine View Drive, a 4-lane, asphalt-surfaced city street. The property is situated 1/4± mile northerly of the 2200 berth Port of Everett marina and approximately 3/4 mile southerly of the E.A. Nord Company door manufacturing plant.

The intervening road frontage to the south is filled land, at grade with the city street and predominantly improved with a mixture of older wood-frame structures and newer metal buildings of quality similar to the subject improvements. Northerly of the subject property, the area west of West Marine View Drive is unimproved tidelands utilized for wet-log storage. The subject tract is bounded to the south by adjacent light industrial land; to the west by Port of Everett ownership utilized predominantly for boat launch parking and to the north by the aforementioned tidelands. To the ease lies West Marine View Drive, with the Burlington Northern railroad and switching yard adjacent to the east of the street and below a bluff which rises upward approximately 200' to a residential area.

Land

Parcel A (Southerly Tract)

Nearly rectangular in shape with an effective 350'± of frontage on the west side of West Marine View Drive, and extending an average of 865'± in depth. The level tract is at-grade with the street, and has sandy soil with good drainage.

Parcel B (Northerly Tract)

Irregular in shape with 397'± of frontage on the west side of West Marine View Drive, and extending an average of 825'± in depth excluding a 100' X 215' tract in the northwest corner.

The total 359,562 sq. ft. site includes a 60' wide road easement extending 850'± in depth along its southerly boundary. The value of the road easement is reflected in adjacent properties; therefore, the effective area of Parcel B is 308,562 sq. ft.

The portion adjacent to Marine View Drive, extending an estimated 150'± in depth, is approximately at street grade, reasonably level, and appears to have a sandy soil, probably mixed with wood refuse. The soil bearing capacity is unknown, but probably would require piling in the foundation for typical building construction. Drainage is good in this area. West of the road frontage are approximately 174,240 sq. ft. of wet land, predominantly subject to inundation at high tide. This area has an abundance of old piling and the concrete remnants of the mill that operated here in bygone years. To the west of the wetlands is the remaining filled area, with a sandy soil that apparently has a good soil bearing capacity and good drainage.

The road easement between Parcels A and B is to the Port of Everett boat launch and is asphalt-surfaced.

Utilities

Electricity by Public Utility District #1 has inadequate capacity for heavy industrial use. City of Everett water line and sanitary sewer line extend along Norton Avenue. Storm drainage for the two parcels is anticipated to be into the Snohomish River Channel.

Building Improvements

As previously discussed, the appraisal is based on the assumption that the improvements described herein are constructed in accordance with the plans.

The building improvements are new or in reasonably new condition. The building improvements are lettered in sequence from A to D as shown on the site sketch.

Building A contains 16,500 sq. ft. and is 16' in height. It has a concrete slab floor, pre-engineered metal construction, is fully insulated and has 15,000 sq. ft. of sprinkled open area and 1,500 sq. ft. of air-conditioned office space. A more detail description is available in the cost estimate by Commercial Industries Company, Inc. in the Addenda.

Building B has a total area of 20,000 sq. ft. with a structural 8" concrete slab and foundations on piling. The pre-engineered metal building is fully insulated, sprinkled, built-in crane rails, and an estimated 5% finished office area. A detailed description of the property is included in the Commercial Industries Company, Inc. cost estimate in the Addenda.

Building C is a 28,000 sq. ft., pre-engineered metal building on a structural 8" slab on piling with a 24' height, fully insulated and sprinkled with approximately 5% office space. For a more detailed description, please refer to the Commercial Industries Company, Inc. cost estimate in the Addenda.

Building D is a 55,000 sq. ft., pre-engineered metal building with ~~14'~~ 22' height, fully insulated and sprinkled with 53,000 sq. ft. of open space and 2,000 sq. ft. of air-conditioned, finished office space. Refer to the Commercial Industries Company, Inc. cost estimate in the Addenda for a more detailed description.

Site Improvements

Site improvements include asphalt surfacing, curbs ,striping for parking and truck transport, a storm sewer system with a oil separator at the outfall to the river channel and woven wire fencing.

Zoning and Use Restrictions

Zoning of the subject tract is M-1. The existing and proposed improvements are in keeping with the zoning classification. The purpose and function of the zoning classification is as follows:

"The purpose and function of the M-1 zone is to provide for and protect certain areas of the city for heavy manufacturing uses. (Prior code §15.04.170(A).)

Uses permitted in the M-1 zone are as follows:

A. B-3 permitted uses when such uses are business or commercial;
B. C-1 permitted uses when such uses are business or commercial;
C. C-2 permitted uses when such uses are business or commercial;
D. All other permitted uses outright except those requiring a special permit.
E. Special property uses unless prohibited.
(Prior code §15.04.170(B).)

Assessed Value and Taxes

PARCEL A

Parcel #	Size (ac.)	ASSESSED VALUE		'84 Taxes
		Land	Impr.	
182905-2-003	6.01	$ 540,900	$ 480,500	$ 10,651.16
182905-2-022	.46	41,400	128,750	1,774.32
182905-2-033	.35	31,500	--	328.48

PARCEL B

Parcel #	Size (ac.)	ASSESSED VALUE		'84 Taxes
		Land	Impr.	
182905-2-001	5 .98	$ 47,840	---	$ 498.88
182905-2-010	.49	3,920	---	40.88
182905-2-011	.71	5,680	---	59.23
182905-2-020	.08	640	---	6.67
182905-2-023	.11	9,900	---	103.24
182905-2-029	.65	29,800	---	310.75
182905-2-030	.10	9,000	---	93.85
182905-2-026	.11	9,900	---	103.24

The assessed value of Parcel A is anticipated to be $3,500,000 upon completion of construction.

Snohomish County is on a 3-year re-assessment cycle and, although the 6% lid on the allowable increase in county spending tends to stabilize real property taxes, the increasing value trend anticipated for the subject area will probably result in an increase in the assessed value as the area develops. The rate or amount of increase is not anticipated to be burdensome.

HIGHEST AND BEST USE

The highest and best use is defined as that legal use of the subject property which has the greatest probability of producing the highest value as of the date of valuation.

The highest and best use of the land, as if vacant and without any building improvements is ascertained. This use forms the basis of the analysis of the land value.

The highest and best use of Parcel A is concluded to be for industrial use with commercial potential along West Marine View Drive.

The highest and best use for Parcel B is concluded to be for light industrial use on the uplands with the wetlands retained in their existing condition until development occurs on the property adjacent to the north, or until hydraulic fill is made available by the Port of Everett.

Parcel A - The highest and best use of the overall real property is analyzed. This study considers the contribution of the building improvements to the value of the underlying land. The considerations utilized in deriving the conclusion as to the highest and best use include consideration of the existing demand, observation of the trend of development in the vicinity and the high occupancy rate of similar structures. The highest and best use of the subject property is considered to be as described in this report. The land to building ratio, of approximately 2.2 to 1, is concluded to be nearly optimum for this type property in this location.

PROPERTY VALUATION

The value of the subject property is estimated by relating the basic economic, physical, governmental, and social forces to the subject property, with particular emphasis on the interaction of the supply and demand, as analyzed in the marketplace.

Cost, Income, and Direct Comparison are basic approaches to valuation which may be utilized to derive estimates of the subject property value when indicated by the comparative market investigated. From each approach used, a value is indicated that is derived from a comparative analysis of the relationship of the market data to the subject property.

The value indications derived from the different valuation techniques are rationalized into the probable value range and the point of greatest probability by placing the greatest weight on the indications of value typically utilized by the informed market, the techniques offering the best market support, and the data providing the greatest reliability.

Site Valuation

To establish the most probable value of the land, the site is assumed to be vacant, and the value typically is estimated by direct comparison with comparable sales that have similar characteristics. This value may be utilized in the Cost Approach and in some techniques of the Income Approach if they are applicable.

The following sales are considered indicative of the site value of the subject parcels; they are listed in the following tabulation and then discussed.

Sale #	Date	Price	Area	$/ sq. ft.
L1	6-29-83	$ 226,600	88,862/sq. ft.	$ 2.55/sq. ft.
L2	1-5-84	125,000	49,350/sq. ft.	2.53/sq. ft.
L3	Option 7-84	300,000	134,322/sq. ft.*	1.75/sq. ft.

* Contribution of upland area to sale price.

Comparative Analysis - Parcel A

Comparable sale L1, located in the Hardeson Road area, sold with 88,862 sq. ft. of sloping terrain contributing $2.55/sq. ft. to the sale price. The unit price is adjusted upward due to the more level terrain of the subject property. The sale price per unit is adjusted downward due to the location of the comparable property in an established industrial park setting. A probable value range of $2.50/sq. ft. to $2.75/sq. ft. is reflected to the subject site by this transaction.

Comparable sale L2, located off the Mukilteo Speedway, south of Mukilteo, sold with 49,350 sq. ft. contributing $2.53/sq.ft. to the sale price.

The comparable sale price per unit is adjusted upward due to the more desirable 4-lane street frontage of the subject site. It is adjusted downward due to the established industrial park use in the area of the comparable sale. A probable value range of $2.40/sq. ft to $2.60/sq. ft. is reflected to the subject site by this transaction.

Comparable Sale L3 contained 134,322 sq. ft. of upland, which contributed an estimated $1.75/sq. ft. to the sale price.

Parcel A has the advantage of superior soil conditions and rectangular shape of the filled lands. Recognizing the increasing value trend since the date of the option, a probable value range of $2.25 to $2.75/sq. ft. is reflected to the subject Parcel A by this transaction.

In conclusion, after consideration of the above comparable sales and other indications of the market, the most probable value of the Parcel A site is concluded to be $2.50/sq. ft.

Comparative Analysis - Parcel B

Comparable sale L1, with 88,862 sq. ft., which sold at $2.55/sq. ft., is superior to the subject site due to its better soil bearing capacity and higher proportion of usable area. A probable value range of $1.80/sq. ft. to $2.20/sq. ft. is reflected to the subject filled lands by this transaction.

Comparable sale L2 had 49,350 sq. ft. which contributed $2.53/sq. ft. to the sale price. This tract also has the advantage of superior soil bearing capacity and greater utility of use reflecting a probable market value in the $2.00/sq. ft. range to the filled area of the subject Parcel B.

Comparable sale L3, the filled area of the subject property, contains 134,322 sq. ft., which, by abstraction, contributed $1.75/sq. ft. to the sale price. At the time of sale, the buyer's and seller's did not have an accurate indication of the filled area and wetland area, and were negotiating on an overall price basis. Utilizing this sale of the subject Parcel B, and recognizing the increased price trend since the date of the option, a probable value range of $1.80/sq. ft. to $2.20/sq. ft. is reflected by this transaction. The wetland area had an estimated contribution value of $.37/sq. ft. by abstraction. Taking into consideration price and demand trends since the date of the option, a probable market value of $.50/sq. ft. is indicated to this area.

Summary

Parcel A - 302,822 sq. ft. @ $2.50/sq. ft. = $757,055

Parcel B -

filled area: 134,322 sq. ft. @ $2.00/sq. ft. =	$268,644
wetlands: 174,240 sq. ft. @ $.50/sq. ft. =	87,120
Total Parcel B	$355,764

TOTAL ESTIMATED LAND VALUE $1,112,819

rounded: **$1,112,800**

COST APPROACH

An estimate of value is derived by calculating the present replacement cost new of the improvements, subtracting from this the depreciation indicated by market comparison, and adding the land value.

Building Improvements

An estimate of the reproduction cost new of the building improvements has been provided by Commercial Industries Company, Inc., a Soule building dealer. A building description and cost breakdown for each building is included in the Addenda.

Building A: 16,500 sq. ft. X 16' height, Soule metal building, insulated, heated, plumbed and sprinkled with 1,500 sq. ft. finished as air conditioned offices;

Estimated cost . . . . . $ 451,160

Building B: 20,000 sq. ft. X ~~16'~~ 24' height, Soule metal building, insulated, heated, plumbed and sprinkled with minimal office space.

Estimated cost . . . . . $ 532,218

Building C: 28,000 sq. ft. X 24' height, Soule metal building, insulated, heated, plumbed and sprinkled with 2,000 sq. ft. of air conditioned office with overhead mezzanine storage.

Estimated cost . . . . . $ 796,730

Building D: 55,000 sq. ft. X ~~14'~~ 24' height, Soule metal building, insulated, heated, plumbed and sprinkled with 2,000 sq. ft. of air conditioned office space.

Estimated cost . . . . . $ 1,569,443

Site Improvements

Asphalt surfacing on crushed rock - 20,500 sq. yds.

Cost estimate by Associated Sand & Gravel:

20,500 sq. yds. @ $9.32/sq. yd.	$ 150,000
thickened edge	$ 2,500
chain link fence, storm drainage & catch basin with oil separator, estimated cost	$ 25,500
Total Site Improvements	$ 178,000
TOTAL REPRODUCTION COST NEW	$ 3,527,551

Marshall Valuation Service was consulted for a cross check on the cost of good quality, pre-engineered metal buildings. The cost estimate from this source generally supports the cost estimates shown above.

Depreciation

The existing structures are less than 8 years old, their additions are new and building D will be constructed new, totalling all building improvements described.

Physical Deterioration

Some deterioration is noted in the chain-link fencing and exterior of Building B.

Total estimated deterioration and damage . . . . . $ 20,000

Obsolescence

Functional Obsolescence

Approximately 103,000 sq. ft. of buildings are constructed on 45' piling with an 8" structural slab. Comparable buildings on sandy soil with good soil bearing capacity provide the same function with $2.00/sq. ft. to $2.50/sq ft. less cost. Considering the total cost of the structures for typical light industrial-distribution use as reflected in the market place, estimated functional obsolescence is $250,000.

Economic Obsolescence

None.

ESTIMATED TOTAL DEPRECIATION	$ 270,000
ESTIMATED REPRODUCTION VALUE	$ 3,257,551

Land Value by Comparison

Parcel A	$ 757,000
Total Estimated Value by the Cost Approach, Parcel A; rounded	$ 4,000,000

Parcel B

Considered as excess land with estimated market value:	$ 355,750

TOTAL ESTIMATED VALUE BY THE COST APPROACH, PARCELS A & B . .	$ 4,355,750
rounded:	$ **4,350,000**

DIRECT COMPARISON APPROACH

When data with sufficient elements of similarity are available to provide reliable indications of value, significant weight is placed on the direct comparison approach. Market data research did not result in sales with significant elements of comparability to the subject property that would provide the broad-based data desired. One significant transaction, however, is the sale of the subject property in December of 1983 for $1,450,000. The transaction involved all of Parcel A, comprising 302,822 sq. ft. with 30,000 sq. ft. of pre-engineered metal buildings on concrete slab which have since been enlarged as part of the subject property and a 24,884 sq. ft. wood-frame building on concrete slab. It had a finished office area of 2,000 sq. ft., which was utilized on an interim basis until it was demolished.

The property was listed for $2,200,000. The purchaser offered $1,200,000 and then through negotiation arrived at the sale price.

Various allocations can be made of the contribution of the building improvements to the land; however, at the time of the sale the purchaser considered that the buildings contributed an estimated $910,000 leaving a residual of $540,000 for land or $1.78/sq. ft. Allocating this price to the metal buildings on the property at the time would lend support to the current contribution value per square foot of the buildings appraised.

The value of land in this area has been increasing over the past 2 years, reflecting a in favor of the Navy establishing a base on Port Gardner Bay have added extra impetus along West Marine View Drive. The selection of Everett as the preferred location by the Navy for their Homeporting site and the subsequent vote by the citizens of Everett in favor of the Navy establishing a base on Port Gardner Bay, has added extra impetus to the potential for an improving valuation trend in the neighborhood.

Direct comparison is not made between this property as purchased and the property as described in the appraisal report under the assumption that construction is completed; however, the sale does lend support to the value conclusions derived from the cost and income approaches.

INCOME APPROACH

The economic rental value of the subject property is estimated by market comparison and processed into a net income stream. Utilizing the capitalization rate indicated by market analysis, the income stream is converted into an estimate of value by one or more capitalization techniques.

The market rental value of the subject property is estimated by comparison with leased property that has similar characteristics. Following is a tabulation of recent leases and a comparative discussion relating the comparable leased properties to Parcel A of the subject property.

Comp. Lease No.	Date	Bldg. Area	Type Impr.	Price/SF/Mo.
1	Current to 2 years old	46,071 sq. ft. (total)	metal warehouse	.24¢ gross
2	Current	6,500 sq. ft.	metal & masonry	.29¢ net
3	Current	21,000 sq. ft.	pre-eng. metal	.29¢ net
4	Current	14,000 sq. ft.	pre-eng. metal	.30¢ net

Comparable Lease #1 is an average of five leases which range from .20¢ to .28¢/sq. ft. gross and a small area at .45¢/sq. ft., representing office rental rate. The comparable property is located in a mixed neighborhood of newer and older buildings with minor freeway view influence. The building and location are less desirable than the subject property and reflect a .27¢ to .30¢/sq. ft. gross to subject buildings B, C, and D; and .50¢ to .55¢/sq. ft. to the office space. Approximately 6,000 sq. ft. is currently vacant.

Comparable Lease #2, located on 37th Street adjacent to Interstate Highway 5, is a current lease of 6,500± sq. ft., encompassing a metal and masonry building at .29¢/sq. ft. The lessee, Everett Brake Company, desired the location due to its proximity to major truck lines with terminals in the neighborhood. Subject buildings B, C, and D are of superior quality, but without the amenity of freeway exposure. A probable net rental of .25¢ to .30¢/sq. ft. is reflected to Buildings B, C, and D by this transaction.

Comparable Lease #3 is a typical lease in a 21,000 sq. ft. pre-engineered building, located adjacent to the south of Building A. It is leased at .29¢/sq. ft. completely net and reflects a .29¢ to .30¢/sq. ft. rental value to Building A. The building is fully leased.

Comparable Lease #4 is a typical lease of 14,000 sq. ft. of a pre-engineered metal structure, located at the Mukilteo Industrial Park. On a completely net basis, this structure brings .30¢/sq. ft. per month. The lease rate is adjusted upward, reflecting a .30¢ to .32¢ rental indication by comparison to Buildings B, C, and D.

The investigation of market leases for buildings similar to the subject property shows that the structures are typically leased either completely net or with the lessor paying exterior maintenance, taxes and insurance only. In some instances, the maintenance

taxes and insurance are an additive to the base rent, with the base rent changing in accordance with the selected index and the maintenance, taxes and insurance changing with the actual costs incurred. Utilizing this type market data, the following market rents are reflected to the subject improvements.

Bldg.	Area	Type Space	Rental/SF	Monthly Rent
Bldg. A	1,500 SF	A.C. Office	.50¢/SF	$ 750
(Existing lease)	15,000 SF	Warehouse	.30¢/SF	$ 4,500
Bldg. B	20,000 SF	Warehouse	.26¢/SF	$ 5,200
Bldg. C (par. exist. lease)	2,000 SF	A.C. Office	.50¢/SF	$ 1,000
Bldg. C	~~26,000~~ 29,000 SF	Warehouse	.25¢/SF	$ ~~6,500~~ 7000
Bldg. D	2,000 SF	A.C. Office	.50¢/SF	$ 1,000
Bldg. D	53,000 SF	Warehouse	.27/SF	$ 14,310

Total Monthly Income	$ ~~33,260~~ 33.760
Annual Building Income 33,260 X 12; or	$ ~~399,120~~ 399620
Outdoor Storage (currently leased) 10,000 SF @ .05¢/SF	
Additional Annual Income	$ 6,000
GROSS ANNUAL INCOME	$ 405,120 405 625

Building A is currently under lease; Building C is currently leased, pending renegotiation of the lease. Building D will be leased by John Schack. The leases represent the current market as indicated by their predominantly leased-up status and by comparable lease data.

Vacancy and Credit Loss

Considering the high degree of occupancy in the neighborhood for this type property, and the existing leases, an estimated vacancy and credit loss of 2% is indicated.

Estimated Vacancy and Credit Loss @ 2%; or	$ 8,102
Effective Gross Annual Income	$397,018

Expenses

Fixed Expenses

Estimated Real Estate Taxes	$	35,000
Estimated Fire & Liability Insurance	$	5,300
Total Estimated Fixed Expenses	$	40,300

Variable Expense

Management, legal & accounting, estimated 2%	$	7,940
Exterior maintenance	$	3,500
TOTAL ESTIMATED ANNUAL EXPENSE	$	51,740
Net Annual Income	$	345,278

Capitalization of Income

The essence of the capitalization method is to identify the components of future potential income, appropriate discount rates, and the proper discounting procedure required for the present worth estimate.

Acting prudently and rationally on available market information, a typical purchaser/ investor is presumed to seek to maximize his cash position. This is accomplished through several means, including acquiring the most beneficial mortgage financing terms and conditions, thus creating leverage; and by acquiring investment properties with the most favorable equity growth possibilities, along with favorable tax shelter benefits. Thus, the property value includes a summation of the present worth of the mortgage and present worth of the equity position.

In developing an indicated overall discount or capitalization rate for the subject property, consideration was given to several primary methods. These included typical overall rates for other properties as developed by the ratio of net income to sale price for other comparable property sales in the market, along with the Band of Investment Method.

The Band of Investment Method of estimating the overall capitalization rate is a synthesis of mortgage amortization constant and equity divident rates, which the current market reveals is applicable to comparable properties.

This overall capitalization rate is also influenced by alternative forms of investment, such as securities investments, including return on and protection of the capital investment

offered by these alternative investments. In this connection, it is noted that the real estate investments have certain tax shelter benefits which are not generally available in securities investments. In addition, the equity growth, in connection with property appreciation, is generally taxed on a capital gains basis, as compared with an ordinary income basis; thus, the equity yield is increased during the holding period for these real estate investments.

In the current real estate investment market, the major attraction appears to be the potential growth of the equity yield or internal rate of return. The actual equity yield rate cannot, of course, be determined until after the investment property is sold. Discussions with knowledgeable real estate brokers and investors, together with available market data evidence, reveal that the current equity dividend rates are considerably lower than in previous years, particularly prior to 1979. Investors are apparently willing to accept relatively-low beginning cash flow earnings in exchange for projected increase in future net income and anticipated appreciation of the property, along with potential attractive reversionary gains upon future sale or exchange of the property. Therefore, the potential growth of the property's equity yield appears to be a major attraction for investors involved in investment real estate. These current equity dividend rates are reportedly ranging between as low as 0% to 2% on prime investment properties, to as high as 7% to 10% on properties with higher risk factors. Based on available market data, as related to the subject property, it is the appraiser's opinion that a 4% equity dividend rate would be acceptable for the subject property.

The commercial mortgage market has been fluctuating during the past several years, with relatively rapid changes--primarily upward since 1979--with more-favorable rates becoming available within the past year. Interest rates and loan terms vary considerably in the current market; however, mortgage financing for properties similar to the subject property is reportedly available at fixed interest rates ranging from approximately 13-1/2% to 14%, or variable rates of 12-1/2% to 12-3/4%, based on 60% to 75% of appraised value. Constant payments are typically based on 15- to 30-year loan amortization periods, with balloon payments for the balance due at the end of 7 to 10 years.

Because of the erratic and unusual mortgage market, as compared with the relatively-stable mortgage market existing prior to the latter part of 1979, coupled with a change in investor's attitudes toward required equity yields, the Band of Investment Method of establishing capitalization rates utilizes considerable judgmental adjustments. As noted, considera-

tion was also given to sales of comparable properties; however, no income figures were found in the market which would give a reliable indication of overall capitalization rates. Several sales of other income properties were noted which revealed overall capitalization rates ranging from approximately 9.2% to 12%, depending on various factors, such as property types, lease structures, age, and location.

Based on the Band of Investment Method, the capitalization rate is estimated as follows.

Utilizing a 13-1/2% fixed mortgage interest rate with a 25-year loan amortization period, the annualized mortgage constant is .1399. Utilizing a 70% loan-to-value ratio, the weighted average of mortgage amortization to equity dividend rates is as follows:

Loan-to-Value Ratio	70% X .1399	0.0979
Equity-to-Value Ratio	30% X .0400	0.0120
Indicated Overall Capitalization Rate		0.1099, say: 11%

Considering the location of the subject property in an area that is currently enjoying an increasing valuation trend and increasing security for the income stream, an overall capitalization rate of 10% is considered appropriate.

Net Annual Income	$ 3,452,780
Capitalization rate - 10%	
Estimated Value of Parcel A	$ 3,452,780
Estimated Value of Parcel B (excess land)	$ 355,750
Estimated market value of the subject property by the Income approach	$ 3,808,530

Rationalization of Market Value - Conclusion

The indicated market value of the subject property was analyzed by all available techniques with emphasis on the Cost and Income approaches. The Market Data, or Direct Comparison approach, to the total value was utilized to the extent of the data available. Primary reliance was placed on this technique to estimate the value of the land as if unimproved.

Significant reliance was placed on the Cost approach as the improvements are new or nearly so, with a small proportion of depreciation. The reproduction cost estimates were

prepared by an experienced, reliable firm, specializing in this type of construction. Good support was available for the conclusion of the land value.

On the basis of the foregoing data, the indication of a market value of $4,350,000 by the Cost approach is given strong credence.

The Income approach reflects the price indicated by the marketplace, which will be paid for the anticipated income stream. It is the present worth of the future benefits discounted at the market rate appropriate to the caliber of the property and the income stream. Reliable data was available to support the conclusions of lease rates, vacancy rates, and expenses. It is recognized that judgmental factors have a significant impact on the valuation estimate from this approach.

Strong reliance is place on the Income approach by investors for this type of property and the value conclusion of $3,800,000, including the excess land, is given significant weight.

In conclusion, after consideration of all pertinent factors affecting value, including the potential economic impact of the proposed Navy base, the market value of the overall subject property is concluded to be: $4,000,000.

A reasonable rounded allocation of the market value between Parcel A and Parcel B is as follows:

Estimated market value Parcel A	$ 3,650,000
Estimated market value Parcel B	$ 350,000

ASSUMPTIONS AND/OR LIMITING CONDITIONS

1. That the title to the property appraised in this report is good in that no liability is assumed on account of matters of legal character affecting the property such as title defect, encroachments, liens, or overlapping property lines, etc.

2. That the appraisal is to be used only in its entirety. The distribution of the total value estimate between land and improvements applies only under the proposed conditions of utilization and reflect their estimated contribution to the overall value of the property.

3. That the maps and drawings included in this report are included to assist the reader in visualizing the property; however, no responsibility is assumed as to their exactness.

4. The appraiser assumes no hidden or unapparent conditions of the property subsoil or structures which would render it more or less valuable. The appraiser assumes no responsibility for such conditions or for engineering which might be required to discover such conditions.

5. Any information in this report furnished by others is believed to be reliable; however, the appraiser assumes no responsibility for its accuracy.

6. The omissions or change of any part of this appraisal report without the written authorization of the appraiser invalidates the entire appraisal.

7. No requirements shall be made of the appraiser for testifying or attending in court by reason of this appraisal with reference to the property in question unless arrangements have been made previously therefor.

CERTIFICATION

We, the undersigned appraisers do hereby certify that, except as otherwise noted in this appraisal report:

1. We made a personal inspection of the subject property, including the significant visible components, on

2. We certify that, to the best of our knowledge and belief, the statements of fact contained in this appraisal report are true and correct.

3. We further certify that the reported appraisal analyses and opinions are limited only by the reported qualifying conditions and are our personal unbiased, professional analyses and opinions.

4. We further certify that we have no specified present or prospective interest in the appraised property.

5. The appraisal analyses and opinions were developed; and this appraisal report has been prepared in conformance with (and the use of this report is subject to) the requirements of the Code of Professional Ethics and the Standards of Professional Practice of the American Institute of Real Estate Appraisers and the Society of Real Estate Appraisers.

6. We are currently certified under the AIREA voluntary continuing education program. We do not authorize the out-of-context quoting from or partial reprinting of this appraisal report.

7. Further, neither all nor any part of this appraisal report shall be disseminated to the general public by the use of media for public communication without the prior written consent of the appraisers signing this appraisal report.

It is our opinion that the market value of the subject property appraised herein, as of

PARCEL A - $3,650,000

PARCEL B - $350,000

TOTAL ESTIMATED MARKET VALUE - $4,000,000

Respectfully submitted,

C.R. Macaulay, MAI, SREA

November 29, 1984

CHARLES R. MACAULAY, MAI, SREA
MACAULAY & ASSOCIATES, LTD.

610 Medical-Dental Building
Everett, Washington 98201

Office Phone: (206) 258-2611
Residence: (206) 252-7588

QUALIFICATIONS

Employment & Experience

1961 to Present: Assignments include: Real property appraisal and consultation, feasibility analysis, and taxation problems. Reconnaissance studies, right-of-way location, and acquisition costs. Conservation and scenic easement appraisals, and economic impact of land use regulations. Valuation of Alpine Lakes, remote acreage, and mining claims. Wide variety of Eminent Domain assignments involving fee, easement, and leasehold property rights. Appraisal review and consultation on various-type problems.

Local improvement District cost/special benefit feasibility studies; L.I.D. proportionate benefit assessment studies for street, water, sewer, etc., improvements.

Appraisals for mortgage lenders on commercial, industrial, agricultural, and recreational/residential-type properties. Consultation on economic land use studies and lease negotiations. Leasehold valuations, zoning application, and conditional use permits.

Clientele include: Snohomish County; King County; City of Seattle; City of Everett; Bechtel Corporation; U. S. Forest Service; Puget Sound Power & Light Company; banks; mortgage companies; Washington State; several agencies; Montana Highway Commission; Burlington Northern Railroad Company; Port of Skagit County; the Boeing Company; General Services Administration; U. S. Department of Justice; Weyerhaeuser Company; Tulalip Tribes, Inc.; Swinomish Tribal Community; and respondents in condemnation action.

Contracts include: Alderwood Mall and Willows Road L.I.D. Benefit Studies; Lake Stevens Sewer District U.L.I.D. Benefit Study; Meadowdale Benefit Study; Lynnwood and Jefferson County P.U.D. No. 1, L.I.D. Feasibility Studies; consultation on the Alpine Lakes Wilderness Exchange; appraisal of Piers 50 and 51, Inc., Seattle; The Everett Clinic; Blakely Island; Point of Arches; Shi Shi Beach; the Brown Farm; Nisqually Delta; Green River Gorge and Snohomish River Delta; office buildings and general commercial, residential, industrial, agricultural, and subdivision acreage; waterfront, recreational, and residential developments; clinics; also, funeral homes, churches, Paine Air Force Base, Columbia Gardens Amusement Park, and other special purpose properties.

1960-61: Bechtel Corporation, San Francisco, California

Prepared right-of-way feasibility and location studies in cooperation with their engineers. Time and budget estimates on acquisition projects and acquisition of land and right-of-way.

1951-58: E. A. Wheeler, MAI, Bellingham, Washington
Transmountain Oil Pipeline Corporation, Vancouver, B.C., Canada

Right-of-way acquisition estimates, acquisition right-of-way, and real estate for Transmountain. Acquisition of right-of-way and settlement of damage claims for Pacific Northwest Pipeline Company.

Expert Testimony

Testified on market value in over a dozen Superior Court jurisdictions in the States of Washington and Montana, and in U. S. Federal Courts.

Education

Bachelor of Science Degree - Washington State University
American Institute of Real Estate Appraisers, Courses I, II, and VI
Society of Real Estate Appraisers, Course 301
Seminars and Conferences, annually

Instruction

Instructor: "Principles of Real Estate Appraisal, I & II"
Everett Community College
Skagit Valley College
Edmonds Community College

Co-Instructor: AIREA Course 1-A - Seattle University

Professional Designation

Member:	American Institute of Real Estate Appraisers	(MAI)
	Society of Real Estate Appraisers	(SREA)
	Senior Member/American Right-of-Way Assn.	(SR/WA)

Past President: Washington-B.C. Chapter (AIREA)
Seattle Chapter (SREA)

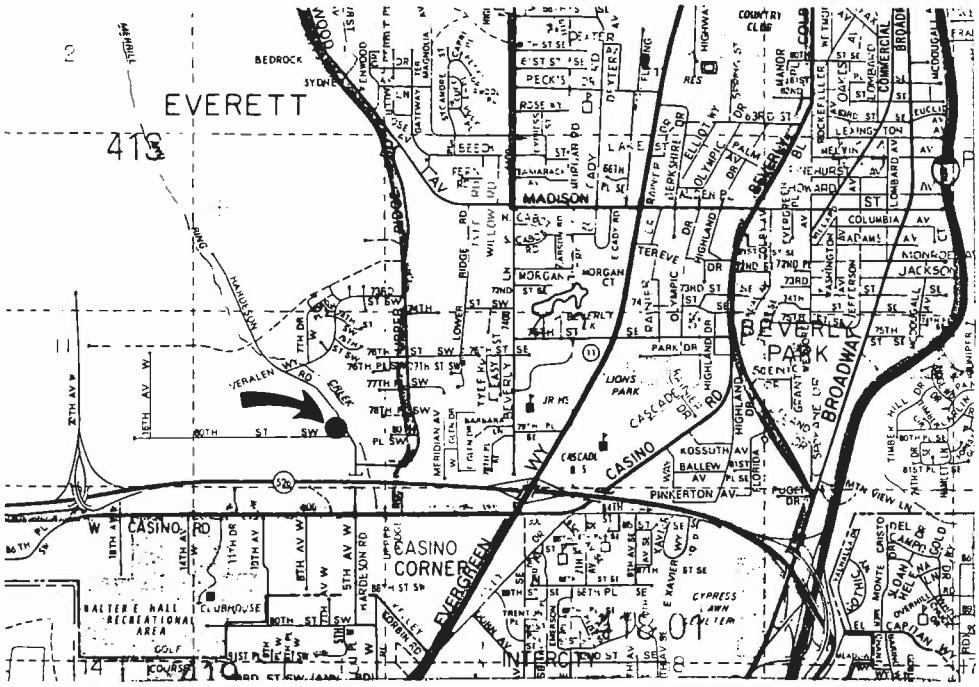
Past Vice-President: Northwest Region (AIREA)

Bank Reference

Olympic Bank, Main Branch; Everett, Washington

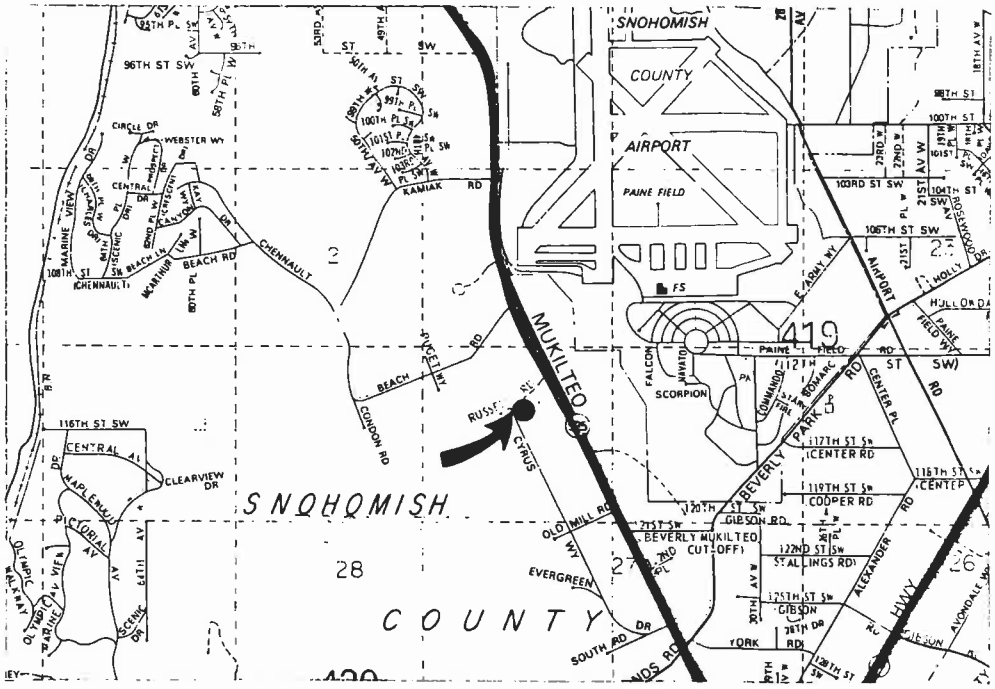
ADDENDA

COMPARABLE LAND SALE NO. 1



Location:	Northwest corner 80th Street SW & Hardeson Road, one block north of S.R. 526
Grantor:	Ronald & Irene Cressell
Grantee:	Lord Electric Company, Inc.
Sale Date:	6-29-83
Sale Price:	$220,000 + $6,618
Instrument:	Warranty Deed
Terms:	Cash
Auditor's File No.:	8307140129
Legal Description:	Lots 5 & 6 of Hardeson Industrial Park; portion of the Southwest quarter of Section 12, Township 28 N, Range 4 E., W.M., Snohomish County, Washington
Land Area:	88,862 sq. ft.
Property Description:	Sloping terrain, irregularly-shaped corner tract with 200'± of frontage on 80th Street SW and 400'± on Hardesson Road. Sandy to sandy clay soil with good soil bearing capacity and good drainage.
Easement or Assessment:	An estimated $6,618 LID assessment is assumed by the purchaser
Utilities:	PUD #1 electricity, city water & sanitary sewer, GTE telephone
Zoning:	City of Everett M-1; heavy manufacturing
Highest & Best Use:	Light Industrial distribution
Analysis:	$226,618 ÷ 88,862 sq. ft. = $2.55/sq. ft.

COMPARABLE LAND SALE NO. 2



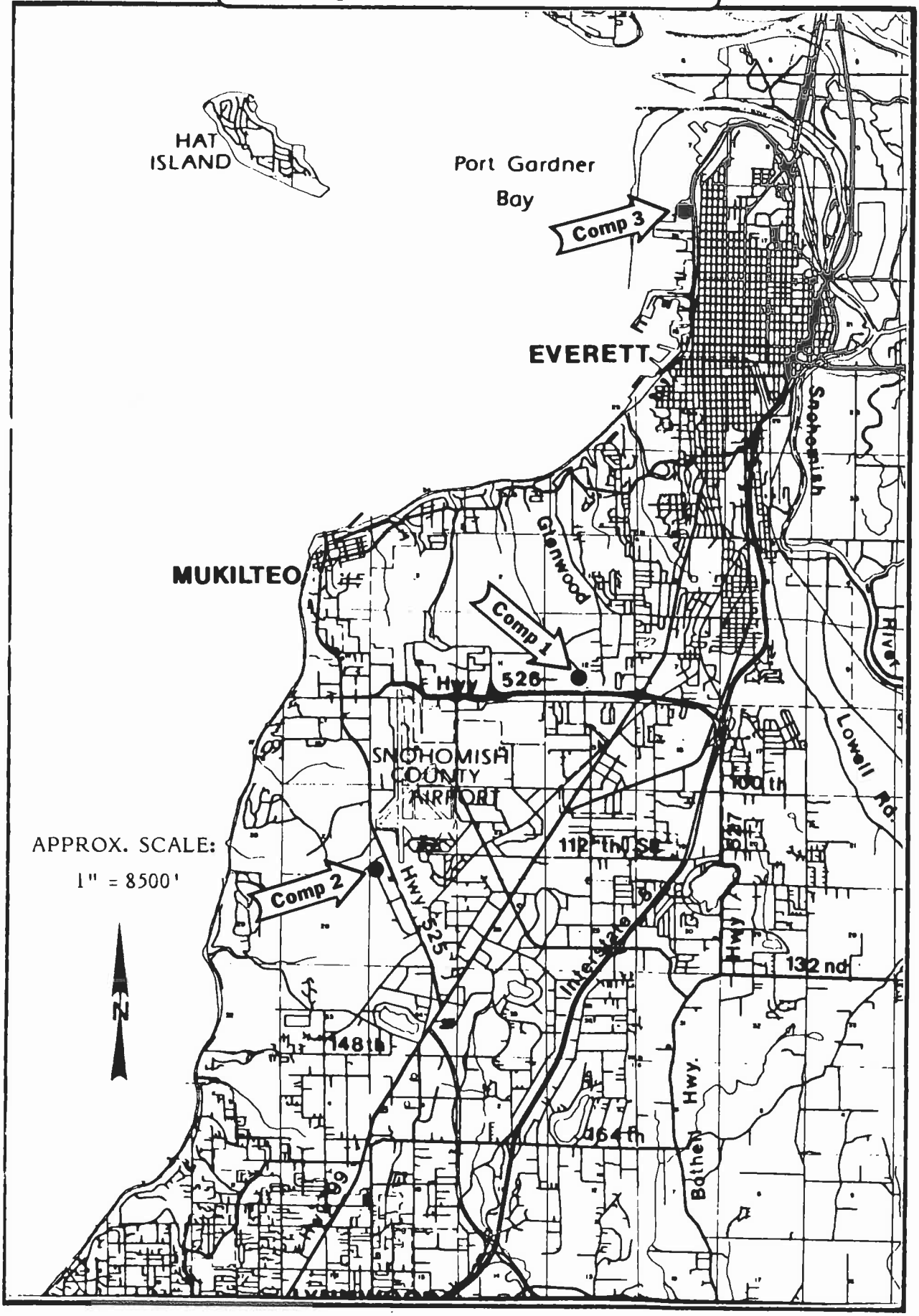
Location:	Northeast corner of Cyrus Road & Russell Road, one block west of the Mukilteo Speedway.
Grantor:	R. George & Renee Willock
Grantee:	Van Zyverden Bros., Inc.
Sale Date:	January 5, 1984
Sale Price:	$125,000
Instrument:	Warranty Deed
Terms:	Cash
Auditor's File No.:	8401130149
Legal Description:	Lot 17, plat of Evergreen Manor No. 3; portion of the Southwest quarter of Section 22, Township 28 N, Range 4 E. W.M., Snohomish County, Washington
Land Area:	49,350 sq. ft.
Property Description:	Level, irregularly-shaped corner tract with 220' of frontage on Russell Road and 100'± on Cyrus Road. Site is ready for building; buyer plans to construct a 20,000 sq. ft. steel warehouse with dock high floors
Easement or Assessment:	Sewer assessment totalling $3,432.64 (Olympic Terrace Sewer District LID #838-0020-1 and 809-1007-8) & water assessment of $2,652.20 (Mukilteo Water District LID #106-0009-6) assumed by purchaser
Utilities:	Electricity, water, sanitary sewer
Access:	Asphalt road
Zoning:	Snohomish County Light Industrial
Highest & Best Use:	Proposed use
Analysis:	$131,085 ÷ 49,350 sq. ft. = $2.66/sq. ft.

COMPARABLE LAND SALE NO. 3

See Subject Property Photographs

Location:	West side of West Marine View Drive; immediately north of public boat launch access road
Grantor:	Summit Timber
Grantee:	Norton Industries, Inc.
Sale Date:	11-9-84 (7-84 option)
Sale Price:	$300,000
Instrument:	Warranty Deed
Terms:	Equivalent to cash
Auditor's File No.:	8411150046
Legal Description:	Portion of the Northwest quarter of Section 18, Township 29 N, Range 5 E, W.M., Snohomish County. Complete legal description is contained in the appraiser's files
Land Area:	359,562 sq. ft.
Property Description:	A rectangular-shaped tract with 350'± frontage on the west side of Norton Avenue and extending at irregular width to 850'± in depth. Estimated 134,322 square feet of upland, including fill along Norton and hydraulic fill at the west end. Estimated 174,240 sq. ft. of tidelands, with old piling and concrete foundation. Cost of cleaning debris and fill will vary, depending on timing for hydraulic fill.
Utilities:	Electricity, telephone, water & sewer
Access:	Asphalt road
Zoning:	City of Everett M-1; heavy manufacturing
Highest & Best Use:	Light Industrial-distribution with potential for fill
Analysis:	Sale based on an option agreement dated 7-84. Unencumbered area = 308,562 SF. Upland: 134,322 SF @ $1.75/SF = $235,064. Wetland: 174,240 SF @ $.37/SF = $64,936

Comparable Land Sales



MACAULAY & ASSOCIATES, LTD.

EVERETT, WASHINGTON

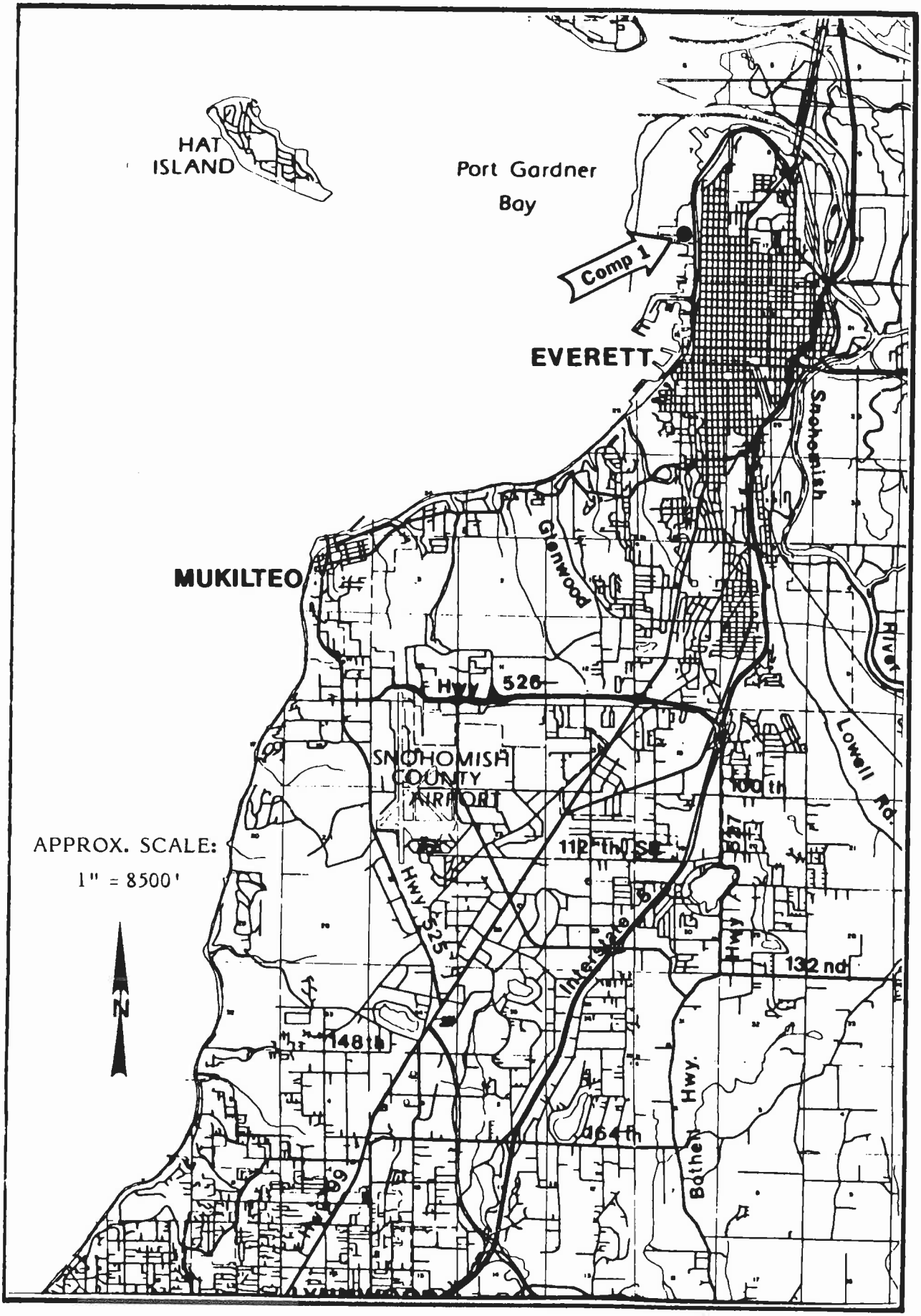
COMPARABLE IMPROVED SALE #1

See Subject Property Photographs

Location:	1028 Norton Avenue, Everett
Grantor:	William E. Boeing, Jr.
Grantee:	Norton Properties
Sale Date:	December 9, 1983
Sale Price:	$1,450,000
Instrument:	Warranty Deed
Confirmed with:	John Schack
Land Area:	302,822 sq. ft.
Legal Description:	Portion of the Northwest quarter of Section 18, Township 29 North, Range 5 East, W.M., also known as tax lots, etc.; together with tidelands in Everett, Snohomish County, Washington (complete legal description contained in the appraiser's files)
Property Description:	Rectangular-shaped tract with 350 feet at grade with Norton Avenue and extending 859'± to the west. Terrain is fairly level, with soil of unknown bearing capacity. A rail spur extends into the tract. Improvements on the property at the time of sale: new 15,000-sq. ft. metal, concrete floor building with lean-to; 15,000-sq. ft. metal construction building and chainlink fencing. A 24,884 sq. ft. wood frame bldg. on concrete slab with 2,000 sq. ft. of office has been demolished since purchase. Listed for $2,200,000; offer: $1,200,000; then negotiated.
Utilities:	Electricity, telephone, sewer, and water

Access:	Asphalt city street
Zoning:	M-1
Highest and Best Use:	Commercial office park or marine industrial
Analysis:	Sale Price: $1,450,000 Estimated Contribution Value of Improvements--30,000 sq. ft. new metal buildings for $862,000, or $28.73/sq. ft.
	Purchaser Estimate: $ 48,000 in site improvements 862,000 in building improvements 540,000 for 302,822/sq. ft. or $1.78/sq. ft.

COMPARABLE IMPROVED SALE LOCATION MAP



MACAULAY & ASSOCIATES, LTD.
EVERETT, WASHINGTON

COMPARABLE LEASE NO. 1

Location:	34th and Hill Streets, 2 blocks west of Interstate 5, Everett
Lessor:	Brandvold Company
Lessee	5 tenants
Lease Dates:	3 year fixed to 5 year with adjustments
Price Per Square Foot:	15,000 sq. ft. @ .23¢
Square Feet Leased:	11,000 sq. ft. @ .20¢; 11,431 sq. ft. @ .23¢; 2,880 sq. ft. @ .45¢; 5,760 sq. ft. @ .28¢; 6,000 sq. ft. or 11.5% vacant Average rental: .24¢/sq. ft.
Legal Description:	Portion of Government Lot 3, Northeast quarter of Section 29, Township 29 N, Range 5 E, W.M., Snohomish Washington. (A complege legal description is contained in the appraiser's files)
Leased Area:	90,000 sq. ft.±
Property Description:	An irregular shaped tract containing approximately 90,000 sq. ft. It has sloping terrain, good drainage and stable soil. The property is located on the south side of 34th Street & west of I-5. The warehouse has overhead doors, dock height deck. It is pre-engineered, metal average construction over a concrete slab with 20' height
Utilities:	Electricity, sewer and water
Access:	Dead end asphalt road
Zoning:	City of Everett C-2
Highest & Best Use:	Current use; light industrial distribution
Analysis:	46,071 sq. ft. @ $11,188/mo. or .24¢/sq. ft.

COMPARABLE LEASE NO. 2

Location:	2222-37th Street, Everett, just west of Interstate 5
Lessor:	William Hulbert
Lessee:	Everett Brake
Lease Dates:	September 1984
Current Monthly Rent:	$1,900
Square Feet Leased:	6,500
Lease Terms:	Complete net to lessor
Legal Description:	Portion of Blocks 20 and 21, J.S. Sines Acre Tracts, and vacated Paine Street. Also known as a portion of the South-west quarter of Section 29, Township 29 N, Range 5 E, W.M., Snohomish County, Washington
Leased Area:	10,000 sq. ft.
Property Description:	Level, irregular-shaped tract adjacent to Interstate 5 improved with a one-story, 6,500 sq. ft. steel frame and masonry building with loft. Some freeway exposure but not a significant factor to the lessee.
Utilities:	Electricity, water, sewer and telephone
Access:	Dead end asphalt road
Zoning:	City of Everett C-2 zoning
Highest & Best Use:	Light Industrial - commercial influence
Analysis:	$1,900/mo. for 6,500 sq. ft. = .29¢/sq. ft.

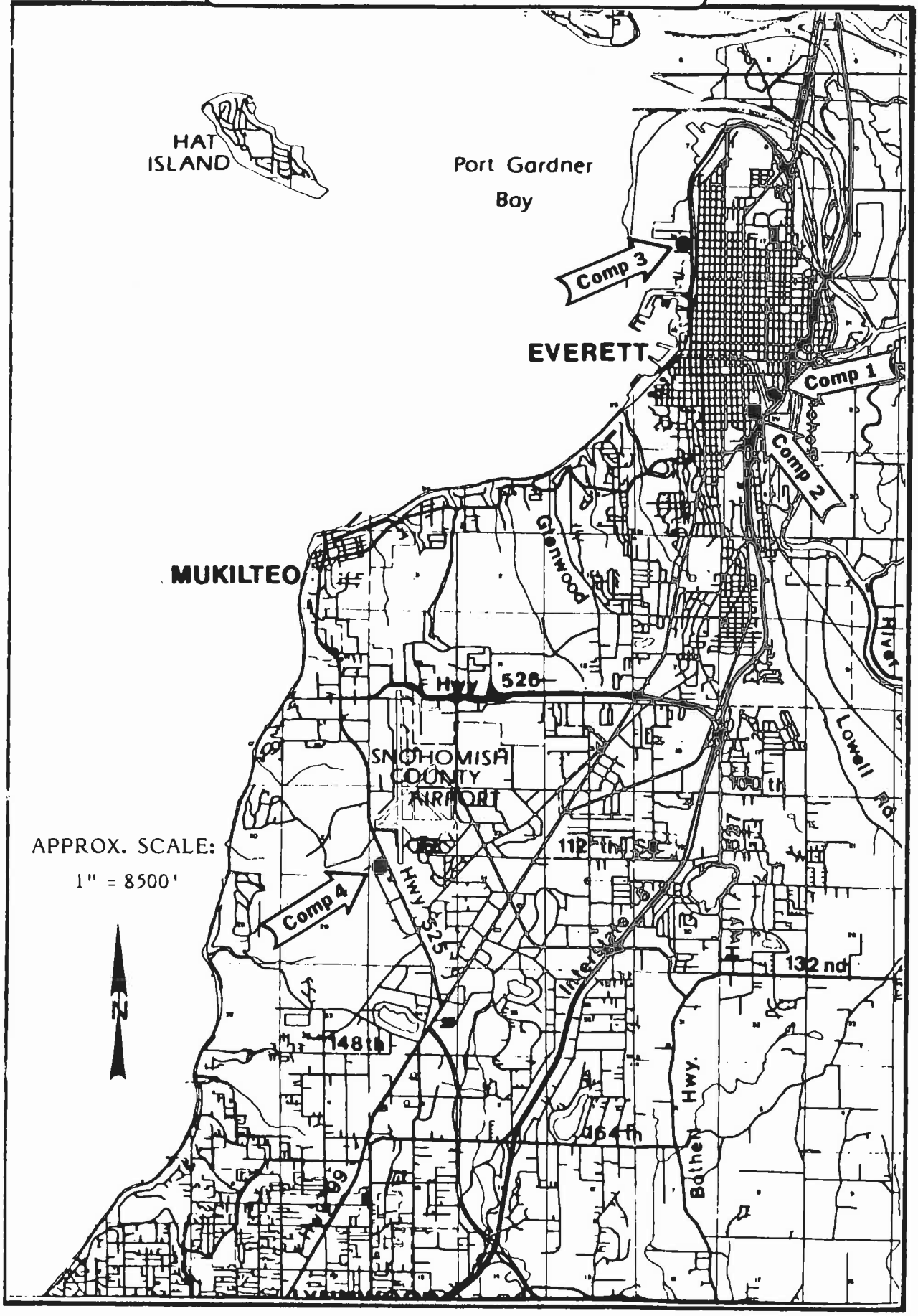
COMPARABLE LEASE NO. 3

Location:	Centrecon Bldg. at 1130 W. Marine View Drive
Lessor:	Centrecon, Inc.
Lessee:	Dunlap Industrial Hardware
Lease Dates:	9/1/82 - 9/1/92
Current Monthly Rent:	$3,718
Square Feet Leased:	12,705
Lease Terms:	2-year cost of living increases. Lessor pays real estate taxes, insurance and exterior maintenance.
Legal Description:	Portion of the northwest quarter of Section 18, Township 29 N, Range 5 E, W.M., Snohomish County, Washington. (A complete legal description is contained in the appraiser's files).
Leased Land Area:	20,205 sq. ft. (Includes 9,500 sq. ft. of parking area)
Property Description:	Level, approximately rectangular tract, leased from the Port of Everett. Improved with a one-story, 21,000 sq. ft. steel-frame, metal-clad warehouse facility built in 1979. Building has 16' ceiling height, and insulation in walls, roof and ceiling. There are currently four tenants on 10-year leases at approximately 29¢/sq. ft.
Utilities:	Electricity, water, sewer & telephone
Access:	Asphalt road
Zoning:	City of Everett M-1; Heavy Industrial
Highest & Best Use:	Current use; industrial distribution and/or marine-oriented industrial
Analysis:	$3,718/mo. for 12,705 sq. ft. = 29.3¢/sq. ft.

COMPARABLE LEASE NO. 4

Location:	Mukilteo Industrial Park; southwest corner of Mukilteo Speedway & Russell Road, Mukilteo
Lessor:	Mukilteo Industrial Park
Lessee:	Polytel, Inc.
Lease Dates:	1984-1989
Current Monthly Rent:	$4,200
Square Feet Leased:	14,000 Lessor pays insurance, taxes, exterior maintenance
Legal Description:	Lot 16 of plat of Evergreen Manor No. 3; portion of the Southwest quarter of Section 22, Township 28 N, Range 4 E. W.M., Snohomish County, Washington
Property Description:	Level, approximately rectangular tract at the west end of Muikilteo Industrial Park. Park is on Lots 13-16 of above plat and contains 4 steel frame industrial buildings and one (furthest east) wood frame, metal-clad mini-storage building.
Utilities:	Electricity, water, sewer & telephone
Access:	Asphalt roads
Zoning:	Snohomish County L1; Light Industrial
Highest & Best Use:	Current use;light industrial distribution
Analysis:	$4,200 ÷ 14,000 sq. ft. = .30¢/sq. ft.

COMPARABLE LEASES MAP



MACAULAY & ASSOCIATES, LTD.
EVERETT, WASHINGTON

COMMERCIAL INDUSTRIES COMPANY, INC.
PRE-ENGINEERED METAL BUILDINGS

SOULÉ

AUTHORIZED DEALER

P.O. BOX 768 - BELLEVUE, WA 98009
SEATTLE: 623-5666 885-2400 TACOMA: 922-9400 EVERETT: 355-2600
WASHINGTON TOLL FREE 1-800-562-8076

November 15, 1984

Macaulay & Associates, Ltd.
650 Medical-Dental Building
Everett, Washington 98201

Attention: Charles R. Macaulay

Re: Norton Properties

Dear Sir:

Following are the present day cost breakdowns for Building "A".

Soule' Steel Building 60 x 275 x 16 fully insulated with all doors and windows	$140,250.00
Site preparation including earth work	36,850.00
Footings, foundation and 5" slab reinforced with 6 x 6-10/10 mesh	81,450.00
Interior finish work at offices including carpets, interior partitions, ceilings, painting and trim	48,526.00
Plumbing, water service, sanitary sewer and connection	18,420.00
Office heating and air conditioning with heat pump system	16,400.00
Warehouse heating	24,600.00
Electrical including service	28,260.00
Finish painting of doors	1,680.00
Engineering and permits	14,460.00
Soil test	2,620.00
Miscellaneous	5,000.00
Estimated Project Cost	$418,516.00
Allowance for Washington State Sales Tax	32,644.00
Total Including Tax	$451,160.00

#27.34

Items excluded at this time are: Survey, performance bond, site work beyond perimeter of building.

Cordially yours,

COMMERCIAL INDUSTRIES COMPANY, INC.

Roger L. Benton
President

RLB:bb

COMMERCIAL INDUSTRIES COMPANY, INC.
PRE-ENGINEERED METAL BUILDINGS

SOULÉ

AUTHORIZED DEALER

P.O. BOX 768 - BELLEVUE, WA 98009
SEATTLE: 623-5666 885-2400 TACOMA: 922-9400 EVERETT: 355-2600
WASHINGTON TOLL FREE 1-800-562-8076

November 15, 1984

Macaulay & Associates, Ltd.
650 Medical-Dental Building
Everett, Washington 98201

Attention: Charles R. Macaulay

Re: Norton Properties

Dear Sir:

Following are the present day cost breakdowns for Building "B".

Soule' Steel Building 100 x 200 x 24 fully insulated with all doors and windows, crane rails	$168,800.00
Site preparation including earth work and fill	28,420.00
Structural 8" slab and foundations on 45 foot piling	167,686.00
Interior finish work at offices and toilet rooms	9,860.00
Plumbing, water service, sanitary sewer and connection	9,429.00
Warehouse heating	22,800.00
Electrical including service	32,100.00
Finish painting of structural and doors	1,928.00
Sprinkler system	39,286.00
Engineering and permits	8,400.00
Miscellaneous	5,000.00
Estimated Project Cost	$493,709.00
Allowance for Washington State Sales Tax	38,509.00
Total Including Tax	$532,218.00

#26.61

Items excluded at this time are: Survey, performance bond, site work beyond perimeter of building.

Cordially yours,

COMMERCIAL INDUSTRIES COMPANY, INC.

Roger L. Benton
President

RLB:bb

COMMERCIAL INDUSTRIES COMPANY, INC.
PRE-ENGINEERED METAL BUILDINGS

SOULÉ

AUTHORIZED DEALER

P.O. BOX 768 - BELLEVUE, WA 98009
SEATTLE: 623-5666 885-2400 TACOMA: 922-9400 EVERETT: 355-2600
WASHINGTON TOLL FREE 1-800-562-8076

November 15, 1984

Macaulay & Associates, Ltd.
650 Medical-Dental Building
Everett, Washington 98201

Attention: Charles R. Macaulay

Re: Norton Properties

Dear Sir:

Following are the present day cost breakdowns for Building "C".

Soule' Steel Building 140 x 200 x 24 fully insulated with all doors and windows	$231,280.00
Site preparation including earth work	37,620.00
Structural 8" slab and foundations on 45 foot piling	229,600.00
Interior finish work at offices and toilet rooms including carpets, interior partitions, mezzanines, ceilings, painting and trim	68,860.00
Plumbing, water service, sanitary sewer and connection	22,462.00
Warehouse, shop heating and ventilation	28,860.00
Electrical including service, baseboard heat at offices	46,400.00
Finish painting of structural and doors	2,160.00
Sprinkler system	54,240.00
Engineering and permits	11,600.00
Miscellaneous	6,000.00
Estimated Project Cost	$739,082.00
Allowance for Washington State Sales Tax	57,648.00
Total Including Tax	$796,730.00

$26.41

Items excluded at this time are: Survey, performance bond, site work beyond perimeter of building.

Cordially yours,

COMMERCIAL INDUSTRIES COMPANY, INC.

Roger L. Benton
President

RLB:bb

COMMERCIAL INDUSTRIES COMPANY, INC.
PRE-ENGINEERED METAL BUILDINGS

SOULÉ

AUTHORIZED DEALER

P.O. BOX 768 - BELLEVUE, WA 98009
SEATTLE: 623-5666 885-2400 TACOMA: 922-9400 EVERETT: 355-2600
WASHINGTON TOLL FREE 1-800-562-8076

November 15, 1984

Macaulay & Associates, Ltd.
650 Medical-Dental Building
Everett, Washington 98201

Attention: Charles R. Macaulay

Re: Norton Properties

Dear Sir:

Following are the present day cost breakdowns for Building "D".

Soule' Steel Building 200 x 275 x ~~14~~ fully insulated with all doors and windows	$447,760.00
Site preparation including earth work and fill	49,462.00
Structural 8" slab and foundations on 45 foot piling	458,500.00
Interior finish work at offices and toilet rooms including carpets, interior partitions, ceilings, painting and trim	86,200.00
Plumbing, water service, sanitary sewer and connection	24,620.00
Office heating and air conditioning with heat pump system	28,480.00
Warehouse heating	58,400.00
Electrical including service	146,662.00
Finish painting of structural and doors	3,200.00
Sprinkler system	118,000.00
Engineering and permits	24,600.00
Miscellaneous	10,000.00
Estimated Project Cost	$1,455,884.00
Allowance for Washington State Sales Tax	113,559.00
Total Including Tax	$1,569,443.00

27.23

Items excluded at this time are: Survey, performance bond, site work beyond perimeter of building.

Cordially yours,

COMMERCIAL INDUSTRIES COMPANY, INC.

Roger L. Benton
President

RLB:bb

Real Estate Appraisal

JAN

1974

BILL BOEING PROP.

.550

Western Appraisal Company

SEATTLE, WASHINGTON

APPRAISAL REPORT

SAGINAW SHINGLE PROPERTY
EVERETT WATERFRONT
BETWEEN 10th & 11th
WEST SIDE OF NORTON AVENUE
EVERETT, WASHINGTON

WESTERN APPRAISAL COMPANY

INTRODUCTION
PART I

SPONSOR
PAT JEPPESEN

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Western Appraisal Company
(206) 364-3620
10728 LAKE CITY WAY N.E.
SEATTLE, WASHINGTON
98125

January 8, 1974

Pat Jeppesen
c/o Douglas Hartwich
Short, Cressman and Cable
3000 Seattle-First National Bank Building
Seattle, Washington 98154

Re: Saginaw Shingle Property
Everett waterfront
Between 10th & 11th
West side of Norton Avenue
Everett, Washington

Gentlemen:

In accordance with your request for an appraisal of the above captioned property, we submit the following report which describes our method of approach and contains pertinent data gathered in our investigation.

We certify that a complete and thorough investigation has been made, including an inspection of the subject property and other properties that have sold recently, are located in the same area, and are sufficiently comparable to give an indication of the market value of the subject property.

The purpose of the appraisal is to estimate the fair market value, as defined herein, of the subject property as of the date of inspection, before and after the taking of a portion thereof for Port of Everett purposes and construction of a small boat launch facility, as proposed, and to estimate the Just Compensation due the owner as a result of the taking.

It is our unbiased opinion that these values are:

VALUE BEFORE TAKING	$549,150.00
VALUE AFTER TAKING	$424,350.00
TOTAL JUST COMPENSATION	$124,800.00

We do further certify that we have no interest, present or contemplated, in the property appraised herein.

Sincerely,

WESTERN APPRAISAL COMPANY

Roland G. Hoefer, M.A.I.

Roland James Hoefer, M.A.I.

RGH:RJ

PROFESSIONAL QUALIFICATIONS

ROLAND G. HOEFER, M.A.I., S.R.E.A., A.A.C.I.

FIRM: Western Appraisal Company, a Washington Corporation
10728 Lake City Way N.E.
Seattle, Washington 98125
Professional Real Estate Appraisers and Consultants

POSITION: President, appraiser and counselor in real estate investment and condemnation matters.

PROFESSIONAL MEMBERSHIPS: M.A.I.: American Institute of Real Estate Appraisers
S.R.E.A.: Society of Real Estate Appraisers
A.A.C.I.: Appraisal Institute of Canada
International Real Estate Federation
American Right of Way Association
National Institute of Real Estate Brokers
Washington Association of Realtors

EXPERIENCE: 1959 to present - president of Western Appraisal Company. specializing in difficult and unusual condemnation problems, appraisal of larger and complex properties, 1956 to 1959 - vice president of Appraisal Associates, Inc., 1950 to 1956 - staff and reviewing appraiser F.H.A., 1943 to 1950 - real estate brokerage and appraisal.

TYPE PROPERTY APPRAISED: Appraised all types of real estate, vacant residential, commercial and industrial land, residences, apartments, commercial, manufacturing, industrial, shopping center, church, school, hospital, convalescent center, cemetery, airport and subdivision properties.

CLIENTELE: Federal: Dept. of Justice, United States Navy, Coast Guard, Corps of Engineers, Forestry Service, G.S.A.
State: States of Washington, Montana, and Alaska, Dept. of Highways, Dept. of General Services, Dept. of Revenue, Dept. of Institutions, State Park Dept.
County: Many western Washington counties and agencies.
City: Numerous cities, Port authorities, Urban Renewal
Schools: Most King and Snohomish County districts
Oil Companies: Shell, Gulf, Standard, Mobil, Humble, etc.
Banks: Seattle-First National, Bank of California, Union Federal Savings & Loan, Highline Savings & Loan, others.
Corps: Numerous national and local corporations including Bethlehem Steel Co., Eastman Kodak Co., Ford Motor Co., General Foods Corp., I.B.M., Pacific Northwest Bell, other

PROFESSIONAL QUALIFICATIONS

ROLAND JAMES HOEFER, M.A.I.

EDUCATIONAL BACKGROUND:

Seattle Pacific College
Graduate in Economics and Business

University of Washington
Graduate studies - real estate research, urban planning, realty computerization, and economic feasibility analysis.

American Institute of Real Estate Appraisers
Course 1, University of Washington
Course 2, Seattle Pacific College
Course 8, University of Colorado

PROFESSIONAL AFFILIATIONS: M.A.I.; Member of American Institute of Real Estate Appraisers
R.M.; Residential Member-American Institute of Real Estate Appraisers - 1972/1973
Seattle-King County Board of Realtors

EXPERIENCE: Affiliated with Western Appraisal Company since 1961, being on a full time basis since 1965; specializing in appraising, real estate analysis and economic research.
Testified as expert witness in Superior Court.

CLIENTELE: Appraised for or acted as associate appraiser in appraisals for the following:

Shell Oil Company
Gulf Oil Company
Dillingham Development Co.
Monsanto
Uniroyal Company
Pacific Northwest Bell
Minneapolis-Honeywell, Inc.
University of Washington
I.B.M.
Seattle School District
Edmonds School District
Scott Paper Company
Standard Oil Company
Marysville School District
State of Washington
King County
City of Seattle
City of Edmonds
State of Montana
Seattle First National Bank
American National Bank
National Bank of Commerce
Bank of California, N.A.
Union Federal Savings & Loan

As well as numerous attorneys and private parties.

PROFESSIONAL AREA COVERED: Throughout the Western States

UNDERLYING ASSUMPTIONS AND LIMITING CONDITIONS

1. That the legal description upon which this analysis is based, is correct.

2. That title to this property analyzed in this report is good.

3. That no survey was furnished the appraiser.

4. The determination of the land areas within the subject property has been made by the appraiser from the County Assessor's records, from the best information available in the field, and from ownership data furnished by the Sponsor.

5. That no liability is assumed on account of matters of legal character affecting the property, such as title defects, encroachments, liens, overlapping property lines, etc.

6. That the distribution of the total valuation between land and improvements applies only to the utilization of the property to its highest and best use, as delineated herein.

7. That the values assigned to improvements are in proportion to the contribution said improvements made to the value of the property as a whole.

8. The information contained in this report was gathered from reliable sources, but is in no sense guaranteed.

9. That standard and accepted appraisal practices were employed in the appraisal process.

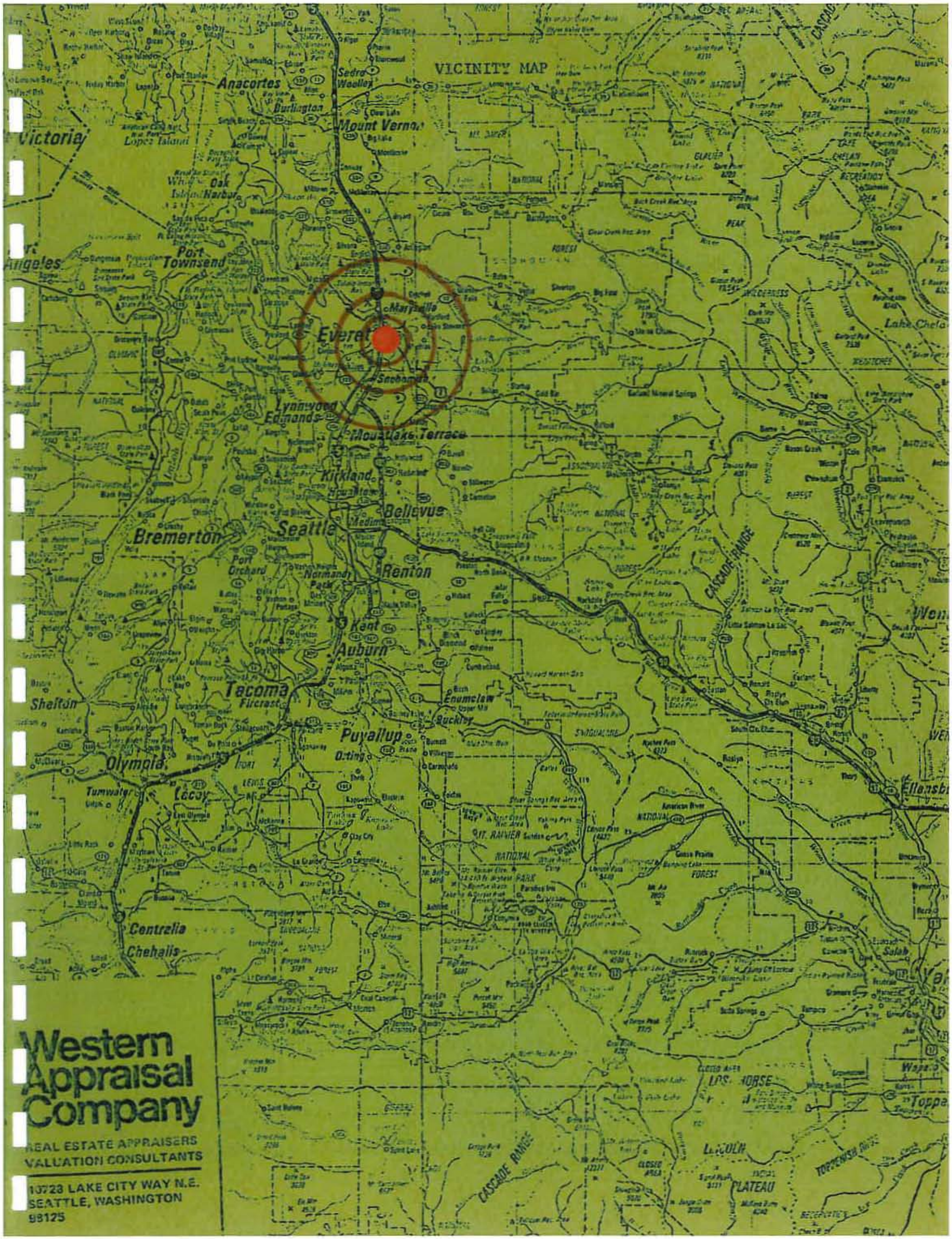
10. Neither the employment to make this analysis nor the compensation is contingent upon the amount of the report valuation.

11. The fee for this or any subsequent employment is not contingent upon an amount to be awarded by a court or jury nor upon reimbursement for fees, if any, by subsequent court decision.

12. If this analysis is not a complete and fully documented before or before and after appraisal, the appraiser shall be retained and given time to make such appraisal before he testifies in regard to valuation matters.

13. Disclosure of the contents of this report is governed by the By-Laws and Regulations of the American Institute of Real Estate Appraisers.

    Neither all nor any part of the contents of this report, especially any conclusions as to value, the identity of the appraiser or the firm with which he is connected, or any reference to the American Institute of Real Estate Appraisers or to the M.A.I. or R.M. designation, shall be disseminated to the public through advertising media, public relations media, news media, sales media or any other public means of communication, without the prior written consent and approval of the author.



Western Appraisal Company

REAL ESTATE APPRAISERS
VALUATION CONSULTANTS

10723 LAKE CITY WAY N.E.
SEATTLE, WASHINGTON
98125

SUBJECT FROM SOUTH

SUBJECT PROPERTY FROM TAKING AREA

VIEW OF PORTION TO BE TAKEN

VIEW NORTH ALONG NORTON

SECTION I - IDENTIFICATION AND SUMMARY

OWNER: Saginaw Shingle Company
Eugene Anderson and Pat Jeppesen, contract purchasers

LEGAL DESCRIPTION: Tax Numbers 2-003, 2-022 and 3-033, in Section 18, Township 29 North, Range 5 East, W.M., situate in Snohomish County, Washington.

PURPOSE OF APPRAISAL: The purpose of the appraisal is to evaluate the subject property as of November 26, 1973 and estimate the fair market value of the tract before and after the taking of a portion by the Port of Everett for a boat launch facility.

DEFINITION OF FAIR MARKET VALUE: Fair Market Value is defined as: . . . "the price a property will bring when offered for sale by one who desires, but is not required, to sell; and is sought by one who desires, but is not required, to buy, after due consideration of all the elements reasonably affecting value." (Washington Reports Second, Volume 31, Page 556, which quoted 29 CJS 974, Eminent Domain S 137.)

SECTION II - EVALUATION OF TOTAL OWNERSHIP

NEIGHBORHOOD, LOCATION AND DESCRIPTION: The subject property is located in Everett, Washington which is approximately 25 miles north of Seattle and is the county seat of Snohomish County, Washington. Everett has a population of approximately 57,000 persons, having increased 42% over the 1960 population of 40,000. Lately, the population has remained somewhat static because of the economic situation.

The subject site is more directly located on the westerly boundary of downtown Everett, on the Port Gardner Bay waterfront.

Access to the area is primarily from Norton Avenue, which is a 60 foot paved right of way and proceeds in a north-south direction. The Burlington Northern Railroad also parallels Norton Avenue, providing one spur into the subject property.

Principal land uses in the area are industrial and manufacturing with Everett Plywood Corporation, Pacific Towboat, Western Gear Works, Robinson Timber, Scott Paper and Nord Door being a few of the larger concerns in the immediate area of the subject property.

The Port of Everett owns substantial portions of the Everett waterfront both north and south of the subject property. A new expansion of the Port, entailing an expenditure of $5.2 million will mean construction of a major new

docking facility. Present plans call for expansion of harbor facilities between Pier 1 and Everett Avenue. Other proposed deep water harbor developments will lie south of 21st Street. Harbor development from 21st Street to the present Everett Yacht Club is anticipated to consist of additional small boat marinas and commercial developments. In the area of the subject property is to be a small boat launch facility.

Principal utilities in the area are sanitary sewer, telephone, water and public power.

DESCRIPTION OF THE SUBJECT PROPERTY:

Present Use: The property is presently utilized by a boat manufacturing concern.

Accessibility and Road Frontages: Access is excellent from Norton Avenue and by a rail spur. Water access is also available from Port Gardner Bay. The tract has 350 feet of road frontage on the west side of Norton Avenue and the rail spur enters from the northeast corner and proceeds in a southerly direction.

Land Contour and Elevations: The upland portion of the site is entirely level and approximately at grade with Norton Avenue. The filled portions were filled with mill refuse and compacted with dirt and gravel.

Land Area: The tract contains approximately 17.92 acres, of which 11 acres is inundated at high tide and 6.92 acres is filled uplands.

Land Shape: The site is rectangular in shape, measuring approximately 350 feet in a north/south direction, and ranges from 2213.38 to 2274.45 feet in an east/west direction.

Utilities: Public power, water, telephone and sewer are available to the property.

Present Zoning: M 1 - City of Everett heavy manufacturing use zone.

The purpose and function of the M 1 zone is to provide for and protect certain areas of the city for heavy manufacturing uses.

Dimensional Standards
- Min. lot area: None required
- Min. lot width: None required
- Min. front yard setback: None required
- Min. side yard setback: None required
- Gross floor area ratio: None required
- Max. height: None required
- Min. rear yard setback: None required

HIGHEST AND BEST USE OF LAND IF VACANT: Highest and Best Use is defined as: . . ."that use which at the time of appraisal is most likely to produce the greatest net return to the land and/or building over a given period of time.) (Page 23, The Appraisal of Real Estate, 5th Edition, American Institute of Real Estate Appraisers.)

It would appear that the highest and best use for the site, if vacant, would be for a marine oriented industrial site, considering the industrial zoning, available utilities, and the close proximity to the Port of Everett. Port Gardner Bay is a deep water port and the subject site could be used for a marine oriented industrial park. Rail is available to implement this philosophy also.

Building Improvements: The most easterly portion of the subject property is improved with a one and two story, wood frame manufacturing building. It was built in 1940 and contains 27,264 square feet of total floor area. It has 24,884 square feet on the main floor and 2,380 square feet on the second floor. There appear to be many recent modifications to the internal structure.

Exterior walls are a horizontal fir and vertical fir and batten, roof is built-up and foundation is wood piling.

Interior walls are generally the interior face of the exterior covering, except in areas where partitions have been made. Floors are concrete in a minority portion and fir planks and plywood in the other portions. Lights are conduit and fluorescenttubes and heating is from suspended gas heaters.

The floor plan, a plot plan of which is included in the addendum, generally consists of offices at the southeast corner with finish of wall to wall carpets, painted plasterboard and panelled walls, aluminum sash windows with numerous built-in counters, storage areas, etc. Adjoining the offices on the west is the assembly area which primarily consists of open warehouse. Portions of the floor are concrete with the majority being wood plank. Along the south is a storage stock area and stairs up to a storage loft.

West of the assembly area is a two story portion used for cabinet making. It is seventeen feet wide and runs the center of the building.

Westerly of the cabinet making section is the fiberglass laying area which is also a large warehouse area with wood floors, fluorescentlighting and suspended gas heaters. It is also sprinklered.

There is a series of six rail load doors along the west building face which are not in use. The entire north end of the building is also comprised of loading doors.

The structure is in reasonable condition considering its age.

Land improvements consist of outside lighting and a 40' x 36' canopy covered concrete slab at the north end of the subject building.

Current Assessed Valuation and Real Estate Taxes:

Assessed Value & Taxes for the three portions of the subject property are as follows:

	Land	Impr.	Taxes	Levy
2-003	$8,560	$ 0	$186.22)	
2-022	$2,500	33,500	$1,469.87)	43.308 mills
3-033	$1,750	0	75.79)	

Assessments: None of Record

HIGHEST AND BEST USE OF THE WHOLE PROPERTY AS IMPROVED: Highest and Best Use has already been defined. Considering the size and quality of the existing improvement, the rail spur and industrial zoning, the highest and best use for the subject property as improved would be the existing use for the structure and development of the undeveloped lands for industrial use, probably marine oriented.

VALUATION OF PROPERTY

Three approaches are commonly used in the valuation of real estate. These three are the Comparative or Market Data Approach, the Cost Approach and the Income Approach, each of which gives an indication of value.

The Cost Approach to value is processed by (a) estimating the value of the land as improved, excluding structures, (b) estimating reproduction cost new of the structures, (c) estimating accrued depreciation and deducting from the estimates of reproduction cost new, and (d) adding the estimated value of the site to the depreciated cost of the structures to arrive at an indicated value for the property.

The Income Approach evaluates the property through the process of estimating the quality, quantity and durability of the income stream, less fixed operating expenses, then capitalizing the net income estimate into an indication of value. This approach is based on the premise that real estate should earn enough to pay for the improvements for their remaining economic life as well as return interest on the investment in improvements and land.

The Comparative Approach to value is the process of comparing the subject property with other properties which have sold recently. Since no two properties are exactly alike, adjustments must be made for each particular difference. The estimate of value by this approach will be indicated after the adjustments are made to the comparable sales and they are correlated to the subject property.

The final estimate of value is derived through a correlation process in which the appraiser weighs each of the individual approaches by its relative merits.

SITE ANALYSIS AND EVALUATION: The first step in the evaluation of any property is to estimate the fair market value of the land.

The appraiser inspected numerous sales of industrially zoned sites in the subject area and has included those felt most applicable to the subject property in this report.

The tabulation which follows depicts those attributes of the sales felt to be most important. A complete description of each sale is found in the addenda of the report.

COMPARABLE LAND SALES TABULATION

Sale No.	Grantor/Grantee	Zoning	Total Land Area	Sale Date	Sale Price	Price Pd/Sq.Ft.	Land Area Submerged
1.	Hulbert/Centrecon	M 1	14.52 ac. 632,589 s.f.	8/72	$450,000	$0.71	4 ac. or 28%
2.	Robinson/Island Ent	M 1	26.55 ac.	11/72	650,000	0.45	19.45 ac. or
(OPTION)	Island Ent./Mitsui	M 1	1,156,518 s.f.	cur.	1,000,000	0.86	73%
3.	Snohomish/Everett	M 1	1.70 ac. 73,996 s.f.	5/73	55,000	0.74	
4.	Dillingham/Scott	M 1	3.58 ac. 155,945 s.f.	8/70	74,250	0.48	
5.	Bodey/Everett	M 1	5 ac. 218,000 s.f.	4/69	65,000	0.30	
6.	Everett/Scott	M 1	54.10 ac. 2,356,596 s.f.	5/69	1,754,250	0.74	7.01 ac. or 13%
7.	State/Scott	M 1	.989 ac. 43,071 s.f.	11/69	9,540	0.22	.989 ac. or 100%
8.	U.S.A./Western Gear	M 1	1.27 ac. 55,321 s.f.	12/70	76,000	1.37	
9.	Ledford/Hansen	H 1	5.31 ac. 231,304 s.f.	6/72	80,000	0.35	5.31 ac. or 100%
10.	Benson/Weyerhaeuser	M 1	3 ac. 130,680 s.f.	5/69	139,000	1.06	
11.	Snelson/Plochowietz	H 1	3.51 ac. 152,896 s.f.	6/72	69,500	0.45	
12.	B.N. Railroad/Port of Everett	M 1	12.3 ac. 535,788 s.f.	10/70 & 4/71	564,120	1.05	10.2 ac. or 83%

COMPARATIVE ANALYSIS:

Sale No. 1 ($0.71/sq.ft.) is superior to the subject property overall. It is a capitalized lease of the piece of property adjoining the subject on the south. It contains a total land area of 14.52 acres, which is slightly smaller than the subject property with approximately 4 acres of submerged lands or 28% of the total land area. The lease was entered into in August of 1972 with a rate of return typical in the Port area of 8% on the rental of $36,000 per year, indicating value for the site of approximately $450,000. It has a larger share of the more valuable uplands than the subject property, adjoins it to the south and would have similar utilities and environmental characteristics. It would indicate a value for the property overall of $0.50 to $0.60/square foot.

Sale No. 2 ($0.45/sq.ft.) is slightly inferior on an overall basis. It is a sale which transpired in November, 1972 of the Robinson Plywood property located in the 1900 block on Norton Avenue which is approximately 8 blocks south of the subject tract. It is very similar in shape, however, it contains 26.55 acres of total property of which 19.45 acres is submerged tidelands or approximately 73% of the entire property. This is a higher proportion of submerged land than the subject and also the larger size would reflect a somewhat lower unit factor. It is reported there is a current option on the property between the existing grantee and Mitsui International, which is a Japanese lumbering concern. The option is for approximately one million dollars, reflecting a price of $0.86/square foot. The option is contingent on Mitsui also tying up the adjoining Everett Plywood Corporation property, and the plan approved by the Port of Everett for a large wood products operation. Even though the site is located closer to central Everett, the large percentage of inundated tidelands indicates lower unit values on an overall basis.

Sales 3,4,5, and 6, ranging from $0.30 per square foot to $0.74 per square foot, are all inferior to the subject uplands. The sales are situated near Railway Avenue and the Snohomish River, on the east side of the town of Everett. They range in size from 1.70 acres to 54.10 acres. All are either purchased by Everett Lumber Company or Scott Paper Company and are used for wood processing facilities. The majority of the sale properties are level and approximately at grade with the existing streets. Sale dates range from April 1969 to May of 1973. Locations of the uplands are inferior to that of the subject property and are much less desirable for marine orientation. These sales would reflect a value of $1.00 to $1.25/square foot for the subject uplands.

Sale No. 7 ($0.22/sq.ft.) is a sale of approximately one acre of tidelands on the Snohomish River, adjoining the Scott Paper wood chip facility. It was 100% submerged at the time of the sale and would reflect a value for the subject tidelands of approximately $0.25/sq.ft.

Sales 9 and 11 ($0.35 and $0.45/sq.ft. respectively) are both inferior to the subject property on a per square foot basis because they are both much smaller tracts containing 5.31 acres and 3.51 acres respectively. Both have much inferior locations. Neither one of the properties has a majority of utilities available. Sale 9 is located on the tip of Smith Island and was nearly 100% submerged before the filling of the property by the grantor. It would indicate a high value for submerged lands. The filling was not totally completed at the time of the sale. Sale 11 has a poor shape and topography although it is primarily uplands.

Sales 8, 10, and 12 ($1.37, $1.06 and $1.05/sq.ft. respectively) are all similar to the uplands portion of the subject property. They are all relatively level, smaller tracts. Sales 8 and 10 are several years old and should be adjusted upward for time. Sale 12 is located in the central port area and was purchased from Burlington Northern Railroad by the Port of Everett, contains 12.3 acres, of which10.2 acres were submerged, or approximately 83% of the total land area. The average price of $1.05 per square foot, considering the large amount of tidelands, would indicate a very high unit value for the approximately two acres of uplands and a reasonably high unit value for the tidelands. The tidelands were deep water tidelands which are rare in the Everett Port area. In addition, this site is located adjacent to Everett Port facilities. Sale 8 is also located along the uplands portion of the east waterway, closer to the central Port area of Everett, Washington.

Sale 10 is located in the Blackman's Point area, at the confluence of the Snohomish River and Port Gardner Bay. Location and industrial capabilities of the property are inferior to the subject. It does reflect a value for the subject uplands of $1.10 to $1.20/square foot.

CORRELATION AND CONCLUSION, SITE ANALYSIS: Analysis of the upland and submerged industrial land sales are indicative of a value for the subject property as follows:

a.	6.92 acres or 301,435 square feet of uplands @ $1.15/square foot	=	$346,650
b.	11 acres or 479,160 square feet of submerged @ $0.25/square foot	=	$119,790
	Average @ $0.60/square foot		
	TOTAL VALUE OF 17.92 ACRES (780,595 sq.ft.)	=	$466,440

The value is based on the recent sale of comparable industrial sites in the Everett Port area. The sales have been adjusted to the subject property for elements of dissimilarity.

WHOLE PROPERTY VALUATION:

Comparative Approach: The comparative approach relies upon the recent sale of similar properties. In this case, there have not been any sales of large waterfront properties in the Everett Port area with buildings of similar size and quality as found on the subject property. Several buildings have sold, several are under option, but none is similar to the subject property so this approach is considered, but not used.

Income Approach: This approach was considered but not used because such a very small part of the subject property produces any income. The income capitalization method bases the value estimate on the present value of a stream of dollars the property is assumed to be able to earn over the period of ownership. Factors affecting future usefulness on the property are very important.

Cost Approach: The cost approach is used as a means of typically setting an upper limit on property value on the assumption that no buyer will pay more for a property than he would for an equally acceptable newly constructed substitute property. In income properties this thesis has pitfalls, but in general the theory is true. The land was evaluated from the market in the site analysis.

Land - Rectangular inside tract containing 780,595 square feet @ $0.60/sq.ft. (avg)	$466,440
Building Improvements - 1 & 2 story wood frame structure containing 24,884 square feet main floor and 2,380 of second floor area or a total of 27,264 sq.ft. @$9.93/sq.ft. $270,732	
Estimated Accr. Depr. 35/50 or 70% $189,512	
Depreciated Value Building Improvements	$ 81,220
Land Improvements	
Estimate of Contribution to Value	$ 1,500
Indication of Value Through the Use of the Cost Approach	$549,160 say $549,150

JUSTIFICATION OF LAND VALUE: Refer to the Site Analysis and Evaluation.

JUSTIFICATION OF COSTS USED: The costs were taken from the Marshall Valuation Service, a nationally recognized building cost index. The cost was adjusted for area and factors of dissimilarity between the subject property and the indices model.

JUSTIFICATION OF DEPRECIATION ESTIMATE:

Effective Age of Building. . . . . .35 years

Estimated Remaining Economic Life. . . . . .15 years

Total Life . . . . . .50 years

Accrued Depreciation 35/50 or. 70%

Several properties were investigated in order to ascertain the effective depreciation exhibited by the subject property. Considering the value of the site, the subject exhibits a greater depreciation than most properties which have a much less underlying land value.

CORRELATION OF VALUE INDICATIONS FROM ALL APPROACHES: The correlation is the process of relating the three approaches to one another so that they complement.

The three valuation approaches were considered but only the Cost Approach was used and it indicated $551,000 for the subject property. It was comprised of a market value for the site and a depreciated cost estimate for the warehouse structure. The approach is well supported because approximately $466,440 is land value.

FINAL ESTIMATE OF FAIR MARKET VALUE BEFORE THE TAKING $549,150

GENERAL DESCRIPTION OF REMAINDER

PART TAKEN: The part taken is the westerly 1393.05 feet as measured along the south property line. It contains 11.10 acres, or 483,516 square feet. It, together with other property, is to be taken for a small boat launching facility. A map in the addenda depicts the taking area.

PROPERTY DESCRIPTION: The property in the after situation may be described as follows:

Land: The subject property is the same except it has no submerged tidelands and will have a small boat launch facility in front of it.

Building Improvements: Same as before the taking.

Land Improvements: Same as before the taking.

ANALYSIS OF HIGHEST AND BEST USE AFTER THE TAKING: Highest and Best Use is defined as:. . . "that use which at the time of appraisal is most likely to produce the greatest net return to the land and/or building over a given period of time." (Page 23, The Appraisal of Real Estate, 5th Edition, American Institute of Real Estate Appraisers.)

Considering the industrial zoning and land uses in the area, the highest and best use for the subject will still be for an industrial site oriented toward marine uses.

VALUATION OF REMAINDER

SITE ANALYSIS: The same sales were compared with the subject site after the taking, as before the taking. The difference is that the subject site will no longer have submerged tidelands. The value is as follows:

a. 6.82 acres or 297,079 square feet @$1.15/square feet

= $341,641

The value of the subject site is based on its comparison with the recent sale of comparable land.

COST APPROACH: The method used in the Cost Approach after the taking is the same as before the taking except the land value is different.

Site Value	$341,641
Bldg. & Imp. Value	82,720
Total Indicated Value	$424,361, say $424,350

INCOME APPROACH: Considered, but not used.

MARKET DATA APPROACH: Considered, but not used.

CORRELATION AND AFTER VALUE: The value of the subject property is based on the recent sale of similar sites and the depreciated cost of the existing building.

Market value of property remaining after the taking of right of way as of the date of examination	$424,350

RIGHT OF WAY TAKEN

Land:	11 acres submerged lands or 479,160 square feet @$0.25/sq.ft.	=	$119,790
	0.10 acres or 4,356 square feet upland @$1.15	=	$ 5,009
TOTAL VALUE OF LAND TAKEN			$124,799, say $124,800

Building Improvements: None

Land Improvements: None

DAMAGES: None

BENEFITS: None

RECAPITULATION

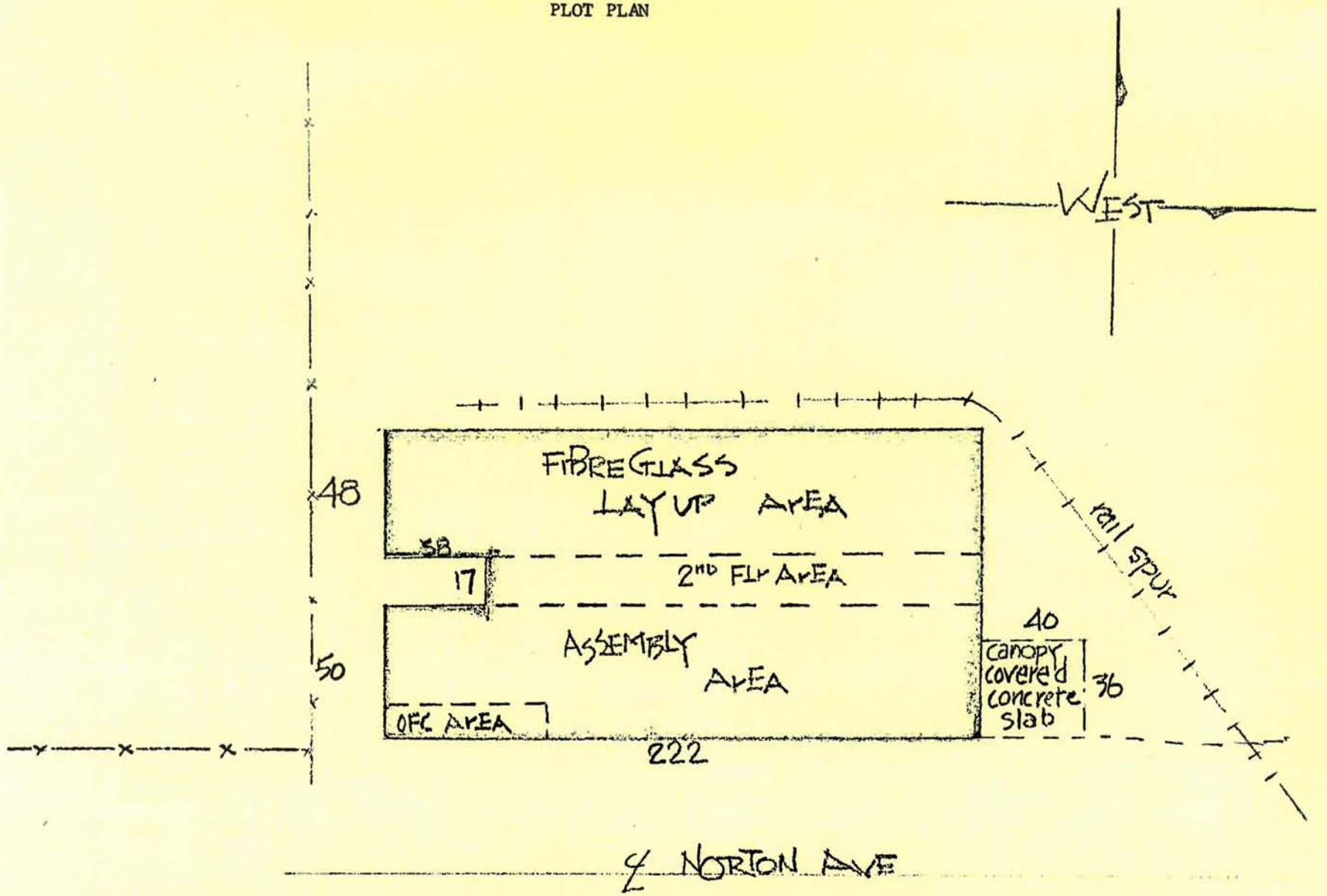
In my opinion, the full cash sum the Port of Everett should pay the owner in full, complete and final settlement for the right of way required is as follows:

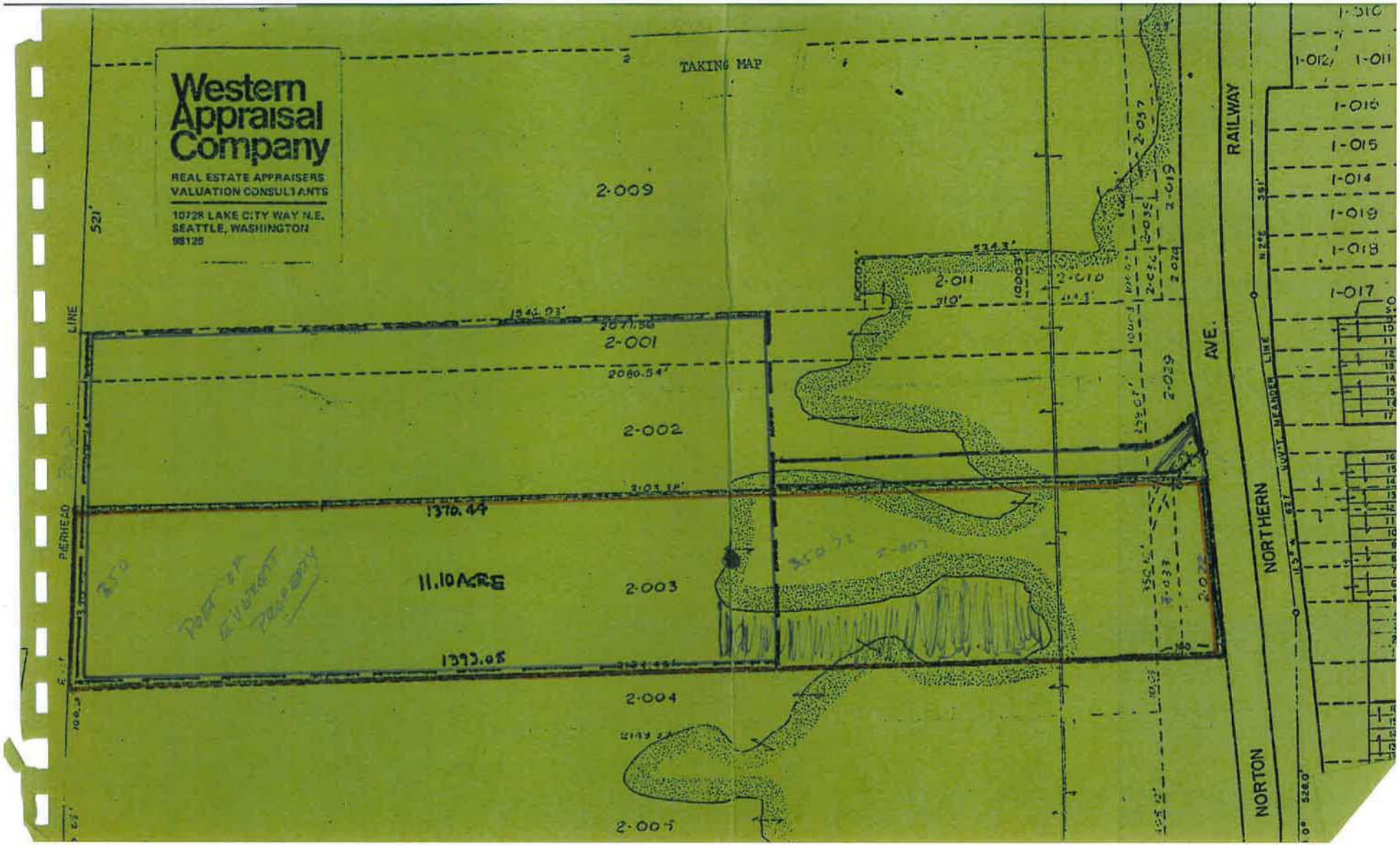
VALUE BEFORE TAKING	$549,150
VALUE AFTER TAKING	$424,350
TOTAL JUST COMPENSATION	$124,800

which may be allocated as follows:

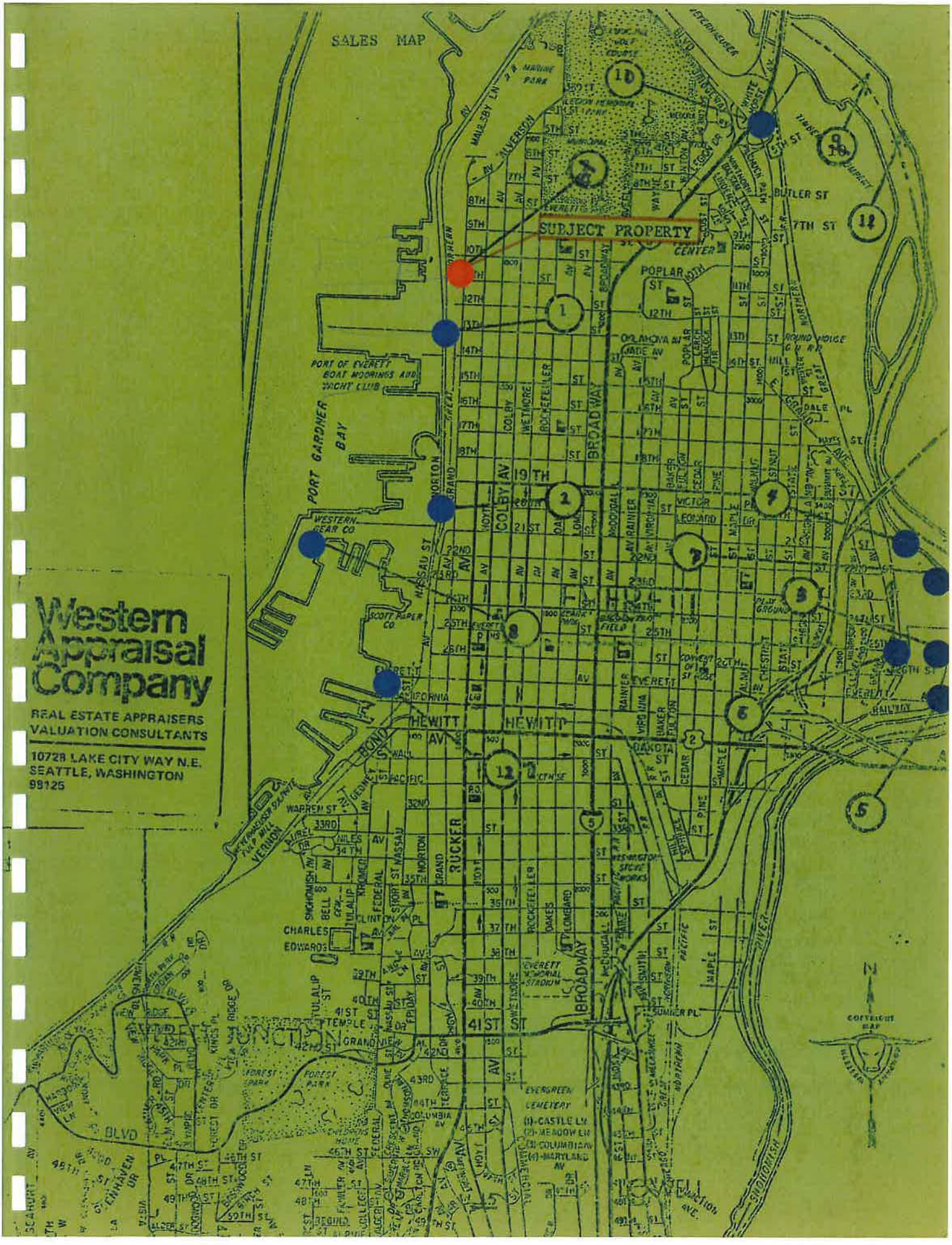
Land	$124,800
Improvements	None
Damages	None
Total	$124,800
Less Special Benefits	None
Total Just Compensation	$124,800

PLOT PLAN


WEST
48
FIBREGLASS
LAY UP AREA
58
17
2ND FLR AREA
ASSEMBLY
AREA
50
OFC AREA
40
canopy
covered
concrete
slab
36
222
rail spur
℄ NORTON AVE


Western Appraisal Company
REAL ESTATE APPRAISERS
VALUATION CONSULTANTS
10728 LAKE CITY WAY N.E.
SEATTLE, WASHINGTON
98125
TAKING MAP
2-009
2-001
2-002
2-003
2-004
2-005
11.10 ACRS
1370.44
1393.05
2080.54'
3103.35'
2071.56
1541.03'
2134.33'
310'
521'
LINE
PIERHEAD
AVE.
RAILWAY
NORTHERN
NORTON
1-010
1-011
1-012
1-013
1-014
1-015
1-016
1-017
1-018
1-019

PART III - ADDENDA


SALES MAP
SUBJECT PROPERTY
Western Appraisal Company
REAL ESTATE APPRAISERS
VALUATION CONSULTANTS
10728 LAKE CITY WAY N.E.
SEATTLE, WASHINGTON
98125
PORT GARDNER BAY
BROADWAY
COLBY AV
HEWITT
RUCKER
EVERETT
41ST ST
19TH
POPLAR
BUTLER ST
7TH ST
PORT OF EVERETT BOAT MOORINGS AND YACHT CLUB
WESTERN GEAR CO
SCOTT PAPER CO
EVERGREEN CEMETERY
(1)-CASTLE LN
(2)-MEADOW LN
(3)-COLUMBIA AV
(4)-MARYLAND AV
EVERETT MEMORIAL STADIUM
FOREST PARK
CHARLES EDWARDS
N

COMPARABLE LAND SALE NO. 1

ADDRESS OR LOCATION:	13th & Norton Avenue Everett, Washington
LEGAL DESCRIPTION:	All that portion of Section 18, Township 29 N, Range 5, E, W.M., situate in Snohomish County, Washington.
ACCESS:	Good from Norton Avenue
PRESENT USE:	Vacant at time of lease
ZONING:	M I - Industrial
DIMENSIONS:	Irregular
AREA:	14.52 Acres
SALE DATE:	8/8/72
PRICE:	$36,000/year for 1st 5 years, after $48,000/year
INSTRUMENT:	Lease Agreement
TERMS:	20 years with 2 additional 10 year terms
E. TAX NO.:	Not applicable
GRANTOR:	William Hulbert Mill Co.
GRANTEE:	Centrecon, Inc.

PROPERTY DESCRIPTION: This is a level site, located on the Pt. Gardner Bay waterfront in central Everett. The tract is irregular in shape, has excellent road frontage and is zoned for industrial use. Land uses around the site are industrial in nature. The site contains approximately 14.52 acres, with 4 acres being submerged lands. These submerged lands are to be filled by the Port and diked along the west line.

Since the lease was consummated, a concrete plant has been constructed on the tract.

The value of the subject property is based on an 8% return of the current rental rate of $36,000/year. The 8% rate is based on rates of return typical in port districts.

ANALYSIS:		Total Value	Unit Value
Land:	632,589 sq.ft. or 14.52 acres	$450,000	$0.71/sq. ft.


SON MARINA
NAUD
EA SKIFF

COMPARABLE LAND SALE NO. 1

ADDRESS OR LOCATION: 2000 Block on Norton Avenue
Everett, Washington

LEGAL DESCRIPTION: All that portion of tidelands in front of Sections 18,19 in Township 29 North, Range 5, East, W. M., Situate in Snohomish County, State of Washington. (Lengthy metes and bounds description in appraiser's file.)

ACCESS:	Good from Norton Avenue
PRESENT USE:	Warehouse
ZONING:	MI - industrial
DIMENSIONS:	Irregular
AREA:	26.55 acres
SALE DATE:	11/30/72
PRICE:	$650,000
INSTRUMENT:	R.E.C.
TERMS:	$65,000 down, balance November, 1974
E. TAX NO.:	10196
GRANTOR:	Robinson Plywood & Timber Company
GRANTEE:	Island Enterprises, Inc.

PROPERTY DESCRIPTION: This sale is located on the Port Gardner Bay waterfront of Everett, Washington. The site is relatively level and approximately at street grade. Approximately 7.10 acres of property are uplands with the remaining 19.45 acres being submerged tidelands. The buildings include 56,627 square feet of building area, most of which are old structures that are approximately 65 to 70% depreciated. All utilities are available.

Currently, the grantee has an option for $1,000,000 from Mitsui, a Japense wood products firm, which plans a total redevelopment of the tract. Existing buildings were not considered contributing to value for an average value of $0.86/sq.ft.

ANALYSIS:		Total Value	Unit Value
Land:	1,156,518 sq.ft. or 26.55 acres	$525,000	$0.45/sq.ft. overall
Improvements: Depreciated Contribution Value		$125,000	
		$650,000	

COMPARABLE LAND SALE NO. 3

ADDRESS OR LOCATION: 2500 Block on West Side of Railway Avenue Everett, Washington

LEGAL DESCRIPTION: Portion of Lots 5,6,7 and 8, Block 2, Industrial Addition to Everett, situate in the County of Snohomish, State of Washington. (Lengthy and complete legal description in appraiser's file.)

ACCESS:	Good from Railway Avenue
PRESENT USE:	Broadcast towers
ZONING:	M I - industrial
DIMENSIONS:	Very irregular
AREA:	73,996 sq.ft.
SALE DATE:	5/7/73
PRICE:	$55,000
INSTRUMENT:	W.D.
TERMS:	Cash
E. TAX NO.:	4312
GRANTOR:	Snohomish County Broadcasting Corporation
GRANTEE:	Everett Lumber Company

PROPERTY DESCRIPTION: This is a relatively level site which is approximately at street garde and located near the Snohomish River at the Everett Lumber Company. All utilities are available. Land uses in the area are primarily industrial, oriented toward wood products.

ANALYSIS:		Total Value	Unit Value
Land:	1.70 acres or 73,996 sq.ft.	$55,000	$0.74/sq.ft.

COMPARABLE LAND SALE NO. 5

ADDRESS OR LOCATION: On Snohomish River at 21st St.
Everett, Washington

LEGAL DESCRIPTION: All that portion Block C, St. Nicholas Addition lying easterly of right of way of Chicago, Milwaukee and St. Paul Railway, Section 21, Towhship 29 N., Range 5 E, W. M., situate in Snohomish County, Washington.

ACCESS:	Good
PRESENT USE:	Vacant
ZONING:	M I - manufacturing zoning
DIMENSIONS:	Triangular shape
AREA:	3.58 acres±
SALE DATE:	8/28/70
PRICE:	$74,250
INSTRUMENT:	W.D.
TERMS:	Cash
E. TAX NO.:	8726
GRANTOR:	Dillingham Corporation
GRANTEE:	Scott Paper Co.

PROPERTY DESCRIPTION: This sale is located along the west bank of the Snohomish River in Everett, Washington, on 21st Street. The sale adjoins the Scott Paper Company wood chip plant and the Burlington Northern Railroad right of way. The site is relatively level and approximately at grade. Access is from adjoining property and utilities are available.

ANALYSIS:		Total Value	Unit Value
Land:	3.58 acres or 155,945 sq.ft.	$74,250	$0.48/sq.ft.

COMPARABLE LAND SALE NO. 5

ADDRESS OR LOCATION: N.E. Corner Everett Ave. and Railway Ave., Everett, Washington

LEGAL DESCRIPTION: PARCEL A: Lot 6, Block 6, all of Block 7, Everett Tidelands, Section 3 (shown on office tidelands map in Commissioner of Public Lands Map). PARCEL B: Lots 1, 2, 3, 4 and 5 and Lot A, Block 1, Industrial Addition to Everett, according to plat thereof recorded in Volume 6 of Plats, page 46, records of Snohomish County, Washington. PARCEL C: Lots 11, 12 and 13 (Replat of) Part of Block H, Mitchell Land and Improvements Co.'s First Addition, according to plat thereof recorded in Volume 7 of Plats, page 41, records of Snohomish County, Washington.

ACCESS:	From Railway Ave.
PRESENT USE:	Vacant
H & B USE:	Industrial
ZONING:	M I, heavy manufacturing
DIMENSIONS:	Irregular shape
AREA:	5 acres±
SALE DATE:	4/22/69
PRICE:	$65,000
INSTRUMENT:	R.E.C.
E. TAX NO.:	4201
GRANTOR:	H.W. Bodey
GRANTEE:	Everett Lumber Co.
CONFIRMED:	Mr. Hambidge, Pres. Everett Lumber Co., 4/24/70

PROPERTY DESCRIPTION: The property is low and wet with some frontage along the Snohomish River. Some fill is being placed on the property.

The purchaser states the property was purchased for eventual expansion of an industrial park in the area.

No utilities were available at the time of sale.

ANALYSIS:		Total Value	Unit Value
Land:	5 acres ± or 217,800 sq.ft.	$65,000	$0.30/sq.ft.

COMPARABLE LAND SALE NO. 6

ADDRESS OR LOCATION: Between 21st and 26th Sts., east of Grand Ave. Everett, Washington

LEGAL DESCRIPTION: Lots 5 - 13 and Lot 15, Industrial Addition, and portions of Government Lots 5 and 12 and tidelands, Section 21, Township 29 N., Range 5 E., W.M.; situate in County of Snohomish, State of Washington. (Lengthy legal description in appraiser's file.)

ACCESS:	Good from Railway Ave.
PRESENT USE:	Industrial
H & B USE:	Industrial
ZONING:	M I, heavy manufacturing
DIMENSIONS:	Irregular
AREA:	54.10 acres
SALE DATE:	5/9/69
PRICE:	$1,754,250
INSTRUMENT:	W.D.
TERMS:	Cash
E. TAX NO.:	Cash
GRANTOR:	Everett Lumber Co.
GRANTEE:	Scott Paper Co., Inc.
CONFIRMED:	Don Ellis, Scott Paper Mr. Hambidge, Everett Lumber Co., 4/24/70

PROPERTY DESCRIPTION: Large acquisition by Scott Paper for Riverside Wood Plat on the Snohomish River. Access is good from downtown Everett and rail and utilities are available.

47.09 acres were filled and ready for development, 5.60 acres were swampy and marginal, 1.41 acres were low and wet.

The purchase price was based on $35,000/acre for filled land, $20,000/acre for marginal and $10,000/acre for wet lands.

ANALYSIS:		Total Value	Unit Value
Land:	54.10 acres or 2,356,596 sq.ft.	$1,754,250	$0.74/sq.ft.

COMPARABLE LAND SALE NO. 7

ADDRESS OR LOCATION: Tidelands on Snohomish River between approximately 21st and 23rd Sts, Everett, Washington

LEGAL DESCRIPTION: Tracts 2 and 3, Everett Tide Lands, Section No. 3, as shown on the official plats thereof on file in the office of the Commissioner of Public Lands at Olympia, Wn.

ACCESS:	From adjoining property
PRESENT USE:	Industrial
H & B USE:	Industrial
ZONING:	M I, heavy manufacturing
DIMENSIONS:	35.5' x 391' + 52.7' x 553.9'
AREA:	43,071 sq.ft. or 0.989 acres
SALE DATE:	11/5/69
PRICE:	$9,540
INSTRUMENT:	W.D.
TERMS:	Cash
E. TAX NO.:	None
GRANTOR:	State of Washington
GRANTEE:	Scott Paper Co.
CONFIRMED:	Mr. C. Kendall, Assist. Chief, Washington State Department of Natural Resources, 4/27/70

PROPERTY DESCRIPTION: This property adjoins approximately 54 acres owned by the purchaser. The State offers the property to upland owners at a predetermined price based on the State's appraisals.

The owner has 60 days to accept the price or the property goes to public auction.

All the property is submerged tidelands with no utilities.

ANALYSIS:		Total Value	Unit Value
Land:	43,071 sq.ft. or 0.989 acres	$9,540	$0.22/sq.ft.


CHEV

COMPARABLE LAND SALE NO. 9

ADDRESS OR LOCATION: North side of East Waterway,
on 21st Street
Everett, Washington

LEGAL DESCRIPTION: Portion of the Southwest 1/4 of the Northwest 1/4 of Section 19, Township 29 North, Range 5 E, W.M., situate in Snohomish County, Washington (Lengthy legal description in appraiser's files.)

ACCESS:	Good from 21st Street
PRESENT USE:	Industrial
ZONING:	M I, heavy manufacturing
DIMENSIONS:	Irregular
AREA:	1.27 acres
SALE DATE:	12/15/70
PRICE:	$76,000
INSTRUMENT:	W.D.
TERMS:	Cash
E. TAX NO.:	Unrecorded
GRANTOR:	U.S.A.
GRANTEE:	Western Gear, Inc.
CONFIRMED:	William Iverson - Division Controller, 10/29/71

PROPERTY DESCRIPTION: This sale is filled industrial land which was improved with a 1 and 2 story wood frame building containing 25,739 sq.ft. Western Gear had leased the building prior to the sale and the property was located within existing Western Gear ownerships. Building has been vacated since purchase and has no contribution value.

ANALYSIS:		Total Value	Unit Value
Land:	1.27 acres or 55,321 sq.ft.	$76,000	$1.37/sq.ft.

COMPARABLE LAND SALE NO. 9

ADDRESS OR LOCATION: North side of East Waterway,
on 21st Street
Everett, Washington

LEGAL DESCRIPTION: Portion of the Southwest 1/4 of the Northwest 1/4 of Section 19, Township 29 North, Range 5 E, W.M., situate in Snohomish County, Washington (Lengthy legal description in appraiser's files.)

ACCESS:	Good from 21st Street
PRESENT USE:	Industrial
ZONING:	M I, heavy manufacturing
DIMENSIONS:	Irregular
AREA:	1.27 acres
SALE DATE:	12/15/70
PRICE:	$76,000
INSTRUMENT:	W.D.
TERMS:	Cash
E. TAX NO.:	Unrecorded
GRANTOR:	U.S.A.
GRANTEE:	Western Gear, Inc.
CONFIRMED:	William Iverson - Division Controller, 10/29/71

PROPERTY DESCRIPTION: This sale is filled industrial land which was improved with a 1 and 2 story wood frame building containing 25,739 sq.ft. Western Gear had leased the building prior to the sale and the property was located within existing Western Gear ownerships. Building has been vacated since purchase and has no contribution value.

ANALYSIS:		Total Value	Unit Value
Land:	1.27 acres or 55,321 sq.ft.	$76,000	$1.37/sq.ft.

COMPARABLE LAND SALE NO. 109

ADDRESS OR LOCATION: Apex of Steamboat Slough & Union Slough with Puget Sound Snohomish County, Washington

LEGAL DESCRIPTION: A portion of Government Lot 1, lying west of the Burlington Northern Railway, and between Steamboat and Union Sloughs in Section 5, Township 29 N., Range 5 E, W.M., situate in Snohomish County, State of Washington.

ACCESS:	From driveway across railroad
PRESENT USE:	Vacant
ZONING:	H I, heavy industrial
DIMENSIONS:	Irregular
AREA:	5.31 acres
SALE DATE:	6/1/72
PRICE:	$80,000
INSTRUMENT:	R.E.C.
E. TAX NO.:	4613
GRANTOR:	Allen Ledford
GRANTEE:	Donald Hansen

PROPERTY DESCRIPTION: The property is located one mile north of the Snohomish River and Everett, Washington, along Steamboat Slough. Access is poor from a driveway across the Burlington Northern Railroad ownership. The majority of the property has standing water and it is in the process of being filled.

There is no available sewer or water.

ANALYSIS:		Total Value	Unit Value
Land:	5.31 acres or 231,304 sq.ft	$80,000	$0.35/sq.ft.

COMPARABLE LAND SALE NO. 1D

ADDRESS OR LOCATION: N.E. Quadrant Highway 99 N. and Walnut Street
Everett, Washington

LEGAL DESCRIPTION: Portion of the Southeast 1/4 of the Southeast 1/4 of Section 8, Township 29 N., Range 5 E, W.M.; situate in County of Snohomish, State of Washington. (Lengthy legal description in appraiser's file.)

ACCESS:	Good from Walnut Street
PRESENT USE:	Industrial
H & B USE:	Industrial
ZONING:	M I, heavy manufacturing
DIMENSIONS:	Very irregular
AREA:	3 acres ±
SALE DATE:	5/29/69
PRICE:	$139,000
INSTRUMENT:	R.E.C.
TERMS:	$40,310 down, $4,419.10/month @ 7% for two years, then lump sum payment
E. TAX NO.:	07012
GRANTOR:	Arthur Benson, et al
GRANTEE:	Weyerhaeuser Co.
CONFIRMED:	Allan T. Smith, Director Bus. Systems Weyerhaeuser Co., 4/24/70

PROPERTY DESCRIPTION: The property is located in the north end of Everett at Highway 99 and Alverson Blvd. It has a very irregular shape, is 50 feet below street grade but is level. There was a small commercial building of interim rental value only.

Weyerhaeuser had staff appraisals and felt the price was fair. The primary motivation for purchase was to protect ingress and egress to their plant because they previously had only easement across the sale property.

ANALYSIS:		Total Value	Unit Value
Land:	3 acres± 130,680 sq.ft.	$139,000	$1.06/sq.ft.

COMPARABLE LAND SALE NO. 11

ADDRESS OR LOCATION: Smith Island, between Highway 99 and Burlington Northern Railroad Snohomish County, Washington

LEGAL DESCRIPTION: A portion of Government Lot 6 and a portion of the Northeast 1/4, Southeast 1/4 and a portion of the Southeast 1/4, southeast 1/4, Section 5, Township 29 N., Range 5 E, W.M., situate in Snohomish County, Washington. (Lengthy legal description in appraiser's file.)

ACCESS:	Good from Highway 99
PRESENT USE:	Vacant
ZONING:	H I, heavy industrial
DIMENSIONS:	Irregular
AREA:	3.51 acres
SALE DATE:	6/12/72
PRICE:	$69,500
INSTRUMENT:	W.D.
TERMS:	Cash
E. TAX NO.:	4739
GRANTOR:	William Snelson, et al
GRANTEE:	Carl Plochowietz

PROPERTY DESCRIPTION: This sale is located on Smith Island approximately three miles north of central Everett. It doesn't have access to tidelands and it is situated approximately 10' below the grade of Highway 99. Property is zoned to permit heavy industrial usage and it has good rail frontage along one entire side. It has a depth ranging from 270' to 240'.

ANALYSIS:		Total Value	Unit Value
Land:	3.51 acres 152,896 sq.ft.	$69,500	$0.45/sq.ft.

COMPARABLE LAND SALE NO. 12

ADDRESS OR LOCATION: Foot of California Avenue, extending from Pier 3 to Scott Paper Co. Everett, Washington

LEGAL DESCRIPTION: Tract 5, Everett Tidelands and a portion of Government Lot 4, Section 19, Township 29 N., Range 5 E., W.M., situate in Snohomish County, Washington (Lengthy metes and bounds description in appraiser's file.)

ACCESS:	Good and unrestricted
PRESENT USE:	Vacant
ZONING:	M I, heavy manufacturing
DIMENSIONS:	Irregular
AREA:	12.3 acres ±
SALE DATE:	10/28/70 and 4/23/71
PRICE:	$564,120
INSTRUMENT:	Q.C.D.
TERMS:	Cash
E. TAX NO.:	11073
GRANTOR:	Burlington Northern Railway
GRANTEE:	Port of Everett

PROPERTY DESCRIPTION: This property is a tract of industrial land in the central Everett waterfront consisting of approximately 2.1 acres of filled uplands and 10.2 acres of deep water tidelands.

Zoning permits heavy industrial use and all utilities are available.

ANALYSIS:		Total Value	Unit Value
Land:	12.3 acres 535,788 sq.ft.	$564,120	$1.05/sq.ft.

LEASE EXTENSION

THIS LEASE EXTENSION, made in triplicate this 8th day of June, 1970, between SAGINAW SHINGLE COMPANY (a Washington Corporation) Lessor, and CRUISE-A-HOME, INC. (a Washington Corporation whose Corporation name was formerly ARETCO, INC.), Lessee,

W I T N E S S E T H:

WHEREAS Lessor and Lessee have heretofore entered into a Lease (consisting of six pages, including Rider #1) dated April 1, 1969 (a copy of which Lease and Rider is attached to this Lease Extension as Exhibit "A") leasing premises in Snohomish County, Washington and fully described in said Rider #1 of said Exhibit "A", and

WHEREAS said Lease provides for a term of lease of five (5) years commencing on the first day of May, 1969 and ending on the 30th day of April, 1974, inclusive with a rental of Four Hundred Dollars ($400.00) per month, and

WHEREAS said Parties desire to extend the term of said Lease for two (2) years at the same rental and on the same terms and conditions as set forth in said Lease dated April,1,,1969,

NOW THEREFORE in consideration of the premises and of the mutual covenants and agreements of the Parties herein provided, and by way of extending the term of said lease for two years; the Lessor does hereby lease to the Lessee and the Lessee does hereby lease from the Lessor those certain premises situated in the City of Everett, County of Snohomish, State of Washington described at Rider #1 attached to Exhibit "A" hereto attached for a term commencing at the end of the term set forth on the said Lease (to wit: May 1, 1974) and ending on the 30th day of April, 1976

inclusive upon the same terms, conditions, and rental as set forth in the said Lease dated April 1, 1969.

IN WITNESS WHEREOF the Parties hereto have executed this Lease Extension on this 8th day of June, 1970.

SAGINAW SHINGLE COMPANY

By _____
Its Vice President

CRUISE-A-HOME, INC.
(Formerly Aretco, Inc.)

By _____
Its PRESIDENT

STATE OF WASHINGTON)
) ss
County of Grays Harbor)

On this 8 day of June, 1970 before me personally appeared L. L. Murchy to me known to be the Vice President and _____ to me know to be the _____ of Saginaw Shingle Company, the corporation that executed the within and foregoing instrument and acknowledged the same instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute the said instrument and that the seal affixed thereto is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year first above written.

_____
Notary Public in and for the State of Washington, residing at Aberdeen

LEASE

THIS LEASE, made in triplicate this 1st day of April, 19 69, between SAGINAW SHINGLE COMPANY (A WASHINGTON CORPORATION), Lessor, and ARETCO, INC. (A WASHINGTON CORPORATION) Lessee,

WITNESSETH:

1. The Lessor does hereby lease to Lessee, and Lessee does hereby lease from Lessor, those certain premises situate in the City of Everett, Snohomish County State of Washington, described as ~~follows:~~ the easterly 200 feet of the real premises described at Rider #1 attached hereto.

hereinafter called "premises."

PURPOSE

2. The premises are to be used for the purpose of boat and general construction and sales, and related business

and for no other purpose, without the written consent of Lessor.

TERM

3. The term of this lease shall be for five years, and shall commence on the 1st day of May, 19-69, and end on the 30th day of April, 19 74, inclusive.

RENT

4. Lessee covenants and agrees to pay the Lessor as rental for said premises a ~~minimum~~ monthly rental of $400.00

in lawful money of the United States in advance on the 1st day of each calendar month of the lease term, to Lessor or to such other party or at such other place as the Lessor may hereafter designate. In the event percentage rent is payable hereunder by the Lessee, it shall be paid in the manner and at the time as set forth in the rider attached hereto and by reference made a part of this lease.

CONSIDERATION

5. As partial consideration for the execution of this lease, the Lessee has this day paid the Lessor the sum of Eight hundred and 00/100 ($800.00), the receipt of which is hereby acknowledged. If the Lessee shall have fully complied with all of the covenants, agreements, terms and conditions of this lease, but not otherwise, said sum so paid shall be credited on the payment of the first and last month's ~~minimum~~ rental of the term of this lease.

REPAIRS

6. The premises have been inspected and are accepted by Lessee in their present condition, and Lessee will at all times keep the premises neat, clean and in a sanitary condition, and will replace any glass of all windows and doors as may become cracked or broken, and except for reasonable wear and tear and damage by fire or other unavoidable casualty, will at all times preserve said premises in as good repair as they now are or may hereafter be put to. All repairs shall be at Lessee's sole cost and expense, except outside walls, roof and foundation, and Lessee agrees that at the expiration or sooner termination of this lease, Lessee will quit and surrender the said premises without notice, and in a neat and clean condition, and will deliver up all keys belonging to said premises to the Lessor or Lessor's agents.

UTILITIES

7. The Lessee hereby covenants and agrees to pay all charges for heat, light and water and for all other public utilities which shall be used in or charged against the leased premises during the full term of this lease.

In the event the leased premises are a part of a building or larger premises to which such charges are charged as a whole, with the consent of the Lessor, then Lessee agrees to pay, upon demand, a proper and fair share of said charges.

ACCIDENTS

8. All personal property on said leased premises shall be at the risk of Lessee. Lessor or Lessor's agents shall not be liable for any damage, either to person or property, sustained by Lessee or others, caused by any defects now in said premises or hereafter occurring therein, or due to the building in which the leased premises are situate, or any part or appurtenance thereof, becoming out of repair, or caused by fire or by the bursting or leaking of water, gas, sewer or steam pipes, or from any act or neglect of employees, co-tenants or other occupants of said building, or any other persons, including Lessor or Lessor's agent, or due to the happening of any accident from whatsoever cause in and about said building. Lessee agrees to defend and hold Lessor and Lessor's agent harmless from any and all claims for damages suffered or alleged to be suffered in or about the leased premises by any person, firm or corporation.

CARE OF PREMISES

9. The Lessor shall not be called upon to make any improvement or repair of any kind upon said premises, and said premises shall at all times be kept and used in accordance with the laws of the State of Washington and ordinances of the City in which said premises are located, and in accordance with all directions, rules and regulations of the health officer, fire

marshal, building inspector, or other proper officer of the City and County in which said premises are located, at the sole cost and expense of said Lessee; and Lessee will permit no waste, damage or injury to the premises, and at Lessee's own cost and expense, will keep all drainage pipes free and open and will protect water, heating and other pipes so that they will not freeze or become clogged, and will repair all leaks, and will also repair all damages caused by leaks or by reason of Lessee's failure to protect and keep free, open and unfrozen any of the pipes and plumbing on said premises. Lessee shall be liable for the removal of ice and snow from the sidewalks in front of and about said premises.

USE

10. The Lessee shall conduct and carry on in said premises, continuously during each and every business day of the term hereof, the business for which said premises are leased (if leased for business purposes), and shall not use the premises for illegal purposes. The Lessee agrees that no stock of goods will be carried, or anything done in or about the premises which will increase the present rate of insurance, provided, however, if the Lessee shall engage in such business with the consent of the Lessor, which business shall increase insurance rates, Lessee shall pay such increase.

LIENS AND INSOLVENCY

11. Lessee shall keep the leased premises and the property in which the leased premises are situated, free from any liens arising out of any work performed, materials furnished or obligations incurred by Lessee. In the event Lessee becomes insolvent, voluntarily or involuntarily bankrupt, or if a receiver, assignee or other liquidating officer is appointed for the business of the Lessee, then the Lessor may cancel this lease at Lessor's option.

ASSIGNMENT

12. Lessee shall not without the written consent of the Lessor or Lessor's agents, let or sublet the whole or any part thereof, nor assign this lease or any part thereof without the written consent of the Lessor, or Lessor's agents. In the event of any assignment so consented to, a minimum charge of 10% of one month's rent shall be made by Lessor for transferring or assigning this lease, and shall be paid by Lessee. This lease shall not be assignable by operation of law. If consent is once given by the Lessor to the assignment of this lease, or any interest therein, Lessor shall not be barred from afterwards refusing to consent to any further assignment.

ACCESS

13. Lessee will allow Lessor or Lessor's agents free access at all reasonable times to said premises for the purpose of inspection or of making repairs, additions or alterations to the premises or any property owned by or under the control of Lessor, but this right shall not be construed as an agreement on the part of the Lessor to make any repairs, all of such repairs to be made by the Lessee as aforesaid. The Lessor shall have the right to place and maintain "For Rent" signs in a conspicuous place on said premises for 30 days prior to the expiration of this lease.

POSSESSION

14. In the event of the inability of Lessor to deliver possession of the premises, or any portion thereof, at the time of the commencement of the term of this lease, neither Lessor nor Lessor's agents shall be liable for any damage caused thereby, nor shall this lease thereby become void or voidable, nor shall the term herein specified be in any way extended, but in such event, Lessee shall not be liable for any rent until such time as Lessor can deliver possession. If the Lessor shall deliver possession of the premises to the Lessee prior to the commencement date of this lease, Lessee agrees to accept same at such time and both Lessor and Lessee agree to be bound by all of the provisions and obligations hereunder during such prior period.

FIRE AND OTHER CASUALTY

15. In the event the premises are destroyed or damaged by fire, earthquake or other casualty to such an extent as to render the same untenantable in whole or in a substantial part thereof, it shall be optional with the Lessor to rebuild or repair the same; and after the happening of any such contingency, the Lessee shall give Lessor or Lessor's agents immediate written notice thereof. Lessor shall have not more than 90 days after date of such notification to notify the Lessee in writing of Lessor's intentions to rebuild or repair said premises, or the part so damaged as aforesaid, and if Lessor elects to rebuild or repair said premises, Lessor shall prosecute the work of such rebuilding or repairing without unnecessary delay, and during such period the rent of said premises shall be abated in the same ratio that that portion of the premises rendered for the time being unfit for occupancy shall bear to the whole of the leased premises. If the Lessor shall fail to give the notice aforesaid, Lessee shall have the right to declare this lease terminated by written notice served upon the Lessor or Lessor's agents.

In the event the building in which the premises hereby leased are located shall be destroyed or damaged by fire, earthquake or other casualty (even though the premises hereby leased shall not be damaged thereby) to such an extent that in the opinion of Lessor it shall not be practicable to rebuild or repair, then it shall be optional with Lessor to terminate this lease by written notice served on Lessee within 90 days after such destruction or damage.

NOTICES

16. Any notice required to be served in accordance with the terms of this lease, shall be sent by mail, the notice from the Lessee to be sent to the Lessor or Lessor's agents, and the notice from the Lessor to be sent to Lessee at the leased premises.

GOVERNMENTAL FEES

17. All fees due the city, county or state on account of any inspection made on said leased premises by any officer thereof, shall be paid by Lessee.

SIGNS

18. All signs or symbols placed in the windows or doors of the premises, or upon any exterior part of the building, by the Lessee shall be subject to the approval of the Lessor or Lessor's agents. In the event Lessee shall place signs or symbols on the exterior of said building, or in the windows or doors where they are visible from the street, that are not satisfactory to the Lessor or Lessor's agents, the Lessor or Lessor's agents may immediately demand the removal of such signs or symbols, and the refusal of the Lessee to comply with such demand within a period of 24 hours will constitute a breach of this lease, and entitle the Lessor to immediately recover possession of said premises in the manner provided by law. Any signs so placed on the premises shall be so placed upon the understanding and agreement that Lessee will remove same at the termination of the tenancy herein created and repair any damage or injury to the premises caused thereby, and if not so removed by Lessee then Lessor may have same so removed at Lessee's expense.

ALTERATIONS

19. Lessee shall not make any alterations, additions or improvements in said premises, without the consent of Lessor in writing first had and obtained, and all alterations, additions and improvements which shall be made, shall be at the sole cost and expense of Lessee, and shall become the property of the Lessor, and shall remain in and be surrendered with the premises as a part thereof at the termination of this lease, without disturbance, molestation or injury. If the Lessee shall perform work with the consent of the Lessor, as aforesaid, Lessee agrees to comply with all laws, ordinances, rules and regulations of the City and County in which said premises are located or any other authorized public authority. The Lessee further agrees to save Lessor free and harmless from damage, loss or expense arising out of the said work.

DEFAULT & RE-ENTRY

20. If any rents above reserved, or any part thereof, shall be and remain unpaid when the same shall become due, or if lessee shall violate or default in any of the covenants and agreements herein contained, then the Lessor may cancel this lease upon giving the notice required by law, and re-enter said premises, but notwithstanding such re-entry by the Lessor, the liability of the Lessee for the rent provided for herein shall not be extinguished for the balance of the term of this lease, and Lessee covenants and agrees to make good to the Lessor any deficiency arising from a re-entry and reletting of the premises at a lessor rental than herein agreed to. The Lessee shall pay such deficiency each month as the amount thereof is ascertained by the Lessor.

COSTS AND ATTORNEY'S FEES

21. If by reason of any default on the part of the Lessee it becomes necessary for the Lessor to employ an attorney or in case Lessor shall bring suit to recover any rent due hereunder, or for breach of any provision of this lease or to recover possession of the leased premises, or if Lessee shall bring any action for any relief against Lessor, declaratory or otherwise, arising out of this lease and Lessor shall prevail in such action, then and in any of such events Lessee shall pay Lessor a reasonable attorney's fee and all costs and expenses expended or incurred by the Lessor in connection with such default or action.

NON-WAIVER OF BREACH

22. The failure of the Lessor to insist upon strict performance of any of the covenants and agreements of this lease, or to exercise any option herein conferred in any one or more instances, shall not be construed to be a waiver or relinquishment of any such, or any other covenants or agreements, but the same shall be and remain in full force and effect.

REMOVAL OF PROPERTY

23. In the event of any entry in, or taking possession of, the leased premises as aforesaid, the Lessor shall have the right, but not the obligation, to remove from the leased premises all personal property located therein, and may store the same in any place selected by Lessor, including but not limited to a public warehouse, at the expense and risk of the owners thereof, with the right to sell such stored property, without notice to Lessee, after it has been stored for a period of thirty (30) days or more, the proceeds of such sale to be applied first to the cost of such sale, second to the payment of the charges for storage, if any, and third to the payment of any other sums of money which may then be due from ~~Lessee to Lessee~~ LESSEE TO LESSOR under any of the terms hereof, the balance if any to be paid to Lessee.

HEIRS AND SUCCESSORS

24. Subject to the provisions hereof pertaining to assignment and subletting, the covenants and agreements of this lease shall be binding upon the heirs, legal representatives, successors and assigns of any or all of the parties hereto.

HOLD-OVER

25. If the Lessee shall, with the written consent of Lessor, hold over after the expiration of the term of this lease, such tenancy shall be for an indefinite period of time on a month to month tenancy, which tenancy may be terminated as provided by the Laws of the State of Washington. During such tenancy Lessee agrees to pay to the Lessor the same rate of rental as set forth herein, unless a different rate is agreed upon, and to be bound by all of the terms, covenants, and conditions as herein specified, so far as applicable.

RIDERS

26. The riders, if any, attached hereto, are made a part of this lease by reference.

27. Lessee shall pay a pro-rata share (on a square-foot basis) of any increase in real estate taxes on the demised premises above the level in effect for 1969.

28. Lessor will place the roof of the buildings on the demised premises in good and usable condition at the inception of this lease.

~~29. Lessor grants to lessee an option to renew this lease for an additional term of five years by giving lessor six months' written notice (at the place of payment of rent) of lessee's intention so to do, but this option shall not be available to lessee, if lessor shall have a sale of the demised premises to Scott Paper Company closeable when the original five years terms of this lease expires if it is not renewed.~~

30. Lessor grants to Lessee throughout the term of the lease and any renewal thereof the right to use and cross the entire property now owned by Lessor of which the demised premises form a part (as described in paragraph 1 of this lease) by means of the road now existing on said entire property (to a width not exceeding 30 feet) for purposes of access to the water for launching and bringing ashore boats and marine products in connection with Lessor's business.

31. Lessor agrees to maintain fire and extended coverage insurance for the full value of the buildings situated on the demised premises and lessee agrees to maintain insurance on the contents and tenants improvements in said building. Lessee and Lessor do each herewith and hereby release and relieve the other, and waive their entire claim of recovery for loss, damage, injury, and all liability of every kind and nature which may arise out of, or be incident to, fire and extended coverage perils, in, on, or about the premises herein described, whether due to the negligence of either of said parties, their agents, or employees, or otherwise.

32. Lessee will not interfere with, nor shall this Lease restrict, Scott Paper Company's dumping on the said entire premises, except dumping on the demised portion thereof or on the said road.

IN WITNESS WHEREOF the parties hereto have executed this lease the day and year first above written.

SAGINAW SHINGLE COMPANY	ARETCO, INC.
[signature]	by [signature], its president
Vice President	
LESSOR	**LESSEE**

CORPORATE

STATE OF WASHINGTON,
COUNTY OF ~~KING~~ Pierce } ss.

On this 16th day of April A. D. 1969, before me personally appeared R. S. Moseley to me known to be the Vice-President and ..... to me known to be the ..... of Seaman Shingle Co. the corporation that executed the within and foregoing instrument and acknowledged the same instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed thereto is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year first above written.

Claudia L. Hagerman

Notary Public in and for the State of Washington, residing at ~~Seattle~~ Hagerman

STATE OF WASHINGTON,
COUNTY OF KING } ss.

On this ..... day of ..... A. D. 19....., before me personally appeared ..... to me known to be the ..... and ..... to me known to be the ..... of ..... the corporation that executed the within and foregoing instrument and acknowledged the same instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed thereto is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year first above written.

.....

Notary Public in and for the State of Washington, residing at Seattle.

INDIVIDUAL

STATE OF WASHINGTON,
COUNTY OF KING } ss.

This is to certify that on this ..... day of ..... A. D. 19....., before me the undersigned, a Notary Public in and for the State of Washington, duly commissioned and qualified, personally appeared ..... to me known to be the individual ..... described in and who executed the within and foregoing instrument, and acknowledged to me that ..... signed and sealed the same as ..... free and voluntary act and deed, for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year first above written.

.....

Notary Public in and for the State of Washington, residing at Seattle.

STATE OF WASHINGTON,
COUNTY OF KING } ss.

This is to certify that on this ..... day of ..... A. D. 19....., before me the undersigned, a Notary Public in and for the State of Washington, duly commissioned and qualified, personally appeared ..... to me known to be the individual ..... described in and who executed the within and foregoing instrument, and acknowledged to me that ..... signed and sealed the same as ..... free and voluntary act and deed, for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year first above written.

.....

Notary Public in and for the State of Washington, residing at Seattle

APPENDIX H

PRIOR ENVIRONMENTAL REPORTS

TECHNICAL MEMORANDUM

LANDAU ASSOCIATES
ENVIRONMENTAL | GEOTECHNICAL | NATURAL RESOURCES

TO: Eric Russell, Port of Everett

FROM: Larry Beard, P.E., and Erik Gerking

DATE: June 20, 2005

RE: AMERON INTERNATIONAL LEASEHOLD
ENVIRONMENTAL INVESTIGATION OF OIL AFFECTED AREA
PORT OF EVERETT, WASHINGTON

INTRODUCTION

This technical memorandum presents the results of a limited environmental investigation of the Ameron International leasehold (Site) that was conducted by Landau Associates on behalf of the Port of Everett (Port). The purpose of this investigation was to evaluate potential soil and groundwater petroleum hydrocarbon contamination in an area near the Site's northern property boundary, which Ameron discovered during the repair of a stormwater line.

The initial Site reconnaissance for this investigation was conducted on November 12, 2004, under our on-call service agreement with the Port. Following the Site reconnaissance, the soil and groundwater investigation was conducted in accordance with procedures presented in our January 5, 2005 proposal to the Port. The environmental data generated by this investigation were gathered and evaluated consistent with the data gaps investigation work plan for the North Marina Redevelopment site (Landau Associates 2005a).

Figure 1 shows the project vicinity, and Figure 2 presents a site plan showing investigation locations and their relationship to Site features. The remainder of this technical memorandum presents the investigation field activities, results, and conclusions.

FIELD ACTIVITIES

The investigation field activities were conducted on two separate Site visits, November 12, 2004 and January 20, 2005. These activities included an initial Site reconnaissance and a subsequent Geoprobe™ investigation, which are described below.

Site Reconnaissance

Erik Gerking from Landau Associates' Edmonds office visited the Site with Poli Luis from the Port on November 12, 2004 to observe the petroleum-impacted soil and groundwater that Ameron reportedly discovered several weeks prior while excavating a damaged stormwater line. The purpose of

this visit was to provide a preliminary evaluation of Site conditions and develop recommendations for further investigation.

The stormwater line is aligned generally with the northern property boundary of the Site and extends to the 12th Street channel (point of discharge), about 500-ft west of the excavation. Figure 2 shows the location of the stormwater line and the excavation.

At the time of the reconnaissance, the excavation was about 10 ft wide and about s6 ft deep. Surface water in the excavation was about 4 ft below ground surface (BGS). Approximately 15 yd^3 of the excavated material was stockpiled near the northern property boundary, west of the excavation.

The soil material observed in the stockpile and the side walls of the excavation consisted of dark brown to black gravely sand, mixed with discolored soil and construction debris. In places, the soil had a moderate to strong petroleum odor, but no sheen. The discolored soil and debris consisted of green, red, and orange silty sand-size granular material, and concrete debris. The concrete debris ranged from 6inches to 3-ft in diameter.

One soil sample was collected from the soil stockpile and analyzed for total petroleum hydrocarbons (NWTPH-HCID) with follow-up diesel- and oil-range TPH analyses (NWTPH-Dx), volatile organic hydrocarbons (VOCs), semivolatile organic hydrocarbons (SVOCs), and polychlorinated biphenyls (PCBs). The results of these analyses are presented in the results section below.

The excavation was backfilled and covered over with fresh crushed rock surfacing, according to Ameron personnel. The status of the stockpile is unknown.

Geoprobe™ Investigation

A subsequent Geoprobe™ investigation was conducted on January 20, 2005 in the vicinity of the excavation to delineate the extent of affected soil and groundwater associated with the conditions observed during the Site reconnaissance. The investigation consisted of exploring subsurface soil and groundwater conditions at eight boring locations. Borings were installed in the immediate vicinity of the stormwater line excavation. Borings were also installed along its length to the west of the excavation because the stormwater line potentially acts as a preferential pathway for contaminant flow. Six borings (G-FA-1, and G-FA-4 through G-FA-8) were advanced to a depth of 12-ft BGS, and two borings (G-FA-1 and G-FA-2) were installed to a depth of 8 ft BGS. A truck-mounted direct-push Geoprobe™ unit operated by Cascade Drilling Inc. of Woodinville, Washington was used to drill the borings. The exploration locations are presented on Figure 2.

It should be noted that refusal was encountered at a number of boring locations prior to achieving the intended exploration depths at the completed boring locations, which is consistent with the presence of the large diameter concrete debris observed in the excavation completed for the stormwater line repair.

Additionally, a void was encountered between about 3 and 7.5 ft BGS, which may be indicative of randomly deposited large concrete slabs or other debris.

Delineation of affected soil and groundwater was achieved by field screening and laboratory analysis. Field screening was accomplished using instrumentation [e.g., photoionization detector (PID) meter] and observations (i.e., presence of discoloration, odors, and sheen). Soil classification was accomplished in the field using the Unified Soil Classification System (USCS; see Attachment 1). Soil and groundwater samples were submitted for laboratory analyses to determine whether constituent concentrations are present in soil or groundwater that exceed cleanup screening levels, and to delineate the aerial extent of contamination for any constituents that exceed the cleanup screening levels.

Based on field screening observations, we noted the following conditions that were indicative of a potential release of hazardous substances:

- **G-FA-5 and G-FA-6:** Petroleum odor and sheen at 7 and 8 ft BGS, respectively.
- **G-FA-1 through G-FA-4:** A discrete, discolored layer of granular material similar in appearance to material stockpiled in the northwest corner of the Ameron facility. The material exhibited an odor characterized as a combination of wet concrete and petroleum hydrocarbons, and the material exhibited no sheen. The material may be some type of concrete manufacturing waste, and is similar in appearance and odor to the layer of contaminated soil encountered in Investigation Area i during the North Marina Redevelopment Phase II environmental site assessment (ESA; Landau Associates 2004).

Soil samples were collected from boring locations G-FA-5 (8 to 8.5 ft) and G-FA-8 (4 to 4.5 ft) to bound the lateral extent of the apparent petroleum hydrocarbon soil contamination observed in the stormwater line repair excavation. Groundwater samples were collected from borings G-FA-4 and G-FA-7 to evaluate potential groundwater quality impacts resulting from the apparent petroleum soil contamination, with the sample from G-FA-4 representing groundwater quality in the immediate vicinity of the affected area and the sample from G-FA-7 representing downgradient groundwater quality. Additionally, a soil sample collected from boring G-FA-4 (2 to 2.5 ft) was tested to characterize the discolored apparent concrete waste material.

The soil and groundwater samples collected to evaluate conditions associated with the apparent petroleum hydrocarbon impacts were tested for TPH in the diesel and oil ranges (NWTPH-Dx), VOCs [U.S. Environmental Protection Agency (EPA) Method 8260B]; priority pollutant metals (EPA Methods SW6000 – 7000 Series); SVOCs (EPA Method 8270C); and PCBs (for soil only; EPA Method 8082). The soil sample collected from boring G-FA-4 to characterize the apparent concrete waste material was tested for VOCs and selected metals.

RESULTS

This section presents the results of our investigation, including observed Site conditions and the results of chemical and physical testing. Chemical data were evaluated using the Washington State

Model Toxics Control Act (MTCA) cleanup levels for unrestricted site use, based on groundwater discharge to marine surface water, supplemented by MTCA Method A cleanup levels for unrestricted site use, as cleanup screening levels. These are the same screening criteria used to evaluate environmental conditions for the North Marina DGI (Landau Associates 2005b).

Geologic and Hydrogeologic Conditions

The ground surface in the investigation area consists of a sand and gravel (GP/SP) roadbase that is 0.5 to 1.5 ft thick. A discolored material ranging in grain size from a sand to a silty sand (SW to SM) was encountered in a 3- to 6-ft thick layer directly beneath the road base material at boring locations G-FA-1 through -4. The appearance of this layer ranged from white to green with dark green to black speckles. Underlying the road base layer, or the discolored layer (where present), hydraulic fill was encountered to the termination depth in all borings, except for G-FA-4. The hydraulic fill material encountered was typically fine to medium sand with silt (SP/SM). At location G-FA-4, fill material consisting of silty sand with gravel and crushed concrete was encountered to the termination depth of 8 ft BGS. Wood debris was encountered at locations G-FA-4 through G-FA-8.

As previously indicated, refusal was met during advancement of a number of borings. The depth of refusal appears to correspond to the fill layers overlying the hydraulic fill, and is likely associated with large slabs of broken concrete or other construction debris.

Groundwater was encountered during drilling between about 4 and 6 ft BGS. Boring logs are presented in Attachment 1.

Soil Quality

As described above, selected soil samples were analyzed for petroleum hydrocarbons; VOCs; metals (arsenic, cadmium, copper, lead, mercury, and zinc); SVOCs; and PCBs to evaluate soil quality associated with the apparent petroleum hydrocarbon impacts observed during excavation for repair of the stormwater line, and testing for VOCs and metals to evaluate environmental conditions associated with the apparent concrete waste material observed in the explorations completed in the excavation vicinity. Detected analytes for these analyses are presented in Table 1. Complete soil laboratory analytical results are presented in Attachment 2. All detected constituents were compared to their respective cleanup screening levels, also presented in Table 1.

As shown in Table 1, the only constituents detected above the soil cleanup screening levels in soil samples collected to characterize the apparent petroleum hydrocarbon affected area (stockpile samples 6-FA-5 and 6-FA-8) were carcinogenic polycyclic aromatic hydrocarbons (cPAH), PCBs (Aroclor 1254), zinc, and copper. Petroleum hydrocarbons in the diesel and oil ranges, and cPAHs, were also detected in the soil sample collected from boring G-FA-5, but at concentrations below the cleanup screening levels. Petroleum hydrocarbons and cPAH were not detected in the sample collected from Boring G-FA-8. Zinc

did not exceed the cleanup screening level in the soil samples collected from G-FA-5 or G-FA-8, and copper did not exceed the cleanup screening level in G-FA-8. PCBs were not tested for in the soil samples collected from G-FA-5 or G-FA-8.

Arsenic, copper, and zinc were the only constituents detected above their cleanup screening level in the sample collected from the apparent concrete waste material (G-FA-4). The sample contained arsenic at a concentration of 80 milligrams per kilogram (mg/kg), which is greater than the screening level of 20 mg/kg. Zinc was detected at 157 mg/kg, which is greater than the screening level of 101 mg/kg. Copper was detected at a concentration of 47 mg/kg, which is greater than the screening level of 36 mg/kg. No other metals or SVOCs were detected at concentrations greater than the cleanup screening levels in this sample, although a number of VOCs associated with petroleum hydrocarbons were detected at elevated concentrations.

Groundwater Quality

As described above, groundwater samples were analyzed for petroleum hydrocarbons VOCs, metals (arsenic, cadmium, copper, lead, mercury, and zinc), SVOCs, and cPAHs to evaluate whether the apparent petroleum hydrocarbon affected soil encountered in the excavation had impacted groundwater quality. All constituents were compared to their respective cleanup screening level. Detected analytes for these analyses are presented in Table 2. Groundwater analytical results for all analytes are presented in Appendix B.

TPH-Dx, VOCs, and cPAHs were not detected in either of the groundwater samples at concentrations greater than the cleanup screening levels. Arsenic was detected in the groundwater sample collected from Boring G-FA-7 at a concentration of 10 micrograms per liter (µg/L), which is slightly greater than the cleanup screening level (8 µg/L); no other metals were detected above respective cleanup levels in groundwater samples collected during this investigation.

Bis(2-ethylhexl)phthalate (BEHP) was detected in the groundwater sample collected from G-FA-7 at a concentration of 26 µg/L, which is greater than the screening level of 3.6 µg/L. No other SVOCs were detected in groundwater samples collected during this investigation. It should be noted that BEHP is a common laboratory contaminant that is not typically present in groundwater, so its presence may be the result of laboratory contamination.

Because zinc and copper were not detected in either groundwater sample at concentrations exceeding their respective cleanup screening level, and the soil cleanup screening level for both zinc and copper are based on protection of groundwater, the exceedance of the soil cleanup screening levels for these constituents are not considered indicative of contamination conditions.

CONCLUSIONS

Two conditions of environmental concern were identified near the north boundary of the Site, based on observations made during the original Site reconnaissance, the Geoprobe™ investigations, and the analytical results from laboratory testing,. The first condition of concern is the apparent petroleum hydrocarbon contamination encountered in the vicinity of an excavation advanced by Ameron to repair the stormwater line. The second condition of concern is the presence of what appears to be concrete waste material, potentially related to the operations of Ameron or their predecessor.

The apparent petroleum hydrocarbon contamination appears to be either localized in the immediate vicinity of the stormwater excavation, or originates on the property to the north and extends only a short distance onto the Site. Constituents of concern associated with this release appear to be limited to cPAH and PCBs based on the analytical results, but could include TPH in the oil or diesel range in localized areas.

The lateral extent of the apparent concrete waste material was not bounded during this investigation. Arsenic appears to be the only constituent of concern associated with this material, although elevated concentrations of a number of VOCs were also detected.

Arsenic and BEHP were the only constituents that exceeded the groundwater cleanup screening levels. As previously discussed, BEHP may be related to laboratory contamination rather than a release at the Site. Both of these constituents exceeded the screening levels at the sampling location (G-FA-7) located at a distance from the affected areas, but not at the sampling location (G-FA_4) located within the affected areas. As a result, these groundwater quality exceedances may not be related to observed affected areas defined by G-FA-1 through G-FA-4 (discolored layer) and G-FA-5 and G-FA-6 (petroleum impact).

LIMITATIONS

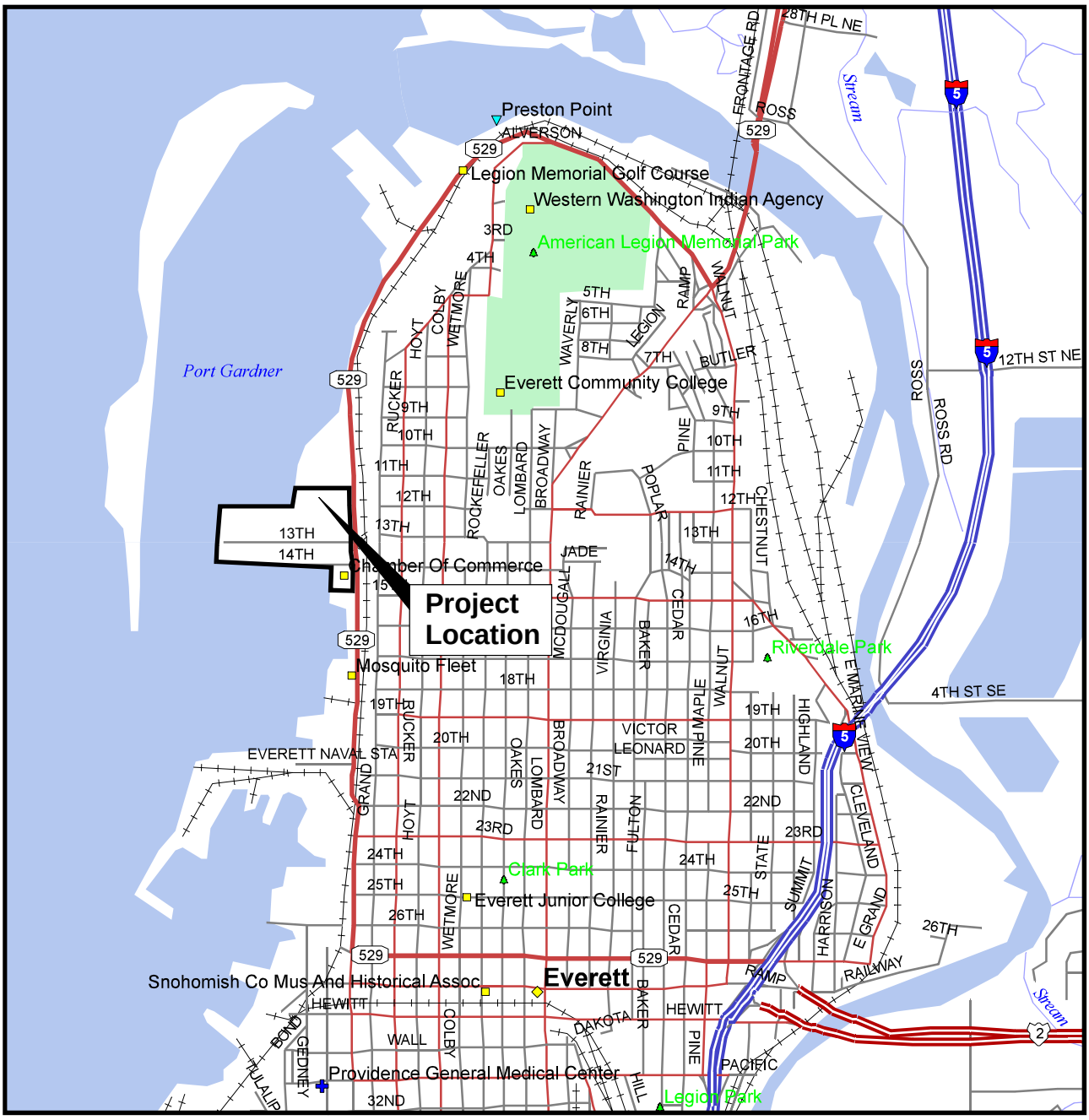
This technical memorandum has been prepared for the exclusive use of the Port of Everett for specific application to the Ameron International Leasehold environmental investigation, and potentially as part of the North Marina Redevelopment project. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of Landau Associates. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by Landau Associates, shall be at the user's sole risk. Landau Associates warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. We make no other warranty, either express or implied.

REFERENCES

Landau Associates. 2004. *Report, Phase II Environmental Site Assessment, North Marina Area, Port of Everett, Everett, Washington.* April 13.

Landau Associates. 2005a. *Final Work Plan, Data Gaps Investigation, North Marina Redevelopment Area, Port of Everett, Washington*. Prepared for Port of Everett. January 5.

Landau Associates. 2005b. *Ecology Review Draft, Data Gaps Investigation, North Marina Redevelopment Site, Port of Everett, Washington*. Prepared for Port of Everett. May 13.

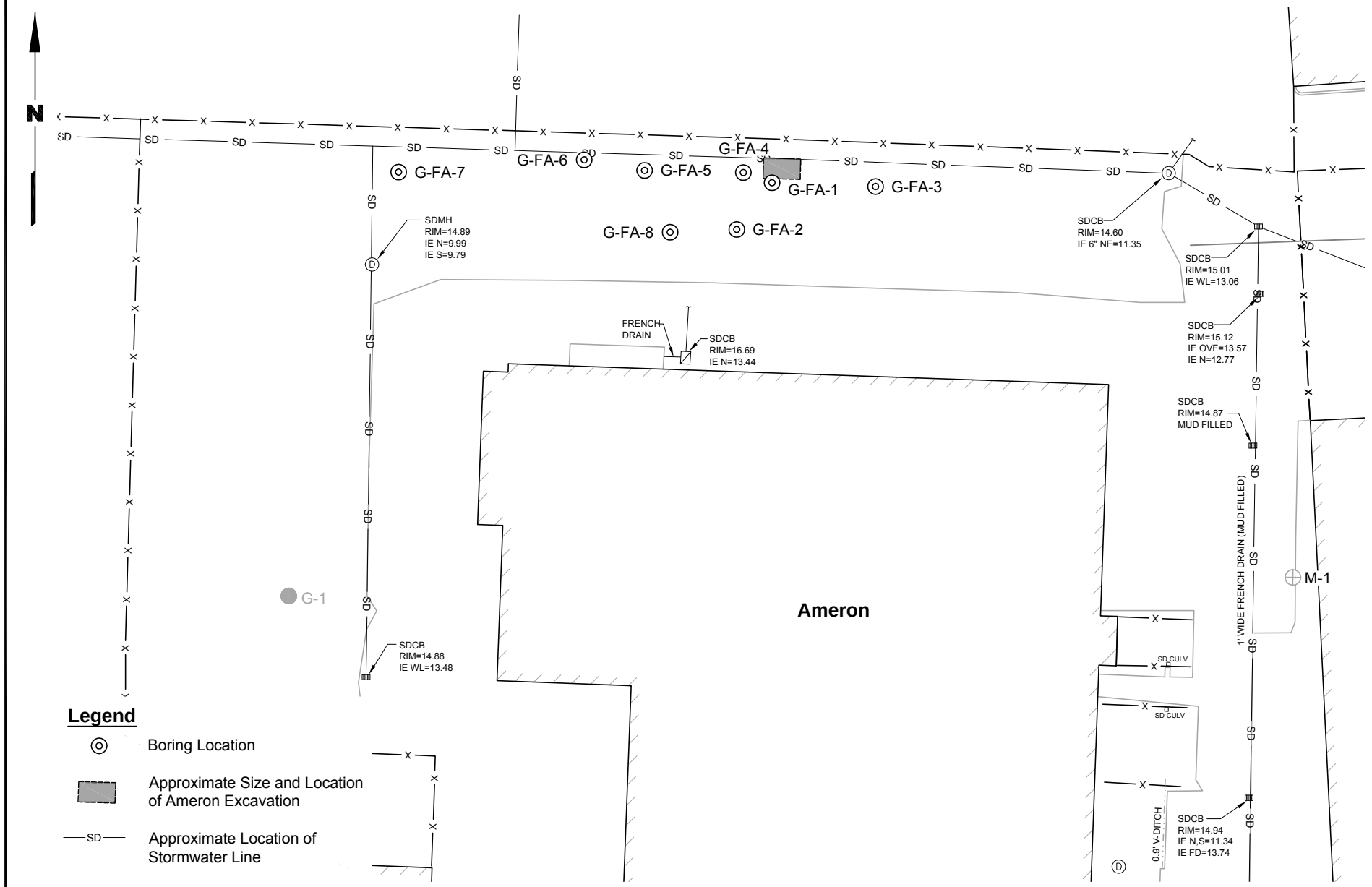


Map from DeLorme Street Atlas USA, 2002

Port of Everett/North Marina/Ameron Site Investigation | X:\147\0230\010\Tech Memo\Fig1.cdr 6/16/2005

LANDAU ASSOCIATES

North Marina Ameron Site Investigation Everett, Washington	**Vicinity Map**	Figure 1



LANDAU ASSOCIATES

North Marina
Ameron Site Investigation
Everett, Washington

Site Plan

Figure
2

TABLE 1
DETECTED SOIL ANALYTICAL RESULTS
AMERON INVESTIGATION OIL AFFECTED AREA
EVERETT, WASHINGTON

	Preliminary Screening level	STOCK PILE AMERON 0411231-01 11/12/04	G-FA-4 (2-2.5) HQ14A 1/20/2005	G-FA-5 (8-8.5) HQ14B 1/20/2005	G-FA-8 (4-4.5) HQ14C 1/20/2005
PETROLEUM HYDROCARBONS					
NWTPH-HCID (mg/kg)					
Diesel		**> 70** J	NA	NA	NA
Motor Oil		**>140** J	NA	NA	NA
NWTPH-D (mg/kg)					
Diesel	2,000	**110** J	NA	**120**	5.0 U
Motor Oil	2,000	**190** J	NA	**57**	10 U
VOLATILE ORGANIC COMPOUNDS					
Method 8260B (µg/kg)					
1,1,1-Trichloroethane	3,301,000	4.0 UJ	**3**	0.9 U	0.8 U
1,2,4-Trimethylbenzene	--	NA	**7,000**	0.9 U	0.8 U
1,3,5-Trimethylbenzene	--	NA	**5,300**	0.9 U	0.8 U
2-Butanone	48,000,000	14.0 UJ	**28**	4.4 U	3.9 U
Acetone	8,000,000	14.0 UJ	**300**	4.4 U	**7.7**
Ethylbenzene	60,000	4.0 UJ	**8,100**	0.9 U	0.8 U
Isopropylbenzene	8,000,000	NA	**170**	0.9 U	0.8 U
m,p-Xylene	160,000,000	4.0 UJ	**43,000**	0.9 U	**1.1**
Methylene chloride	6,900	**280** J	2 U	1.7 U	1.6 U
Naphthalene	138,000	NA	**24**	4.4 U	3.9 U
n-Butylbenzene	--	NA	**5**	0.9 U	0.8 U
n-Propylbenzene	--	NA	**190**	0.9 U	0.8 U
o-Xylene	160,000,000	4.0 UJ	**9,100**	0.9 U	0.8 U
Tetrachloroethene	90	4.0 UJ	**2**	0.9 U	0.8 U
Toluene	352,000	4.0 UJ	**180**	0.9 U	0.8 U
SEMIVOLATILE ORGANIC COMPOUNDS					
Method 8270C (µg/kg)					
Benzoic acid	320,000,000	**1,200** J		660 U	640 U
Naphthalene	1,600,000	470 UJ		**80**	64 U
Phenanthrene	--	**1,300** J		**210**	64 U
Fluoranthene	89,000	**1,400** J		**170**	64 U
Pyrene	2,400,000	**1,200** J		**180**	64 U
bis(2-Ethylhexyl)phthalate	13,000	470 UJ		**190**	64 U
Benzo[a]anthracene	TEQ	**640** J		**69**	64 U
Chrysene	TEQ	**730** J		**140**	64 U
Benzo[b]fluoranthene	TEQ	**660** J		66 U	64 U
Benzo[a]pyrene	137	**570** J		**79**	64 U
CPAH TEQ	137	**707.3**		**93.9**	64 U
PCBs (µg/kg)					
Method SW8082					
Aroclor-1248	40	**95** J	NA	NA	NA
Aroclor-1254	40	**140** J	NA	NA	NA
Aroclor-1260	40	**61** J	NA	NA	NA
Total PCBs	1,000	296	NA	NA	NA
TOTAL METALS (mg/kg)					
SW6000-7000 Series					
Arsenic	20	**13.9**	**80**	**13**	**15**
Copper	36	**119**	**47**	**37.1**	**32.8**
Lead	250	**97.5**	**50**	**19**	**13**
Zinc	101	**199**	**157**	**85.0**	**61.2**

NA = Not Analyzed.
U = Indicates the compound was analyzed for, but was not detected at the reported sample detection limi
J = Laboratory flag indicating the analyte was positively identified; the associated numerical value is the approximate concentratio of the analyte in the sample
UJ = The analyte was not detected in the sample; the rported sample reporting limit is an estimate
-- = no preliminary screening level criteria available.

Notes:
Framed cell indicates exceedance of preliminary screening level
Detected metals concentrations less than background levels are not considered exceedances of cleanup levels
Bold indicates detected value.

TABLE 2
DETECTED GROUNDWATER ANALYTICAL RESULTS
AMERON ENVIRONMENTAL INVESTIGATION, OIL AFFECTED AREA
EVERETT, WASHINGTON

	Preliminary Sreening level	G-FA-4 HQ15B 1/20/2005	G-FA-7 HQ15A 1/20/2005
VOLATILE ORGANIC COMPOUNDS			
Method 8260B (µg/L)			
Toluene	48,500	**1.10**	1.00 U
Ethylbenzene	6,910	**4.3**	1 U
m,p-Xylene	--	**17**	1 U
o-Xylene	--	**4.1**	1 U
SEMIVOLATILE ORGANIC COMPOUNDS (µg/L)			
Method 8270C			
bis(2-Ethylhexyl)phthalate	3.56	2.2 U	**26**
Dissolved Metals (µg/L)			
Arsenic	8	**8**	**10**
Copper	20	**0.6**	0.5 U

NA = Not Analyzed.
U = Indicates the compound was analyzed for, but was not detected at the reported sample detection limit.
J = Laboratory flag indicating the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
-- = no preliminary screening level criteria available.

Notes:
Framed cell indicates exceedance of preliminary screening level.
Detected metals concentrations less than background levels are not considered exceedances of cleanup levels.
Bold indicates detected value.

ATTACHMENT 1

Boring Logs

Soil Classification System

MAJOR DIVISIONS			GRAPHIC SYMBOL	USCS LETTER SYMBOL[1]	TYPICAL DESCRIPTIONS[2][3]
COARSE-GRAINED SOIL (More than 50% of material is larger than No. 200 sieve size)	GRAVEL AND GRAVELLY SOIL (More than 50% of coarse fraction retained on No. 4 sieve)	CLEAN GRAVEL (Little or no fines)		GW	Well-graded gravel; gravel/sand mixture(s); little or no fines
				GP	Poorly graded gravel; gravel/sand mixture(s); little or no fines
		GRAVEL WITH FINES (Appreciable amount of fines)		GM	Silty gravel; gravel/sand/silt mixture(s)
				GC	Clayey gravel; gravel/sand/clay mixture(s)
	SAND AND SANDY SOIL (More than 50% of coarse fraction passed through No. 4 sieve)	CLEAN SAND (Little or no fines)		SW	Well-graded sand; gravelly sand; little or no fines
				SP	Poorly graded sand; gravelly sand; little or no fines
		SAND WITH FINES (Appreciable amount of fines)		SM	Silty sand; sand/silt mixture(s)
				SC	Clayey sand; sand/clay mixture(s)
FINE-GRAINED SOIL (More than 50% of material is smaller than No. 200 sieve size)	SILT AND CLAY (Liquid limit less than 50)			ML	Inorganic silt and very fine sand; rock flour; silty or clayey fine sand or clayey silt with slight plasticity
				CL	Inorganic clay of low to medium plasticity; gravelly clay; sandy clay; silty clay; lean clay
				OL	Organic silt; organic, silty clay of low plasticity
	SILT AND CLAY (Liquid limit greater than 50)			MH	Inorganic silt; micaceous or diatomaceous fine sand
				CH	Inorganic clay of high plasticity; fat clay
				OH	Organic clay of medium to high plasticity; organic silt
	HIGHLY ORGANIC SOIL			PT	Peat; humus; swamp soil with high organic content

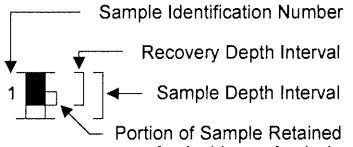
OTHER MATERIALS	GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
PAVEMENT		AC or PC	Asphalt concrete pavement or Portland cement pavement
ROCK		RK	Rock (See Rock Classification)
WOOD		WD	Wood, lumber, wood chips
DEBRIS		DB	Construction debris, garbage

Notes:
1. USCS letter symbols correspond to symbols used by the Unified Soil Classification System and ASTM classification methods. Dual letter symbols (e.g., SP-SM for sand or gravel) indicate soil with an estimated 5-15% fines. Multiple letter symbols (e.g., ML/CL) indicate borderline or multiple soil classifications.
2. Soil descriptions are based on the general approach presented in the *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)* outlined in ASTM D 2488. Where laboratory index testing has been conducted, soil classifications are based on the *Standard Test Method for Classification of Soils for Engineering Purposes*, as outlined in ASTM D 2487.
3. Soil description terminology is based on visual estimates (in the absence of laboratory test data) of the percentages of each soil type and is defined as follows:

Primary Constituent:	> 50%	- "GRAVEL," "SAND," "SILT," "CLAY," etc.
Secondary Constituents:	> 30% and ≤ 50%	- "very gravelly," "very sandy," "very silty," etc.
	> 15% and ≤ 30%	- "gravelly," "sandy," "silty," etc.
Additional Constituents:	> 5% and ≤ 15%	- "with gravel," "with sand," "with silt," etc.
	≤ 5%	- "trace gravel," "trace sand," "trace silt," etc., or not noted.

Drilling and Sampling Key

SAMPLE NUMBER & INTERVAL



SAMPLER TYPE

Code	Description
a	3.25-inch O.D., 2.42-inch I.D. Split Spoon
b	2.00-inch O.D., 1.50-inch I.D. Split Spoon
c	Shelby Tube
d	Grab Sample
e	Other - See text if applicable
1	300-lb Hammer, 30-inch Drop
2	140-lb Hammer, 30-inch Drop
3	Pushed
4	Other - See text if applicable

Groundwater

▽ ATD — Approximate water elevation at time of drilling (ATD) or on date noted. Groundwater levels can fluctuate due to precipitation, seasonal conditions, and other factors.

Field and Lab Test Data

Code	Description
PP = 1.0	Pocket Penetrometer, tsf
TV = 0.5	Torvane, tsf
PID = 100	Photoionization Detector VOC screening, ppm
W = 10	Moisture Content, %
D = 120	Dry Density, pcf
-200 = 60	Material smaller than No. 200 sieve, %
GS	Grain Size - See separate figure for data
AL	Atterberg Limits - See separate figure for data
GT	Other Geotechnical Testing
CA	Chemical Analysis

6/16/05 \\EDMDATA\GINT\GINT6\PROJECTS\147023.012.GPJ SOIL CLASS SHEET

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Port of Everett
Everett, Washington

Soil Classification System and Key

Figure 1-1

G-FA-1

SAMPLE DATA					SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	
0						GP/ SP	Brown, fine to coarse SAND and GRAVEL (dense, moist)(no odor, no sheen)(roadbase)	Groundwater not encountered.
						SP/ SM	Brown, fine to medium SAND with silt (loose, moist)(no odor, no sheen)(fill)	
2		b3						
	G-FA-1 2.7-3.7			0		SM/ SC	Brown with black speckles, fine to medium SAND and SILT with clay (dense, moist)(no odor, no sheen)(fill)	
4								
						SM	Brown, fine to medium SAND with silt (loose, wet)(petroleum / concrete odor, no sheen)(hydraulic fill)	
6		b3						
8								
10		b3						
12						WD	- Wood debris (~3" diameter chips)	

Boring Completed 01/20/05
Total Depth of Boring = 12.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

6/16/05 \\EDMDATA\GINT\GINT6\PROJECTS\147023.012.GPJ SOIL BORING LOG

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Log of Boring G-FA-1

Figure
1-2

G-FA-2

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						SW	Brown, fine to coarse SAND with gravel (dense, moist)(no odor, no sheen)(roadbase)	
						SW	Grey with light green speckles, gravelly, fine to medium SAND with silt (dense, moist)(petroleum/concrete odor, no sheen)(fill) Gravel layer without green granules at 1.7'	
2		b3						
	G-FA-2 2.7-3.2			0				
4						SM	Dark grey, fine to medium SAND with silt (loose, wet) (no odor, no sheen) (hydraulic fill)	▽ ATD
6		b3						
8								
10								
12								

Boring Completed 01/20/05
Total Depth of Boring = 8.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

6/16/05 \\EDMDATA\GINTGINT6\PROJECTS\147023.012.GPJ SOIL BORING LOG

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Everett, Washington

Log of Boring G-FA-2

Figure
1-3

G-FA-3

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Water Level

Drilling Method: Geoprobe™

Ground Elevation (ft):

Depth (ft)	Sample Number & Interval	Sampler Type	Test Data	USCS Symbol	
0				SW	Brown, fine to medium SAND with gravel (dense, moist)(no odor, no sheen)(roadbase)
				SM	White, silty, fine to medium SAND with gravel (very dense, damp)(petroleum/concrete odor, no sheen)(concrete waste materials)(fill)
2		e3			
4					▽ ATD
				SP	Grey, fine to medium SAND (loose, wet)(unidentifiable odor, no sheen)(hydraulic fill)
	G-FA-3 5-5.5		0		
6		e3			
8					
10					
12					

Boring Completed 01/20/05
Total Depth of Boring = 8.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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Port of Everett
Everett, Washington

Log of Boring G-FA-3

Figure
1-4

G-FA-4

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						GP/ SP	Brown, gravelly, fine to medium SAND with crushed concrete (dense, moist)(no odor, no sheen)(roadbase)	
						SW	Brown, fine to mediumd SAND with gravel (medium dense, moist)(no odor, no sheen)(Road Base)	
2	G-FA-4 2-2.5	e3		74		SM	Green, silty, fine SAND with crushed concrete and gravel (dense, moist)(petroleum/concrete odor, no sheen)(fill)	
						WD	Grey, sandy, WOOD debris with trace gravel (medium dense, moist)(no odor, no sheen)(fill)	
4						SM	Green to white, silty, fine SAND with gravel (dense, moist)(concrete odor, no sheen)(fill)	
6		e3						▽ ATD
8						SP/ SM	Brown, silty, fine SAND with gravel and crushed concrete (medium dense, wet)(no odor, no sheen)(fill)	
10		e3						
12								

Boring Completed 01/20/05
Total Depth of Boring = 12.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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Log of Boring G-FA-4

Figure
1-5

G-FA-5

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						GP	Brown, sandy, GRAVEL with organics (medium dense, moist)(no odor, no sheen)(roadbase)	
						SP	Tan, fine to medium SAND with silt (dense, moist)(no odor, no sheen)(fill)	
2		e3				WD	Wood debris	
							Void	
								▽ ATD
4								
		e3						
6								
8	G-FA-5 8-8.5			0		SM	Dark grey, silty, fine SAND (medium dense, wet)(petroleum odor, light sheen)(hydraulic fill)	
		e3						
10								
12								

Boring Completed 01/20/05
Total Depth of Boring = 12.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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Port of Everett
Everett, Washington

Log of Boring G-FA-5

Figure
1-6

G-FA-6

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						GP/ SP	Brown, fine to medium SAND and GRAVEL (dense, wet)(no odor, no sheen)(roadbase)	
						SP	Tan, fine to medium SAND with trace concrete residue and trace wood fragments (medium dense, moist)(no odor, no sheen)(fill)	
2		e3						
4								ATD
	G-FA-6 5.2-5.5			0		SM	Brown, fine SAND with silt (medium stiff, moist)(light hydrocarbon odor, no sheen)(fill)	
6		e3				SP	Tan, fine to medium SAND with trace concrete residue and trace wood fragments (medium dense, moist)(no odor, no sheen)(fill)	
						SM	Dark grey, fine SAND with silt (medium dense, moist)(petroleum odor, light sheen) (hydraulic fill)	
8								
10		e3					Silt content increases to a silty, fine SAND at 11'	
12								

Boring Completed 01/20/05
Total Depth of Boring = 12.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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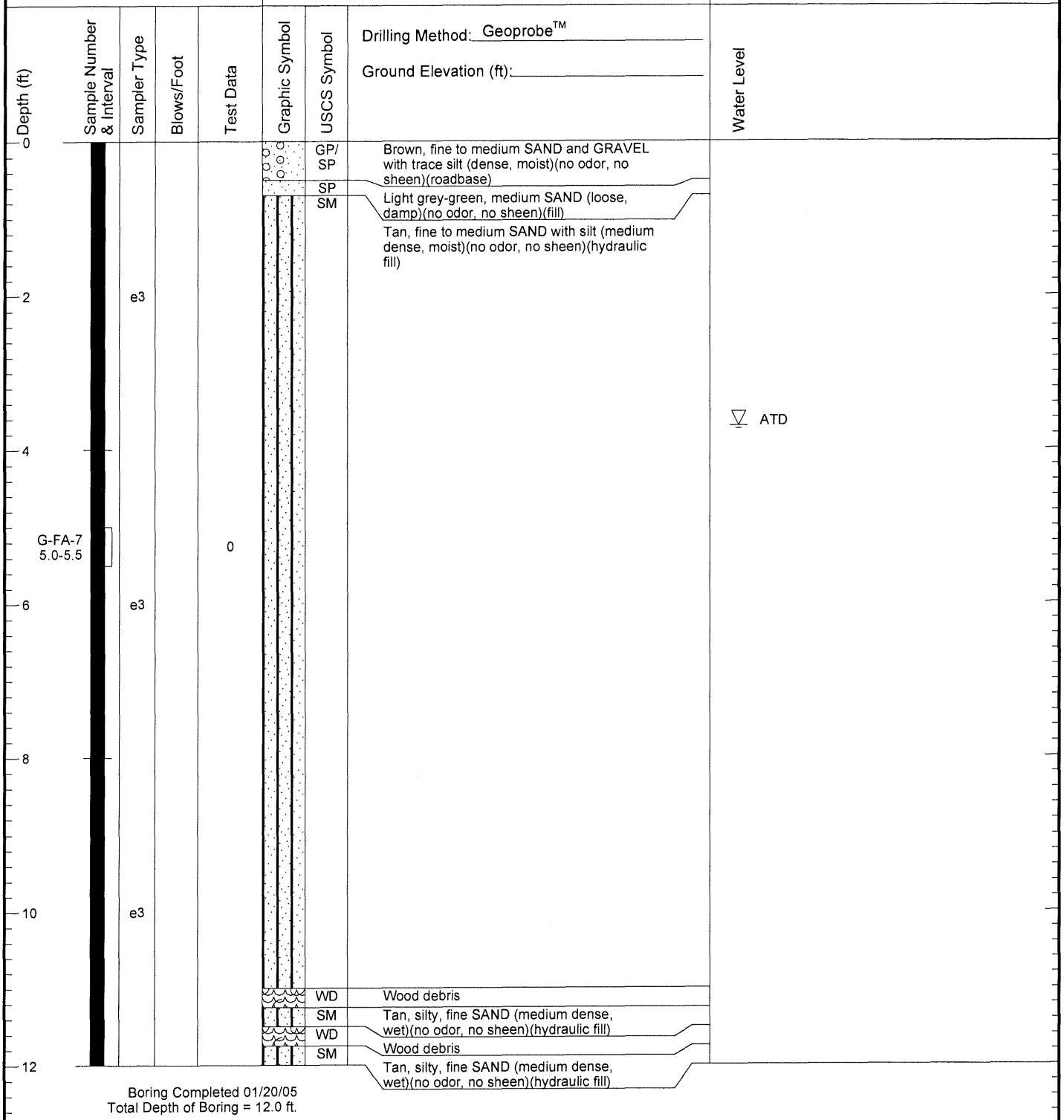
Port of Everett
Everett, Washington

Log of Boring G-FA-6

Figure
1-7

G-FA-7



Boring Completed 01/20/05
Total Depth of Boring = 12.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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LANDAU ASSOCIATES

Port of Everett
Everett, Washington

Log of Boring G-FA-7

Figure
1-8

G-FA-8

SAMPLE DATA				SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Blows/Foot	Test Data	Graphic Symbol	USCS Symbol	Drilling Method: Geoprobe™ Ground Elevation (ft):	Water Level
0						GP/ SP	Brown, fine to medium SAND and CRUSHED GRAVEL (dense, moist)(no odor, no sheen)(roadbase)	
						SM	Tan, fine to medium SAND with concrete residue (medium dense, moist)(no odor, no sheen)(fill)	
2		e3					Becomes tan at 2.1'	
4	G-FA-8 4.0-4.5			0				▽ ATD
						SM	Brown, silty, fine SAND with intermixed wood fibers (dense, moist)(no odor, no sheen)(hydraulic fill)	
6		e3						
8								
10		e3						
12								

Boring Completed 01/20/05
Total Depth of Boring = 12.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

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Port of Everett
Everett, Washington

Log of Boring G-FA-8

Figure
1-9

ATTACHMENT 2

Analytical Results

TABLE 2-1
AMERON SOIL ANALYTICAL RESULTS
PORT OF EVERETT NORTH MARINA

	STOCK PILE AMERON 0411231-01 11/12/04	G-FA-4 (2-2.5) HQ14A 1/20/2005	G-FA-5 (8-8.5) HQ14B 1/20/2005	G-FA-8 (4-4.5) HQ14C 1/20/2005
PETROLEUM HYDROCARBONS				
NWTPH-HCID (mg/kg)				
Gasoline	< 28 UJ	NA	NA	NA
Diesel	**> 70** J	NA	NA	NA
Motor Oil	**>140** J	NA	NA	NA
NWTPH-D (mg/kg)				
Diesel	**110** J	NA	**120**	5.0 U
Motor Oil	**190** J	NA	**57**	10 U
VOLATILE ORGANIC COMPOUNDS				
Method 8260B (µg/kg)				
Chloromethane	4.0 UJ	1.2 U	0.9 U	0.8 U
Bromomethane	4.0 UJ	1.2 U	0.9 U	0.8 U
Vinyl chloride	4.0 UJ	1.2 U	0.9 U	0.8 U
Chloroethane	4.0 UJ	1.2 U	0.9 U	0.8 U
Methylene chloride	**280** J	2.4 U	1.7 U	1.6 U
Acetone	14.0 UJ	**300**	4.4 U	**7.7**
Carbon disulfide	4.0 UJ	1.2 U	0.9 U	0.8 U
1,1-Dichloroethene	4.0 UJ	1.2 U	0.9 U	0.8 U
1,1-Dichloroethane	4.0 UJ	1.2 U	0.9 U	0.8 U
trans-1,2-Dichloroethene	4.0 UJ	1.2 U	0.9 U	0.8 U
cis-1,2-Dichloroethene	4.0 UJ	1.2 U	0.9 U	0.8 U
Chloroform	4.0 UJ	1.2 U	0.9 U	0.8 U
1,2-Dichloroethane	4.0 UJ	1.2 U	0.9 U	0.8 U
2-Butanone	14.0 UJ	**28**	4.4 U	3.9 U
1,1,1-Trichloroethane	4.0 UJ	**3.0**	0.9 U	0.8 U
Carbon tetrachloride	4.0 UJ	1.2 U	0.9 U	0.8 U
Vinyl Acetate	NA	5.9 U	4.4 U	3.9 U
Bromodichloromethane	4.0 UJ	1.2 U	0.9 U	0.8 U
1,2-Dichloropropane	4.0 UJ	1.2 U	0.9 U	0.8 U
cis-1,3-Dichloropropene	4.0 UJ	1.2 U	0.9 U	0.8 U
Trichloroethene	4.0 UJ	1.2 U	0.9 U	0.8 U
Dibromochloromethane	4.0 UJ	1.2 U	0.9 U	0.8 U
1,1,2-Trichloroethane	4.0 UJ	1.2 U	0.9 U	0.8 U
Benzene	4.0 UJ	1.2 U	0.9 U	0.8 U
trans-1,3-Dichloropropene	4.0 UJ	1.2 U	0.9 U	0.8 U
2-Chloroethylvinylether	NA	5.9 U	4.4 U	3.9 U
Bromoform	4.0 UJ	1.2 U	0.9 U	0.8 U
4-Methyl-2-pentanone	14.0 UJ	5.9 U	4.4 U	3.9 U
2-Hexanone	14.0 UJ	5.9 U	4.4 U	3.9 U
Tetrachloroethene	4.0 UJ	**1.9**	0.9 U	0.8 U
1,1,2,2-Tetrachloroethane	4.0 UJ	1.2 U	0.9 U	0.8 U
Toluene	4.0 UJ	**180**	0.9 U	0.8 U
Chlorobenzene	4.0 UJ	1.2 U	0.9 U	0.8 U
Ethylbenzene	4.0 UJ	**8100**	0.9 U	0.8 U
Styrene	4.0 UJ	1.2 U	0.9 U	0.8 U
Trichlorofluoromethane	4.0 UJ	1.2 U	0.9 U	0.8 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	2.4 U	1.7 U	1.6 U
m,p-Xylene	4.0 UJ	**43000**	0.9 U	**1.1**
o-Xylene	4.0 UJ	**9100**	0.9 U	0.8 U
1,2-Dichlorobenzene	NA	1.2 U	0.9 U	0.8 U
1,3-Dichlorobenzene	NA	1.2 U	0.9 U	0.8 U
1,4-Dichlorobenzene	NA	1.2 U	0.9 U	0.8 U
Acrolein	NA	59 U	44 U	39 U
Methyl Iodide	NA	1.2 U	0.9 U	0.8 U

TABLE 2-1
AMERON SOIL ANALYTICAL RESULTS
PORT OF EVERETT NORTH MARINA

	STOCK PILE AMERON 0411231-01 11/12/04	G-FA-4 (2-2.5) HQ14A 1/20/2005	G-FA-5 (8-8.5) HQ14B 1/20/2005	G-FA-8 (4-4.5) HQ14C 1/20/2005
Bromoethane	NA	2.4 U	1.7 U	1.6 U
Acrylonitrile	NA	5.9 U	4.4 U	3.9 U
1,1-Dichloropropene	NA	1.2 U	0.9 U	0.8 U
Dibromomethane	NA	1.2 U	0.9 U	0.8 U
1,1,1,2-Tetrachloroethane	NA	1.2 U	0.9 U	0.8 U
1,2-Dibromo-3-chloropropane	NA	5.9 U	4.4 U	3.9 U
1,2,3-Trichloropropane	NA	2.4 U	1.7 U	1.6 U
trans-1,4-Dichloro-2-butene	NA	5.9 U	4.4 U	3.9 U
1,3,5-Trimethylbenzene	NA	**5300**	0.9 U	0.8 U
1,2,4-Trimethylbenzene	NA	**7000**	0.9 U	0.8 U
Hexachlorobutadiene	NA	5.9 U	4.4 U	3.9 U
Ethylene Dibromide	NA	1.2 U	0.9 U	0.8 U
Bromochloromethane	NA	1.2 U	0.9 U	0.8 U
2,2-Dichloropropane	NA	1.2 U	0.9 U	0.8 U
1,3-Dichloropropane	NA	1.2 U	0.9 U	0.8 U
Isopropylbenzene	NA	**170**	0.9 U	0.8 U
n-Propylbenzene	NA	**190**	0.9 U	0.8 U
Bromobenzene	NA	1.2 U	0.9 U	0.8 U
2-Chlorotoluene	NA	1.2 U	0.9 U	0.8 U
4-Chlorotoluene	NA	1.2 U	0.9 U	0.8 U
tert-Butylbenzene	NA	1.2 U	0.9 U	0.8 U
sec-Butylbenzene	NA	1.2 U	0.9 U	0.8 U
4-Isopropyltoluene	NA	1.2 U	0.9 U	0.8 U
n-Butylbenzene	NA	**5.1**	0.9 U	0.8 U
1,2,4-Trichlorobenzene	NA	5.9 U	4.4 U	3.9 U
Naphthalene	NA	**24**	4.4 U	3.9 U
1,2,3-Trichlorobenzene	NA	5.9 U	4.4 U	3.9 U
Dichlorodifluoromethane	4.0 UJ	NA	NA	NA
SEMIVOLATILE ORGANIC COMPOUNDS				
Method 8270C (µg/kg)				
1,2,4-Trichlorobenzene	470 UJ	NA	66 U	64 U
1,2-Dichlorobenzene	470 UJ	NA	66 U	64 U
1,2-Diphenylhydrazine	470 UJ	NA	NA	NA
1,3-Dichlorobenzene	470 UJ	NA	66 U	64 U
1,4-Dichlorobenzene	470 UJ	NA	66 U	64 U
2,4,5-Trichlorophenol	470 UJ	NA	330 U	320 U
2,4,6-Trichlorophenol	470 UJ	NA	330 U	320 U
2,4-Dichlorophenol	470 UJ	NA	660 U	640 U
2,4-Dimethylphenol	470 UJ	NA	66 U	64 U
2,4-Dinitrophenol	940 UJ	NA	330 U	320 U
2,4-Dinitrotoluene	470 UJ	NA	330 U	320 U
2,6-Dinitrotoluene	470 UJ	NA	330 U	320 U
2-Chloronaphthalene	470 UJ	NA	66 U	64 U
2-Chlorophenol	470 UJ	NA	66 U	64 U
2-Methylnaphthalene	470 UJ	NA	66 U	64 U
2-Methylphenol	470 UJ	NA	66 U	64 U
2-Nitroaniline	470 UJ	NA	330 U	320 U
2-Nitrophenol	470 UJ	NA	330 U	320 U
3,3'-Dichlorobenzidine	470 UJ	NA	330 U	320 U
3-Nitroaniline	470 UJ	NA	330 U	320 U
4,6-Dinitro-2-methylphenol	470 UJ	NA	660 U	640 U
4-Bromophenyl-phenylether	470 UJ	NA	66 U	64 U
4-Chloro-3-methylphenol	470 UJ	NA	330 U	320 U
4-Chloroaniline	470 UJ	NA	330 U	320 U
4-Chlorophenyl-phenylether	470 UJ	NA	66 U	64 U

TABLE 2-1
AMERON SOIL ANALYTICAL RESULTS
PORT OF EVERETT NORTH MARINA

	STOCK PILE AMERON 0411231-01 11/12/04	G-FA-4 (2-2.5) HQ14A 1/20/2005	G-FA-5 (8-8.5) HQ14B 1/20/2005	G-FA-8 (4-4.5) HQ14C 1/20/2005
4-Methylphenol	470 UJ	NA	66 U	64 U
4-Nitroaniline	470 UJ	NA	330 U	320 U
4-Nitrophenol	470 UJ	NA	330 U	320 U
Acenaphthene	470 UJ	NA	66 U	64 U
Acenaphthylene	470 UJ	NA	66 U	64 U
Anthracene	470 UJ	NA	66 U	64 U
Benzo[a]anthracene	**640** J	NA	**69**	64 U
Benzo[a]pyrene	**570** J	NA	**79**	64 U
Benzo[b]fluoranthene	**660** J	NA	66 U	64 U
Benzo[g,h,i]perylene	470 UJ	NA	66 U	64 U
Benzo[k]fluoranthene	470 UJ	NA	66 U	64 U
Benzoic acid	**1200** J	NA	660 U	640 U
Benzyl alcohol	470 UJ	NA	330 U	320 U
bis(2-Chloroethoxy)methane	470 UJ	NA	66 U	64 U
bis(2-Chloroethyl)ether	470 UJ	NA	66 U	64 U
Bis(2-chloroisopropyl)ether	470 UJ	NA	66 U	64 U
bis(2-Ethylhexyl)phthalate	470 UJ	NA	**190**	64 U
Butylbenzylphthalate	470 UJ	NA	66 U	64 U
Carbazole	470 UJ	NA	66 U	64 U
Chrysene	**730** J	NA	**140**	64 U
Dibenz[a,h]anthracene	470 UJ	NA	66 U	64 U
Dibenzofuran	470 UJ	NA	66 U	64 U
Diethylphthalate	470 UJ	NA	66 U	64 U
Dimethylphthalate	470 UJ	NA	66 U	64 U
Di-n-butylphthalate	470 UJ	NA	66 U	64 U
Di-n-octylphthalate	470 UJ	NA	66 U	64 U
Fluoranthene	**1400** J	NA	**170**	64 U
Fluorene	470 UJ	NA	66 U	64 U
Hexachlorobenzene	470 UJ	NA	66 U	64 U
Hexachlorobutadiene	470 UJ	NA	66 U	64 U
Hexachlorocyclopentadiene	470 UJ	NA	330 U	320 U
Hexachloroethane	470 UJ	NA	66 U	64 U
Indeno[1,2,3-cd]pyrene	470 UJ	NA	66 U	64 U
Isophorone	470 UJ	NA	66 U	64 U
Naphthalene	470 UJ	NA	**80**	64 U
Nitrobenzene	470 UJ	NA	66 U	64 U
N-Nitroso-di-n-propylamine	470 UJ	NA	330 U	320 U
N-Nitrosodiphenylamine	470 UJ	NA	66 U	64 U
Pentachlorophenol	470 UJ	NA	330 U	320 U
Phenanthrene	**1300** J	NA	**210**	64 U
Phenol	470 UJ	NA	66 U	64 U
Pyrene	**1200** J	NA	**180**	64 U
cPAHs (µg/kg)				
SW8270C-SIM				
Naphthalene	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA

TABLE 2-1
AMERON SOIL ANALYTICAL RESULTS
PORT OF EVERETT NORTH MARINA

	STOCK PILE AMERON 0411231-01 11/12/04	G-FA-4 (2-2.5) HQ14A 1/20/2005	G-FA-5 (8-8.5) HQ14B 1/20/2005	G-FA-8 (4-4.5) HQ14C 1/20/2005
Benzo(b)fluoranthene	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	NA	NA
Benzo(a)pyrene	NA	NA	NA	NA
Ideno(1,2,3-cd)pyrene	NA	NA	NA	NA
Dibenzo(a,h)anthracene	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	NA
cPAH TEQ (a)	NA	NA	NA	NA
PCBs (µg/kg)				
Method SW8082				
Aroclor-1016	24.0 UJ	NA	NA	NA
Aroclor-1221	24.0 UJ	NA	NA	NA
Aroclor-1232	24.0 UJ	NA	NA	NA
Aroclor-1242	24.0 UJ	NA	NA	NA
Aroclor-1248	**95.0** J	NA	NA	NA
Aroclor-1254	**140** J	NA	NA	NA
Aroclor-1260	**61.0** J	NA	NA	NA
TOTAL METALS (mg/kg)				
SW6000-7000 Series				
Arsenic	**13.9**	**80**	**13**	**15**
Cadmium		2 U	0.3 U	0.2 U
Copper	**119**	**47**	**37.1**	**32.8**
Lead	**97.5**	**50**	**19**	**13**
Mercury		0.08 U	0.06 U	0.05 U
Zinc	**199**	**157**	**85.0**	**61.2**

NA = Not Analyzed.
U = Indicates the compound was analyzed for, but was not detected at the reported sample detection limit.
J = Laboratory flag indicating the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ = The analyte was not detected in the sample; the rported sample reporting limit is an estimate.
Bold indicates detected value.

(a) Toxicity Equivalency Quotient (TEQ) based on conversion to benzo(a)pyrene risk level.

TABLE 2-2
AMERON GROUNDWATER ANALYTICAL RESULTS
PORT OF EVERETT NORTH MARINA

	G-FA-4 HQ15B 1/20/2005	G-FA-7 HQ15A 1/20/2005
PETROLEUM HYDROCARBONS		
NWTPH-D (mg/L)		
Diesel	0.25 U	0.25 U
Motor Oil	0.50 U	0.50 U
VOLATILE ORGANIC COMPOUNDS (µg/L)		
Method 8260B		
Chloromethane	1.0 U	1.0 U
Bromomethane	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U
Methylene chloride	2.0 U	2.0 U
Acetone	5.0 U	5.0 U
Carbon disulfide	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U
Chloroform	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U
2-Butanone	5.0 U	5.0 U
1,1,1-Trichloroethane	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 U
Vinyl acetate	5.0 U	5.0 U
Bromodichloromethane	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U
Benzene	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U
2-Chloroethylvinylether	5.0 U	5.0 U
Bromoform	1.0 U	1.0 U
4-Methyl-2-Pentanone (MIBK)	5.0 U	5.0 U
2-Hexanone	5.0 U	5.0 U
Tetrachloroethene	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U
Toluene	**1.1**	1.0 U
Chlorobenzene	1.0 U	1.0 U
Ethylbenzene	**4.3**	1.0 U
Styrene	1.0 U	1.0 U
Trichlorofluoromethane	1.0 U	1.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0 U	2.0 U
m,p-Xylene	**17**	1.0 U
o-Xylene	**4.1**	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U
Acrolein	50 U	50 U
Methyl Iodide	1.0 U	1.0 U
Bromoethane	2.0 U	2.0 U
Acrylonitrile	5.0 U	5.0 U
1,1-Dichloropropene	1.0 U	1.0 U
Dibromomethane	1.0 U	1.0 U
1,1,1,2-Tetrachloroethane	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	5.0 U	5.0 U
1,2,3-Trichloropropane	2.0 U	2.0 U

TABLE 2-2
AMERON GROUNDWATER ANALYTICAL RESULTS
PORT OF EVERETT NORTH MARINA

	G-FA-4 HQ15B 1/20/2005	G-FA-7 HQ15A 1/20/2005
trans-1,4-Dichloro-2-butene	5.0 U	5.0 U
1,3,5-Trimethylbenzene	1.0 U	1.0 U
1,2,4-Trimethylbenzene	1.0 U	1.0 U
Hexachlorobutadiene	5.0 U	5.0 U
Ethylene Dibromide	1.0 U	1.0 U
Bromochloromethane	1.0 U	1.0 U
2,2-Dichloropropane	1.0 U	1.0 U
1,3-Dichloropropane	1.0 U	1.0 U
Isopropylbenzene	1.0 U	1.0 U
n-Propylbenzene	1.0 U	1.0 U
Bromobenzene	1.0 U	1.0 U
2-Chlorotoluene	1.0 U	1.0 U
4-Chlorotoluene	1.0 U	1.0 U
tert-Butylbenzene	1.0 U	1.0 U
sec-Butylbenzene	1.0 U	1.0 U
4-Isopropyltoluene	1.0 U	1.0 U
n-Butylbenzene	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5.0 U	5.0 U
Naphthalene	5.0 U	5.0 U
1,2,3-Trichlorobenzene	5.0 U	5.0 U
SEMIVOLATILE ORGANIC COMPOUNDS (µg/L)		
Method 8270C		
Phenol	1.0 U	1.0 U
Bis-(2-Chloroethyl) Ether	1.0 U	1.0 U
2-Chlorophenol	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U
Benzyl Alcohol	5.0 U	5.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U
2-Methylphenol	1.0 U	1.0 U
2,2'-Oxybis(1-Chloropropane)	1.0 U	1.0 U
4-Methylphenol	1.0 U	1.0 U
N-Nitroso-Di-N-Propylamine	5.0 U	5.0 U
Hexachloroethane	1.0 U	1.0 U
Nitrobenzene	1.0 U	1.0 U
Isophorone	1.0 U	1.0 U
2-Nitrophenol	5.0 U	5.0 U
2,4-Dimethylphenol	1.0 U	1.0 U
Benzoic Acid	10 U	10 U
bis(2-Chloroethoxy) Methane	1.0 U	1.0 U
2,4-Dinitrophenol	5.0 U	5.0 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U
Naphthalene	1.0 U	1.0 U
4-Chloroaniline	5.0 U	5.0 U
Hexachlorobutadiene	1.0 U	1.0 U
4-Chloro-3-methylphenol	5.0 U	5.0 U
2-Methylnaphthalene	1.5	1.0 U
Hexachlorocyclopentadiene	5.0 U	5.0 U
2,4,6-Trichlorophenol	5.0 U	5.0 U
2,4,5-Trichlorophenol	5.0 U	5.0 U
2-Chloronaphthalene	1.0 U	1.0 U
2-Nitroaniline	5.0 U	5.0 U
Dimethylphthalate	1.0 U	1.0 U
Acenaphthylene	1.0 U	1.0 U
3-Nitroaniline	5.0 U	5.0 U
Acenaphthene	1.0 U	1.0 U
2,4-Dichlorophenol	10 U	10 U

TABLE 2-2
AMERON GROUNDWATER ANALYTICAL RESULTS
PORT OF EVERETT NORTH MARINA

	G-FA-4 HQ15B 1/20/2005	G-FA-7 HQ15A 1/20/2005
4-Nitrophenol	5.0 U	5.0 U
Dibenzofuran	1.0 U	1.0 U
2,6-Dinitrotoluene	5.0 U	5.0 U
2,4-Dinitrotoluene	5.0 U	5.0 U
Diethylphthalate	1.0 U	1.0 U
4-Chlorophenyl-phenylether	1.0 U	1.0 U
Fluorene	1.0 U	1.0 U
4-Nitroaniline	5.0 U	5.0 U
4,6-Dinitro-2-Methylphenol	10 U	10 U
N-Nitrosodiphenylamine	1.0 U	1.0 U
4-Bromophenyl-phenylether	1.0 U	1.0 U
Hexachlorobenzene	1.0 U	1.0 U
Pentachlorophenol	5.0 U	5.0 U
Phenanthrene	1.0 U	1.0 U
Carbazole	1.0 U	1.0 U
Anthracene	1.0 U	1.0 U
Di-n-Butylphthalate	1.0 U	1.0 U
Fluoranthene	1.0 U	1.0 U
Pyrene	1.0 U	1.0 U
Butylbenzylphthalate	1.0 U	1.0 U
3,3'-Dichlorobenzidine	5.0 U	5.0 U
Benzo(a)anthracene	1.0 U	1.0 U
bis(2-Ethylhexyl)phthalate	2.2 U	26
Chrysene	1.0 U	1.0 U
Di-n-Octyl phthalate	1.0 U	1.0 U
Benzo(b)fluoranthene	1.0 U	1.0 U
Benzo(k)fluoranthene	1.0 U	1.0 U
Benzo(a)pyrene	1.0 U	1.0 U
Indeno(1,2,3-cd)pyrene	1.0 U	1.0 U
Dibenz(a,h)anthracene	1.0 U	1.0 U
Benzo(g,h,i)perylene	1.0 U	1.0 U
cPAHs/Naphthalenes (µg/L)		
SW8270C-SIM		
Benzo[a]anthracene	0.10 U	0.10 U
Chrysene	0.10 U	0.10 U
Benzo[b]fluoranthene	0.10 U	0.10 U
Benzo[k]fluoranthene	0.10 U	0.10 U
Benzo[a]pyrene	0.10 U	0.10 U
Indeno[1,2,3-cd]pyrene	0.10 U	0.10 U
Dibenz[a,h]anthracene	0.10 U	0.10 U
DISSOLVED METALS (µg/L)		
SW6000-7000 Series		
Arsenic	**8**	**10**
Cadmium	0.2 U	0.2 U
Copper	**0.6**	0.5 U
Lead	1 U	1 U
Mercury	0.1 U	0.1 U
Zinc	4 U	4 U

U = Indicates the compound was analyzed for, but was not detected at the reported sample detection limit.
Bold indicates detected value.

NORTON PROPERTY

1028 ~~GRAND~~ AVENUE

EVERETT, WASHINGTON

CERT. NO. 841-57G

CASCADE TESTING LABORATORY, INC.
TESTING & INSPECTION / ENGINEERS / GEOLOGISTS

12919 N.E. 126TH PLACE
KIRKLAND, WASHINGTON 98034 (206) 823-9800

SEATTLE (206) 525-6700
EVERETT (206) 259-0817

May 2, 1984
Cert. No. 841-57G

Norton Properties
1028 Norton Ave.
Everett, WA 98201

Attention: Mr. John Schaak

Reference: Norton Property
1028 Grand Avenue
Everett, Washington

Dear Mr. Schaak:

As requested an engineering geologist from Cascade Testing Laboratory visited the above referenced site to drill two (2) test borings on April 23, 1984. The purpose of this report is to present our findings from the test borings and provide recommendations for foundation support as it is influenced by the in-situ soils conditions.

We understand that the purposed structure on this site will be a warehouse/office building utilizing post and beam construction, metal walls, and a slab on grade floor.

The site work for this building included two (2) test borings (B-1, B-2) drilled to a depth of 21.5 feet each. The purpose of the two (2) test borings was to identify the types of near surface materials and to establish their relative density and uniformity across the site. All drilling and sampling was done in accordance with ASTM D-1586.

GEOGRAPHY

The above referenced site lies within the the old Jamison Mill Company property on the tidal flats in Port Gardner Bay, Everett, Washington. The building lot is located between 1000 Grand Ave. and an abandoned railroad spur line, approximately 120 feet west of Grand Ave. This area was once occupied by two shingle storage sheds, (number 2 and number 3) built on piles and used by the Jamison Mill Company. At the time of our visit storage shed number 2 had been removed. Storage shed number 3 had been partially removed with the remaining area being occupied by Norton Properties, Inc. (see site plot plan).

AREA GEOLOGY

The above referenced site lies within the tidal flats in Gardner Bay. East of the site lies a thirty foot bluff. The bluff area has been generally mapped as part of the Vashon till sequence consisting of compacted tills with discontinuous covers of sand and gravel. Materials within the tidal flats are those types generally associated with low energy beach and shoreline depositional zones, fine-to coarse-grained sands and silts.

STRATIGRAPHY

The soils types and descriptions are represented on the test boring logs enclosed at the end of this report. Locations of the two (2) test borings are shown on the site plot plan. In general the site is underlain by a fairly consistent layer of fill. The age and source of this fill is unknown. The exact profile of the fill and natural soil across the site is also unknown. The two (2) test borings represent the subsurface soils at the two (2) boring locations. There is approximately a three (3) foot elevation difference

between boring B-1 and boring B-2, boring B-1 is higher than boring B-2.

ANALYSIS

Boring B-1 was drilled in fill material to a depth of 18 feet after which natural soils were encountered. The boring was terminated at 21.5 feet in heaving sands. The fill materials consisted of very loose to loose sandy silt to silty sand. The natural materials found below 18 feet were fine-to coarse-grained, medium dense, sands. Ground water was encountered approximately 4.5 feet below colar elevation (see boring log).

Boring B-2 was drilled in fill materials to a depth of 15.5 feet after which natural soils were encountered. The boring was terminated at 21.5 feet. The fill materials consisted of very loose to loose sandy silt to silty sand. The natural materials found below 15.5 feet were fine-to coarse-grained, very dense, sand. Ground water was encountered approximately two (2) feet below the colar elevation (see boring log).

Analysis of the soil samples collected from borings B-1 and B-2 and the comparison of the samples to their respective standard penetration values indicate approximately 15 feet of very loose to loose silt fill overlying a very dense natural sand (see boring logs). The fill material was water saturated. The exact behavior of the fill materials under load is not known at this time. However, certain responses may be anticipated.

First, the fill material will compact causing settlement at the surface. This settlement may or may not be uniform.

Second, as the ground water is forced out of the material by the added load of additional fill and the building itself, a certain amount of silt will also be carried along with the water causing a migration of the silt fill toward those areas which are not loaded. This migration of fill will also cause settlement which may or may not be uniform.

RECOMMENDATIONS

After analysis of all the data gathered during our field study, the following recommendations are suggested for the foundation support and design.

Site Preparation

We recommend the complete removal of all existing slabs, debris, organics, and abandoned utilities from the site prior to the start of any earth work. Existing utilities within the construction area should be re-routed or removed from the work area. All existing piles should be cut back a minimum of six (6) inches below the lowest cut elevation so as not to hinder earth work operations.

We also recommend that the structure currently housing Norton Properties, Inc. (storage shed number 3) also be removed at this time. Although it is not necessary, the removal of this structure would facilitate the proper preparation of the site for the proposed building as well as directly cutting down on the time required for the recommended earth work. As per our conversation on April 30, 1984, the recommendations contained within this report assume the building will not be removed prior to the start of earth work on the above referenced building site.

Excavation

It is not anticipated that there will be any excavation work on this site at this time. If excavation is required at some later date, special precautions will have to be taken to handle ground water and probable sloughing of any cut slopes. An engineering geologist should be consulted prior to any excavation work on this site.

Foundation Alternatives

It is our opinion that there are two potential foundation alternatives for this site. Alternative number 1 would be the placement of a deep pile foundation system with anticipated pile lengths of 20 to 25 feet below the existing site grade. Alternative number 2 would be the placement of a miniumum four (4) foot thick structural fill pad. A two foot thick building preload should then be placed on top of the structural fill pad.

From our conversations with the developer, alternative number 1 will not be discussed in the report. All further recommendations assume a structural fill pad will be used as support for the proposed building.

Structural Support

As stated previously in this report, the above referenced site is underlain by varying amounts of loose fill materials. In order to provide a uniform soil support medium under all footings and slab areas we recommend the following procedures.

A minimum of a four (4) foot structural fill pad should be placed within the building area and extended out a minimum of ten (10) feet

on all sides of the building. The initial base lift of this pad should be eighteen (18) inches thick and placed in an arms length manner from the north end of the building site. This will limit the amount of construction traffic over the subgrade and minimize associated pumping problems during the placement of the structural fill pad. The initial lift should be compacted to a minimum density of 90% of the ASTM D-1557 maximum density proctor value. All subsequent fill should be placed in six (6) to eight (8) inch lifts and compacted to the minimum density of 95% of ASTM D-1557 maximum density proctor value. All compaction should be done with a smooth drum vibratory roller.

Importation of a gravelly sand for the structural fill pad is recommended. This material should have no more than 5% fines passing the 200 sieve.

Pre-Load

We recommend that the entire structural fill pad be pre-loaded with a minimum of two feet of pre-load materials. This pre-load material will not need to be compacted but the top of it should be rolled with the compactor to seal the surface against moisture and prevent ponding. The pre-load materials are recommended to be the same material used as the structural fill in order that they may be used as fill within the parking area after removal.

We recommend that five (5) settlement hubs be placed on top of the pre-load. The hubs should be installed in the corners and at the center of the building area. The settlement hubs should be monitored by a licensed surveyor once a week for the first two weeks and every other week thereafter. We would anticipate a three month period of settlement. The settlement period may be more or less than anticipated. When the settlement has stopped, the pre-load may be removed and construction started.

If settlement is not completed within the required time period, a perimeter construction dewatering system may be installed to accelerate the settlement rates. If this is required, an engineering geologist should be consulted prior to system design.

We would anticipate that total and differential settlements of approximately 1/2 and 3/4 inches respectively may develop. Structural and footing designs should be reinforced to take into account the possibility of differential settlement.

For footings placed to bear on the compacted structural fill a maximum bearing value of 2000 psf may be utilized in the structural design.

Drainage

Observations of ground water levels made during the drilling of B-1 and B-2 indicated near surface saturated soils conditions. This high ground water table should not affect construction activities if the recommendations in this report are followed.

As part of the continuous drainage for this site we recommend that all foundation areas have continuously positive drains that discharge into an appropriate collector system. The drainage system should include roof drains. The roof drain should be tightlined independent of all foundation drains all of the way into the appropriate collector system.

CONCLUSION

Although we do fully expect the subsurface soil conditions to reflect our findings, some local variations are possible. Should conditions other than those described herein be encountered, the geotechnical engineer should be contacted immediately to determine if additional or alternative recommendations are required.

The referenced property is suitable for the proposed commercial structure as stated in the above recommendations.

Careful and prudent construction techniques are recommended at this site. We recommend that an engineering geologist from Cascade Testing Laboratory be provided the opportunity for a general review of the final design and specifications to confirm that the earthwork and foundation recommendations have been properly interpreted and implemented. Through this review, any necessary modifications to our recommendations or apparent soils conditions could be resolved immediately with an appropriate solution. We also recommend that an engineering geologist from Cascade Testing Laboratory be present during all site soils work to monitor the placement of the structural fill and certify that it has been properly compacted and prepared for the pre-load.

This report has been prepared for the exclusive use of Norton Properties, Inc. for specific application to their project at 1028 Norton Ave., Everett, Washington. This report was prepared in accordance with generally accepted foundation and soils engineering practices. No other warranty, expressed or implied, is made.

We appreciate the opportunity to be of service to you on this project and look forward to working for you again soon. Should you have additional questions or require further assistance, please feel free to contact us at any time.

Sincerely,

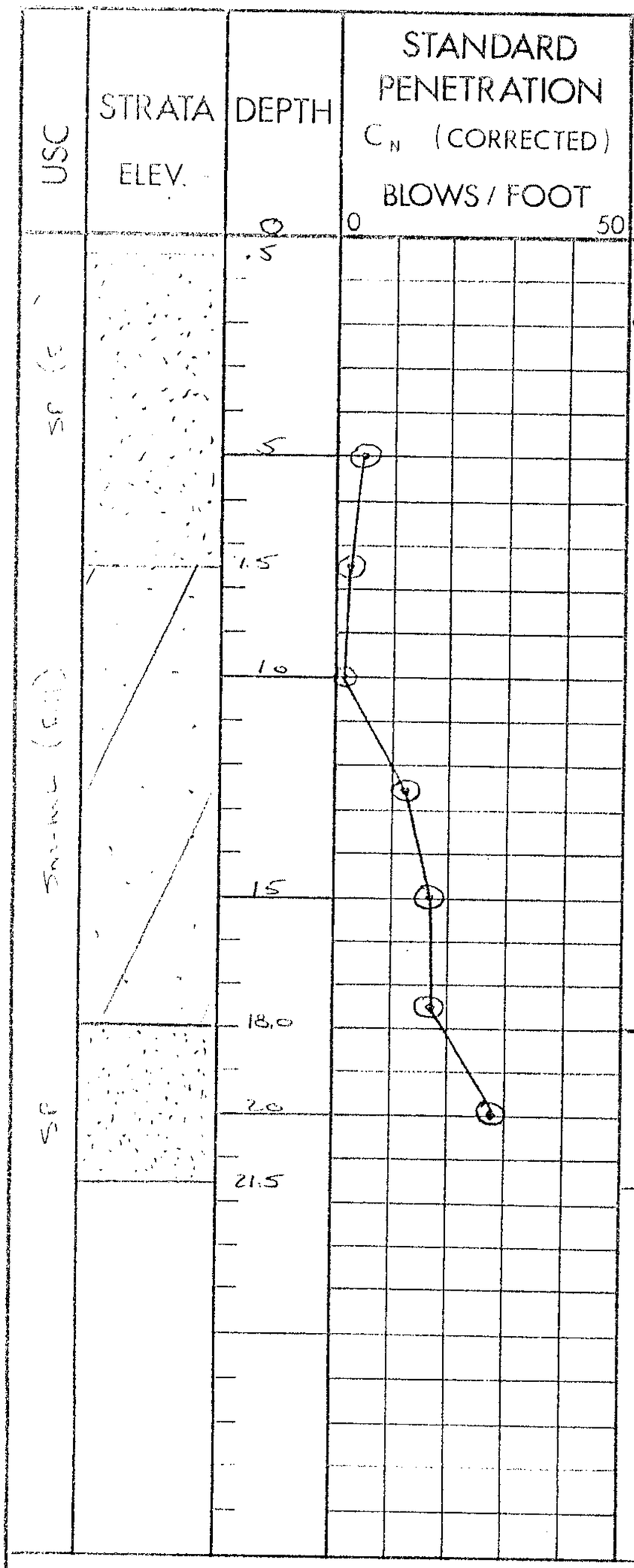
CASCADE TESTING LABORATORY, INC.

Charles C. May, P.E.
Vice President

Kirk R. Bailey
Engineering Geologist

APPENDIX A

TEST BORING LOGS



DESCRIPTION	WATER TABLE
0 - .5' ORGANICS ; SURFICIAL SOIL, GRASS	
0.5 - 7.5' SAND ; BROWN, FINE- TO MEDIUM-GRAINED, TRACE SILT, LOOSE, WET, SOME IRON STAINING (FILL)	
7.5 - 18.0' SANDY SILT TO SILTY SAND ; GRAY, VERY FINE- GRAINED, TRACE MEDIUM- TO COARSE-GRAINED SAND, TRACE ORGANICS, VERY LOOSE TO MEDIUM, WET, SLIGHTLY MICACEOUS, SHELLS (FILL).	
12.5' MEDIUM DENSITY	
18.0 - 21.5' SAND ; BROWN, FINE- TO COARSE-GRAINED, LITTLE GRAVEL, TRACE TO LITTLE SILT, ROUNDED PARTICLES, MEDIUM DENSITY, WET, FEW GRAVEL SEAMS (SP)	
T.D. = 21.5 Ft	

NOTES FLOWING SANDS ENCOUNTERED AT 19.0 Ft. HOLE TERMINATED AT 21.5 Ft DEPTH

TEST BORING LOG NORTON PROPERTY

Cascade Testing Laboratory, Inc.
Engineers · Geologists
14120 N. E. 21st Street Bellevue, Wash. 98007
Phone 641-2573

BORING NO. 1

PAGE 1 OF 1

DATE 4-24-84	CERT. NO. 841-576	DWN BY KKB	CHKD BY

USC	STRATA ELEV.	DEPTH	STANDARD PENETRATION C_N (CORRECTED) BLOWS / FOOT 0–50	DESCRIPTION	WATER TABLE
SM (FILL)		0		0-2.5' SAND ; TAN, FINE- TO MEDIUM-GRAINED, TRACE SILT, TRACE SAWDUST, LOOSE, WET (FILL).	▽
		2.5		2.5-15.5' SANDY SILT TO SILTY SAND ; GRAY, VERY FINE-GRAINED, TRACE MEDIUM- TO COARSE-GRAINED SAND, TRACE ORGANICS, VERY LOOSE TO LOOSE, WET, SLIGHTLY MICACEOUS, SHELLS (FILL).	
		5		7.5' DARK GRAY CLEAN SILT LAYER	
		10		12.5' TRACE GRAVEL AND ORGANICS	
		15	50/12"		
		15.5		15.5-21.5' SAND ; GRAY TO GRAY BROWN, FINE- TO MEDIUM-GRAINED, TRACE COARSE-GRAINED SAND, TRACE SILT, VERY DENSE, WET (SP)	
			53/12"		
			75/12"	17.5' TRACE ORGANICS	
		20		20.0' SLIGHTLY COARSER WITH DEPTH.	
		21.5		T.D = 21.5 ft.	

NOTES 15.5' HEAVING SANDS FLOWING INTO SAMPLER. TERMINATED HOLE AT 21.5' FT DEPTH.

TEST BORING LOG NORTON PROPERTY

Cascade Testing Laboratory, Inc.
Engineers · Geologists
14120 N. E. 21st Street Bellevue, Wash. 98007
Phone 641-2573

BORING NO. 2

PAGE 1 OF 1

DATE 4-24-84	CERT. NO. 841-574	DWN BY KRB	CHKD BY

PORT GARDNER BAY OF PUGET SOUND

JAMISON MILL COMPANY

EVERETT WASH.

File No. 37 — March 28 1952

Sanborn Map Co. Street No. 36 — Block 084

Scratch Pad Risk Report No. A - 1952.

Scale 1" = 100'

WASHINGTON SURVEYING & RATING BUREAU
J.K. WOOLLEY, MGR
SEATTLE, WASH.

Steel Refuse Burner Brick Stack

Pump Ho.

Refuse Fill

Log Way

No. 1 — 27" H. — 100' H.

2" — 50' H. — No. 32

Fuel Deck

Brick Stack

Boiler Ho.

Shingle Block Cutting

#2-6" 203 H.

Eng. Rm.

2"+2" Blkhd.

2" H. 182 F.

Shingle Mill

Shingle Packing

#1-6" 169 H.

Blsm Shop

Lunch Room

Filing Rm. 2 F.

2" 100' H. No 52

No. 9-1F.

No. 2-1F.

No. 4-2F.

#3-6" 254 H.

8" Inside Sprinklers

WC I.C.

Loading Shed

2"+2" Blkhd.

Plat. El. 25'

Under

2" 100' H.

68'

6" Steel

8" C.I.

Dry Kilns

#4-6" 501 H.

Walls - 8" Tile

No. 6 RF.

Frame Doors Both Ends

Plat. El. 20'

Under

70'

Lumber In Piles

Wm. Hulbert Mill Co. Lumber Yard Stock Lumber Piles 12' - 15'

Office

Oil Ho.

Lbr. & Shipping Mill

Lbr. Shed

Platform

Shingle Storage & Shipping Shed No. 1.

No 7

2" 50' H.

Shingle Storage Shipping Shed #5-6" 340 H.

No. 2.

Shingle Scaling

SPUR LINE G.N.R.

Sand Fill

Storage Shipping Shed No. 3.

Auto Parking

4" Conn. To Inside Hyds.

6" Steel

ONLY ENTRANCE FOR FIRE DEPARTMENT

Black Top Roadway

12" City Main

Hersey D.C. Meter.

520' S. To 3-Way Public Hyd.

225' N. To 3-Way Public Hyd.

Note: 6" Plant Main Supported By Frame Trestle 8" Main Buried In Tide Flats.

225' N. To Property Of C&B Shingle Co. Intervening Tidewashed Ground

Property Of C&B Shingle Co.

BUILDING SITE PROP.

SECTION A-A

High Tide

SHINGLE BLOCK SAWING

REFUSE FILL

AS

SHINGLE SAWING

AUX. MACH. & PACKING

NS

2"+2" Blkhd.

2"-2" Blkhd.

TRUCK LOADING SHED

SHINGLE DRYING

SHINGLE STGE.

TIDEWASHED GROUND

ROADWAY

Site area

CASCADE TESTING LABORATORY, INC.
TESTING & INSPECTION - ENGINEERS
14120 N.E. 21st STREET
BELLEVUE, WASHINGTON 98007

PHONE
Bellevue – 206/641 2573
Seattle – 206/525 6700

12 January 1978
Cert. No. 7712-44

Cruise-A-Home
1028 Norton Avenue
Everett, Washington 98201

Attention: Mr. John Bull

Reference: Foundation Investigation for the proposed New Cruise-A-Home Facility, Everett, Washington.

Gentlemen:

We are pleased to submit the following results of a soils investigation performed in the area to the West of the existing Cruise-A-Home facility at 1028 North Avenue, Everett, Washington.

Two (2) test borings were placed along the existing North-South trending, unpaved roadway which lies to the West of the existing Cruise-A-Home facility and rail spur.

The scope of our study is to establish the apparent quality of the man-made fill which covers the entire site. In addition, an estimate depth to bearing for piling and load bearing capacities will be offered for those areas tested.

Authority for our investigation was granted by Mr. John Bull, representative for Cruise-A-Home.

Description of Drilling Equipment

Our test borings were performed with a truck mounted B-61 "Mobile" heavy duty rotary drill, using 3 3/8" hollow stem auger and standard penetration equipment as per ASTM D-1586-67T (140 Lb. hammer,

30 inch fall, "A" rod and standard split-spoon penetrometer).

Note on Elevations

All elevations and depths noted herein refer to existing grade.

Site Description and Stratigraphy

The proposed building site is located to the West of the existing Cruise-A-Home facility, and is situated in a relatively level, hummocky filled area. At the time of our investigation, rubble, soil, and building waste of various kinds were noted to cover the surface of the area. It is understood that the area has been used as a dump area for many years, and that large quantities of organic waste have been dumped in the area by local paper and pulp processing plants.

The soils encountered during our investigation are best illustrated by the accompanying test boring logs. Briefly however, a basal dense to very dense, grey, medium grained sand was encountered in both test borings.

This basal unit was overlain by five (5) to seven (7) feet of loose, fine to medium sand with localized organics and wood debris. The origin of this unit is unclear, but may be associated with an initial filling phase.

The uppermost twelve (12) to thirteen (13) feet was found to consist of a very poor quality, inconsistent man-made fill. The basal five (5) (TB-1) to eleven (11) (TB-2) feet of this fill consisted

wholly of decaying organic matter and wood debris. A very strong odor of methane gas was noted in TB-2, with a milder odor noted in TB-1.

The surface of the road bed was covered with twelve (12) to eighteen (18) inches of crushed rock and soil.

Conclusions and Recommendations

It is our opinion that the subject building site is unsuitable for the support of conventional spread footings or for adjustment by preloading. We therefore recommend the use of a pile supported foundation and floor slab.

Treated Timber Piling

All piling should be driven to bearing in the dense natural sands found at depths of approximately 20 feet ± two (2) feet. Pile support will be developed primarily by point bearing.

Minimum pile lengths on the order of 24 to 27 feet below existing grade are anticipated. At that depth driven timber piling are expected to develop in excess of 20 tons per pile load bearing capacity.

Due to the quantity of fill overlying the soft organic waste materials the risk of down drag forces acting on piling is high. The magnitude of these forces will vary with the consistancy and thickness of the fill overlying the soft, compressible organic materials.

Based on the data obtained in our test borings, and the visual inspection of the site, down-drag forces on the order of five (5) tons may be expected. For this reason all piles should be driven to at least 25 tons per pile using E.N.R. criteria.

Due to the limited extent of our investigation it is recommended that several test piles be driven within the building area prior to ordering production piles. The test piles should be driven in locations which when completed may be incorporated into the pile support system for the structure.

Specifications for piling should be governed by U.B.C. Standard No. 25-14 and/or ASTM D-25-70. "Full Cell" treated piling is recommended for use, as established in U.B.C. Standard No. 25-14.

We recommend the use of a Vulcan #1 pile driver with a rated striking force of 15,000 ft. lbs. for all driven pile installations. All final values for determination of pile load bearing capacities should be confirmed by visual inspection and application of the E.N.R. Formula:

$$L = \frac{2wh}{s+0.1}$$

Where: L = Pile Bearing in Lbs.
W = Weight of Hammer in Lbs.
H = Height of Drop in Ft.
S = Pile Set in Inches/Blow

All pile installation should be observed by the soils engineer or his qualified representative to insure adequate penetration into the dense basal sand and attainment of the desired design loads.

Due to the presence of the decaying organic materials and subsequent generation of methane gas, measures for control of these gases should be incorporated into the building plan. Failure to do so may result in a chronic, hazardous condition.

If you should have any questions or if we may be of further service, please feel free to call on us at any time.

Sincerely,

CASCADE TESTING LABORATORY, INC.

Charles C May

Charles C. May, P.E.

CCM:cd

Prepared by:

Walter L Bicket

Walter L. Bicket,
Senior Engineering Geologist

CASCADE TESTING LABORATORY, INC.
TESTING & INSPECTION - ENGINEERS
14120 N.E. 21st STREET
BELLEVUE, WASHINGTON 98007
PHONE: 206 / 641-2573

TEST BORING LOG

PROJECT CRUISE-A-HOME
EVERETT, WASHINGTON

DATE 12-22-1977
CERT. NO. 7712-99
TEST BORING NO. 1
PAGE 1 OF 1

LOCATION ON SMALL ROAD WEST OF EXISTING BUILDING, NORTH FROM S.E. CORNER OF PROPOSED BUILDING 1/3 OF BUILDING LENGTH.

STRATA Grade Elev.	RESISTANCE BLOWS / PENE.	DEPTH	SOIL DESCRIPTION AND CLASSIFICATION	WATER CONTENT
0			GREY RUBBLY SOIL.	
	2 1 2	2.5'	LOOSE, BLACK, HIGHLY ORGANIC, SILTY SAND. (WOOD FRAGMENTS IN CUTTINGS).	
5	6 6 6	4.0'		
	1 0 1	7.5'	LOOSE WOOD DEBRIS, SATURATED.	
10	6 6 6	9.0'		
	2 2 4	12.5'	LOOSE, BLACK, ORGANIC SAND WITH WOOD FRAGMENTS.	
15	6 6 6	14.0'		
	2 4 5	17.5'	LOOSE, GREY, SILTY, MEDIUM SAND. (BEACH SAND).	
20	6 6 6	19.0'		
	12 45 50	22.5'	AS ABOVE BUT VERY DENSE, SOMEWHAT CLEANER AND COARSER.	
25 TD=24'	6 6 5	24.0'		

NOTES

CASCADE TESTING LABORATORY, INC.
TESTING & INSPECTION - ENGINEERS
14120 N.E. 21st STREET
BELLEVUE, WASHINGTON 98007
PHONE: 206 / 641-2573

TEST BORING LOG

PROJECT CRUISE - A - HOME
EVERETT, WASHINGTON

DATE 12 - 22 - 1977
CERT. NO. 7712 - 44
TEST BORING NO. 2
PAGE 1 OF 1

LOCATION N.E. CORNER OF PROPOSED BUILDING, CENTER OF ROAD.

STRATA Grade Elev.	RESISTANCE BLOWS / PENE.	DEPTH	SOIL DESCRIPTION AND CLASSIFICATION	WATER CONTENT
0			GREY RUBBLY SOIL.	
	1 1 2	2.5' -		
	6 6 6	4.0'		
5			WOOD CHIPS AND ORGANIC WASTE. BECOMES VERY SLOPPY AT BOTTOM OF ZONE. (STRONG METHANE GAS ODOR).	
	1 1 1	7.5' -		
	6 6 6	9.0'		
10				
	2 3 3	12.5' -		
	6 6 6	14.0'		
15			LOOSE, GREY, FINE TO MEDIUM SAND, GREENISH HUE IN BASE 4" OF ZONE.	
	- 7 13	17.5' -		
	- 6 6	19.0'		
20			MEDIUM DENSE, GREY, SILTY, MEDIUM SAND (BEACH SAND).	
	4 8 21	22.5' -		
	6 6 6	24.0'		
25	T.D. = 24			

NOTES

APPENDIX I

SNOHOMISH COUNTY ASSESSOR RECORDS

TAPE PICTURE HERE

BUILDING PERMITS

DATE	NUMBER	AMOUNT
/ /		
/ /		
/ /		
/ /		

BUILDER

MISCELLANEOUS INFORMATION

DEPTY	DATE	REMARKS
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	
	/ /	

SALES DATA

GRANTOR/SELLER	GRANTEE/PURCHASER	W.O.P.	INST	1%	DATE	SALES PRICE
					/ /	
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OTHER CONSTRUCTION

TYPE	DATE BUILT	CONST.	FLOOR	ROOF	DIMENSION	S.F. AREA	COND.	FACTOR	VALUE	% DEP.	NET VALUE
	/ /										
	/ /										
	/ /										
	/ /										
	/ /										
	/ /										

APPRAISAL DATA

DEPTY	DATE	REMARKS
SH	5/19/94	SEAD FR 2-003 PER REC NORTON END BSP AF # 9404010423. SPLIT 93 LAV
	/ /	PER 90. PLACED BLDGS PER GARY P. BAV TAKEN OFF RECENT SEA (C940327) 95/96 G.P.
BR	4/15/96	Legal Inv add AF Corrections Nos
	/ /	L960512
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DEPTY	DATE	REMARKS
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182905-2-013-0003

05/27/94 S940616

NEW ACCOUNT

LEVY CODE 0010

SCHOOL DISTRICT 2

SEC 18 TWP 29 RGE 05
LOT 3 OF NORTON INDUSTRIES BSP
REC VOL 2894 BSP'S PG 0177 AF NO
9404010424 BEING A PTN OF N1/2 OF SEC 18

182905-2-013-0003

04/26/96 L960512

NORTON INDUSTRIES

1210 W MARINE VIEW DR
EVERETT WA
98201

LEVY CODE 0010

SCHOOL DISTRICT 2

SEC 18 TWP 29 RGE 05
LOT 3 OF NORTON INDUSTRIES BSP
REC VOL 2894 BSP'S PG 0177 AF NO
9404010424 & AF NOS 9404015002 &
9405185001 BEING A PTN OF N1/2 SEC 18

FM 61 ☐ REVAL 94 BUILDING LAND
TAX YR 95 05/26/94 05/26/94 ACCOUNT NO 182905-2-013-0003 SD 2 L/C 0010

SITUS: P/P NO TYPE

NBR 1032- UNIT # PRE STREET 10TH TYPE ST SUF

CITY EVERETT ZIP 98201- CT 401.00 SEC-TWP-RNG 182905-2

BENCH MARK AREA 410 WTRFT

BUSINESS NAME CRUISE-A-HOME, INC/TC SYSTEMS

U N D X

BUILDING NO	OCCUPANCY	CONSTRUCTION	STYLE
1 OF 1	24 MANUFACTURING	S	1 STRY

DATE BUILT	REMODEL DATE	CONDITION	EFFECTIVE AGE	DEPRECIATION %
1980	1985	AVERAGE	10	15

% UNFINISHED	HEIGHT MULT	PERIM MULT	BUILDING LIFE	MARKET MODIFIER
	1.231	.921	35	

QUALITY	BEDROOMS #	FLOOR COVER	BUILT IN APPLIANCES	
LOW		NONE	RANGE-OVEN	INTERCOM
EXTERIOR	FULL BATHS #	FLOOR CONST	HOOD-FAN	VACUUM
METAL	3/4 BATHS #	FRAME ☐	DISHWASHER	EL GAR DR
ROOF TYPE	1/2 BATHS #	CONC ☐	GARB DISP	HOT TUB
PITCHED			TRASH COMP	SAUNA
ROOF COVER	PLUMB FIX #	HEAT-COOL	MICROWAVE	
METAL		SUSP		
FOUNDATION		FIREPLACE		
CONCRETE				

1st FLR ☐	28,000	BASEMENT ☐		GAR QUAL	LOW	CP QUAL		PRCH QUAL	
2nd FLR ☐		DAYLITE		EXTERIOR	METAL	ROOF CVR		CONC ☐	
3rd FLR ☐		POR DEV ☐		ATTACHED ☐	210	CP ☐		DECK ☐	
4th FLR ☐		QUAL FIN		DETACHED ☐				BALC ☐	
LOFT ☐				BASEMENT ☐				ROOF ☐	

MEZZANINE		COMMERCIAL BASEMENT		YARD IMPROVEMENTS		LIVING UNITS		
LOFT ☐	4,000	UNFIN ☐		ASPH ☐	15,000	TYPE	#	☐
UNDEV ☐		CEILED ☐		CONC ☐	10,000	STUDIO		
RETAIL ☐		FINISHED ☐		YD LT #P	#F	1 BR		
RET-OFF ☐	2,000	RETAIL ☐		FENCE L/F	300	2 BR		
OFFICE ☐		APT ☐				3 BR		
BANK ☐		OFFICE ☐		SPRINKLED ☐	28,000	TOTAL		
		BANK ☐						
		FACTOR %		ELEVATOR		LENGTH		
		PARKING ☐				WIDTH		
		PARK QUAL				AVG HEIGHT	24	
						PERIMETER	680	

DBW 1-30-98

LAND USE 34900 PREFAB METAL MANUF ZONING EVRT /M-2 MS /C

LAND VALUATION

PORTION	METHOD SITE	SQ FT	FR FT	ACRES	ATMBR	QUANTITY	RATE	CONTIG	CLEARED 1	CLEARED 2	WOODED	NEIGH GOOD	NEIGH AVG	NEIGH FAIR	ACCESS LEG YES	ACCESS LEG NO	PHY YES	PHY NO	RD ASPHLT	RD GRAVEL	CURB SW	PWR UNDRGD	PWR POLE	WTR PUBLIC	WTR WELL	SEWER	SEPTIC	NO PERK	VIEW BLUFF	VIEW GOOD	VIEW AVG	VIEW FAIR	WTR FRT LOW BK	WTR FRT MED BK	WTR FRT HI BK	TIDELAND	LOW LAND	WET	STEEP	EASEMENT
	1 2		3	4	5				1	2		1	2	3	1	2	1	2	1	2		1	2	1	2	1	2		1	2	3	4	1	2	3					
1				X		1.45	150,000	X	X				X		X		X		X				X	X		X														
							160,000																																	

ACRES 1.45

SITE UTILITY 1.00

LAND VALUE $ 217,500

LIEN

BUILDING VALUES

P/P	
BLDG $	663,400*
O-IMP $	0
COMM $	0
TOTAL $	663,400

TOTAL ASSESSED VALUE $ 880,900

LIEN VALUE ($ 0)

1 OF 1

	BUILDING	LAND		SD	2
FM 94 ☐ REVAL 94	05/26/94	05/26/94	ACCOUNT NO 182905-2-013-0003		L/C 0010

SITUS: P/P NO TYPE

NBR 1032 UNIT # PRE STREET 10TH TYPE ST SUF

CITY EVERETT ZIP 98201 CT 401.00 SEC-TWP-RNG 182905 2

BENCH MARK AREA 400 WTRFT

BUSINESS NAME CRUISE-A-HOME, INC/IC SYSTEMS

U N D X

BUILDING NO	OCCUPANCY	CONSTRUCTION	STYLE
1 OF 1	24 MANUFACTURING	S	1 STRY

DATE BUILT	REMODEL DATE	CONDITION	EFFECTIVE AGE	DEPRECIATION %
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% UNFINISHED	HEIGHT MULT	PERIM MULT	BUILDING LIFE	MARKET MODIFIER
	1.231	.921	35	

QUALITY	BEDROOMS #	FLOOR COVER	BUILT IN APPLIANCES	
LOW		NONE	RANGE-OVEN	INTERCOM
EXTERIOR	FULL BATHS #	FLOOR CONST	HOOD-FAN	VACUUM
METAL	3/4 BATHS #	FRAME ☐	DISHWASHER	EL GAR DR
ROOF TYPE	1/2 BATHS #	CONC ☐	GARB DISP	HOT TUB
PITCHED			TRASH COMP	SAUNA
ROOF COVER	PLUMB FIX #	HEAT-COOL	MICROWAVE	
METAL		SUSP		
FOUNDATION		FIREPLACE		
CONCRETE				

1st FLR ☐	28,000	BASEMENT ☐		GAR QUAL	LOW	CP QUAL		PRCH QUAL	
2nd FLR ☐		DAYLITE		EXTERIOR	METAL	ROOF CVR		CONC ☐	
3rd FLR ☐		POR DEV ☐		ATTACHED ☐	210	CP ☐		DECK ☐	
4th FLR ☐		QUAL FIN		DETACHED ☐				BALC ☐	
LOFT ☐				BASEMENT ☐				ROOF ☐	

MEZZANINE		COMMERCIAL BASEMENT	YARD IMPROVEMENTS		LIVING UNITS		
LOFT ☐	4,000	UNFIN ☐	ASPH ☐	15,000	TYPE	#	☐
UNDEV ☐		CEILED ☐	CONC ☐	10,000	STUDIO		
RETAIL ☐		FINISHED ☐	YD LT #P	#F	1 BR		
RET-OFF ☐	2,000	RETAIL ☐	FENCE L/F	300	2 BR		
OFFICE ☐		APT ☐			3 BR		
BANK ☐		OFFICE ☐	SPRINKLED ☐	28,000	TOTAL		
		BANK ☐					
		FACTOR %	ELEVATOR		LENGTH		
		PARKING ☐			WIDTH		
		PARK QUAL			AVG HEIGHT	24	
					PERIMETER	680	

LAND USE 34900 PREFAB METAL MANUF ZONING EVRT /M-2 /C

LAND VALUATION

PORTION	METHOD SITE	SQ FT	FR FT	ACRES	TMBR	ACRES	SITE UTILITY	CONTIG	CLEARED	WOODED	NEIGH GOOD	NEIGH AVG	NEIGH FAIR	ACCESS LEG YES	ACCESS LEG NO	PHY YES	PHY NO	RD ASPHLT	RD GRAVEL	CURB SW	PWR UNDRGD	PWR POLE	WTR PUBLIC	WTR WELL	SEWER	SEPTIC	NO PERK	VIEW BLUFF	VIEW GOOD	VIEW AVG	VIEW FAIR	WTR FRT LOW BK	WTR FRT MED BK	WTR FRT HI BK	TIDELAND	LOW LAND	WET	STEEP	EASEMENT
1				X		1.45	1.00	X	X			X			X	X		X				X	X		X													

QUANTITY	RATE
1.45	150,000

LIEN

BUILDING VALUES

P/P	
BLDG $	663,400*
O-IMP $	0
COMM $	0
TOTAL $	663,400

LAND VALUE

$ 217,500

TOTAL ASSESSED VALUE

$ 880,900

LIEN VALUE

($ 0)

FM 94 ☐ ACCOUNT NO 182905-2-013-0003 SD L/C

SITUS: P/P NO TYPE

NBR 1032 - _____ UNIT # _____ PRE __ STREET 10 Th _____ TYPE ST SUF __

CITY EVE _____ ZIP 98201 - _____ CT 401.00 SEC-TWP-RNG 182905 - 2

BENCH MARK AREA 400 WTRFT

BUSINESS NAME CRUISE - A - HOME, INC / TC Systems

U N D X

BUILDING NO 1	OCCUPANCY 24		CONSTRUCTION S	STYLE 1	
DATE BUILT 1980	REMODEL DATE 1985	CONDITION A	EFFECTIVE AGE 10	DEPRECIATION % 15	
% UNFINISHED	HEIGHT MULT 1.231	PERIM MULT .921	BUILDING LIFE 35	MARKET MODIFIER	

QUALITY L	BEDROOMS #	FLOOR COVER N	BUILT IN APPLIANCES	
			RANGE-OVEN	INTERCOM
EXTERIOR M	FULL BATHS #	FLOOR CONST	HOOD-FAN	VACUUM
	3/4 BATHS #	FRAME ☐	DISHWASHER	EL GAR DR
ROOF TYPE P	1/2 BATHS #	CONC ☐	GARB DISP	HOT TUB
			TRASH COMP	SAUNA
ROOF COVER M	PLUMB FIX #	HEAT-COOL S	MICROWAVE	
FOUNDATION C		FIREPLACE		

1st FLR ☐ 28000	BASEMENT ☐	GAR QUAL L	CP QUAL	PRCH QUAL
2nd FLR ☐	DAYLITE	EXTERIOR M	ROOF CVR	CONC ☐
3rd FLR ☐	POR DEV ☐	ATTACHED ☐ 210	CP ☐	DECK ☐
4th FLR ☐	QUAL FIN	DETACHED ☐		BALC ☐
LOFT ☐		BASEMENT ☐		ROOF ☐

MEZZANINE	COMMERCIAL BASEMENT	YARD IMPROVEMENTS	LIVING UNITS	
LOFT ☐ 4000	UNFIN ☐	ASPH ☐ 15000	TYPE # ☐	
UNDEV ☐	CEILED ☐	CONC ☐ 10 000	STUDIO	
RETAIL ☐	FINISHED ☐	YD LT #P #F	1 BR	
RET-OFF ☐ 2000	RETAIL ☐	FENCE L/F 300	2 BR	
OFFICE ☐	APT ☐		3 BR	
BANK ☐	OFFICE ☐	SPRINKLED ☐	TOTAL	
	BANK ☐	28,000		
	FACTOR %	ELEVATOR	LENGTH	
	PARKING ☐		WIDTH	
	PARK QUAL		AVG HEIGHT 24	
			PERIMETER 680	

5/26 SR

LAND USE 34900 ZONING EVE / M2 / C

LAND VALUATION

PORTION	METHOD: SITE 1	SQ FT 2	FR FT 3	ACRES 4	TMBR 5	QUANTITY	RATE	CONTIG	CLEARED 1	WOODED 2	NEIGH: GOOD 1	AVG 2	FAIR 3	ACCESS: LEG YES 1	PHY NO 2	PHY YES 1	PHY NO 2	RD: ASPHLT 1	GRAVEL 2	CURB SW	PWR: UNDRGD 1	POLE 2	WTR: PUBLIC 1	WELL 2	SEWER 1	SEPTIC 2	NO PERK	VIEW: BLUFF 1	GOOD 2	AVG 3	FAIR 4	WTR FRT: LOW BK 1	MED BK 2	HI BK 3	TIDELAND	LOW LAND	WET	STEEP	EASEMENT
1				X		1.45	150,000	X	X			X			X	X		X				X	X		X													

ACRES 1.45

SITE UTILITY 1.00

LIEN

BUILDING VALUES

P/P

BLDG $ 663,400

O-IMP $

COMM $

TOTAL $

LAND VALUE

$ 217,500

TOTAL ASSESSED VALUE

$ 881,900

LIEN VALUE

($)

ACCOUNT NUMBER 182905-2-013-0003 ~~013-0003~~ DATE 12/19/80

NAME OF BUSINESS (DBA) CRUISE-A-HOME, INC. POLARIS MARINE
ANDERSON, EUGENE R. ET AL

ADDRESS OF PROPERTY ~~1028 W. MAR. VIEW~~ 1032 10TH ST.

BLDG USE/TYPE ~~BOAT RACE~~ MFG. CLASS "S" LOW COST IND. Bldg. Life 35

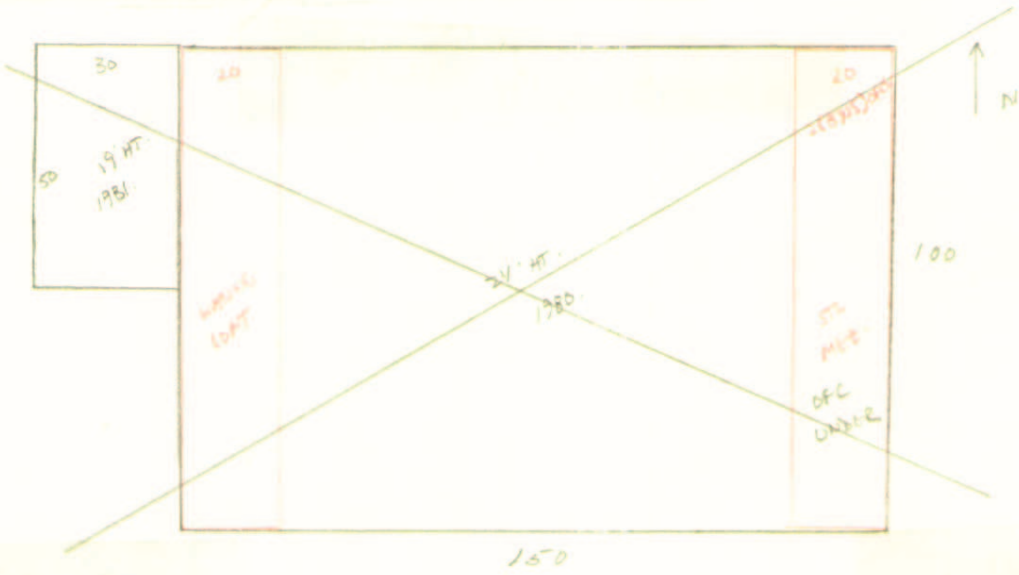
CONDITION	EXTERIOR WALLS	INTERIOR WALLS	INTERIOR TRIM	INCOME INFORMATION ON FILE
E G F P	Single	Brick	Mahogany	YES / NO / DATE
G Foundation	Double	Concrete	✓ Metal	
G Exterior	Brick	Conc Blk	Hemlock	
G Interior ~~UNF~~	Concrete	Plywood	Birch	
	✓ Pre Fab Metal	Plywood Panel		
BUILDING	Glass	Plaster	**INSULATION**	
1 No. Stories		✓ Plaster Board PREP.	✓ Roof Ceiling	
1 No. Stores	**EXTERIOR FACING**	✓ Painted WHITE	✓ Walls	
Bsmt.	Siding	Papered	Floor	**BLDG. PERMITS**
✓ No. Offices	Stucco	✓ OPEN	**WIRING**	No. / Date / Amt. / Purpose
No. Apts	Tx 111	**INTERIOR CEILING**	Minimum	07420 / 5/30/80 / 400,000 / CONSTR NEW METAL BLDG
	Brick Venr	Plaster	✓ Average	08056 / 8/7/80 / 18,900 / INSTL. FIRE SPRINKLER SYS.
UNIT SQ. FEET	Concrete	Plaster Board	Good	08583 / 11/80 / 42,000 / DEC MEZ 47 22 INT. REM. IVE CMNT
1br	Concrete Blk	Celotex	Special	09533 / 8/81 / 30,000 / SPR PT. BOOTH 30X50
2br	Ply - HDBD	Acoustical Spray	**HEAT**	12981 / 3/84 / 99,500 / ADD 14000 ft
3br	✓ PREFAB METAL	✓ Acoustical Susp.	**ELEC-GAS-OIL**	
4br	**FLOOR CONSTRUCT.**	✓ Open	Hot Water	
Avg	Wood Frame		Forced Air	
CONSTRUCTION	Car Deck	**PLUMBING**	✓ Suspended GAS.	
Wood Frame	✓ Concrete	17 No. of Fixtures	✓ Base Board OFF	
✓ Steel Frame	Plywood	Tubs	Heat Pump NF	
Concrete Blk	Earth	5 Toilets	Air Condition	
Tilt up		6 Basins	H.V.A.C.	
Modular		2 Sinks	DATE BUILT 1980	WALL HT. / SQ. FT.
Brick	**FLOOR FINISH**	Utility	Add Yr. 1985	B / B ~~28000~~ 16500
	Hardwood	2 Shower	Eff. Age	~~19~~ 24 / 1 ~~15,000~~ 16500
FOUNDATION	Lino	1 HWT	Dep. Phy. Cond.	2 Maint / 2 ~~4000~~
✓ Concrete	Asph. Tile	1 Urinal	Dep. Econ. Obs.	3 / 3
Conc. Blk.	✓ Vinyl Tile	Drink Fount.	Dep. Func. Obs.	4 / 4
Post & Pier	✓ Concrete		**ITEM** / Sq. Ft. / Factor / Product	
None	Terazzo	**SOLAR SYSTEM**	BR 12.55 X 1.231 HGT.=	
	✓ Carpet	Heat	15.45 X .967 AP= 14.90	
BSMT.		Hot Water	X1.11 MULT.= 16.54	
Full Part			(MULT.=.99 X 1.126) ~~16500~~ ~~15,000~~ 15000 X16.54 = 248,100	
Sub Bsmt.	**ROOF CONST.**	**ROOF COVER**	SPRINKLER SYSTEM ~~28500~~ ~~18,890~~ 18547 X1.02 = 18,890	
Parking	Wood Frame	Shake-Shingle	WHSING LOFT 2000	
Service	✓ Steel Frame	Composition	STG/OFC MEZ 2000	
Finished	Truss	Bit Up		
FLOOR COVER	Ply-Cardeck	✓ Metal		
	Alum Frame			
ELEVATOR	**Miscellaneous Items**	**Miscellaneous Items**		
Hyd Elect	Yard Lites	Drop in Range		
Pass Freight	Pump Islands	Built in R-O	TOTAL	266,990
Stops	SP DP	Garbage Disposal	% UNF 30% - INTERIOR PARTITIONS, OFFICE AND LOFTS	80,100
	Monoxo Vents	Hood & Fan	TOTAL	186,890
Miscellaneous Items	✓ Sprinklers ALL	Dish Washer	LESS DEP.	
Fire Place	✓ Thermopane	✓ BT 15000	TOTAL	186,890
Balcony	Tanks	✓ CONC 10,000	OTHER IMPROVEMENTS	
Stair Ways	✓ COMPR. 2000 M	✓ FENCE 3000 L	TOTAL FV	186,890
Marquee	2104			
Covered Walk			MAIN BLDG.	
Hoists			OTHER BLDGS.	
Air Water			TOTAL FV	186900.
Canopy				

OTHER IMPROVEMENTS

Improvement	Construction	Floor	Roof	Age	Dimension	Area	Factor	Value	% Dep	Deprec.	Net Value

REMARKS: WILL HAVE AN OFFICE, LUNCH AND REST ROOMS - ALSO FRAMING FOR LOFTS ON WEST WALL AND MEZZANINE ON EAST WALL. BLDG. NOW 30% UNF. THERE WILL BE 35'17 S.F. OF OFFICE-MEZZANINE AREA ALL SPRINKLED, ADDED INSIDE. 12/19/80 HWJ

BLDG 'C'



INT MEZ. FRAMED IN, BUT LITTLE FIN. MEZ ON EAST SIDE IS PLANNED FOR FIN OFC'S WITH FIN OFCS UNDER. NOT DONE. SPRAY BOOTH IS FULL, BUT NOT FINISHED. PLANT IS NOT OPERATING. VALUE OF FOL NOW. Up 4/82. Looked up could not see any dif from pict. of 5-16-83 2140. BLDG CONF AS NOTED ON ABOVE DWG EP 8/84

EAST WALL 12-19-80

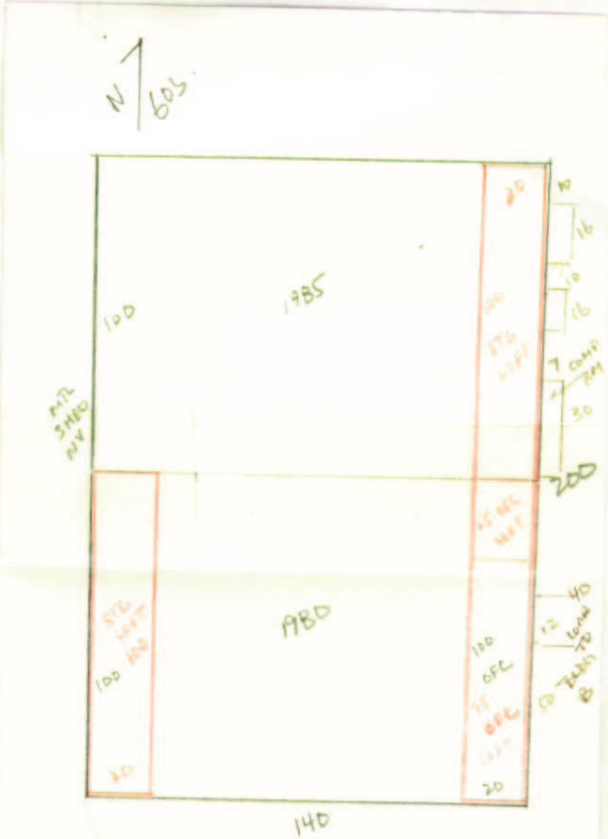
182905-2-~~003-0005~~ 013-0003

12/19/80

SOUTH WALL

182905-2-~~003-0005~~ 013-0003

6/85 'C'



TAPE PICTURE HERE

BUILDING PERMITS

DATE	NUMBER	AMOUNT
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BUILDER

MISCELLANEOUS INFORMATION

DEPTY	DATE	REMARKS
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SALES DATA

GRANTOR/SELLER	GRANTEE/PURCHASER	W.O.P.	INST	1%	DATE	SALES PRICE
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OTHER CONSTRUCTION

TYPE	DATE BUILT	CONST.	FLOOR	ROOF	DIMENSION	S.F. AREA	COND.	FACTOR	VALUE	% DEP.	NET VALUE
	/ /										
	/ /										
	/ /										
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APPRAISAL DATA

DEPTY	DATE	REMARKS
SH	5/19/94	SEGD FR 2-003 PER REC BSP AF # 9404010424. SPLIT 94 LAV PER %. 95/96
	/ /	LAV & BAV PLACED + VALUED PER BART P.
BR	4/15/96	Legal to add AF Corrections Nos 1, 96, 05, 12
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DEPTY	DATE	REMARKS
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182905-2-007-0001

05/27/94 5940616

NEW ACCOUNT

LEVY CODE 0010

SCHOOL DISTRICT 2

SEC 18 TWP 29 RGE 05
LOT 2 OF NORTON INDUSTRIES BSP
REC VOL 2894 BSP'S PG 0177 AF NO
9404010424 BEING A PTN OF N1/2 SEC 18

182905-2-007-0001

04/26/95 L960512

NORTON INDUSTRIES

1210 W MARINE VIEW DR
EVERETT WA
98201

LEVY CODE 0010

SCHOOL DISTRICT 2

SEC 18 TWP 29 RGE 05
LOT 2 OF NORTON INDUSTRIES BSP
REC VOL 2894 BSP'S PG 0177 AF NO
9404014242 & AF NOS 9404015002 &
9405185001 BEING A PTN OF N1/2 SEC 18

REVAL 94 BUILDING LAND

FM 61 ☐ TAX YR 95 05/27/94 05/27/94 ACCOUNT NO 182905-2-007-0001 SD 2 L/C 0010

SITUS: P/P NO TYPE

NBR 1104 UNIT # PRE STREET 10TH TYPE ST SUF

CITY EVERETT ZIP 98201 CT 401.00 SEC-TWP-RNG 182905-2

BENCH MARK AREA 410 WTRFT

BUSINESS NAME T C SYSTEMS, INC

U N D X

BUILDING NO	OCCUPANCY	CONSTRUCTION	STYLE
1 OF 1	24 MANUFACTURING	S	1 STRY

DATE BUILT	REMODEL DATE	CONDITION	EFFECTIVE AGE	DEPRECIATION %
1978	1985	AVERAGE	10	15

% UNFINISHED	HEIGHT MULT	PERIM MULT	BUILDING LIFE	MARKET MODIFIER
	1.231	.949	35	

QUALITY	BEDROOMS #	FLOOR COVER	BUILT IN APPLIANCES	
LOW		NONE	RANGE-OVEN	INTERCOM
EXTERIOR	FULL BATHS #	FLOOR CONST	HOOD-FAN	VACUUM
METAL	3/4 BATHS #	FRAME ☐	DISHWASHER	EL GAR DR
ROOF TYPE	1/2 BATHS #	CONC ☐	GARB DISP	HOT TUB
PITCHED			TRASH COMP	SAUNA
ROOF COVER	PLUMB FIX #	HEAT-COOL	MICROWAVE	
METAL		SUSP		
FOUNDATION		FIREPLACE		
CONCRETE				

1st FLR ☐	20,000	BASEMENT ☐		GAR QUAL		CP QUAL	LOW	PRCH QUAL	
2nd FLR ☐		DAYLITE		EXTERIOR		ROOF CVR	METAL	CONC ☐	
3rd FLR ☐		POR DEV ☐		ATTACHED ☐		CP ☐	760	DECK ☐	
4th FLR ☐		QUAL FIN		DETACHED ☐				BALC ☐	
LOFT ☐				BASEMENT ☐				ROOF ☐	

MEZZANINE		COMMERCIAL BASEMENT		YARD IMPROVEMENTS		LIVING UNITS		
LOFT ☐	1,568	UNFIN ☐		ASPH ☐	10,000	TYPE	#	☐
UNDEV ☐		CEILED ☐		CONC ☐	10,000	STUDIO		
RETAIL ☐		FINISHED ☐		YD LT #P	#F	1 BR		
RET-OFF ☐	702	RETAIL ☐		FENCE L/F	250	2 BR		
OFFICE ☐		APT ☐				3 BR		
BANK ☐		OFFICE ☐		SPRINKLED ☐	20,000	TOTAL		
		BANK ☐						
		FACTOR %		ELEVATOR		LENGTH		
		PARKING ☐				WIDTH		
		PARK QUAL				AVG HEIGHT	24	
						PERIMETER	600	

12/26 SJ

LAND USE 34900 PREFAB METAL MANUF ZONING EVRT /M-2 MS /C

LAND VALUATION

POR	METHOD SITE	SQ FT	FR FT	ACRES	TMBR	ACRES	QUANTITY	RATE	CONTIG	CLEARED	WOODED	NEIGH GOOD	AVG	FAIR	ACCESS LEG YES	LEG NO	PHY YES	PHY NO	RD GRAVEL	RD ASPHLT	CUR SW	PWR UNDRGD	PWR POLE	WTR PUBLIC	WTR WELL	SEWER	SEPTIC	NO PERK	VIEW BLUF	VIEW GOOD	VIEW AVG	VIEW FAIR	WTRFRT LOW BK	WTRFRT MED BK	WTRFRT HI BK	TIDELAND	LOW LAND	WET	STEEP	EASEMENT
1				X			1.12	150,000	X	X			X		X		X		X			X	X		X														
								160,000																																

ACRES 1.12

SITE UTILITY 1.00

BUILDING VALUES

P/P	
BLDG $	470,400*
O-IMP $	0
COMM $	0
TOTAL $	470,400

LAND VALUE

$ 168,000 (139,200)

TOTAL ASSESSED VALUE

$ 638,400

LIEN

LIEN VALUE

($ 0)

	BUILDING	LAND		SD	
FM 94 ☐ REVAL 94	05/27/94	05/27/94	ACCOUNT NO 182905-2-007-0001		L/C 0010

SITUS: P/P NO TYPE

NBR 1104- UNIT # PRE STREET 10TH TYPE ST SUF

CITY EVERETT ZIP 98201- CT 401.00 SEC-TWP-RNG 182905-2

BENCH MARK AREA 400 WTRFT

BUSINESS NAME T C SYSTEMS, INC

U N D X

BUILDING NO	OCCUPANCY	CONSTRUCTION	STYLE
1 OF 1	24 MANUFACTURING	S	1 STRY

DATE BUILT	REMODEL DATE	CONDITION	EFFECTIVE AGE	DEPRECIATION %
1978	1985	AVERAGE	10	15

% UNFINISHED	HEIGHT MULT	PERIM MULT	BUILDING LIFE	MARKET MODIFIER
	1.231	.949	35	

QUALITY	BEDROOMS #	FLOOR COVER	BUILT IN APPLIANCES	
LOW		NONE	RANGE-OVEN	INTERCOM
EXTERIOR	FULL BATHS #	FLOOR CONST	HOOD-FAN	VACUUM
METAL	3/4 BATHS #	FRAME ☐	DISHWASHER	EL GAR DR
ROOF TYPE	1/2 BATHS #	CONC ☐	GARB DISP	HOT TUB
PITCHED			TRASH COMP	SAUNA
ROOF COVER	PLUMB FIX #	HEAT-COOL	MICROWAVE	
METAL		SUSP		
FOUNDATION		FIREPLACE		
CONCRETE				

1st FLR ☐	20,000	BASEMENT ☐	GAR QUAL	CP QUAL	LOW	PRCH QUAL	
2nd FLR ☐		DAYLITE	EXTERIOR	ROOF CVR	METAL	CONC ☐	
3rd FLR ☐		POR DEV ☐	ATTACHED ☐	CP ☐	760	DECK ☐	
4th FLR ☐		QUAL FIN	DETACHED ☐			BALC ☐	
LOFT ☐			BASEMENT ☐			ROOF ☐	

MEZZANINE		COMMERCIAL BASEMENT	YARD IMPROVEMENTS		LIVING UNITS		
LOFT ☐	1,568	UNFIN ☐	ASPH ☐	10,000	TYPE	#	☐
UNDEV ☐		CEILED ☐	CONC ☐	10,000	STUDIO		
RETAIL ☐		FINISHED ☐	YD LT #P	#F	1 BR		
RET-OFF ☐	702	RETAIL ☐	FENCE L/F	250	2 BR		
OFFICE ☐		APT ☐			3 BR		
BANK ☐		OFFICE ☐	SPRINKLED ☐	20,000	TOTAL		
		BANK ☐					
		FACTOR %	ELEVATOR		LENGTH		
		PARKING ☐			WIDTH		
		PARK QUAL			AVG HEIGHT	24	
					PERIMETER	600	

LAND USE 34900 PREFAB METAL MANUF ZONING EVRT /M-2 /C

LAND VALUATION

PORTION	METHOD: SITE	SQFT	FR FT	ACRES	TMBR	ACRES	SITE UTILITY	QUANTITY	RATE	CONTIG	CLEARED 1	WOODED 2	NEIGH: GOOD 1	AVG 2	FAIR 3	ACCESS LEG: YES 1	NO 2	PHY: YES 1	NO 2	RD: ASPHLT 1	GRAVEL 2	CURB	SW	PWR: UNDRGD 1	UPOLE 2	WTR: PUBLIC 1	WELL 2	SEWER 1	SEPTIC 2	NO PERK	VIEW: BLUFF 1	GOOD 2	AVG 3	FAIR 4	WTR FRT: LOW BK 1	MED BK 2	HI BK 3	TIDELAND	LOW LAND	WET	STEEP	EASEMENT
1				X			ACRES 1.12	1.12	150,000	X	X			X			X	X	X					X	X		X															
							SITE UTILITY 1.00																																					

LIEN

BUILDING VALUES

P/P	
BLDG $	470,400*
O-IMP $	0
COMM $	0
TOTAL $	470,400

LAND VALUE

$ 168,000

TOTAL ASSESSED VALUE

$ 638,400

LIEN VALUE

($ 0)

1 OF 1

FM 94 ☐ ACCOUNT NO 182905-2-007-0001 SD L/C

SITUS: P/P NO TYPE

NBR 1104 - _____ UNIT # _____ PRE __ STREET 10 TH TYPE ST SUF __

CITY EVE ZIP 98201 - ____ CT 401.00 SEC-TWP-RNG 182905 - 2

BENCH MARK AREA 400 BUSINESS NAME TC Systems Inc WTRFT

U N D X

BUILDING NO 1	OCCUPANCY 24		CONSTRUCTION S	STYLE 1
DATE BUILT 1978	REMODEL DATE 1985	CONDITION A	EFFECTIVE AGE 10	DEPRECIATION % 15
% UNFINISHED	HEIGHT MULT 1.231	PERIM MULT .949	BUILDING LIFE 35	MARKET MODIFIER

QUALITY L	BEDROOMS #	FLOOR COVER N	BUILT IN APPLIANCES	
			RANGE-OVEN	INTERCOM
EXTERIOR M	FULL BATHS #	FLOOR CONST	HOOD-FAN	VACUUM
	3/4 BATHS #	FRAME ☐	DISHWASHER	EL GAR DR
ROOF TYPE P	1/2 BATHS #	CONC ☐	GARB DISP	HOT TUB
			TRASH COMP	SAUNA
ROOF COVER M	PLUMB FIX #	HEAT-COOL S	MICROWAVE	
FOUNDATION C		FIREPLACE		

1st FLR ☐ 20,000	BASEMENT ☐	GAR QUAL	CP QUAL L	PRCH QUAL
2nd FLR ☐	DAYLITE	EXTERIOR	ROOF CVR M	CONC ☐
3rd FLR ☐	POR DEV ☐	ATTACHED ☐	CP ☐ 760	DECK ☐
4th FLR ☐	QUAL FIN	DETACHED ☐		BALC ☐
LOFT ☐		BASEMENT ☐		ROOF ☐

MEZZANINE	COMMERCIAL BASEMENT	YARD IMPROVEMENTS	LIVING UNITS
LOFT ☐ 1568	UNFIN ☐	ASPH ☐ 10,000	TYPE # ☐
UNDEV ☐	CEILED ☐	CONC ☐ 10,000	STUDIO
RETAIL ☐	FINISHED ☐	YD LT #P #F	1 BR
RET-OFF ☐ 702	RETAIL ☐	FENCE L/F 250	2 BR
OFFICE ☐	APT ☐		3 BR
BANK ☐	OFFICE ☐	SPRINKLED ☐ 20,000	TOTAL
	BANK ☐		
	FACTOR %	ELEVATOR	LENGTH
	PARKING ☐		WIDTH
	PARK QUAL		AVG HEIGHT 24
			PERIMETER 600

5/27

LAND USE 34900 ZONING EVE / M2 / C

LAND VALUATION

PORTION	METHOD: SITE 1	SQFT 2	FR FT 3	ACRES 4	TMBR 5	QUANTITY	RATE	CONTIG	CLEARED 1	WOODED 2	NEIGH: GOOD 1	AVG 2	FAIR 3	ACCESS: LEG YES 1	LEG NO 2	PHY YES 1	PHY NO 2	RD: ASPHLT 1	GRAVEL 2	CURB SW	PWR: UNDRGD 1	POLE 2	WTR: PUBLIC 1	WELL 2	SEWER 1	SEPTIC 2	NO PERK	VIEW: BLUFF 1	GOOD 2	AVG 3	FAIR 4	WTRFRT: LOW BK 1	MED BK 2	HI BK 3	TIDELAND	LOW LAND	WET	STEEP	EASEMENT
1				X		1.12	150,000	X	X				X		X		X	X				X	X	X														

ACRES 1.12 SITE UTILITY 1.00

BUILDING VALUES

P/P O/R

BLDG $ 470,400

O-IMP $

COMM $

TOTAL $

LAND VALUE

$ 168,000

TOTAL ASSESSED VALUE

$ 638,400

LIEN VALUE

($)

LIEN

ACCOUNT NUMBER 18290S - 2 - ~~003~~ 0001 ~~0005~~ DATE 1/30/79

NAME OF BUSINESS (DBA) CRUISE-A-HOME / POLARIS MARINE

ADDRESS OF PROPERTY ~~1028~~ 1104 10TH ST. ~~W. MAIN DREW~~

BLDG USE/TYPE ~~BOAT MFG~~ WHSE MFG CLASS S LOW COST ~~MFG~~ WHSE Bldg. Life 35

CONDITION	EXTERIOR WALLS	INTERIOR WALLS	INTERIOR TRIM	INCOME INFORMATION ON FILE
E G F P	Single	Brick	Mahogany	YES / NO / DATE
G Foundation	Double	Concrete	✓ Metal	
G Exterior	Brick	Conc Blk	Hemlock	
G Interior	Concrete	Plywood	Birch	
	✓ Pre Fab Metal	Plywood Panel		
BUILDING	Glass	Plaster	**INSULATION**	
1 No. Stories		✓ Plaster Board } BR LR STR	✓ Roof Ceiling	
1 No. Stores	**EXTERIOR FACING**	✓ Painted	✓ Walls	
Bsmt.	✓ Siding MTL	Papered	Floor	**BLDG. PERMITS**
✓ No. Offices	Stucco		**WIRING**	No. / Date / Amt. / Purpose
No. Apts	Tx 111	**INTERIOR CEILING**	Minimum	4185 / 4/78 / 185000 / 100X150 MTL
	Brick Venr	Plaster	✓ Average	13994 / 10/84 / 75000 / 50 X 100 ADD
UNIT SQ. FEET	Concrete	✓ Plaster Board 22 LR STR	Good	
1br	Concrete Blk	Celotex	Special	
2br	Ply - HDBD	Acoustical Spray	**HEAT**	
3br		Acoustical Susp.	**ELEC-GAS-OIL**	
4br	**FLOOR CONSTRUCT.**	✓ Open	Hot Water	
Avg	Wood Frame		~~✓~~ Forced Air BLOWER DOOR MTG LIGHTS	
CONSTRUCTION	Car Deck	**PLUMBING**	✓ Suspended	
Wood Frame	✓ Concrete	7 No. of Fixtures	Base Board	
✓ Steel Frame	Plywood	Tubs	Heat Pump	
Concrete Blk	Earth	1 Toilets	Air Condition	
Tilt up		1 Basins	~~✓~~ H.V.A.C.	
Modular		1 Sinks	**DATE BUILT** 1978	**WALL HT.** / **SQ. FT.**
Brick	**FLOOR FINISH**	Utility	Add Yr.	B / B
	Hardwood	1 Shower	Eff. Age	1 20 / 1 15,000
FOUNDATION	Lino	1 HWT	Dep. Phy. Cond.	2 / 2
✓ Concrete PILINGS UNDER	Asph. Tile	1 Urinal	Dep. Econ. Obs.	3 / 3
Conc. Blk.	Vinyl Tile	1 Drink Fount.	Dep. Func. Obs.	4 / 4
Post & Pier	✓ Concrete		**ITEM**	Sq. Ft. / Factor / Product
None	Terazzo	**SOLAR SYSTEM**	BR 9.88 + .69(HEAT) X	15,000 / 11.46 / 171,900
	Carpet	Heat	1.133 (HT) X .957 (P) = 11.46	
BSMT.		Hot Water	SM. DTL LOFT	1008 / 2.35 / 2370
Full Part			2ND FLR	702 / 9.91 / 6955.
Sub Bsmt.	**ROOF CONST.**	**ROOF COVER**	SPIERS	16710 / .91 / 15205.
Parking	Wood Frame	Shake-Shingle		
Service	✓ Steel Frame	Composition		
Finished	Truss	Bit Up		
FLOOR COVER	Ply-Cardeck	✓ Metal		
	Alum Frame			
ELEVATOR	**Miscellaneous Items**	**Miscellaneous Items**		
Hyd Elect	1 Yard Lites	Drop in Range		
Pass Freight	Pump Islands	Built in R-O	TOTAL	196430
Stops	SP DP	Garbage Disposal	~~% UNF~~ TREND 1.08(C) X 1.05(L)	1.11
	Monoxo Vents	Hood & Fan	TOTAL	218035.
Miscellaneous Items	✓ Sprinklers ALL	Dish Washer	LESS DEP.	
Fire Place	Thermopane		TOTAL	
Balcony	Tanks		OTHER IMPROVEMENTS	
Stair Ways			TOTAL FV	
Marquee				
Covered Walk			MAIN BLDG.	
Hoists			OTHER BLDGS.	
Air Water			TOTAL FV	218000
✓ Canopy				

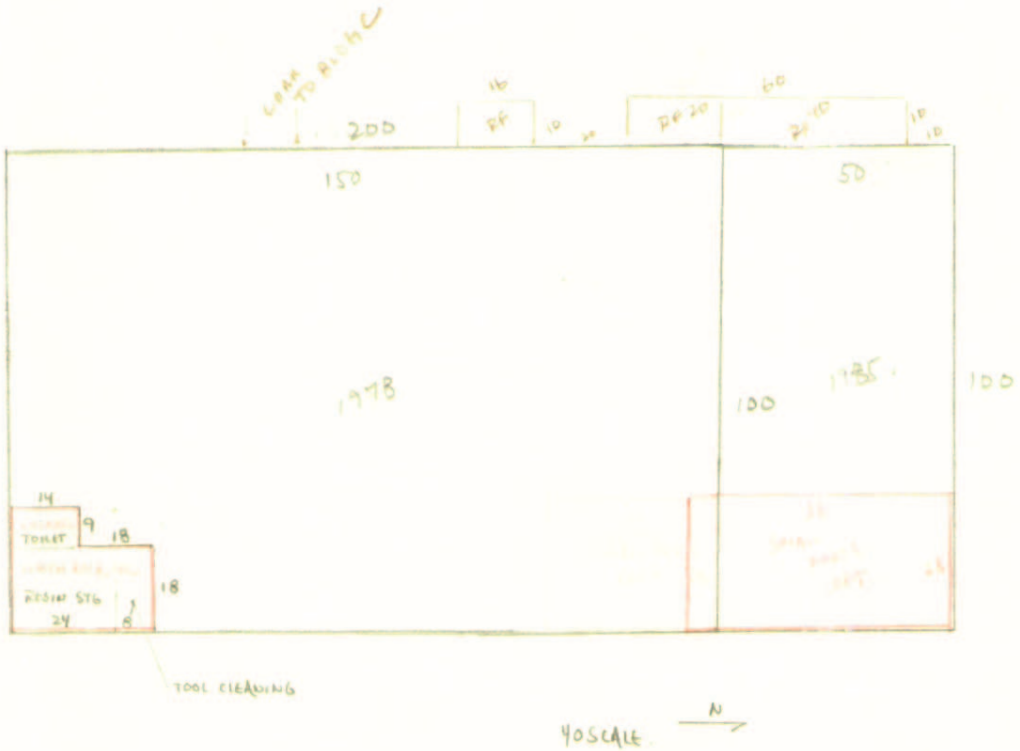
OTHER IMPROVEMENTS

Improvement	Construction	Floor	Roof	Age	Dimension	Area	Factor	Value	% Dep	Deprec.	Net Value
BT				1976	10,000	~~By Dec~~					
FENCE	CL TR	3 SW	8' HT	1980	250 LF	900 SF	9.30	~~8370~~			
CONC	SLAB			~~1980~~	10,000	~~20,000~~	~~75~~	~~15000~~			
							TOTAL	~~23370~~			

REMARKS:

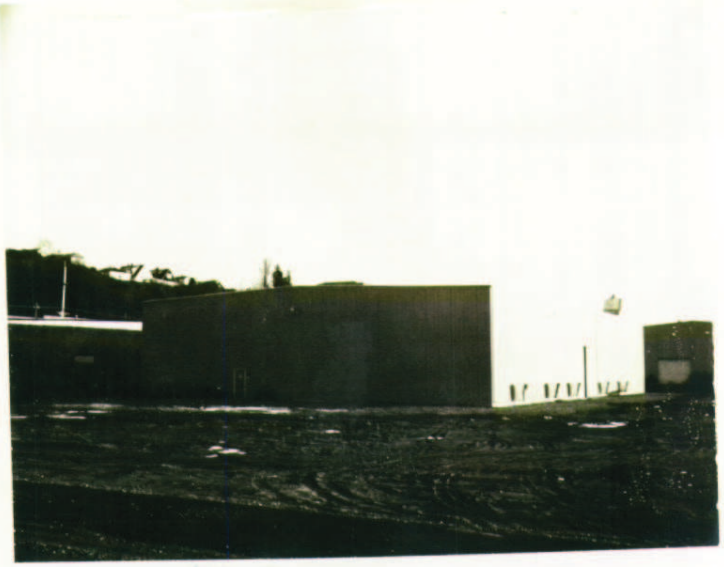
WINDGATE ~~1980~~ 68/14
M.H. ~~EQUIP~~ OF CO
~~1/81~~ 6/82

BLDG. 'B'



Add Yr. 1985	B		B 20,000
Eff. Age	1 ~~20~~ 24		1 ~~45~~ 5000
Dep. Phy. Cond.	2		2
Dep. Econ. Obs.	3		3
Dep. Func. Obs.	4		4

ITEM	Sq. Ft.	Factor	Product
BR 12.55 + .77 HEAT =			
13.32 X 1.133 HGT = 15.09			
X .967 A.P. = 14.59 X			
1.11 MULT. = 16.19			
(MULT. = .99 C X 1.12 L)	15,000	16.19	242,850
SM PTS LOFT	1008	2.61	2,630
2ND FLR.	702	11.00	7720
SPRINKLERS	16,740	1.02	17,040
TOTAL			270,240
% UNF			
TOTAL			270,240
LESS DEP.			
TOTAL			270,240
OTHER IMPROVEMENTS			23,370
TOTAL FV			293,610
MAIN BLDG. 1 OF 2			293,600
OTHER BLDGS. 30% UNF. 2 OF 2			186,900
TOTAL FV			480,500



1/79

5/85. B

APPENDIX J

PORT OF EVERETT TRAILER BOAT LAUNCH FACILITY;

WATERGATE BOAT LAUNCH FINAL EIS

8/28/74

CITY OF EVERETT

PERMIT FOR SUBSTANTIAL DEVELOPMENT

Pursuant to Section 14, Chapter 286, Laws of 1971 Extra Session, a permit is hereby granted to The Port of Everett, Pier 1, Everett, Washington, to undertake the following development:

A trailer boat launch facility including:

(1) the diking and filling of 15.4 acres of tidelands to an average elevation of approximately +17.0 feet MLLW, by hydraulic dredging of approximately 483,000 cubic yards of sand and silt from the lower Snohomish River Channel, and (2) the construction thereon of a trailer boat launch facility to include (a) a boat launching ramp with capacity for simultaneous launching of up to 18 trailered boats, (b) ramp access and temporary tieup floats, (c) floating drift booms and wave breaks, (d) parking areas for approximately 600 cars, (e) a service building to include office space, public restrooms, a small maintenance shop, etc., (f) a waterfront park and picnic area, with transient moorage float, and marine view points, (g) paved access roadways and a combination bike and pedestrian access path, and (h) appropriate landscaping.

upon the following described property:

See attachment "A"

Development pursuant to this permit shall be undertaken pursuant to the following terms and conditions:

1. That the project conform to Washington State Department of Fisheries criteria on marinas.

2. The dredging shall be conducted in a manner which minimizes the impact on water quality and aquatic life.

3. That the disposal of spoils behind the diked area shall be carried out in a manner which minimizes the adverse effects on the Snohomish River. Design of the disposal ponds and dikes shall consider the location of the inlet and outlet to prevent short circuiting, installation of adequate discharge controls, and providing a capacity and detention time based on the settling characteristics.

(1)

4. That pedestrian/bike access be provided to the project. This will connect with the bike path along Norton Avenue.

5. That the potential visual impact be mitigated by an extensive landscaping plan addressing the following areas:

   a. The access road from Norton Avenue to the site.

   b. The 10 acres of parking provided for autos and boats.

   c. The marine park, picnic and view area.

6. That the Department of Community Development be notified 7 days prior to commencing of dredging.

Nothing in this permit shall be construed as excusing the applicant from compliance with any federal, state, or local statutes, ordinances or regulations applicable to this project other than the permit requirements of the Shoreline Management Act of 1971.

This permit may be rescinded pursuant to Section 14(7) of the Shoreline Management Act of 1971 in the event the permittee fails to comply with any condition hereof.

Construction pursuant to a permit will not begin or be authorized until forty-five days from the date of final approval by the local government, or until all review proceedings are terminated within forty-five days from the date of final approval by the local government.

August 28, 1974
Date

Frank H. Bennett, Director
Department of Community Development

June 3, 1974
File No. 7.90J/4

NORTON AVENUE BOAT LAUNCH PROJECT

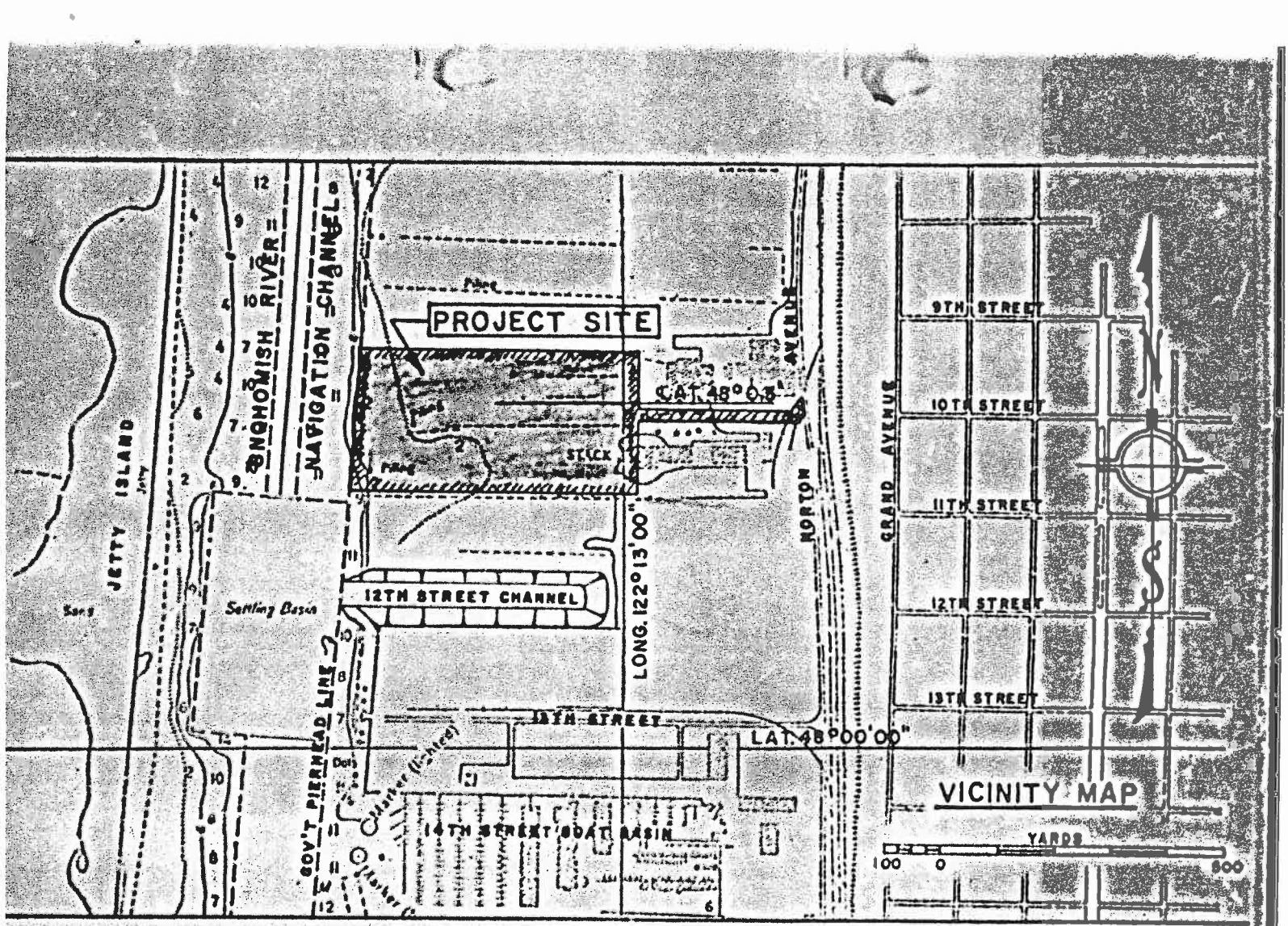
AGGREGATE DESCRIPTION FOR LANDS INCLUDED IN PROJECT

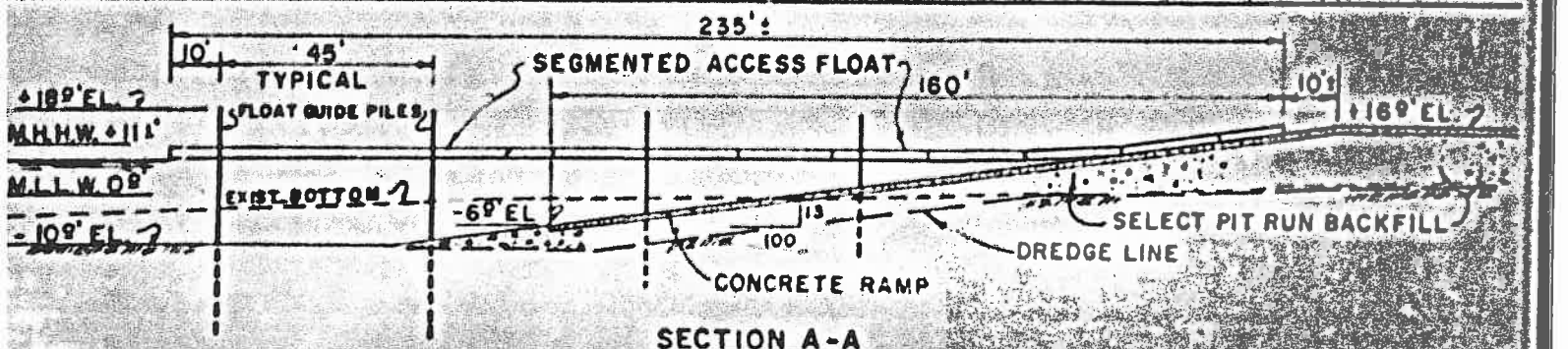
That portion of the First Class Tidelands lying westerly of Government Lots 1 and 2, Section 18, Township 29 North, Range 5 East W.M., described as follows: Commencing at the intersection of the Monument Line of Grand Avenue with the Monument Line of 14th Street in the City of Everett; thence N89°52'00"W, along the Monument Line of 14th Street produced, for 587.78 feet to an intersection with the westerly margin of the Northern Pacific Railway Company's right-of-way; thence N1°15'00"W, along the westerly margin of the Northern Pacific Railway Company's right-of-way, for 1831.53 feet; thence N89°52'00"W, for 732.94 feet to the True Point of Beginning; thence S0°08'00"W, for 350.00 feet; thence N89°52'00"W, for 1393.05 feet to an intersection with the Government Harbor or Pierhead Line; thence N3°49'50"E, along said Government Harbor or Pierhead Line, for 709.47 feet; thence S89°52'00"E for 1347.26 feet; thence S0°08'00"W, for 358.00 feet to the True Point of Beginning.

TOGETHER WITH an easement for ingress, egress and utilities over, under, across, through and upon that portion of the First Class Tidelands lying westerly of Government Lots 1 and 2, Section 18, Township 29 North, Range 5 East W.M., described as follows: Commencing at the intersection of the Monument Line of Grand Avenue with the Monument Line of 14th Street in the City of Everett; thence N89°52'00"W, along the Monument Line of 14th Street produced, for 587.78 feet to an intersection with the westerly margin of the Northern Pacific Railway Company's right-of-way; thence N1°15'00"W, along the westerly margin of the Northern Pacific Railway Company's right-of-way, for 1831.53 feet to the True Point of Beginning of this description; thence N89°52'00"W for 732.94 feet; thence N0°08'00"E for 60.00 feet; thence S89°52'00"E for 647.10 feet to the point of a curve of a curve to the left having a radius of 100.00 feet; thence easterly, along the arc of said curve to the left and consuming a central angle of 56°25'46", an arc distance of 98.49 feet; thence N33°42'14"E for 93.87 feet to the point of curve of a curve to the right having a radius of 50.00 feet; thence easterly, along the arc of said curve to the right and consuming a central angle of 51°52'53", an arc distance of 45.28 feet to an intersection with the westerly margin of Norton Avenue, said westerly margin being the arc of a curve having a radius of 6074.65 feet and from which intersection the radius point of the latter said curve bears N85°35'07"E; thence southerly, along the westerly margin of Norton Avenue and the arc of the latter said curve, being a curve to the left, to an intersection with the westerly line of that certain triangular parcel of land containing 16/100 acres more or less, being that parcel of land formerly belonging to the C. B. Lumber & Shingle Company in front of Government Lots 1 and 2, Section 18, Township 29 North, Range 5 East, W.M. and conveyed to Jamison Mill Company by deed dated November 4, 1926, and recorded in Volume 232 of Deeds, page 378, records of Snohomish County; thence southwesterly, along the westerly line of said certain triangular parcel of land, to a point which bears S89°52'00"E from the True Point of Beginning; thence N89°52'00"W to the True Point of Beginning.

REID, MIDDLETON & ASSOCIATES
Engineers • Surveyors • Planners
324 Main St. 775-3434
EDMONDS, WASHINGTON

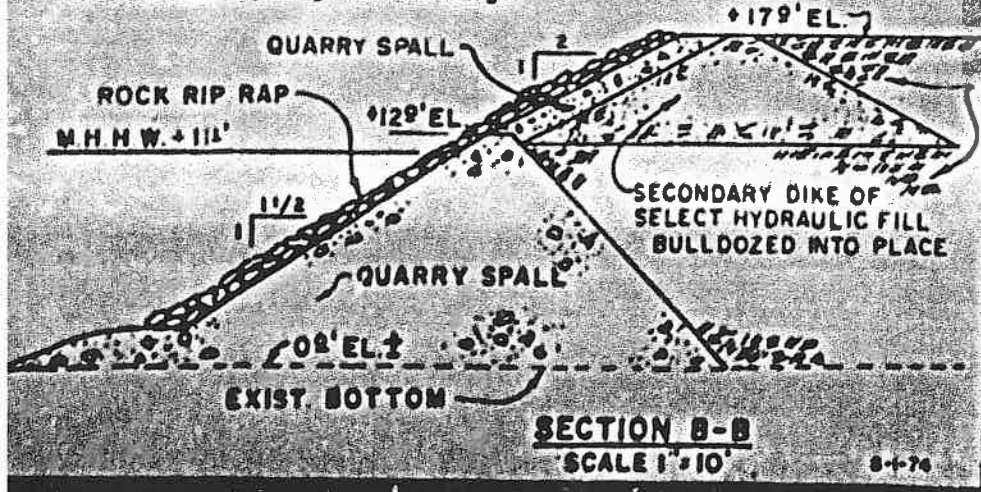
Attachment "A"





SECTION A-A
SCALE 1"=40'

8,600 Tons Rip Rap & 107,000 Tons Quarry Spall, placed by dragline from Barge.



SECTION B-B
SCALE 1"=10'

8-1-74

Revised 10-3-74

PROPOSED TRAILER BOAT LAUNCH AND MARINE PARK
IN: SNOHOMISH RIVER, at 10th Street
City of Everett, Snohomish County,
State of Washington
Application by: PORT OF EVERETT
Prepared by: Reid, Middleton & Assoc., Inc.
Edmonds, Washington

2. INTRODUCTION TO FINAL SUPPLEMENT

A. General Background Data

Following the conception of the Norton Avenue Trailer Boat Launch project in 1972 (at which time it was referred to also as the "Water Gate Boat Launch), a draft environmental impact statement was compiled and issued in May 1973 for review by appropriate City, County, State and Federal agencies. In July 1973 a final environmental impact statement was issued, which included the comments received from the reviewing agencies, together with analysis of and response to those comments.

For some months thereafter the Port of Everett engaged in difficult negotiations and some court actions directed toward acquisition of lands required for the project site. Acquisitions were finally consummated in the first half of 1974, but on the basis of certain compromises under which all lands easterly of a line 800 feet west of Norton Avenue were excluded from acquisition, except for an easement access road. This reduced the area of the project site, and necessitated modifications in details of the project development plan.

Upon consummation of site acquisition, the Port proceeded with an application to the City of Everett for a shoreline management permit for project construction. At that point City staff concluded that the differences between the development plan as depicted in the 1973 environmental impact statement and the modified plan portrayed in the application for shoreline management permit should be made the subject of a supplement to the 1973 impact statement. Such a supplement was compiled, and in the first week of July 1974 was distributed to appropriate City, County, State and Federal agencies.

Pursuant to the receipt of comments on the Draft Supplement, a Final Supplement has been compiled and is here presented in this bound document.

B. Format

The contents and format of this Final Supplement is indicated in the foregoing Table of Contents. It may be noted that preceding impact statements are included in their entirety, and that this Final Supplement adds the following:

(1) A new Summary Sheet
(2) This Introduction
(3) Statement of Project Action Subsequent to Issuance of Draft Supplement
(4) Agencies Receiving and Replying to Draft Supplement
(5) Copies of Letters of Comment
(6) Response to Review Comments
(7) Miscellaneous Exhibits

4. OTHER MODIFICATIONS TO FINAL ENVIRONMENTAL IMPACT STATEMENT OF JULY 1973

A. The Proposed Action

1. Type of Action

The type of action is basically unchanged; and only certain details of the proposed action have been modified, in the interest of more efficient land use, avoidance of disruption to existing desirable industry, and improvement of the overall facility plan. Area of acquisition has been reduced from the 33 acres of the former plan to 22.3 acres purchased, plus 1.3 acres in access easement, under the new plan "C". Creation of new uplands is modified as follows:

Fill Category	Reclaimed Acreage 1973 Plan	Reclaimed Acreage 1974 Plan "C"
On Port Project Site	17.0	15.4
Supplemental	-	4.3
Total	17.0	19.7

The item of "Supplemental" fill entered in the foregoing tabulation consists of projected subsequent filling of low areas on lands of Saginaw Shingle Company and Summit Company lying between the project site and Norton Avenue. Portions of these low areas are flooded at high tide and bare at low tide. The condition, location and configuration of these areas is such as to constitute generally an unsightly nuisance, and a future detriment to the marine ecology. In consummating acquisition of the project site, the Port of Everett has made a commitment to designate these low areas as a site for disposal of approximately 60,000 cubic yards of spoil from future maintenance dredging in the lower Snohomish River channel. This supplemental filling will be preceded by cleanup operations to remove a forest of unsightly deteriorated piling and other extensive debris remaining from abandoned mill operations and other activities, and will result in elimination of potential marine life entrapment areas and the creation of an attractive usable site for waterfront-oriented industry.

A rather thorough description of other modifications in the project development plan is provided in the preceding section, entitled "3. Description of Changes in Project", and need not be repeated here.

2. Justification of the Proposed Action

Justification for the proposed action was well-expressed in the Environmental Statement of 1973. The need for a boat launching facility of this character in the Everett area is very acute, and strongly increases year by year. Public interest in the early development of this project is very strong.

It is noted that the Draft Environmental Impact Statement of June 1973 suggested a desirability of two acres of uplands to be provided for each

of certain other factors is recognized. Some transitory light oil film will be left on the water surface of the boat-launching basin in the wakes of outboard motor driven boats, to the detriment of water quality. However, the total actual quantity of such pollutant is small, and the surface effect in the launching basin will not be cumulative, by reason of continual dissipation and flushing effect by the river currents and tidal action. Tradeoff of this minor pollution against the probably substantially greater pollution resulting from the log handling and wet storage operations presently carried on at this site should appear as an environmental gain.

Some noise pollution will result from startup and operation of boat motors. This level of noise might be entirely unacceptable in a quiet residential district or even adjacent to professional offices. However, the boat launching basin is remote from any use or occupancy to which the motor noise could create a problem or nuisance, with the exception only of the waterfront park. Considering that one of the real interests to visitors at this park is the activity engendered by the launching and operation of boats, the noise attendent thereto does not appear incompatible to the nearby park.

E. Alternatives to the Proposed Action

The comments appearing in Section E (same heading), page 7, of the Draft E.I.S. of June 1973, remain applicable. Notwithstanding, this E.I.S. Supplement reflects the conclusions of an even further analysis of alternatives, brought about by the need to bring the proposed project development into fuller compatability with the needs of contiguous industrial enterprises of a desirable character.

F. Relationship Between Short-Term Environmental Uses and the Maintenance and Enhancement of Long-Term Productivity

The comments of Section F (same heading), page 7, Draft E.I.S. of June 1973, remain fully applicable.

G. Irreversible and Irretrievable Commitments of Resources

The comments of Section G (same heading), page 7, Draft E.I.S. of June 1973, remain applicable excepting that the area of tidelands to be dredged is reduced from 10 acres to 5 acres, and the area of tidelands to be filled on Port property is reduced from 17 acres to 15.4 acres. Contemplated action,however,includes future filling of an additional 4.4 acres of presently severely impacted tidelands situated between the project site and Norton Avenue on properties of Saginaw Shingle Company and Summit Timber Company, as both an environmental and economic improvement.

H. Response to Review Comments

The comments appearing in Part 4 of the Final Environmental Impact Statement of July 1973, made in response to comments from reviewers of the Draft E.I.S. of June 1973, are deemed still valid except as noted following:

AMERICAN TUGBOAT COMPANY

SNOHOMISH RIVER NAVIGATION CHANNEL

EBB

FLOOD

GOVERNMENT HARBOR OR PIERHEAD LINE

S 3°49'30" W 109.47'

1347.26

N 89°52'30" W

1341.05

N 89°52'30" E

HULBERT MILL COMPANY

12th STREET CHANNEL (DREDGED TO -20.0 M.L.L.W.)

PROPERTY LINE

EXISTING 13th STREET FILL
(PORT OF EVERETT)

WET LANDS

SUMMIT TIMBER COMPANY

DRY LANDS

LINE OF EXTREME HIGH TIDE

(SAGA CRUISE-A-HOME COMPANY)
(ANDERSON)

CRUISE-A-HOME

S 89°52'00" E

210.90'

100.00'

100.03'

NORTON AVENUE

BURLINGTON NORTHERN RLY CO RIGHT OF WAY

CENTRACON
(HULBERT MILL COMPANY)

SOUTHERN PAC RLY CO R/W

GRAND AVENUE

MONUMENT LINE

14th STREET

100' 50' 0 100' 200' 300' 400'

GRAPHIC SCALE

PORT OF EVERETT, WASHINGTON

NORTON AVENUE BOAT LAUNCH FACILI

GENERAL PLAN "C"

REID, MIDDLETON & ASSOCIATES,
CONSULTING ENGINEERS & LAND SURVEYORS
324 MAIN ST., EDMONDS WASH. 1818 PACIFIC AVE., EVERETT, WASH

PORT OF EVERETT TRAILER BOAT LAUNCH FACILITY

WATER GATE BOAT LAUNCH

SUMMARY SHEET

Nature of This Report: Final Statement

Sponsor: Sponsoring Agency: Port of Everett, Pier 1, Everett, Washington 98201
Direct Inquiries to: Reid, Middleton & Associates, Inc.
324 Main Street, Edmonds, Washington 98020

Type of Proposed Action: Project

Official Title of Proposed Action and Summary of the Proposed Action: Construct boat launch facility for trailered boats at Everett, Washington. The purpose being to provide access to the waters of Puget Sound and to meet the needs of the recreational boating public owning trailer size boats utilizing dry land storage.

Summary of Environmental Impacts: No significant displacement, endangerment, or destruction of any wildlife or natural vegetation. Social environment is improved. Water quality may be affected during construction from dredging operation.

Summary of Alternatives: No action, alternate location, larger or smaller facility.

Review Period: (Length of time and deadline date for review comments.)
Thirty days review period, deadline for review comments - June 30, 1973.

Recipients of the Document: (Reviewers)
See attached list.

4. Historical Background - Past Planning and Decisions

The Everett waterfront in its past has been nearly totally occupied by wood product mills and related activities. Over the years these mills slowly have disappeared. Of recent demise were the Saginaw and Summit Timber Mills, located on the site contemplated for the new public boat launch.

In the past, Snohomish County has been overly dependent on a single industry, and present planning goals indicate a desire to diversify to reduce the prominence of one industry. Because of its ideal location, the development of the site as planned aids in the development of the boating, recreational, and tourist industries.

Agencies involved in the formulation of this plan include the Snohomish County and City of Everett Planning Departments, Snohomish County and City of Everett Park Departments and the Port of Everett.

5. Public Participation - Information, Hearings and Controversy

A public hearing was held on April 17, 1972, whereat the Port of Everett amended the Port's comprehensive scheme to include this project. The opportunity for additional public review and comment will be provided through the procedures established by the Shorelines Management Act of 1971, and through the distribution of this impact statement.

Although this project is being pursued under the jurisdiction of the Port of Everett, it is in fact a joint project and effort between three agencies, the Port of Everett, the City of Everett and Snohomish County.

6. Proposed Method of Financing and Financial Sponsors

The proposed method of financing is through the Interagency Committee for Outdoor Recreation, with matching funds coming from and divided equally between the Port of Everett, Snohomish County and the City of Everett.

7. Relationship with Existing Laws, Policies, Plans

The Port of Everett possesses the statutory and legal authority to acquire and improve public outdoor recreation land, to undertake planning activities incident thereto, and to receive and expend funds involved for the purposes described when such facilities are necessary to more fully utilize boat landings.

8. Actions/Decisions Remaining for Implementation

The following actions and decisions remaining for implementation of this project include application for and issuance of Shorelines Management permit, application for and issuance of U. S. Corps of Engineers Permit, application for and issuance of Department of Game Hydraulics permit, and application to and funding from the State Interagency Committee for Outdoor Recreation.

B. EXISTING CONDITIONS

1. General

The proposed boat launch site is a 37-acre segment of a much larger strip of tideland extending along the Snohomish River channel from its mouth north to Preston Point, encompassing an area of perhaps 800 acres. Since the undeveloped parts of these tidelands are all very similar, the proposed boat launching site can best be described in ecological context with the overall area.

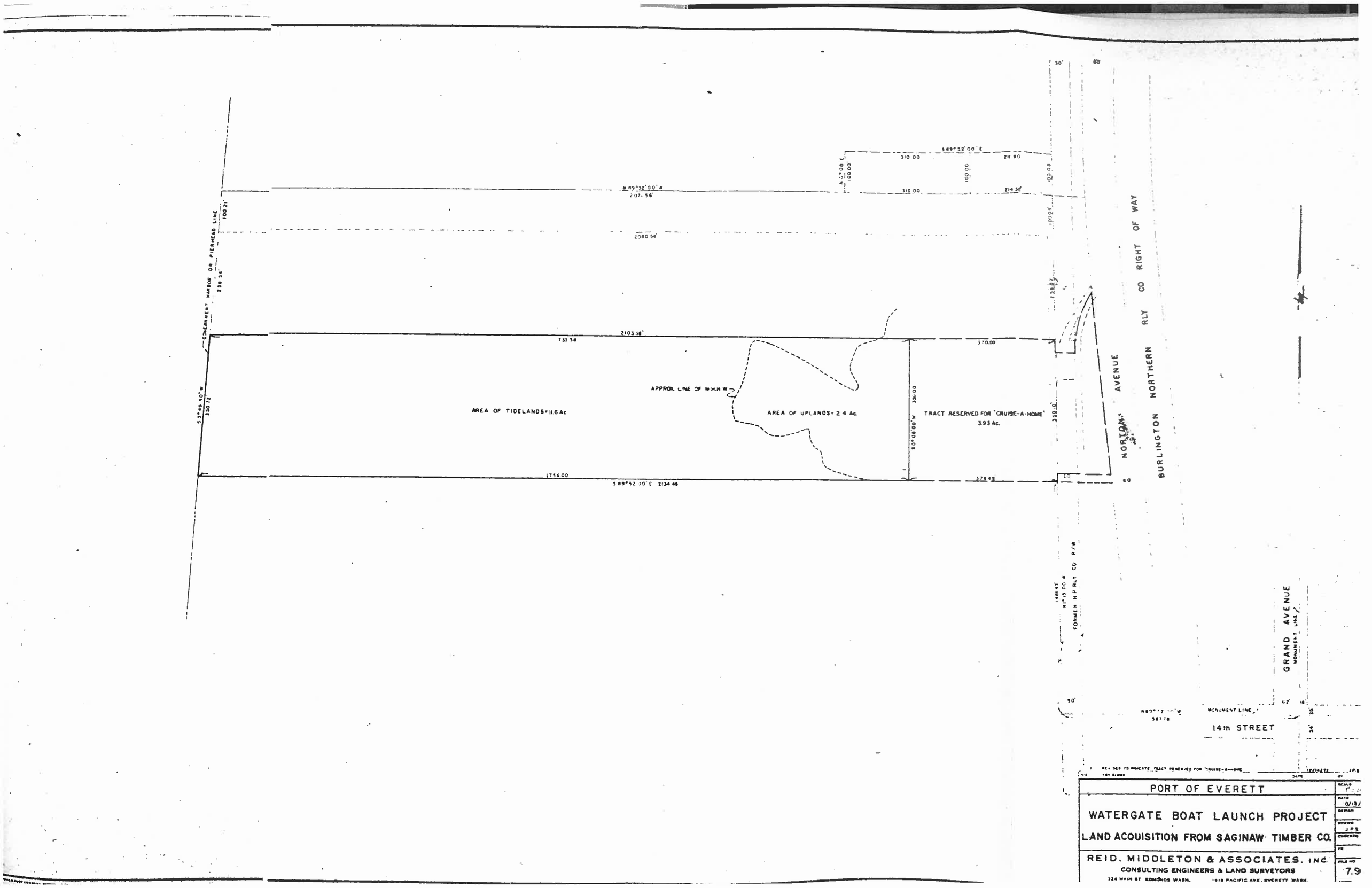
The eastern approximately one-fourth of the 37-acre site which borders on Norton Avenue is upland, and the remaining three-fourths, adjacent to the Snohomish River channel, is an intertidal mud flat.

2. Upland Portion

The upland portion of the site is apparently an old fill approximately six feet above high tide. Two lumber mills occupied this part of the property until 1967, when both burned. Since that time considerable rubbish and other fill material has been hauled in and spread. The site of one mill is marked by many charred dock pilings, brick, concrete and pieces of rusting machinery. A low area nearby is being used currently as a dumping area for industrial refuse from an adjacent boat-works. Various weeds, grasses, blackberry vines, and a few small alder seedlings have managed to colonize parts of this area and establish a pioneer community of vegetation. A few nesting pairs of small birds (killdeer, redwing blackbird, song sparrow) are using the area during the spring months, and from the evidence of tracks, fecal droppings and general habitat, there is probably a fair resident population of rats. The general appearance is of a greatly disturbed area which offers little to attract or sustain wildlife of any kind. Its general appearance is most unattractive.

3. Intertidal Portion

The remaining three-fourths of this property lies offshore and borders the Snohomish River channel, and with the exception of a narrow strip adjacent to the channel, it is a tide flat which is exposed at lower tides and covered with as much as 12 feet of water at the highest tides. The bottom is similar in every way to the bottom at the proposed Norton Avenue Terminal, 3000 feet south, which has been reported on in detail in the Preliminary Environmental Impact Statement for Norton Avenue Marine Terminal and Boat Harbor, April, 1972. The bottom at that location contains so little, both in diversity and numbers of organisms, that virtually no biological community of significance is present. The entire intertidal mud flat, from the 13th Street fill to the E. A. Nord mill at the north, has for many years been used as a log storage area. The logs are usually in large bundles enclosed by log booms, which, in turn, are moored to rows of piling driven into the muddy bottom. There is a continual traffic of log rafts into and out of the area, with the logs alternately sitting on the bottom at low tide and floating a few feet above it at higher tides. This is a desirable log storage site primarily because of the fresh-water influence of the Snohomish River, which prevents the logs from being destroyed by marine boring organisms. The highly variable salinity, which makes this a good log storage area, and the continual physical disturbance of the bottom by log bundles and tug boats, as well as perhaps less obvious factors, quite effectively prevent the establishment of any signigicant biological community. This is further evidenced by


GOVERNMENT HARBOR DR PIERHEAD LINE
100.21'
S 89°52'00" E 2134.46
1755.00
S 0°08'00" W 330.00
AREA OF TIDELANDS = 11.6 Ac
APPROX LINE OF M.H.H.W.
AREA OF UPLANDS = 2.4 Ac.
TRACT RESERVED FOR "CRUISE-A-HOME"
3.93 Ac.
370.00
2103.58'
2080.54'
N 89°52'00" W
207.56'
S 89°52'00" E
310.00
214.30'
100.00
100.03'
NORTON AVENUE
BURLINGTON NORTHERN RLY CO RIGHT OF WAY
FORMER N P RLY CO R/W
GRAND AVENUE
MONUMENT LINE
14th STREET
PORT OF EVERETT
WATERGATE BOAT LAUNCH PROJECT
LAND ACQUISITION FROM SAGINAW TIMBER CO.
REID, MIDDLETON & ASSOCIATES, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
324 MAIN ST. EDMONDS WASH. 1918 PACIFIC AVE. EVERETT WASH.

the fact that few waterfowl or shorebirds are to be seen feeding here at any time of the year. There are approximately 40 piling driven into the bottom which do provide a surface firm enough for the attachment of a sparse growth of fucus, balanus, and mytilus (brown algae, barnacles and mussels,) respectively. The tops of piling also afford resting sites for seagulls and an occasional blue heron.

C. ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION

The anticipated beneficial impact of the proposal would be a cleaning up of what literally could now be called a junk yard, and would displace the storage of logs within the intertidal portion of the property. Deepening the approach will attract some herring during the winter months, as has been the case at the 14th Street moorage. The development and cleanup of the area will displace and destroy a present rat habitat.

The anticipated adverse impacts of the proposal will be the displacement of some small birds previously mentioned. However, the proposed work will not endanger or destroy these birds.

No significant natural vegetation exists on the site. Vegetation will be greatly enhanced by planting and landscaping of the final project.

One construction operation with a significant problem potential which will require much care is the dredging necessary to provide the boat basin and hydraulic fill. Extreme muddying of the adjacent river channel could create a hazard for downstream migrant salmon. This possibility is to be avoided to the full extent possible by approved procedures, by avoiding dredging during critical migrating periods of April and May, and by controlling the ponding time in the fill. Also, requirements as set forth in the Department of Game Hydraulics Permit are to be complied with.

A number of new jobs relating directly to operation of the boat launch and also to supporting facilities such as marine-oriented sales, gas sales and service, will be created.

The aesthetics of the area will be greatly improved, with grounds being maintained in a park-like atmosphere.

D. UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS

1. Effects

The unavoidable adverse effects are those that will occur during the construction of the project from the dredging and filling operations. There are no significant permanent adverse effects to any wildlife or natural vegetation.

2. Diminishing or Mitigating Measures

The boat launch facility will provide a much-needed access to the state's many recreational resources for a great number of people.

RESOLUTION NO. 482

A RESOLUTION OF THE PORT COMMISSION OF THE PORT OF EVERETT ADOPTING A SUPPLEMENTAL COMPREHENSIVE SCHEME OF HARBOR IMPROVEMENT OF THE PORT DISTRICT OF THE PORT OF EVERETT TO SUPPLEMENT AND BE IN ADDITION TO THE COMPREHENSIVE SCHEME AND SUPPLEMENTAL COMPREHENSIVE SCHEMES HERETOFORE ADOPTED.

BE IT RESOLVED by the Port Commission of the Port of Everett, as follows:

That the Port Commission of the Port of Everett, Snohomish County, Washington, does hereby officially adopt a Supplemental Comprehensive Scheme of Harbor Improvement in the Port District of the Port of Everett after having held a public hearing thereon after ten (10) day's notice thereof, published on April 13, 14, 15, 17, 18, 19, 20, 21, 22, and 24, 1972, inclusive, in the Everett Daily Herald, a daily newspaper published in said Port District and having a general circulation in said Port District, such supplemental comprehensive scheme of harbor improvement being supplemental to and in addition to the comprehensive schemes of harbor improvement and supplemental comprehensive schemes of harbor improvement of and for said Port of Everett heretofore officially adopted and ratified as provided by law; this Supplemental Comprehensive Scheme of Harbor Improvement being as follows:

GENERAL FEATURES:

The acquisition and/or use of all of such portion of those lands situate in Government Lot 1, Section 18, Township 29 North, Range 5 E.W.M., Snohomish County, Washington, described generally as follows, to-wit:

> A tract of approximately 37 acres of uplands and tidelands bounded on the East by Norton Avenue, bounded on the West by the Snohomish River channel, bounded on the North by the Westerly extension of 9th Street, and bounded on the South by the Westerly extension of 11th Street, exclusive of that portion of said tract presently occupied by Cruise-a-Home, Inc. facilities and being approximately the East 150 ft. of the South 300 ft. of said tract, and which said tract is legally described in Exhibit "A" attached hereto and hereby made a part hereof.

Said tracts, not already owned by the Port District, to be acquired from time to time as the Port Commission deems wise, by gift, purchase, lease and/or condemnation. Said lands are to be improved by dredging, filling and bulk-heading as needed and required and by the construction, installation and development of the following additional improvements, to-wit:

1. A concrete ramp for the launching and retrieving of trailered boats.
2. Car and trailer parking lots.
3. Bathing beach.
4. Mooring floats.
5. Floating timber wave breaks.
6. Access and service roads.
7. Water, sewer and electrical services.
8. Storm drainage and solid waste collection and facilities to serve said property.
9. Building or buildings to accommodate a park operations office, supply and equipment storage, public restrooms, bath house facilities, and such other miscellaneous work and/or items reasonably required for a marine park and boat launch facility.

Such acquisition and construction is to be by said Port of Everett, itself, or in conjunction or cooperation with Snohomish County, the City of Everett, the State or Federal Government, any agency of said governments, and any commercial waterway district that may be hereinafter created in said Port District or in conjunction or cooperation with any of them as provided by law.

DATED April 25, 1972.

COMMISSIONER

COMMISSIONER

COMMISSIONER

ATTEST:

SECRETARY

EXHIBIT "A"
To Resolution No. 482

A portion of Government Lot 1, Section 18, Township 29, North Range 5, East W.M., situate in Snohomish County, Washington, and described as follows, to-wit:

a) Commencing at the intersection of the monument line of Grand Ave. and 14th St. in the City of Everett, thence westerly along the monument line of 14th Street produced for 587.78 feet to the westerly line of the Northern Pacific Railway Company's right-of-way; thence angle to the right 88°37' and following the westerly line of the Northern Pacific Railway Company's right-of-way 1481.43 feet to True Place of Beginning; thence continuing on the same straight line for 708.20 feet; thence angle to the left of 88°37' for 2071.16 feet, more or less, to the Government Harbor or Pier Head Line; thence angle to the left 86°18'10" and following the Government Harbor or Pier Head Line for 709.47 feet; thence angle to the left 93°41'50" for 2134.45 feet, to the westerly line of the Northern Pacific Railway Company's right-of-way, the True Place of Beginning.

b) Commencing at the intersection of the monument lines of Grand Ave. and 14th Street in the City of Everett; thence westerly along the monument line of 14th Street produced in its present direction 587.78 feet to the Westerly line of the Northern Pacific Railway Company's right-of-way; thence angle to right 88°37' and following the westerly line of said Northern Pacific Railway Company's right-of-way for 1831.53 feet; thence angle to right of 91°23' for 50.01 feet to the East line of said Northern Pacific Railway Company's right-of-way, the True Point of Beginning; thence angle to the left 91°23' and following the said East line of the Northern Pacific Railway Company's right-of-way for 358.10 feet; thence angle to right of 91°23' for 52.00 feet to the West line of a strip of land deeded to Snohomish County for a road; thence angle to right 87°05'30" to tangent to curve; thence on a curved line to the left with a radius of5855.00 feet, consuming an angle of 3°06' for 310 feet to a point; thence on tangent to last described curve for 48.85 feet; thence angle to right 96°00'30" for 76.00 feet to True Point of Beginning.

c) Commencing at the monument at the intersection of the monument lines of 14th Street and Grand Avenue in the City of Everett; thence westerly and following the monument line of 14th Street produced for 587.78 feet to the westerly property line of the Northern Pacific Railway Company's right-of-way; thence angle to the right of 88°37' and following the West property line of the Northern Pacific Railway Company's right-of-way for 2189.63 feet to the True Point of Beginning; thence angle to the left of 88°37' for 500.00 feet thence North 75 feet; thence East 650 feet more or less to the West margin of Norton Avenue; thence southerly along the West margin of Norton Ave. to a point East of the Point of Beginning; thence West to the Point of Beginning. EXCEPT Northern Pacific Right-of-Way.

RESOLUTION NO. 531

A RESOLUTION authorizing the Manager to execute an Interlocal Governmental Agreement between the City of Everett, Snohomish County and the Port of Everett for development of the Norton Avenue Boat Launch Facility.

WHEREAS, the Port of Everett, along with the City of Everett and Snohomish County, together with financial assistance from the State of Washington Interagency for Outdoor Recreation, did jointly purchase certain real property for a boat launch facility; and

WHEREAS, these same three agencies are now desirous of jointly developing said property for the use of the general public; and

WHEREAS, an application will be made to the State of Washington Interagency Committee for Outdoor Recreation for seventy-five (75%) percent of the development cost;

NOW, THEREFORE, BE IT RESOLVED BY THE COMMISSION OF THE PORT OF EVERETT that it authorize Manager John G. Belford to execute an Interlocal Agreement to participate in the development of said boat launch facility on a one-third (1/3) share of the three local participants development cost.

DATED this 23rd day of December, 1974.

PORT OF EVERETT

By _____
President

Attest:

_____
Secretary

RESOLUTION NO. 525

BE AND IT IS HEREBY RESOLVED, that the Treasurer of Snohomish County be and he is hereby directed and empowered to establish a special trust fund, to be known as the "NORTON AVENUE BOAT LAUNCH FUND". The entire monthly credits to this fund to be deposited to a special savings account at Pioneer First Federal Savings & Loan. Interest on earnings to be reinvested.

The credits to this fund are to be derived solely from rentals of American Tug Boat Company to Saginaw Timber Company under existing lease arrangement between these parties. The proceeds from said rental agreement are and have been the property of the Port of Everett by reason of condemnation of all right, title and interest of said Saginaw Timber Company.

The principal and interest are to be held by the County Treasurer in said trust fund until directed otherwise by the Port of Everett.

Dated this 15th day of August, 1974.

PORT OF EVERETT

Robert Shriber
President

Paul Kinnune
Acting Secretary

RESOLUTION NO. 502

RESOLUTION OF THE PORT COMMISSION OF THE PORT OF EVERETT DIRECTING AND AUTHORIZING THE ACQUISITION BY PURCHASE OR CONDEMNATION OF CERTAIN REAL PROPERTY FOR PUBLIC USE

WHEREAS, by Resolution No. 482 adopted by the Port Commission of the Port of Everett on April 25, 1972, the Comprehensive Scheme of Harbor Improvement, the port district of the Port of Everett supplemented to include within said comprehensive scheme certain property not owned by the Port of Everett for public use and improvement, all as more particularly described in said resolution;

WHEREAS, said resolution did authorize the acquisition of such property by gift, purchase, lease and/or condemnation;

WHEREAS, said property is necessary for the public use of the Port as described in said resolution and has not been acquired by the Port of Everett.

NOW, THEREFORE, be it resolved that the real property described in Exhibit "A" attached hereto and made a part hereof is hereby found and declared to be necessary for the public uses and purposes described in Resolution No. 482.

IT IS FURTHER RESOLVED that the attorneys for the Port of Everett be and hereby are authorized and directed to institute and pursue to completion condemnation proceedings against the owners of such properties so as to complete the acquisition of said properties in the name of the Port of Everett.

DATED this 5th day of February, 1973.

Port Commissioner

Port Commissioner

Port Commissioner

Attest:

Secretary

I, W. PAUL KINNUNE, Secretary of the Board of Commissioners of the Port of Everett, Washington, DO HEREBY CERTIFY that the foregoing is a true and correct copy of Resolution No. 502 of the Board of Commissioners, duly adopted on the 13th day of February, 1973.

Secretary of the Port Commission

July 25, 1972
File No. 7.90

LEGAL DESCRIPTION FOR PROPOSED NORTON AVENUE BOAT LAUNCHING PARK

PARCEL "A" SUMMIT TIMBER COMPANY

That portion of Government Lot 1 in Section 18, Township 29 North, Range 5 East, W.M., in Snohomish County, Washington, described as follows: Commencing at the intersection of the monument line of Grand Avenue with the monument line of 14th Street in the City of Everett; thence N 89°52'00"W, along the monument line of 14th Street produced, for 587.78 feet to an intersection with the westerly margin of the Northern Pacific Railway Company's right-of-way; thence N 1°15'00"W, along the westerly margin of the Northern Pacific Railway Company's right-of-way for 1831.53 feet to the True Point of Beginning; thence N 89°52'00"W, for 2103.38 feet to an intersection with the Government Harbor or Pierhead Line; thence N 3°49'50"E, along the Government Harbor or Pierhead Line for 358.75 feet; thence S 89°52'00"E, for 1547.26 feet to a point which bears N 89°52'00"W, a distance of 524.30 feet from the westerly margin of the Northern Pacific Railway Company's right-of-way; thence N 0°08'00"E, for 100.00 feet; thence S 89°52'00"E, to an intersection with the westerly margin of the right-of-way for Norton Avenue; thence southerly along the westerly margin of the right-of-way for Norton Avenue to a point from which the True Point of Beginning bears N 89°52'00"W; thence N 89°52'00"W, to the True Point of Beginning.

EXCEPT a triangular parcel of land containing 16/100 acres, more or less, being that parcel of land formerly belonging to the C. B. Lumber & Shingle Company in front of Government Lots 1 and 2, Section 18, Township 29 North, Range 5 East, W.M. and conveyed to Jamison Mill Company by deed dated November 4, 1926, and recorded in Volume 232 of Deeds, page 378, records of Snohomish County, Washington. The said tract is bounded as follows: On the East by the west line of Norton Avenue; on the South by a line drawn parallel to and 1831 feet North of the monument line of 14th Street produced and bounded on the West by a line drawn parallel to and 7-1/2 feet westerly of the Center Line of a Spur Track described as follows, to wit:

Commencing at the intersection of the North Line of said Lot 1 with the Center Line of the main track of the Great Northern Railway Company as now located, constructed and operated; thence southerly along said Center Line of main tract 793.3 feet; thence along a 4° curve to the right 104 feet; thence tangent 15.2 feet; thence along a 12°30' curve to the right 228 feet to the beginning of said Spur Track; thence along a 7°30' curve to the left 85 feet; thence along an 18° curve to the left 174.2 feet; thence southerly on tangent 297.3 feet.

Containing 19.3 acres.

REID, MIDDLETON & ASSOCIATES
Consulting Engineers - Land Surveyors
324 MAIN ST. EDMONDS, WASH.

EXHIBIT A

July 24, 1972
File No. 7.90

LEGAL DESCRIPTION FOR PROPOSED NORTON AVENUE BOAT LAUNCHING PARK

PARCEL "B" SAGINAW SHINGLE COMPANY

That portion of Government Lots 1 and 2 in Section 18, Township 29 North, Range 5 East, W.M., in Snohomish County, Washington, described as follows: Commencing at the intersection of the monument line of Grand Avenue with the monument line of 14th Street in the City of Everett; thence N 89°52'00"W, along the monument line of 14th Street produced, for 587.78 feet to an intersection with the westerly margin of the Northern Pacific Railway Company's Right-of-Way; thence N 1°15'00"W, along the Westerly margin of the Northern Pacific Railway Company's Right-of-Way for 1481.43 feet; thence N 89°52'00"W, for 378.45 feet to the True Point of Beginning; thence continuing N 89°52'00"W, for 1756.00 feet to an intersection with the Government Harbor or Pierhead Line; thence N 3°49'50"E, along the Government Harbor or Pierhead Line for 350.72 feet; thence S 89°52'00"E, for 1733.38 feet to a point from which the True Point of Beginning bears S 0°08'00"W, thence S 0°08'00"W, for 350.00 feet to the True Point of Beginning.

Containing 14.0 acres.

REID, MIDDLETON & ASSOCIATES
Consulting Engineers - Land Surveyors
324 MAIN ST. EDMONDS, WASH.

DENNIS GREGOIRE

CITY OF EVERETT

PERMIT FOR SUBSTANTIAL DEVELOPMENT

Pursuant to Section 14, Chapter 286, Laws of 1971 Extra Session, a permit is hereby granted to The Port of Everett, Pier 1, Everett, Washington, to undertake the following development:

A trailer boat launch facility including:

(1) the diking and filling of 15.4 acres of tidelands to an average elevation of approximately +17.0 feet MLLW, by hydraulic dredging of approximately 483,000 cubic yards of sand and silt from the lower Snohomish River Channel, and (2) the construction thereon of a trailer boat launch facility to include (a) a boat launching ramp with capacity for simultaneous launching of up to 18 trailered boats, (b) ramp access and temporary tieup floats, (c) floating drift booms and wave breaks, (d) parking areas for approximately 600 cars, (e) a service building to include office space, public restrooms, a small maintenance shop, etc., (f) a waterfront park and picnic area, with transient moorage float, and marine view points, (g) paved access roadways and a combination bike and pedestrian access path, and (h) appropriate landscaping.

upon the following described property:

See attachment "A"

Development pursuant to this permit shall be undertaken pursuant to the following terms and conditions:

1. That the project conform to Washington State Department of Fisheries criteria on marinas.

2. The dredging shall be conducted in a manner which minimizes the impact on water quality and aquatic life.

3. That the disposal of spoils behind the diked area shall be carried out in a manner which minimizes the adverse effects on the Snohomish River. Design of the disposal ponds and dikes shall consider the location of the inlet and outlet to prevent short circuiting, installation of adequate discharge controls, and providing a capacity and detention time based on the settling characteristics.

(1)

4. That pedestrian/bike access be provided to the project. This will connect with the bike path along Norton Avenue.

5. That the potential visual impact be mitigated by an extensive landscaping plan addressing the following areas:

   a. The access road from Norton Avenue to the site.

   b. The 10 acres of parking provided for autos and boats.

   c. The marine park, picnic and view area.

6. That the Department of Community Development be notified 7 days prior to commencing of dredging.

Nothing in this permit shall be construed as excusing the applicant from compliance with any federal, state, or local statutes, ordinances or regulations applicable to this project other than the permit requirements of the Shoreline Management Act of 1971.

This permit may be rescinded pursuant to Section 14(7) of the Shoreline Management Act of 1971 in the event the permittee fails to comply with any condition hereof.

Construction pursuant to a permit will not begin or be authorized until forty-five days from the date of final approval by the local government, or until all review proceedings are terminated within forty-five days from the date of final approval by the local government.

August 28, 1974
Date

Frank H. Bennett, Director
Department of Community Development

MINUTES OF THE REGULAR MEETING OF THE EVERETT PORT COMMISSION

August 11, 1975

Present: Paul Kinnune, President
Robert Shriber, Secretary
John G. Belford, Manager
Lewis A. Bellt,, Attorney
Belva P. Staeheli, Auditor

Absent: John Martinis, Vice President

Also Present: (See Attendance Register)

CALL TO ORDER:

The meeting was called to order by Chairman Kinnune at 8:00 p.m. It was noted that Commissioner Martinis was out of town commercial fishing and was excused from this meeting.

APPROVAL OF MINUTES:

On motion by Commissioner Shriber, seconded by Commissioner Kinnune, the minutes of the Regular meeting of July 8, 1975, and the Special meeting of August 4, 1975, were approved.

NORTON AVENUE TERMINAL PERMIT:

Manager Belford reported that the objection of the Coast Guard has now been satisfied and the Port is now awaiting signature on the permit from the District Engineer, Corps of Engineers.

NORTON AVENUE BOAT LAUNCH:

Manager Belford reported that Reid, Middleton & Associates have been given authority to go ahead with final design. It appears there will be two contracts. The Corps of Engineers will have one for the dredging and the City/County/Port will have a second contract for the diking because of the considerable difference in cost estimates to do with work. Expect contract for diking will be called for around the end of September, with letting around the middle to October.

Total cost estimated to be $610,000.00 with Corps of Engineers participating in $120,000.00, IAC from $390,000.00 to $400,000.00 and the balance by the Port/City/County, which will be from $40,000.00 to $50,000.00 each, depending on the bids.

GENERAL TELEPHONE CO. EASEMENT:

On motion by Commissioner Shriber, seconded by Commissioner Kinnune, Manager Belford was authorized to grant General Telephone Co. easement as proposed.

MINUTES OF THE SPECIAL MEETING OF THE EVERETT PORT COMMISSION

November 3, 1975 -- 7:00 p.m.

Present: Paul Kinnune, President
John Martinis, Vice President
John G. Belford, Manager
Lewis A. Bell, Attorney
Belva P. Staeheli, Auditor

Absent: Robert Shriber, Secretary

Also Present: Jim Reid, Reid, Middleton & Assoc.
Frank Harthorne, Harthorne, Hagen, Gross & Assoc.

CALL TO ORDER: The meeting was called to order at 7:00 p.m. by Chairman Kinnune.

AWARD OF BID FOR DIKING AND RIPRAP FOR HYDRAULIC FILL -- NORTON AVENUE BOAT LAUNCH PROJECT:

Engineer Jim Reid read from his written recommendation to the Commission that the low bid by Stoen Construction Co. of Monroe had been studied, the construction materials for the project are to come from the quarry owned and operated by that company. Quarry materials have been examined by engineers and soils consultant and found to be satisfactory. The conclusion was that Stoen Construction Co. was responsive and their bid constituted the lowest and best received and Mr. Reid, therefore, recommended that it be accepted subject to the following conditions: (a) Alternate Item 4A, in the amount of $2,400.00, be accepted; (b) Roadway related items Nos. 8, 10 and 11, inclusive, be accepted subject to concurrence by the Interagency Committee for Outdoor Recreation, that cost of the said items will be eligible for payment from I.A.C. grant funds.

On motion by Commissioner Martinis, seconded by Commissioner Kinnune, Stoen Construction Co. was awarded the contract for Norton Avenue Boat Launch Project riprap and diking in the amount of $381,358.50 which included the $2,400.00 Alternate Item 4A.

ADJOURN:

On motion by Commissioner Martinis, seconded by Commissioner Kinnune, the meeting was adjourned.

Paul Kinnune
President

John Martinis
Secretary

MINUTES OF THE REGULAR MEETING OF THE EVERETT PORT COMMISSION
November 12, 1974

NORTON AVENUE BOAT LAUNCH:

On motion by Commissioner Martinis, seconded by Commissioner Kinnune, signing of transfer of deed of this property to the City of Everett and Snohomish County was approved.

Manager Belford reported that he is still working with the City and County towards equal participation in the diking and filling in 1975. Application for IAC participation must be submitted by January 1, 1975. This application cannot be submitted without having some idea where the 25% funding will come from. It is hoped that the Port will receive an answer from the other two agencies by the next work session.

It was noted that if the boat launch site cannot be used as a site for deposit of spoils for the settling basin dredging project, the Port will be forced to look for another site for spoils. In the past, Jetty Island has been used for disposal of maintenance dredge spoils.

On motion by Commissioner Kinnune, seconded by Commissioner Martinis, Manager Belford was authorized to proceed with the way the Port is going to obtain permits for disposal on the boat launch site and if this is not possible, to then seek authorization to proceed with summary judgment action for disposal on Jetty Island, based on Attorney Bell's recommendation.

LEASES -- AMERICAN BOILER WORKS//AMENDMENT TO EVERETT BOAT HOUSE LEASE:

American Boiler Works is expanding their facilities, which takes place on Everett Boat House lease property. Amendment decreasing the size and rental by $200.00 for Everett Boat House Lease, as well as a new lease with American Boiler Works for this property in the amount of $233.00 was submitted to the Commission.

On recommendation by Manager Belford, it was moved by Commissioner Kinnune and seconded by Commissioner Martinis, that the new lease and amendment be approved.

ITEMS FOR DECEMBER AGENDA:

According to the Commission working rules adopted, persons from the audience may request items to be set on the agenda of the next regular meeting. None were received from the floor.

At this time the Commission went on record, with correspondence to be sent to the City of Everett, for reconsideration of closure of the 13th Street Fire Station (No. 3).

APPROVAL OF BILLS:

Vouchers 8417 thru 8616, inclusive, in the amount of $123,398.43 were approved for payment.

ADJOURN:

On motion by Commissioner Martinis, seconded by Commissioner Kinnune, the meeting was adjourned.

MINUTES OF THE SPECIAL MEETING OF THE EVERETT PORT COMMISSION

December 23, 1974 -- 3:00 p.m.

Present: Robert Shriber, President
Paul Kinnune, Vice President
John Martinis, Secretary
John G. Belford, Manager
Lewis A. Bell, Attorney
Belva P. Staeheli, Auditor

CALL TO ORDER: The meeting was called to order at 3:00 p.m. by Chairman Shriber.

CALL FOR BIDS ON EARTH MOVING PORTION OF THE 13th STREET CHANNEL TERMINAL:

On motion by Commissioner Kinnune, seconded by Commissioner Martinis, call for bids on the earth moving portion of the 13th Street Channel Terminal was authorized, with bid opening set for 7:00 p.m. January 6, 1975.

RESOLUTIONS NO. 531 and 532, ENDORSING PORT OF EVERETT PARTICIPATION IN THE NORTON AVENUE BOAT LAUNCH FACILITY:

On motion by Commissioner Martinis, seconded by Commissioner Kinnune, Resolutions No. 531 and 532 enabling the three participating agencies to submit an application to IAC for funding were approved.

ADJOURN:

On motion by Commissioner Martinis, seconded by Commissioner Kinnune, the meeting was adjourned.

Robert J. Shriber
President

Secretary

MINUTES OF THE SPECIAL MEETING OF THE EVERETT PORT COMMISSION

October 7, 1975 -- 7:00 p.m.

Present: Paul Kinnune, President
Robert Shriber, Secretary
John G. Belford, Manager
Lewis A. Bell, Attorney
Belva P. Staeheli, Auditor

Absent: John Martinis, Vice President

Also Present: (See Attendance Register)

CALL TO ORDER:

The meeting was called to order at 7:00 p.m. by Chairman Kinnune.

ADOPTION OF FINAL BUDGET FOR 1976, RESOLUTION NO. 539:

On motion by Commissioner Shriber, seconded by Commissioner Kinnune, Resolution No. 539 setting the budget for the year 1976 in the amount of $7,639,546.00 was adopted.

AUTHORIZATION FOR CALL FOR BIDS FOR DIKING AND RIPRAPPING FOR HYDRAULIC FILL--NORTON AVENUE BOAT LAUNCH:

Engineer Jim Reid, in submitting plans and specifications for diking and riprapping for hydraulic fill for Norton Avenue Boat Launch, informed the Commission he had received verbal approval from IAC to be followed by letter. Mr. Reid also presented soils report.

Through the process of developing plans, the project has been discussed with the Corps of Engineers and they have indicated their concurrence, however, authorization has not yet been received from the Chief of Engineers in Washington, D.C. regarding the Corps participation.

Plans and specifications as prepared meet all the requirements as agreed to at the time of purchase of the Summit and Saginaw properties. Mr. Reid also said he thought it would be well for Port's attorney, Lewis Bell to put attorneys for Summit on notice re disposition of unsuitable materials out of the easement approach area.

Mr. Reid requested authorization from the Commission to call for bids with bid opening to be set for October 23, 1975, at 10:00 a.m., with award of bid to be set for a later date which will enable the City/County/Port and IAC to review the bids as submitted.

On motion by Commissioner Shriber, seconded by Commissioner Kinnune, Engineer Reid was given authorization to call for bids on the diking and riprapping for hydraulic fill for the Norton Avenue Boat Launch, subject to the clarification of the City and County participation and the Corps of Engineers participation. Bid opening set for October 23, 1975, at 10:00 a.m. In conjunction with this bid authorization, it was moved by Commissioner Shriber, seconded by Commissioner Kinnune that Resolution 540, Authorizing the sale of the old burner on the Norton Avenue Boat Launch site was approved.

JAMES H. REID
L. ROY E. MIDDLETON
C. WAYNE JONES
LLOYD H. NELSON

Reid, Middleton & Associates, Inc. ENGINEERS • SURVEYORS • PLANNERS

324 Main Street • Edmonds, Washington 98020 • (206) 775-3434

April 21, 1976
File No. 7.90N

Mr. Ken Kirkland
Port of Everett
Pier 1
Everett, Washington 98020

Re: Old Burner Base at Norton Avenue Boat Launch

Dear Ken:

We have reviewed the old burner base at Norton Avenue Boat Launch and the attached sketch shows elevations of the various parts of the structure. What appears to be the upper fire box or base has a top elevation of 19.27 feet and is resting on a foundation base at elevation 12.9 feet. It does not seem economically practical to remove the entire structure, but we feel that the base should be removed to the foundation at elevation 12.9 feet.

The upper fire box appears to be a ring wall about 3 feet thick with circumferential cable reinforcing wire. We felt that this could be broken up and pushed off the foundation using a large dozer and a man with a cutting torch.

In estimating the cost of the large dozer available at the Stoen quarry (D-9 Caterpillar), we found the costs to be excessive, i.e.:

Move In and Out	$ 600.00
8 hour Cat and Operator	800.00
8 hour Labor and Cutting Torch	200.00
	$ 1,600.00

The other possibilities that exist are to (a) try a smaller local dozer, also with a man and cutting torch, which would be a much lower operating cost, but may take longer, and (b) drill and shoot to break up concrete, then using a small dozer push debris off foundation.

Based on the high estimated cost for the benefit, we would recommend that you try to obtain a firm price from a local contractor using alternate (a) and/or (b).

Ken & Ed, contract for $500.00

Please let me know if we can be of further help on this.

Very truly yours,

REID, MIDDLETON & ASSOCIATES, INC.

John O. Olsen

JOO:bb
Encl.

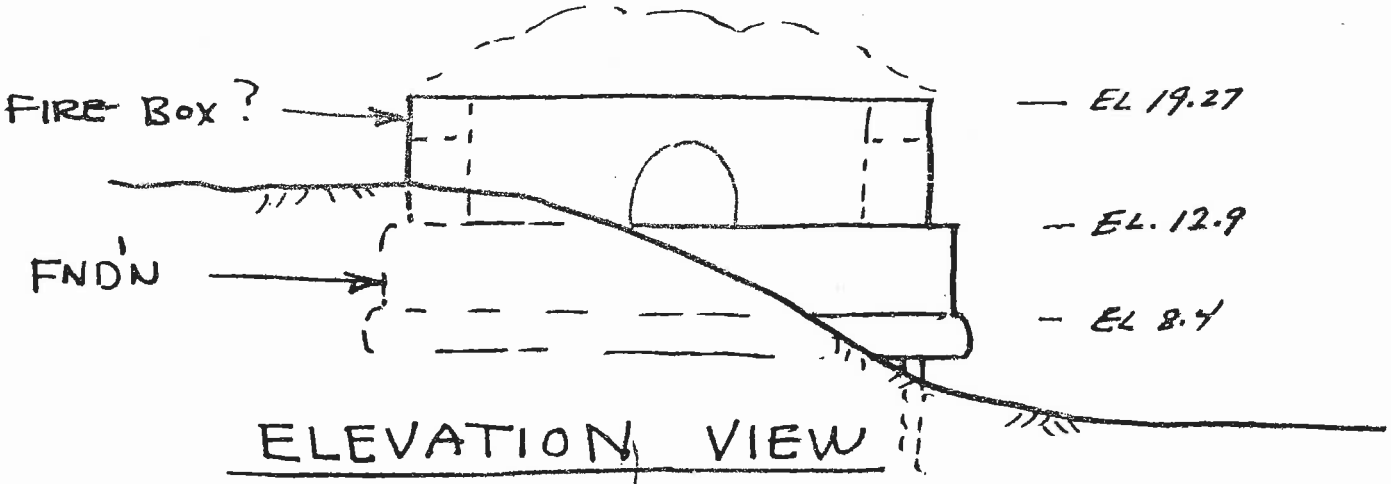
JO. DATE

HKD. BY DATE

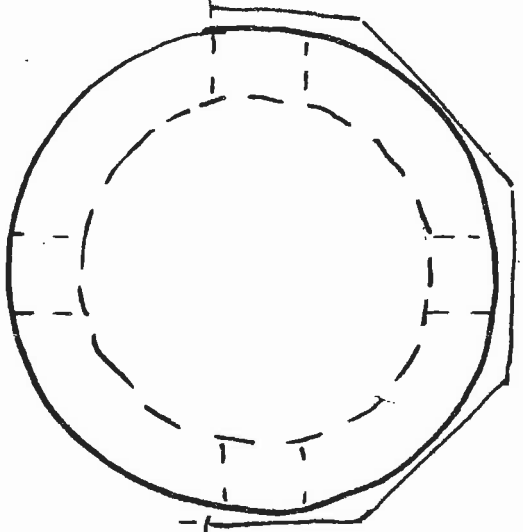
SUBJECT Norton Ave Boat Launch

SHEET NO. 1 OF 1

JOB NO. 7.90 N



ELEVATION VIEW



Datum - MLLW

PLAN VIEW

OLD BURNER BASE @ NORTON AVE BOAT LAUNCH

5415

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
PO BOX C-3755
SEATTLE, WASHINGTON 98124

NPSOP-NF

22 January 1976

John G. Belford, Manager
Port of Everett
P. O. Box 538
Everett, Washington 98206

Dear Mr. Belford:

Reference Fiscal Year 1976 Everett Harbor and Snohomish River maintenance dredging. Inclosed is a draft resolution, in triplicate, for deposit of $34,000 with the Treasurer of the United States or in escrow for Port of Everett's portion of the work.

This work includes dredging the entrance channel from the Federal Channel to the Norton Avenue trailer boat launch facility estimated to cost $30,000, and construction of approximately 2,650 lineal feet of retaining dike at the Pacific Towboat disposal site on Smith Island, estimated to cost $4,000 for a total contribution of $34,000.

We suggest the commissioners act on the resolution at their next meeting so that advertising for bids on the dredging scheduled for 23 February 1976 will not be delayed. Please return the signed original copy along with the $34,000 deposit or the executed escrow agreement, prior to advertising.

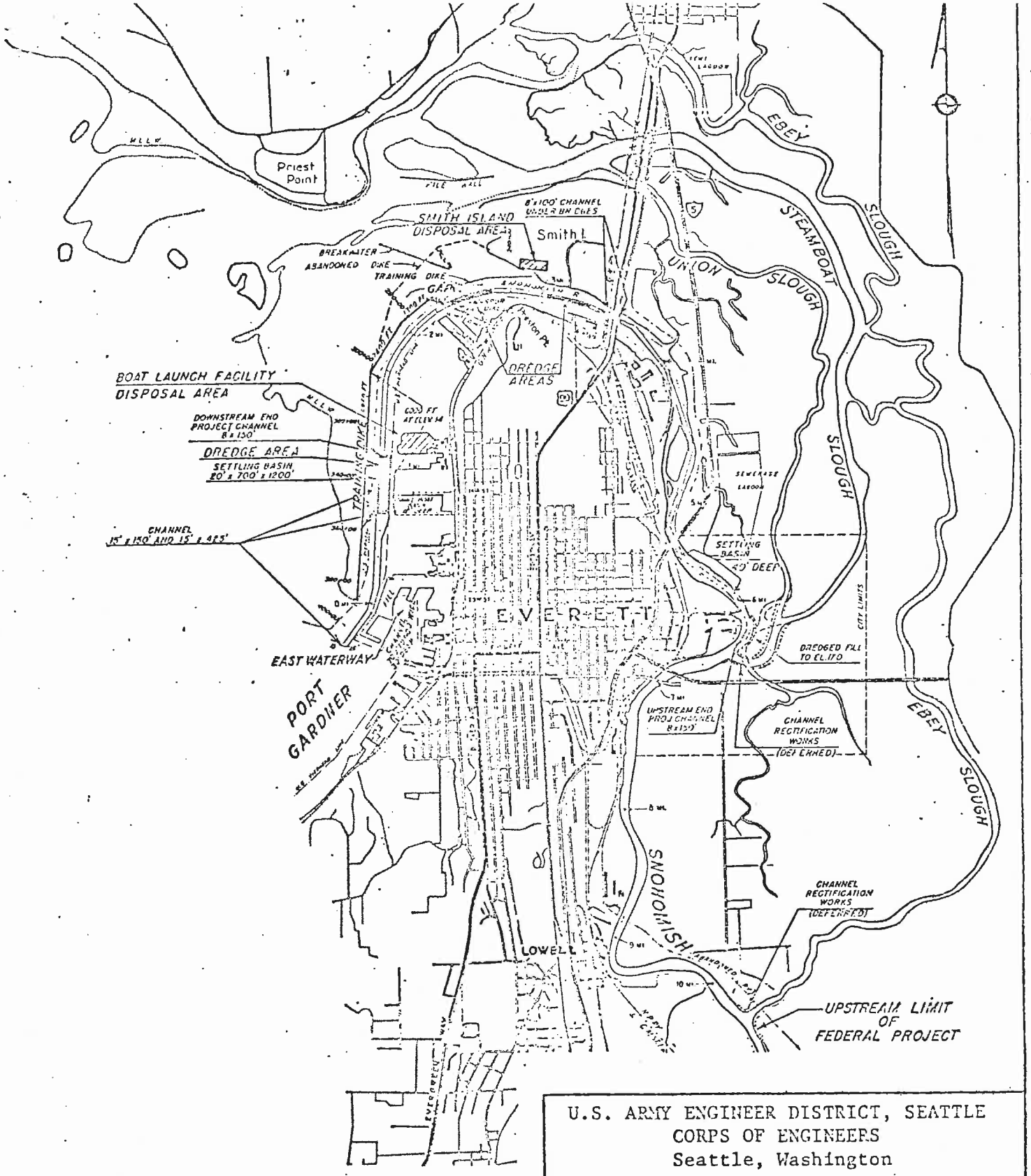
If you have any questions on the resolution, please contact our project manager, Mr. E. A. Dorner, phone 764-3401/3400.

Sincerely yours,

W. C. Gilmore for

R. H. LATTA
Chief, Operations Division

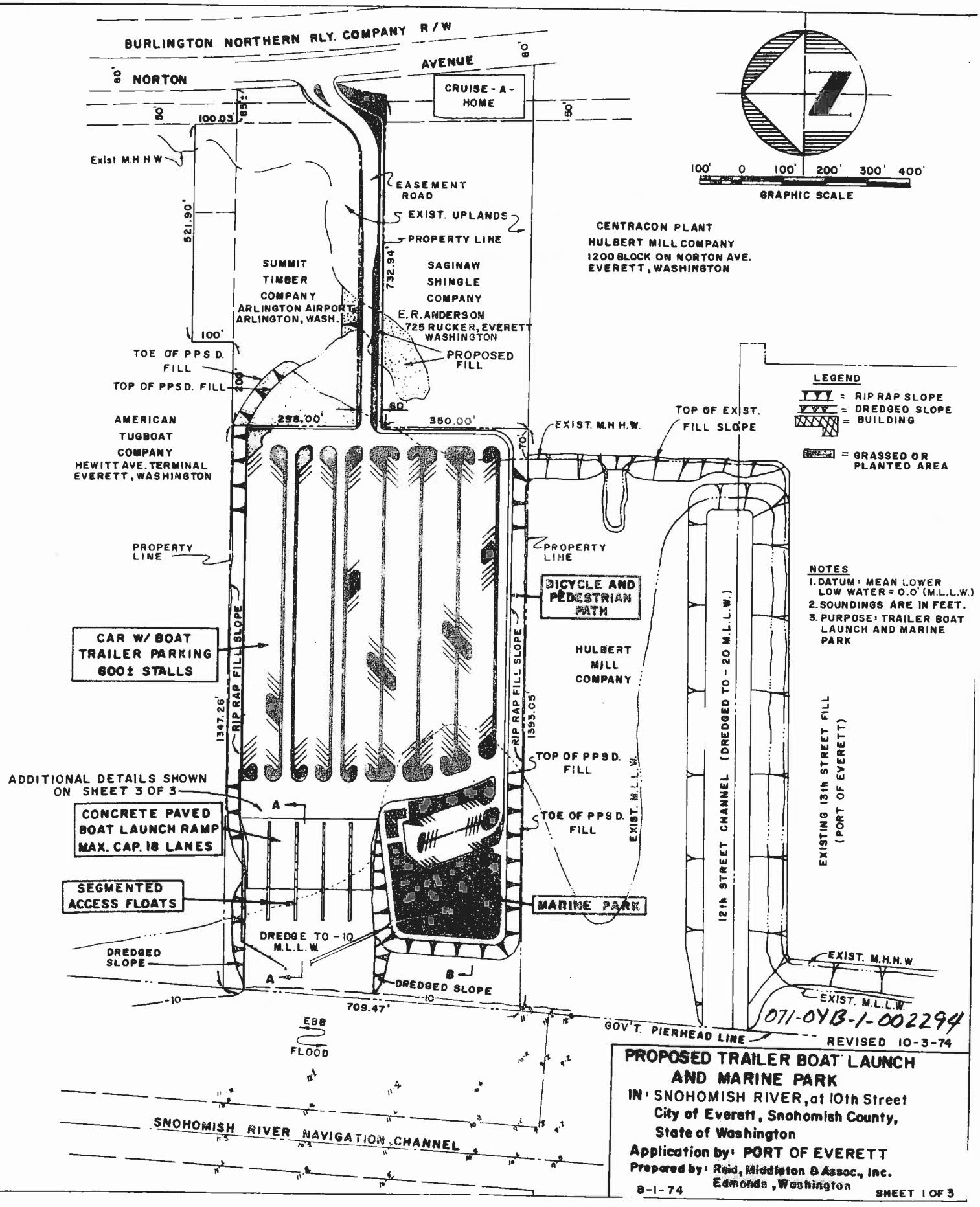
1 Incl
As stated



U.S. ARMY ENGINEER DISTRICT, SEATTLE
CORPS OF ENGINEERS
Seattle, Washington

EVERETT HARBOR and SNOHOMISH RIVER,
WASHINGTON
Fiscal Year 1976 Dredging

DATE	PUBLIC NOTICE	SHT
Nov 1975	Ref No. NPSOP-NF-09	1 of 1



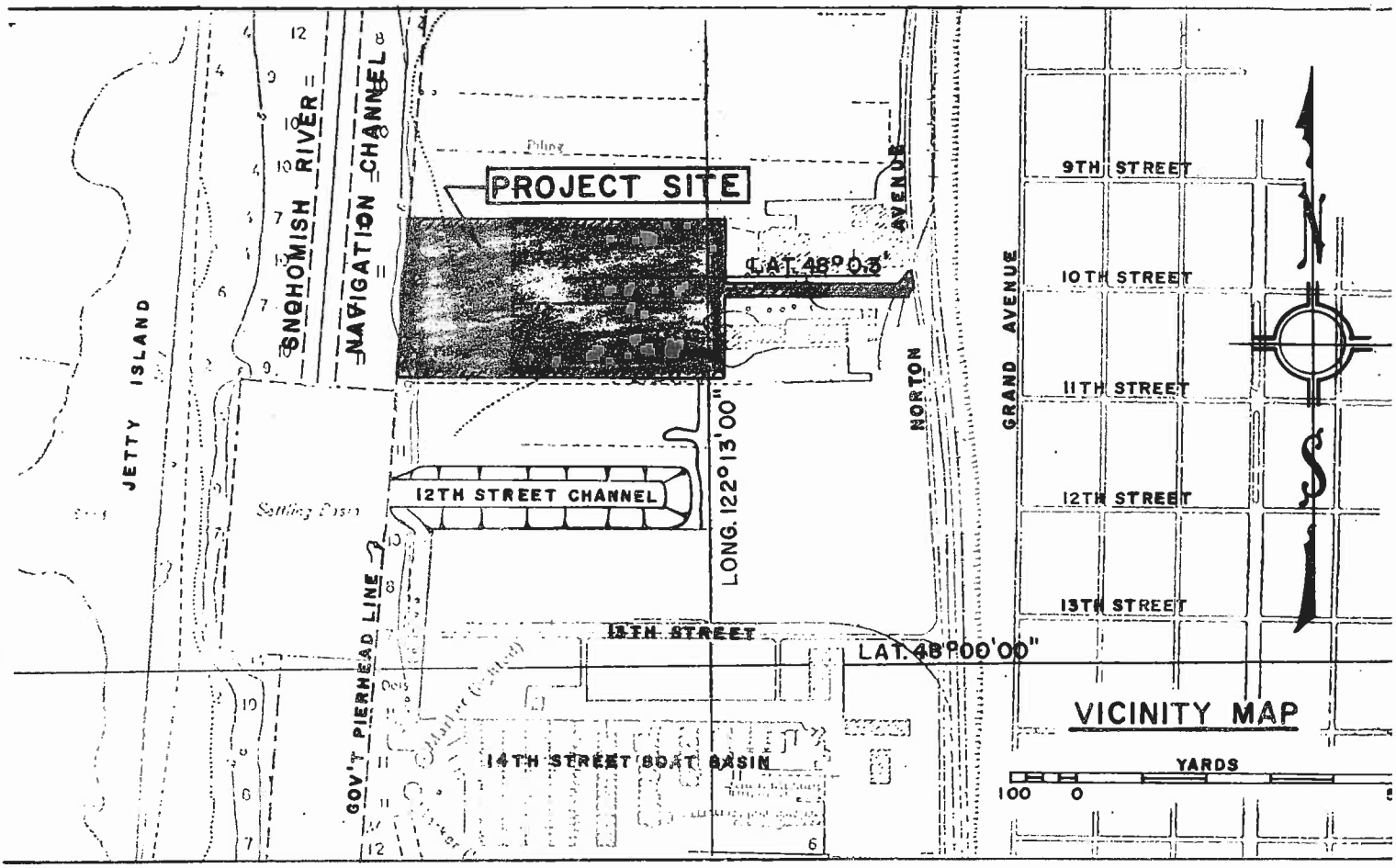
PROPOSED TRAILER BOAT LAUNCH AND MARINE PARK

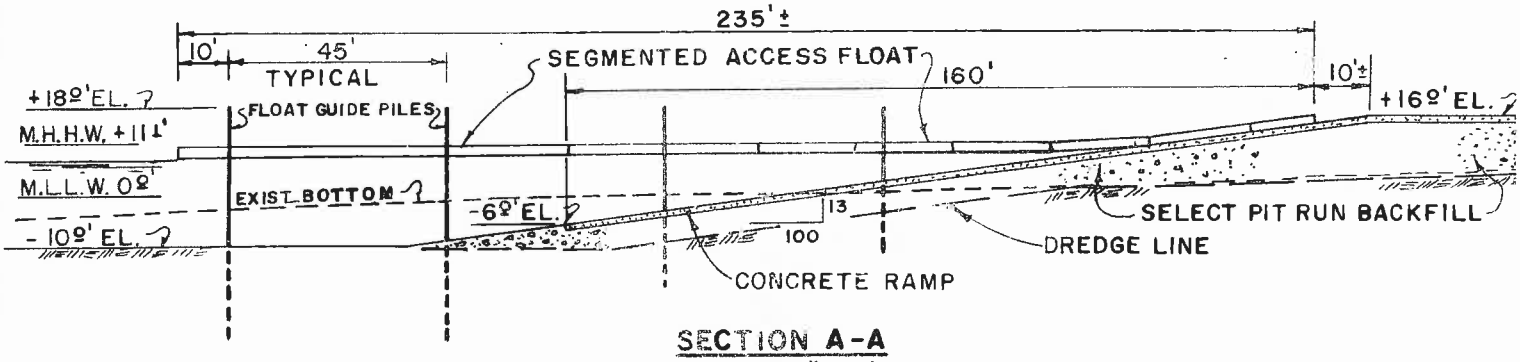
IN: SNOHOMISH RIVER, at 10th Street
City of Everett, Snohomish County,
State of Washington

Application by: PORT OF EVERETT

Prepared by: Reid, Middleton & Assoc., Inc.
Edmonds, Washington

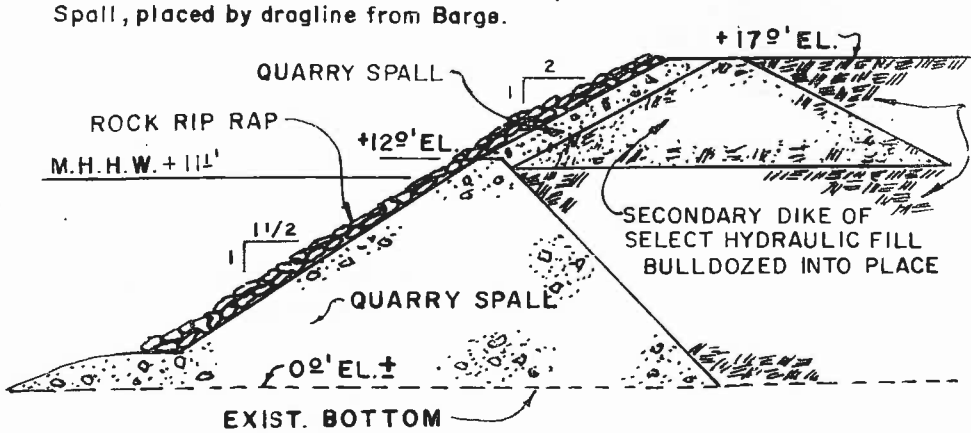
8-1-74





SECTION A-A
SCALE 1"=40'

8,600 Tons Rip Rap & 107,000 Tons Quarry Spall, placed by dragline from Barge.



SECTION B-B
SCALE 1"=10'

8-1-74

071-0YB-1-CC2294

HYDRAULIC FILL, FINE SAND, PUMPED INTO PLACE, 458,000 C.Y. FROM MAINTENANCE DREDGING SNOHOMISH RIVER CHANNEL & SETTLING BASIN, 25,000 C.Y. FROM DREDGING PROJECT BOAT BASIN

Revised 10-11-74

PROPOSED TRAILER BOAT LAUNCH AND MARINE PARK

IN: SNOHOMISH RIVER, at 10th Street
City of Everett, Snohomish County,
State of Washington

Application by: PORT OF EVERETT

Prepared by: Reid, Middleton & Assoc., Inc.
Edmonds, Washington

SHEET 2 OF

APPENDIX K

HAZARDOUS WASTE & TOXIC REDUCTIONS COMPLIANCE INSPECTIONS AT TC SYSTEMS

Washington Department of Ecology
Hazardous Waste & Toxics Reduction Program
Compliance Report

Site: TC Systems, Inc. **RCRA ID#: WAD 088 722 947**

Inspection Date: **May 13, 2003**

Site Contacts: Charles Souder, General Manager
Mike Farnham, Purchasing
Phone: (425) 258-4055

Site Location: 1028 W. Marine View Drive
Everett, WA. 98201

At This Site Since: 1976 SIC Code: 3471, 3479

Generator/Site Status: LQG NAICS Code: 332813

Ecology

Lead Contact: Warren Walton- NWRO Phone: (425) 649-7216 FAX: (425) 649-7098

Other Representatives: Hasina Wong, Snohomish Health District (425) 339-5250 ext 4060

Report Date: June 13, 2003

Report and Photos By: Warren Walton

_____ _____

(Signed) (Date)

Facility Background:

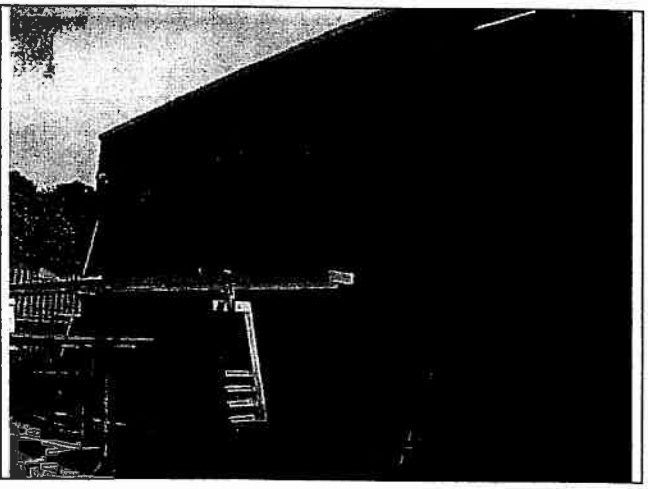
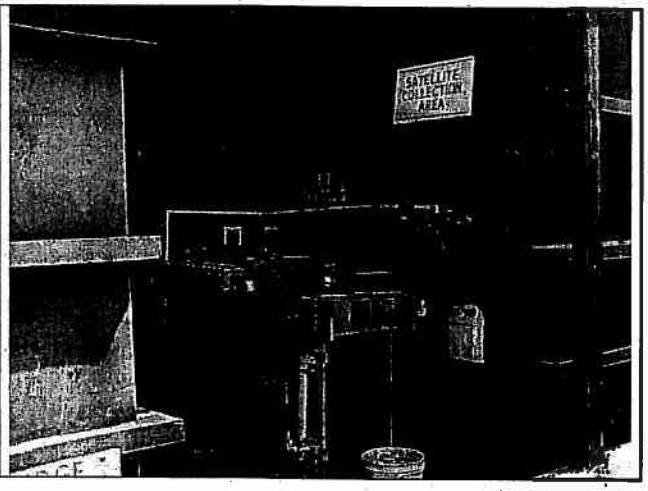
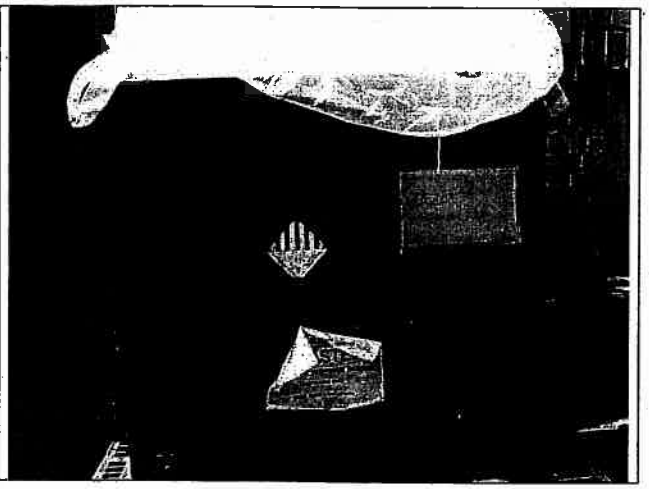
TC Systems is located near the Everett Marina on West Marine View Drive. Twenty five people are employed working the day shift five days a week. TC Systems supports the aviation and boating industries chemically treating and painting metal parts across their chemical line and in their paint booths. Wastewater is pre-treated and discharged according to local discharge limits. Limited sand blasting is done here with the majority of off site sand blasting contracted to Alternative Blasters in Marysville.

Inspection Summary:

We arrived at 1:10 p.m. asking for the person in charge of the hazardous waste program. Lisa Patterson had done it for several years, but departed TC Systems recently. Mr. Mike Farnham introduced himself to us; we identified ourselves, and the purpose of our visit. At the in-briefing, we outlined what we wanted to see during a site walk-through and the records we wanted to see at the end of the tour. Mike said he had been the acting hazardous waste manager for less than a year and that he is responsible for several work areas simultaneously.

We went to Building B (photo 1) where the chem line is located. He explained the processes as items traveled from one end of the line to the other. He showed us records in the upstairs office of continuous effluent monitoring and frequent effluent testing of the wastewater being pre-treated prior to discharge.

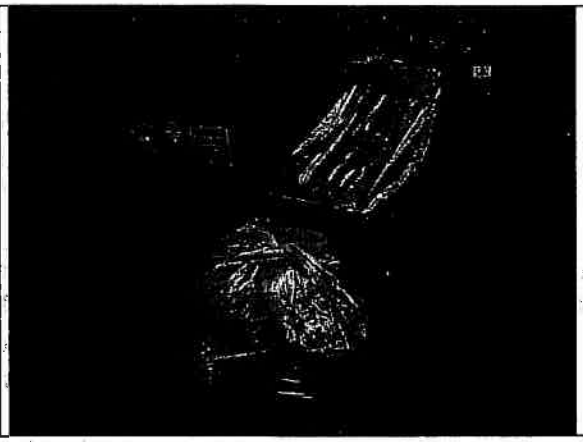
We went to the alley way between Buildings B and C (photo 3) where the sludge from the wastewater treatment process is collected and batch processed in the filter press. Solids containing heavy metals (chromium – D007 specifically) are dropped into a tray and accumulated in a bulk solids container (photo 2). The bulk solids container is on a skid pallet and stored under cover against Building C.

#1 (of 13) MVC-001F 1:40 pm	Reference photo of company name. This is Building B where the chemical line is located.	
#3 (of 13) MVC-003F 1:51 pm	The filter press dewaters treatment sludge containing chromium (DOO7) from chemical line in Bldg. B. An open pan collects solids that are placed in the bulk container nearby (photo 2).	
#2 (of 13) MVC-002F 1:48 pm	Photo of bulk solids container located adjacent to Building C. Bulk solids are generated from filter press (photo 3).	

We returned to Building C to the first floor and went to one of two hazardous waste accumulation areas (HWAA) in the building. This site is being referred to as HWAA # 1.

#5 (of 13) MVC-005F 1:56 pm	HWAA # 1 - This is one of two hazardous waste storage areas on site. The bagged solid debris is shown for reference.	

The area is clearly marked for hazardous waste storage and as we looked at items in the area, we found a few things that need to be addressed.

#4 (of 13) MVC-004F 1:54 pm	Bagged paint filters and what appear to be sorbent socks in HWAA #1. They were to be placed in the box.	

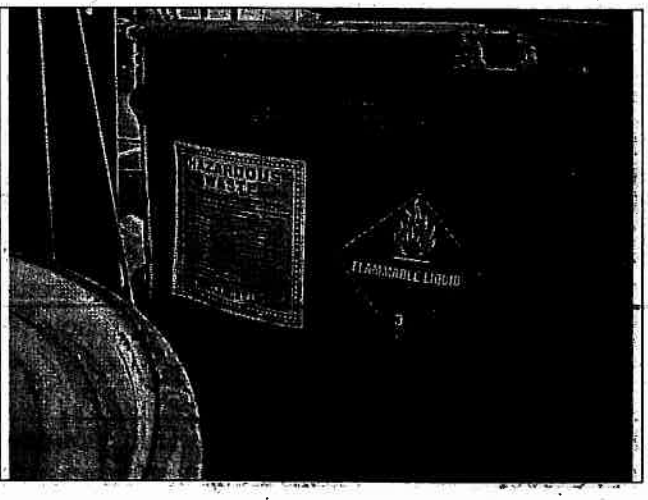
The paint booth filters should have been put directly into the open box with risk label nearby. Because they were not, there was waste without an accumulation start date and not labeled. Along the left wall of this area was used oil to be recycled (photo 6). Though properly stored on spill pallets, two of the containers were open.

#6 (of 13) MVC-006F 2:00 pm	HWAA #1 - This photo shows items along the left wall when facing the sign in photo 5. All drums were labeled as containing used oil.	

We moved to the flammable paint storage locker which is an accumulation area for drums of paint. Slopped paint going into the drums may have obliterated existing labels. There are no labels identifying each drum as a hazardous or dangerous waste, there are no labels, there are no accumulation start dates on any container, and it appears that more than 55 gallons of a single waste stream are being accumulated here.

#7 (of 13) MVC-007F 2:02 pm	Area marked 'Hazardous Waste' and 'Accumulation Only?' in the flammable paint locker. This is in Building C. Note condition and number of drums.	

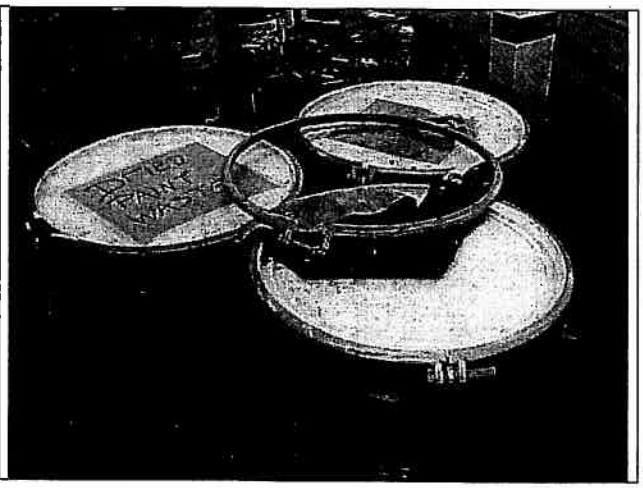
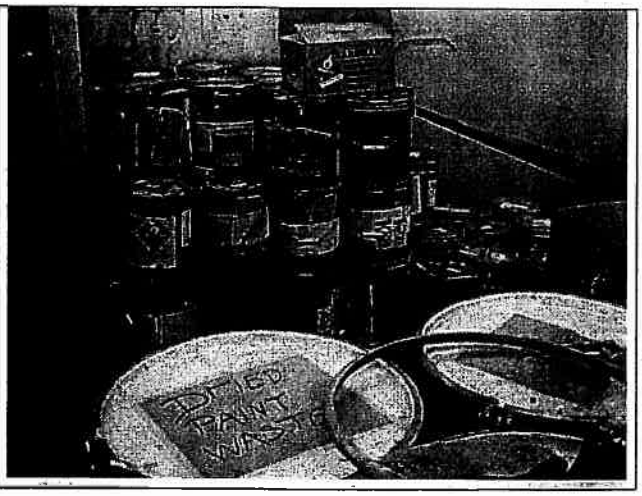
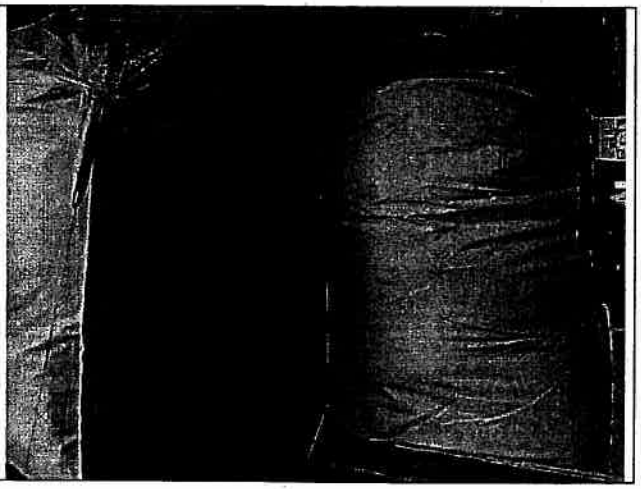
We went across the building to the second hazardous waste accumulation area referred to as HWAA #2. Looking at yellow markings and labels on containers, we noticed one drum (photo 8) had an accumulation start date of October 2002, which was well past its 90 day storage limit prior to shipment.

#8 (of 13) MVC-008F 2:11 pm	Located in the second (90-day) hazardous waste accumulation area (HWAA #2) was this drum with a start date of October 2002. It is properly marked and labeled, but beyond shipment date.	

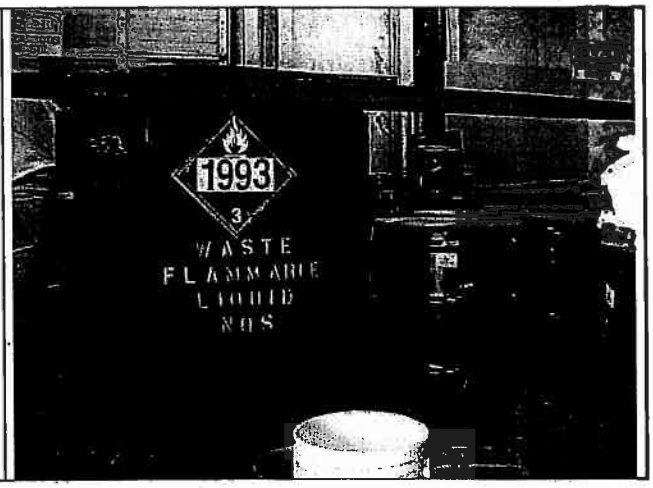
We looked at three drums on one pallet (photo 9). Two had paper signs on the top saying dried paint waste, but neither had a risk label. The third drum on the pallet had no labeling.

Photo 10 shows a pallet of mostly five gallon metal paint cans. Some are shelf expired paint, some cans are labeled, but many are not. There is no accumulation start date evident on any of the containers, nor for the entire pallet as there should be in a 90-day accumulation area. We were told the hazardous waste contractor for TC Systems, Univar USA, Inc. was going to come to the site and handle these five gallon containers for proper disposal.

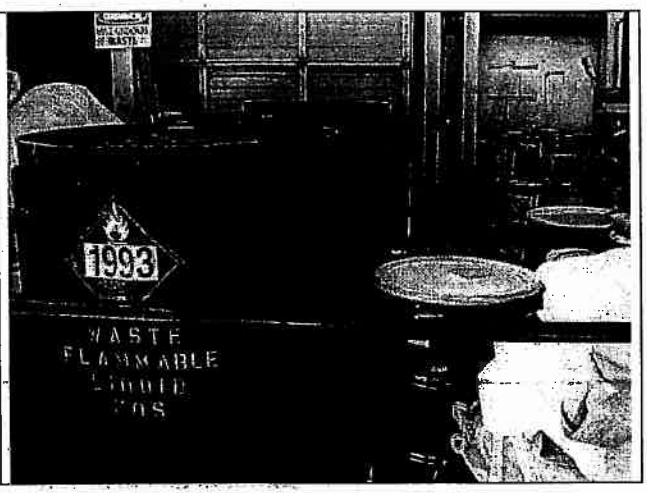
We were told the bulk bags in photo 11 contain the solid sludge collected from the filter press operation, but other than solids, the waste is not identified and there is no risk label. Remember in photo 2, the bulk solids box is marked with contents and has a risk label. The photo 11 items should be labeled the same as the outer box in photo 4 and there is no accumulation start date on either solids bulk container.

#9 (of 13) MVC-009F 2:12 pm	HWAA #2 - Two of the three drums indicate what is in them, but there are no risk labels on any of them.	
#10 (of 13) MVC-010F 2:13 pm	HWAA #2 - There was no accumulation start date on any of these containers and none were marked as dangerous or hazardous waste. Many containers did not have a risk label. *We were told the paint and paint related material was going to be bulk packed – poured into common drums for better handling.	
#11 (of 13) MVC-011F 2:14 pm	HWAA #2 - Bulk bag identifies the contents as hazardous waste, but does not say what it is and neither bag has a risk label.	

We asked if the yellow crayon markings on the bulk containers related to a start date and were told these bulk waste flammable liquid containers were received with the writing on them. The UN 1993 number in conjunction with the 'waste flammable liquid, n.o.s.' properly labels the container, but there is no accumulation start date.

#12 (of 13) MVC-012F 2:15 pm	HWAA #2 - The bulk container is properly marked, but missing the accumulation start date.	

All three tanks are identically marked. None of these bulk tanks has an accumulation start date, which is key to controlling waste shipments within time frames.

#13 (of 13) MVC-013F 2:15 pm	HWAA #2 - Three bulk tanks are identically marked and none have an accumulation start date.	

We returned to the office conference room where we requested review of manifests, weekly HWAA inspection sheets or logs, the contingency plan, the training plan, and training records.

The manifests were in good order save for manifest # 01686 date December 4, 2002 which did not have the signed returned original manifest copy. We requested Mike contact Univar USA, Inc. to get the required copy. He did so the next day, faxing a copy to me at the Bellevue Ecology Office.

The contingency plan met plan requirements. There were no inspection sheets for either HWAA, there was no training plan, and no training files.

Mike showed us a May 2003 internal training calendar with respirator and fork lift training listed to indicate TC Systems is addressing training. We said it was a good start, but for compliance purposes it was inadequate to document what training the employees handling hazardous waste have had or are scheduled to attend.

Inspection concerns:

- Recommend removing extraneous marks such as yellow crayon not having to do with current handling from the three "waste flammable liquid, n.o.s." bulk containers or any drum received to accumulate hazardous waste.
- Recommend an SOP change to deliver paint filters to HWAA #1 so that filters go directly into a lined box that is properly labeled.
- As part of TC Systems in-house training, recommend employees receive instruction on the requirements at a satellite accumulation site and that the accumulation start date applies to a waste that has reached a 55 gallon volume for individual waste streams.
- Recommend becoming familiar with exception reporting for manifests not returned in 35 days of waste shipment date from the receiving facility. Reference WAC 173-303-220(2), exception reports.
- Recommend generator become fully familiar with designation, marking, and labeling requirements for generated wastes.

COMPLIANCE PROBLEMS

*The following conditions identified during the inspection on **May 13, 2003** were not in compliance with Dangerous Waste and/or other environmental laws. Each problem is covered in three parts: (1) the **citation from the regulations**, (2) the **specific observations** from the inspection that highlight the problem, and (3) the **corrective measures** needed to fix the problem and achieve compliance. On the last page(s) of this report is a 'Compliance Certificate' which again lists these compliance citations and directives in a table. That certificate also lists the deadlines for the corrective measures to be completed. The certificate explains how to complete the form and return it to the Department of Ecology.*

1) WAC 173-303-200(1)(a) – Accumulation over 90 days (LQG): WAC 173-303-200(1)(a) as referenced by -170(3): Accumulated waste has remained on site for more than 90 days.

There was one drum in HWAA #2 (as illustrated in photo #8) that had exceeded its 90 day shipment requirement. It had a start date of October 2002.

***Within 60 calendar days** of the receipt of this letter, provide copies of manifests for waste disposal of all waste which has been on site longer than 90 days.*

2) WAC 173-303-200(1)(c) – Accumulation start date on container: WAC 173-303-200(1)(c) as referenced by -170(2): Failure to mark each container with the accumulation start date.

All areas may not be mentioned here, but photos 4, 7, 9, 10, 11, and 13 above illustrate bulk and non-bulk containers that do not have an accumulation start date.

Immediately upon receipt of this letter, ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Provide photographs of properly labeled containers.

3) WAC 173-303-200(2)(a) – Satellite Accumulation – container standards: WAC 173-303-200(2)(a) as referenced by -170(2): Failure to meet the satellite accumulation area standards for containers.

Photo 7 above shows four drums of paint related wastes. Satellite accumulation allows one waste stream of 55 gallons total be accumulated at a satellite point. There appear to be at least three drums of the same material being collected at this site in the flammable paint locker.

Immediately comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date; (c) ensuring containers are in good

condition, handled safely, and compatible with waste stored; and (d) keeping containers closed at all times. Provide photos to document TC Systems' return to compliance with this regulation.

4) WAC 173-303-630(5)(a) – Containers closed: WAC 173-303-630(5)(a) as referenced by -200(1)(b): Failure to assure container is closed (except when actively adding or removing waste).

Photos 7 and 6 show containers open; one drum is without its lid and the used oil drums are missing a bung and have an open funnel.

Immediately upon receipt of this letter, ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5). Provide photos to document TC Systems' return to compliance with this regulation.

5) WAC 173-303-200(1)(d) – Label with risk and as either dangerous waste or hazardous waste: WAC 173-303-200(1)(d) as referenced by -170(2): Failure to label container as "Hazardous Waste" or "Dangerous Waste", and/or failure to provide a label that identifies the major risk(s) associated with the waste in the containers.

Photos 4, 7, 9, 10, and 11 show unlabeled paint booth filters, paint drums, five-gallon containers, and solid bulk containers that have missing or incomplete labels.

Immediately upon receipt of this letter adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d). Provide photos to document TC Systems' return to compliance with this regulation.

6) WAC 173-303-630(6) – Container weekly inspections: WAC 173-303-630(6) as referenced by -200(1)(b): Failure to conduct weekly inspections of dangerous waste accumulation areas and containers.

There were two Hazardous Waste (90 Day) Accumulation Areas (HWAA) identified on site. Each will require its own weekly inspection sheet or log. Similar logs may be used at each site and each should be specifically identified. The example of a weekly inspection sheet may be used as a starting point to design a sheet or log suitable for your facility.

Within 7 days of receipt of this letter, institute an inspection schedule for areas where containers of dangerous waste are stored. These areas must be inspected at least on a weekly basis. Maintain an inspection log that includes: the date and time of the inspection, the printed name and signature of the inspector, a notation of the observations mad and the date and nature of any corrective measures taken. ***Submit a copy of the proposed inspection log within 7 work days.***

7) WAC 173-303-330(2) – Written training plan: WAC 173-303-330(2) as referenced by -200(1)(e): Failure to prepare and maintain a written personnel training plan.

I was given a copy of a TC Systems in-house training schedule for May 2003. It indicates respirator training and fork lift training on two dates, but is not part of a formally written training plan. "How to Develop a Written Personnel Training Plan" shall be enclosed with this inspection report for your use.

Within 60 calendar days of the receipt of this letter, prepare and begin to maintain a written training plan. ***Submit a copy of the plan to the department within 60 days.***

8) WAC 173-303-330(3) – Training Records: WAC 173-303-330(3) as referenced by -200(1)(e): Failure to maintain personnel training records.

Step 5 from the "How to Develop a Written Training Plan" gives an example of an individual training record. Keeping individual training records is preferred to keeping sign up sheets for each training course, though the latter method would satisfy the training record requirement.

Within 30 calendar days of the receipt of this letter, establish and institute use of proper training records.

RCRA ID #: WAD 088 722 947

COMPLIANCE CERTIFICATE

Instructions: **Return this Completed Form or Request an Extension** -- Use this form to report if the action(s) needed to achieve compliance, identified during the inspection on **May 13, 2003**, have been completed. Complete the shaded portion of the table and mail a copy of this form to Warren Walton by ***August 18, 2003*** at the following address: Washington Department of Ecology, Hazardous Waste and Toxics Reduction Program, Attention: Warren Walton, 3190 160th Avenue SE, Bellevue, WA 98008-5452 .

An extension of the deadlines to achieve compliance may be requested. Please make a request in writing, including the reasons an extension is necessary and proposed date(s) for completion, and send it to ***Warren Walton*** before the date specified above. Ecology will provide a written approval or denial of your request.

If you have any questions about information in this Compliance Report, please call:
Warren Walton – 425 649-7216

The problems identified below must be corrected in order to be in compliance with Washington Dangerous Waste Regulations (Chapter 173-303 WAC), or other environmental laws or regulations. Please indicate the date each action is completed and initial each item. Include any comments explaining the actions taken on a separate piece of paper.

1) WAC 173-303--200(1)(a) – Accumulation over 90 days (LQG): WAC 173-303-200(1)(a) as referenced by -170(3): Accumulated waste has remained on site for more than 90 days.

Within 60 calendar days *of the receipt of this letter, provide copies of manifests for waste disposal of all waste which has been on site longer than 90 days.*

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(a)	August 18, 2003		

2) WAC 173-303-200(1)(c) – Accumulation start date on container: WAC 173-303-200(1)(c) as referenced by -170(2): Failure to mark each container with the accumulation start date.

Immediately upon receipt of this letter, ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(a)	June 18, 2003		

3) WAC 173-303-200(2)(a) – Satellite Accumulation – container standards: WAC 173-303-200(2)(a) as referenced by -170(2): Failure to meet the satellite accumulation area standards for containers.

Immediately comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date; (c) ensuring containers are in good condition, handled safely, and compatible with waste stored; and (d) keeping containers closed at all times.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(2)(a)	June 18, 2003		

4) WAC 173-303-630(5)(a) – Containers closed: WAC 173-303-630(5)(a) as referenced by -200(1)(b): Failure to assure container is closed (except when actively adding or removing waste).

Immediately upon receipt of this letter, ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5).

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-630(5)(a)	June 18, 2003		

5) WAC 173-303-200(1)(d) – Label with risk and as either dangerous waste or hazardous waste: WAC 173-303-200(1)(d) as referenced by -170(2): Failure to label container as "Hazardous Waste" or "Dangerous Waste", and/or failure to provide a label that identifies the major risk(s) associated with the waste in the containers.

Immediately upon receipt of this letter adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d).

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(d)	June 18, 2003		

6) WAC 173-303-630(6) – Container weekly inspections: WAC 173-303-630(6) as referenced by -200(1)(b): Failure to conduct weekly inspections of dangerous waste accumulation areas and containers.

Within 7 days of receipt of this letter, institute an inspection schedule for areas where containers of dangerous waste are stored. These areas must be inspected at least on a weekly basis. Maintain an inspection log that includes: the date and time of the inspection, the printed name and signature of the inspector, a notation of the observations mad and the date and nature of any corrective measures taken. ***Submit a copy of the proposed inspection log within 7 work days.***

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-630(6)	June 24, 2003		

7) WAC 173-303-330(2) – Written training plan: WAC 173-303-330(2) as referenced by -200(1)(e): Failure to prepare and maintain a written personnel training plan.

Within 60 calendar days of the receipt of this letter, prepare and begin to maintain a written training plan. ***Submit a copy of the plan to the department within 60 days.***

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-330(2)	August 18, 2003		

8) WAC 173-303-330(3) – Training Records: WAC 173-303-330(3) as referenced by -200(1)(e): Failure to maintain personnel training records.

Within 30 calendar days of the receipt of this letter, establish and institute use of proper training records.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-330(3)	July 18, 2003		

The Department of Ecology is an equal opportunity agency and does not discriminate on the basis of race, creed, color, disability, age, religion, national origin, sex, marital status, disabled veteran's status, Vietnam Era veteran's status or sexual orientation. If you have special accommodation needs or require this document in alternative format, please call Warren Walton at *425 649-7216* (Voice) or **Washington State Relay Operator/Service: 711 and 1-800-833-6388 (TTY).**

Issuance Date: April 30, 2004
Expiration Date: April 29, 2009

CITY OF EVERETT
INDUSTRIAL WASTE DISCHARGE PERMIT

In compliance with the provisions of The Federal Clean Water Act,
The State of Washington Water Pollution Control Law, as amended
(Chapter 90.48 Revised Code of Washington) and
The City of Everett Industrial Pretreatment Ordinance No. 2034-95 (as amended)
An Industrial Waste Discharge Permit is Issued to:

TC Systems
1032 West Marine View Drive
Everett, WA 98201

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Permit Number:	7708-04
Authorized Rep:	Charles Souder
Plant Location:	1032 West Marine View Drive, Everett, WA 98201
Receiving Water:	Everett Water Pollution Control Facility
Industry Type:	Metal Finisher — SIC No. 3471 40 CFR 433.17 (PSNS)
Sample Site:	Sample box on waste treatment outlet (Effluent weir)

TC Systems is authorized to discharge pretreated industrial wastewater to the City of Everett sewer system in compliance with the City's Ordinance, any applicable provisions of Federal or State law or regulation, and in accordance with discharge point(s), effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit is granted in accordance with the permit application form filed on February 4, 2004, in the office of the City of Everett Department of Public Works, and in conformity with plans, specifications, and other data submitted to the City in support of the above data disclosure form.

Tom Thetford, P.E.
Utilities Director

Date

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I. EMERGENCY NOTIFICATION

A. In the event that a petroleum or other hazardous material spill reaches the sewer system, the Everett Water Pollution Control Facility shall be notified immediately.

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Hours 7:30 AM to 4:00 PM Monday - Friday	(425) 257-8240
After Hours, Weekends and Holidays	(425) 257-8200

B. In the event that a spill of oil or hazardous material reaches the storm sewer or the waters of the State, Everett Surface Water Management and the Department of Ecology shall be notified immediately.

Everett Surface Water Management Hours 7:30 AM to 4:00 PM Monday - Friday	(425) 257-8800
After Hours, Weekends and Holidays	(425) 257-8200
Washington State Dept. of Ecology 24 hours	(425) 649-7000

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Limitations and Monitoring Requirements

After issuance and lasting through midnight April 29, 2009, the Permittee is authorized to discharge treated industrial wastewater to the City of Everett sanitary sewerage system subject to the following limitations and monitoring requirements.

Sample location: Sample box on waste treatment outlet (Effluent weir) DRAFT

REQUIREMENTS	EFFLUENT LIMITATIONS		MONITORING	
Parameter	Daily[a] Maximum	Monthly[b] Average	Minimum[c] Frequency	Sample Type
NONCONVENTIONALS				
Arsenic (T)	0.50 mg/L[k]	NA[d]	1/Quarter	Composite[g]
Cadmium (T)	0.11 mg/L[j]	0.07 mg/L[j]	1/Quarter	Composite
Chromium (T)	2.77 mg/L[j]	1.71 mg/L	1/Quarter	Composite
Copper (T)	3.00 mg/L[k]	2.07 mg/L	1/Quarter	Composite
Lead (T)	0.69 mg/L[j]	0.43 mg/L	1/Quarter	Composite
Mercury (T)	0.10 mg/L[k]	NA	1/Quarter	Composite
Nickel (T)	2.83 mg/L[k]	2.38 mg/L	1/Quarter	Composite
Silver (T)	0.43 mg/L[j]	0.24 mg/L	1/Quarter	Composite
Zinc (T)	2.61 mg/L[k]	1.48 mg/L	1/Quarter	Composite
Cyanide(T)	0.65 mg/L[j]	0.65 mg/L	2/Year	Composite[h]
TTO[i]	2.13 mg/L[j]	NA	2/Year (Jun/Dec)	Grab[n]
Process Flow	No Limit		Daily	Metered
CONVENTIONALS				
pH	5.0 - 10.0[e,k]	NA	Daily	Recording pH Meter
Total FOG	NA[f]	NA	1/Quarter	Grab[o]
FOG/Nonpolar	200 mg/L[k]	NA	1/Quarter	Grab[o]
Closed Cup Flashpoint	140°F[l]		2/Year	Grab[p]

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS (continued)

B. Sample Site/Dilution

All samples shall be collected at an approved sample site at the point of discharge from the treatment system, prior to mixing with any other dilution stream. The effluent limits apply to industrial wastewater prior to dilution with wastewaters other than those generated by the regulated process. The Permittee shall not use dilution to meet the limitations. See Sections VI.H. and VI.I.

C. Footnotes

a. The daily maximum is defined as the greatest allowable value for any calendar day.

b. The monthly average is defined as the arithmetic mean of samples collected during a calendar month.

If self monitoring is performed only once per month, then the daily maximum will become as stringent as the monthly average. The Permittee may choose to monitor more frequently than is required by this permit, with the understanding that all sampling and analytical data shall be submitted with the monthly report.

c. The City may reduce or increase the frequency of sampling based on compliance history, including analytical results.

d. NA means not applicable.

e. pH is measured in standard units. See Section V.C.

f. If Total FOG (fats, oils and grease) is greater than 50 mg/L, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged FOG interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge, the Permittee for the cost of treatment.

g. Composite shall mean a flow-proportioned sample taken during the hours of discharge using an automatic sampler approved by the City or at least four grab samples taken in accordance with City of Everett Sampling Guidelines and composited according to flow. See Section V.D.

h. Each of four (4) grab samples for cyanide shall be immediately preserved with NaOH to a pH of >12.0 then combined and refrigerated until analyzed. Analysis shall occur within fourteen (14) days of taking the sample.

II. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

C. Footnotes (continued)

i. TTO (Total Toxic Organics) is the summation of all values greater than 0.01 mg/L for each of the Toxic Organics specified in 40 CFR 433.11(e), where reasonably expected to be present. Results are due in June and December and shall contain the calculated TTO value defined above. If the Permittee is in compliance with the TTO limit, it may develop a solvent management plan. See Sections III.B. and V.E.

j. These limits based upon limitations contained in 40 CFR 433.17, Pretreatment Standards for New Sources (PSNS).

k. These limits based upon local limitations contained in Everett City Ordinance No. 2034-95 (as amended).

l. Any wastewater with a closed cup flash point of less than 140°F or 60° Celsius using the test methods specified in 40 CFR 261.21 is prohibited from discharge. See Section VII.A.3.

m. If TSS (Total Suspended Solids) or BOD_5 (5-day Biochemical Oxygen Demand) exceeds 250 mg/L, the Permittee will be surcharged as part of the monthly sewerage bill for the additional costs of treatment. If the discharged TSS or BOD_5 interferes with the collection and/or treatment systems, then the City may take enforcement action, as well as surcharge the Permittee for the cost of treatment and any additional maintenance costs incurred by the City.

n. A minimum of four grab samples must be taken during the sampling event for TTO's. Semi volatiles are then composited in the field for sample analysis, volatiles are composited in the laboratory when analyzed.

o. A minimum of four individual grab samples to be taken during the sampling event for FOG. The samples are to be taken and contained in separate containers and not to be composited or split.

p. A single separate grab sample must be taken and analyzed for Flash Point.

III. SUMMARY OF REPORTS

The Permittee shall submit reports to the City according to the schedule listed below.

A. Reserved

B. Accidental Spill Prevention Plan

Frequency:	Once, update as needed.
Due Date:	Submit 90 days following the commencement of discharge or permit issuance whichever is later. Implement within 6 months.
Content:	Strategy for spill prevention, including training and emergency response. See Section IV.B.

C. Solvent Management Plan (SMP)

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Frequency:	Once, update as needed.
Content:	Regulated Toxic Organics on site, disposal method and spill prevention procedures. See Section V.E.

D. Notification of Hazardous Waste Discharges

Frequency:	Once only for each hazardous waste (HW)
Due Date:	Within 90 day of permit issuance
Content:	HW name, EPA HW Number & type of discharge. See Section IV.C.

E. Notification of New Hazardous Waste Discharges

Frequency:	Whenever new regulations designate wastes or constituents as hazardous.
Due Date:	Within 90 days of the effective date of the published regulation.
Content:	See Section IV.D. and 40 CFR 403.12(p).

F. O & M Manual

Frequency:	As needed prior to installation or changes of pretreatment equipment.
Due Date:	Approval required prior to completion of construction.
Content:	O & M instructions and pretreatment system "as-builts". See Section IV.E. and WAC 173-240.

III. SUMMARY OF REPORTS (continued)

G. Self Monitoring Report

Frequency:	As required.
Due Date:	Commencing on date of Permit issuance. To be submitted no later than the last day of each month following self monitoring.
Content:	Data required in Section II.A or, if appropriate, a notification that no discharge has occurred. See Section IV.F.

H. Notification of Violation

Frequency:	As needed.
Due Date:	Notify the City within 24 hrs. of discovery and submit a written report within 5 days.
Content:	Reason for violation and corrective action taken. See Section IV.G.

I. Changes To Discharge

Frequency:	As needed.
Due Date:	90 days prior to changes in discharge that result in altered wastewater pollutants.
Content:	See Section IV.H.

J. Spill Report

Frequency:	As needed.
Due Date:	Notify City within 24 hrs of discovery and a written report within 5 days.
Content:	Characteristics of and reason for spill, and corrective action taken. See Section IV.I.

K. Upset Report

Frequency:	As needed
Due Date:	Notify the City within 24 hrs of discovery and submit a written report within 5 days.
Content:	Characteristics of and reason for noncompliance, and corrective action taken. See Section IV.J.

L. Engineering Report

Frequency:	As needed prior to installation or changes of the pretreatment equipment.
Due Date:	Approval required prior to installation.
Content:	Per WAC 173-240. See Section IV.K.

IV. REPORTING REQUIREMENTS

The Permittee shall monitor their discharge to the sanitary sewer as specified in Section II of this permit. The Permittee shall also submit to the City of Everett, Department of Public Works, all of the reports according to the following schedule and content requirements.

A. Reserved

B. Accidental Spill Prevention Plan

The Permittee shall continue with implementation of their approved Accidental Spill Prevention Plan to eliminate or minimize the accidental slug discharge of pollutants into the sewer system which could have an effect on the City's wastewater treatment plant, biosolids and biosolids utilization plans, or cause the City to violate it's National Pollutant Discharge Elimination System (NPDES) permit.

C. Notification of Hazardous Waste Discharges

The Permittee shall notify the City, the EPA RCRA Director and State Dangerous Wastes Director, in writing within 90 days of the effective date of this permit, of any discharge of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other).

Notification need be submitted only once for each hazardous waste discharged. The notification requirement in this section does not apply to pollutants already reported under the self-monitoring requirements in Section II of this permit. The Permittee shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated.

D. Notification of New Hazardous Wastes

Whenever the EPA publishes new RCRA rules identifying additional hazardous wastes or new characteristics of hazardous wastes, the Permittee must notify the City, EPA RCRA Director and State Hazardous Wastes Director if any of these wastes are discharged to the City's treatment system. The notification must occur within 90 days of the effective date of the published regulation.

IV. REPORTING REQUIREMENTS (continued)

E. Operation and Maintenance Manual

As needed with installation or changes of pretreatment equipment. The Permittee shall submit an operation and maintenance manual and "as-built" drawings for the pretreatment system, to the City, for approval prior to completion of construction. This does not apply to equipment replaced with operationally identical parts during repair or maintenance activities. See WAC 173-240.

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F. Self Monitoring Reports

The Permittee shall monitor the parameters specified in Section II.A of this permit. All monitoring results obtained during the month shall be summarized and reported on a form approved by the City, to be submitted no later than the last day of the month following the completed reporting period. The Permittee shall include the daily pH highs and lows and daily flows. The report shall be signed and certified in accordance with the requirements of Section VII.B. and submitted to the following address:

City of Everett
Industrial Pretreatment Program
3200 Cedar St.
Everett, WA. 98201
Attn.: Gene Bennett

In the event that additional monitoring (other than that required in Section II.A) is conducted, the Permittee shall report all results in the report. Note that reporting TTO monitoring data is not required monthly. The December and June self monitoring reports shall contain TTO discharge monitoring data or certification statement.

G. Notification of Violation

If self monitoring data indicates that a discharge limit has been exceeded, the Permittee shall notify the City within 24 hours of becoming aware of the violation. The Permittee shall repeat the sampling and submit the analysis to the City within 30 days after becoming aware of the violation. Formal written notification discussing circumstances and remedies shall be submitted to the City within five (5) days of becoming aware of the violation or as required.

H. Notification of Changed Discharge

The Permittee shall notify the City 90 days prior to the introduction of new wastewater pollutants, changes in manufacturing operations or any substantial change in the volume or character of pollutants in their discharge, including the listed or characteristic hazardous wastes for which the Permittee has submitted initial notification under 40 CFR 403.12(p). The Permittee shall obtain approval from the City prior to any substantial change in their discharge.

IV. REPORTING REQUIREMENTS (continued)

I. Spill/Slug Discharge Reports

The Permittee shall notify the City immediately, either in person or by phone (see Section I Emergency Notification), upon accidental spill or slug discharge to the sanitary sewer. Formal written notification discussing circumstances and remedies shall be submitted to the City within five (5) days of the occurrence or as required.

J. Upset Reporting

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1. Definition

For the purpose of this section, "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with applicable pretreatment standards because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance or careless or improper operation.

2. Effect of an Upset

An upset shall constitute an affirmative defense to action brought for noncompliance with applicable pretreatment standards if the requirements of paragraph 3 are met.

3. Conditions Necessary for a Demonstration of Upset:

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs or other relevant evidence that:

a. an upset occurred and the permittees can identify the specific cause(s) of the upset;

b. the facility was, at the time, being operated in a prudent and workman-like manner and in compliance with applicable operation and maintenance procedures; and

IV. REPORTING REQUIREMENTS (continued)

J. Upset Reporting (continued)

c. the Permittee has submitted the following information to the City within 24 hours of becoming aware of the upset (if this information is provided verbally a written submission must be provided within five days):

(1) a description of the discharge and cause of noncompliance;
(2) the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to be corrected; and
(3) steps being taken and/or planned to reduce, eliminate and prevent recurrence of the noncompliance.

4. Burden of Proof

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset shall have the burden of proof.

5. Permittee Responsibility in Case of Upset

The Permittee shall control production or all discharges to the extent necessary to maintain compliance with applicable pretreatment standards upon reduction, loss or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost or fails.

K. Engineering Report

Prior to constructing or modifying any wastewater control facilities, detailed plans shall be submitted to the City and the Washington Department of Ecology for approval in accordance with WAC 173-240. Facilities shall be constructed and operated in accordance with the approved plans.

V. SPECIAL CONDITIONS/COMPLIANCE SCHEDULES

A. Batch Discharge Log

The Permittee shall maintain a log containing the date and time of discharge, contents, and the volume and number of batches discharged per day.

B. Effluent Meter

The Permittee shall install and maintain a continuous flow meter, monitoring flow through the discharge/sample site.

C. Recording pH Meter

The Permittee shall maintain a continuously recording pH meter with an audible alarm system and shall report the high and low pH values for each day the Permittee discharges. Any discharge without a pH record shall be considered a violation of this permit.

The Permittee shall maintain a log that includes a record of calibration for the instrument used with: the date, time, name of the person doing the calibration, and the method used. The chart shall be dated and initialed on working days.

D. Autosampler

The Permittee shall use an autosampler approved by the City to flow proportion composite samples of the treatment discharge to be monitored per Section II.A of this permit. Samples may be flow proportioned by hand if use of an autosampler is impractical. See Sections II.B and VI.I concerning the sample site.

V. SPECIAL CONDITIONS/COMPLIANCE SCHEDULES (continued)

E. Solvent Management Plan/TTO

1. Requirements

If the Permittee demonstrates compliance with the TTO limits, it may elect to develop a solvent management plan in lieu of sampling for TTO's. The plan must be submitted to the City for review and approval. The plan must include:

a. a list of the Total Toxic Organic's used;
b. the method of disposal, i.e., reclamation, contract hauling or incineration; and
c. the procedures that are used to insure that TTO's do not routinely spill or leak into the wastewater.

2. TTO Status

Status reports are due each June and December as part of the Self Monitoring Report. List any changes to the last plan on file or state there have been no changes to the plan. The Permittee shall make the following certification statement:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation or pretreatment standard for TTO, I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last discharge monitoring report. I further certify that this facility is implementing the solvent management plan submitted to the City." See 40 CFR 403.12(e).

VI. OPERATIONS AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures. The Permittee shall keep and maintain an operation and maintenance log on all facilities and systems of treatment and control.

Water conservation practices shall be used to reduce total effluent volume. Waste prevention practices shall be used to reduce or eliminate contaminant loading to the POTW. These include, but are not limited to, minimizing excessive dragout of cleaning, stripping, etching, and plating solutions used during metal finishing operations. In addition, the following practices shall be used:

A. Chemical Storage

Chemicals shall be stored in a manner which will prevent the entry into the municipal sewer system or the waters of the State. All liquid chemicals will be stored in a no outlet area, approved by the City.

1. Oils, waste oils, solvents, chemicals, and waste chemical solution shall be stored in a curbed and covered area with an impervious surface to prevent the contamination of the ground, ground water, storm sewer system or the sanitary sewer system. Empty barrels shall be adequately stoppered and stored in a designated area.

2. Incompatible chemicals shall be segregated.

3. Adequate dikes, sumps, and valves shall be installed to intercept and contain overflows and spills from all chemical cleaning and metal finishing tanks. Wastes from the sumps shall be collected for disposal in a manner that will prevent its entry into waters of the state or, be adequately treated and analyzed before discharge to the POTW.

B. Spill Prevention

1. All plating process tanks shall be stored in bermed, roofed, secured, no outlet areas.

2. Process tanks shall be located in an area capable of containing 110 percent of the volume of the largest tank. This area can have no outlet to the sewer system or the waters of the State.

3. All process tanks and chemical storage containers shall be adequately labeled. Emergency phone numbers shall be posted.

VI. OPERATIONS AND MAINTENANCE (continued)

B. Spill Prevention (continued)

4. In the event of a concentrated solution spill, such as a tank failure, the Permittee shall not discharge any spilled solution into the municipal sewer system unless laboratory test results indicate that the substance meets the conditions of this permit. The Permittee shall receive approval from the City prior to the discharge of any untreated spilled solution.

5. The Permittee shall use spill prevention practices to preclude the discharge of liquids, solids, or gasses, which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosions.

C. Required Process Changes

The Permittee shall make the process changes required and/or install whatever pretreatment equipment is necessary to meet the discharge conditions of this permit.

D. Shutoff Devices

1. The Permittee shall provide a functional shutoff device downstream of the pretreatment system.

2. Incoming rinse waters shall be turned off and shut off devices shall be closed at all times when the plant is not operating (i.e., nights, weekends and holidays), and in the event of an emergency spill. Rinse water to specific processes shall be turned off when process is not in operation.

E. Housekeeping

1. No plating or process bath filter shall be flushed over the processing floor, rinse tanks, or in any area where they may drain into the sanitary sewer system.

2. All filters shall be placed inside the processing tanks or over other containers to prevent any leaks to the sanitary sewer system.

3. The Permittee shall maintain and inspect all process solution and rinse tanks on a regular basis. Any leaks shall be repaired promptly.

F. Proper Disposal of Sludges and Spent Chemicals

1. The Permittee shall comply with the provisions of WAC 173-303 (Dangerous Waste Regulations).

VI. OPERATIONS AND MAINTENANCE (continued)

F. Proper Disposal of Sludges and Spent Chemicals (continued)

2. If it has not already done so and if applicable, the Permittee shall obtain a Hazardous Waste generator number from the US EPA or the WDOE for proper disposal of wastes.

3. Spent plating, etching and other concentrated process solutions shall not be disposed of to the sanitary sewer system.

4. The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into waters of the State.

5. For all liquid wastes and sludges removed by waste disposal companies, the Permittee shall record and retain for a period of three (3) years:

   a. chemical name and trade name of the substance;
   b. volume of each substance;
   c. date that it was hauled away;
   d. identity of the waste hauler and, if applicable, an EPA registration number; and
   e. receipt from the waste hauler.

G. Flowmeter

The Permittee shall maintain a water or sewer meter which provides accurate information regarding industrial process wastewater discharges to the sewer. The Permittee shall maintain a daily log of flowmeter readings and daily flows.

H. Dilution

Excess water usage shall be minimized to prevent dilution. No Industrial User shall increase the use of potable or process water, or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

I. Sample Site

An approved sampling site shall be maintained downstream of the final pretreatment system and upstream of any mixing with unregulated flows for the monitoring of the industrial discharge. City personnel shall have access to the sample site during normal business hours and in the event of an emergency. All process wastewater shall flow through the sampling point. All process wastewater shall be hard-piped to the sampling point. All wastewater monitoring samples shall be collected from the approved sample site. Sample sites are to remain unobstructed at all times to allow access. All sample sites shall have a suitable, City approved, primary device installed for the purpose of monitoring industrial discharge flow to the Sanitary Sewer.

VII. GENERAL CONDITIONS

DRAFT

A. Compliance

1. All discharges to the City sanitary sewer system shall be in accordance with the requirements and ordinances of the City.

2. All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

3. The Permittee shall comply with all the general prohibitive discharge standards in Ordinance 2034-95 (as amended) and is responsible to take whatever steps are necessary to ensure discharge requirements of this permit are met.

4. Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

5. All applicable requirements of 40 CFR 403 and 40 CFR 433 are incorporated into this permit by reference.

6. Sanitary sewage shall be disposed of in accordance with the requirements of the Snohomish County Health District.

B. Signatory Requirements

All reports and information submitted to the City shall be signed by an executive officer, or his/her designated official, testifying to the accuracy of the results and representativeness of the sample by making the following statement:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

C. Confidential Information

Except for data determined to be confidential under Section 7 of the City's Industrial Pretreatment Ordinance No. 2034-95 (as amended), all reports required by this permit shall be available for public inspection at the office of the City of Everett, Department of Public Works.

VII. GENERAL CONDITIONS (continued)

D. Records Retention

The Permittee shall retain for a minimum of three years all records of monitoring activities and results, including all reports of recordings from continuous monitoring instrumentation. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the City.

E. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information:

1. the date, exact place, person collecting the sample, and time of sampling;
2. the date the analyses were performed;
3. who performed the analyses;
4. the analytical techniques or methods used;
5. the results of all the analyses; and
6. provide certification of representativeness.

F. Representative Sampling

Samples and measurements taken to meet the requirements of this condition shall be representative of the volume and the nature of the monitored discharge.

G. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless approved otherwise in writing by the City, conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants, contained in 40 CFR 136. Where 40 CFR 136 does not include a sampling or analytical technique for the pollutant in question, sampling and analyses shall be performed in accordance with any other sampling and analysis procedure approved by the EPA Administrator.

VII. GENERAL CONDITIONS (continued)

H. Bypass

The intentional bypass of wastes from all or any portion of a treatment works to the extent that permit effluent limitations cannot be met is prohibited unless the following four conditions are met:

1. Bypass is:

   (a) unavoidable to prevent loss of life, personal injury, or severe property damage; or
   (b) necessary to perform construction or maintenance related activities essential to meet the requirements of the Clean Water Act and authorized by administrative order;

2. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or temporary reduction or termination of production;

3. The Permittee submits notice of an anticipated bypass in accordance with Section IV.H. Where the Permittee knows or should have known in advance of the need for a bypass, this prior notification shall be submitted for approval to the City, if possible, at least 10 days before the date of bypass; and

4. This bypass is allowed under conditions determined to be necessary by the City to minimize any adverse effects. The public shall be notified and be given the opportunity to comment on bypass incidents of significant duration, to the extent feasible.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic impact caused by delays in production.

After consideration of the factors above and the adverse effects of the proposed bypass, the City may approve the request.

VII. GENERAL CONDITIONS (continued)

I. Right of Entry

The Permittee shall allow an authorized representative of the City, upon the presentation of credentials and such other documents as may be required by law and at reasonable hours:

1. To enter the Permittee's premises where a discharge source is located or where any records must be kept under the terms and conditions of the permit;

2. To have access to and copy any records that must be kept under terms and conditions of the permit;

3. To inspect any monitoring equipment or method required in the permit;

4. To inspect any collection, treatment, pollution management, or discharge facilities required under the permit;

5. To sample any discharge of pollutants (sampling sites are to remain unobstructed at all times); and

6. Where a user has security measures in force which require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the Director will be permitted to enter without delay for the purposes of performing specific responsibilities. Unreasonable delays in allowing the Director access to the user's premises shall be a violation of this Permit.

J. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Property rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringement of Federal, State, or Local regulations.

L. Falsifying Information or Tampering With Monitoring Equipment

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, may result in punishment under the criminal laws of the City, as well as being subject to civil penalties and relief.

VII. GENERAL CONDITIONS (continued)

M. Enforcement Provision

The City may seek any or all of the remedies or penalties (including civil and judicial action) provided in City ordinances, including recovering costs incurred by the City, in response to the following:

1. Any violation by the Permittee of the provision of the Industrial Wastewater Discharge Permit;

2. Any violation by the Permittee of the provisions of the City Code; or

3. Any violation by the Permittee of any order of the Director with respect to provisions set forth in this Industrial Wastewater Discharge Permit or the City Code.

The range or severity of remedial actions taken against the Permittee may include, but not be limited to, notices of violation, compliance schedules, fines of up to $10,000 per day per violation, show cause hearings and/or cease discharge notices and be determined, in part, by the nature, duration and frequency of the violation (including significant non-compliance status).

N. Duty to Reapply

The City shall notify the Permittee 180 days prior to the expiration of the Permitee's permit. Within 90 days of the notification, the Permittee shall apply for reissuance of the permit on a form provided by the City.

O. New or Supplemental Application for Changes

The City may require the Permittee to submit a new application or supplement to the previous application where facility expansions, production increases, or process modifications will result in:

1. New or substantially increased discharges of pollutants;

2. A substantial increase in flow; or

3. Violation of the terms and conditions of the existing permit.

The Permittee shall notify the City 60 days prior to such changes. Formal written notification shall follow within 30 days. Submission of such an application does not relieve the discharger of the duty to comply with the existing permit until it is modified or reissued.

VII. GENERAL CONDITIONS (continued)

P. Limitation of Permit Transfer

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Permits are issued to a specific User for a specific operation and are not assignable to another User or transferable to any other location without the prior written approval of the City. Sale of a User shall obligate the purchaser to seek prior written approval from the City for continued discharge to the POTW.

Q. Emergency Suspension of Service and Revocation of Permit

The City may, without advance notice, order the suspension of the wastewater treatment service and revoke the Industrial Waste Discharge Permit from a Permittee when it appears to the City that an actual or threatened discharge:

1. presents or threatens an imminent or substantial danger to the health or welfare of persons or substantial danger to the environment; or

2. threatens to interfere with the operation of the POTW, or violate any pretreatment limits.

Any Permittee notified of the City's suspension order shall immediately cease all discharges. In the event of failure of the Permittee to comply with a suspension order, the City may immediately take all necessary steps to halt or prevent any further discharge by such Permittee into the POTW. See Ordinance 2034-95 (as amended), section 9.7.

R. Modification, Revision or Termination of the Permit

This permit may be modified, terminated, or revoked during its term for:

1. Failure of the Permittee to disclose fully all relevant facts or the misrepresentation of any relevant facts by the Permittee in the application or during the permit issuance process;

2. A violation of any term or condition of the permit;

3. EPA promulgating a new federal pretreatment standard;

4. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit;

5. Information indicating that the permitted discharge poses a threat to human health or welfare;

VII. GENERAL CONDITIONS (continued)

R. Modification or Revision of the Permit (continued)

6. A change in ownership or control of the source;

7. A change in City Ordinances or other just cause

8. Incorporating special conditions resulting from the issuance of a special order; or

9. Failure to pay pretreatment charges that causes the user's account to be sent to a collection agency.

Permit transfer fee shall be $500.00

Permit modification fee shall be $500.00. Permit modification fees will only be charged in a case where changes in the user's operation require the modification, or when the user requests a modification.

Any permit modification which results in new conditions in the permit will include a reasonable time schedule for compliance, if necessary. Permit modification, revocation and reissuance, or termination may be initiated by the City or requested by any interested person.

S. Analytical Requirements

All analyses performed to establish compliance and used in compliance reporting shall be performed by a laboratory accredited by the Quality Assurance Division of the Washington State Department of Ecology in accordance with WAC 173-50. Laboratories must be accredited for the analyses that they are performing.

Washington Department of Ecology
Hazardous Waste & Toxics Reduction Program
Compliance Report

Site:	**TC Systems**	**RCRA ID#:**	**WAD088722947**
Inspection Date:	August 8, 2006		
Site Contacts:	Guy Donaldson Charles Souder		
Phone:	(425) 258-4055	FAX:	
Site Location:	1032 Marine View Drive Everett, WA 98201		
At This Site Since:	20 Years	NAICS#:	332813
Generator/Site Status:	Large Quantity Generator (LQG)		

Ecology

Lead Contact: Victoria Sutton Phone: (425) 649-7277 FAX : (425) 649-7098
Other Representatives: Warren Walton
Report Date: October 4, 2006
Report By: Victoria Sutton

_____ _____
(Signed) (Date)

Facility Background:

TC Systems cleans and paints pre-fabricated metal parts. Sixty percent of their business is related to aerospace and Boeing, and 40% is for other types of commercial metal painting. Metal parts are brought to the site, cleaned in the cleaning line, and the wastewater treated and discharged under permit. They currently have 18 employees.

Inspection Summary:

We arrived on site at 9:05 am and asked for Guy Donaldson, the environmental contact. Guy took us to the hazardous waste storage area in a corner of the building. Charles Souder joined us there and helped explain the waste management. The area was well marked with signs. There is one additional waste accumulation area in the paint mixing room, and no other areas of the facility are currently being used to accumulate hazardous waste.

Waste sludge is generated from the wastewater treatment system for the metal cleaning line. The sludge is a solid containing chromium and is stored in two large plastic tote sacks. The sacks were labeled as hazardous waste with start dates, and all sacks were stored within the 90-day accumulation time limit. The sacks were not labeled with the risk associated with the waste (see Photo # 1).

One of the tote sacks was labeled as chromium solids, but the sack is placed in a box that is labeled "Paint Booth Filters" (see Photo # 3). Paint booth filters are accumulated in another tote sack. They did not think that the filters had chromium from the paint, so they may not be hazardous waste.

Photo # / Area	Notes/Descriptions	Photographs
Hazardous Waste Storage Area Photo # 1 (MVC-001F.JPG) / 9:13 am	Tote sacks containing chromium sludge without risk labels.	
Hazardous Waste Storage Area Photo # 3 (MVC-003F.JPG) / 9:21 am	This tote sack contained chromium sludge, but the box was labeled as paint booth filters.	

There was one 55-gallon drum for accumulating waste paint on a pallet in the accumulation area. Guy and Charles explained that they generate very little waste paint. Most of the paint is used and there is a small amount of waste generated from gun cleaning. The waste paint drum is labeled as hazardous waste and has a risk label, but no accumulation start date nor secondary containment (see Photos # 2 and 4). It is not near the area where the gun cleaning waste is generated so it is not serving as a satellite accumulation drum.

Photo # / Area	Notes/Descriptions	Photographs
Hazardous Waste Storage Area Photo # 2 (MVC-002F.JPG) / 9:16 am	Waste paint drum without accumulation start date.	

Photo # / Area	Notes/Descriptions	Photographs
Hazardous Waste Storage Area Photo # 4 (MVC-004F.JPG) / 9:27 am	Waste paint drum without secondary containment.	

Warren provided some shipping risk labels for the tote sacks and waste paint drum. Over to the side stored in the accumulation area were several unused secondary containment pallets.

We went into Paint Booth # 5 and Guy and Charles said that the waste gun cleaner was generated in the booths, and then stored in buckets until the end of the day. They are then emptied into one of the 55-gallon drums, either in the hazardous waste accumulation area, or in the paint storage room. In this paint booth, there was a container of flammable liquid product with the lid off. We told Charles and Guy that they should check their air permit requirements since lids might be required to be kept on products.

The waste gun cleaner was stored in five-gallon buckets with the lids sitting on. The buckets were not labeled (see Photo # 5). This waste may have been stored here for several days without being emptied into the waste accumulation drum.

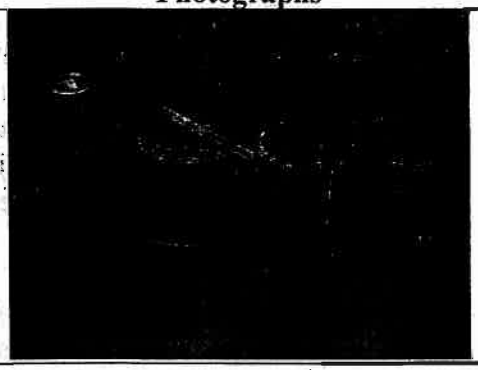
Photo # / Area	Notes/Descriptions	Photographs
Paint Booth # 5 Photo # 5 (MVC-005F.JPG) / 9:29 am	Open, unlabeled containers of spent gun cleaning solvent.	

We went into the paint storage room. An additional hazardous waste storage area was located within the flammable storage area. There was a secondary containment pallet holding two 55-gallon drums and several five-gallon buckets. The 55-gallon drum on the left was for accumulating waste paint thinner from gun cleaning. It was labeled as hazardous waste and had a risk label, but no start date (see Photo # 6).

The 55-gallon drum on the right was for accumulating paint solids from the paint pot bottoms. It was open, was not labeled as hazardous waste, nor did it have a start date or risk label (see Photo # 6). Several five-gallon buckets of hazardous waste paint with the lids sitting on them and no labels were also stored on the pallets.

Photo # / Area	Notes/Descriptions	Photographs
Flammable Storage Area Photo # 6 (MVC-006F.JPG) / 9:43 am	Open, unlabeled containers of liquid and solidified waste paint.	

We went to Paint Booth # 1 and found open, unlabeled buckets of hazardous waste paint (see Photo # 7).

Photo # / Area	Notes/Descriptions	Photographs
Paint Booth # 1 Photo # 7 (MVC-007F.JPG) / 9:46 am	Open, unlabeled containers of spent gun cleaner.	

We went to the conference room to review records. No weekly inspections were currently being performed. Warren provided the Generator Toolbox CD, which contains a blank weekly inspection checklist, and labels for printing. We reviewed the manifests and they were in order.

The facility's generator status has been large quantity generator, though they have stated on their Annual Dangerous Waste Reports that they have been a medium quantity generator in a few of the years since 2000. In 2005, they revised their Site Identification Form and also indicated that they were a medium quantity generator. However, the manifest records show that the facility is a large quantity generator due to waste shipments larger than 2200 pounds, exceeding the accumulation limit for medium quantity generators.

In 2006, their first shipment of two tote sacks of chromium sludge hazardous waste was in the amount of 3200 pounds, exceeding the 2000 pound accumulation limit and making them a large quantity generator for this year. The large quantity generator regulations thus currently apply.

We discussed how the weight of the tote sacks is determined and Charles and Guy said that the disposal firm measured the weight. They have no way to measure the weight in order to verify that the disposal firm is measuring the weight accurately.

COMPLIANCE PROBLEMS

*The following conditions identified during the inspection on **(August 8, 2006)** were not in compliance with Dangerous Waste and/or other environmental laws. Each problem is covered in three parts: (1) the **citation from the regulations**, (2) the **specific observations** from the inspection that highlight the problem, and (3) the **corrective measures** needed to fix the problem and achieve compliance. On the last page(s) of this report is a 'Compliance Certificate' which again lists these compliance citations and directives in a table. That certificate also lists the deadlines for the corrective measures to be completed. These deadlines are Ecology's expectation of the time reasonably required to resolve violations. The deadlines do not relieve you of your continuing responsibility to comply with the regulations at all times. The certificate explains how to complete the form and return it to the Department of Ecology.*

1) WAC 173-303-170(2) and by reference 200(1)(d): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste.

Containers of spent gun wash in the paint booths and paint storage room were not labeled as hazardous waste and did not have risk labels ("Flammable"), (see Photos # 5, 6, and 7). Tote sacks of chromium sludge were not labeled with the risk associated with the waste ("Toxic"). Labels may be printed on your computer using the pre-prepared labels on the "Generator Toolbox" compact disk left with you during the inspection.

Within two days of receipt of this letter, adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d).

2) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste.

Containers of dangerous waste in the paint booths and paint storage room were not kept closed (see Photos # 5, 6, and 7).

Within two days of receipt of this letter, ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5).

3) WAC 173-303-200(1)(b) and by reference 630(7): Containers of liquid dangerous waste did not have adequate secondary containment.

A drum of waste paint in the 90-day accumulation area did not have secondary containment (see Photo # 4).

Within 30 calendar days of the receipt of this letter, provide a containment system for container accumulation areas that is capable of holding spills and leaks per WAC 173-303-630(7).

4) WAC 173-303-170(2) and by reference 200(1)(c): Containers of dangerous waste were not marked with the date accumulation began and/or the date accumulation began was not clearly visible for inspection on each container.

Containers of waste paint in the hazardous waste accumulation area and paint storage areas did not have accumulation start dates (see Photos # 2 and 6).

Within two days of receipt of this letter, ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Also ensure that the date accumulation began is clearly visible for inspection on each container.

5) WAC 173-303-200(1)(b) and by reference 630(6): Dangerous waste accumulation areas were not inspected weekly.

Dangerous waste stored in the 90-day accumulation area and the paint storage areas were not inspected weekly.

Within 7 days of receipt of this letter, institute an inspection schedule for areas where containers of dangerous waste are stored. These areas must be inspected at least on a weekly basis. Maintain an inspection log that includes: the date and time of inspection; the name and signature of the inspector; a notation of the observations made; and the date and nature of any corrective measures taken.

Submit a copy of the proposed inspection log within 7 days.

6) WAC 173-303-170(2) and by reference 200(2)(a): Dangerous waste collected in satellite accumulation areas must be managed in accordance with the regulations.

Five gallon buckets of hazardous waste in Paint Booths # 1 and 5 were being used as satellite accumulation containers without complying with the regulations (see Photos # 5 and 7). If the buckets are emptied after every shift, they may be used as they are, but if the waste is stored past one shift, a satellite accumulation area should be established and managed accordingly. A guidance document on the regulations applying to these areas is enclosed.

Within ten days of receipt of this letter, comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date and transfer it within three days to the 90-day accumulation area; (c) ensuring containers are in good condition, handled safely, labeled as hazardous waste, and compatible with waste stored; and (d) keeping containers closed at all times.

7) WAC 173-303-200(1)(e) and by reference 330: Training requirements were not met. The facility should have a training program, a written training plan, and keep training records.

A training plan is not being followed.

Within 45 calendar days of the receipt of this letter, develop a dangerous waste training program which shall include a written training plan and records per WAC 173-303-330.

Submit a copy to Ecology.

8) WAC 173-303-200(1)(e) and by reference 350(2): A contingency plan was not prepared.

Please submit a copy of the facility's contingency plan.

Within 60 calendar days of the receipt of this letter, develop and retain on-site a contingency plan per the requirements of WAC 173-303-350. Submit a copy of the contingency plan within 60 days.

COMPLIANCE CERTIFICATE

Instructions: **Return this Completed Form or Request an Extension** -- Use this form to report if the action(s) needed to achieve compliance, identified during the inspection on **August 8, 2006**, have been completed. Complete the shaded portion of the table and mail a copy of this form to Victoria Sutton by **December 13, 2006** at the following address: Washington Department of Ecology, Hazardous Waste and Toxics Reduction Program, Attention: Victoria Sutton, 3190 160th Avenue SE, Bellevue, WA, 98008.

An extension of the deadlines to achieve compliance may be requested. Please make a request in writing, including the reasons an extension is necessary and proposed date(s) for completion, and send it to Victoria Sutton before the date specified above. Ecology will provide a written approval or denial of your request.

If you have any questions about information in this Compliance Report, please call:
Victoria Sutton *at* (425) 649-7277.

The problems identified below must be corrected in order to be in compliance with Washington Dangerous Waste Regulations (Chapter 173-303 WAC), or other environmental laws or regulations. Please indicate the date each action is completed and initial each item. Include any comments explaining the actions taken on a separate piece of paper.

1) WAC 173-303-170(2) and by reference 200(1)(d): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste.

Within two days of receipt of this letter, adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d).

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(2) and by reference 200(1)(d)	**October 18, 2006**		

2) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste.

Within two days of receipt of this letter, ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5).

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(b) and by reference 630(5)(a)	**October 18, 2006**		

3) WAC 173-303-200(1)(b) and by reference 630(7): Containers of liquid dangerous waste did not have adequate secondary containment.

Within 30 calendar days of the receipt of this letter, provide a containment system for container accumulation areas that is capable of holding spills and leaks per WAC 173-303-630(7).

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(b) and by reference 630(7)	November 18, 2006		

4) WAC 173-303-170(2) and by reference 200(1)(c): Containers of dangerous waste were not marked with the date accumulation began and/or the date accumulation began was not clearly visible for inspection on each container.

Within two days of receipt of this letter, ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Also ensure that the date accumulation began is clearly visible for inspection on each container.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(2) and by reference 200(1)(c)	October 18, 2006		

5) WAC 173-303-200(1)(b) and by reference 630(6): Dangerous waste accumulation areas were not inspected weekly.

Within 7 days of receipt of this letter, institute an inspection schedule for areas where containers of dangerous waste are stored. These areas must be inspected at least on a weekly basis. Maintain an inspection log that includes: the date and time of inspection; the name and signature of the inspector; a notation of the observations made; and the date and nature of any corrective measures taken.

Submit a copy of the proposed inspection log within 7 days.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(b) and by reference 630(6)	October 20, 2006		

6) WAC 173-303-170(2) and by reference 200(2)(a): Dangerous waste collected in satellite accumulation areas must be managed in accordance with the regulations.

Within ten days of receipt of this letter, comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date and transfer it within three days to the 90-day accumulation area; (c) ensuring containers are in good condition, handled safely, labeled as hazardous waste, and compatible with waste stored; and (d) keeping containers closed at all times.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(2) and by reference 200(2)(a)	**October 23, 2006**		

7) WAC 173-303-200(1)(e) and by reference 330: Training requirements were not met. The facility should have a training program, a written training plan, and keep training records.

Within 45 calendar days of the receipt of this letter, develop a dangerous waste training program which shall include a written training plan and records per WAC 173-303-330.

Submit a copy to Ecology.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(e) and by reference 330	**November 30, 2006**		

8) WAC 173-303-200(1)(e) and by reference 350(2): A contingency plan was not prepared.

Within 60 calendar days of the receipt of this letter, develop and retain on-site a contingency plan per the requirements of WAC 173-303-350. Submit a copy of the contingency plan within 60 days.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(e) and by reference 350(2)	**December 13, 2006**		

APPENDIX B
Digital Camera Photolog

Camera: Sony FD Mavica (MVC-FD75) **Lead Inspector: Daylin Davidson**
Photographer: Warren Walton

Disc 1

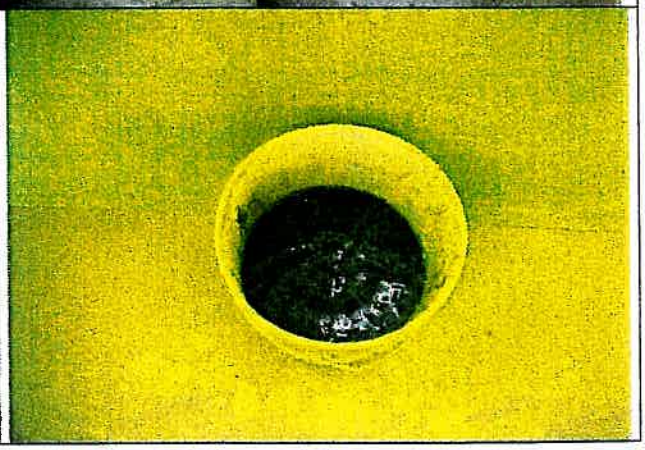
Photo # Area	Notes/Descriptions	Photographs
Photo 1 of 19 9:54 a.m. In Building C Inside paint booth # 4.	Robert Deatherage of TC Systems was given labels by Ecology inspectors to apply to hazardous waste drums containing contaminated solid debris (tape, gloves, etc.) and empty paint cans. Note – There is no lid for either drum.	
Photo 2 of 19 9:55 a.m. Bldg C Inside paint booth # 4.	A hazardous waste label was applied to the left drum in our presence, but not filled out. Right drum is also labeled "garbage".	
Photo 3 of 19 9:57 a.m. Bldg C Inside paint booth # 4.	Paint gun wash out and paint solids were found in this open 5-gallon plastic bucket. The solvent being used for paint gun wash out is MEK.	

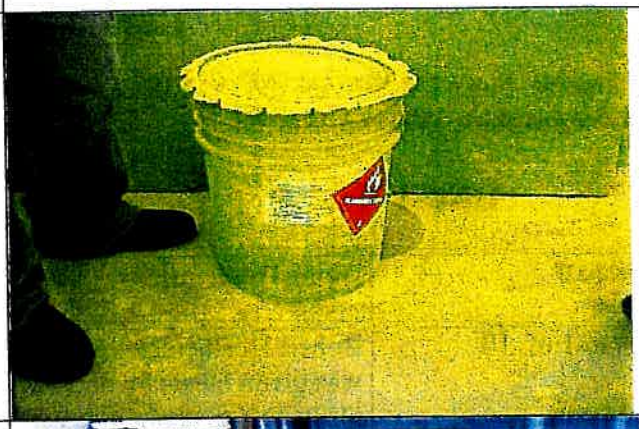
Photo # Area	Notes/Descriptions	Photographs
Photo 4 of 19 10:02 a.m. Bldg C Inside paint booth # 4.	This is the same container as in photo 3 of 19. The HW label reads filter cake. But contents are clearly a flammable liquid. The lid placed on the container during the inspection is ill fitting and would not contain the liquid contents if knocked over.	
Photo 5 of 19 10:06 a.m. Bldg C HWAA	Tote contains mastic, tape, and crushed paint cans. It is labeled properly but does not have a lid.	

Photo # Area	Notes/Descriptions	Photographs
Photo 6 of 19 10:06 a.m. Bldg C HWAA	A piece of plywood was placed on top of the open tote acting as a cover.	
Photo 7 of 19 10:09 a.m. Bldg C HWAA	The contents of this bag (mastic debris) are crushed so they will fit in the bag. Once the bags are compacted, they will fit in the soft shipment tote. The tote has a risk label, but no hazardous waste label or start date.	

Photo # Area	Notes/Descriptions	Photographs
Photo 8 of 19 10:10 a.m. Bldg C HWAA	More mastic debris in another 'open' tote without a hazardous waste label, risk label, or start date. Two more bags of HW debris were stored on the floor in this area. (not shown.)	
Photo 9 of 19 10:11 a.m. Bldg C HWAA	Paint booth filters are over filling this box. Box on floor in foreground contains more filters with no labels or start dates.	

Photo # Area	Notes/Descriptions	Photographs
Photo 10 of 19 10:14 a.m. Bldg C HWAA	Berm area clean out fills both drums. We were told this would have to be processed as a waste on site. No labels are visible. A locking ring leans against the open drums. The drums are not closed.	
Photo 11 of 19 10:17 a.m. Bldg C HWAA	All of the boxes of spent fluorescent bulbs to the left in the photo are properly labeled. The standing spent bulbs are not protected from breakage, are not labeled as Universal Waste Bulbs, and have no accumulation start date displayed.	

Photo # Area	Notes/Descriptions	Photographs
Photo 12 of 19 10:21 a.m. Bldg C Mezzanine	An open satellite drum that collects contaminated striping tape. Photo taken after can was turned to make labels visible. Outside oven # 4	
Photo 13 of 19 10:25 a.m. Bldg C Former Satellite Collection Area	The label reads… "Vintage Oil, Inc. [Used filter recycling service].	

Photo # Area	Notes/Descriptions	Photographs
Photo 14 of 19 10:26 a.m. Bldg C Former Satellite Collection Area	Hardened unknown substance in 5-gallon bucket.	
Photo 15 of 19 10:32 a.m. At the North end of Bldg C – delivery area	It was recommended to TC Systems personnel that covering the storm drain immediately beneath liquid chemical unloading areas is wise. Bulk chemical totes with 250-300 gallon capacity are frequently unloaded in this area.	

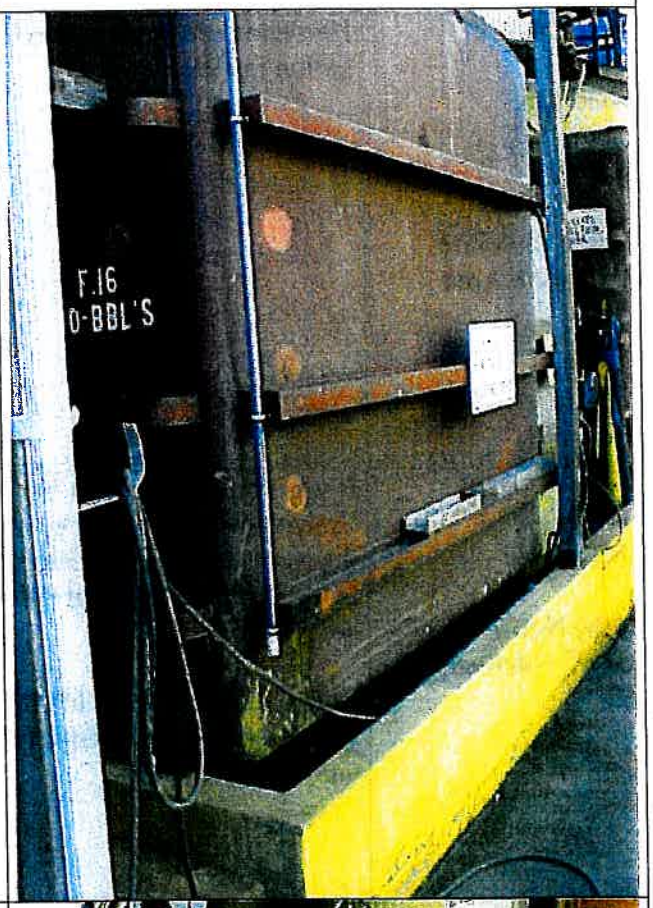
Photo # Area	Notes/Descriptions	Photographs
Photo 16 of 19 10:33 a.m. Treatment tanks In alley against Building B	Looking generally south from the corner of the wastewater treatment area at the containment berm	
Photo 17 of 19 10:34 a.m. Treatment and chemical storage area In alley against Building B	Containment for outside area at Bldg B - Looking generally north.	

Photo # Area	Notes/Descriptions	Photographs
Photo 18 of 19 10:37 a.m. Looking at containment area in waste water treatment area more closely. In alley against Building B	Containment wall seen in photo 17 above. The wall has cracked and does not have containment on rainwater or other liquid.	
Photo 19 of 19 10:37 a.m. Looking at containment area in waste water treatment area more closely. In alley against Building B	Outside containment wall for Bldg B. The wall shows signs of not being properly moisture sealed.	

Photo # Area	Notes/Descriptions	Photographs
Disc 2		
Photo 1 of 11 10:39 a.m. Looking at containment area in waste water treatment area more closely. In alley against Building B	A small sump area was designed to capture rainwater.	
Photo 2 of 11 10:42 a.m. Compressor shed outside Building C	A compressor that leaks oil. This unit was sitting on what appeared to be a dirt floor in an area where the asphalt had broken away.	
Photo 3 of 11 10:43 a.m. Boiler Shed outside Building B	A hole underneath the asphalt bed at the foundation wall of Building B receives condensate from the small boiler plant.	

Photo # Area	Notes/Descriptions	Photographs
Photo 7 of 11 10:49 a.m. At NE corner of Bldg C in alley way, in filter press shed.	"Soap sludge" from operations in Building B. Personnel on site suggested this had been covered with water and that the water had evaporated away. Ecology was told this waste was to go into a nearby chromium sludge tote.	
Photo 8 of 11 10:59 a.m. Inside building B on the west side of the process tanks.	Inside building B on the west side of the process tanks. This photo was taken near the base of the stairs up to the tanks. There are several inches of sludge in the containment area.	

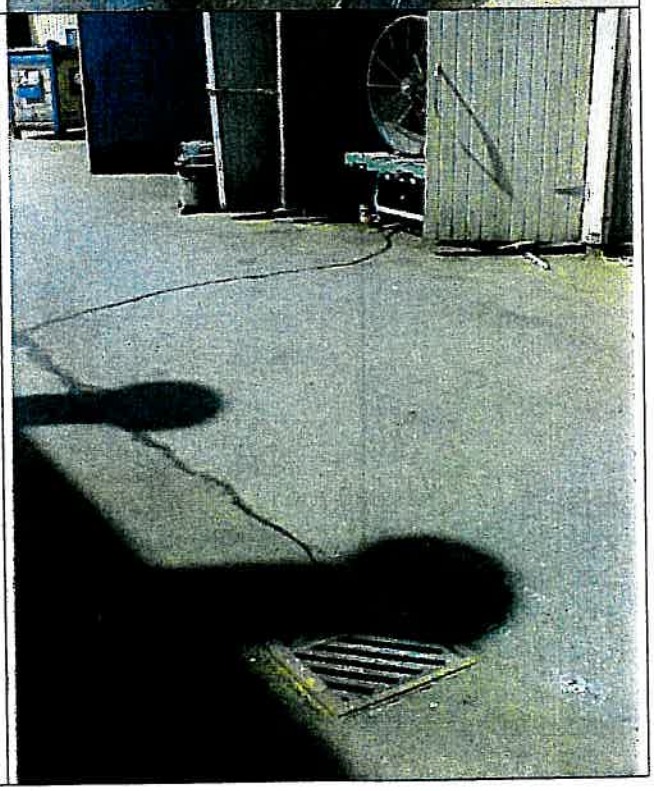
Photo # Area	Notes/Descriptions	Photographs
Photo 4 of 11 10:45 a.m. Storm drain contents. Drain between Bldg B and C.	Close up of the surface of the sump in photo 5 of 11. It appears to be oily or like an emulsion.	
Photo 5 of 11 10:46 a.m. Storm drain between Bldg B & C	The storm drain where photo 4 of 11 was taken.	
Photo 6 of 11 10:46 a.m. Storm drain between building B and C	Looking up hill toward the compressor shed area. Note: liquid trail to the storm drain from the covered shed.	

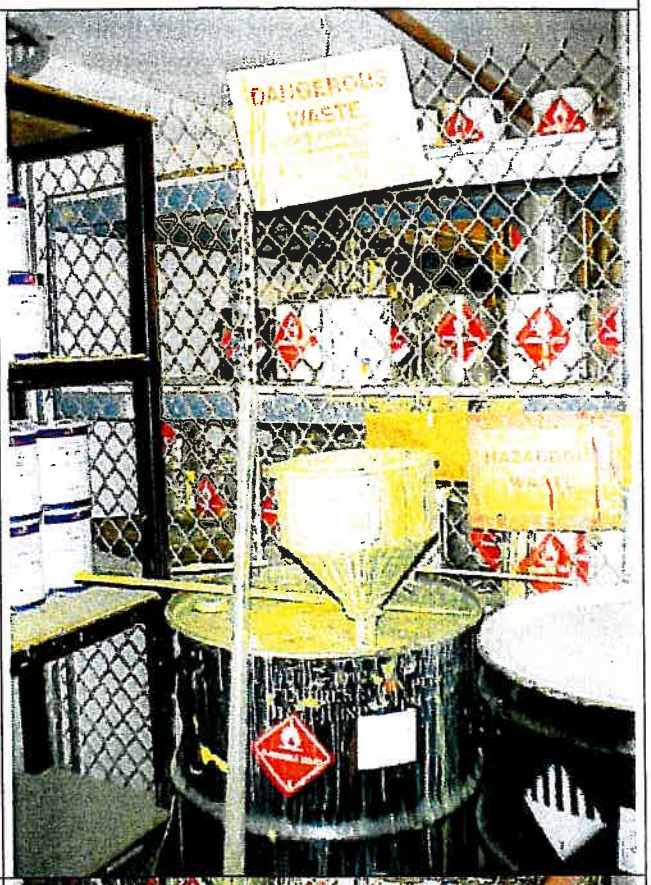
Photo # Area	Notes/Descriptions	Photographs
Photo 9 of 11 11:03 a.m. Bldg B – Paint Locker	Open funnel sits screwed in to the small lid bung on left drum, which is for liquid paint wastes. Larger bung on this drum is open with lid resting on top of lid. Right drum was full of paint solids with the lid just resting on it.	
Photo 10 of 11 11:03 a.m. Bldg B – Paint Locker	Both drums are properly labeled and with start dates as these cannot be a satellite accumulation area. However, the two five-gallon buckets in front contain hazardous waste intended to be air-dried (evaporated) and then scraped into the drum on the right in this photo.	

Photo # Area	Notes/Descriptions	Photographs
Photo 11 of 11 11:12 a.m. Bldg B – Paint Locker	Properly labeled drum of dangerous waste floor sweepings. The lid is only resting on the drum, not properly closed.	

Washington Department of Ecology
Hazardous Waste & Toxics Reduction Program
Compliance Report

Site: TC Systems **RCRA ID#: WAD 088 722 947**

Inspection Date:	November 6, 2007	
Site Contacts:	Charles Souder	
Phone:	(425) 258-4055	FAX: (425) 252-6855
E-mail:	ccsouder@hotmail.com	
Site Location:	1032 W Marine View Dr Everett, WA	
At This Site Since:	1993	NAICS#: 332813
Generator/Site Status:	LQG	Electroplating, Plating, Polishing, etc.

Ecology
Lead Contact: Daylin Davidson
E-mail: DayD461@ecy.wa.gov
Report Date: November 19, 2007
Report By: Daylin Davidson

Phone: (425) 649-7090 FAX: (425) 649-7218
Other Representatives: Warren Walton

_____ _____
(Signed) (Date)

Facility Background:
TC Systems is located near the Everett Marina on West Marine View Drive. Employee numbers vary between twelve and twenty working the day shift five days a week. TC Systems supports the aviation and boating industries by chemically treating and painting metal parts using their chemical line and paint booths. Waste water from the tank line is pre-treated to meet local discharge limits and discharged under a permit. A limited amount of sand blasting is done here. TC Systems received Hazardous Waste Compliance inspections from the Department of Ecology in 1997, 1998, 2003, and 2006.

Inspection Summary:
We arrived on site at 10:00 a.m. and asked to speak to Guy Donaldson, the QA Manager. We were joined briefly by Charles Souder. We explained the reason for our visit to Mr. Souder and Mr. Donaldson and proceeded on a site tour with only Mr. Donaldson.

Mr. Donaldson told us the following about the facility's processes and waste streams:

- Filter press sludge from the treatment of waste water contains chromium and is the largest waste stream generated at this facility.
- Liquid paint and solvent (including MEK) waste is the second largest waste stream.
- Floor sweeping and solids scraped from the paint booths are also managed as dangerous wastes.
- Used oil from compressors, equipment, and one company truck is also stored at the facility, as well as spent antifreeze.
- Paint booth filters are managed as dangerous waste for heavy metals.
- Spent fluorescent bulbs may be taken to the local transfer station.
- Paint cans are drained and thrown in the trash.
- Paint contaminated tape, gloves, and paint can filters are thrown in the trash.

Hazardous Waste Accumulation Area
Waste sludge is generated from the plating line waste water treatment system. The sludge comes from the filter press and is a dangerous waste due to chromium. The sludge is accumulated at the filter press in large plastic tote sacks, then is brought to the Hazardous Waste Accumulation Area (HWAA) for 90-day storage before being

taken by the hazardous waste vendor. We saw one sludge sack in this area. It was properly labeled as hazardous waste with a risk label and a start date of August 13, 2007. We pointed out to Mr. Donaldson that the waste would have to be shipped within the week to meet the 90 day accumulation time limit. Two drums of paint waste, one liquid, the other solid (floor sweepings and clean out from the paint booths) were also located here. They were properly labeled and dated with August 14, 2007 as the accumulation start date, but the drum of liquid waste did not have any secondary containment (liquid waste drum is on the right in photo #1 below, drum on left is paint solids and was identified as "floor sweepings" on the lid and by Mr. Donaldson.)

Photo #1 of 20 Hazardous waste accumulation area (HWAA) Building B 10:12 a.m.	Photos of properly labeled drums with accumulation dates of 8-14-07. These drums should be shipped the week of 11-11-07 or will exceed 90 days on site.	

Mr. Donaldson showed us a spill kit and a fire extinguisher near this area. The spill kit drum was almost empty. The fire extinguisher was last serviced in November of 2006. We pointed out that it was due this month to be serviced. We noticed some fluorescent light tubes stored under the nearby staircase and Mr. Donaldson confirmed they were spent bulbs. We asked what would happen to them and he explained that bulbs are typically taken to the local transfer station for recycling, but he did not have any records to show this. The bulbs were not secured or labeled as universal waste, nor with an accumulation start date.

<u>Paint Booth</u>
We went into Paint Booth # 5 and Mr. Donaldson said that the waste gun cleaner was generated in the booths, and then stored in buckets until the end of the day. He said they are then emptied into the 55-gallon drum in the paint locker. We observed the waste gun cleaner stored in five-gallon buckets with the lids sitting on top (not closed). The buckets were not labeled (see photo # 2 below).

Photo #2 of 20 In paint booth 5, Building B 10:17 a.m.	Open, unlabeled containers of spent solvent waste, to be emptied every night into the liquid paint waste drum in the paint locker.	

"Satellite Collection Area" in Building B

This area held paint booth filters, used oil, spent antifreeze, undesignated "blasting dust," and liquid paint waste. Though the area had a sign marking it as a "Satellite Collection Area," none of these waste accumulations were managed in a way that met the definition of "Satellite Accumulation."

Photo #3 of 20 "Satellite area" in Building B 10:18 a.m.	Paint booth filters are packaged but loosely stacked near a box full of the same items. None of the bags were labeled as hazardous waste and had no risk labels or start dates. There is more than a 55 gallon equivalent of paint booth filters at this location, therefore this cannot be managed as a satellite accumulation of paint booth filters.	

There were an estimated two dozen bags of paint booth filters piled in this area (see photo #3 above), not counting those inside the wood box shown above in the background of photo #3 and in photo #4 (below). The box was properly labeled but lacked an accumulation start date.

Photo #4 of 20 "Satellite area" in Building B 10:19 a.m.	Paint booth filters labeled "Hazardous Waste" and with risk labels, but lacking an accumulation start date.	

One full drum of liquid paint waste was on a secondary containment pallet and was properly labeled, but lacked an accumulation start date (see photo #5 below).

Photo #5 of 20 "Satellite area" in Building B 10:20 a.m.	The hazardous waste and risk label are in compliance, but there is no accumulation start date and the drum appeared to be full.	

A drum labeled "Blasting Dust" and "Flammable Liquid" had an unsecured lid (see photo #6 below). We confirmed the contents were indeed dust/grit and asked Mr. Donaldson what type of blasting material TC Systems uses. He told us he believed it was a garnet medium, but he did not know if this debris had been sampled or designated as non-hazardous or hazardous waste.

Photo #6 of 20 "Satellite area" in Building B 10:23 a.m.	This drum was labeled "Blasting Dust". It is not labeled as hazardous waste, but has a flammable liquid risk label on this solid waste.	

We also saw an open drum of used oil and an open drum labeled "used antifreeze" in this area. We did not see any spill kit in this room.

Along the left wall of this area were five drums of used oil (photo #7 & 8 below). Though properly labeled and stored on spill pallets, four of the five drums were open and some of the secondary containment had been compromised by the practice of draining oil from filters directly into the secondary containment (shown in photo #8 below).

Photo #7 of 20 Area adjacent to "satellite area" in Building B 10:24 a.m.	Open drums of used oil. Containers adjacent to drums will be poured to drums. All used oil containers were sitting on containment pallets.	

Photo #8 of 20 Adjacent to Building B satellite area 10:24 a.m.	More open drums of used oil. All drums of liquid were sitting on containment pallets. Note used oil filter draining into secondary containment between drums.	

Paint Locker Room

We went into the paint locker room next. There was a secondary containment pallet holding two 55-gallon drums and several five-gallon buckets. The 55-gallon drum on the left was for accumulating liquid waste paint and thinner from gun cleaning. It had an open funnel in it and no labels. This drum was not near the area where the gun cleaning waste is generated not under the control of the process operator (?) so it was not serving as a satellite accumulation drum and did not have an accumulation start date.

The 55-gallon drum on the right was for accumulating paint solids from the paint pot bottoms. It was full, open, not labeled as hazardous waste, and did not have an accumulation start date. It did have a flammable liquid risk label (photo #9 below) even though it was used to accumulate solids. Several five-gallon buckets of hazardous waste paint solids were open with no labels or accumulation start dates and were also stored on the secondary containment pallets.

Another full 55-gallon drum was stored near the door. It had no labels or dates, but Mr. Donaldson told us it was floor sweepings, the same hazardous waste stream we had seen in the HWAA (photo #1). We did not see any spill kit in this room.

Photo #9 of 20 Paint Locker room 10:28 a.m.	Open funnel sits screwed in to the small lid bung on left drum, which is for liquid paint wastes. Right drum was full of paint solids with the lid just resting on it. Open five gallon plastic buckets in front also contained paint solids. None of these containers were properly labeled. Only the right drum has a risk label, but it is a flammable liquid label on what is clearly a solid inside the drum.	

We noticed two trash cans right next to this waste drums inside the paint locker. The first trash can held empty paint cans. One can was still 25 to 30% full of paint (see photo #10 below). We pointed out the can to Mr. Donaldson. He said it should not be in there; cans are supposed to be drained before being put in the trash can.

Photo #10 of 20 Paint Locker room 10:30 a.m.	Open can of paint in top right of photo is 25-30% full of free-flowing paint liquids. Other cans appear to be empty as they are on their sides and no free liquid has drained from them.	

In the other trash can, we saw paint covered tape, latex gloves, filters, rags, and other paint covered debris. We asked Mr. Donaldson if these wastes had been designated and he said he was not aware of any testing having been done.

Photo #11 of 20 Paint Locker room 10:31 a.m.	Paint contaminated tape, rags, filters, empty container, and PPE debris.	

On the product side of the paint locker, we noticed a cart filled with rusty and outdated items (see photo #13 below). One can on the right side was bulging. We observed expiration dates of August 2004 and earlier. Mr. Donaldson said these items had not been stored there the week before, when he left for vacation. He did not know why they were here, but suspected someone had pulled expired products to be disposed of.

We told Mr. Donaldson that these items should be designated, moved to the 90-day hazardous waste accumulation area (HWAA), and disposed of as hazardous waste.

Photo #13 of 20 Paint Locker room 10:33 a.m.	Various one gallon and smaller items determined to be no longer useful due to their age. Expiration dates observed were for 2004 and earlier. Many are rusted, one can is clearly bulging.	

Back Lot

Outside in the north parking lot, we noticed a white drum that was labeled as "Zep Aluminum Cleaner and Brightener" (see photo #14 below). It was just under ¼ full of a dark liquid. Mr. Donaldson said he thought it might be diesel fuel that had been pumped out of a truck. We discussed the proximity of the nearby storm drain and how standing water on top of a drum can pass through the bung lid to contaminate the contents of a drum. We also discussed the possible incompatibility of the liquid in the drum with the product that the drum previously contained. The drum was not correctly labeled, had no start date, and no secondary containment. We recommended that the drum be brought inside the building as soon as possible.

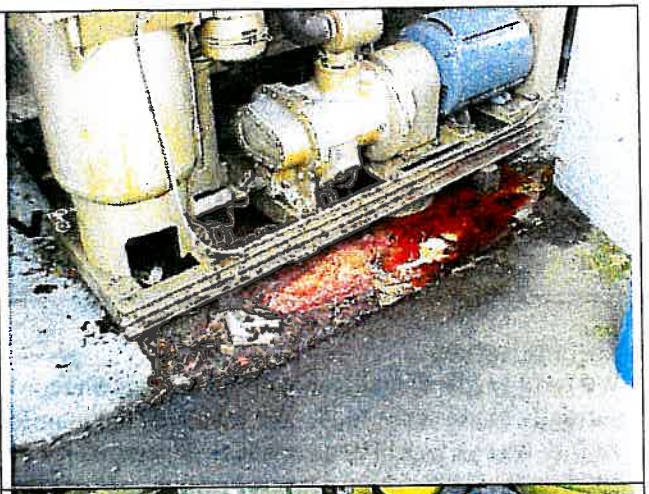
Photo #14 of 20 About 80 feet north of Building C. 10:41 a.m.	Poly drum partially full of dark liquid, possibly diesel fuel, that is labeled as a corrosive and poisonous product from ZEP. Storm drain to bay is approximately 20 feet down grade from this drum.	

Tank Area Between Buildings B and C

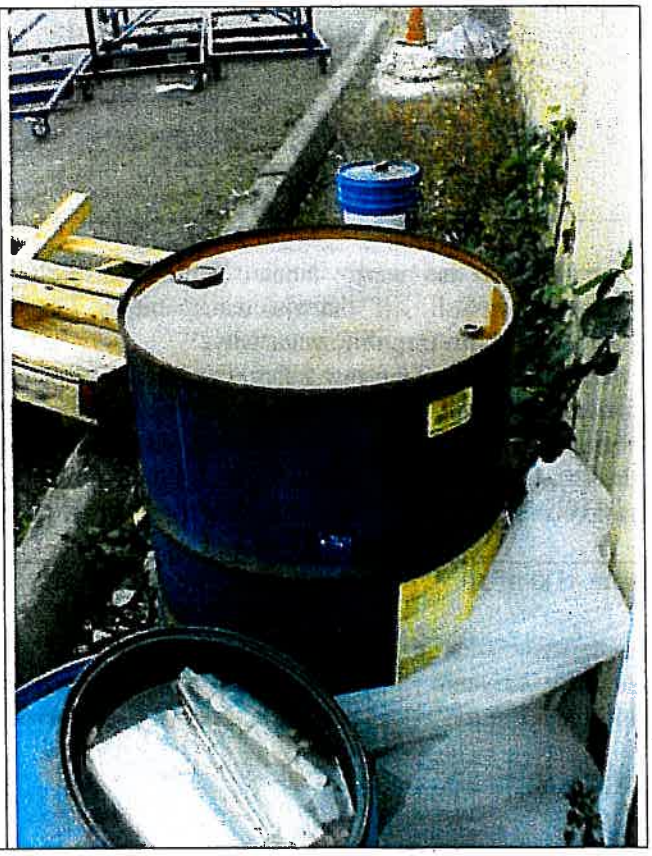
We went to the alley way between Buildings B and C where the sludge from the waste water treatment process is collected and batch processed in the filter press. The solids are hazardous waste due to heavy metal content. From the filter press, the solid are dropped into a tray under the filter press and accumulated in a bulk solids container (photo #16 below). The bulk solids container is on a skid pallet and stored under cover against Building C. The open container was approximately half full of sludge and had no labels or accumulation start date. Mr. Donaldson applied a hazardous waste label and risk label provided by inspector Warren Walton while we were there.

Photo #16 of 20 Alley way between Buildings B and C. 10:46 a.m.	Sludge container was open and had no labels. . Inspectors provided Mr. Donaldson with labels and he is applying labels in this photo.	

We noticed a shed nearby labeled "Spill Control Station" that held a few absorbents and a drum labeled "Emergency Spill Kit" that was nearly empty. The alley had several storm drains that were labeled as going to the local stream or public waterway.
In this same alley, we saw a shed that was housing compressors. There was red liquid on the ground shown in photo #18 below. Mr. Donaldson told us this compressor was no longer operational and would be repaired before being used again. He said? the red liquid is the oil that had leaked from the compressor when it was last used. In this same shed, we noticed an open, unlabeled blue bucket of dark oil shown in photo #19 below. Mr. Donaldson said this should have been poured into one of the used oil drums in the "Satellite Area" in Building B.

Photo #18 of 20 Compressor Shed in alley way between Buildings B and C 10:53 a.m.	Compressor site with leaking, puddled oil on the ground. The oil appears to have stained the asphalt in front of the doorway.	
Photo #19 of 20 Compressor Shed in alley way between Buildings B and C 10:54 a.m.	Open, unlabeled bucket of used oil under a piece of equipment to the right of the compressor in photo 18. The compressor oil leak was four to six feet in length – note liquid in left foreground.	

Outside of Building C, we saw two containers (see photo #20 below). The first was a 50-gallon drum that had rusted on top and was half full of an unknown liquid. The drum had a product label reading "Duplicating Fluid 5 Anhydrous" and the manufacturer's name – ChemCentral. The other container was a 5-gallon blue bucket half full of an unknown liquid, but had no legible label. Mr. Donaldson didn't know what was in either container or why they were stored outside in this location. We advised that the containers be moved indoors as soon as possible and that the contents be identified.

Photo #20 of 20 Outside North end of Building C 10:57 a.m.	Blue drum with rusting top is approximately ½ full. Product label reads: "Duplicating Fluid 5 Anhydrous" with the manufacturer's name – ChemCentral. Blue bucket in background is approximately ½ full of unknown substance. The label was illegible.	

Records Review

We went to Mr. Donaldson's office to review records. No weekly inspections or general facility inspections were currently being performed. We reviewed the manifests for 2005, 2006, and 2007, which clearly demonstrated the facility was an LQG (large quantity generator) for all three years. The facility's generator status was revised in 2005 on their Site Identification Form to indicate that they were a medium quantity generator. However, the manifest records show that the facility was a large quantity generator in 2005 due to waste shipments larger than 2,200 pounds, exceeding the accumulation limit for medium quantity generators. In 2006, their first shipment of two tote sacks of chromium sludge hazardous waste was in the amount of 3,200 pounds, exceeding the 2,200 pound accumulation limit for a medium quantity generator and making them a large quantity generator for 2006. The most recent shipment was in August of this year and also exceeded 2,200 pounds, thus the large quantity generator regulations currently apply. The facility is delinquent in submitting their 2006 annual dangerous waste report to Ecology.. No contingency plan, training plan, or training records were available.

We did not review most of our findings with Mr. Donaldson, as he had told us he was leaving the company the end of the week for a new job. We did advise that he arrange for a pickup of the waste in the HWAA before he resigned, which he agreed to do. We left the site at 11:15 a.m.

- Universal wastes are certain dangerous wastes that are able to be managed appropriately under less stringent regulatory requirements if they are recycled. For light bulbs, the rule includes, but is not limited to fluorescent tubes, compact fluorescent, mercury vapor, metal halide, high pressure sodium and neon lamps. The benefits of managing the lamps as universal waste include no counting, no manifesting, no reporting on annual reports and a 12-month accumulation time limit. To manage your used bulbs as Universal Waste, please store them so that they will not be broken and label their container with the words "Universal Waste Lamps" and the start date when the first item was placed in the container to ensure they are recycled within the 12-month accumulation time limit.

- Used shop towels contaminated with hazardous substances may also designate as dangerous waste under the Dangerous Waste regulations. If your used shop towels designate you have the option to handle *and recycle* (i.e. *launder*) them according to Ecology's best management practices (BMPs). If you choose to do this, they are not subject to generator, transporter and permitted treatment, storage and disposal facility requirements of the Dangerous Waste Regulations and are not "counted" as a hazardous waste. To be considered managed under Ecology's BMP's, the containers of used shop rags must be labeled "contaminated shop rags." Please label the containers of shop rags in your facility. Please see the publication: *Used Shop Towels* for more information. **[If your towels are being disposed they must be managed as hazardous waste if they fail any hazardous waste test.]**

COMPLIANCE PROBLEMS

The following conditions identified during the inspection were not in compliance with Dangerous Waste and/or other environmental laws. Each problem is covered in three parts: (1) the **citation from the regulations**, (2) the specific observations from the inspection, and (3) the *corrective measures* needed to fix the problem and achieve compliance.

1) WAC 173-303-515(6) and by reference 40 CFR Part 279.22(d): A used oil generator must respond to releases of used oil to the environment and perform the following cleanup steps: a) stop the release; b) contain the released used oil; c) clean up and manage properly the released used oil and other materials; and d) repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

Oil that has spilled/leaked from the old compressor is still puddled on the ground in the compressor shed between Buildings B & C.

Within 2 days of receipt of this letter, ensure that any old releases of used oil and contaminated soil are cleaned up and properly managed. In case of oil releases in the future, immediately perform the cleanup steps listed. Submit photos showing the spilled oil in the compressor shed has been cleaned up as well as photos of the containers used to hold the clean up materials to be disposed of properly.

2) WAC 173-303-141(1): Designated dangerous waste was not offered to a treatment, storage, and disposal facility (TSD).

One paint can in the trash can in the paint locker was still ¼ - 1/3 full of paint.

Upon receipt of this letter, do not send any more designated dangerous waste to non-permitted facilities. Dangerous waste may only be sent to permitted hazardous waste treatment, storage, or disposal facilities. Within 10 days of receipt of this letter, submit documentation showing employees have received training in proper disposal of these wastes, and documentation showing how the paint can described above was managed.

3) WAC 173-303-170(1) and by reference 070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes. REPEAT VIOLATION

The designation status has not been determined for the following: The drum of "blasting dust" in satellite area of Building B: the paint contaminated tape, gloves, filters, and other debris in the trash can in the paint locker; the cart full of expired materials in the paint locker; the white drum that is ¼ full, possibly of diesel fuel, outside behind the buildings; and the blue drum and blue bucket outside Building C.

Immediately upon receipt of this letter move the three containers that are out back inside the buildings. Within 30 days of receipt of this letter, provide to the Department documentation that designation of the solid wastes listed has occurred. This documentation shall include, but not be limited to, copies of the analytical results of designation testing and any contracts with testing laboratories.

4) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste. REPEAT VIOLATION

The following containers were open during the inspection: the 5-gallon buckets of dirty solvent in the paint booths; the open funnel in the liquid paint waste drum in the paint locker; the 55-gallon drum of paint solids in the paint locker; the 5-gallon buckets of paint solids in the paint locker; and the box of sludge outside between buildings B & C.

Within 2 days of receipt of this letter, ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5). Submit photos of all the containers listed above to demonstrate compliance with this item.

5) WAC 173-303-200(1)(d) as referenced by 170(2): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste. REPEAT VIOLATION

Numerous containers of dangerous waste were lacking proper labeling. These include: Buckets of paint/solvent waste in the paint booths; bagged paint booth filters; all three 55-gallon drums of paint waste (and floor sweepings) in the paint locker; all the buckets of paint solids in the paint locker; and the box of sludge between Buildings B & C.

Within two days of receipt of this letter, adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d). Submit photos of all the containers listed above to demonstrate compliance with this item.

6) WAC 173-303-200(1)(c) as referenced by 170(2): Failure to mark each container with the accumulation start date. REPEAT VIOLATION

Numerous containers of dangerous waste were lacking start dates. These include: bagged paint booth filters; all three 55-gallon drums of paint waste (and floor sweepings) in the paint locker; all the buckets of paint solids in the paint locker; one drum of liquid paint wastes in the "Satellite Area" in Building B; and the box of sludge between Buildings B & C.

Within two days of receipt of this letter, ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Submit photos to demonstrate compliance with this item.

7) WAC 173-303-200(2)(a) as referenced by 170(2): Failure to meet the satellite accumulation area standards for containers. **REPEAT VIOLATION**

Though the area in Building B had a sign marking it as "Satellite Collection Area," none of the waste accumulations there were managed in a way that met the definition of "Satellite Accumulation." The containers were not at or near the point of generation, and the paint booth filters vastly exceeded the 55-gallon limit for satellite accumulation. The 55-gallon limit was also exceeded in the flammable paint locker for the solid paint waste stream because the 55-gallon drum was full and 5-gallon buckets of the same waste stream were stored next to it, but none of the containers had start dates. These containers must be treated as 90-day containers when they do not meet the requirements for satellite accumulation.

Within two days of receipt of this letter, comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date; (c) insuring containers are in good condition, handled safely, and compatible with waste stored; and (d) keeping containers closed at all times.

8) WAC 173-303-522(2)(a): The special requirements for generators recycling spent antifreeze were not met.

We saw an open drum labeled "used antifreeze" in the "Satellite Area" of Building B.

Within two days of receipt of this letter, label containers of spent antifreeze as "spent antifreeze". Accumulate antifreeze in a manner to prevent releases to the environment. This includes but is not limited to storing wastes in compatible containers, on impermeable surfaces, or in secondary containment structures. Submit photos to demonstrate compliance with this item.

9) WAC 173-303-515(6) and by reference 40 CFR Part 279.22(c)(1): Containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."

The bucket of used oil in the compressor shed was not labeled.

Within two days of receipt of this letter, label all used oil collection containers with the words "Used Oil". Submit photos to demonstrate compliance with this item.

10) WAC 173-303-515(6)(a)(i): Containers of used oil must be kept closed except to add or remove used oil.

Five drums of used oil in the satellite area of Building B and the bucket of used oil in the compressor shed were open.

Within two days of receipt of this letter, close all containers of used oil. Submit photos to demonstrate compliance with this item.

11) WAC 173-303-200(1)(b) and by reference 630(3): Failure to maintain identification of containers by re-labeling during transfer of contents, and/or to properly remove or destroy labels on empty containers.

A drum labeled "Blasting Dust" has a "Flammable Liquid" risk label on it in the "satellite area" of Building B. A 55-gallon drum of paint solids had a flammable liquid risk label on it in the paint locker.

A white drum that was labeled as Zep Aluminum Cleaner and Brightener contained what was believed to be diesel fuel in the outside back lot.

Within two days of receipt of this letter, institute a process to label all containers so that the information required is present and accurate, according to the current contents of the container. Submit photos of the correctly labeled containers listed above to demonstrate compliance with this item.

12) WAC 173-303-170(3) and by reference 200(1)(a): Dangerous waste was accumulated on-site for more than 90 days. REPEAT VIOLATION

Drums and totes in the Hazardous Waste Accumulation Area are dated 8/14/07, which means the 90 day accumulation time limit was exceeded November 12th.

Within 5 calendar days of the receipt of this letter, provide copies of manifests for waste disposal of all waste which has been on-site greater than 90 days.

13) WAC 173-303-630(6) as referenced by 200(1)(b): Dangerous waste accumulation areas were not inspected weekly. REPEAT VIOLATION

Weekly inspections were not being conducted.

Within 7 days of receipt of this letter, institute an inspection schedule for areas where containers of dangerous waste are stored. These areas must be inspected at least on a weekly basis. Maintain an inspection log that includes: the date and time of inspection; the name and signature of the inspector; a notation of the observations made; and the date and nature of any corrective measures taken. At a minimum, items to include are checking that containers are closed, containers are labeled including hazardous waste labels as appropriate, containers are dated with the accumulation start date, spills and leaks have been addressed, and up to date emergency information is posted near telephones. Submit a copy of the proposed inspection log within 7 days and copies of three weeks of completed logs within 30 days.

14) WAC 173-303-340(1) as referenced by 200(1)(e): Spill control equipment in dangerous waste accumulation areas was missing or inadequate.

Spill control equipment in the Hazardous Waste Accumulation Area was inadequate to control a release of liquid hazardous waste. We did not see any spill kits in the "Satellite Area" in Building B, nor in the paint locker.

Within 30 calendar days of the receipt of this letter, ensure that spill control equipment is well stocked and available in areas where liquid waste is stored. Submit a report within 30 calendar days documenting compliance with this requirement.

15) WAC 173-303-630(7) as referenced by 200(1)(b): Containers of liquid dangerous waste did not have adequate secondary containment. REPEAT VIOLATION

The drum of liquid waste in the HWAA did not have any secondary containment.

Within 30 calendar days of the receipt of this letter, provide a containment system for container accumulation areas that is capable of holding spills and leaks per WAC 173-303-630(7). Submit photos to demonstrate compliance with this item.

16) WAC 173-303-573(9): Universal wastes must be managed in a way that prevents releases of universal waste or component of a universal waste to the environment, as required by this subsection.

Spent fluorescent light tubes stored under the staircase near the HWAA were not secured in boxes.

Within 30 calendar days of the receipt of this letter properly manage universal waste in a way that prevents releases to the environment, as described in WAC 173-303-573(9). Submit photos to demonstrate compliance with this item.

17) WAC 173-303-573(10): Universal wastes must be properly labeled or marked to identify the type of universal waste as required by this section.

Spent fluorescent light tubes stored under the staircase near the HWAA were not labeled and had no start dates.

Within 30 calendar days of the receipt of this letter label or mark the universal waste lamps with the words "Universal Waste Lamp(s)", "Waste Lamp(s)", or "Used Lamp(s)" and the date the first bulb went in the container to demonstrate compliance with the 12-month accumulation time limit. Submit photos of the labeled containers to demonstrate compliance with this item.

18) WAC 173-303-200(1)(e) and by reference 320(1): General facility inspections were not conducted.
REPEAT VIOLATION

General facility inspections were not conducted at this facility.

Within 30 calendar days of receipt of this letter, plan, conduct, and document a general facility inspection. Submit a copy of the plan and log sheet. Determine the appropriate interval for future inspections and inform Ecology of this interval. Inspections must be frequent enough to identify and correct problems before they harm human health or the environment.

19) WAC 173-303-170(2) and by reference 060(5) and 220(1): Failure to submit a Dangerous Waste Annual Report for the 2006 calendar year.

The facility is delinquent in submitting their 2006 annual dangerous waste report to Ecology.

Within 30 calendar days of the receipt of this letter, submit to the Department a completed Dangerous Waste Annual Report for the year 2006.

20) WAC 173-303-350(2) as referenced by 200(1)(e): A contingency plan was not prepared.
REPEAT VIOLATION

No contingency plan was available for this facility.

Within 60 calendar days of the receipt of this letter, develop and retain on-site a contingency plan per the requirements of WAC 173-303-350. Submit a copy of the contingency plan within 60 days.

21) WAC 173-303-330 as referenced by 200(1)(e): Training requirements were not met. The facility should have a training program, a written training plan, and keep training records. REPEAT VIOLATION

No training program was available for this facility.

Within 60 calendar days of the receipt of this letter, develop and submit a dangerous waste training program which shall include a written training plan and records per WAC 173-303-330.

COMPLIANCE CERTIFICATE

Instructions: **Return this Completed Form**
The problems listed above are repeated below and must be corrected in order to be in compliance with Washington Dangerous Waste Regulations. Complete the shaded portion of the table by initialing and indicating the date each action is completed, and **briefly explain the actions taken for each item in a cover letter.** Mail this completed form, the cover letter, and any requested documentation by ***January 28, 2008*** to: Daylin Davidson, Department of Ecology, Hazardous Waste Program, 3190 160th Avenue SE, Bellevue, WA 98008-5452. *(An extension of the deadlines may be requested. Please e-mail a request to DayD461@ecy.wa.gov before the date specified above.)*

1) WAC 173-303-515(6) and by reference 40 CFR Part 279.22(d): A used oil generator must respond to releases of used oil to the environment and perform the following cleanup steps: a) stop the release; b) contain the released used oil; c) clean up and manage properly the released used oil and other materials; and d) repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

Within 2 days of receipt of this letter, ensure that any old releases of used oil and contaminated soil are cleaned up and properly managed. In case of oil releases in the future, immediately perform the cleanup steps listed. Submit photos showing the spilled oil in the compressor shed has been cleaned up as well as photos of the containers used to hold the clean up materials to be disposed of properly.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-515(6)	November 26, 2007		

2) WAC 173-303-141(1): Designated dangerous waste was not offered to a treatment, storage, and disposal facility (TSD).

Upon receipt of this letter, do not send any more designated dangerous waste to non-permitted facilities. Dangerous waste may only be sent to permitted hazardous waste treatment, storage, or disposal facilities. Within 10 days of receipt of this letter, submit documentation showing employees have received training in proper disposal of these wastes, and documentation showing how the paint can described above was managed.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-141(1)	November 26, 2007		

3) WAC 173-303-170(1) and by reference 070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes. **REPEAT VIOLATION**

Immediately upon receipt of this letter move the three containers that are out back inside the buildings. Within 30 days of receipt of this letter, provide to the Department documentation that designation of the solid wastes listed has occurred. This documentation shall include, but not be limited to, copies of the analytical results of designation testing and any contracts with testing laboratories.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(1)	December 27, 2007		

4) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste. **REPEAT VIOLATION**

Within 2 days of receipt of this letter, ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5). Submit photos of all the containers listed above to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(b)	November 26, 2007		

5) WAC 173-303-200(1)(d) as referenced by 170(2): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste. **REPEAT VIOLATION**

Within two days of receipt of this letter, adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d). Submit photos of all the containers listed above to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(d)	November 26, 2007		

6) WAC 173-303-200(1)(c) as referenced by 170(2): Failure to mark each container with the accumulation start date. **REPEAT VIOLATION**

Within two days of receipt of this letter, ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(c)	November 26, 2007		

7) WAC 173-303-200(2)(a) as referenced by 170(2): Failure to meet the satellite accumulation area standards for containers. **REPEAT VIOLATION**

Within two days of receipt of this letter, comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date; (c) insuring containers are in good condition, handled safely, and compatible with waste stored; and (d) keeping containers closed at all times.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(2)(a)	November 26, 2007		

8) WAC 173-303-522(2)(a): The special requirements for generators recycling spent antifreeze were not met.

Within two days of receipt of this letter, label containers of spent antifreeze as "spent antifreeze". Accumulate antifreeze in a manner to prevent releases to the environment. This includes but is not limited to storing wastes in compatible containers, on impermeable surfaces, or in secondary containment structures. Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-522(2)(a)	November 26, 2007		

9) WAC 173-303-515(6) and by reference 40 CFR Part 279.22(c)(1): Containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."

Within two days of receipt of this letter, label all used oil collection containers with the words "Used Oil". Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-515(6)	November 26, 2007		

10) WAC 173-303-515(6)(a)(i): Containers of used oil must be kept closed except to add or remove used oil.

Within two days of receipt of this letter, close all containers of used oil. Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-515(6)(a)(i)	November 26, 2007		

11) WAC 173-303-200(1)(b) and by reference 630(3): Failure to maintain identification of containers by re-labeling during transfer of contents, and/or to properly remove or destroy labels on empty containers.

Within two days of receipt of this letter, institute a process to label all containers so that the information required is present and accurate, according to the current contents of the container. Submit photos of the correctly labeled containers listed above to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(b)	November 26, 2007		

12) WAC 173-303-170(3) and by reference 200(1)(a): Dangerous waste was accumulated on-site for more than 90 days. **REPEAT VIOLATION**

Within 5 calendar days of the receipt of this letter, provide copies of manifests for waste disposal of all waste which has been on-site greater than 90 days.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(3)	November 29, 2007		

13) WAC 173-303-630(6) as referenced by 200(1)(b): Dangerous waste accumulation areas were not inspected weekly. **REPEAT VIOLATION**

Within 7 days of receipt of this letter, institute an inspection schedule for areas where containers of dangerous waste are stored. These areas must be inspected at least on a weekly basis. Maintain an inspection log that includes: the date and time of inspection; the name and signature of the inspector; a notation of the observations made; and the date and nature of any corrective measures taken. At a minimum, items to include are checking that containers are closed, containers are labeled including hazardous waste labels as appropriate, containers are dated with the accumulation start date, spills and leaks have been addressed, and up to date emergency information is posted near telephones. Submit a copy of the proposed inspection log within 7 days and copies of three weeks of completed logs within 30 days.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-630(6)	November 31, 2007		

14) WAC 173-303-340(1) as referenced by 200(1)(e): Spill control equipment in dangerous waste accumulation areas was missing or inadequate.

Within 30 calendar days of the receipt of this letter, ensure that spill control equipment is well stocked and available in areas where liquid waste is stored. Submit a report within 30 calendar days documenting compliance with this requirement.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-340(1)	December 27, 2007		

15) WAC 173-303-630(7) as referenced by 200(1)(b): Containers of liquid dangerous waste did not have adequate secondary containment. **REPEAT VIOLATION**

Within 30 calendar days of the receipt of this letter, provide a containment system for container accumulation areas that is capable of holding spills and leaks per WAC 173-303-630(7). Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-630(7)	December 27, 2007		

16) WAC 173-303-573(9): Universal wastes must be managed in a way that prevents releases of universal waste or component of a universal waste to the environment, as required by this subsection.

Within 30 calendar days of the receipt of this letter properly manage universal waste in a way that prevents releases to the environment, as described in WAC 173-303-573(9). Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-573(9)	December 27, 2007		

17) WAC 173-303-573(10): Universal wastes must be properly labeled or marked to identify the type of universal waste as required by this section.

Within 30 calendar days of the receipt of this letter label or mark the universal waste lamps with the words "Universal Waste Lamp(s)", "Waste Lamp(s)", or "Used Lamp(s)" and the date the first bulb went in the container to demonstrate compliance with the 12-month accumulation time limit. Submit photos of the labeled containers to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-573(10)	December 27, 2007		

18) WAC 173-303-200(1)(e) and by reference 320(1): General facility inspections were not conducted. REPEAT VIOLATION.

Within 30 calendar days of receipt of this letter, plan, conduct, and document a general facility inspection. Submit a copy of the plan and log sheet. Determine the appropriate interval for future inspections and inform Ecology of this interval. Inspections must be frequent enough to identify and correct problems before they harm human health or the environment.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(e)	December 27, 2007		

19) WAC 173-303-170(2) and by reference 060(5) and 220(1): Failure to submit a Dangerous Waste Annual Report for the 2006 calendar year.

Within 30 calendar days of the receipt of this letter, submit to the Department a completed Dangerous Waste Annual Report for the year 2006.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(2)	December 27, 2007		

20) WAC 173-303-350(2) as referenced by 200(1)(e): A contingency plan was not prepared. REPEAT VIOLATION

Within 60 calendar days of the receipt of this letter, develop and retain on-site a contingency plan per the requirements of WAC 173-303-350. Submit a copy of the contingency plan within 60 days.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-350(2)	January 28, 2008		

21) WAC 173-303-330 as referenced by 200(1)(e): Training requirements were not met. The facility should have a training program, a written training plan, and keep training records. REPEAT VIOLATION

Within 60 calendar days of the receipt of this letter, develop and submit a dangerous waste training program which shall include a written training plan and records per WAC 173-303-330.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-330	**January 28, 2008**		

APPENDIX A
Digital Camera Photolog

Camera: Sony FD Mavica (MVC-FD75)
Photographer: Warren Walton **Lead Inspector: Daylin Davidson**
Camera clock had not been adjusted for day light savings time, so times have been moved back one hour in this photo log to represent the actual time the photos were taken.

Photo # Area	Notes/Descriptions	Photographs
Photo #1 of 20 Hazardous waste accumulation area (HWAA) Building B 10:12 a.m.	Photos of properly labeled drums with accumulation dates of 8-14-07. These drums should be shipped the week of 11-11-07 or will exceed 90 days on site.	
Photo #2 of 20 In paint booth 5, Building B 10:17 a.m.	Open, unlabeled containers of spent solvent waste, to be emptied every night into the liquid paint waste drum in the paint locker.	

Photo # Area	Notes/Descriptions	Photographs
Photo #3 of 20 "Satellite area" in Building B 10:18 a.m.	Paint booth filters are packaged but loosely stacked near a box full of the same items. None of the bags were labeled as hazardous waste and had no risk labels or start dates. There is more than a 55 gallon equivalent of paint booth filters at this location, therefore this cannot be managed as a satellite accumulation of paint booth filters.	
Photo #4 of 20 "Satellite area" in Building B 10:19 a.m.	Paint booth filters labeled "Hazardous Waste" and with risk labels, but lacking an accumulation start date.	

Photo # Area	Notes/Descriptions	Photographs
Photo #5 of 20 "Satellite area" in Building B 10:20 a.m.	The hazardous waste and risk label are in compliance, but there is no accumulation start date and the drum appeared to be full.	
Photo #6 of 20 "Satellite area" in Building B 10:23 a.m.	This drum was labeled "Blasting Dust". It is not labeled as hazardous waste, but has a flammable liquid risk label on this solid waste.	

Photo # Area	Notes/Descriptions	Photographs
Photo #7 of 20 Area adjacent to "satellite area" in Building B 10:24 a.m.	Open drums of used oil. Containers adjacent to drums will be poured to drums. All used oil containers were sitting on containment pallets.	
Photo #8 of 20 Adjacent to Building B satellite area 10:24 a.m.	More open drums of used oil. All drums of liquid were sitting on containment pallets. Note used oil filter draining into secondary containment between drums.	
Photo #9 of 20 Paint Locker room 10:28 a.m.	Open funnel sits screwed in to the small lid bung on left drum, which is for liquid paint wastes. Right drum was full of paint solids with the lid just resting on it. Open five gallon plastic buckets in front also contained paint solids. None of these containers were properly labeled. Only the right drum has a risk label, but it is a flammable liquid label on what is clearly a solid inside the drum.	

Photo # Area	Notes/Descriptions	Photographs
Photo #10 of 20 Paint Locker room 10:30 a.m.	Open can of paint in top right of photo is 25-30% full of free-flowing paint liquids. Other cans appear to be empty as they are on their sides and no free liquid has drained from them.	
Photo #11 of 20 Paint Locker room 10:31 a.m.	Paint contaminated tape, rags, filters, empty container, and PPE debris.	
Photo #12 of 20 Paint Locker room 10:32 a.m.	However, photos 9, 10, and 11 all show open containers.	

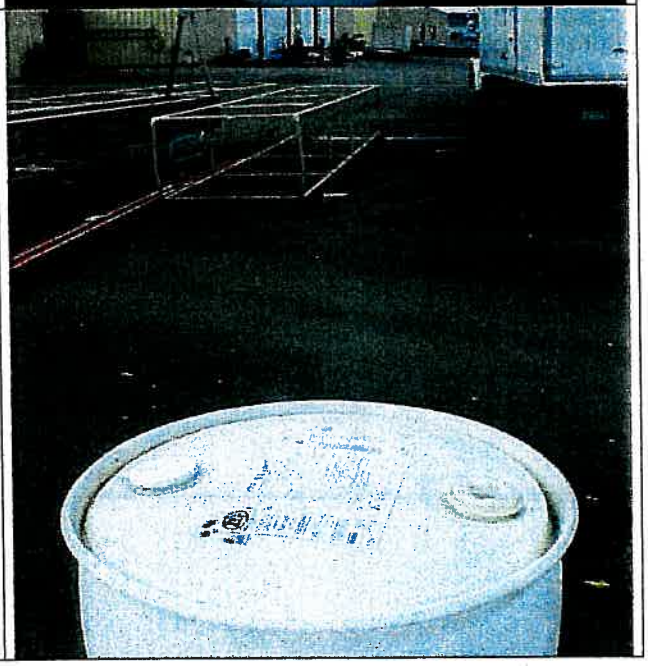
Photo # Area	Notes/Descriptions	Photographs
Photo #13 of 20 Paint Locker room 10:33 a.m.	Various one gallon and smaller items determined to be no longer useful due to their age. Expiration dates observed were for 2004 and earlier. Many are rusted, one can is clearly bulging.	
Photo #14 of 20 About 80 feet north of Building C. 10:41 a.m.	Poly drum partially full of dark liquid, possibly diesel fuel, that is labeled as a corrosive and poisonous product from ZEP. Storm drain to bay is approximately 20 feet down grade from this drum.	
Photo #15 of 20 About 80 feet north of Building C. 10:41 a.m.	Drum of alleged diesel fuel was placed in a poly drum that formerly contained a corrosive and poisonous product from ZEP. Storm drain is at far end of wheeled cart. All storm drains here go to the bay.	

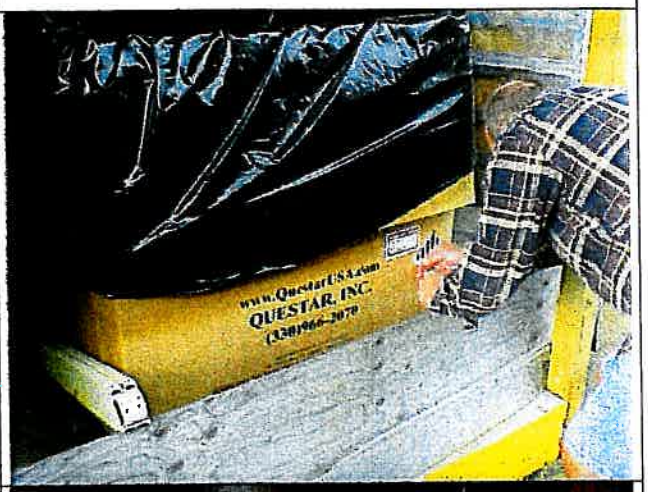
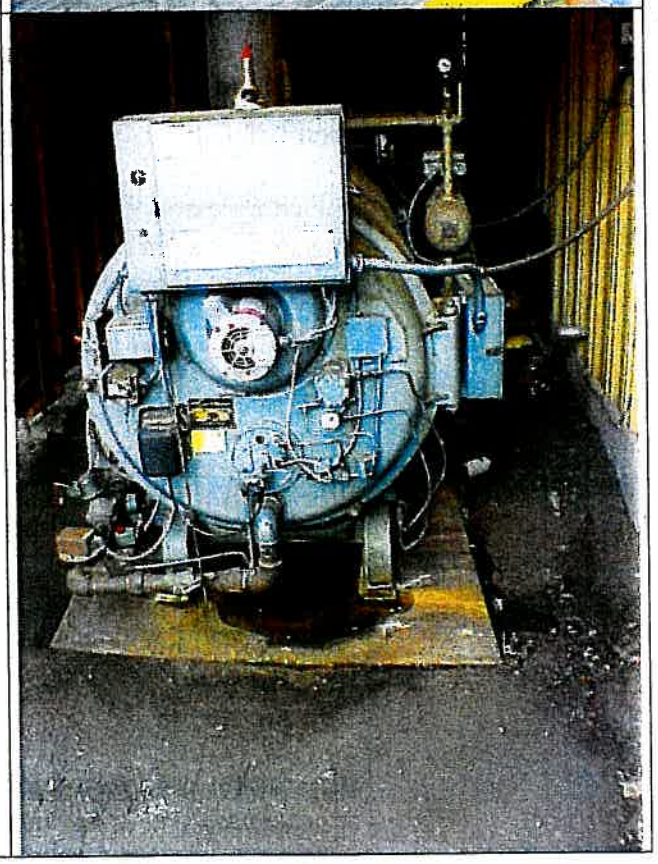
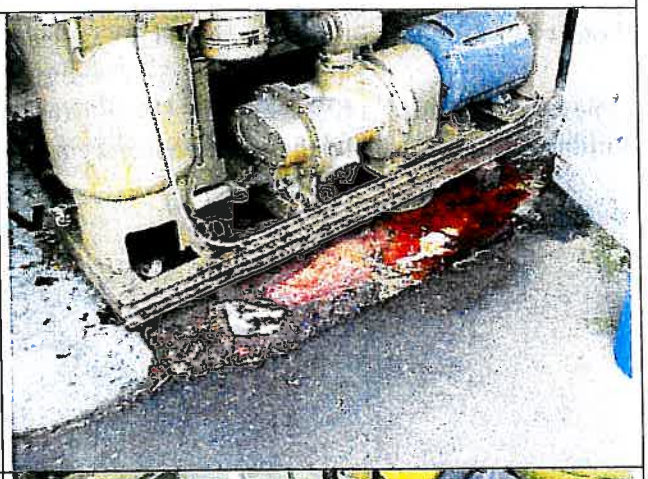
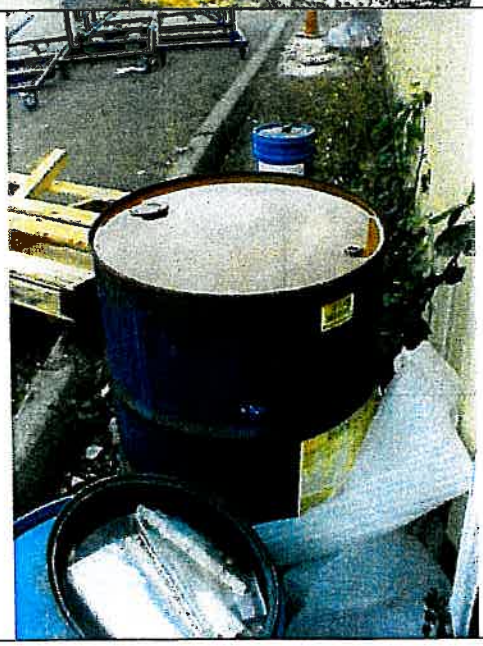
Photo # Area	Notes/Descriptions	Photographs
Photo #16 of 20 Alley way between Buildings B and C. 10:46 a.m.	Sludge container was open and had no labels. . Inspectors provided Mr. Donaldson with labels and he is applying labels in this photo.	
Photo #17 of 20 Boiler Shed in alley way between Buildings B and C. 10:51 a.m.	Boiler on pad which appears to be settling. Water leaking from the boiler may be causing mortar leaching on the pad.	

Photo # Area	Notes/Descriptions	Photographs
Photo #18 of 20 Compressor Shed in alley way between Buildings B and C 10:53 a.m.	Compressor site with leaking, puddled oil on the ground. The oil appears to have stained the asphalt in front of the doorway.	
Photo #19 of 20 Compressor Shed in alley way between Buildings B and C 10:54 a.m.	Open, unlabeled bucket of used oil under a piece of equipment to the right of the compressor in photo 18. The compressor oil leak was four to six feet in length – note liquid in left foreground.	
Photo #20 of 20 Outside North end of Building C 10:57 a.m.	Blue drum with rusting top is approximately ½ full. Product label reads: "Duplicating Fluid 5 Anhydrous" with the manufacturer's name – ChemCentral. Blue bucket in background is approximately ½ full of unknown substance. The label was illegible.	

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

November 7, 2007

CERTIFIED MAIL
7007 0220 0004 7250 2570

Mr. Charles Souder
TC Systems
1032 W Marine View Dr
Everett, WA 98201

Dear Mr. Souder:

RE: Immediate Action Required
Dangerous Waste Compliance Inspection at TC Systems
RCRA ID# WAD 088 722 947 on November 6, 2007

Thank you for your staff's time during the recent compliance inspection. The purpose of this inspection was to determine compliance with the Washington State Dangerous Waste Regulations (Chapter 173-303 WAC). These regulations establish a system for safe and responsible management of dangerous waste.

There were several areas of non-compliance with the Dangerous Waste Regulations at TC Systems observed during the inspection. This letter is provided in advance of the Compliance Inspection Report to give you notice of several actions to be taken in order to mitigate potential environmental threats. Please see that the following actions are completed immediately upon receipt of this letter.

1) WAC 173-303-170(3) and by reference 200(1)(a): Dangerous waste was accumulated on-site for more than 90 days.

Drums and totes in the Hazardous Waste Accumulation Area are dated 8/14/07, which means the 90 day accumulation time limit will be exceeded after next Monday, November 11th. This time limitation was discussed with Guy Donaldson, QA Manager, during yesterday's inspection.

These wastes must be shipped before November 12th.

2) WAC 173-303-145(3): For spills and discharges, the responsible person must take appropriate mitigation and control actions.

Oil that has spilled/leaked from the old compressor is still puddled on the ground in the compressor shed between Buildings B & C.

Immediately upon receipt of this letter, clean up the spilled oil in the compressor shed.

3) WAC 173-303-170(1) and by reference 070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes.

The designation status has not been determined for the following: The drum of "blasting dust" in satellite area of Building B: the paint contaminated tape, gloves, filters, and other debris in the trash can in the paint locker; the cart full of expired materials in the paint locker; the white drum that is ¼ full, possibly of diesel fuel, outside behind the buildings; and the blue drum and blue bucket outside Building C.

Immediately upon receipt of this letter move the three containers that are out back inside the buildings. Immediately upon receipt of this letter, provide to the Department documentation that samples have been sent to an accredited lab or that designation of the solid wastes listed has been determined in another manner. This documentation shall include, but not be limited to, copies of any contracts with testing laboratories and a written description of how the generator determined designation status.

4) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste.

The following containers were open during yesterday's inspection: 5 drums of used oil in the satellite area of Building B; the bucket of used oil in the compressor shed; the open funnel in the liquid paint waste drum in the paint locker; and the open 1/3 full can of paint in the trash can in the paint locker.

Immediately upon receipt of this letter, ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5).

5) WAC 173-303-200(1)(c) & (d) as referenced by 170(2): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste, nor with the accumulation start date.

Numerous containers of dangerous waste were lacking proper labeling. These include: Buckets of paint/solvent waste in the paint booths (these do not need a start date); bagged paint booth filters; one drum of liquid paint wastes in the "Satellite Area" in Building B did not have a start

date; all three 55-gallon drums of paint waste (and floor sweepings) in the paint locker and all the buckets of paint solids in the paint locker.

Immediately upon receipt of this letter, adequately label all drums containing dangerous waste with the words "Hazardous Waste", the appropriate risk label, and the accumulation start date.

These and the remaining conditions not in compliance will be listed in the Compliance Report that will follow this letter soon. To correct these items of non-compliance, you are required to complete the actions needed to achieve compliance as listed in this letter and the Compliance Certificate portion of the Compliance Report within the specified timeframes. Please be advised that failure to correct these items of non-compliance may result in the issuance of an administrative order and/or penalty as provided by the Revised Code of Washington, Sections 70.105.080 and/or .095 (Hazardous Waste Management Act).

Please do not hesitate to contact me at dayd461@ecy.wa.gov or (425) 649-7090 should you have questions or require clarification of any items in this letter.

Sincerely,

Daylin Davidson, Hazardous Waste Compliance Inspector
Hazardous Waste and Toxics Reduction Program

DD:SA

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

February 26, 2008

CERTIFIED MAIL
7007 0220 0004 7250 3454

Charles Souder
TC Systems
1032 W Marine View Dr
Everett, WA 98201

Dear Mr. Souder:

RE: Dangerous Waste Compliance Inspection at TC Systems
RCRA ID# WAD 088 722 947 on November 6, 2007

Thank you for your submittal received January 30, 2008. However, *a number of items still remain delinquent*. These are outlined below:

Item 3 – Only information regarding the designation of the blast dust was provided. What about the paint contaminated tape, gloves, filters, and other debris in the trash can in the paint locker; the cart full of expired materials in the paint locker; and the blue drum and blue bucket outside Building C? You must submit documentation of designation of all of these wastes.

Items 4-6, 9-11, and 15 – As stated in the compliance certificate, photos were required of all of these items to show they were corrected before being shipped off site. Additionally no information was provided regarding the 55-gallon drum of paint solids (item #4). Provide photos of new containers for each of these items.

Items 8 – Again, no photo was provided to show proper labeled of the spent antifreeze and the bill of lading provided only shows that used oil was shipped, not antifreeze.

Item 13 – Weekly inspection logs provided are for 12/13/07, 1/14/08, and 1/20/08. What about all the weeks between 12/13/07 and 1/14/07?

Item 14 – You showed you had ordered a spill kit. You must follow up with evidence that the spill kits have been delivered and is set up in all proper locations. Please submit photos.

Item 17 – The photo of the box of bulbs is too far away to see if the box is labeled and/or dated.

Item 19 – TC Systems has incorrectly filed as a Medium Quantity Generator (MQG) for 2005, 2006, and 2007. Manifests seen on site by inspectors prove the facility accumulated over 2,200 pounds of dangerous waste on site each of those years, making the facility a Large Quantity Generator (LQG). All three annual reports must be revised to show the correct generator status.

Item 21 – The Training Plan provided did not include any records to demonstrate any training had been conducted (individual training records) and did not specify what training "Level 3" employees will receive.

Lastly, as directed in the compliance certificate, you must submit the completed compliance certificate found at the end of the report. Resolution of and a description of actions taken to resolve the items described in this letter must be submitted to Ecology no later than March 12th, 2008.

Please do not hesitate to contact me at DayD461@ecy.wa.gov or (425) 649-7090 should you have questions or require clarification of any items in this letter.

Sincerely,

Daylin Davidson, Hazardous Waste Compliance Inspector
Hazardous Waste and Toxics Reduction Program

DD:SA

Washington Department of Ecology
Hazardous Waste & Toxics Reduction Program
Compliance Report

Site: TC Systems **RCRA ID#: WAD 088 722 947**

Inspection Date:	July 8, 2008
Site Contacts:	Charles Souder
Phone:	(425) 258-4055 FAX: (425) 252-6855
E-mail:	ccsouder@hotmail.com
Site Location:	1032 W Marine View Dr Everett, WA
At This Site Since:	1993 NAICS#: 332813
Generator/Site Status:	LQG Electroplating, Plating, Polishing, etc.

Ecology
Lead Contact: Daylin Davidson Phone: (425) 649-7090 FAX: (425) 649-7218
E-mail: DayD461@ecy.wa.gov Other Representatives: Warren Walton
Report Date: July 22, 2008
Report By: Daylin Davidson

_____ _____
(Signed) (Date)

Facility Background:
TC Systems is located near the Everett Marina on West Marine View Drive. Employee numbers vary between twelve and twenty-two working the day shift five days a week. TC Systems supports the aviation (primarily Boeing) and boating industries by chemically treating and painting metal parts using their chemical line and paint booths. Waste water from the tank line is pre-treated to meet local discharge limits and discharged under a permit with the City of Everett. A limited amount of sand blasting is done here. TC Systems received Hazardous Waste Compliance inspections from the Department of Ecology in 1997, 1998, 2003, 2006 and 2007.

Inspection Summary:
We arrived on site at 9:20 a.m. and asked to speak to Charles Souder, the General Manager. We met briefly with Charles Souder, then were joined by Robert Deatherage and Les Deatherage. We were told Robert has been receiving training as he has taken over responsibility for hazardous waste management at the facility. We explained the reason for our visit to Charles, Robert, and Les and proceeded on a site tour without Charles.

We knew the following about the facility's processes and waste streams from previous inspections:

- Filter press sludge from the treatment of waste water contains chromium and is the largest waste stream generated at this facility.
- Liquid paint and solvent (including MEK) waste is the second largest waste stream.
- Floor sweeping and paint-contaminated solids are also managed as dangerous wastes.
- Used oil from compressors, equipment, and one company truck is also stored at the facility, as well as spent antifreeze.
- Paint booth filters are managed as dangerous waste for heavy metals.
- Spent fluorescent bulbs are managed as universal waste.
- Paint cans are drained and thrown in the trash.

Records Review
We went to the upstairs office to review records. Weekly inspection logs for the last few months were reviewed and were complete. We reviewed the manifests for 2008, which clearly demonstrated the facility was an LQG (large quantity generator) for this year. (A shipment in April of 2008 exceeded 2,200 pounds, thus the large quantity generator regulations currently apply.) We noted four manifests did not have the final signed copies. The

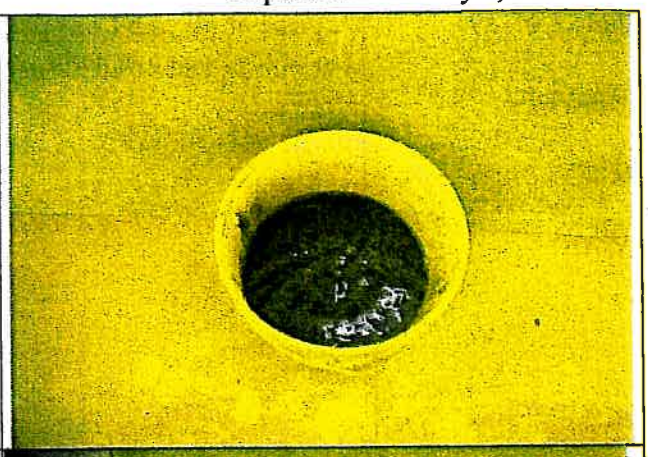
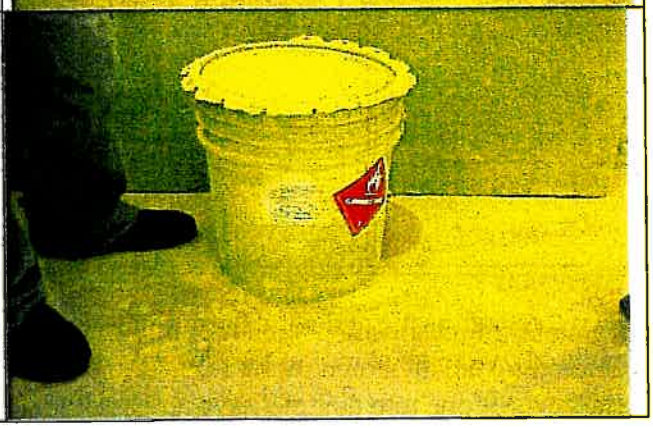
facility's generator status was revised for 2007 and 2006 on their Site Identification Form to indicate that they were a medium quantity generator. However, the manifest records show that the facility was a large quantity generator in 2007 due to waste shipments larger than 2,200 pounds, exceeding the accumulation limit for medium quantity generators. In 2006, their first shipment of two tote sacks of chromium sludge hazardous waste was in the amount of 3,200 pounds, exceeding the 2,200 pound accumulation limit for a medium quantity generator and making them a large quantity generator for 2006. We discussed the contingency and training plans. Robert told us he had received training in April, but that was all. Robert and Les both acknowledged that the contingency plan had not been updated to reflect the changes from the previous hazardous waste manager to Robert as the emergency coordinator and point of contact.

Paint Booth

We went into Paint Booth # 4 and Robert showed us two drums used to accumulate mastic and other solid debris contaminated with chromium and paint cans. The mastic debris had no hazardous waste label, but Ecology provided a label and Robert applied it while we were there, though he did not indicate the drum contents on the hazardous waste label. (See photos #1 & 2.) Both drums were open.

Photo 1 of 19 9:54 a.m. In Building C Inside paint booth # 4.	Robert Deatherage of TC Systems was given labels by Ecology inspectors to apply to hazardous waste drums containing contaminated solid debris (tape, gloves, etc.) and empty paint cans. Note – There is no lid for either drum.	
Photo 2 of 19 9:55 a.m. Bldg C Inside paint booth # 4.	A hazardous waste label was applied to the left drum in our presence, but not filled out. Right drum is also labeled "garbage".	

Robert said that the waste gun cleaner was generated in the booths, and then stored in buckets until the end of the day. He said they are then emptied into the 55-gallon drum in the paint locker. We observed the waste gun cleaner stored in a five-gallon bucket with no lid. Robert found a lid and set it on top (still not closed). The bucket was improperly labeled as "filter cake" (see photos # 3 & 4 below).

Photo 3 of 19 9:57 a.m. Bldg C Inside paint booth # 4.	Paint gun wash out and paint solids were found in this open 5-gallon plastic bucket. The solvent being used for paint gun wash out is MEK.	
Photo 4 of 19 10:02 a.m. Bldg C Inside paint booth # 4.	This is the same container as in photo 3 of 19 (above). The HW label reads filter cake. But contents are clearly a flammable liquid. The lid placed on the container during the inspection is ill fitting and would not contain the liquid contents if knocked over.	

Hazardous Waste Accumulation Area (HWAA)
A tote of chromium-contaminated metal crushed cans was lacking a lid in this area. Robert put a piece of plywood on top of the tote while we were there. (See photo #5 & 6 below.)

Photo 5 of 19 10:06 a.m. Bldg C HWAA	Tote contains mastic, paint can lids, and crushed paint cans. It is labeled properly but does not have a lid.	

Photo 6 of 19 10:06 a.m. Bldg C HWAA	A piece of plywood was placed on top of the open tote acting as a cover.	

Two totes of mastic and solid chromium-contaminated debris, plus two more bags on the floor (not pictured), were all stored in the HWAA. All were missing hazardous waste labels, risk labels, and start dates except one tote that did have a risk label. (See photos #7 & 8 below.)

Photo 7 of 19 10:09 a.m. Bldg C HWAA	The contents of this bag (mastic debris) will be crushed so they will fit in the bag. Once the bags are compacted, they will fit in the soft shipment tote. The tote has a risk label, but no hazardous waste label or start date.	

Photo 8 of 19 10:10 a.m. Bldg C HWAA	More mastic debris in another 'open' tote without a hazardous waste label, risk label, or start date. Two more bags of HW debris were stored on the floor in this area. (not shown.)	

A tote of paint booth filters was properly labeled, dated, and closed. But a box of more filters was stored on the floor in front of the tote and these were not labeled, dated, or closed. Robert and Les speculated about the possibility of reusing the filters in the box, but said it was unlikely this would be a viable alternative to disposal.

Photo 9 of 19 10:11 a.m. Bldg C HWAA	Paint booth filters are over filling this box. Box on floor in foreground contains more filters with no labels or start dates.	

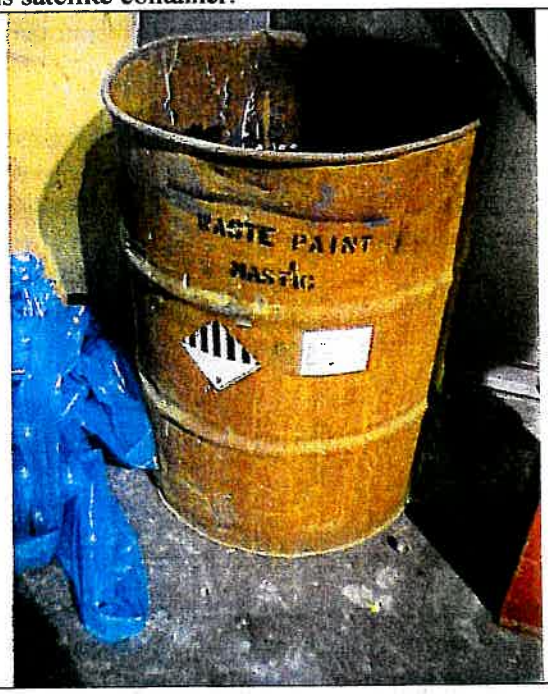
Two drums of "rusty water" (per Robert and Les) had been pumped out of the secondary containment berm outside, at the waste water treatment tank system area, and Les said the waste would be disposed of as dangerous waste. Neither of the drums were labeled, dated, or properly closed. (See photo #10.)

Photo 10 of 19 10:14 a.m. Bldg C HWAA	Berm area clean out fills both drums. We were told this would have to be processed as a waste on site. No labels are visible. A locking ring leans against the open drums. The drums are not closed.	
Photo 11 of 19 10:17 a.m. Bldg C HWAA	All of the boxes of spent fluorescent bulbs to the left in the photo are properly labeled. The standing spent bulbs are not protected from breakage, are not labeled as Universal Waste Bulbs, and have no accumulation start date displayed.	

Robert showed us a spill kit and a fire extinguisher near this area. We noticed some spent fluorescent light tubes stored here. Most of the bulbs were in labeled and dated boxes, but, as shown in photo #11 above, several were stored in an unsecured box with no label or start date.

Building C "Mezzanine"

One satellite accumulation container used to collect mastic waste was located in this area. We discovered it was properly labeled after Robert turned the drum around, as the labels had been facing the wall, but the can had no lid and it was unclear where the operator and workstation were for this satellite container.

Photo 12 of 19 10:21 a.m. Bldg C Mezzanine	An open satellite drum that collects contaminated striping tape. Photo taken after can was turned to make labels visible. Outside oven # 4	

Former Satellite Collection Area in Building C

This area, which was a satellite collection area on our last visit, now held mostly product. However, we noticed an open, unlabeled bucket of some material that had hardened. Neither Robert nor Les knew what was in the bucket.

Photo 14 of 19 10:26 a.m. Bldg C Former Satellite Collection Area	Hardened unknown substance in 5-gallon bucket.	

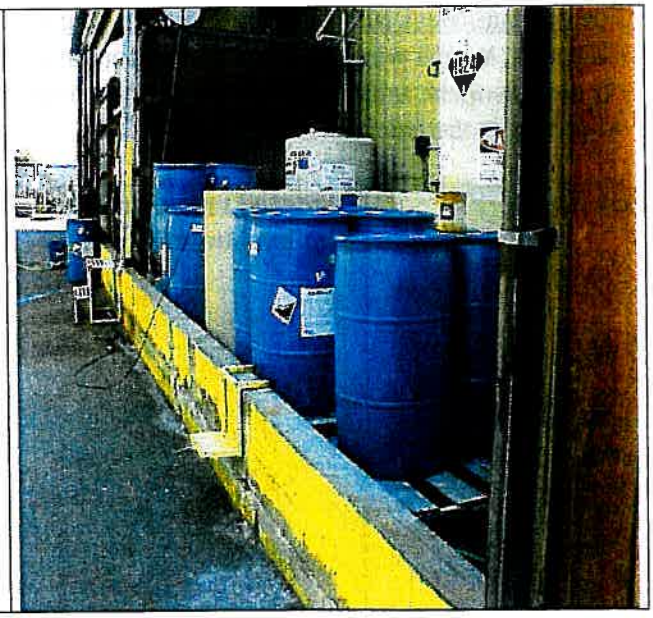
Tank Area Between Buildings B and C

We went to the alley way between Buildings B and C where the sludge from the waste water treatment process is collected and batch processed in the filter press. The solids are hazardous waste due to TCLP metal content. From the filter press, the solids are dropped into a tray under the filter press and accumulated in a bulk solids

container. The bulk solids container is on a skid pallet and stored under cover in a shed against Building C. We saw one sludge sack/tote in this area. The open container was approximately half full of sludge and while it did have proper labels and accumulation start date, these were only visible after Robert removed the tarp on the side of the shed and lifted up the flaps on the side of the tote.
In this same shed we noticed a drum that had "soap sludge" from the waste water treatment process that was open, had no labels, and no start date; though Les told us it is a dangerous waste, and would likely be added into the filter press solids/sludge.

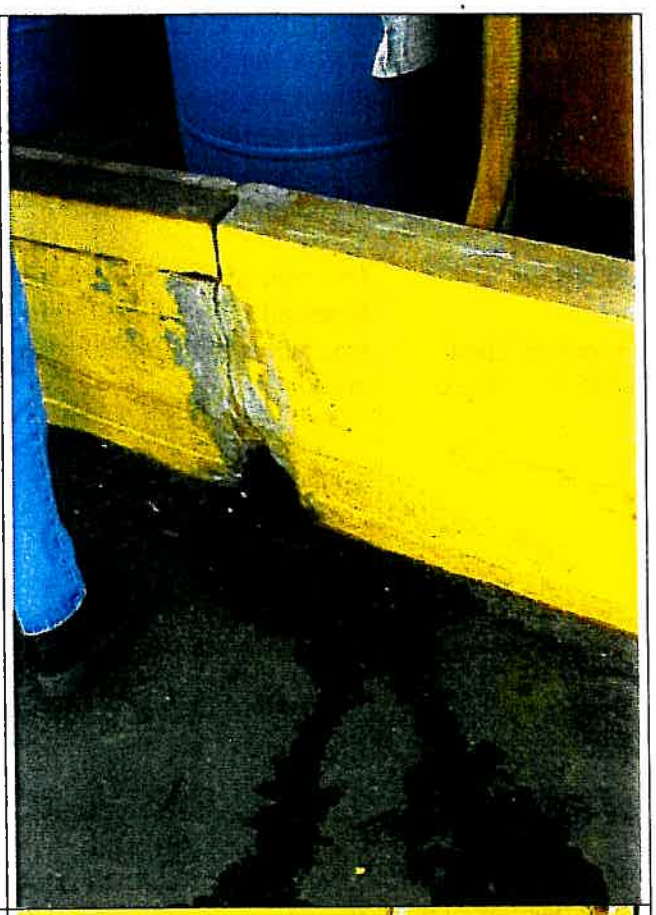
Photo 7 of 11 10:49 a.m. At NE corner of Bldg C in alley way, in filter press shed.	"Soap sludge" from operations in Building B. Personnel on site suggested this had been covered with water and that the water had evaporated away. Ecology was told this waste was to go into a nearby chromium sludge tote.	

The alley had several storm drains that were labeled as going to the local stream or public waterway. The waste water treatment system was constructed inside a berm along most of the length of the alley against Building B. A bit less than half of the tank area was covered, thus allowing rain water to enter the containment area.

Photo 17 of 19 10:34 a.m. Treatment and chemical storage area In alley against Building B	Containment for outside area at Bldg B - Looking generally north.	

Robert told us he pumps out the containment area regularly, routing the liquids back into the treatment system. He also told us there are float valves in place that send an alarm (a phone call) to the front desk and then to the owner's personal phone if the levels in the containment ever get too high. I asked Robert if he did any inspections of the tanks or the containment. He said he keeps an eye out, but the tanks never leak, and he does not keep any

logs of these visual assessments. We pointed out the cracks in the containment wall that were obviously leaking (as shown in photos #18 & 19 below) and Les admitted the wall needed some patching.
I also asked Robert if any of the tanks had received any engineering or integrity testing, or if the containment area was lined. He indicated he was unsure, but he did not think so.

Photo 18 of 19 10:37 a.m. Looking at containment area in waste water treatment area more closely. In alley against Building B	Containment wall seen in photo 17 above. The wall has cracked and does not have containment of rainwater or other liquid.	
Photo 19 of 19 10:37 a.m. Looking at containment area in waste water treatment area more closely. In alley against Building B	Outside containment wall for Bldg B. The wall shows signs of not being properly moisture sealed.	

We noted liquids accumulated in low spots inside the containment berm.

In this same alley, we saw a shed that was housing compressors. There was red/orange liquid on the ground shown in photo #2 below. We had observed the same problem on our previous inspection in November of 2007 and cited TC Systems for failure to take action to mitigate a spill of used oil. Mr. Charles Souder submitted a response to that violation on January 24, 2008 stating that "this compressor will remain out of service until repairs have been made to eliminate the leaking oil". Yet, we observed the same compressor exhibiting the same leak. It appears there were significant gaps in the floor surface in this area and leaked oil was migrating into the soil.

Photo 2 of 11 10:42 a.m. Compressor shed outside Building C	A compressor that leaks oil. This unit was sitting on what appeared to be a dirt floor in an area where the asphalt had broken away.	

Additionally, there was a clear path of liquids flowing from the leaking compressor area to the nearest storm drain as shown in photo #6 below.

Photo 6 of 11 10:46 a.m. Storm drain between building B and C	Looking up hill toward the compressor shed area. Note: liquid trail to the storm drain from the covered shed.	

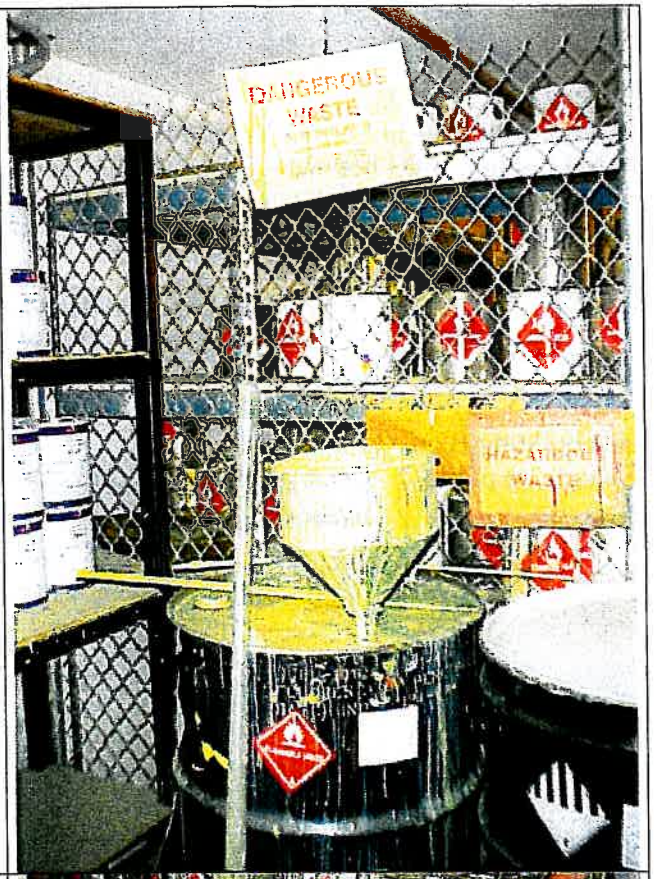
Building B Chem Line

We passed the Chem Line on our way to the paint locker inside building B and were joined by Charles Souder. I asked Les how often the sludge in the containment area under the chem line is cleaned out and he said he thought it was done two to three times per year. We observed several inches of sludge underneath all the tanks. An example is shown in photo #8 below.

Photo 8 of 11 10:59 a.m. Inside building B on the west side of the process tanks.	Inside building B on the west side of the process tanks. This photo was taken near the base of the stairs up to the tanks. There are several inches of sludge in the containment area.	

Paint Locker Room in Building B

The last place we visited was the paint locker room. There was a secondary containment pallet holding two 55-gallon drums and two five-gallon buckets. The 55-gallon drum on the left was for accumulating liquid waste paint and thinner from gun cleaning. It had an open funnel and the other bung was open as well. It was labeled and dated. The 55-gallon drum on the right was for accumulating paint solids from the paint pot bottoms. Its lid was only resting on top of the drum, but it was also properly labeled and dated. Two five-gallon buckets of hazardous waste paint solids were open with no labels or accumulation start dates and were also stored on the secondary containment pallets. Mr. Souder told us these were left to dry out before being scraped into the solid paint waste drum. We advised Mr. Souder, Robert, and Les that allowing paint waste containing listed solvents (in this case MEK) was illegal disposal to the air and was not in compliance with dangerous waste regulations. Robert began scraping the contents of the buckets into the solid paint waste drum while we were there.

Photo 9 of 11 11:03 a.m. Bldg B – Paint Locker	Open funnel sits screwed in to the small lid bung on left drum, which is for liquid paint wastes. Larger bung on this drum is open with lid resting on top of drum. Right drum was full of paint solids with the lid just resting on it.	
Photo 10 of 11 11:03 a.m. Bldg B – Paint Locker	Both drums are properly labeled and with start dates as these cannot be a satellite accumulation area. However, the two five-gallon buckets in front contain hazardous waste intended to be air-dried (evaporated) and then scraped into the drum on the right in this photo.	

Another full 55-gallon drum was stored near the door. It was properly labeled and dated as containing chromium contaminated floor sweepings, but the lid was not secured onto the containers.

Photo 11 of 11 11:12 a.m. Bldg B – Paint Locker	Properly labeled drum of dangerous waste floor sweepings. The lid is only resting on the drum, not properly closed.	

We left the site at 11:45 a.m.
On July 15th, I sent an e-mail to Robert requesting copies of the missing final copies of four manifests; the training plan; and general facility inspection logs. As of the date of this report, no response was received.

Additional Information

During our walk through, we noticed liquid products being off-loaded directly over a storm drain.
We recommended to Robert and Les that a mat be put over the drain during unloading operations to prevent any accidental spills from entering the storm drain.

Photo 15 of 19 10:32 a.m. At the North end of Bldg C – delivery area	It was recommended to TC Systems personnel that covering the storm drain immediately beneath liquid chemical unloading areas is wise. Bulk chemical totes with 250-300 gallon capacity are frequently unloaded in this area.	

COMPLIANCE PROBLEMS

The following conditions identified during the inspection were not in compliance with Dangerous Waste and/or other environmental laws. Each problem is covered in three parts: (1) the **citation from the regulations**, (2) the specific observations from the inspection, and (3) the *corrective measures* needed to fix the problem and achieve compliance.

1) WAC 173-303-141(1): Illegal disposal of hazardous waste. **REPEAT VIOLATION**

- Spilled compressor oil (not being recycled) has been allowed to migrate into the soil and the nearby storm drain.
- Soap sludge stored in open drum in filter cake shed has been allowed to evaporate.
- Paint wastes containing MEK solvent have been routinely allowed to evaporate.

Immediately do not allow any more dangerous waste to evaporate or enter the soil or storm drain. Dangerous waste may only be sent to permitted hazardous waste treatment, storage, or disposal facilities.

2) WAC 173-303-515(6) and by reference 40 CFR Part 279.22(d): A used oil generator must respond to releases of used oil to the environment and perform the following cleanup steps: a) stop the release; b) contain the released used oil; c) clean up and manage properly the released used oil and other materials; and d) repair or replace any leaking used oil storage containers or tanks prior to returning them to service. **REPEAT VIOLATION**

Oil that has spilled/leaked from the compressor that was STILL being used after Ecology was told it would not, was left puddled on the ground again in the compressor shed between Buildings B & C.

Ensure that any old releases of used oil and contaminated soil are cleaned up and properly managed. In case of oil releases in the future, immediately perform the cleanup steps listed. Submit photos showing the spilled oil in the compressor shed has been cleaned up as well as photos of the containers used to hold the clean up materials to be disposed of properly.

3) WAC 173-303-170(1) and by reference 070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes. **REPEAT VIOLATION**

The designation status has not been determined for the bucket of unknown material that had hardened in the former satellite area of Building C.

Provide to the Department documentation that designation of the solid wastes listed has occurred. This documentation shall include, but not be limited to, copies of the analytical results of designation testing and any contracts with testing laboratories.

4) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste. **REPEAT VIOLATION**

The following containers were open during the inspection: the 5-gallon buckets of dirty solvent in the paint booths; the open funnel (and other bung) in the liquid paint waste drum in the paint locker; the 55-gallon drum of paint solids in the paint locker; the 5-gallon buckets of paint solids in the paint locker; the drum of floor

sweepings in the paint locker; all cans and totes used to accumulate contaminated solid debris (mastic, sticks, gloves, and paint cans); the two drums of "rusty water" in the HWAA; the drum of soap sludge and the tote of sludge outside between buildings B & C.

Ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5). Submit photos of all the containers listed above to demonstrate compliance with this item. (Multiple resources for finding appropriate/practical lid options were e-mailed to Robert and Mr. Souder on July 14, 2008.)

5) WAC 173-303-200(1)(d) as referenced by 170(2): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste.
REPEAT VIOLATION

Numerous containers of dangerous waste were lacking proper labeling. These include: Buckets of paint/solvent waste in the paint booths (one was labeled as "filter cake"; one can of mastic waste in Paint Booth #4; box of paint booth filters in HWAA; two totes and three bags of mastic debris in the HWAA; two drums of "rusty water" in the HWAA; and two buckets of paint solids in the paint locker. Additionally, the box of sludge between Buildings B & C was labeled and the drum in the mezzanine for mastic waste was labeled, but these labels were not visible.

Adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d). Submit photos of all the containers listed above to demonstrate compliance with this item.

6) WAC 173-303-200(1)(c) as referenced by 170(2): Failure to mark each container with the accumulation start date.
REPEAT VIOLATION

Numerous containers of dangerous waste were lacking start dates. These include: two totes of mastic/solid debris in the HWAA; two bags of mastic/solid debris in the HWAA; one box of paint booth filters in the HWAA; two drums of "rusty water" in the HWAA; one drum of soap sludge in the filter cake shed between building B & C; and two buckets of paint waste in the paint locker.

Ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Submit photos to demonstrate compliance with this item.

7) WAC 173-303-200(2)(a) as referenced by 170(2): Failure to meet the satellite accumulation area standards for containers.
REPEAT VIOLATION

Though the drum in the mezzanine is not dated because it is being used as a satellite container, it must meet the definition of "Satellite Accumulation". This requires the container to be at or near the point of generation, and it was not clear where the point of generation for this container was. Also, the container had no lid.

Comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date; (c) insuring containers are in good condition, handled safely, and compatible with waste stored; and (d) keeping containers closed at all times.

8) WAC 173-303-573(9): Universal wastes must be managed in a way that prevents releases of universal waste or component of a universal waste to the environment, as required by this subsection.

Spent fluorescent light tubes in the small box in the HWAA were not secured.

Properly manage universal waste in a way that prevents releases to the environment, as described in WAC 173-303-573(9). Submit photos to demonstrate compliance with this item.

9) WAC 173-303-573(10): Universal wastes must be properly labeled or marked to identify the type of universal waste as required by this section. REPEAT VIOLATION

Spent fluorescent light tubes in the small box in the HWAA were not labeled and had no start dates.

Label or mark the universal waste lamps with the words "Universal Waste Lamp(s)", "Waste Lamp(s)", or "Used Lamp(s)" and the date the first bulb went in the container to demonstrate compliance with the 12-month accumulation time limit. Submit photos of the labeled containers to demonstrate compliance with this item.

10) WAC 173-303-200(1)(e) and by reference 320(1): General facility inspections were not conducted. REPEAT VIOLATION

Records of general facility inspections were not provided.

Within 30 calendar days of receipt of this letter, plan, conduct, and document a general facility inspection. Submit a copy of the plan and log sheet. Determine the appropriate interval for future inspections and inform Ecology of this interval. Inspections must be frequent enough to identify and correct problems before they harm human health or the environment.

11) WAC 173-303-170(2) and by reference 060(5) and 220(1): A Dangerous Waste Annual Report was not submitted to Ecology according to the Instructions on the form. REPEAT VIOLATION

The facility's generator status was revised in January of 2008 for 2007 and 2006 on their Site Identification Form to indicate that they were a medium quantity generator, though they were an LQG.

Submit to the Department a revised Dangerous Waste Annual Report for the year(s):2006 & 2007 to revise generator status back to LQG. This can be done online via Turbowaste.net.

12) WAC 173-303-200(1)(e) and by reference 350(3): An adequate contingency plan was not maintained or available. REPEAT VIOLATION

Robert and Les both acknowledged that the contingency plan had not been updated to reflect the changes from the previous hazardous waste manager to Robert as the emergency coordinator and point of contact.

Amend the current contingency plan or spill prevention control and countermeasures (SPCC) plan to update it with the most current and accurate information to comply with WAC 173-303-350 and WAC 173-303-360. Submit a copy of the amendments.

13) WAC 173-303-330 as referenced by 200(1)(e): Training requirements were not met. The facility should have a training program, a written training plan, and keep training records. REPEAT VIOLATION

The training program and training records (other than one certificate for Robert Deatherage) were not provided to Ecology.

Develop and submit a dangerous waste training program which shall include a written training plan and records showing all employees that handle hazardous waste have received relevant training per WAC 173-303-330.

14) WAC 173-303-170(2) and by reference 180(3) and 210(1): The appropriate signed manifests were not kept by the generator.

Four manifests were missing the final signed copies: #001368741; 001368742; 001368825; and 001368983.

Obtain copies of manifests listed above for shipments of wastes from your facility. Implement procedures to ensure that copies of the signed manifests are kept on-site for the required five years. Submit copies of the listed manifests to Ecology.

15) WAC 173-303-802(5): Failure to comply with permit by rule requirements for totally enclosed facility, elementary neutralization or waste water treatment units.

- Volume of secondary containment for waste treatment system tanks in not adequate to hold 100% of the largest tank or 10% of the total volume.
- Treatment system and secondary containment system is not totally enclosed – only partially covered, allowing rainwater to compromise system.
- Tanks have not been integrity tested or certified by an engineer.
- Daily tank inspections are not being conducted or logged.
- Secondary containment berm is not sealed.
- Secondary containment system has not been maintained, and has already failed in several places.

In order to avoid revocation of Permit by Rule, you must comply with permit by rule requirements by correcting all of the deficiencies noted above. A schedule for accomplishing these corrections may be submitted by the due date for this report providing a timeline for corrections, subject to approval by Ecology.

16) WAC 173-303-640(4)(c)(iv): Leaked waste or precipitation from secondary containment should be removed within 24 hours, or in as timely a manner as is possible.

We observed several inches of sludge underneath all the tanks.

In order to avoid the containment under the tank line being considered a hazardous waste storage tank, thereby subject to all hazardous waste storage tank requirements, remove all liquid/sludge from the dangerous waste accumulation tank secondary containment and treat or dispose of properly. The containment area must be kept clean and dry at all times to avoid tank requirements. Submit disposal records and photos.

WAD 088 722 947
Inspection Date: July 8, 2008

COMPLIANCE CERTIFICATE

Instructions: **Return this Completed Form**
The problems listed above are repeated below and must be corrected in order to be in compliance with Washington Dangerous Waste Regulations. Complete the shaded portion of the table by initialing and indicating the date each action is completed, and **briefly explain the actions taken for each item in a cover letter.** Mail this completed form, the cover letter, and any requested documentation by ***August 27, 2008*** to: Daylin Davidson, Department of Ecology, Hazardous Waste Program, 3190 160th Avenue SE, Bellevue, WA 98008-5452. *(An extension of the deadlines may be requested. Please e-mail a request to DayD461@ecy.wa.gov before the date specified above.)*

1) WAC 173-303-141(1): Illegal disposal of hazardous waste. **REPEAT VIOLATION**

Immediately do not allow any more dangerous waste to evaporate or enter the soil or storm drain. Dangerous waste may only be sent to permitted hazardous waste treatment, storage, or disposal facilities.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-141(1)	August 27, 2008		

2) WAC 173-303-515(6) and by reference 40 CFR Part 279.22(d): A used oil generator must respond to releases of used oil to the environment and perform the following cleanup steps: a) stop the release; b) contain the released used oil; c) clean up and manage properly the released used oil and other materials; and d) repair or replace any leaking used oil storage containers or tanks prior to returning them to service. **REPEAT VIOLATION**

Ensure that any old releases of used oil and contaminated soil are cleaned up and properly managed. In case of oil releases in the future, immediately perform the cleanup steps listed. Submit photos showing the spilled oil in the compressor shed has been cleaned up as well as photos of the containers used to hold the clean up materials to be disposed of properly.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-515(6)	August 27, 2008		

3) WAC 173-303-170(1) and by reference 070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes. **REPEAT VIOLATION**

Provide to the Department documentation that designation of the solid wastes listed has occurred. This documentation shall include, but not be limited to, copies of the analytical results of designation testing and any contracts with testing laboratories.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(1)	August 27, 2008		

4) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste. **REPEAT VIOLATION**

Ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5). Submit photos of all the containers listed above to demonstrate compliance with this item. (Multiple resources for finding appropriate/practical lid options were e-mailed to Robert and Mr. Souder on July 14, 2008.)

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(b)	**August 27, 2008**		

5) WAC 173-303-200(1)(d) as referenced by 170(2): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste.
REPEAT VIOLATION

Adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d). Submit photos of all the containers listed above to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(d)	**August 27, 2008**		

6) WAC 173-303-200(1)(c) as referenced by 170(2): Failure to mark each container with the accumulation start date.
REPEAT VIOLATION

Ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(c)	**August 27, 2008**		

7) WAC 173-303-200(2)(a) as referenced by 170(2): Failure to meet the satellite accumulation area standards for containers.
REPEAT VIOLATION

Comply with "satellite accumulation area" requirements by: (a) accumulating no more than 55 gallons of dangerous waste per waste stream at or near the point of generation; (b) when full, immediately mark container with the accumulation start date; (c) insuring containers are in good condition, handled safely, and compatible with waste stored; and (d) keeping containers closed at all times.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(2)(a)	**August 27, 2008**		

8) WAC 173-303-573(9): Universal wastes must be managed in a way that prevents releases of universal waste or component of a universal waste to the environment, as required by this subsection.
REPEAT VIOLATION

Properly manage universal waste in a way that prevents releases to the environment, as described in WAC 173-303-573(9). Submit photos to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-573(9)	August 27, 2008		

9) WAC 173-303-573(10): Universal wastes must be properly labeled or marked to identify the type of universal waste as required by this section. **REPEAT VIOLATION**

Label or mark the universal waste lamps with the words "Universal Waste Lamp(s)", "Waste Lamp(s)", or "Used Lamp(s)" and the date the first bulb went in the container to demonstrate compliance with the 12-month accumulation time limit. Submit photos of the labeled containers to demonstrate compliance with this item.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-573(10)	August 27, 2008		

10) WAC 173-303-200(1)(e) and by reference 320(1): General facility inspections were not conducted. **REPEAT VIOLATION**

Within 30 calendar days of receipt of this letter, plan, conduct, and document a general facility inspection. Submit a copy of the plan and log sheet. Determine the appropriate interval for future inspections and inform Ecology of this interval. Inspections must be frequent enough to identify and correct problems before they harm human health or the environment.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(e)	August 27, 2008		

11) WAC 173-303-170(2) and by reference 060(5) and 220(1): A Dangerous Waste Annual Report was not submitted to Ecology according to the Instructions on the form. **REPEAT VIOLATION**

Submit to the Department a revised Dangerous Waste Annual Report for the year(s):2006 & 2007 to revise generator status back to LQG. This can be done online via Turbowaste.net.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(2)	August 27, 2008		

12) WAC 173-303-200(1)(e) and by reference 350(3): An adequate contingency plan was not maintained or available. **REPEAT VIOLATION**

Amend the current contingency plan or spill prevention control and countermeasures (SPCC) plan to update it with the most current and accurate information to comply with WAC 173-303-350 and WAC 173-303-360. Submit a copy of the amendments.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-200(1)(e)	August 27, 2008		

13) WAC 173-303-330 as referenced by 200(1)(e): Training requirements were not met. The facility should have a training program, a written training plan, and keep training records. REPEAT VIOLATION

Develop and submit a dangerous waste training program which shall include a written training plan and records showing all employees that handle hazardous waste have received relevant training per WAC 173-303-330.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-330	August 27, 2008		

14) WAC 173-303-170(2) and by reference 180(3) and 210(1): The appropriate signed manifests were not kept by the generator.

Obtain copies of manifests listed above for shipments of wastes from your facility. Implement procedures to ensure that copies of the signed manifests are kept on-site for the required five years. Submit copies of the listed manifests to Ecology.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-170(2)	August 27, 2008		

15) WAC 173-303-802(5): Failure to comply with permit by rule requirements for totally enclosed facility, elementary neutralization or waste water treatment units.

In order to avoid revocation of Permit by Rule, you must comply with permit by rule requirements by correcting all of the deficiencies noted above. A schedule for accomplishing these corrections may be submitted by the due date for this report providing a timeline for corrections, subject to approval by Ecology.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-802(5)	August 27, 2008		

16) WAC 173-303-640(4)(c)(iv): Leaked waste or precipitation from secondary containment should be removed within 24 hours, or in as timely a manner as is possible.

In order to avoid the containment under the tank line being considered a hazardous waste storage tank, thereby subject to all hazardous waste storage tank requirements, remove all liquid/sludge from the dangerous waste accumulation tank secondary containment and treat or dispose of properly. The containment area must be kept clean and dry at all times to avoid tank requirements. Submit disposal records and photos.

Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-640(4)(c)(iv)	August 27, 2008		

Washington Department of Ecology
Hazardous Waste & Toxics Reduction Program
Compliance Report

Site: TC Systems **RCRA ID#: WAD 088 722 947**

Inspection Date:	August 19, 2008
Site Contacts:	Charles Souder
Phone:	(425) 258-4055 FAX: (425) 252-6855
E-mail:	ccsouder@hotmail.com
Site Location:	1032 W Marine View Dr Everett, WA
At This Site Since:	1993 NAICS#: 332813
Generator/Site Status:	LQG Electroplating, Plating, Polishing, etc.

Ecology
Lead Contact: Daylin Davidson Phone: (425) 649-7090 FAX: (425) 649-7218
E-mail: DayD461@ecy.wa.gov Other Representatives: Dave Misko
Report Date: September 2, 2008
Report By: Daylin Davidson

_____ _____
(Signed) (Date)

Facility Background:
TC Systems is located near the Everett Marina on West Marine View Drive. Employee numbers vary between twelve and twenty-two working the day shift five days a week. TC Systems supports the aviation (primarily Boeing) and boating industries by chemically treating and painting metal parts using their chemical line and paint booths. Waste water from the tank line is pre-treated to meet local discharge limits and discharged under a permit with the City of Everett. A limited amount of sand blasting is done here. TC Systems received Hazardous Waste Compliance inspections from the Department of Ecology in 1997, 1998, 2003, 2006, 2007, and July 2008.

Inspection Summary:
We arrived on site at 9:00 a.m. for a scheduled meeting with Charles Souder, the General Manager, and Robert Deatherage who has responsibility for hazardous waste management at the facility. We were also joined by Wendee Cook, the representative for General Environmental Management, Inc. (GEM) which is TC Systems hazardous waste vendor. We discussed the compliance history of TC Systems and informed Mr. Souder that Ecology would be issuing formal enforcement in the coming months, likely in the form of an Order and Penalty. Robert told us he had just conducted facility-wide training on proper waste drum management, particularly the requirement to keep the containers closed. He told us all employees are "level one" employees and he is a "level three". No one else at the facility is above a "level one" besides Robert.

Records Review
Robert provided weekly inspection logs for the last nine weeks. We reviewed the four manifests that were missing final copies during the last inspection and found two were still missing. Wendee offered to find those copies and fax them to Ecology.

Building C - Paint Booth
We went into Paint Booth # 4 and Robert showed us two drums used to accumulate mastic and other solid debris contaminated with chromium and paint cans. All containers were closed and labeled.

Building C - Hazardous Waste Accumulation Area (HWAA)
Totes of chromium-contaminated metal crushed cans, mastic and other solid debris were all labeled, dated, and had plywood covers. A tote of paint booth filters was properly labeled, dated, and closed via a double-

bagging system. Two drums of liquid and sludge had been pumped out of the secondary containment berm inside under the chem line. These were labeled, dated, and closed.

Robert showed us a spill kit and a fire extinguisher near this area. Spent fluorescent bulbs were all in labeled and dated boxes.

Building C "Mezzanine"
One satellite accumulation container on wheels, used to collect mastic waste was located in this area. It was properly labeled and closed.

Building C - Can crushing area
Robert told us that he brings the satellite accumulation drums from the rest of the facility to this area to sort the waste and crush the paint cans.

#4 of 8 10:00 a.m. Can compactor area	A total of four open, unlabeled drums of hazardous waste paint cans, mastic, and other chrome contaminated debris were brought here from satellite locations to be sorted, crushed, and/or repackaged before being moved to the HWAA.	

Back Parking Lot

#2 of 8 9:45 a.m. Back parking lot	Drum of unknown liquid with methanol label and flammable risk label. Holes had been punched in the top and on the side just above the first chime.	

Tank Area Between Buildings B and C

We went to the alley way between Buildings B and C where the sludge from the waste water treatment process is collected and batch processed in the filter press. The solids are hazardous waste due to TCLP metal content. From the filter press, the solids are dropped into a tray under the filter press and accumulated in a bulk solids container. The bulk solids container is on a skid pallet and stored under cover in a shed against Building C. We saw one sludge sack/tote in this area. The container was closed and had labels and an accumulation start date.

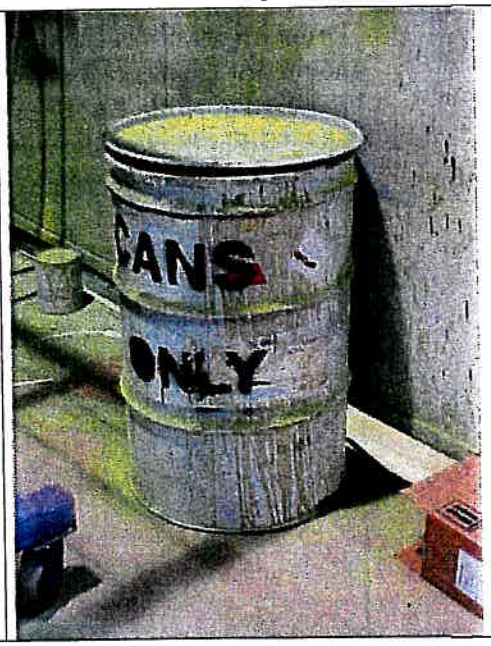
In this same alley, we saw a shed that was housing compressors. There was red/orange liquid on the ground shown in photo #2 below. We had observed the same problem on our previous inspection in November of 2007 and cited TC Systems for failure to take action to mitigate a spill of used oil. Mr. Charles Souder submitted a response to that violation on January 24, 2008 stating that "this compressor will remain out of service until repairs have been made to eliminate the leaking oil". Yet, we observed the same compressor exhibiting the same leak. It appears there were significant gaps in the floor surface in this area and leaked oil was migrating into the soil.

Building B - Chem Line

We passed the Chem Line on our way to the paint locker inside building B and noted all sludge we had previously seen had been removed from underneath the tanks.

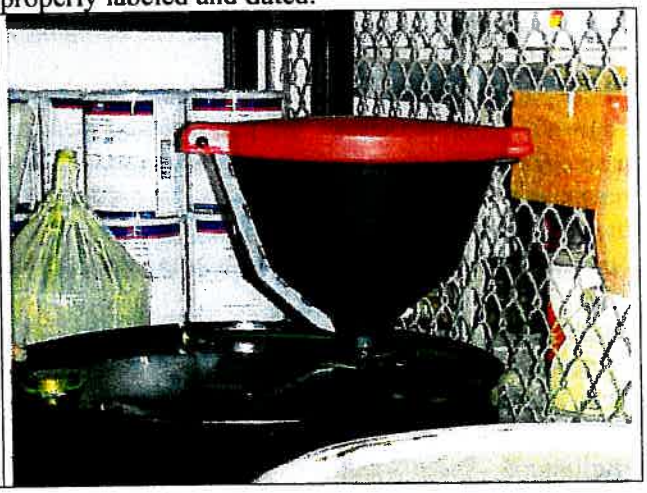
Building B - Paint Booth

Robert began scraping the contents of the buckets into the solid paint waste drum while we were there.

#5 of 8 10:15 a.m. Paint booth	Open drum of hazardous waste paint cans lacking labels.	

Building B - Paint Locker

The last place we visited was the paint locker room. There was a secondary containment pallet holding two 55-gallon drums. The 55-gallon drum on the left was for accumulating liquid waste paint and thinner from gun cleaning. It had a funnel in it but the funnel was not latched or spring-loaded (see photo #6 below). It was labeled and dated. The 55-gallon drum on the right was for accumulating paint solids from the paint pot bottoms. It was closed and was also properly labeled and dated.

#6 of 8 10:24 a.m. Paint Locker	Funnel for drum of paint waste does not have a latch.	

#7 of 8 10:25 a.m. Paint Locker	Accumulation of old paints, one of which was labeled "bad paint".	

Another full 55-gallon drum was stored near the door. It was properly labeled and dated as containing chromium contaminated floor sweepings, and the lid was secured.

We left the site at 10:45 a.m.

Additional Information

COMPLIANCE PROBLEMS

The following conditions identified during the inspection were not in compliance with Dangerous Waste and/or other environmental laws. Each problem is covered in three parts: (1) the **citation from the regulations**, (2) the specific observations from the inspection, and (3) the *corrective measures* needed to fix the problem and achieve compliance.

1) WAC 173-303-141(1): Illegal disposal of hazardous waste. **REPEAT VIOLATION**

- Spilled compressor oil (not being recycled) has been allowed to migrate into the soil and the nearby storm drain.

Immediately do not allow any more dangerous waste to evaporate or enter the soil or storm drain. Dangerous waste may only be sent to permitted hazardous waste treatment, storage, or disposal facilities.

2) WAC 173-303-515(6) and by reference 40 CFR Part 279.22(d): A used oil generator must respond to releases of used oil to the environment and perform the following cleanup steps: a) stop the release; b) contain the released used oil; c) clean up and manage properly the released used oil and other materials; and d) repair or replace any leaking used oil storage containers or tanks prior to returning them to service.
REPEAT VIOLATION

Oil that has spilled/leaked from the compressor that was STILL being used after Ecology was told it would not, was left puddled on the ground again in the compressor shed between Buildings B & C.

Ensure that any old releases of used oil and contaminated soil are cleaned up and properly managed. In case of oil releases in the future, immediately perform the cleanup steps listed. Submit photos showing the spilled oil in the compressor shed has been cleaned up as well as photos of the containers used to hold the clean up materials to be disposed of properly.

3) WAC 173-303-170(1) and by reference 070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes. **REPEAT VIOLATION**

The designation status has not been determined for the bucket of unknown material that had hardened in the former satellite area of Building C.

Provide to the Department documentation that designation of the solid wastes listed has occurred. This documentation shall include, but not be limited to, copies of the analytical results of designation testing and any contracts with testing laboratories.

4) WAC 173-303-200(1)(b) and by reference 630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste. **REPEAT VIOLATION**

The following containers were open during the inspection: the 5-gallon buckets of dirty solvent in the paint booths; the open funnel (and other bung) in the liquid paint waste drum in the paint locker; the 55-gallon drum of paint solids in the paint locker; the 5-gallon buckets of paint solids in the paint locker; the drum of floor sweepings in the paint locker; all cans and totes used to accumulate contaminated solid debris (mastic, sticks, gloves, and paint cans); the two drums of "rusty water" in the HWAA; the drum of soap sludge and the tote of sludge outside between buildings B & C.

Ensure that all containers holding dangerous waste are closed except when adding or removing waste per WAC 173-303-630(5). Submit photos of all the containers listed above to demonstrate compliance with this item. (Multiple resources for finding appropriate/practical lid options were e-mailed to Robert and Mr. Souder on July 14, 2008.)

5) WAC 173-303-200(1)(d) as referenced by 170(2): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste. **REPEAT VIOLATION**

Numerous containers of dangerous waste were lacking proper labeling. These include: Buckets of paint/solvent waste in the paint booths (one was labeled as "filter cake"; one can of mastic waste in Paint Booth #4; box of paint booth filters in HWAA; two totes and three bags of mastic debris in the HWAA; two drums of "rusty water" in the HWAA; and two buckets of paint solids in the paint locker. Additionally, the box of sludge between Buildings B & C was labeled and the drum in the mezzanine for mastic waste was labeled, but these labels were not visible.

Adequately label all drums containing dangerous waste in accordance with WAC 173-303-200(1)(d). Submit photos of all the containers listed above to demonstrate compliance with this item.

6) WAC 173-303-200(1)(c) as referenced by 170(2): Failure to mark each container with the accumulation start date. **REPEAT VIOLATION**

Numerous containers of dangerous waste were lacking start dates. These include: two totes of mastic/solid debris in the HWAA; two bags of mastic/solid debris in the HWAA; one box of paint booth filters in the HWAA; two drums of "rusty water" in the HWAA; one drum of soap sludge in the filter cake shed between building B & C; and two buckets of paint waste in the paint locker.

Ensure that the accumulation start date is clearly written on all containers holding dangerous wastes, excluding satellite containers. Submit photos to demonstrate compliance with this item.

10) WAC 173-303-200(1)(e) and by reference 320(1): General facility inspections were not conducted. REPEAT VIOLATION

Records of general facility inspections were not provided.

Within 30 calendar days of receipt of this letter, plan, conduct, and document a general facility inspection. Submit a copy of the plan and log sheet. Determine the appropriate interval for future inspections and inform Ecology of this interval. Inspections must be frequent enough to identify and correct problems before they harm human health or the environment.

11) WAC 173-303-170(2) and by reference 060(5) and 220(1): A Dangerous Waste Annual Report was not submitted to Ecology according to the Instructions on the form. REPEAT VIOLATION

The facility's generator status was revised in January of 2008 for 2007 and 2006 on their Site Identification Form to indicate that they were a medium quantity generator, though they were an LQG.

Submit to the Department a revised Dangerous Waste Annual Report for the year(s):2006 & 2007 to revise generator status back to LQG. This can be done online via Turbowaste.net.

12) WAC 173-303-200(1)(e) and by reference 350(3): An adequate contingency plan was not maintained or available. REPEAT VIOLATION

Robert and Les both acknowledged that the contingency plan had not been updated to reflect the changes from the previous hazardous waste manager to Robert as the emergency coordinator and point of contact.

Amend the current contingency plan or spill prevention control and countermeasures (SPCC) plan to update it with the most current and accurate information to comply with WAC 173-303-350 and WAC 173-303-360. Submit a copy of the amendments.

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Four manifests were missing the final signed copies: #001368741; 001368742; 001368825; and 001368983.

Obtain copies of manifests listed above for shipments of wastes from your facility. Implement procedures to ensure that copies of the signed manifests are kept on-site for the required five years. Submit copies of the listed manifests to Ecology.

15) WAC 173-303-802(5): Failure to comply with permit by rule requirements for totally enclosed facility, elementary neutralization or waste water treatment units.

- Volume of secondary containment for waste treatment system tanks in not adequate to hold 100% of the largest tank or 10% of the total volume.
- Treatment system and secondary containment system is not totally enclosed – only partially covered, allowing rainwater to compromise system.
- Tanks have not been integrity tested or certified by an engineer.
- Daily tank inspections are not being conducted or logged.
- Secondary containment berm is not sealed.
- Secondary containment system has not been maintained, and has already failed in several places.

In order to avoid revocation of Permit by Rule, you must comply with permit by rule requirements by correcting all of the deficiencies noted above. A schedule for accomplishing these corrections may be submitted by the due date for this report providing a timeline for corrections, subject to approval by Ecology.

COMPLIANCE CERTIFICATE

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Compliance Item	Corrective Measures Deadline	Date Completed	Initials
WAC 173-303-			

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Washington Department of Ecology
Hazardous Waste & Toxics Reduction Program
Compliance Report

DEPARTMENT OF ECOLOGY
NORTHWEST REGIONAL OFFICE
HAZARDOUS WASTE AND TOXICS REDUCTION PROGRAM

Date: March 25, 2009

To: Julie Sellick, Section Supervisor

Through: Dave Misko, Unit Supervisor

From: Daylin Davidson, Hazardous Waste Compliance Inspector

Subject: Recommendation for Enforcement for TC Systems
1032 W Marine View Dr, Everett 98201 (WAD 088 722 947)

SUMMARY

TC Systems has received six inspections from Ecology's Hazardous Waste and Toxics Reduction Program over the course of the last eleven years, during which a total of fifty-nine violations were cited. Inspectors have repeatedly observed many of the same violations of the Dangerous Waste Regulations. Inadequate performance of regulatory responsibilities at TC Systems directly led to violations for illegal disposal, failure to designate, and numerous repeat violations for improper waste management.

BACKGROUND

TC Systems provides metal cleaning, non-destructive testing, electroplating, etching, and coloring services to support the aviation and boating industries. Waste water from the tank line is pre-treated on-site and discharged under their local discharge permit.

TC Systems first established an EPA/state ID# for the generation and handling of hazardous waste in 1986 pursuant to RCRA requirements. The facility has reported as a Large Quantity Generator (LQG) of dangerous waste for all years except 2003 and 2004, when it self-reported as a Medium Quantity Generator (MQG). In 2005, the facility reported as an LQG. In 2007, TC Systems revised its generator status for 2006 and 2007 from LQG to MQG, which was incorrect based on a review of manifests during the 2006 and 2007 inspections which clearly showed the facility to be an LQG for both years.

TC Systems has an Industrial Pretreatment Discharge Permit with the City of Everett Public Works and has received over a dozen Notices of Violation from the City over the last 11 years.

The facility received the following visits by Ecology under the authority of Chapter 173-303 WAC and Chapter 70.105 RCW:

- On March 20, 1997 Ecology inspected TC Systems and found eleven violations of state dangerous waste regulations. (See Table 1 on page 2.) The due date for correction of these violations was May 9, 1997. The facility returned to compliance on May 26, 1997 by submitting the required compliance certificate.
- Twelve months later on June 2, 1998 Ecology inspected TC Systems as follow up to the 1997 inspection and determined that "while TC Systems has made progress in addressing regulatory compliance, especially regarding paperwork and record keeping, we have concerns

about the commitment of facility management to proper dangerous waste management." (Cover letter for 6/2/98 inspection report by Elliott Zimmermann.) Six violations were found during this inspection. The facility returned to compliance by the due date by submitting the required compliance certificate and other requested documentation.

- On August 6, 1998 Ecology inspected TC Systems to follow up on the June 2, 1998 inspection and found the facility had completed all the required actions as stated in their compliance certificate.
- On May 13, 2003 Ecology inspected TC Systems again and found seven violations of state dangerous waste regulations. The facility returned to compliance by the due date by submitting the required compliance certificate and other requested documentation.
- On August 8, 2006 Ecology inspected TC Systems again and found eight violations of state dangerous waste regulations. The due date for correction of these violations was November 30, 2006. *There are no records to show that TC Systems submitted any "return to compliance" documentation or responded in any way to that inspection report.*
- On November 6, 2007 Ecology inspected TC Systems again and found fifteen violations of state dangerous waste regulations. (See Appendix A Photolog.) The original compliance due date was January 28, 2008. After several extensions to April 30th, 2008, the facility submitted all requested items to demonstrate compliance.
- On July 8, 2008, Ecology inspected TC Systems again and found twelve repeat violations. (See Appendix B Photolog.) The original compliance due date was August 27, 2008. An extension was requested and granted to September 15, 2008. On September 16th, the facility submitted an incomplete return-to-compliance packet, and did not resolve the four remaining violations.

TC Systems has exhibited an eleven-year history of repeat violations of Washington's Dangerous Waste Regulations, Chapter 173-303 WAC. Table 1 shows the violations for each inspection:

	TABLE 1	1997	1998	2003	2006	2007	2008
	Environmental Coordinator	Robert Howard	Lisa Patterson	Mike Farnham	Guy Donaldson	Tim Webster	Robert Deatherage
1	141(1): Illegal disposal (& oil spill)					X	X
2	070(3): Designation		X			X	X
3	630(5)(a): Closed Container	X	X	X	X	X	X
4	630(3): Labeling Containers	X	X	X	X	X	X
5	200(1)(c): Start Dates on Containers	X	X	X	X	X	X
6	330: Training Plans/Records	X		X	X	X	X
	320(1): General Facility Inspections	X				X	X
	350(2): Contingency Plan	X			X	X	X
	630(6): Weekly Inspections	X		X	X	X	
	200(2)(a): Satellite Accumulation Standards	X	X	X	X	X	X
	630(7): Secondary Containment	X			X	X	
	170(3): Accumulation Time Limits			X			
	210(1): Proper Manifest recordkeeping		X				X
	220(1): Annual Reporting issues	X				X	X
	630(5)(c): Adequate Aisle Space	X					
	515(6): Used Oil container management					X	
	522(2)(a): Spent Antifreeze container mgmnt					X	
	573(9) & (10): Universal Waste management					X	X

FINDINGS

The following findings are based on the information provided to Ecology by the Environmental Coordinators and employees during the dangerous waste inspections conducted on November 6, 2007 *(2007)* and July 8, 2008 *(2008)*.

Designated Wastes	Process	Source of information	Assigned Codes
Filter press sludge	Waste water treatment	Manifests & Facility Contact	D007
Soap sludge	Waste water treatment	Facility Contact	D007
Berm Cleanout Sludge	Waste water treatment	Facility Contact	D007
Paint/Solvent liquids & sludges	Painting/coating/cleanup	Manifests & Facility Contact	D001, D007, D008, F003, F005
Paint booth filters	Air filtration during painting	Manifests & Facility Contact	D007
Solid Paint debris	Floor sweeping & paint booth cleanout	Manifests & Facility Contact	D007
Mastic, gloves, filters	Painting/coating/cleanup	Facility Contact	D007

Numerous violations of Chapter 173-303 WAC and Chapter 70.105 RCW occurred. However, we have chosen only to pursue formal enforcement for the following violations because the first three are high priority indicator violations, the fourth and fifth are repeats of minor violations, and the sixth is the foundation upon which the other violations occurred:

1) WAC 173-303-141(1): Illegal disposal of dangerous waste.

- Spilled compressor oil (not being recycled) has been allowed to migrate into the soil and the nearby storm drain. The spill residue was disposed of as used oil per the definition in WAC 173-303-515. *(2007 & 2008)*
- Paint wastes containing acetone & methyl ethyl ketone (MEK) solvents have been routinely allowed to evaporate. *(2008)*

2) WAC 173-303-070(3): Wastes have not been designated to determine if they are dangerous wastes or extremely hazardous wastes.

- The designation status had not been determined for the drum of "blasting dust" in satellite area of Building B: the paint contaminated tape, gloves, filters, and other debris in the trash can in the paint locker; the cart full of expired materials in the paint locker; the white drum that is ¼ full, possibly of diesel fuel, outside behind the buildings; and the blue drum and blue bucket outside Building C. *(2007)*

- The designation status has not been determined for the bucket of unknown material that had hardened in the former satellite area of Building C. *(2008)*

The facility subsequently determined through testing that only the paint contaminated debris designated as dangerous waste for Chromium (D007). None of the other wastes designated as dangerous wastes.

3) WAC 173-303-630(5)(a): Containers of dangerous waste must be kept closed except when actively adding or removing waste.

- Containers of dangerous waste paint wastes in the paint booths and paint storage room were not kept closed. *(2007,2008)*
- Cans and totes used to accumulate previously designated dangerous waste (mastic, sticks, gloves, and paint cans); the two drums of berm cleanout sludge declared to be dangerous waste by Environmental Coordinator Robert Deatherage; the drum of soap sludge declared to be dangerous waste by Les Deatherage; and the tote of sludge designated as dangerous waste outside between buildings B & C were not kept closed. *(2008)*

4) WAC 173-303-630(3): Containers of dangerous waste were not identified with the words "Hazardous Waste" or "Dangerous Waste" and/or the major risk(s) associated with the waste.

Numerous containers of dangerous waste throughout the facility were lacking proper labeling or labels were not visible. These include: buckets of paint/solvent waste in the paint booths; bagged paint booth filters; all three 55-gallon drums of paint waste (and floor sweepings) in the paint locker; all the buckets of paint solids in the paint locker; and the box of sludge between Buildings B & C. *(2007)*

One can of mastic waste in Paint Booth #4; box of paint booth filters in Hazardous Waste Accumulation Area (HWAA); two totes and three bags of mastic debris in the HWAA; two drums of berm cleanout sludge in the HWAA; and two buckets of paint solids in the paint locker. Additionally, the box of sludge between Buildings B & C was labeled and the drum in the mezzanine for mastic waste was labeled, but these labels were not visible. *(2008)*

5) WAC 173-303-200(1)(c): Failure to mark each container with the accumulation start date.

Numerous containers of dangerous waste throughout the facility were lacking start dates. These include: bagged paint booth filters; all three 55-gallon drums of paint waste (and floor sweepings) in the paint locker; all the buckets of paint solids in the paint locker; one drum of liquid paint wastes in the "Satellite Area" in Building B; and the box of sludge between Buildings B & C. *(2007)*

Two totes of mastic/solid debris in the HWAA; two bags of mastic/solid debris in the HWAA; one box of paint booth filters in the HWAA; two drums of berm cleanout sludge in the HWAA; one drum of soap sludge in the filter cake shed between building B & C; and two buckets of paint waste in the paint locker. *(2008)*

6) WAC 173-303-330: Training requirements were not met. The facility should have a training program, a written training plan, and keep training records.

No training program was available for this facility. (A plan was subsequently created.) *(2007)*

The training plan had not been implemented and training records (other than one certificate for Robert Deatherage) were not provided to Ecology. Mr. Deatherage told Ecology that TC Systems had not been keeping up with this requirement. *(2008)*

RECOMMENDATION FOR ORDER

TC Systems is a Significant Non-Complier (SNC) as defined by the Hazardous Waste & Toxics Reduction Program's "Compliance Assurance Policy." The definition of a SNC is:

> "a facility which has caused actual exposure or a substantial likelihood of exposure to hazardous waste or hazardous waste constituents; is a chronic or recalcitrant violator; or deviates substantially from the terms of a permit, order, agreement or from RCRA statutory or regulatory requirements."

Inadequate performance of regulatory responsibilities at TC Systems directly led to violations for illegal disposal, failure to designate, and numerous repeat violations for improper waste management. These actions deviate substantially from regulatory requirements.

It appears employee turnover in the position of Environmental Coordinator has hindered training and compliance. TC Systems has not addressed turnover adequately to ensure continued compliance.

The Hazardous Waste Management Act is intended to establish safe and responsible hazardous waste management to prevent adverse effects on the environment and to protect public health and safety. Pursuant to RCW 70.105.095, Ecology may issue an order requiring compliance with the provisions of RCW 70.105 when the department determines that a person has violated or is about to violate any provision of RCW 70.105. Pursuant to this authority, Ecology recommends issuing an Administrative Order to TC Systems. The goals of this Administrative Order are to require TC Systems to:

- Reduce immediate risk to human health and the environment by properly managing and disposing of dangerous waste.
- Make management responsible for bridging the gap of turnover with timely training and expedient hiring and replacement.

- Train employees in proper waste management procedures.
- Demonstrate over time that employees remain vigilant and well-trained regarding dangerous waste management as demonstrated by showing that dangerous wastes are properly managed at TC Systems to prevent future repeat violations.

In order to achieve these goals, the Order requires that TC Systems complete the following actions within the time frame indicated, and items 1A & C must be completed again whenever there is turnover in the Environmental Coordinator position, which must remain filled at all times:

1) Training Program
   A. Within 30 days of the date of the Order, TC Systems must identify an employee to be responsible for dangerous waste management and training (Environmental Coordinator) at TC Systems. Within 35 days of the date of the Order, submit notice and contact information for the identified employee to Ecology.
   B. Within 45 days of the date of the Order, TC Systems must hire an outside contractor to provide all employees and managers with site specific hazardous waste management training, on-site and the course content and attendance sheet must be submitted to Ecology
   C. Within 60 days of the date of the Order, the Environmental Coordinator must attend the McCoy and Associates RCRA training seminar or an equivalent training approved by Ecology. Within 75 days of the date of the Order, a copy of the certificate of completion must be sent to Ecology.
   D. Within 90 days of the date of the Order, the following plan, including course content, must be submitted to Ecology, subject to approval by Ecology: TC Systems must create a site specific training plan (or revise any existing plan) for all employees and managers at TC Systems to cover initial training on standard operating procedures for all of the following topics: proper chemical storage, disposal of all dangerous wastes, spill response, treatment by generator, dangerous waste determinations, storage of compatibles, dangerous waste container management (labeling, dating, closing containers), universal waste management, secondary containment, and storage of flammables. Within 10 days of the date of approval notice from Ecology, the approved plan must be implemented and initial training conducted.
   E. Beginning 20 days from the date of plan approval notice from Ecology and for a period of fifteen months from the date of this Order, TC Systems must conduct monthly refresher training on hazardous waste management to all employees and provide training records to Ecology by the 1st of each month.

2) Monitoring
   A. Beginning within 45 days of the date of the Order to continue until the same end date as the monthly training records (1E above), TC Systems must submit copies of weekly inspection logs to Ecology by the 1st of every month.
   B. Beginning within 45 days of the date of the Order to continue until the same end date as the monthly training records (1E above), TC Systems must conduct and log general facility inspections at least monthly and submit copies of the logs to Ecology by the 1st of every month.

3) Revise and Submit Dangerous Waste Annual Reports

Within 15 days of the date of the Order, submit to the Department a revised Dangerous Waste Annual Report for the year 2007 to correct generator status from MQG to LQG and file the 2008 report (with LQG generator status). Call the Annual Reporting Hotline at 1-800-874-2022 for assistance in completing this action correctly.

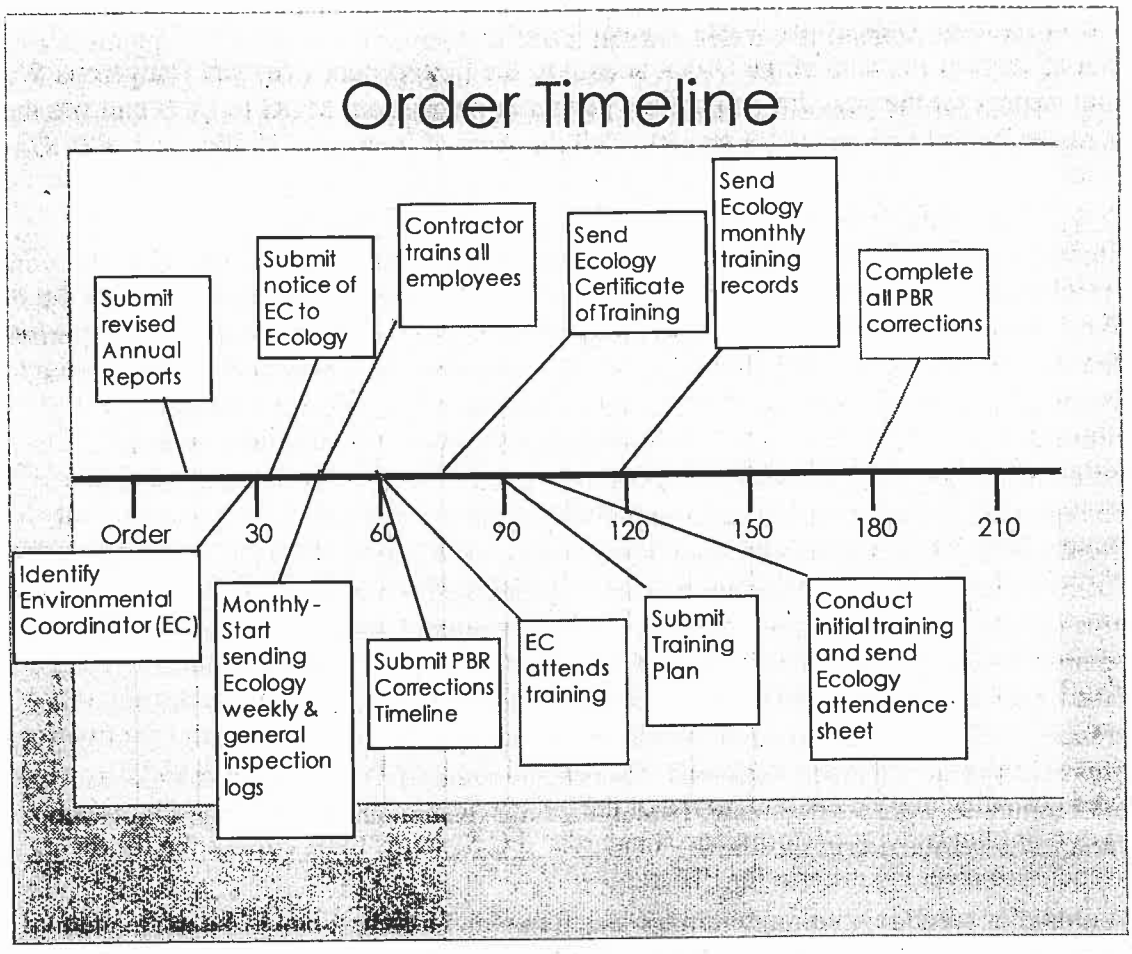
4) Waste Water Treatment System Requirements to Utilize Permit-by-Rule

TC Systems has the option to operate their wastewater treatment system under permit by rule (PBR) if all of the conditions found in WAC 173-303-802 are met. This allowance lets the facility treat dangerous waste without being required to submit an application for a dangerous waste facility permit. However, if these conditions are not met, TC Systems is subject to violations and subsequent penalties for treating dangerous waste without a permit. Conditions include WAC 173-303-283 (Performance Standards) requirements that all generators must design, construct, operate, and/or maintain the facility in a manner that prevents degradation of groundwater, surface water, and/or air quality.

TC Systems did not comply with the standards found in WAC 173-303-283(3)(c) or with the City of Everett Public Works Department Waste Discharge Permit No.7708-04 VI(B) – which requires in part, that process tanks shall be located in a bermed, roofed, secured area capable of containing 110 percent of the volume of the largest tank. TC System's tanks are only partially covered with a roof, and have inadequate containment. Therefore, the facility does not currently meet the criteria to qualify for PBR because: 1) WAC 173-303-802(5)(a)(iii) requires compliance with the conditions of the permit; and 2) WAC 173-303-802(5)(a)(iv)(C) requires compliance with performance standards. TC Systems must correct the following deficiencies to meet the criteria for PBR:

A. Volume of secondary containment for waste treatment system tanks is not adequate to hold 110% of the largest tank or 10% of the total volume;
B. Treatment system and secondary containment system is not totally enclosed – only partially covered, allowing rainwater to compromise system and reduce available containment volume;
C. Tanks have not been integrity tested or certified by an engineer;
D. Daily tank inspections are not being conducted or logged;
E. Secondary containment berm is not sealed; and
F. Secondary containment system has not been maintained, and has already failed in several places.

Within 60 days of the date of the Order, TC Systems must submit a timeline for resolving the problems listed above, subject to approval by Ecology. In order to avoid the requirement to submit an application for a dangerous waste facility permit; and to address violations for past treatment without a permit, TC Systems must comply with PBR requirements by correcting all of the deficiencies noted above within 180 days of the date of the Order.



RECOMMENDATION FOR PENALTY

Definition of Violation Types

Major violations are those that pose imminent threat to human health or the environment, actions that deviate significantly from the requirements of a regulation or are recurrent. These can be assessed in the $6,000 to $10,000 range.
Moderate violations are those that have the potential for threat to human health or the environment, actions that present some deviation from the regulatory requirements or repetition of minor violations. These can be assessed in the $3,000 to $6,000 range.
Minor violations are of an administrative nature and have little or no potential to impact human health or the environment or actions that deviate somewhat from the regulations but most or all of the important aspects are being met. These can be assessed in the $500-$3,000 range.

Most of the recommended penalty amounts were calculated at the lower end of these respective ranges and all are based on only one count per violation. We are recommending a penalty of **$24,000** be issued for the following violations:

1. For violation of WAC 173-303-141(1), Illegal Disposal, a penalty of $6,000 is recommended. This violation is determined to be a major violation because it posed potential or actual harm to the environment and was a repeat violation.

2. For violation of WAC 173-303-070(3), Waste Designation, a penalty of $5,000 is recommended. This violation is determined to be a moderate violation because it posed potential harm to the environment because undesignated liquids were stored outside near a storm drain, and was a repeat violation.
3. For violation of WAC 173-303-630(5)(a), Open Containers, a penalty of $3,000 is recommended. This violation is determined to be a moderate violation because it posed potential worker exposure and was a repeat violation.
4. For violation of WAC 173-303-630(3), Container Labeling, a penalty of $3,000 is recommended. This violation is determined to be a moderate violation because it is a repeat of minor violation.
5. For violation of WAC 173-303-200(1)(c), Container Start Date, a penalty of $1,000 is recommended. This violation is determined to be a minor violation because it did not pose a threat to human health or the environment but was a repeat of a minor violation.
6. For violation of WAC 173-303-330, Training Requirements, a penalty of $6,000 is recommended. This violation is determined to be a moderate violation because it is the foundation upon which subsequent violations occurred, and is a repeat of a minor violation.

PENALTY DETERMINATION

Violation #	Violation	Recommended Penalty	Instances of violation	Maximum Penalty
1	WAC 173-303-141(1)	$6,000	4	$24,000
2	WAC 173-303-070(3)	$5,000	7	$35,000
3	WAC 173-303-630(5)(a)	$3,000	8	$24,000
4	WAC 173-303-630(3)	$3,000	2	$6,000
5	WAC 173-303-200(1)(c)	$1,000	2	$2,000
6	WAC 173-303-330	$6,000	6	$36,000
	Total	$24,000		$127,000

The discretionary factors considered in calculating this penalty amount are explained in Table 2. Please see the attached Appendix C titled "Benefits of Non-Compliance" for a breakdown of the cost savings realized by TC Systems due to their lack of proper waste management.

Table 2

Discretionary Factor	Inspector Evaluation	Effect on Penalty
Degree of Threat to Human Health and the Environment	TC Systems left unknown liquids outside, near storm drains, allowed used oil to enter the storm drain, and put chromium contaminated tape, gloves, filters, and other debris into the landfill. Actual harm cannot be confirmed.	No change
History of Compliance	TC Systems has an eleven year history of recalcitrant behavior.	Raise
Impact on Regulated Community	TC Systems is in the plating industry and this penalty is likely to serve as an example for other facilities in this industry. This penalty amount is sufficient for this purpose.	No change
Small Business Incentives	This company employs fewer than 50 people and is considered a small business. The criteria for reducing a penalty against a small business are: no previous enforcement; no actual harm; corrective action taken; does not involve criminal conduct. TC Systems meets the criteria.	Lower
Public Entity	This company is not a public entity.	None
Economic Benefit	Calculated at: $16,761 See Appendix B titled "Benefits of Non-Compliance."	Threshold to be collected per USEPA guidance

APPENDIX L

CORRECTIVE ACTION REPORT

BY MR. DAVID JOHNSON, P.E., MAY 29, 1998

Corrective Action Report

prepared by

David T. Johnson, P.E.

for

TC Systems
1028 W. Marine View Drive
Everett, WA 98201
City of Everett Permit No. 7708-94

for submittal to

City of Everett
Public Works Department
3200 Cedar Street
Everett, WA 98201

May 29, 1998

David T. Johnson Engineering
Chemical Engineering - Manufacturing Processes - Water Treatment - Waste Processing - Materials of Construction

May 29, 1998

Clair Olivers, P. E.
Director of Public Works
City of Everett
3200 Cedar Street
Everett, WA 98201

Dear Mr. Olivers:

TC Systems has received Mr. Don McKinney's letter dated April 28, 1998 regarding the proposed compliance schedule for preparation of a Corrective Action Report or an Engineering Report. TC Systems has requested that I perform a survey their pretreatment facilities in accordance with the process outlined in TC Systems April 14, 1998 letter.

Please find enclosed a Corrective Action Report which addresses the issues described in your letter of March 27, 1998 and Mr. Don McKinney's letter of April 28, 1998. Please call me at the number below if you have any questions.

Sincerely,

David T. Johnson, P.E.

cc: D. Miracle (TC Systems)
D. McKinney (City of Everett)
B. Britten (City of Everett)

14966 NE 31st Circle, Redmond, WA 98052
Tel: (425) 883-6043 Fax: (425) 556-9547 E-Mail: djohnson@isomedia.com

Corrective Action Report

prepared by

David T. Johnson, P.E.

for

TC Systems
1028 W. Marine View Drive
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Everett, WA 98201

May 29, 1998

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1.0 BACKGROUND

TC Systems operates a metal surface treatment facility at 1028 W. marine View Drive in Everett, Washington. The processes used by TC Systems at this facility produce wastewater that is discharged the City of Everett under Industrial Waste Discharge Permit No. 7708-94. This permit establishes wastewater discharge limits for a number of parameters that potentially could be present in TC Systems wastewater. Wastewater discharged by TC Systems exceeded the parameter established by the City for zinc during the months of December, 1997 and January, 1998. As a result, in a letter dated March 27, 1998, the City required TC Systems to submit an Engineering Report and a revised Operations and Maintenance Manual for modifications to be made to TC System's wastewater pretreatment facilities to comply with the City's effluent discharge limits.

To comply with this requirement, TC Systems sent a letter to the City on April 14, 1998 which stated its intent to obtain the services of a licensed engineer to survey its pretreatment system. This engineer was to determine if modifications to TC Systems pretreatment facilities are required to comply with the City's permit requirements. If modifications are required, the engineer would prepare an engineering report meeting the requirements of WAC 173-240 for review by the City and the Washington State Department of Ecology. If the engineer determined that operational changes alone could achieve compliance, the engineer would instead prepare a Corrective Action Report to be submitted to the City on May 29, 1998.

In compliance with this process, TC Systems obtained the services of David T. Johnson Engineering (DTJE) whose principal engineer is David T. Johnson P.E., an independent chemical engineer licensed in the State of Washington. DTJE has performed the required survey of TC System's pretreatment facilities and has prepared this report in accordance with the procedure described above.

2.0 SURVEY OF PROBLEMS

A survey was performed by DTJE of the industrial wastewater pretreatment facilities operated by TC Systems at 1028 W. Marine View Drive in Everett, Washington. As a part of this survey, visits were made to the site to obtain information regarding the facilities, observe operations, take photographs, meet with treatment system operators, gather operational data, and other such information as was needed to identify the

sources of wastewater, wastewater characterization, treatment processes used, and methods of operation.

2.1 Process Description

TC Systems operates a total of 17 process tanks which are used to perform up to six chemical surface treatment processes on a variety of fabricated metal parts. Most of these metal parts are composed of aluminum alloys. The attached Figure 1 shows these 17 tanks in the sequential order that they exist at TC Systems. These 17 tanks are used for the six processes as described below.

2.1.1 Alkaline Cleaning

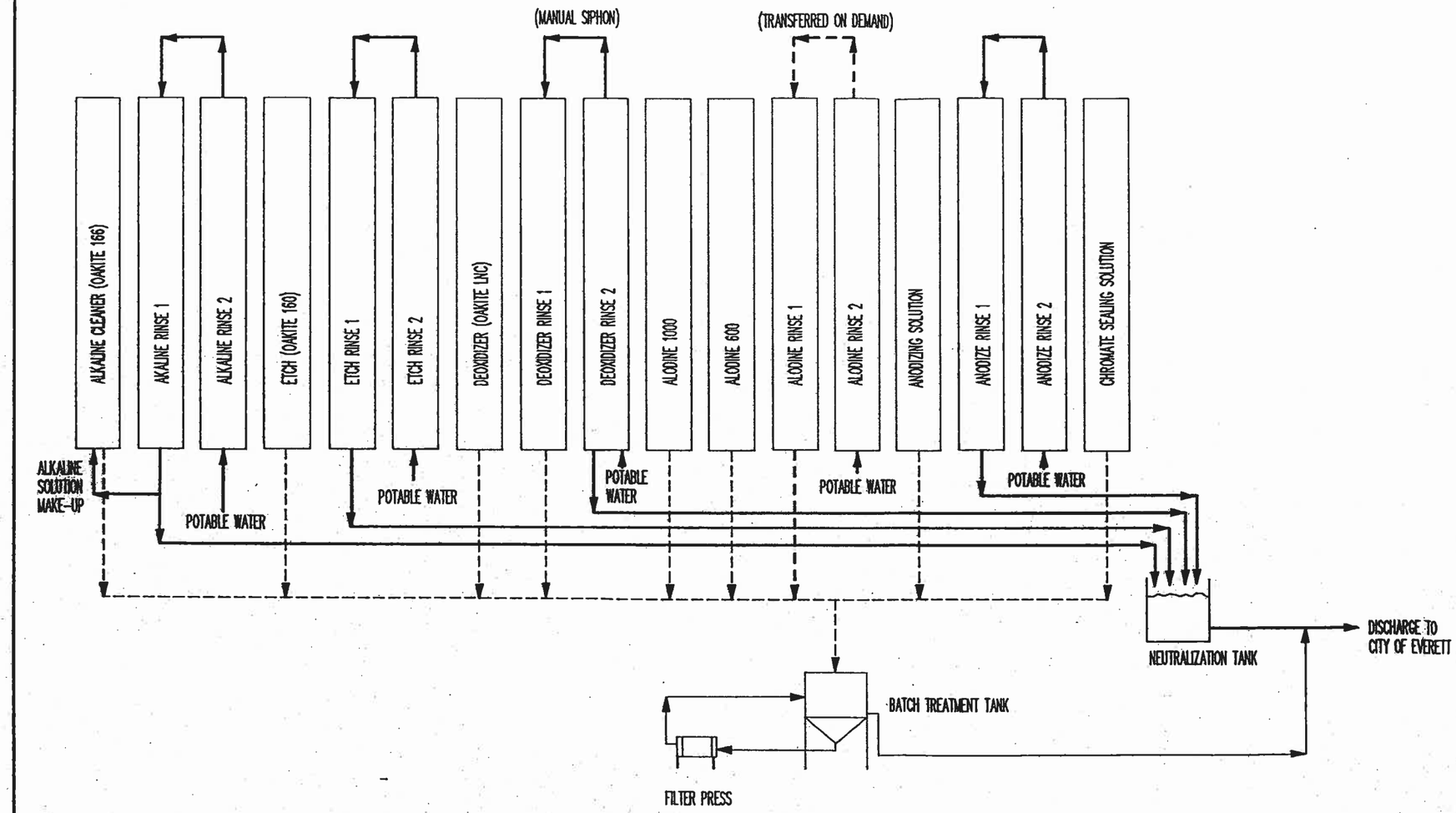
An alkaline cleaning solution is used in the Alkaline Cleaner Tank to remove soils such as inks, light oil, grease and grime residues left on metal parts from previous manufacturing steps without removing the underlying metal substrate. TC systems is presently using a solution of "Oakite 166" to perform the alkaline cleaning process. Following immersion in the alkaline cleaning tank, the cleaned parts are sequentially rinsed in Alkaline Rinse Tank 1 and then Alkaline Rinse Tank 2 to remove residual cleaning solution from the metal surfaces. To comply with specifications for aircraft parts, the cleaning solution is prepared at a concentration of 5 - 8 oz Oakite 166 powder per gallon of water.

2.1.2 Chemical Etching

The fourth in the tank sequence is the Etch Tank. The etching solution consists of "Oakite 160" added at a concentration of 3-5 oz per gallon along with nitric acid added at a concentration of 25-43 grams per liter. The etching solution both etches and cleans the aluminum surface preparatory to subsequent surface treatment. Following immersion in the Etch Tank, the etched parts are sequentially rinsed in Etch Rinse Tank 1 and then Etch Rinse Tank 2 to remove any etching solution from the metal surfaces.

2.1.3 Deoxidizer Treatment

In this step, a deoxidizing solution is used to remove oxides, smut, mill scale, and discoloration from aluminum and aluminum alloys. Deoxidization is required prior to chromate conversion coating to remove aluminum oxide from the metal surface. The deoxidizer solution consists of "Oakite Deoxidizer LNC" prepared in solution at a diluted concentration of 15 vol% Oakite LNC liquid. Nitric acid is added at a concentration of 25-43 grams per liter of solution. Following immersion in the



WASTE PROCESSING FLOW DIAGRAM

TC SYSTEMS
1028 W. MARINE VIEW DRIVE
EVERETT, WASHINGTON 98201
(425) 258-4055

David T. Johnson Engineering
Chemical Engineering – Water Treatment – Waste Processing
14966 NE 31st Circle
Redmond, WA 98052
TEL: (425) 883-6043
FAX: (425) 556-9547

Deoxidizer Tank, the etched parts are sequentially rinsed in Deoxidizer Rinse Tank 1 and then Deoxidizer Rinse Tank 2 to remove any deoxidizer solution from the metal surfaces.

2.1.4 Chromate Conversion Coating

In this step, products containing chromic acid are used to provide a chromate conversion coating to the surface of aluminum and aluminum alloy parts. TC Systems uses two commercial products for performing this coating process, "Alodine 600" and "Alodine 1000." The Alodine 1000 is used at a concentration of 0.14-0.18 oz powder per gallon and imparts a clear coating. The Alodine 600 is used at a concentration of 1.3-3.0 oz/gallon and imparts a colored coating. The Alodine 600 tank is used predominantly. Following immersion in either of the Alodine Tanks, the coated parts are sequentially rinsed in Alodine Rinse Tank 1 and then Alodine Rinse Tank 2 to remove any Alodine solution from the metal surfaces.

2.1.5 Boric/Sulfuric Anodizing

Anodizing is an electrochemical process used to increase the thickness of the natural aluminum oxide on the surface of aluminum and aluminum alloy parts. During anodizing, the aluminum parts become the anode of an electrochemical cell during which time the oxide film increases in thickness as a result of an applied external DC current. The anodizing solution consists of a mixture of sulfuric acid liquid at a concentration of 30.5-52.0 grams per liter and boric acid powder at a concentration of 5.2-10.7 grams per liter. Following immersion in the Anodizing Tank, the anodized parts are sequentially rinsed in Anodizing Rinse Tank 1 and then Anodizing Rinse Tank 2 to remove any residual Anodizing solution from the metal surfaces.

2.1.6 Chromate Sealing

The Chromate Sealing Tank is the 17th tank in the tankline and contains a dilute chromic acid solution at a concentration of 50 - 150 parts per million.

2.2 Wastewater Sources

Two types of process wastes are produced during operation of the six processes described above, dilute rinsewater and batch treatment wastes.

2.2.1 Dilute Rinsewater

Dilute rinsewater is produced from Alkaline Rinse Tank 1, Etch Rinse Tank 1, Deoxidizer Rinse Tank 2, and Anodizing Rinse Tank 1. These four rinsewater streams are routed to the neutralization tank where pH neutralization occurs prior to their discharge. The rinsewater discharge flows through a V-notch weir. An ultrasonic level meter is installed above the weir to measure the height of liquid in the weir and provide a flow measure of the discharge.

2.2.2 Batch Treatment Wastes

Wastes from the Alodine Rinse Tanks, the Alkaline Cleaning Tank, the Etch Tank, the Deoxidizer Tank, the Alodine Tanks, the Anodizing Tank, and the Chromate Sealing Tank are segregated and treated in a batch treatment process as shown on Figure 1.

The batch treatment process uses a conventional treatment process to these wastes. To begin treatment, the operator transfers the waste stream to the batch treatment tank. The batch treatment tank is a 2600 gallon polyethylene conical bottom tank with a vertical axial-flow agitator to provide mixing during treatment. Prior to beginning this treatment, the operator performs a simple colorimetric test to determine the presence and concentration of hexavalent chromium (chromic acid) present in the waste. If hexavalent chromium is found to be present, the pH is reduced to approximately 2 by adding dilute sulfuric acid, if necessary. Sodium metabisulfite solution is then added to chemically reduce hexavalent chromium to trivalent chromium. After this reduction is complete, the pH is increased to approximately 6.5 and a proprietary coagulant and a flocculating polymer agent are added. After a prescribed length of time, 25% sodium hydroxide is added to increase the pH to approximately 8 and an additional flocculating agent is added. At this point, the addition of reagents is complete and mixing continues until the reagents have been properly mixed. After mixing is complete, the mixer is turned off and the precipitated metal hydroxide solids in the tank are allowed to settle to the bottom of the tank cone. After settling is complete, the settled solids are visually decanted from the bottom of the tank and transferred to the filter press feed tank. The supernatant treated water is sampled and tested for compliance with effluent discharge parameters prior to being discharged.

2.3 Compliance Problems

Treated water produced from the batch treatment process has not exceeded the effluent limits established in TC Systems Industrial Waste Discharge Permit. However, the total zinc concentration measured by TC Systems in the dilute rinsewater stream was found to have exceeded the monthly average maximum concentration established in the permit of 1.48 mg/l during the months of December, 1997 and January, 1998. During

each of these two months, TC Systems collected one monthly 24-hour composite sample of the dilute rinsewater and submitted it to an outside laboratory (CCI Analytical Laboratories) for analysis. In December, 1997, CCI found the total zinc concentration in the composite sample to be 2.3 mg/l using the EPA-289.1 method. In January, 1998, the zinc concentration was found to be 2.5 mg/l. No exceedances of other permit effluent limits were observed.

3.0 SOURCE OF COMPLIANCE PROBLEMS

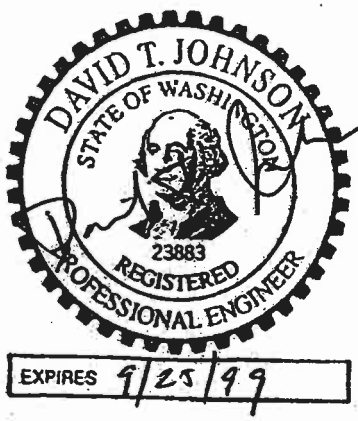
A review of the chemicals and reagents used in the six surface treatment processes described in Section 2.1 found that only one chemical contains a significant quantity of zinc.

The Oakite 166 used in the alkaline cleaning process contains approximately 5 weight percent zinc sulfate. Based on this concentration, the alkaline cleaning solution would have a zinc concentration of approximately 650 parts per million when prepared to the recommended concentration described in 2.1.1. When parts are removed from the alkaline cleaning solution, a small quantity of cleaning solution remains on the part and is transferred to the rinsewater. This loss is typically referred to as 'dragout.' Observations show that this dragout loss is approximately 75 to 150 gallons per week. At the cleaning solution concentration, this dragout loss equates to a total zinc monthly dragout of as much as 3.7 lbs. Some of this probably settles in the rinse tank where it is removed during periodic tank cleaning. However, a significant proportion could ultimately be in the dilute rinsewater. The total zinc concentration in the 127,111 gallons of effluent discharged during January, 1998 was 2.5 mg/l which would equate to a monthly discharge of 2.6 lbs of zinc if the 2.5 mg/l concentration existed during the entire month. It appears, therefore, that rinsewater from the alkaline cleaning process could potentially be the major source of effluent zinc. A second source of zinc would be the zinc found in the metal alloys being treated as some aluminum alloys contain zinc. However, the metal loss from the parts being processed is, of necessity, small and this does not therefore appear to be a significant source of effluent zinc.

4.0 RECOMMENDED CORRECTIVE ACTIONS

If the alkaline cleaning rinsewater is a source of effluent zinc, this could be controlled in two ways. The first way would be to install additional treatment equipment on the rinsewater to specifically remove zinc. However, a better approach than this 'end-of-pipe' treatment would be to take a Pollution Prevention approach and find a substitute, but equally effective, alkaline cleaning material that did not contain zinc or other metals. One such alkaline cleaner is "Oakite Inpro-Clean 3000" which does not contain

zinc or other metals and is being successfully used in similar applications. It is therefore recommended that the Oakite 166 cleaning material be removed from the Alkaline Cleaning Tank and replaced with Oakite Inpro-Clean 3000 or another acceptable zinc-free alkaline cleaning product. If this operational change is made and if the other processing tanks are cleaned at sufficiently frequent intervals to prevent a buildup of trace zinc concentrations in their contents, it appears that the dilute rinsewater would not have a zinc concentration that exceeded the effluent permit limits.



5.0 SUPPLEMENTARY INFORMATION

Calculations

MSDS's and Technical Data Sheets:

- Oakite 166
- Oakite Inpro-Clean 3000
- Oakite 160
- Oakite LNC Deoxidizer
- Alodine 600
- Alodine 1000

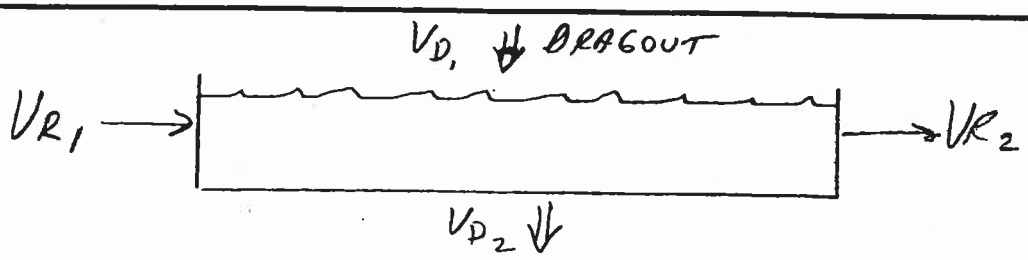
BY _____ DATE 5/26/98 SHEET 1 OF 2

CHKD BY _____ DATE _____

CLIENT TC SYSTEMS

PROJECT 98011

SUBJECT _____



DRAGOUT LOSSES: 1-2 INCHES / WEEK IN ALKALINE TANK.

TANK DIMENSIONS: 48' LENGTH
9' DEPTH
30" WIDTH

$$\text{GAL/INCH} = (48\text{ FT})\left(\frac{30}{12}\text{ FT}\right)\left(\frac{1''}{12}\right)\left(7.4805\ \frac{\text{GAL}}{\text{FT}^3}\right)$$

$$= 74.8\ \text{GAL/INCH}$$

$$(2\text{ IN/WK})\left(74.8\ \frac{\text{GAL}}{\text{IN}}\right) = 149.6\ \text{GAL DRAGOUT}$$

ESTIMATE ZINC CONC. IN DRAGOUT SOLUTION

~~Zn MW = 65~~

$ZnSO_4 \cdot 7H_2O$ = 288 MOLECULAR WEIGHT

ZINC SULFATE CONC = 5 WT % IN OAKITE 166

OAKITE 166 CONC = 8 OZ. POWER PER GALLON

$$\text{OAKITE 166 WT FRACT.} = \frac{(8\text{ OZ}/(16\text{ OZ/LB}))}{8.308 + (8/16)} = .057$$

$$\text{ZINC CONC. IN SOLUTION} = (.05)(.057)\left(\frac{65}{288}\right)(10^6) = 643\text{ PPM}$$

BY _____ DATE 5/26/98

CHKD BY _____ DATE _____

SHEET 2 OF 2

CLIENT TC SYSTEMS

PROJECT _____

SUBJECT _____

CALCULATE ZINC MASS IN EFFLUENT

	VOLUME, GAL	ZN, mg/l
DEC 97	69,044	2.3
JAN 98	127,111	2.5

$$\text{EFF. ZINC MASS} = (\text{VOL})(8.3\ ^{LB}/_{GAL})\left(\frac{ZN}{10^6}\right)$$

$$\text{DEC ZN LBS} = (69044)(8.3)\left(\frac{2.3}{10^6}\right) = 1.3 \text{ LBS}$$

$$\text{JAN ZN LBS} = (127,111)(8.3)\left(\frac{2.5}{10^6}\right) = 2.6 \text{ LBS}$$

$$\text{DRAGOUT ZINC} = (V_D)\left(8.3\frac{LB}{GAL}\right)\left(\frac{643}{10^6}\right)$$

$$\text{DEC } V_D = \left(150\ GAL/WK\right)\left(4.6\ \frac{WK}{MON}\right) = 690 \text{ GAL MAX}$$

$$\text{JAN } V_D = (150\ GAL/WK)\left(4.4\ \frac{WK}{MON}\right) = 660 \text{ GAL MAX}$$

$$\text{DEC ZN DRAGOUT} = (690)(8.3)\left(\frac{643}{10^6}\right) = 3.7 \text{ LBS MAX}$$

$$\text{JAN ZN DRAGOUT} = (660)(8.3)\left(\frac{643}{10^6}\right) = 3.5 \text{ LBS MAX}$$

DRAGOUT LOSSES LESS IF: 1) TANK CONC. LESS
2) DRAGOUT VOLUME LESS

Oakite®

3142

MATERIAL SAFETY DATA SHEET

PRODUCT CODE: 3142
OAKITE ALUMINUM CLEANER 166
60-C-505

HMIS 2 0 0 J

SECTION I - PRODUCT IDENTIFICATION

ADE NAME	OAKITE ALUMINUM CLEANER 166
EMICAL NAME	
D SYNONYMS	NA-Mixture
NUFACTURER'S NAME	
D TELEPHONE NO.	OAKITE PRODUCTS INC. (908) 464-6900 (8am-5pm)
	A Member of The CHEMETALL Group
DRESS	50 Valley Road Berkeley Heights NJ 07922
TE OF PREPARATION	08-22-95

EMERGENCY TELEPHONE NUMBER:
(800) 424-9300 (CHEMTREC)

SECTION II - HAZARDOUS INGREDIENTS

	CAS NO.	% BY WT	ACGIH TLV (TWA)	OSHA PEL (TWA)	UNITS
ium tetraborate	0001330434	60-70	1	NE	mg/m^3
c sulfate(+)	0007733020	<5	NE	NE	
ium nitrate(+)	0007631994	<5	NE	NE	
-hazardous ingredients		Bal.			

dentified ingredients are considered not hazardous under Federal Hazard
mmunication Standard (29 CFR 1910.1200).

components of this material are on the US TSCA Inventory.

This product contains ingredient(s) identified in Section II with (+) which subject to the reporting requirements of section 313 of SARA Title III and CFR 372.

CINOGENICITY: No substance in this product is listed by IARC, NTP, or ulated by OSHA as a carcinogen.

SECTION III - PHYSICAL DATA

- Not Applicable

NE - Not Established

LING POINT (F)	NA	SPECIFIC GRAVITY (H20=1)	0.97
OR PRESSURE (mm Hg)	NA	Bulk Density	8.1 lb/gal
OR DENSITY (Air=1)	NA	PERCENT VOLATILE	
UBILITY IN WATER	Appreciable	BY WEIGHT(%) Excludes H20	NA
PORATION RATE	NA	PH 40 g/l	9.1
EARANCE AND ODOR	White powder; odorless.	PH (concentrate)	NA

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

SH POINT (Method Used): NONE
MMABLE LIMITS: LEL: NA UEL: NA

INGUISHING MEDIA: Use media suitable for surrounding materials.

CIAL FIRE FIGHTING PROCEDURES: No special procedures required.

SUAL FIRE AND EXPLOSION HAZARDS: See Section VII.(WHMIS)
See Section VI.(U.S.)

SECTION V - HEALTH HAZARD INFORMATION

TE(S) OF ENTRY:	INHALATION:	SKIN:	INGESTION:
	X	X	X

ICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.
PTOMS/EFFECTS OF OVEREXPOSURE:
Inhalation of dust or mist causes irritation of mucous membranes. Skin irritation. Possible dermatitis. Although absorption of borates through intact skin is unlikely, contact with burned or abraded skin may result in systemic poisoning. Symptoms include nausea, abdominal pain, diarrhea, vomiting, headache and weakness. Severe cases may be characterized by shock, rapid heartbeat and cyanosis. Direct contact with eyes causes irritation. No evidence of adverse chronic respiratory exposure effects from available information.

FIRST AID

S: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get prompt medical attention.

- Not Applicable NE - Not Established

KIN: Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists get medical attention. Wash clothing before reuse.

NGESTION: Contact local poison control center or physician IMMEDIATELY!

NHALATION: Move victim to fresh air. Get medical help if irritation persists.

SECTION VI - REACTIVITY DATA

ABILITY: NORMALLY STABLE
NCOMPATIBLE MATERIALS: Strong acids.
ZARDOUS DECOMPOSITION PRODUCTS: Phosphorous oxides, Boron oxides.

SECTION VII - SPILL OR LEAK PROCEDURES

ROCEDURES: Wear personal protective equipment (See Section VIII). Carefully clean up spilled material and place in dry containers for disposal. Avoid dust generation.

STE DISPOSAL METHOD: Dispose of in accordance with Local State and Federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

SPIRATORY: If TLV is exceeded, or For symptoms of overexposure, wear a NIOSH-approved dust/mist respirator.

EWEAR: Wear chemical safety goggles.

OTHING/GLOVES: Wear chemical-resistant gloves and clothing as needed to prevent skin contact.

NTILATION: Local exhaust may be necessary for some handling/use conditions. Specific needs should be addressed by supervisory or health/safety personnel.

SECTION IX - SPECIAL PRECAUTIONS

ore in closed container in dry area.

- Not Applicable

NE - Not Established

Oakite®

3142

MATERIAL SAFETY DATA SHEET

APPROVAL Michael Chang Mgr. Health & Environmental Dept. 08/22/1995
NAME TITLE DATE OF PRINTING

-- Not Applicable

NE - Not Established

Oakite
A MEMBER OF THE CHEMETALL GmbH GROUP

PRODUCT PROFILE

OAKITE PRODUCTS, INC., P.O. BOX 602, 50 VALLEY ROAD, BERKELEY HEIGHTS, NJ 07922
OAKITE CANADA LIMITED, 115 EAST DRIVE, BRAMALEA, ONT L6T 1B7
Subsidiaries and Distributors World-wide Tel. (908) 464-6900 FAX (908) 464-6031

TECHNICAL DATA

OAKITE® INPRO-CLEAN 3000: An alkaline tank immersion cleaner for aluminum and aluminum alloys

PRIMARY APPLICATION

Inpro-Clean 3000 is an alkaline immersion cleaner for aluminum, clad aluminum and aluminum alloys, magnesium and titanium alloys. Inpro-Clean 3000 has been designed to remove soils such as stencil ink, light oil, grease, grime, from metal surfaces without attacking the substrate.

CHEMICAL CHARACTERISTICS

chemical composition	surfactants and alkaline salts, including silicates
physical form	as received: pale-yellow liquid as used: colorless solution
odor	mild
bulk density	1129 g/ℓ 20°C (9.4 lb/gal at 68°F)
viscosity	not applicable
flash point	none
hygroscopic tendency	not applicable
foaming tendency	moderate
recommended diluent	water
maximum solubility	complete
behavior in hard water	sequesters
rinsability	good
biodegradable surfactants	yes
phosphate-free	no
normal working temperatures	49-82°C (120°-180°F)
normal working concentrations	5-10% by volume
pH at working concentrations	12.7 ± 0.2
effect of prolonged boiling	none
effect of working solutions on metals	rate of metal loss from 24-hour static immersion in Inpro-Clean 3000, 65 grams/ℓ at 150°F, projected for one year, is as follows:

Metal (alloy)	mm/yr	in/yr
aluminum:		
1100	0.0270	0.0010
2024	0.0200	0.0008
3003	0.0220	0.0009
steel	0.0000	0.0000
stainless steel (316)	0.0000	0.0000
galvanized steel	0.0220	0.0009
copper*	0.0380	0.0015
brass*	0.0680	0.0027
magnesium	0.0170	0.0007

* Copper, brass and copper alloys are discolored.

APPLICATION PROCEDURE

1. **Light Duty Cleaning:**
   5% by volume of Inpro-Clean 3000, 140-180°F, 10 minutes immersion or until soil is removed.
2. **Heavy Duty Cleaning:**
   5-10% by volume of Inpro-Clean 3000, 140-180°F, 10 minutes immersion or until soil is removed.

NOTE: When possible, agitate parts during processing, for optimum results.

Solution Control: Concentrations of Inpro-Clean 3000 can be titrated by Procedures 92 or Test Kit Procedure 121. For Procedure 92, the sample volume is 25 ml and Multiplying Factor (F) is 2.2. For TK 121, the sample volume is 10 ml and Multiplying Factor (F) is 5.6.

For Free and Total Alkali use Procedures 13 or TK 123.

NOTES ON USE - See Material Safety Data Sheet

Safety and Handling Precautions: Inpro-Clean 3000 is a moderately alkaline industrial product containing biodegradable surfactants. May cause burns of eyes. Causes skin irritation. Harmful if swallowed. Avoid contact with eyes, skin and clothing. Wear rubber gloves, safety goggles or face shield, and suitable protective clothing when handling dry powder or solutions. Wash thoroughly after using. Do not take internally.

First Aid in Case of Contact: Flush skin or eyes with plenty of water for at least 15 minutes. For eyes, get medical attention. If swallowed, give several glasses of water or milk to drink. Contact a physician.

KEEP OUT OF REACH OF CHILDREN

DISPOSAL

Dispose of according to all federal, state and local regulations.

PACKAGING

Packaged in nonreturnable plastic drums.
large drum: 517 lb net

SHIPMENT

May be shipped by any common carrier. Freight classification is "Cleaning Compound, NOIBN, Liquid". Product Code #4396.

STORAGE

Suitable for general indoor storage. Keep container closed when not in use.

effect of high temperature storage	None
effect of low temperature storage	None*
effect of aging	None

*Solution may appear hazy below 50°F. Solution reconstitutes to a homogeneous solution at room temperature. Mix well before use.

Oakite® MATERIAL SAFETY DATA SHEET

PRODUCT CODE: 4396
OAKITE INPRO CLEAN 3000
60-DI-1

HMIS 3 0 0 J

SECTION I - PRODUCT IDENTIFICATION

TRADE NAME	OAKITE INPRO CLEAN 3000	**EMERGENCY TELEPHONE NUMBER:** (800) 424-9300 (CHEMTREC)
CHEMICAL NAME AND SYNONYMS	NA; Mixture	
MANUFACTURER'S NAME AND TELEPHONE NO.	OAKITE PRODUCTS INC. (908) 464-6900 (8am-5pm)	
	A Member of The CHEMETALL Group	
ADDRESS	50 Valley Road Berkeley Heights NJ 07922	
DATE OF PREPARATION	01-03-95	

SECTION II - HAZARDOUS INGREDIENTS

	CAS NO.	% BY WT	ACGIH TLV (TWA)	OSHA PEL (TWA)	UNITS
Trade secret registry (735517)	-5033P	<5	NE	NE	
Amine Ethoxylate	0073138279	<5	NE	NE	
Nonionic surfactant	0060828786	<5	NE	NE	
[redacted]	0001344098	<5	NE	NE	
Non-hazardous ingredients		Bal.			

Unidentified ingredients are considered not hazardous under Federal Hazard Communication Standard (29 CFR 1910.1200).

All components of this material are on the US TSCA Inventory.

CARCINOGENICITY: No substance in this product is listed by IARC, NTP, or regulated by OSHA as a carcinogen.

SECTION III - PHYSICAL DATA

BOILING POINT (F)	NE	SPECIFIC GRAVITY (H20=1)	1.131
VAPOR PRESSURE (mm Hg)	NE	Bulk Density	9.44 lb/gal
VAPOR DENSITY (Air=1)	NE	PERCENT VOLATILE	

NA - Not Applicable **NE - Not Established**

Oakite® MATERIAL SAFETY DATA SHEET

SOLUBILITY IN WATER	Complete	BY WEIGHT(%) Excludes H2O	<5
EVAPORATION RATE (BuAc=1)	<1	PH 8% solution	12.7
APPEARANCE AND ODOR	Pale yellow liquid; mild odor.	PH (concentrate)	13.8

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used): None
FLAMMABLE LIMITS: LEL: NA UEL: NA

EXTINGUISHING MEDIA: Use media suitable for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES: Wear Self-Contained Breathing Apparatus (SCBA).

UNUSUAL FIRE AND EXPLOSION HAZARDS: See Section VII.(WHMIS)
See Section VI.(U.S.)

SECTION V - HEALTH HAZARD INFORMATION

ROUTE(S) OF ENTRY:	INHALATION:	SKIN:	INGESTION:
	x	x	x

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known
SYMPTOMS/EFFECTS OF OVEREXPOSURE:
Inhalation of mist may cause respiratory irritation. Direct contact with skin causes irritation and possible burns. Eye contact is irritating and may cause damage.

FIRST AID

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.

SKIN: Immediately flush skin with plenty of water for at least 15 minutes. Get medical attention.

INGESTION: Contact local poison control center or physician IMMEDIATELY!

INHALATION: Move victim to fresh air.

SECTION VI - REACTIVITY DATA

NA - Not Applicable NE - Not Established

Oakite® MATERIAL SAFETY DATA SHEET

STABILITY: NORMALLY STABLE
INCOMPATIBLE MATERIALS: Strong acids.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, Carbon dioxide, Silicon dioxide.

SECTION VII - SPILL OR LEAK PROCEDURES

PROCEDURES: Wear personal protective equipment (See Section VIII). Clean up with absorbant material. Neutralize with a mild acid. Flush area with water.

WASTE DISPOSAL METHOD: Dispose of in accordance with Local State and Federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY: Respirator not normally required. For symptoms of overexposure, wear a NIOSH-approved dust/mist respirator.

EYEWEAR: Wear chemical safety goggles.

CLOTHING/GLOVES: Wear chemical-resistant gloves and clothing as needed to prevent skin contact.

VENTILATION: Local exhaust may be necessary for some handling/use conditions. Specific needs should be addressed by supervisory or health/safety personnel.

SECTION IX - SPECIAL PRECAUTIONS

Store in closed container.

APPROVAL: Michael Chang Mgr.Health & Environmental Dept. 01/03/1995

NAME **TITLE** **DATE OF PRINTING**

NA - Not Applicable **NE - Not Established**

Oakite

1600

MATERIAL SAFETY DATA SHEET

PRODUCT CODE: 1600
OAKITE 160
60-U-161

HMIS 3 0 1 F

SECTION I

RADE NAME	OAKITE 160	EMERGENCY TELEPHONE NUMBER: (800) 424-9300 (CHEMTREC)
EMICAL NAME / D SYNONYMS	NA; Mixture	
ANUFACTURER'S NAME / D TELEPHONE NO.	OAKITE PRODUCTS INC. (908) 464-6900 (8am-5pm)	
DDRESS	50 Valley Road Berkeley Heights NJ 07922	

SECTION II - HAZARDOUS INGREDIENTS

	CAS NO.	% BY WT	TLV	PEL	UNITS
dium hydroxide -(ceiling)	0001310732	80-90	2	2	mg/m^3
dium carbonate	0000497198	<10	NE	NE	
n-hazardous ingredients		Bal.			

nidentified ingredients are considered not hazardous under Federal Hazard mmunication Standard (29 CFR 1910.1200).

ll component of this material are on the US TSCA Inventory.

SECTION III - PHYSICAL DATA

OILING POINT (F)	NA	SPECIFIC GRAVITY (H20=1)	1.17
APOR PRESSURE (mm Hg)	NA	Bulk Density	
APOR DENSITY (Air=1)	NA	PERCENT VOLATILE	
OLUBILITY IN WATER	Appreciable	BY VOLUME(%) Excludes H2O	NA
VAPORATION RATE	NA	PH 4% solution	13.5
PPEARANCE AND ODOR	White powder; odorless.	Concentrate	NA

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

A - Not Applicable

NE - Not Established

LASH POINT (Method Used): None
LAMMABLE LIMITS: LEL: NA UEL: NA

TINGUISHING MEDIA: Use media suitable for surrounding materials.

PECIAL FIRE FIGHTING PROCEDURES: Carbon dioxide, dry chemical, or foam.

NUSUAL FIRE AND EXPLOSION HAZARDS: Wear Self-Contained Breathing Apparatus (SCBA).

SECTION V - HEALTH HAZARD INFORMATION

ROUTE(S) OF ENTRY:	INHALATION:	SKIN:	INGESTION:
	X	X	X

EDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known
YMPTOMS/EFFECTS OF OVEREXPOSURE:
Severe irritation of the nose, mouth, and respiratory tract; coughing, difficulty breathing; chemical pneumonitis. Severe skin irritation and burns. Eye contact causes severe or permanent damage.

FIRST AID

YES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get prompt medical attention.

SKIN: Immediately remove contaminated clothing. Wash skin with large amounts of water for at least 15 minutes. Get prompt medical attention. Wash clothing before reuse.

INGESTION: Contact local poison control center or physician IMMEDIATELY!

INHALATION: Move victim to fresh air and restore breathing if necessary. Stay with victim until emergency medical help arrives.

SECTION VI - REACTIVITY DATA

STABILITY: NORMALLY STABLE
INCOMPATIBLE MATERIALS: Acids, Hot water. Contact with certain metals may yield explosive hydrogen gas.
HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen.

SECTION VII - SPILL OR LEAK PROCEDURES

NA - Not Applicable NE - Not Established

ROCEDURES: Wear personal protective equipment (See Section VIII). Carefully clean up spilled material and place in dry containers for disposal. Avoid dust generation.

ASTE DISPOSAL METHOD: Dispose of in accordance with Local State and Federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

ESPIRATORY: If TLV is exceeded, or for symptoms of overexposure, wear a NIOSH-approved dust/mist respirator.

YEWEAR: Wear chemical safety goggles.

LOTHING/GLOVES: If potential for skin contact exists, wear neoprene or other chemical resistant gloves and apron or coveralls and/or foot coverings, as needed.

ENTILATION: Local exhaust may be necessary for some handling/use conditions. Specific needs should be addressed by supervisory or health/safety personnel.

SECTION IX - SPECIAL PRECAUTIONS

ORROSIVE. Store in closed container in dry, well-ventilated area. NOTE: IF ILUTING (OR DISSOLVING) ALWAYS ADD THIS PRODUCT TO WATER SLOWLY AND WITH ONSTANT STIRRING. This product does not contain any carcinogens (at 0.1% or reater) as defined by IARC, NTP, or OSHA.

PPROVAL Michael Chang Mgr. Health & Environmental Dept. 03/23/1992

NAME TITLE DATE

NA - Not Applicable

NE - Not Established

Oakite® 160

Chelated alkaline material for uniformly cleaning and etching aluminum surfaces in one step.

PRIMARY APPLICATION

Oakite 160 is an alkaline material which uniformly and rapidly etches aluminum while simultaneously removing light soils from the surface. It contains ingredients which minimize the formation of aluminum scale in solution tanks and on heating coils to cut maintenance costs and downtime. Oakite 160 also rinses easily, controls foaming to minimize alkali mist and fumes.

CHEMICAL CHARACTERISTICS

chemical composition	caustic soda and other alkaline salts, sequestrants, surfactants
physical form	as received: white powder as used: clear solution
odor	none
bulk density	1164 g/l (9.7 lb/gal)
hygroscopic tendency	high (keep drum closed when not in use)
foaming tendency	slight
recommended diluent	water
maximum solubility	150 g/l at 77°C (20 oz/gal at 170°F)
behavior in hard water	sequesters
rinsability	good
biodegradable	no
phosphate-free	yes
normal working concentrations	15 to 45 g/l (2 to 6 oz/gal)
norm al operating temperatures	38° to 71°C (100° to 160°F)
pH at working concentrations	13.0 to 13.6 at 21°C (70°F)
effect of working solutions on metals	rate of metal loss from 24-hour immersion in Oakite 160, 40 g/l (5.3 oz/gal) at 40°C (120°F), projected for one year, is as follows:

metal (alloy)	mm/yr	in/yr
steel (1010)	0 00	0 000
stainless steel (316)	0.00	0 000
aluminum (1100)	attacks	attacks
brass	*0.03	*0 001
copper	*0 00	*0 000
magnesium	0.03	0.001
zinc	2.94	0.116

*discolors

APPLICATION PROCEDURE

Oakite 160 is a tank immersion material used between 15 and 45 g/l (2 and 6 oz/gal) at temperatures between 38° and 71°C (100° and 160°F). Exposure time varies from 30 seconds to several minutes. Exact time, temperature and concentration will depend upon the degree of etch required.

Oakite.

Solution Control: Concentrations are titrated using Test Kit Procedure 121. For aluminum etch activity, use Procedure 17. For free and total alkali, use Test Kit Procedure 123.

NOTES ON USE

See Material Safety Data Sheet

Tanks and heating coils which are coated with heat-retarding scale should be treated with an Oakite descalant (before using Oakite 160) to restore proper heat transfer and extend the solution life.

When preparing new solutions or adding to existing ones, slowly sprinkle product over surface of solution while stirring to avoid violent spattering. Do not add large amounts of dry powder to solution at any one time. **Do not add to hot water or hot solution warmer than 43° to 49°C (110° to 120°F).**

Under certain operating conditions, new solutions may foam excessively. This can be controlled by reducing the concentration or lowering the temperature, or both.

Safety and Handling Precautions: Oakite 160 is a highly alkaline material containing sodium hydroxide. Direct contact causes burns of eyes and skin. It is harmful if swallowed or inhaled. Avoid contact with eyes, skin and clothing. Wear rubber gloves, safety goggles or face shield, and suitable protective clothing when handling dry powder solutions. Wash thoroughly after handling. Avoid breathing dust or mist. Use with adequate ventilation. Do not take internally.

First Aid in Case of Contact: Immediately flush **eyes** or **skin** with plenty of water for at least 15 minutes. For **eyes**, get medical attention. For **skin**, remove contaminated clothing and shoes. Wash them before reuse. If **swallowed**, wash out mouth thoroughly with water. Give several glasses of water or milk to drink. Contact a physician immediately.

KEEP OUT OF REACH OF CHILDREN.

DISPOSAL

Dispose of according to all federal, state and local regulations.

SHIPMENT

May be shipped by any common carrier. Freight classification is "Corrosive Solid, NOS, (Sodium Hydroxide)8. UN-1759". Product Code No.1600.

STORAGE

Suitable for general indoor storage. Keep container closed when not in use.

effect of high temperature storage ..... no adverse effect
effect of low temperature storage ..... no adverse effect
effect of aging ..... no adverse

Oakite®
Oakite Products, Inc. P.O. Box 602, 50 Valley Road, Berkeley Heights, NJ 07922
Oakite Canada Limited 115 East Drive, Bramalea, Ontario L6T1B7
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Distributors and Licensees Worldwide

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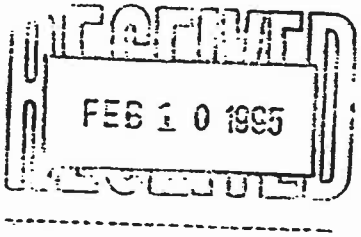
Printed in the USA

Oakite

MATERIAL SAFETY DATA SHEET

3850



PRODUCT CODE: 3850
OAKITE DEOXIDIZER LNC
60-FD-33

HMIS 3 0 1 J

SECTION I - PRODUCT IDENTIFICATION

TRADE NAME	OAKITE DEOXIDIZER LNC	EMERGENCY TELEPHONE NUMBER: (800) 424-9300 (CHEMTREC)
CHEMICAL NAME AND SYNONYMS	NA-Mixture	
MANUFACTURER'S NAME AND TELEPHONE NO.	OAKITE PRODUCTS INC. (908) 464-6900 (8am-5pm)	
ADDRESS	50 Valley Road Berkeley Heights NJ 07922	

SECTION II - HAZARDOUS INGREDIENTS

	CAS NO.	% BY WT	ACGIH TLV (TWA)	OSHA PEL (TWA)	UNITS
Trade Secret Registry (735517) -(Soluble salts, as Fe)	-5020P	30-40	1	NE	mg/m^3
Nitric acid(+)	0007697372	15-25	2	2	ppm
Trade Secret Registry (735517)	-5053P	<5	NE	NE	
Non-hazardous ingredients		Bal.			

Unidentified ingredients are considered not hazardous under Federal Hazard Communication Standard (29 CFR 1910.1200).

All component of this material are on the US TSCA Inventory.

(+) This product contains ingredient(s) identified in Section II with (+) which are subject to the reporting requirements of section 313 of SARA Title III and 40 CFR 372.

CARCINOGENICITY: No substance in this product is listed by IARC, NTP, or regulated by OSHA as a carcinogen.

SECTION III - PHYSICAL DATA

NA - Not Applicable

NE - Not Established

BOILING POINT (F)	NE	SPECIFIC GRAVITY (H20=1)	1.440
VAPOR PRESSURE (mm Hg)	NE	Bulk Density	12.0 lbs/gal
VAPOR DENSITY (Air=1)	>1	PERCENT VOLATILE	
SOLUBILITY IN WATER	Complete	BY WEIGHT(%) Excludes H20	0
EVAPORATION RATE (BuAc=1)	<1	PH	
APPEARANCE AND ODOR	Dark amber liquid; sharp odor.	Concentrate	<1.0

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used): NONE
FLAMMABLE LIMITS: LEL: NA UEL: NA

EXTINGUISHING MEDIA: Use media suitable for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES: Use water spray to cool fire-exposed containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS: May have oxidizing properties, therefore, fire risk on contact with combustible materials.

SECTION V - HEALTH HAZARD INFORMATION

ROUTE(S) OF ENTRY:	INHALATION:	SKIN:	INGESTION:
	X	X	X

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.
SYMPTOMS/EFFECTS OF OVEREXPOSURE:
Inhalation of dust or mist may cause severe respiratory irritation. Exposure to high concentrations may cause pneumonitis and pulmonary edema. Symptoms include coughing, chest pain and difficulty breathing. ONSET OF SYMPTOMS MAY BE DELAYED BY INHALATION. Severe skin burns. Eye contact causes severe or permanent damage. No evidence of adverse chronic respiratory exposure effects from available information.

FIRST AID

EYES: Immediately flush eyes with large amounts of water for at least 15 minutes while holding eyelids open. Get prompt medical attention.

SKIN: Immediately remove contaminated clothing. Wash skin with large amounts of water for at least 15 minutes. Get prompt medical attention. Wash clothing before reuse.

NA - Not Applicable NE - Not Established

INGESTION: Contact local poison control center or physician IMMEDIATELY!

INHALATION: Move victim to fresh air and restore breathing if necessary. Stay with victim until emergency medical help arrives.

SECTION VI - REACTIVITY DATA

STABILITY: NORMALLY STABLE
Avoid direct sunlight.

INCOMPATIBLE MATERIALS: Alkalies, Combustibles. Contact with certain metals may yield explosive hydrogen gas. Avoid prolonged contact of concentrate with glass or ceramic.

HAZARDOUS DECOMPOSITION PRODUCTS: Sulfur dioxide, Nitrogen dioxide. Hydrogen.

SECTION VII - SPILL OR LEAK PROCEDURES

PROCEDURES: Wear personal protective equipment (See Section VIII). Ventilate area. Clean up with noncombustible absorbant material. Neutralize using sodium bicarbonate.

WASTE DISPOSAL METHOD: Dispose of in accordance with Local State and Federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY: If TLV is exceeded, wear a NIOSH-approved chemical cartridge respirator or gas mask containing non-oxidizable sorbent.

EYEWEAR: If splash potential exists wear chemical splash goggles or faceshield.

CLOTHING/GLOVES: If potential for skin contact exists, wear neoprene or other chemical resistant gloves and apron or coveralls and/or foot coverings, as needed.

VENTILATION: Local exhaust may be necessary for some handling/use conditions. Specific needs should be addressed by supervisory or health/safety personnel.

SECTION IX - SPECIAL PRECAUTIONS

NA - Not Applicable

NE - Not Established

CORROSIVE. Store in closed container in well-ventilated area. NOTE: IF DILUTING (OR DISSOLVING) ALWAYS ADD THIS PRODUCT TO WATER SLOWLY AND WITH CONSTANT STIRRING. Do not add this product to chlorine-releasing materials.

APPROVAL [signature] Mgr. Health & Environmental Dept. 09/15/199:

NAME TITLE DATE

NA - Not Applicable

NE - Not Established

Oakite Deoxidizer LNC

Non-chromated, liquid acidic material for deoxidizing and desmutting aluminum and aluminum alloys

PRIMARY APPLICATION

Oakite Deoxidizer LNC is a non-chromated, non-foaming acidic material for removing oxides, smut, mill scale and discoloration from aluminum and aluminum alloys. It is used before spot welding, anodizing, barrel burnishing, conversion coating or after alkaline etching.

It performs well in hard water, requires no heat, deoxidizes rapidly and rinses freely. Oakite Deoxidizer LNC meets the deoxidizing requirements of Military Specification MIL-W-6858.

CHEMICAL CHARACTERISTICS

chemical composition	non-chromated blend of inorganic salts, nitric acid and fluorides
physical form	as received: dark reddish brown liquid as used: light yellow solution
odor	none
specific gravity (approx.)	1.433 at 20°C (68°F)
bulk density	1433 g/ℓ at 20°C (11.9 lb/gal at 68°F)
viscosity	10 cps, Brookfield Spindle 1, 60 rpm
flash point	none
foaming tendency	none
recommended diluent	water
maximum solubility	complete
behavior in hard water	performs well
rinsability	good
biodegradable surfactants	not applicable (non-surfactant material)
phosphate-free	yes
normal working concentrations	10 to 20% by volume
normal operating temperatures	ambient: 10° to 38°C (50° to 100°F)
pH at working concentrations	0.8 to 1.0 at 10% by volume
effect of working solutions on metals	rate of metal loss from 24 hour immersion in Oakite Deoxidizer LNC, 20% by volume at 49°C (120°F), projected for one year, is as follows:

metal (alloy)	mm/yr	in/yr
steel (1010)	43.26	1.703
stainless steel (316)	0.00	0.000
stainless steel (403)	0.00	0.000
copper	44.53	1.753
brass	52.83	2.080
aluminum (3003)	23.27	0.916
magnesium	attacks	attacks
galvanized steel	attacks	attacks

APPLICATION PROCEDURE

For Deoxidizing Aluminum Prior to Spot Welding, Anodizing, Barrel Burnishing, Conversion Coating

After surfaces have been pre-cleaned (with a suitable detergent such as Oakite Aluminum Cleaner NSS for spray washing or Oakite Aluminum Cleaner NST for tank cleaning), immerse in a solution of Oakite Deoxidizer LNC, 10% by volume at ambient temperature-- 10° to 38°C (50° to 100°F). Immersion time-- in an **air-agitated tank**--is normally 1 to 5 minutes, although heat treated alloys may require more time. Rinse thoroughly in clear, cold water, 24°C (75°F) or lower.

For Desmutting Aluminum After Alkaline Etching

Once surfaces have been etched in an Oakite enchant (such as Oakite 360 L), a 2-to-5-minute immersion in an unheated--but **air-agitated**--solution of Oakite Deoxidizer LNC, 15 to 20% by volume, is recommended. Follow with a thorough rinse in cold water.

It has an etch rate on 2024-T3 alloy aluminum that ranges between 0.03 and 0.10 mils/surface/hour--depending upon the age and concentration of the bath.

Solution Control: Concentrations are titrated using procedure 150 (by acidity) or procedure 25 (by ferric iron content).

NOTES ON USE

(See Material Safety Sheet)

Tanks should be constructed of stainless steel (type 316, 304, 347 ELC). However, ordinary steel tanks lined with Koroseal (pvc) can be used.

Keep concentrate away from combustible, organic and readily oxidizable materials. Avoid prolonged contact of concentrate with glass, ceramic or concrete. If contact is made, rinse surface promptly and thoroughly with water. Avoid contact or mixing with chlorine-releasing materials.

Safety and Handling Precautions: Oakite Deoxidizer LNC is a highly acidic material. It contains nitric acid and hydrofluoric acid as minor constituents. Direct contact causes severe burns that may or may not be immediately painful or visible. It is harmful if swallowed or inhaled.

Avoid contact with eyes, skin and clothing. Wear safety goggles, rubber gloves and other suitable protective clothing when handling. Wash thoroughly after handling. Use with adequate ventilation. Avoid breathing vapor. Do not take internally.

First Aid in Case of Contact-- Or Suspicion of Contact: Prompt Medical Attention is Absolutely Necessary. Eyes: Immediately flush with cool water for 15 to 30 minutes. Hold eyelids apart while flushing to ensure contact of water with all surfaces of eyes and lids. Get prompt medical attention. **Skin:** Immediately flush with large quantities of cool water until all acid is removed, paying particular attention to skin under the nails. Immediately remove contaminated clothing and shoes. In case medical attention is delayed, apply a generous amount of paste made from powdered magnesium oxide or milk of magnesia and glycerin, freshly prepared. Wash clothing and shoes before reuse. If **swallowed:** Rinse out mouth thoroughly with water. Give water to drink without delay. Follow with milk or 60 milliliters (two ounces) of milk of magnesia. Get prompt medical attention. If **inhaled:** Remove from exposure. Get medical attention.

KEEP OUT OF REACH OF CHILDREN.

DISPOSAL

(See Material Safety Data Sheet)

Dispose of according to all federal, state and local regulations.

SHIPMENT

May be shipped by any common carrier. Freight classification is "Compound Cleaning Liquid, Corrosive Material--NA 1760". Product Code No. 3850.

STORAGE

Suitable for general indoor storage away from oxidizable materials or reducing agents. Store out of direct sunlight and away from heat. Keep container closed when not in use. Keep from freezing. Before opening drum, loosen bung slowly to relieve any pressure build-up.

effect of high temperature storage ..... none
effect of low temperature storage ..... will freeze at -9.4°C (15°F); restores on thawing
effect of aging ..... none

Oakite®

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Tel. (800) 526-4473 (908) 464-6900 FAX (908) 464-4658
Distributors and Licensees Worldwide

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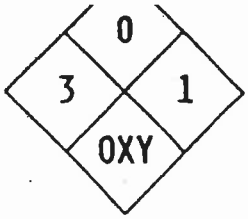

MATERIAL SAFETY DATA SHEET

CUSTOMER #

PRODUCT TRADE NAME	ALODINE® 600
DOT PROPER SHIPPING NAME	Chromic acid mixture, dry, NA1463.
DOT HAZARD CLASSIFICATION	Oxidizer.
TECHNICAL CONTACT (NAME)	Product Acceptance Office
TELEPHONE NUMBER	(313) 583-9300 EMERGENCY NUMBER 1-517-263-9430

1 HAZARDOUS INGREDIENTS

MATERIAL	CAS NO.	CONTENTS (% WT/WT)	HAZARD	TLV/PEL
+Chromic Acid	1333-82-0	30-40	Carcinogen,	0.05 mg/m³ as Cr
			NTP, IARC	0.5 mg/m³ as Cr
			Oxidizer	
Sodium Fluoborate	13755-29-8	40-50	Irritant	2.5 mg/m³ as F
				2.5 mg/m³ as F
Potassium Fluozirconate	16923-95-8	10-15	Irritant	2.5 mg/m³ as F
				2.5 mg/m³ as F

This product contains a chemical (+) subject to the reporting requirements of Section 313, Title III of SARA, Part 372.

2 PHYSICAL DATA

APPEARANCE	Yellow to orange powder containing reddish-brown crystals.		
SOLUBILITY IN WATER	Appreciable		
ODOR	None	pH of CONCENTRATE	Not applicable
SPECIFIC GRAVITY	Not applicable	BOILING POINT, °F.	Not applicable
OTHER:	Not applicable		

3 FIRE & EXPLOSION DATA

FLASH POINT None.

TEST METHOD Not applicable.

EXTINGUISHING MEDIA Water.

UNUSUAL FIRE OR EXPLOSION HAZARDS

Violent reactions may occur with organic materials or reducing agents.

SPECIAL FIRE FIGHTING PROCEDURES

Wear positive pressure self-contained breathing apparatus and full protective clothing.

4 REACTIVITY DATA

STABLE ☒ UNSTABLE ☐

CONDITIONS TO AVOID

Not applicable.

INCOMPATIBLE MATERIALS

Organic materials, reducing agents, alkaline materials.

HAZARDOUS POLYMERIZATION WILL OCCUR ☐

WILL NOT OCCUR ☒

CONDITIONS TO AVOID

Excessive heat.

HAZARDOUS DECOMPOSITION PRODUCTS

Hydrogen fluoride

5 HEALTH HAZARD DATA

EYES: Eye contact may result in loss of vision with severe burns.

SKIN: Skin contact is corrosive to tissues.

INGESTION: Ingestion could result in tissue destruction of the digestive tract and severe irritation in the respiratory tract.

INHALATION: Inhalation of dust can cause damage to mucous membranes, perforation of nasal septum and irritation of the respiratory system.

CHRONIC: Prolonged or repeated skin contact may cause "chrome sores". Long-term exposure can cause liver damage, kidney damage and dermatitis. Prolonged or repeated inhalation of mist may cause ulceration and performation of the nasal septum.

CHRONIC: Contains fluorides. Exposure to fluorides over years may cause fluorosis.

POSSIBLE CANCER HAZARD: There is laboratory evidence that aqueous sodium dichromate administered directly into the lung, at the highest tolerated dose, over the lifetime of rats, causes a significantly increased incidence of lung cancer. It is expected that if chromic acid was tested in the manner as aqueous sodium dichromate, it would give similar response. There is sufficient evidence for the carcinogenicity of chromium and certain chromium compounds both in humans and experimental animals.
Reference: NTP (National Toxicology Program), Annual Report on Carcinogens, 1983.
IARC (International Agency for Research on Cancer), Annual Report, 1982.

Medical Conditions Generally Aggravated by Exposure: Persons with a history of asthma, allergies or known sensitizations to chromic acid or chromates.

6 FIRST AID RECOMMENDATIONS

EYES: Immediately flush eyes in a directed stream of water for at least 15 minutes while forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. GET MEDICAL ATTENTION.

SKIN: Immediately remove contaminated clothing and shoes. Flush skin thoroughly with water for at least 15 minutes. Rinse clothing. If irritation persists, GET MEDICAL ATTENTION.

INGESTION: Drink large quantities of water. CORROSIVE. DO NOT INDUCE VOMITING. If vomiting occurs, drink more water. GET MEDICAL ATTENTION. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If breathing is difficult, give oxygen. GET MEDICAL ATTENTION.

7 SPILL PROCEDURES & WASTE DISPOSAL

SPILL PROCEDURES

Transfer any excess to a clean polyethylene container. Treat the residue with a dilute solution of metabisulfate to reduce the chrome. Neutralize with lime to pH = 7-8.

WASTE TREATMENT

This chemical contains chromium compounds and fluoride compounds Waste treatment and neutralization may be required prior to discharge to a sewer.
This chemical is a hazardous waste as defined by EPA Hazardous Waste and Consolidated Permit Regulations (or consult equivalent state regulations).
Hazardous Waste Characteristic: Ignitability, Title 40, Code of Federal Regulations, 261.21, Hazardous Waste Number D001. (Contains an oxidizer.)
Hazardous Waste Characteristic: EP Toxicity, Title 40, Code of Federal Regulations, 261.24, Hazardous Waste Number D007.
Dispose of in compliance with all applicable federal, state and local regulations.

8 PERSONAL PROTECTION

VENTILATION REQUIREMENTS	GENERAL AREA EXHAUST	☐
	LOCAL EXHAUST	☒
	NO EXHAUST NECESSARY	☐

PERSONAL PROTECTIVE EQUIPMENT

EYE PROTECTION	Chemical goggles or face shield.
SKIN PROTECTION	Neoprene or polyvinyl gloves and appropriate protective clothing.
RESPIRATORY PROTECTION	Use NIOSH-approved respirator as required to prevent overexposure. Provide sufficient mechanical (general and/or local exhaust ventilation to maintain exposure below TLV(s).
OTHER REQUIRED EQUIPMENT	Eye wash facility and emergency shower should be in close proximity.

9 SPECIAL PRECAUTIONS & STORAGE

DO NOT GET IN EYES, ON SKIN OR ON CLOTHING.

For industrial use only.

Contact with combustible material may cause fire.

Clothing contaminated with contents of this package is DANGEROUSLY FLAMMABLE. Immediately remove contaminated clothing and rinse thoroughly with water.

DO NOT TAKE INTERNALLY.

DO NOT BREATHE DUST.

Wash thoroughly after handling.

PREPARED BY Product Acceptance Office DATE 09/06/90

TITLE

CHEMICAL EMERGENCY TELEPHONE 1-800-424-9300

HENKEL CORPORATION
32100 Stephenson Highway
Madison Heights,Michigan 48071

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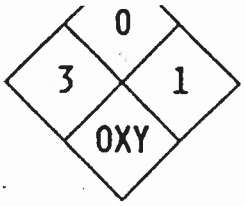
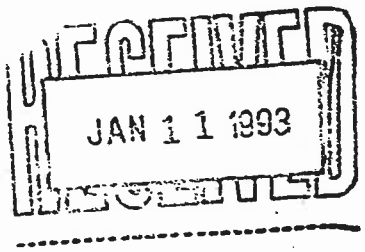


MATERIAL SAFETY DATA SHEET



CUSTOMER #

PRODUCT TRADE NAME	ALODINE 1000
DOT PROPER SHIPPING NAME	Chromic acid mixture, dry, oxidizer, NA1463 (NA-1463A)
DOT HAZARD CLASSIFICATION	Oxidizer
TECHNICAL CONTACT (NAME)	Product Acceptance Office
TELEPHONE NUMBER	(313) 583-9300 EMERGENCY NUMBER 1-517-263-9430

1 HAZARDOUS INGREDIENTS

MATERIAL	CAS NO.	CONTENTS (% WT/WT)	HAZARD	TLV/PEL
+Chromic Acid	1333-82-0	60-70	Carcinogen, IARC,NTP	0.05 mg/m³ C 0.1 mg/m³
Potassium Fluozirconate	16923-95-8	30-40	Irritant	2.5 mg/m³ as F* 2.5 mg/m³ as F*

*5 mg/m³ as Zr, STEL = 10 mg/m³ as Zr
This product contains a chemical (+) subject to the reporting requirements of Section 313, Title III of SARA, Part 372.

2 PHYSICAL DATA

APPEARANCE	Light orange powder		
SOLUBILITY IN WATER	Complete		
ODOR	Slight acid	pH of CONCENTRATE	Not applicable
SPECIFIC GRAVITY	Not applicable	BOILING POINT, °F.	Not applicable
OTHER:	Not applicable		

3 FIRE & EXPLOSION DATA

FLASH POINT None

TEST METHOD Not applicable

EXTINGUISHING MEDIA As required to extinguish surrounding fire.

UNUSUAL FIRE OR EXPLOSION HAZARDS

Clothing contaminated with the chemical is dangerously flammable. Immediately remove and rinse thoroughly with water. Contact with combustible material may cause fire.

SPECIAL FIRE FIGHTING PROCEDURES

Wear positive pressure self-contained breathing apparatus and full protective clothing.

4 REACTIVITY DATA

STABLE ☒ UNSTABLE ☐

CONDITIONS TO AVOID

None

INCOMPATIBLE MATERIALS

Keep separate from alkalies.
Organic materials, paint thinners or reducing agents.

HAZARDOUS POLYMERIZATION WILL OCCUR ☐
WILL NOT OCCUR ☒

CONDITIONS TO AVOID

None

HAZARDOUS DECOMPOSITION PRODUCTS

At elevated temperatures, various fluoride compounds will be liberated, including hydrogen fluoride.

5 HEALTH HAZARD DATA

EYES: Eye contact can cause severe burns and loss of vision.

SKIN: Contact can cause severe burns. Chromic acid may be absorbed through skin, especially if skin is damaged. Fatal kidney damage was reported in a person who evidently absorbed chromium trioxide into the body.

INHALATION: Inhalation of dust can cause damage to mucous membranes, perforation of nasal septum and irritation of the respiratory system.

INGESTION: Can result in gastrointestinal damage; burns of the digestive tract. Chromic acid is considered very toxic. (As sodium dichromate, oral-rat LD50: 51.10 +/- 5.93 mg/kg.)

CHRONIC: Prolonged or repeated skin contact may cause "chrome sores". Long-term exposure can cause liver damage, kidney damage and dermatitis. Prolonged or repeated inhalation of mist may cause ulceration and performation of the nasal septum.

POSSIBLE CANCER HAZARD: There is laboratory evidence that aqueous sodium dichromate administered directly into the lung, at the highest tolerated dose, over the lifetime of rats, causes a significantly increased incidence of lung cancer. It is expected that if chromic acid was tested in the manner as aqueous sodium dichromate, it would give similar response. There is sufficient evidence for the carcinogenicity of chromium and certain chromium compounds both in humans and experimental animals.
Reference: NTP (National Toxicology Program), Annual Report on Carcinogens, 1983.
IARC (International Agency for Research on Cancer), Annual Report, 1982.

CHRONIC: Contains fluorides. Exposure to fluorides over years may cause fluorosis.

Medical Conditions Generally Aggravated by Exposure: Persons with a history of asthma, allergies or known sensitizations to chromic acid or chromates.

6 FIRST AID RECOMMENDATIONS

EYES: Immediately flush eyes in a directed stream of water for at least 15 minutes while forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. GET MEDICAL ATTENTION.

SKIN: Immediately remove contaminated clothing and shoes. Flush skin thoroughly with water for at least 15 minutes. Rinse clothing. If irritation persists, GET MEDICAL ATTENTION.

INHALATION: Remove to fresh air. If breathing is difficult, give oxygen. GET MEDICAL ATTENTION.

INGESTION: DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION. Drink milk of magnesia, aluminum hydroxide gel or limewater followed by water.

7 SPILL PROCEDURES & WASTE DISPOSAL

SPILL PROCEDURES

Wear respiratory protection.
Wear protective clothing.
Sweep up or otherwise collect and store in suitable drum.

WASTE TREATMENT

This chemical is a hazardous waste as defined by EPA Hazardous Waste and Consolidated Permit Regulations (or consult equivalent state regulations).
Hazardous Waste Characteristic: EP Toxicity, Title 40, Code of Federal Regulations, 261.24, Hazardous Waste Number D007.
This chemical contains chromium compounds and fluoride compounds Waste treatment and neutralization may be required prior to discharge to a sewer.
Waste Treatment Information Bulletin No. 1004 (Available on request.)
Dispose of in compliance with all applicable federal, state and local regulations.

8 PERSONAL PROTECTION

VENTILATION REQUIREMENTS	GENERAL AREA EXHAUST	☐
	LOCAL EXHAUST	☒
	NO EXHAUST NECESSARY	☐

PERSONAL PROTECTIVE EQUIPMENT

EYE PROTECTION	Safety goggles
SKIN PROTECTION	Neoprene or polyvinyl gloves and appropriate protective clothing.
RESPIRATORY PROTECTION	MSHA/NIOSH dust filter mask or respirator if dusting occurs. Provide sufficient mechanical (general and/or local exhaust ventilation to maintain exposure below TLV(s).
OTHER REQUIRED EQUIPMENT	Eye wash facility and emergency shower should be in close proximity.

9 SPECIAL PRECAUTIONS & STORAGE

Keep separate from organic materials and reducing agents. Do not breathe dust or get in eyes or on skin.

MATERIAL IS TOXIC.

Contact with combustible material may cause fire.

Wash thoroughly after handling.

For industrial use only.

PREPARED BY Product Acceptance Office DATE 10/03/89

TITLE

CHEMICAL EMERGENCY TELEPHONE 1-800-424-9300

Henkel Surface Technologies

Technical Process Bulletin

Technical Process Bulletin No. 1182
This Revision: 05/19/92

ALODINE® 600
Conversion Coating Process for Aluminum

1. Introduction:

ALODINE 600 is a powdered chemical used to produce a chromate conversion coating on aluminum and its alloys, which ranges in color from light, iridescent gold to tan. ALODINE 600 can be applied by immersion or spray method, does not contain complex cyanides, and is particularly recommended where a low dielectric resistance coating is desired.

ALODINE 600 is approved under MIL-C-81706 for use by Application Methods A and C, classes 1A and 3: and it's listing on QPL 81706 indicates its acceptance under the MIL-C-5541 document of current issue.

2. Operating Summary:

Chemical	Bath Preparation per 100 gallons:
ALODINE 600 Chemical	12.5 pounds
*ALODINE TONER 22	9.9 pounds (1.0 gallons)
*Not required when processing to meet class 3 of MIL-C-5541.	

Operation and Control:	
ALODINE Titration	7.4 to 9.4 ml
Temperature	70° to 100° Fahrenheit
Time	1 to 5 minutes
pH	1.5 to 2.0

3. The Process:

The complete process sequence for the ALODINE 600 treatment normally consists of the following steps:

A. Cleaning
B. Water rinsing
C. Deoxidizing (Optional)
D. Water rinsing
E. Treating with the ALODINE 600 processing solution
F. Water rinsing
G. Post treatment
H. Drying.

4. Materials:

ALODINE 600
ALODINE TONER 22
Nitric Acid
Testing Reagents and Apparatus

5. Equipment:

Process tank and housing should be fabricated from stainless steel, such as 316L or 304L. The 316L being preferred for maximum tank life. In all cases, approved welding techniques must be used. Polyvinyl chloride (PVC) or CPVC lined mild steel can be used. In spray applications, nozzles fabricated from 300 series stainless steel are preferred.

Process piping and pumps should be constructed of 316 or 304 stainless steel alloys. Various formulations of plastic pipe may be used with recommended support spacing, Schedule-80 being generally recommended. PVC Type I is limited to maximum process temperatures of 140° Fahrenheit. CPVC and PP may be used up to a maximum process temperature of 190° Fahrenheit. PVDF may be used for all expected operating temperatures.

Heat exchanger plates should be polished 316 stainless steel. Gas fired burner tubes are not recommended. All process circulation pump seals, valve seats, door seals, etc., which come into contact with the process solution and occasional acid equipment cleaners, should be EPDM, Viton™ or Teflon™.

Chemical feed pump parts and other elastomers which may come into contact with the concentrated replenishing chemical should be Viton or Teflon.

Support equipment available from Henkel Surface Technologies for this process includes: chemical feed pumps, level controls, transfer pumps and bulk storage tanks.

Our sales representative should be consulted for information on Henkel Surface Technologies automatic process control equipment for this process and any additional questions. In addition, the "Henkel Surface Technologies Equipment Design Manual" may be consulted.

6. Surface Preparation:

Cleaning:
All metal to be treated with the processing solution must be free from grease, oil and other foreign matter before the treatment. A complete line of cleaners is available and our representative should be consulted.

Water Rinsing:
After cleaning, the metal must be thoroughly rinsed with water. The rinse should be overflowed continuously at a rate which will keep it clean and free from scum and contamination.

Deoxidizing (optional):
When aluminum to be treated with ALODINE 600 processing chemical has corrosion products or heavy oxide on the surface, it should be cleaned by installing two additional stages between the post cleaner rinse and the ALODINE 600 treatment stage. One is for deoxidizing with a deoxidizing chemical and one is for an additional cold water rinse.

7. Treating with the ALODINE 600 Processing Solution:

Buildup:
Fill the tank about three-fourths full with cold water. For each 100 gallons of final solution volume, add 12.5 pounds of pre-dissolved ALODINE 600 chemical and circulate until thoroughly mixed; add, while mixing, 9.9 pounds (1.0 gallon) of ALODINE TONER 22 chemical. Finally, add sufficient water to bring the solution up to the working level and then heat, if necessary, to the operating temperature.

Operation:
Time: 1 to 5 minutes.
Temperature: 70° to 100° Fahrenheit.

Each alloy reacts with the ALODINE 600 solution to produce a coating that is characteristic of that alloy. The bath should produce a light, iridescent, gold to tan coating within the operating conditions selected.

If the Coating is Powdery:
a. The pH of the bath may be too low for the bath concentration selected.
b. The work may have been improperly cleaned and/or rinsed.
c. The ALODINE 600 bath may have become contaminated with phosphates, sulfates, or some other contaminant. In most cases, phosphate contamination will stop-off the coating completely.
d. The bath temperature may be too high.
e. The process time may be too long.

If the Coating is too Light or too Iridescent:
a. The temperature of the ALODINE 600 bath may be too low for the process time selected.
b. The process time may be too short
c. The concentration of the bath may be too low.
d. The pH of the bath may be outside of the proper range.

8. Testing and Control:
Never pipet by mouth, use a pipet filler.

ALODINE Titration:
Pipet a 5 ml sample of the ALODINE 600 bath into an iodimetric flask and dilute to approximately 100 ml with water. Add approximately 1 gm (1/2 teaspoonful) of Reagent 2 and agitate the solution until the compound is dissolved. Add approximately 10 ml of Reagent Solution 49 in 5 ml increments to the lip of the flask, raising the stopper slightly after each addition to allow the acid to run into the flask. Rinse the lip several times with water and replace the stopper. Let sit for approximately one minute.

Titrate with Titrating Solution 104 until a straw color is obtained. Do not rezero the buret. Add several milliliters of Indicator 10 to the sample and continue the titration until the blue-black color disappears. The milliliters of Titrating Solution 104 used is the ALODINE titration.

ALODINE titration range: 7.4 - 9.4 ml.

To increase the value 1.0 ml: 1.5 pounds of ALODINE 600 chemical per 100 gallons of bath.

pH Adjustment:
As the bath is used, the pH has a tendency to rise. Nitric acid is added to restore the pH to its proper operating level.

pH range: 1.5 to 2.0

Large additions of nitric acid are to be avoided in favor of frequent small additions.

9. After Treatment:

Water Rinsing:
After treating with ALODINE 600 the work should be thoroughly rinsed in cold water. The rinse should be continuously overflowed such that the main body of the rinse never becomes excessively contaminated.

Post Treatment:
The ALODINE 600 treated metal is treated with an acidic post treatment solution. The post treatment adds to the overall quality of the coating and prevents the formation of hard water rinse blistering. In some cases the post treatment stage may be heated to facilitate work drying.

Drying:
Parts coming from the post treatment stage should be dried as soon as possible in an indirectly fired oven or by any other means which will not contaminate the metal with fumes, oil, or partially burnt gases. Peak metal temperature should not exceed 140° Fahrenheit.

10. Storage Requirements:

ALODINE 600 chemical should be stored in a dry ventilated area. ALODINE TONER 22 freezes as 3° Fahrenheit. Should freezing occur, the chemical should be agitated after thawing.

11. Waste Disposal Information:

Applicable regulations covering disposal and discharge of chemicals should be consulted and followed.

Disposal information for ALODINE 600 and ALODINE TONER 22 is given on the Material Safety Data Sheet for each product.

The processing bath is acidic and contains chromium and complex fluorides. Waste treatment and neutralization will be required prior to the discharge to the sewer. (Refer to Waste Treatment Information Bulletin WT1004, available on request.)

Testing Reagents and Apparatus
(Order only those items which are not already on hand.)

Code	Quantity	Item
205957	1	Bucket, Graduated, Plastic, 10 liter
205700	1	Buret Assembly, 25-ml Automatic, Glass
205897	2*	Flasks, iodimetric, 250-ml
205852	2*	Graduated Cylinder, 50-ml, Glass
205010	1/2 pt	Indicator 10 (0.5% starch solution)
205590	1	Indicator Dropping Bottle, 2 oz
205876	2	Pipet, 5-ml, plastic
205082	1 lb	Reagent 2 (KI)
205249	5 pt	Reagent Solution 49 (C.P. HCl)
205960	1	Scale, 24-lb capacity
205966	1	Spoon, plastic, 1/2 teaspoon
205980	1	Thermometer, Floating
205104	2 qts	Titrating Solution 104 (0.1N $Na_2S_2O_3$)

- * * * * * -

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Henkel Surface Technologies
32100 Stephenson Highway
Madison Heights, MI 48071
Telephone: 248-583-9300
Fax: 248-583-2976

Form Revised 16 May 1997

APPENDIX M

POTENTIAL DRAIN FEATURES INSPECTION

JUNE 29, 30, AND JULY 1, 2010

Technical Memorandum

To: Mr. Mike Nesteroff, Lane Powell PC

From: Mr. Luke Martinkosky, Kane Environmental, Inc.
Mr. Jason Souza, Kane Environmental, Inc.

Date: July 23, 2010

Re: Potential Drain Features Inspection
Former TC Systems Inc.
1032 West Marine View Drive, Buildings B & C
Everett, Washington

This memorandum summarizes Kane Environmental's Potential Drain Features Inspection at the former TC Systems, Inc. facility located at 1032 West Marine View Drive in Everett, Washington (the Property).

BACKGROUND

The former TC Systems, Inc. facility is currently being decommissioned. As part of the process, the Washington State Department of Ecology (Ecology) issued a letter dated June 8, 2010 (Attachment B) stating (in part) that TC Systems, Inc. must "inspect all floors, walls, and other structures located in areas of the facility where you generated or accumulated dangerous wastes. Document this inspection, including photographs and an inspection log. The inspection must focus on determining whether release of contaminants could have occurred through cracks or gaps in concrete, through floor drains, or other conveyances." The floors, walls and other structures are considered drain features for the purposes of this memorandum.

SCOPE OF WORK

The Potential Source Area Inspection Scope of Work is intended to fulfill the above requirement by Ecology. The Scope of Work consisted of the following:

- A visual inspection of the interiors of Buildings B & C, located on the Property;
- A visual inspection of the exterior areas of the Property, including parking and storage areas;
- A log and photographs of potential source areas;
- A summary of the information compiled during the inspection, including photographs; and

- Kane Environmental's professional opinion as to whether the observed conditions may require further consideration as part of the ongoing Remedial Investigation/Feasibility Study (RI/FS) at the Property.

METHODOLOGY

The Scope of Work was completed by Luke Martinkosky, Emily Kane, and Jason Souza of Kane Environmental. Visual inspections took place on June 29, June 30, and July 1, 2010. At the time of the inspections, the facility was being decommissioned by others. The inspection consisted of visual examination of all safely-accessible areas of the Property, including the exterior, offices, storage, and process areas. Each potential drain feature was labeled, photographed, and inventoried for pertinent features.

FINDINGS

The visual inspection of the Property documented thirty-six (36) potential drain features. The characteristics of each area are summarized in Table 1. The symbol key to Table 1 is included as Attachment A. Photographs are included as Attachment C. The potential drain features consist primarily of cracks in concrete in (or near) chemical storage or process areas as well as storm sewer drains. Selected findings from the inspection are detailed below.

- Drain #9: A storm sewer drain on the western side of the Property (Photo 9). The drain has the potential to receive runoff from the western adjacent property. The adjacent property is sloped toward the storm drain and no berm was observed. Staining observed around the drain and the sloping indicate potential for impacts to the storm sewer drain; decontamination of this feature is considered warranted.
- Drain #14: A storm sewer drain located between Buildings B & C (Photo 14). The drain is located in a down-slope position from the compressor shed and secondary containment area for the wastewater treatment area. The down-slope position of this storm sewer drain indicates a potential for impacts to the drain; decontamination of this feature is considered warranted.
- Drain #15: The compressor shed (Photos 15 & 16). The concrete in the shed was observed to be oil-stained and gaps in the concrete floor were observed. The staining and gaps in the floor indicate a potential for subsurface impacts; decontamination of this feature is considered warranted.
- Drain #16. A patch of bare soil south of the compressor shed (Photo 16). This area of unasphalted soil adjacent to the compressor shed and wastewater treatment shed. Spills from

these two areas represent a potential for subsurface impacts at this location; decontamination of this feature is considered warranted.

- Drain #17: An exterior shed, formerly used to shelter the boiler system near the wastewater treatment area (Photo 18). Surface staining and extensive cracks in the asphalt and concrete floor of the shed was observed. The staining and cracks in the concrete indicate a potential for subsurface impacts; decontamination of this feature is considered warranted.
- Drain #18: An exterior sanitary sewer cleanout on the west side of Building B (Photo 18). Flexible tubing from the interior of the building was tight-lined to the sanitary sewer cleanout and leaking was observed at the time of inspection. The origin of the flexible tubing could not be determined during the inspection. Due to the leaking around the cleanout, there is a potential for subsurface impacts at this location; decontamination of this feature is considered warranted.
- Drains #19 & 21: Concrete secondary containment on the west side of Building B (Photos 20, 22 & 23). This secondary containment area was outside, partially covered and had contained water treatment chemicals. Staining on the concrete and small cracks on the exterior of the secondary containment were observed; decontamination of this feature is considered warranted.
- Drain #20: An area of bare soil located between the exterior secondary containment walls of the wastewater treatment area and the siding on the western side of Building B (Photos 21, 24 & 25). The metal siding above the soil was irregularly rusted, which can be indicative of chemical exposure. The outer side of the top of the concrete berm adjacent to the area was etched, which can also be indicative of chemical exposure. The bare soil represents a potential pathway for subsurface impacts; decontamination of this feature is considered warranted.
- Drain #22: An area of unpaved soil on the southern edge of the Property (Photo 26). The area is sloped such that it has the potential to receive runoff from the southern adjacent property. No staining was observed; decontamination of this feature is not considered warranted.
- Drain #24: The drum storage area in Building C (Photo 28). The drums were observed to be primarily stored on secondary containment structures. Several cracks and cold seams in the concrete in and around the drum storage area, which represent potential pathways to the subsurface in the event of a chemical spill, however no staining or other evidence of spills was observed. Decontamination of this feature is considered warranted.
- Drain #27: A hand cut sump in the dye penetrant test area of Building B (Photo 30). Exposed bare soil was observed in the sump, beneath the concrete slab. Chemicals from the penetrant test area were reportedly mopped to the sump and then pumped out. Staining was observed in

and around the sump. The exposed soil, staining and location of the sump indicate a potential for subsurface impacts; decontamination of this feature is considered warranted.

- Drain #28: The concrete floor of the entire dye penetrant test area (Photos 31, 32, 33, 34 & 35). The concrete floor was observed to be stained at the time of the inspection. Cold seams, cracks and gaps in the concrete were also observed in this area, indicative of the potential for subsurface impacts; decontamination of this feature is considered warranted.
- Drains #29 & 30: The sumps inside the concrete secondary containment for the process plating dip tanks (Photos 36 & 37). Liquid was observed in the sumps at the time of the inspection, therefore drainage from these features could not be determined. Re-inspection of these sumps will be required after the removal of the dip tanks and associated equipment; decontamination of this feature is considered warranted.
- Drain #31: The entire concrete secondary containment area around the process plating dip tanks (Photo 38). Although this area was mostly inaccessible at the time of the inspection, surface staining was observed in this area. It is unknown at this time if additional sumps are present within this area. Re-inspection of this area will be required after the removal of the process equipment.

TABLES
Table 1 – Potential Source Area Inventory

ATTACHMENTS
Attachment A – Table 1 Key
Attachment B – Ecology Letter
Attachment C – Site Photographs

TABLES

TABLE 1
POTENTIAL DRAIN FEATURE INVENTORY

DRAIN ID	BUILDING	FLOOR	ROOM or AREA	LOCATION NOTES	CONSTRUCTION	USE	LOCATION	MAINTENANCE	DESIGN	EVIDENCE	COMMENTS
1	Between B&C	out	out	asphalt	C	L	X,Z	AG	—	—	storm drain
2	Between B&C in breeze way	out	out	drains out of breezeway	B	N	T,Z	AF	—	—	Drains away from water treatment
3	Between B&C in breeze way	out	out	drains out of breezeway	B	N	T,Y,Z	AF	—	—	Above grade of asphalt, drains away from water treatment, crosses breezeway
4	South of B	out	out	in asphalt parking	H	I	Z, AT, #	AE	—	—	Cut-in patch in asphalt
5	South of B	out	out	in asphalt parking covered by metal plate	B,E	M	X, Z, #	AH	—	—	Sanitary sewer cleanout
6	South of C	out	out	asphalt	C	L	Z	AG	—	—	storm drain
7	West of C	out	out	asphalt	C	L	Z,Q	AG	—	—	storm drain
8	West of edge of C	out	out	asphalt next to foundation	H	O	Z,#	AB, AC, AF	AL, AM	AS	
9	West of C	out	out	asphalt	C	L	Q,Z	AG	—	AS	storm drain
10	NW of C	out	out	asphalt	C	L	Z,Q	AG	—	AS	storm drain
11	North of C	out	out	asphalt	C	L	Z,R	AG	AM, AL	—	storm drain
12	North of B & C	out	out	asphalt	C	L	Z,R	AG	AL, AM	—	storm drain
13	North of B&C	out	out	asphalt	C	L	Z,R	AG	AL, AM	AS	storm drain
14	Between B & C	out	out	asphalt	C	L	Z,R	AG	AL, AM	AS, AP, AQ	storm drain
15	East side of C	concrete & asphalt	exterior shed	compressor shed	F	N	Y,Z,#	AB, AD, AC, AE, AG, AF	AL, AM	AP, AQ	Shed
16	Between B & C	out	out	in area between buildings	H	I	Z, AT, V, #, R	AE	—	—	Cut in patch in asphalt
17	West side at B	concrete & asphalt	exterior shed	boiler shed	F	N	Y, Z, #	AB, AE, AC, AF, AD, AG	AL, AM	AP, AR	Shed
18	West side of building B	exterior asphalt	exterior boiler shed	adjacent to concrete foundation	B,E,G	M	X,Z,#	AB	—	AS	Visual indicates leaking
19	West side of building B	concrete	secondary containment outside	adjacent to building, not covered	C, F	J	Z	AG, AB	AN	AP, AS, AR, AC	Secondary containment for water treatment chemicals
20	West side of building B	out	Between secondary containment & building	adjacent to building	H	I	Z, AT, V, #, R	AB, AE, AF	AL, AM	AP, AR, AQ, AS	Un-asphalted area
21	West side of building B	concrete	secondary containment outside	adjacent to building, partially covered	C, F	J	Z	AG, AB, AC	AN	AP, AS, AR, AC	Secondary containment for water treatment chemicals
22	South side of property	out, asphalt & bare	out	south side	H	N	Q, Z, #	—	AM, AL	—	Southern adjacent property drains to here
23	C	concrete	NW corner	near bay doors	F	K	T, Y	AB, AC	AO	AR	Etch in concrete

TABLE 1
POTENTIAL DRAIN FEATURE INVENTORY

DRAIN ID	BUILDING	FLOOR	ROOM or AREA	LOCATION NOTES	CONSTRUCTION	USE	LOCATION	MAINTENANCE	DESIGN	EVIDENCE	COMMENTS
24	C	concrete	drum storage	—	F	K	Y	AB, AG, AD	AK, AL, AM	AP, AR, AQ, AS	Etchings & stains in drum storage
25	C	concrete	north oven	—	F	K	Y	AC, AH	—	—	Cracks in concrete inside paint oven
26	C	concrete	men's & women's bathroom	—	H	M	—	AH	—	—	Sinks/drains in bathroom
27	B	concrete	penetrant area	north center	H, C, F	I, K, N	R, Y, #	AB, AG, AE, AF	AK, AM, AL	AP, AS	Cut sump in concrete floor
28	B	concrete	penetrant area	whole area	F	K	R, V, Y, #	AB, AE, AC, AF, AD, AG	AK	AP, AQ, AR, AS	Floor condition in penetrant area running to walls
29	B	concrete	dip tanks	inside secondary containment	F	J, N	R, Y	AB, AG, AC, AD	AK	AP, AQ, AR, AS	Sump in NE corner of tank's secondary containment
30	B	concrete	dip tanks	inside secondary containment	F	J, N	R, Y	AB, AG, AC, AD	AK	AP, AQ, AR, AS	Sump in SE area of tank's secondary containment
31	B	concrete	dip tanks	whole area of secondary containment	F, H	K	R, V, Y	AB, AE, AC, AF, AD, AG	AL, AO	AP, AQ, AR, AS	Requires re-inspection
32	B	concrete	ovens	3 ovens	F	K	Y	AC, AH	—	—	Cracks in concrete inside 2 existing & 1 former oven
33	B	tile/porcelain	wet lab	upstairs in B	H	M	—	AH	—	—	Sinks in lab
34	B	concrete	near south bay door	west of ovens	F	N	Y	AH	AO	—	Concrete patch (old sump ?)
35	B	concrete	bathroom & adjacent sink	south end	H	M	—	AH	—	—	Sink & bathroom
36	C	concrete	near breezeway	—	F	N	Y	AH	AC	—	3 concrete patches

ATTACHMENT A
TABLE 1 KEY

DEFINITIONS OF TABLE 1 KEY SYMBOLS

CONSTRUCTION	
A	ZIPPER
B	ROUND
C	SQUARE CATCH BASIN
D	ROUND CATCH BASIN
E	POLYPROPYLENE
F	CONCRETE
G	METAL
H	OTHER MATERIAL CONSTRUCTION

USE	
I	CUT IN SURFACING
J	CONTAINMENT
K	CONDITION – SEE COMMENT
L	STORM DRAIN
M	SANITARY SEWER DRAIN
N	OTHER DRAIN
O	UNIDENTIFIED DRAIN
P	DRAIN NOT IN USE

LOCATION	
Q	CLOSE TO ADJACENT PROPERTY
R	CLOSE TO CONTROLLED PROCESS AREA
S	
T	CLOSE TO STORM SEWER
U	CLOSE TO SANITARY SEWER
V	CLOSE TO UNIDENTIFIED DRAIN
W	CLOSE TO STORM CLEANOUT
X	DOWN GRADIENT OF OTHER DRAINS, CROSS CONTAMINATION LIKELY
Y	ON CONCRETE
Z	ON ASPHALT
AA	ON TILE
#	UNPROTECTED, CONDITIONS REPRESENT ELEVATED RISK
AT	ON SOIL

MAINTENANCE	
AB	POORLY MAINTAINED
AC	CRACKS AROUND DRAIN ALLOW FOR SEEPAGE
AD	COLD SEAMS AROUND DRAIN ALLOW FOR SEEPAGE
AE	NEARBY SOIL ALLOWS FOR SEEPAGE
AF	OTHER FEATURE ALLOWS FOR SEEPAGE
AG	IN NEED OF CLEANING
AH	APPEARS CLEAN
AI	REPORTEDLY DECONTAMINATED
AJ	DECONTAMINATED AND SAMPLED

DESIGN	
AK	ELEVATION OF DRAIN DOES NOT ALLOW FOR DRAINAGE
AL	DRAIN IS LACKING PROPER BERM
AM	DRAIN IS LACKING PROPER SLOPE
AN	DRAIN HAS PROPER SECONDARY CONTAINMENT
AO	DRAIN HAS BEEN ALTERED SINCE ITS ORIGINAL CONSTRUCTION

APPEARANCE/EVIDENCE	
AP	RUST STAINING AROUND DRAIN
AQ	OIL STAINING AROUND DRAIN
AR	ETCHING AROUND DRAIN
AS	OTHER STAINING AROUND DRAIN

ATTACHMENT B
ECOLOGY LETTER

June 8, 2010

HAND DELIVERED

Mr. Charles Souder
TC Systems
1032 W Marine View Dr
Everett, WA 98201

RE: Site Closure at TC Systems in Everett
RCRA ID#: WAD088722947

Dear Mr. Souder:

This letter addresses the steps needed to successfully close TC Systems in compliance with the Dangerous Waste Regulations, Chapter 173-303 WAC. Please use this letter, the document *Guidance for Clean Closure of Dangerous Waste Units and Facilities. Revised May 2005*[1], and the applicable regulations to help guide the closure activities.

Ecology considers a site closure complete when actions have been sufficient to:

- ✓ Define potential risks to human health or the environment that your management of hazardous materials and wastes may have caused.
- ✓ Minimize the need for future decontamination or waste removal.
- ✓ Control, minimize or eliminate post-closure escape of dangerous wastes or dangerous constituents to the environment.
- ✓ Return the site to its original appearance to the degree possible given the nature of previous activities.

The federal "clean debris standard" (defined in 40 CFR Part 268.45) allows that a visual inspection may be sufficient to determine if floors, sumps, equipment, or other structures require additional decontamination beyond the initial effort. Source sampling and analysis can also be used to verify that structures have been adequately decontaminated.

Required Actions:

1. Dangerous Waste Accumulation Areas: Designate and dispose of dangerous waste accumulated in containers and tanks. Properly decontaminate or dispose of all contaminated equipment and structures. Designate all residues and cleanup waste as required in WAC 173-303-070, and properly dispose of them. Maintain records to track any material managed off-site.

[1] www.ecy.wa.gov/biblio/94111.html If a paper copy is needed, please contact David Zink at 360-407-6752.

2. Process Areas: Clean-up any chemical residue deposited on floors, equipment, or structures in the facility. Designate all residues and cleanup waste as required in WAC 173-303-070, and properly dispose of them. Maintain records to track any material managed off-site.

3. Wash Water: Designate any wash water generated during the closure as required in WAC 173-303-070 and properly dispose of it. Obtain authorization before discharging wash water to the sanitary sewer. Maintain records to track any material discharged or managed off-site.

4. Product Chemicals/Hazardous Materials: Designate any discarded or unusable material as required in WAC 173-303-070 and properly dispose of it. If another business can use the materials, you may want to list them on the King County Industrial Materials Exchange website at www.govlink.org/hazwaste/business/imex/. Maintain records to track any material managed off-site.

5. Inspection and Documentation: Manifest all dangerous wastes (including those generated in the clean-out) off-site. After cleaning and removing equipment, inspect all floors, walls, and other structures located in areas of the facility where you generated or accumulated dangerous wastes. Document this inspection, including photographs and an inspection log. The inspection must focus on determining whether release of contaminants could have occurred through cracks or gaps in concrete, through floor drains, or other conveyances. The inspection must also focus on determining which structures must undergo decontamination or removal, based on the presence of contaminants.

6. Releases: Investigate any potential release to the environment. At other facilities, this work has included coring through concrete to obtain soil and groundwater samples. Determine risks and review potential impacts. If you determine that soils or groundwater have been impacted, then the company must meet the standards defined in the State's Model Toxics Control Act (MTCA), Chapter 173-340 WAC.

7. Final Dangerous Waste Annual Report: After transporting all dangerous waste off site, file a final Dangerous Waste Annual Report (DWAR). Include the final loads and the amounts of dangerous wastes removed and then withdraw the RCRA ID number. For questions on annual reporting, contact Ecology's DWAR team at 360-407-6170 or 1-800-874-2022.

Within 30-days of closure

Provide the following documentation, per WAC 173-303-220(3) – Additional Reports:

- Copies of the manifests for all dangerous waste managed off-site from the time closure started to the final closure date.

- A copy of any inspection results (photographs and written documentation) demonstrating that the dangerous waste accumulation area(s) and process area(s) have been properly cleaned and closed.
- A copy of the final DWAR for the facility.
- A brief description of what operations, if any, will remain in place.

Mail, fax, or email requested information to:

Washington State Department of Ecology
3190 160th Ave SE
Bellevue, WA 98008
Attn: Daylin Davidson

FAX: (425) 649-7218

Please call me at (425) 649-7090 or contact me via email at Daylin.Davidson@ecy.wa.gov if you have questions or require clarification of any items in this letter.

Sincerely,

Daylin Davidson, Environmental Specialist
Hazardous Waste and Toxics Reduction Program

ATTACHMENT C
SITE PHOTOGRAPHS

Photo1: Storm drain between Buildings B & C and south of the breezeway.

Photo 2: Drains leading from the breezeway. The source area for #2 is unknown, but may be to the north of the breezeway. #3 drains the breezeway. Both drains lead to the storm drain in Photo 1.

Photo 3: Bare soil patch in the asphalt south of Building B.

Photo 4: Sanitary sewer cleanout to the south of Building B.

Photo 5: Storm drain to the south of Building C.

Photo 6: Storm drain to the west of Building C.

Photo 7: Sunken asphalt patch adjacent to the western foundation of Building C.

Photo 8: Same as Photo 7, but numbered and from a different angle.

Photo 9: Storm drain to the west of Building C. Note reddish sediment/staining around the storm drain.

Photo 10: Storm drain to the northwest of Building C.

Photo 11: Storm drain to the north of Building C.

Photo 12: Storm drain to the north of Buildings B & C.

Photo 13: Storm drain to the south of Building C.

Photo 14: Storm drain between Buildings B & C and north of the breezeway. This storm drain is down slope of the compressor shed.

Photo 15: Exterior compressor shed on the east side of building C.

Photo 16: Close-up of staining and a gap in the concrete in the shed.

Photo 17: Bare soil patch in the asphalt between Buildings B & C.

Photo 18: An exterior shed on the western side of Building B. Note the cracking and staining.

Photo 19: Sanitary sewer cleanout tight lined to flexible tubing. The area around the cleanout was observed to be leaking at the time of the inspection.

Photo 20: Concrete secondary containment for treatment chemicals on the west side of Building B. This area was not covered.

Photo 21: Bare soil between the west wall of Building B and the concrete containment areas. Note the damaged siding and etching on the concrete berm.

Photo 22: Concrete secondary containment for chemicals on the west side of Building B. This area was partially covered.

Photo 23: Wide angle view of the concrete secondary containment for chemicals on the west side of Building B. This area was partially covered. Note the staining on the front concrete berms and rust on the building's siding.

Photo 24: Close up of the bare soil between the west wall of Building B and the concrete containment areas. Note the damaged siding and etching on the concrete berm.

Photo 25: Bare soil between the west wall of Building B and the concrete containment areas. Note the damaged siding and etching on the concrete berm. The area extended the entire length of the secondary containment area.

Photo 26: Bare soil on the southern edge of the subject property. The site to the south of the subject property was sloped in such a way that runoff would impact this area.

Photo 27: Etching in concrete floor in the northwest corner of Building C, near the bay doors.

Photo 28: Drum storage area in Building C. Several cold seams and cracks in the concrete were noted in this area. Staining was also present in several areas of the floor.

Photo 29: Cracked concrete floor inside the drying oven in Building C.

Photo 30: A hand cut sump in the penetrant test area in Building B. The sump is directly over bare soil. Note the staining in and around the sump.

Photo 31: Concrete floor in penetrant test area in Building B. Note the severe staining. Cold seams, cracks and gaps between the wall and floor were noted within the stained area. This area consists of the entire penetrant testing area.

Photo 32: View of another area of stained concrete in penetrant test area beneath metal troughs.

Photo 33: View of another area of stained concrete in penetrant test area beneath metal troughs.

Photo 34: View of another area of stained concrete in penetrant test area beneath metal troughs. Note the faucet draining directly to the concrete floor and nearby cold seam.

Photo 35: View of another area of stained concrete in penetrant test area beneath metal troughs.

Photo 36: Sump in the northeast corner of the secondary containment area around the process plating dip tanks in Building B.

Photo 37: Sump in the southeast corner of the secondary containment area around the process plating dip tanks in Building B.

Photo 38: The entire secondary containment area around the process plating dip tanks in Building B. Note the extensive staining in and around the containment area. Due to the condition of the dip tanks, it was not safely feasible to visually inspect inside the secondary containment. Re-inspection of this area will be needed when the dip tanks are removed.

Photo 39: View of drying oven in Building B with extensive cracks in the concrete floor.

Photo 40: View of drying oven in Building B with extensive cracks in the concrete floor.

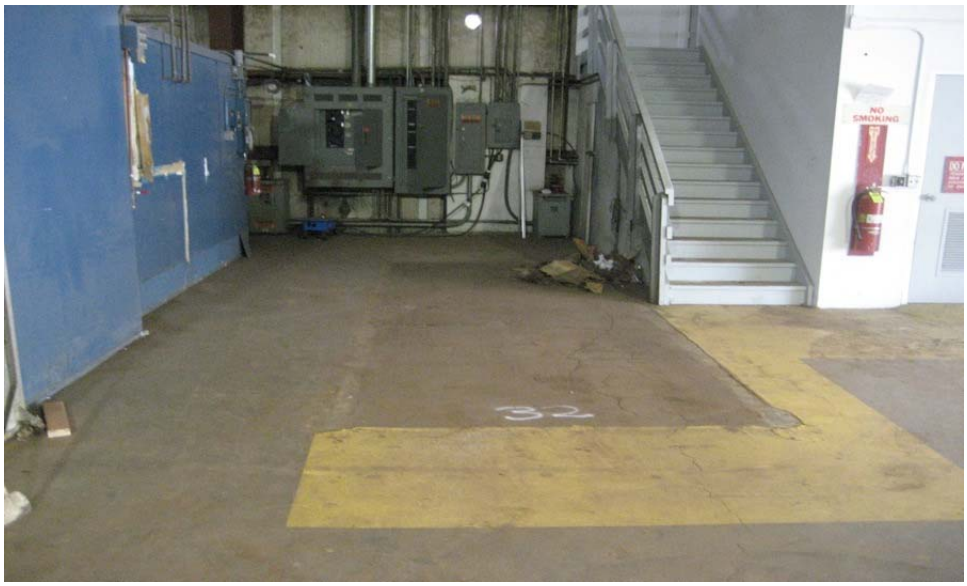

Photo 41: View of former drying oven in Building B with extensive cracks in the concrete floor.


Photo 42: Sink drain in wet lab upstairs in Building B.

Photo 43: Concrete patch in floor of Building B, near the south bay doors. The patch may have been a former sump.

Photo 44: Sinks adjacent to bathroom in the southeast portion of Building B.

Photo 45: Bathroom in the southeast portion of Building B.

Photo 46: Three concrete patches in floor of Building C, adjacent to the breezeway.

APPENDIX N

EDR RADIUS MAP REPORT

TC Systems
1032 West Marine Drive
Everett, WA 98201

Inquiry Number: 2790806.1s
June 11, 2010

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1032 WEST MARINE DRIVE
EVERETT, WA 98201

COORDINATES

Latitude (North):	48.003800 - 48° 0' 13.7''
Longitude (West):	122.215500 - 122° 12' 55.8''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	558517.5
UTM Y (Meters):	5316801.5
Elevation:	11 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	48122-A2 MARYSVILLE, WA
Most Recent Revision:	1973
South Map:	47122-H2 EVERETT, WA
Most Recent Revision:	1973

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
TC SYSTEMS INC 1032 W MARINE VIEW DR EVERETT, WA 98201	RCRA-SQG FINDS CSCSL ALLSITES MANIFEST NPDES	WAD088722947
TC SYSTEMS INC 1032 W MARINE VIEW DR EVERETT, WA 98201	FINDS	N/A
TC SYSTEMS 1028 W MARINE VIEW DR EVERETT, WA	SPILLS	N/A

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

CERCLIS ---------- Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP ---------- CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators

Federal institutional controls / engineering controls registries

US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Facility Database

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

AST ---------- Aboveground Storage Tank Locations
INDIAN UST ---------- Underground Storage Tanks on Indian Land
FEMA UST ---------- Underground Storage Tank Listing

State and tribal voluntary cleanup sites

VCP ---------- Voluntary Cleanup Program Sites
INDIAN VCP ---------- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ---------- Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI ---------- Open Dump Inventory
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
SWTIRE ---------- Solid Waste Tire Facilities
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL ---------- Clandestine Drug Labs
CDL ---------- Clandestine Drug Lab Contaminated Site List
HIST CDL ---------- List of Sites Contaminated by Clandestine Drug Labs
US HIST CDL ---------- National Clandestine Laboratory Register

Local Land Records

LIENS 2 ---------- CERCLA Lien Information
LUCIS ---------- Land Use Control Information System

Records of Emergency Release Reports

HMIRS ---------- Hazardous Materials Information Reporting System

Other Ascertainable Records

DOT OPS ---------- Incident and Accident Data
DOD ---------- Department of Defense Sites
FUDS ---------- Formerly Used Defense Sites
CONSENT ---------- Superfund (CERCLA) Consent Decrees
ROD ---------- Records Of Decision
UMTRA ---------- Uranium Mill Tailings Sites
MINES ---------- Mines Master Index File

TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
RAATS	RCRA Administrative Action Tracking System
UIC	Underground Injection Wells Listing
DRYCLEANERS	Drycleaner List
AIRS	Washington Emissions Data System
Inactive Drycleaners	Inactive Drycleaners
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
COAL ASH	Coal Ash Disposal Site Listing
PCB TRANSFORMER	PCB Transformer Registration Database
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
COAL ASH DOE	Sleam-Electric Plan Operation Data

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants	EDR Proprietary Manufactured Gas Plants
EDR Historical Auto Stations	EDR Proprietary Historic Gas Stations
EDR Historical Cleaners	EDR Proprietary Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA)

of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 02/17/2010 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMERON INC PPD	*1130 W MARINE VIEW DR*	*S 0 - 1/8 (0.042 mi.)*	*B4*	*47*
ABW TECHNOLOGIES INC	*1332 W MARINE VIEW DR*	*S 1/8 - 1/4 (0.232 mi.)*	*E15*	*85*

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 02/17/2010 has revealed that there are 2 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PERFORMANCE MARINE INC	*930 W MARINE VIEW DR*	*NNE 0 - 1/8 (0.062 mi.)*	*8*	*70*
MARINE SPILL RESPONSE CORP EVE	*1105 13TH ST*	*S 1/8 - 1/4 (0.206 mi.)*	*C9*	*73*

State- and tribal - equivalent NPL

HSL: The Hazardous Sites List is a subset of the CSCSL Report. It includes sites which have been assessed and ranked using the Washington Ranking Method (WARM).

A review of the HSL list, as provided by EDR, and dated 02/17/2010 has revealed that there are 8 HSL sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NORTH MARINA AMERON HULBERT Facility Type: Hazardous Sites List		*SE 0 - 1/8 (0.057 mi.)*	*7*	*66*
EVERETT LAUNDRY Facility Type: Hazardous Sites List	*1130 N BROADWAY*	*E 1/2 - 1 (0.638 mi.)*	*38*	*179*
THE ALLEY SHOP Facility Type: Hazardous Sites List	*1321 BROADWAY*	*ESE 1/2 - 1 (0.669 mi.)*	*39*	*183*
JELD WEN Facility Type: Hazardous Sites List	*300 WEST MARINE VIEW DR*	*NNE 1/2 - 1 (0.698 mi.)*	*40*	*186*
BAY WOOD PRODUCTS Facility Type: Hazardous Sites List		*NNE 1/2 - 1 (0.898 mi.)*	*J44*	*213*

Lower Elevation	Address	Direction / Distance	Map ID	Page
EVERETT SHIPYARD INC Facility Type: Hazardous Sites List	*1016 14TH STREET*	*S 1/4 - 1/2 (0.274 mi.)*	*F23*	*99*
NORTH MARINA WEST END Facility Type: Hazardous Sites List		*SW 1/4 - 1/2 (0.363 mi.)*	*31*	*141*

Lower Elevation	Address	Direction / Distance	Map ID	Page
PIONEER MARINE PLAZA	***17TH ST & W MARINE VIEW***	***S 1/2 - 1 (0.570 mi.)***	***37***	***174***
Facility Type: Hazardous Sites List				

State- and tribal - equivalent CERCLIS

CSCSL: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Ecology's Confirmed & Suspected Contaminated Sites List.

A review of the CSCSL list, as provided by EDR, and dated 04/26/2010 has revealed that there are 15 CSCSL sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NORTH MARINA AMERON HULBERT		***SE 0 - 1/8 (0.057 mi.)***	***7***	***66***
NORTH MARINA BAYSIDE ABW SITE	***1332 W MARINE VIEW DR***	***S 1/8 - 1/4 (0.231 mi.)***	***E14***	***83***
EVERETT LAUNDRY	***1130 N BROADWAY***	***E 1/2 - 1 (0.638 mi.)***	***38***	***179***
THE ALLEY SHOP	***1321 BROADWAY***	***ESE 1/2 - 1 (0.669 mi.)***	***39***	***183***
JELD WEN	***300 WEST MARINE VIEW DR***	***NNE 1/2 - 1 (0.698 mi.)***	***40***	***186***
TIME STATION 168	***928 N BROADWAY***	***E 1/2 - 1 (0.771 mi.)***	***41***	***203***
TREPANIER ENGINEERING	***1601 BROADWAY AVE***	***SE 1/2 - 1 (0.786 mi.)***	***42***	***206***
JACKPOT FOOD MART CO 169	***851 N BROADWAY***	***E 1/2 - 1 (0.840 mi.)***	***43***	***207***
BAY WOOD PRODUCTS		***NNE 1/2 - 1 (0.898 mi.)***	***J44***	***213***
LEGION MEMORIAL GOLF COURSE	***E MARINE VIEW DRIVE***	***NNE 1/2 - 1 (0.907 mi.)***	***J45***	***217***
WA DOT EVERETT MAINTENANCE FAC	***709 N BROADWAY***	***ENE 1/2 - 1 (0.951 mi.)***	***46***	***219***
NAVAL STATION EVERETT	***2000 W MARINE VIEW DR***	***S 1/2 - 1 (0.987 mi.)***	***47***	***221***

Lower Elevation	Address	Direction / Distance	Map ID	Page
EVERETT SHIPYARD INC	***1016 14TH STREET***	***S 1/4 - 1/2 (0.274 mi.)***	***F23***	***99***
NORTH MARINA WEST END		***SW 1/4 - 1/2 (0.363 mi.)***	***31***	***141***
PIONEER MARINE PLAZA	***17TH ST & W MARINE VIEW***	***S 1/2 - 1 (0.570 mi.)***	***37***	***174***

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Ecology's Leaking Underground Storage Tanks Site List.

A review of the LUST list, as provided by EDR, and dated 05/24/2010 has revealed that there are 3 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EVERETT PORT	***1100 13TH ST***	***S 1/8 - 1/4 (0.206 mi.)***	***C10***	***75***

Lower Elevation	Address	Direction / Distance	Map ID	Page
EVERETT BAYSIDE MARINE INC	***1001 14TH ST***	***S 1/4 - 1/2 (0.272 mi.)***	***F19***	***91***
PUGET SOUND TRUCK LINES	***615 13TH ST***	***SW 1/4 - 1/2 (0.281 mi.)***	***H25***	***118***

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Ecology's Statewide UST Site/Tank Report.

A review of the UST list, as provided by EDR, and dated 05/24/2010 has revealed that there are 3 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMERON INC PPD	***1130 W MARINE VIEW DR***	***S 0 - 1/8 (0.042 mi.)***	***B4***	***47***
EVERETT PORT	***1100 13TH ST***	***S 1/8 - 1/4 (0.206 mi.)***	***C10***	***75***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
EVERETT FIRE DEPT 3	***920 13TH ST***	***S 1/8 - 1/4 (0.208 mi.)***	***D12***	***78***

State and tribal institutional control / engineering control registries

INST CONTROL: Sites that have institutional controls.

A review of the INST CONTROL list, as provided by EDR, and dated 05/18/2010 has revealed that there is 1 INST CONTROL site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NORTH MARINA WEST END		***SW 1/4 - 1/2 (0.363 mi.)***	***31***	***141***

State and tribal voluntary cleanup sites

ICR: These are remedial action reports Ecology has received from either the owner or operator of the site. These actions have been conducted without department oversight or approval and are not under an order or decree.

A review of the ICR list, as provided by EDR, and dated 12/01/2002 has revealed that there are 4 ICR sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PORT OF EVERETT	1105 13TH ST.	S 1/8 - 1/4 (0.206 mi.)	C11	78
EVERETT COMMUNITY COLLEGE	***2000 TOWER ST***	***ENE 1/4 - 1/2 (0.416 mi.)***	***34***	***150***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
EVERETT BOAT HOUSE - PORT OF E	1001 14TH ST.	S 1/4 - 1/2 (0.272 mi.)	F20	92
PUGET SOUND TRUCK EVERETT	615 13TH ST.	SW 1/4 - 1/2 (0.281 mi.)	H26	120

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

ALLSITES: Information on facilities and sites of interest to the Department of Ecology.

A review of the ALLSITES list, as provided by EDR, and dated 05/12/2010 has revealed that there are 27 ALLSITES sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SUNSET BODY WORKS INC	***1130 W MARINE VIEW DR S***	***S 0 - 1/8 (0.042 mi.)***	***B5***	***60***
NORTH MARINA AMERON HULBERT		***SE 0 - 1/8 (0.057 mi.)***	***7***	***66***
PERFORMANCE MARINE INC	***930 W MARINE VIEW DR***	***NNE 0 - 1/8 (0.062 mi.)***	***8***	***70***
MARINE SPILL RESPONSE CORP EVE	***1105 13TH ST***	***S 1/8 - 1/4 (0.206 mi.)***	***C9***	***73***
EVERETT PORT	***1100 13TH ST***	***S 1/8 - 1/4 (0.206 mi.)***	***C10***	***75***
NORTH MARINA BAYSIDE ABW SITE	***1332 W MARINE VIEW DR***	***S 1/8 - 1/4 (0.231 mi.)***	***E14***	***83***
EVERETT PORT NORTH MARINE	***1400 W MARINE VIEW DR***	***S 1/4 - 1/2 (0.279 mi.)***	***G24***	***116***
EVERETT PORT MARINA SUPPORT SV	***1402 W MARINE VIEW DR***	***S 1/4 - 1/2 (0.281 mi.)***	***G27***	***120***
EVERETT ENGINEERING INC	***1420 W MARINE VIEW DR***	***S 1/4 - 1/2 (0.299 mi.)***	***G28***	***128***
PROVIDENCE GEN MED CTR	***1321 COLBY AVE***	***SE 1/4 - 1/2 (0.377 mi.)***	***32***	***146***
OLYMPIC FISH CO	***1520 W MARINE VIEW DR***	***S 1/4 - 1/2 (0.400 mi.)***	***33***	***149***
EVERETT COMMUNITY COLLEGE	***2000 TOWER ST***	***ENE 1/4 - 1/2 (0.416 mi.)***	***34***	***150***
PROVIDENCE EVERETT MEDICAL CTR	***14TH & COLBY***	***SE 1/4 - 1/2 (0.420 mi.)***	***35***	***163***
EVERETT COMMUNITY COLLEGE ROCK	***13TH ST & ROCKEFELLER A***	***ESE 1/4 - 1/2 (0.495 mi.)***	***36***	***173***

Lower Elevation	Address	Direction / Distance	Map ID	Page
OW GLASS	***1020 10TH ST***	***W 0 - 1/8 (0.048 mi.)***	***6***	***64***
EVERETT FIRE DEPT 3	***920 13TH ST***	***S 1/8 - 1/4 (0.208 mi.)***	***D12***	***78***
CHUCKS BOAT HOSPITAL	***915 13TH ST***	***S 1/8 - 1/4 (0.209 mi.)***	***D13***	***81***
EVERETT MARINE CO OP	733 13TH ST	SSW 1/8 - 1/4 (0.243 mi.)	16	88
B & B MARINE SERVICES LLC	***949 14TH ST***	***S 1/4 - 1/2 (0.267 mi.)***	***F17***	***89***
JIMS L & M MARINE INC	999 14TH ST	S 1/4 - 1/2 (0.272 mi.)	F18	90
EVERETT BAYSIDE MARINE INC	***1001 14TH ST***	***S 1/4 - 1/2 (0.272 mi.)***	***F21***	***93***
EVERETT SHIPYARD PIERS 1 3	1016 14TH ST	S 1/4 - 1/2 (0.274 mi.)	F22	99
EVERETT SHIPYARD INC	***1016 14TH STREET***	***S 1/4 - 1/2 (0.274 mi.)***	***F23***	***99***
PUGET SOUND TRUCK LINES	***615 13TH ST***	***SW 1/4 - 1/2 (0.281 mi.)***	***H25***	***118***
EVERETT PORT 14TH ST	***609 14TH ST***	***SW 1/4 - 1/2 (0.327 mi.)***	***I29***	***138***
EVERETT ENGINEERING BLDG M 11	***800 BLOCK OF 13TH ST***	***SW 1/4 - 1/2 (0.330 mi.)***	***I30***	***139***
NORTH MARINA WEST END		***SW 1/4 - 1/2 (0.363 mi.)***	***31***	***141***

CSCSL NFA: The data set contains information about sites previously on the Confirmed and Suspected Contaminated Sites list that have received a No Further Action (NFA) determination. Because it is necessary to maintain historical records of sites that have been investigated and cleaned up, sites are not deleted from the database when cleanup activities are completed. Instead a No Further Action code is entered based upon the type of NFA determination the site received.

A review of the CSCSL NFA list, as provided by EDR, and dated 04/26/2010 has revealed that there is 1 CSCSL NFA site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
PUGET SOUND TRUCK LINES	***615 13TH ST***	***SW 1/4 - 1/2 (0.281 mi.)***	***H25***	***118***

Other Ascertainable Records

RCRA-NonGen: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA-NonGen list, as provided by EDR, and dated 02/17/2010 has revealed that there are 4 RCRA-NonGen sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SUNSET BODY WORKS INC	*1130 W MARINE VIEW DR S*	*S 0 - 1/8 (0.042 mi.)*	*B5*	*60*
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
OW GLASS	*1020 10TH ST*	*W 0 - 1/8 (0.048 mi.)*	*6*	*64*
EVERETT FIRE DEPT 3	*920 13TH ST*	*S 1/8 - 1/4 (0.208 mi.)*	*D12*	*78*
CHUCKS BOAT HOSPITAL	*915 13TH ST*	*S 1/8 - 1/4 (0.209 mi.)*	*D13*	*81*

MANIFEST: Hazardous waste manifest information.

A review of the MANIFEST list, as provided by EDR, and dated 12/31/2009 has revealed that there are 2 MANIFEST sites within approximately 0.25 miles of the target property.

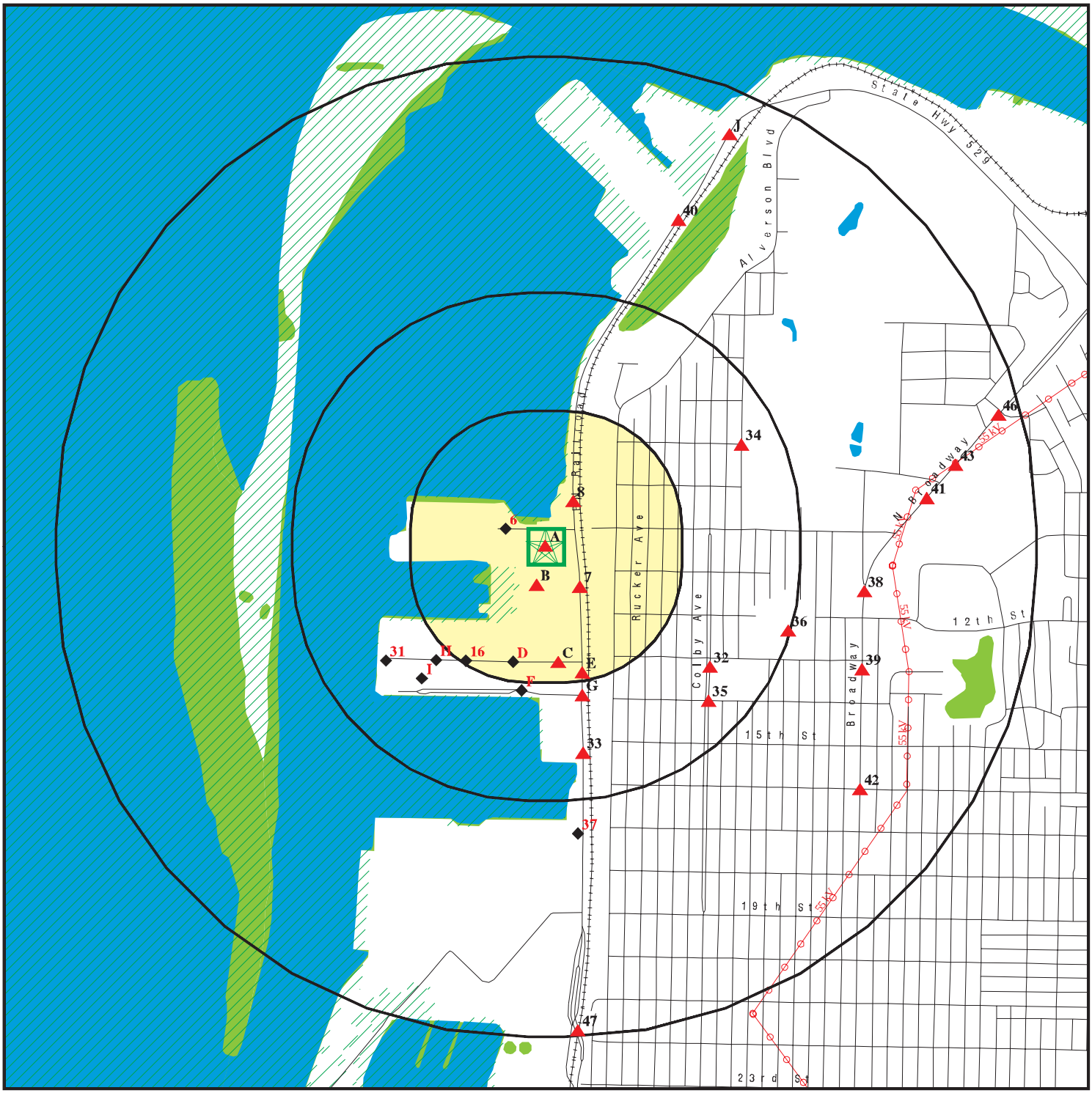
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMERON INC PPD	*1130 W MARINE VIEW DR*	*S 0 - 1/8 (0.042 mi.)*	*B4*	*47*
SUNSET BODY WORKS INC	*1130 W MARINE VIEW DR S*	*S 0 - 1/8 (0.042 mi.)*	*B5*	*60*

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
FOOD MART 164	ALLSITES, UST
144TH ALVERSON & W MARINE DR	RCRA-NonGen, FINDS, ALLSITES
1100 TO 1500 BLOCK W MARINE VI	FINDS, ALLSITES
ALLEY BEHIND 3601 BRO	ALLSITES
SMITH ISLAND LANDFILL	FINDS, ALLSITES
NORTH MARINA PHASE 1 VCP	ALLSITES, CSCSL NFA, VCP
3 MARINE TERMINAL NORTH PIER	RCRA-LQG, ALLSITES
CEMEX	ALLSITES
3400 OLD HWY 99 N	FINDS, ALLSITES, UST
331 RUCKER AVE	RCRA-CESQG, FINDS, ALLSITES, Inactive Drycleaners
SEC AIRPORT RD & HWY 99	FINDS, ALLSITES, UST
SHAFFER CRANE	LUST
1616 MARINE VIEW DR	FINDS, UST
Y & F PROPERTY	ICR
EAST MARINE VIEW DR. & LEGION MEMO	ICR

OVERVIEW MAP - 2790806.1s

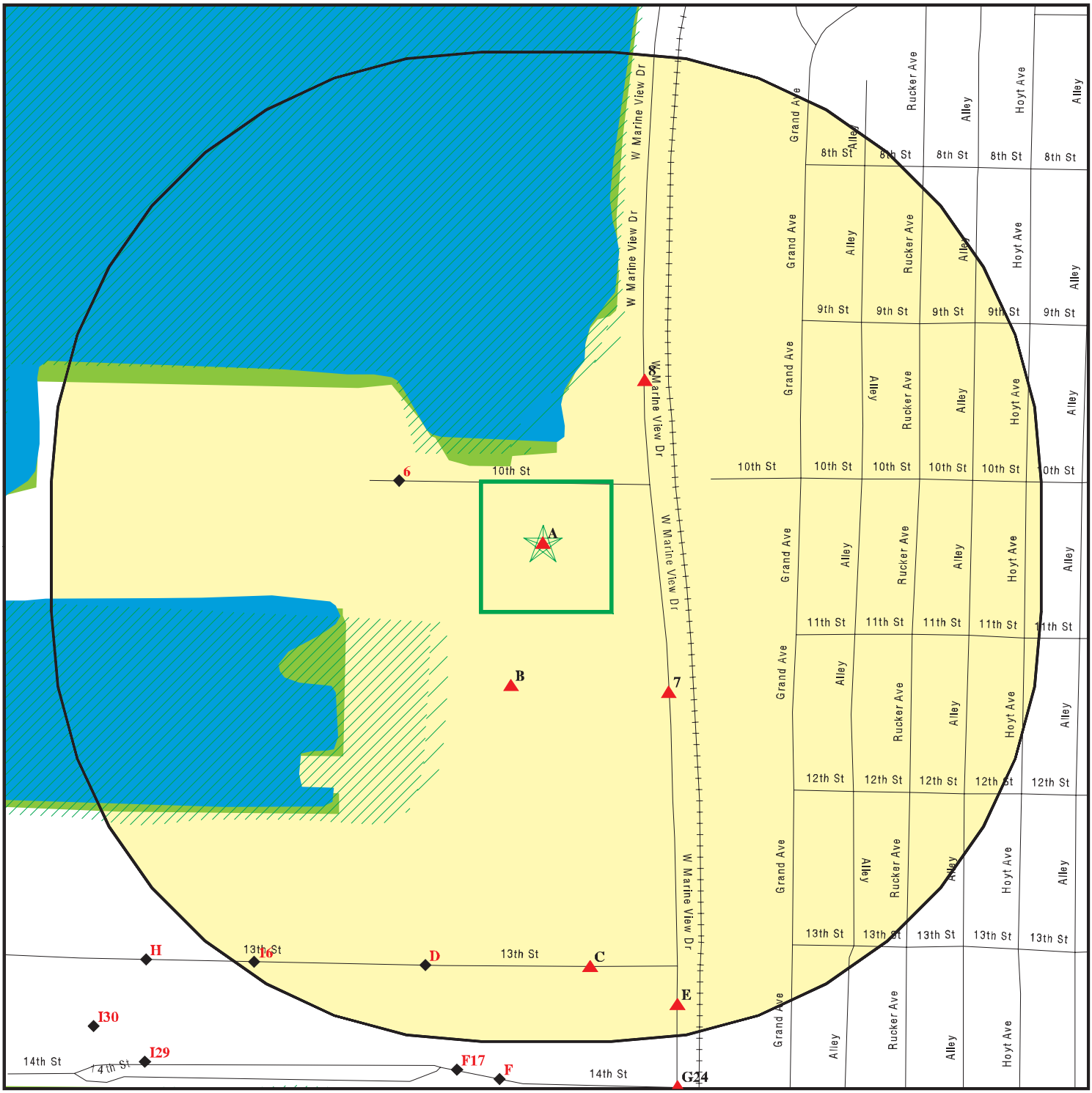


Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
National Priority List Sites
Dept. Defense Sites

Indian Reservations BIA
Power transmission lines
Oil & Gas pipelines
100-year flood zone
500-year flood zone
National Wetland Inventory

SITE NAME:	TC Systems	CLIENT:	Kane Environmental Inc.
ADDRESS:	1032 West Marine Drive Everett WA 98201	CONTACT:	Luke Martinkosky
LAT/LONG:	48.0038 / 122.2155	INQUIRY #:	2790806.1s
		DATE:	June 11, 2010 7:52 am

DETAIL MAP - 2790806.1s



Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
Sensitive Receptors
National Priority List Sites
Dept. Defense Sites

Indian Reservations BIA
Oil & Gas pipelines
100-year flood zone
500-year flood zone
National Wetland Inventory

0 1/16 1/8 1/4 Miles

N

SITE NAME:	TC Systems	CLIENT:	Kane Environmental Inc.
ADDRESS:	1032 West Marine Drive Everett WA 98201	CONTACT:	Luke Martinkosky
LAT/LONG:	48.0038 / 122.2155	INQUIRY #:	2790806.1s
		DATE:	June 11, 2010 7:52 am

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
NPL LIENS		TP	NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL		1.000	0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS		0.500	0	0	0	NR	NR	0
FEDERAL FACILITY		1.000	0	0	0	0	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP		0.500	0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS		1.000	0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF		0.500	0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG		0.250	0	0	NR	NR	NR	0
RCRA-SQG	X	0.250	1	1	NR	NR	NR	2
RCRA-CESQG		0.250	1	1	NR	NR	NR	2
Federal institutional controls / engineering controls registries								
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
Federal ERNS list								
ERNS		TP	NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
HSL		1.000	1	0	2	5	NR	8
State- and tribal - equivalent CERCLIS								
CSCSL	X	1.000	1	1	2	11	NR	15
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF		0.500	0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST		0.500	0	1	2	NR	NR	3
INDIAN LUST		0.500	0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
State and tribal registered storage tank lists								
UST		0.250	1	2	NR	NR	NR	3
AST		0.250	0	0	NR	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
FEMA UST		0.250	0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
INST CONTROL		0.500	0	0	1	NR	NR	1
State and tribal voluntary cleanup sites								
VCP		0.500	0	0	0	NR	NR	0
INDIAN VCP		0.500	0	0	0	NR	NR	0
ICR		0.500	0	1	3	NR	NR	4
State and tribal Brownfields sites								
BROWNFIELDS		0.500	0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI		0.500	0	0	0	NR	NR	0
DEBRIS REGION 9		0.500	0	0	0	NR	NR	0
SWTIRE		0.500	0	0	0	NR	NR	0
INDIAN ODI		0.500	0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL		TP	NR	NR	NR	NR	NR	0
ALLSITES	X	0.500	4	6	17	NR	NR	27
CSCSL NFA		0.500	0	0	1	NR	NR	1
CDL		TP	NR	NR	NR	NR	NR	0
HIST CDL		TP	NR	NR	NR	NR	NR	0
US HIST CDL		TP	NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2		TP	NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS		TP	NR	NR	NR	NR	NR	0
SPILLS	X	TP	NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA-NonGen		0.250	2	2	NR	NR	NR	4

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DOT OPS		TP	NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
HIST FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
RADINFO		TP	NR	NR	NR	NR	NR	0
FINDS	X	TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
UIC		TP	NR	NR	NR	NR	NR	0
MANIFEST	X	0.250	2	0	NR	NR	NR	2
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
NPDES	X	TP	NR	NR	NR	NR	NR	0
AIRS		TP	NR	NR	NR	NR	NR	0
Inactive Drycleaners		0.250	0	0	NR	NR	NR	0
INDIAN RESERV		1.000	0	0	0	0	NR	0
SCRD DRYCLEANERS		0.500	0	0	0	NR	NR	0
COAL ASH		0.500	0	0	0	NR	NR	0
PCB TRANSFORMER		TP	NR	NR	NR	NR	NR	0
COAL ASH EPA		0.500	0	0	0	NR	NR	0
COAL ASH DOE		TP	NR	NR	NR	NR	NR	0
EDR PROPRIETARY RECORDS								
EDR Proprietary Records								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0
EDR Historical Auto Stations		0.250	0	0	NR	NR	NR	0
EDR Historical Cleaners		0.250	0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target
Property

TC SYSTEMS INC
1032 W MARINE VIEW DR
EVERETT, WA 98201

Site 1 of 3 in cluster A

Database(s): RCRA-SQG, FINDS, CSCSL, ALLSITES, MANIFEST, NPDES

EDR ID Number: 1000138617
EPA ID Number: WAD088722947

Actual:
11 ft.

RCRA-SQG:

Date form received by agency:	01/23/2008
Facility name:	TC SYSTEMS INC
Facility address:	1032 W MARINE VIEW DR EVERETT, WA 982011557
EPA ID:	WAD088722947
Contact:	CHARLES SOUDER
Contact address:	1032 W MARINE VIEW DR EVERETT, WA 98201-1557
Contact country:	US
Contact telephone:	(425)258-4055
Contact email:	Not reported
EPA Region:	10
Land type:	Private
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	TC SYSTEMS INC
Owner/operator address:	1032 W MARINE VIEW DR EVERETT, WA 98201
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/11/2008
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Commercial status unknown

TC SYSTEMS INC (Continued) **1000138617**

Historical Generators:

Date form received by agency: 12/31/2007
Facility name: TC SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 12/31/2005
Facility name: TC SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 12/31/2003
Facility name: TC SYSTEMS INC
Classification: Small Quantity Generator

Date form received by agency: 01/23/2002
Facility name: TC SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 03/06/2000
Facility name: TC SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 07/10/1998
Facility name: TC SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 03/01/1996
Facility name: TC SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 03/31/1994
Facility name: TC SYSTEMS INC
Site name: TC SYSTEMS, INC.
Classification: Large Quantity Generator

Date form received by agency: 09/01/1993
Facility name: TC SYSTEMS INC
Site name: TRI-COATINGS
Classification: Large Quantity Generator

Date form received by agency: 12/31/1990
Facility name: TC SYSTEMS INC
Site name: TRI-COATINGS
Classification: Large Quantity Generator

Biennial Reports:

Last Biennial Reporting Year: 2009

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

TC SYSTEMS INC (Continued) **1000138617**

Amount (Lbs): 2291

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 12741

Waste code: D008
Waste name: LEAD
Amount (Lbs): 2291

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 2291

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 2291

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/14/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/21/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 09/14/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/21/2009
Enf. disposition status: Not reported

TC SYSTEMS INC (Continued) **1000138617**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Miscellaneous Unit Standards
Date violation determined: 09/14/2009
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/21/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 03/25/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 03/25/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 24000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Container Use and Management
Date violation determined: 03/25/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/21/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Container Use and Management
Date violation determined: 03/25/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 03/25/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

TC SYSTEMS INC (Continued) **1000138617**

Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 03/25/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/21/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 03/25/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 03/25/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 24000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 03/25/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 03/25/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 24000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 03/25/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 03/25/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

TC SYSTEMS INC (Continued) **1000138617**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 03/25/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 03/25/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 03/25/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/21/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 03/25/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/21/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Container Use and Management
Date violation determined: 03/25/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 03/25/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

TC SYSTEMS INC (Continued) **1000138617**

Final penalty amount: 24000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 03/25/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/21/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 03/25/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 03/25/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 24000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 03/25/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 03/25/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 03/25/2009
Date achieved compliance: 11/04/2009
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 03/25/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

TC SYSTEMS INC (Continued) **1000138617**

Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 07/08/2008
Date achieved compliance: 09/16/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/08/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 07/08/2008
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/08/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 07/08/2008
Date achieved compliance: 09/16/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/08/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 07/08/2008
Date achieved compliance: 09/16/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/08/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

TC SYSTEMS INC (Continued) **1000138617**

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 07/08/2008
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/08/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Universal Waste - Small Quantity Handlers
Date violation determined: 07/08/2008
Date achieved compliance: 09/16/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/08/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Container Use and Management
Date violation determined: 07/08/2008
Date achieved compliance: 09/16/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/08/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 07/08/2008
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 03/25/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported

TC SYSTEMS INC (Continued) **1000138617**

Area of violation: Generators - Manifest
Date violation determined: 07/08/2008
Date achieved compliance: 09/16/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/08/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 07/08/2008
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 03/25/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 24000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Used Oil - Generators
Date violation determined: 07/08/2008
Date achieved compliance: 09/16/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/08/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Tank System Standards
Date violation determined: 07/08/2008
Date achieved compliance: 09/16/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/08/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Permits - Special Forms

TC SYSTEMS INC (Continued) **1000138617**

Date violation determined: 07/08/2008
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/08/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 07/08/2008
Date achieved compliance: 09/16/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/08/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 11/06/2007
Date achieved compliance: 12/01/2007
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/19/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 11/06/2007
Date achieved compliance: 03/31/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/19/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 11/06/2007

TC SYSTEMS INC (Continued) **1000138617**

Date achieved compliance: 12/01/2007
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/19/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Universal Waste - Small Quantity Handlers
Date violation determined: 11/06/2007
Date achieved compliance: 12/01/2007
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/19/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Used Oil - Generators
Date violation determined: 11/06/2007
Date achieved compliance: 12/01/2007
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/19/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 11/06/2007
Date achieved compliance: 12/01/2007
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 11/07/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 11/06/2007
Date achieved compliance: 12/01/2007

TC SYSTEMS INC (Continued) **1000138617**

Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/19/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 11/06/2007
Date achieved compliance: 03/05/2008
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 11/07/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 11/06/2007
Date achieved compliance: 03/05/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/19/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 11/06/2007
Date achieved compliance: 12/01/2007
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/19/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 11/06/2007
Date achieved compliance: 03/31/2008
Violation lead agency: State

TC SYSTEMS INC (Continued) **1000138617**

Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/19/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 08/08/2006
Date achieved compliance: 12/01/2007
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/04/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 08/08/2006
Date achieved compliance: 12/01/2007
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/04/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 08/08/2006
Date achieved compliance: 03/31/2008
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 11/07/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 08/08/2006
Date achieved compliance: 04/30/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL

TC SYSTEMS INC (Continued) **1000138617**

Enforcement action date: 10/04/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 08/08/2006
Date achieved compliance: 03/31/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/04/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 08/08/2006
Date achieved compliance: 12/01/2007
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/19/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 08/08/2006
Date achieved compliance: 03/31/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/19/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 08/08/2006
Date achieved compliance: 12/01/2007
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/04/2006

TC SYSTEMS INC (Continued) **1000138617**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 08/08/2006
Date achieved compliance: 12/01/2007
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 11/07/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 08/08/2006
Date achieved compliance: 12/01/2007
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/19/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 08/08/2006
Date achieved compliance: 12/01/2007
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/19/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 08/08/2006
Date achieved compliance: 04/30/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/19/2007
Enf. disposition status: Not reported

TC SYSTEMS INC (Continued) **1000138617**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -330(2) / -200(1)(e)
Area of violation: Generators - Records/Reporting
Date violation determined: 05/13/2003
Date achieved compliance: 07/22/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/13/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200(1)(d) / -170(2)
Area of violation: Generators - General
Date violation determined: 05/13/2003
Date achieved compliance: 05/16/2003
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 05/15/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -630(6) / -200(1)(b)
Area of violation: Generators - Records/Reporting
Date violation determined: 05/13/2003
Date achieved compliance: 06/24/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/13/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200(1)(a) / -170(3)
Area of violation: Generators - General
Date violation determined: 05/13/2003
Date achieved compliance: 05/21/2003
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 05/15/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

TC SYSTEMS INC (Continued) **1000138617**

Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200(1)(d) / -170(2)
Area of violation: Generators - General
Date violation determined: 05/13/2003
Date achieved compliance: 05/16/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/13/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -330(3) / -200(1)(e)
Area of violation: Generators - Records/Reporting
Date violation determined: 05/13/2003
Date achieved compliance: 07/07/2003
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 05/15/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -330(3) / -200(1)(e)
Area of violation: Generators - Records/Reporting
Date violation determined: 05/13/2003
Date achieved compliance: 07/07/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/13/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200(2)(a) / -170(2)
Area of violation: Generators - General
Date violation determined: 05/13/2003
Date achieved compliance: 05/16/2003
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 05/15/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

TC SYSTEMS INC (Continued) **1000138617**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -330(2) / -200(1)(e)
Area of violation: Generators - Records/Reporting
Date violation determined: 05/13/2003
Date achieved compliance: 07/22/2003
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 05/15/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200(1)(a) / -170(3)
Area of violation: Generators - General
Date violation determined: 05/13/2003
Date achieved compliance: 05/21/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/13/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200(1)(c) / -170(2)
Area of violation: Generators - General
Date violation determined: 05/13/2003
Date achieved compliance: 05/16/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/13/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200(2)(a) / -170(2)
Area of violation: Generators - General
Date violation determined: 05/13/2003
Date achieved compliance: 05/16/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/13/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

TC SYSTEMS INC (Continued) **1000138617**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -630(5)(a) / -200(1)(b)
Area of violation: Generators - General
Date violation determined: 05/13/2003
Date achieved compliance: 05/16/2003
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 05/15/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200(1)(c) / -170(2)
Area of violation: Generators - General
Date violation determined: 05/13/2003
Date achieved compliance: 05/16/2003
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 05/15/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -630(6) / -200(1)(b)
Area of violation: Generators - Records/Reporting
Date violation determined: 05/13/2003
Date achieved compliance: 06/24/2003
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: 05/15/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -630(5)(a) / -200(1)(b)
Area of violation: Generators - General
Date violation determined: 05/13/2003
Date achieved compliance: 05/16/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/13/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

TC SYSTEMS INC (Continued) **1000138617**

Paid penalty amount: Not reported

Regulation violated: SR - 170(1)(a)&200(2)
Area of violation: Generators - General
Date violation determined: 06/02/1998
Date achieved compliance: 06/19/1998
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/12/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 200(1)(c)(d)
Area of violation: Generators - General
Date violation determined: 06/02/1998
Date achieved compliance: 06/19/1998
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/12/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 180
Area of violation: Generators - Manifest
Date violation determined: 06/02/1998
Date achieved compliance: 06/19/1998
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/12/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 630(5)(a)
Area of violation: Generators - General
Date violation determined: 06/02/1998
Date achieved compliance: 06/19/1998
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/12/1998
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

TC SYSTEMS INC (Continued) **1000138617**

Regulation violated: SR - 630(6)
Area of violation: Generators - General
Date violation determined: 03/20/1997
Date achieved compliance: 11/01/1997
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/16/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 200(1)(c)
Area of violation: Generators - General
Date violation determined: 03/20/1997
Date achieved compliance: 11/01/1997
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/16/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 200(1)(c)(d)
Area of violation: Generators - General
Date violation determined: 03/20/1997
Date achieved compliance: 11/01/1997
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/16/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 200(1)(b)
Area of violation: Generators - General
Date violation determined: 03/20/1997
Date achieved compliance: 11/01/1997
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/16/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 630(7)

TC SYSTEMS INC (Continued) **1000138617**

Area of violation: Generators - General
Date violation determined: 03/20/1997
Date achieved compliance: 03/01/1998
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/16/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 320(2)
Area of violation: Generators - General
Date violation determined: 03/20/1997
Date achieved compliance: 04/08/1998
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/16/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 350
Area of violation: Generators - General
Date violation determined: 03/20/1997
Date achieved compliance: 03/01/1998
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/16/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 320(2)(d)
Area of violation: Generators - General
Date violation determined: 03/20/1997
Date achieved compliance: 03/01/1998
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/16/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 330
Area of violation: Generators - General

TC SYSTEMS INC (Continued) **1000138617**

Date violation determined: 03/20/1997
Date achieved compliance: 04/08/1998
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/16/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 220
Area of violation: Generators - General
Date violation determined: 03/20/1997
Date achieved compliance: 05/26/1997
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/16/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 630(5)(c)
Area of violation: Generators - General
Date violation determined: 03/20/1997
Date achieved compliance: 11/01/1997
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/16/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 09/14/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD IS-Container Use and Management
Date achieved compliance: 11/04/2009
Evaluation lead agency: State

Evaluation date: 09/14/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Miscellaneous Unit Standards
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/14/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 11/04/2009

TC SYSTEMS INC (Continued) **1000138617**

Evaluation lead agency: State

Evaluation date: 09/14/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 11/04/2009
Evaluation lead agency: State

Evaluation date: 09/14/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 11/04/2009
Evaluation lead agency: State

Evaluation date: 04/10/2009
Evaluation: COMPLIANCE ASSISTANCE VISIT
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/07/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/05/2009
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD IS-Container Use and Management
Date achieved compliance: 11/04/2009
Evaluation lead agency: State

Evaluation date: 02/05/2009
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - General
Date achieved compliance: 11/04/2009
Evaluation lead agency: State

Evaluation date: 02/05/2009
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: State Statute or Regulation
Date achieved compliance: 11/04/2009
Evaluation lead agency: State

Evaluation date: 02/05/2009
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/05/2009
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - Manifest
Date achieved compliance: 11/04/2009
Evaluation lead agency: State

Evaluation date: 02/05/2009

TC SYSTEMS INC (Continued) **1000138617**

Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - Pre-transport
Date achieved compliance: 11/04/2009
Evaluation lead agency: State

Evaluation date: 02/05/2009
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: TSD - General Facility Standards
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/08/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 09/16/2008
Evaluation lead agency: State

Evaluation date: 07/08/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Used Oil - Generators
Date achieved compliance: 09/16/2008
Evaluation lead agency: State

Evaluation date: 07/08/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 09/16/2008
Evaluation lead agency: State

Evaluation date: 07/08/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 09/16/2008
Evaluation lead agency: State

Evaluation date: 07/08/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Permits - Special Forms
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/08/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 09/16/2008
Evaluation lead agency: State

Evaluation date: 07/08/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Universal Waste - Small Quantity Handlers
Date achieved compliance: 09/16/2008
Evaluation lead agency: State

Evaluation date: 07/08/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD IS-Container Use and Management
Date achieved compliance: 09/16/2008

TC SYSTEMS INC (Continued) **1000138617**

Evaluation lead agency: State

Evaluation date: 07/08/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD IS-Tank System Standards
Date achieved compliance: 09/16/2008
Evaluation lead agency: State

Evaluation date: 07/08/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 09/16/2008
Evaluation lead agency: State

Evaluation date: 07/08/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/08/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/06/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Used Oil - Generators
Date achieved compliance: 12/01/2007
Evaluation lead agency: State

Evaluation date: 11/06/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Universal Waste - Small Quantity Handlers
Date achieved compliance: 12/01/2007
Evaluation lead agency: State

Evaluation date: 11/06/2007
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Generators - Pre-transport
Date achieved compliance: 12/01/2007
Evaluation lead agency: State

Evaluation date: 11/06/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 03/31/2008
Evaluation lead agency: State

Evaluation date: 11/06/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 04/30/2008
Evaluation lead agency: State

Evaluation date: 11/06/2007

TC SYSTEMS INC (Continued) **1000138617**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 03/05/2008
Evaluation lead agency: State

Evaluation date: 11/06/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 03/31/2008
Evaluation lead agency: State

Evaluation date: 11/06/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 12/01/2007
Evaluation lead agency: State

Evaluation date: 11/06/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 03/31/2008
Evaluation lead agency: State

Evaluation date: 11/06/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 12/01/2007
Evaluation lead agency: State

Evaluation date: 11/06/2007
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Generators - General
Date achieved compliance: 03/05/2008
Evaluation lead agency: State

Evaluation date: 11/06/2007
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Generators - Pre-transport
Date achieved compliance: 03/31/2008
Evaluation lead agency: State

Evaluation date: 11/06/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 12/01/2007
Evaluation lead agency: State

Evaluation date: 11/06/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 12/01/2007
Evaluation lead agency: State

Evaluation date: 11/06/2007
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 12/01/2007

TC SYSTEMS INC (Continued) **1000138617**

Evaluation lead agency: State

Evaluation date: 10/17/2007
Evaluation: COMPLIANCE ASSISTANCE VISIT
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/08/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 03/31/2008
Evaluation lead agency: State

Evaluation date: 08/08/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 04/30/2008
Evaluation lead agency: State

Evaluation date: 08/08/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 12/01/2007
Evaluation lead agency: State

Evaluation date: 08/08/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 12/01/2007
Evaluation lead agency: State

Evaluation date: 08/08/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 12/01/2007
Evaluation lead agency: State

Evaluation date: 05/13/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 06/24/2003
Evaluation lead agency: State

Evaluation date: 05/13/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/16/2003
Evaluation lead agency: State

Evaluation date: 05/13/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 07/22/2003
Evaluation lead agency: State

Evaluation date: 05/13/2003

TC SYSTEMS INC (Continued) **1000138617**

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 07/07/2003
Evaluation lead agency: State

Evaluation date: 05/13/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/21/2003
Evaluation lead agency: State

Evaluation date: 08/06/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/02/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 06/19/1998
Evaluation lead agency: State

Evaluation date: 06/02/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 06/19/1998
Evaluation lead agency: State

Evaluation date: 03/20/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 11/01/1997
Evaluation lead agency: State

Evaluation date: 03/20/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/26/1997
Evaluation lead agency: State

Evaluation date: 03/20/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 04/08/1998
Evaluation lead agency: State

Evaluation date: 03/20/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 03/01/1998
Evaluation lead agency: State

FINDS:

Registry ID: 110000905496

Environmental Interest/Information System

TC SYSTEMS INC (Continued) **1000138617**

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CSCSL:

Facility ID:	10587741
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	1
Entered Date:	10/30/2009
Updated Date:	10/30/2009
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.0037138888889
Longitude:	-122.215177777778
Lat/Long:	48.0037138888889 / -122.215177777778
Lat/Long (dms):	48 0 13.37 / -122 12 54.64
Media Status Desc:	10/30/2009

TC SYSTEMS INC (Continued) **1000138617**

Affected Media:	Groundwater
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported

Non-Halogenated Solvents:	Suspected
Base/Neutral/Acid Organics:	Suspected
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Suspected
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Suspected
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Awaiting SHA

Facility ID:	10587741
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	1
Entered Date:	10/30/2009
Updated Date:	10/30/2009
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.0037138888889
Longitude:	-122.215177777778
Lat/Long:	48.0037138888889 / -122.215177777778
Lat/Long (dms):	48 0 13.37 / -122 12 54.64
Media Status Desc:	10/30/2009
Affected Media:	Sediment
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS

TC SYSTEMS INC (Continued) **1000138617**

Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Suspected
Base/Neutral/Acid Organics:	Suspected
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Suspected
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Suspected
Polynuclear Aromatic Hydrocarbons (PAH):	Suspected
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Awaiting SHA

Facility ID:	10587741
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	1
Entered Date:	10/30/2009
Updated Date:	10/30/2009
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.0037138888889
Longitude:	-122.215177777778
Lat/Long:	48.0037138888889 / -122.215177777778
Lat/Long (dms):	48 0 13.37 / -122 12 54.64
Media Status Desc:	10/30/2009
Affected Media:	Soil
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Suspected
Base/Neutral/Acid Organics:	Suspected
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Suspected
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Suspected

TC SYSTEMS INC (Continued) **1000138617**

Polynuclear Aromatic Hydrocarbons (PAH):	Suspected
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Awaiting SHA

ALLSITES:

Facility Id:	10587741
Latitude:	48.003713888888903
Longitude:	-122.215177777778
Geographic location identifier (alias facid):	10587741
Facility Name:	TC SYSTEMS INC
Latitude Decimal Degrees:	48.003713879999999
Longitude Decimal Degrees:	-122.21517777
Coordinate Point Areal Extent Code:	99
Horizontal Accuracy Code:	9
Coordinate Point Geographic Position Code:	8
Location Verified Code:	Not reported

Geographic Location Identifier (Alias Facid):	10587741
Interaction (Aka Env Int) Type Code:	TRI
Interaction (Aka Env Int) Description:	Toxics Release Inventory
Interaction Status:	I
Federal Program Indentifier:	WAD088722947
Interaction Start Date:	1/1/1987
Interaction End Date:	10/3/2002

Geographic Location Identifier (Alias Facid):	10587741
Interaction (Aka Env Int) Type Code:	TIER2
Interaction (Aka Env Int) Description:	Emergency/Haz Chem Rpt TIER2
Interaction Status:	A
Federal Program Indentifier:	WAD088722947
Interaction Start Date:	1/1/1990
Interaction End Date:	Not reported

Geographic Location Identifier (Alias Facid):	10587741
Interaction (Aka Env Int) Type Code:	ENFORFNL
Interaction (Aka Env Int) Description:	Enforcement Final
Interaction Status:	A
Federal Program Indentifier:	Not reported
Interaction Start Date:	3/31/2009
Interaction End Date:	Not reported

Geographic Location Identifier (Alias Facid):	10587741
Interaction (Aka Env Int) Type Code:	TRI
Interaction (Aka Env Int) Description:	Toxics Release Inventory
Interaction Status:	I
Federal Program Indentifier:	WAD088722947
Interaction Start Date:	1/1/1989
Interaction End Date:	10/3/2002

Geographic Location Identifier (Alias Facid):	10587741
Interaction (Aka Env Int) Type Code:	INDUSTGP
Interaction (Aka Env Int) Description:	Industrial SW GP

TC SYSTEMS INC (Continued) **1000138617**

Interaction Status:	A
Federal Program Indentifier:	WAR000762
Interaction Start Date:	3/10/1993
Interaction End Date:	Not reported
Geographic Location Identifier (Alias Facid):	10587741
Interaction (Aka Env Int) Type Code:	HWG
Interaction (Aka Env Int) Description:	Hazardous Waste Generator
Interaction Status:	A
Federal Program Indentifier:	WAD088722947
Interaction Start Date:	1/9/1986
Interaction End Date:	Not reported
Geographic Location Identifier (Alias Facid):	10587741
Interaction (Aka Env Int) Type Code:	SCS
Interaction (Aka Env Int) Description:	State Cleanup Site
Interaction Status:	A
Federal Program Indentifier:	Not reported
Interaction Start Date:	10/30/2009
Interaction End Date:	Not reported
Geographic Location Identifier (Alias Facid):	10587741
Interaction (Aka Env Int) Type Code:	HWP
Interaction (Aka Env Int) Description:	Hazardous Waste Planner
Interaction Status:	A
Federal Program Indentifier:	WAD088722947
Interaction Start Date:	1/1/1991
Interaction End Date:	Not reported

WA MANIFEST:

Facility Site ID Number:	10587741
SWC Desc:	Not reported
FWC Desc:	D001, D007, D008, F003, F005
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False

TC SYSTEMS INC (Continued) **1000138617**

Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD088722947
Facility Address 2:	Not reported
TAX REG NBR:	Not reported
NAICS CD:	332813
BUSINESS TYPE:	Not reported
MAIL NAME:	TC Systems Inc
MAIL ADDR LINE1:	1032 W Marine View DR
MAIL CITY,ST,ZIP:	Everett, WA 98201-1557
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	TC Systems Inc
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	3333 CASITAS AVE
LEGAL CITY,ST,ZIP:	LOS ANGELES, CA 90039-2207
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(323)663-1261
LEGAL EFFECTIVE DATE:	12/31/2002
LAND ORG NAME:	Not reported
LAND ORG TYPE:	Private
LAND PERSON NAME:	John Schaak
LAND ADDR LINE1:	1210 W Marine View Dr
LAND CITY,ST,ZIP:	EVERETT, WA 98201-1558
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)252-5187
OPERATOR ORG NAME:	TC Systems Inc
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1032 W Marine View DR
OPERATOR CITY,ST,ZIP:	Everett, WA 98201-1557
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)258-4055
OPERATOR EFFECTIVE DATE:	Not reported
SITE CONTACT NAME:	Charles Souder
SITE CONTACT ADDR LINE1:	1032 W Marine View DR
SITE CONTACT ZIP:	Everett, WA 98201-1557
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)258-4055
SITE CONTACT EMAIL:	ccsouder@hotmail.com
FORM CONTACT NAME:	Charles Souder
FORM CONTACT ADDR LINE1:	1032 W Marine View DR
FORM CONTACT CITY,ST,ZIP:	Everett, WA 98201-1557
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)258-4055
FORM CONTACT EMAIL:	ccsouder@hotmail.com
GEN STATUS CD:	LQG
MONTHLY GENERATION:	True
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False

TC SYSTEMS INC (Continued) **1000138617**

USED OIL TRANSFER FACLTY: False
USED OIL PROCESSOR: False
USED OIL REREFINER: False
USED OIL FUEL MRKTR DIRECTS SHPMNTS: False
USED OIL FUEL MRKTR MEETS SPECS: False

Facility Site ID Number: 10587741
SWC Desc: Not reported
FWC Desc: Not reported
Form Comm: Not reported
Data Year: 2009
Permit by Rule: True
Treatment by Generator: False
Mixed radioactive waste: False
Importer of hazardous waste: False
Immediate recycler: False
Treatment/Storage/Disposal/Recycling Facility: False
Generator of dangerous fuel waste: False
Generator marketing to burner: False
"Other marketers (i.e., blender, distributor, etc.)": False
Utility boiler burner: False
Industry boiler burner: False
Industrial Furnace: False
Smelter defferal: False
Universal waste - batteries - generate: False
Universal waste - thermostats - generate: False
Universal waste - mercury - generate: False
Universal waste - lamps - generate: False
Universal waste - batteries - accumulate: False
Universal waste - thermostats - accumulate: False
Universal waste - mercury - accumulate: False
Universal waste - lamps - accumulate: False
Destination Facility for Universal Waste: False
Off-specification used oil burner - utility boiler: False
Off-specification used oil burner - industrial boiler: False
Off-specification used oil burner - industrial furnace: False
EPA ID: WAD088722947
Facility Address 2: Not reported
TAX REG NBR: Not reported
NAICS CD: 332813
BUSINESS TYPE: Not reported
MAIL NAME: TC Systems Inc
MAIL ADDR LINE1: 1032 W Marine View DR
MAIL CITY,ST,ZIP: Everett, WA 98201-1557
MAIL COUNTRY: UNITED STATES
LEGAL ORG NAME: TC Systems Inc
LEGAL ORG TYPE: Private
LEGAL ADDR LINE1: 3333 CASITAS AVE
LEGAL CITY,ST,ZIP: LOS ANGELES, CA 90039-2207
LEGAL COUNTRY: UNITED STATES
LEGAL PHONE NBR: (323)663-1261
LEGAL EFFECTIVE DATE: 12/31/2002
LAND ORG NAME: Not reported
LAND ORG TYPE: Private
LAND PERSON NAME: John Schaak
LAND ADDR LINE1: 1210 W Marine View Dr
LAND CITY,ST,ZIP: EVERETT, WA 98201-1558

TC SYSTEMS INC (Continued) **1000138617**

LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)252-5187
OPERATOR ORG NAME:	TC Systems Inc
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1032 W Marine View DR
OPERATOR CITY,ST,ZIP:	Everett, WA 98201-1557
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)258-4055
OPERATOR EFFECTIVE DATE:	Not reported
SITE CONTACT NAME:	Robert Deatherage
SITE CONTACT ADDR LINE1:	1032 W Marine View DR
SITE CONTACT ZIP:	Everett, WA 98201-1557
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)258-4055
SITE CONTACT EMAIL:	robertdeatherage@msn.com
FORM CONTACT NAME:	Robert Deatherage
FORM CONTACT ADDR LINE1:	1032 W Marine View DR
FORM CONTACT CITY,ST,ZIP:	Everett, WA 98201-1557
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)258-4055
FORM CONTACT EMAIL:	robertdeatherage@msn.com
GEN STATUS CD:	LQG
MONTHLY GENERATION:	True
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Facility Site ID Number:	10587741
SWC Desc:	Not reported
FWC Desc:	D001, D007, D008, F003, F005
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	No
Treatment by Generator:	No
Mixed radioactive waste:	No
Importer of hazardous waste:	No
Immediate recycler:	No
Treatment/Storage/Disposal/Recycling Facility:	No
Generator of dangerous fuel waste:	No
Generator marketing to burner:	No
"Other marketers (i.e., blender, distributor, etc.)":	No
Utility boiler burner:	No
Industry boiler burner:	No
Industrial Furnace:	No
Smelter defferal:	No
Universal waste - batteries - generate:	No

TC SYSTEMS INC (Continued) **1000138617**

Universal waste - thermostats - generate:	No
Universal waste - mercury - generate:	No
Universal waste - lamps - generate:	No
Universal waste - batteries - accumulate:	No
Universal waste - thermostats - accumulate:	No
Universal waste - mercury - accumulate:	No
Universal waste - lamps - accumulate:	No
Destination Facility for Universal Waste:	No
Off-specification used oil burner - utility boiler:	No
Off-specification used oil burner - industrial boiler:	No
Off-specification used oil burner - industrial furnace:	No
EPA ID:	WAD088722947
Facility Address 2:	Not reported
TAX REG NBR:	Not reported
NAICS CD:	332813
BUSINESS TYPE:	Not reported
MAIL NAME:	TC Systems Inc
MAIL ADDR LINE1:	1032 W Marine View DR
MAIL CITY,ST,ZIP:	Everett, WA 98201-1557
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	TC Systems Inc
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	3333 CASITAS AVE
LEGAL CITY,ST,ZIP:	LOS ANGELES, CA 90039-2207
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(323)663-1261
LEGAL EFFECTIVE DATE:	12/31/2002
LAND ORG NAME:	Not reported
LAND ORG TYPE:	Private
LAND PERSON NAME:	John Schaak
LAND ADDR LINE1:	1210 W Marine View Dr
LAND CITY,ST,ZIP:	EVERETT, WA 98201-1558
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)252-5187
OPERATOR ORG NAME:	TC Systems Inc
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1032 W Marine View DR
OPERATOR CITY,ST,ZIP:	Everett, WA 98201-1557
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)258-4055
OPERATOR EFFECTIVE DATE:	Not reported
SITE CONTACT NAME:	Charles Souder
SITE CONTACT ADDR LINE1:	1032 W Marine View DR
SITE CONTACT ZIP:	Everett, WA 98201-1557
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)258-4055
SITE CONTACT EMAIL:	ccsouder@hotmail.com
FORM CONTACT NAME:	Guy Donaldson
FORM CONTACT ADDR LINE1:	1032 W Marine View DR
FORM CONTACT CITY,ST,ZIP:	Everett, WA 98201-1557
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)258-4055
FORM CONTACT EMAIL:	ccsouder@hotmail.com
GEN STATUS CD:	LQG
MONTHLY GENERATION:	No
BATCH GENERATION:	No
ONE TIME GENERATION:	No

TC SYSTEMS INC (Continued) **1000138617**

TRANSPORTS OWN WASTE: No
TRANSPORTS OTHRS WASTE: No
RECYCLER ONSITE: No
TRANSFER FACILITY: No
OTHER EXEMPTION: Not reported
UW BATTERY GEN: No
USED OIL TRANSPORTER: No
USED OIL TRANSFER FACLTY: No
USED OIL PROCESSOR: No
USED OIL REREFINER: No
USED OIL FUEL MRKTR DIRECTS SHPMNTS: No
USED OIL FUEL MRKTR MEETS SPECS: No

NPDES:
Facility Type: Stormwater Industrial
Latitude: 48.005000000000003
Longitude: 122.21306
Contact Name: Guy Donalson
Contact Phone Number: 425.258.4055
Permit ID: WAR000762E
Permit Issue Date: 10/21/2009
Facility Size: General Permits
Ecology Contact: Jeff Killelea
WRIA: Snohomish
Permit Expiration Date: 1/1/2015
Effective Date: 1/1/2010

A2 **TC SYSTEMS INC** **FINDS** **1012309256**
Target Property **1032 W MARINE VIEW DR** **N/A**
EVERETT, WA 98201

Site 2 of 3 in cluster A

Actual: 11 ft.

FINDS:

Registry ID: 110040341136

Environmental Interest/Information System
PCS (Permit Compliance System) is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

A3 **TC SYSTEMS** **SPILLS** **S105389997**
Target Property **1028 W MARINE VIEW DR** **N/A**
EVERETT, WA

Site 3 of 3 in cluster A

Actual: 11 ft.

SPILLS:
Facility ID: 505685
Medium: Not reported
Material Desc: CHEMICAL
Material Qty: 200
Material Units: GALLON

TC SYSTEMS (Continued) **S105389997**

Date Received: 8/4/1999
Contact Name: TC SYSTEMS

Facility ID: 505685
Medium: Not reported
Material Desc: CHEMICAL
Material Qty: 200
Material Units: GALLON
Date Received: 8/10/1999
Contact Name: TC SYSTEMS

Facility ID: 551107
Medium: Not reported
Material Desc: PETROLEUM - UNKNOWN
Material Qty: 1
Material Units: SHEEN
Date Received: 10/10/2005
Contact Name: UNK

B4 **AMERON INC PPD** **RCRA-SQG** **1005445302**
South **1130 W MARINE VIEW DR** **FINDS** **WAH000015677**
< 1/8 **EVERETT, WA 98201** **UST**
0.042 mi. **MANIFEST**
224 ft. **Site 1 of 2 in cluster B**

Relative:
Higher

Actual:
11 ft.

RCRA-SQG:
Date form received by agency: 02/25/2008
Facility name: AMERON INC PPD
Facility address: 1130 W MARINE VIEW DR
EVERETT, WA 982011500
EPA ID: WAH000015677
Contact: PAUL VANNINI
Contact address: 1130 W MARINE VIEW DR STE A
EVERETT, WA 98201
Contact country: US
Contact telephone: (425)258-2616
Contact email: Not reported
EPA Region: 10
Land type: Municipal
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: AMERON INTL. CORP. PPD
Owner/operator address: 1130 W MARINE VIEW DR STE A
EVERETT, WA 98201
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1997
Owner/Op end date: Not reported

AMERON INC PPD (Continued) **1005445302**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Historical Generators:
Date form received by agency: 12/31/2007
Facility name: AMERON INC PPD
Classification: Small Quantity Generator

Date form received by agency: 12/31/2005
Facility name: AMERON INC PPD
Classification: Not a generator, verified

Date form received by agency: 12/31/2003
Facility name: AMERON INC PPD
Classification: Small Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 06/22/2009
Date achieved compliance: 06/23/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/22/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 06/22/2009
Date achieved compliance: 06/23/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/22/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

AMERON INC PPD (Continued) **1005445302**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 06/22/2009
Date achieved compliance: 07/01/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/22/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 06/22/2009
Date achieved compliance: 06/23/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/22/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 06/22/2009
Date achieved compliance: 06/23/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/22/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Used Oil - Generators
Date violation determined: 06/22/2009
Date achieved compliance: 06/23/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/22/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

AMERON INC PPD (Continued) **1005445302**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Container Use and Management
Date violation determined: 06/22/2009
Date achieved compliance: 06/23/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/22/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 06/22/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 06/23/2009
Evaluation lead agency: State

Evaluation date: 06/22/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD IS-Container Use and Management
Date achieved compliance: 06/23/2009
Evaluation lead agency: State

Evaluation date: 06/22/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 06/23/2009
Evaluation lead agency: State

Evaluation date: 06/22/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 07/01/2009
Evaluation lead agency: State

Evaluation date: 06/22/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 06/23/2009
Evaluation lead agency: State

Evaluation date: 06/22/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Used Oil - Generators
Date achieved compliance: 06/23/2009
Evaluation lead agency: State

Evaluation date: 06/22/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation

AMERON INC PPD (Continued) **1005445302**

Date achieved compliance: 06/23/2009
Evaluation lead agency: State

FINDS:

Registry ID: 110001138894

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

UST:

Facility ID:	68853261
Site ID:	1963
Lat Deg:	48
Lat Min:	0
Lat Sec:	8.45180609796898
Long Deg:	-122
Long Min:	12
Long Sec:	55.8264520403998
UBI:	Not reported
Phone Number:	2062582616
Tank ID:	36603
Tank Name:	1
Install Date:	12/31/1964
Capacity:	Not reported
Tank Upgrade Date:	1/1/0001

AMERON INC PPD (Continued) **1005445302**

TankSystem Status:	Removed
TankSystem Status Change Date:	8/26/1996
Tank Status:	Removed
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	12/19/1988
Tank Pumping System:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Steel
Tank Construction:	Not reported
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Material:	Not reported
Pipe Construction:	Not reported
Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Not reported
Tank Primary Release Detection:	Not reported
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	8/6/1996
Tag Number:	Not reported

WA MANIFEST:

Facility Site ID Number:	68853261
SWC Desc:	Not reported
FWC Desc:	D001 U002
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAH000015677
Facility Address 2:	Not reported
TAX REG NBR:	600070733

AMERON INC PPD (Continued) **1005445302**

NAICS CD:	32739
BUSINESS TYPE:	Not reported
MAIL NAME:	Ameron Intl. Corp. PPD
MAIL ADDR LINE1:	1130 W Marine View Dr
MAIL ADDR LINE2:	Ste A
MAIL CITY,ST,ZIP:	EVERETT, WA 98201
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Ameron Intl. Corp. PPD
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1130 W Marine View Dr
LEGAL ADDR LINE2:	Ste A
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)258-2616
LEGAL EFFECTIVE DATE:	8/1/2001
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	Municipal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	2911 BOND ST
LAND CITY,ST,ZIP:	EVERETT, WA 98201-3943
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-3164
OPERATOR ORG NAME:	Ameron Intl. Corp. PPD
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1130 W Marine View Dr
OPERATOR ADDR LINE2:	Ste A
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)258-2616
OPERATOR EFFECTIVE DATE:	01/01/97
SITE CONTACT NAME:	Paul Vannini
SITE CONTACT ADDR LINE1:	1130 W Marine View Dr
SITE CONTACT ADDR LINE2:	Ste A
SITE CONTACT ZIP:	EVERETT, WA 98201
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)258-2616 ext 200
SITE CONTACT EMAIL:	paul_vannini@ameron-intl.com
FORM CONTACT NAME:	Paul Vannini
FORM CONTACT ADDR LINE1:	1130 W Marine View Dr
FORM CONTACT ADDR LINE2:	Ste A
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)258-2616
FORM CONTACT EMAIL:	paul_vannini@ameron-intl.com
GEN STATUS CD:	MQG
MONTHLY GENERATION:	True
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False

AMERON INC PPD (Continued) **1005445302**

USED OIL REREFINER:	False	
USED OIL FUEL MRKTR DIRECTS SHPMNTS:		False
USED OIL FUEL MRKTR MEETS SPECS:		False
Facility Site ID Number:	68853261	
SWC Desc:	Not reported	
FWC Desc:	D001 U002	
Form Comm:	Not reported	
Data Year:	Not reported	
Permit by Rule:	No	
Treatment by Generator:	No	
Mixed radioactive waste:	No	
Importer of hazardous waste:	No	
Immediate recycler:	No	
Treatment/Storage/Disposal/Recycling Facility:		No
Generator of dangerous fuel waste:		No
Generator marketing to burner:		No
"Other marketers (i.e., blender, distributor, etc.)":		No
Utility boiler burner:		No
Industry boiler burner:		No
Industrial Furnace:		No
Smelter defferal:		No
Universal waste - batteries - generate:		No
Universal waste - thermostats - generate:		No
Universal waste - mercury - generate:		No
Universal waste - lamps - generate:		No
Universal waste - batteries - accumulate:		No
Universal waste - thermostats - accumulate:		No
Universal waste - mercury - accumulate:		No
Universal waste - lamps - accumulate:		No
Destination Facility for Universal Waste:		No
Off-specification used oil burner - utility boiler:		No
Off-specification used oil burner - industrial boiler:		No
Off-specification used oil burner - industrial furnace:		No
EPA ID:	WAH000015677	
Facility Address 2:	Not reported	
TAX REG NBR:	600070733	
NAICS CD:	32739	
BUSINESS TYPE:	Not reported	
MAIL NAME:	Ameron Intl. Corp. PPD	
MAIL ADDR LINE1:	1130 W Marine View Dr	
MAIL ADDR LINE2:	Ste A	
MAIL CITY,ST,ZIP:	EVERETT, WA 98201	
MAIL COUNTRY:	UNITED STATES	
LEGAL ORG NAME:	Ameron Intl. Corp. PPD	
LEGAL ORG TYPE:	Private	
LEGAL ADDR LINE1:	1130 W Marine View Dr	
LEGAL ADDR LINE2:	Ste A	
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201	
LEGAL COUNTRY:	UNITED STATES	
LEGAL PHONE NBR:	(425)258-2616	
LEGAL EFFECTIVE DATE:	8/1/2001	
LAND ORG NAME:	Everett Port	
LAND ORG TYPE:	Municipal	
LAND PERSON NAME:	Not reported	
LAND ADDR LINE1:	2911 BOND ST	
LAND CITY,ST,ZIP:	EVERETT, WA 98201-3943	

AMERON INC PPD (Continued) **1005445302**

LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-3164
OPERATOR ORG NAME:	Ameron Intl. Corp. PPD
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1130 W Marine View Dr
OPERATOR ADDR LINE2:	Ste A
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)258-2616
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	Arnold Thompson
SITE CONTACT ADDR LINE1:	1130 W Marine View Dr
SITE CONTACT ADDR LINE2:	Ste A
SITE CONTACT ZIP:	EVERETT, WA 98201
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)258-2616
SITE CONTACT EMAIL:	Not reported
FORM CONTACT NAME:	Arnold Thompson
FORM CONTACT ADDR LINE1:	1130 W Marine View Dr
FORM CONTACT ADDR LINE2:	Ste A
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)258-2616
FORM CONTACT EMAIL:	arnie_thompson@ameron-intl.com
GEN STATUS CD:	XQG
MONTHLY GENERATION:	No
BATCH GENERATION:	No
ONE TIME GENERATION:	No
TRANSPORTS OWN WASTE:	No
TRANSPORTS OTHRS WASTE:	No
RECYCLER ONSITE:	No
TRANSFER FACILITY:	No
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	No
USED OIL TRANSPORTER:	No
USED OIL TRANSFER FACLTY:	No
USED OIL PROCESSOR:	No
USED OIL REREFINER:	No
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	No
USED OIL FUEL MRKTR MEETS SPECS:	No

Facility Site ID Number:	68853261
SWC Desc:	Not reported
FWC Desc:	D001 - Ignitable
Form Comm:	Not reported
Data Year:	2009
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False

AMERON INC PPD (Continued) **1005445302**

Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAH000015677
Facility Address 2:	Not reported
TAX REG NBR:	600070733
NAICS CD:	327390
BUSINESS TYPE:	Not reported
MAIL NAME:	Ameron Intl. Corp. PPD
MAIL ADDR LINE1:	1130 W Marine View Dr
MAIL ADDR LINE2:	Ste A
MAIL CITY,ST,ZIP:	EVERETT, WA 98201
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Ameron Intl. Corp. PPD
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1130 W Marine View Dr
LEGAL ADDR LINE2:	Ste A
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)258-2616
LEGAL EFFECTIVE DATE:	8/1/2001
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	Municipal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	2911 BOND ST
LAND CITY,ST,ZIP:	EVERETT, WA 98201-3943
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-3164
OPERATOR ORG NAME:	Ameron Intl. Corp. PPD
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1130 W Marine View Dr
OPERATOR ADDR LINE2:	Ste A
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)258-2616
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	Paul Vannini
SITE CONTACT ADDR LINE1:	1130 W Marine View Dr
SITE CONTACT ADDR LINE2:	Ste A
SITE CONTACT ZIP:	EVERETT, WA 98201
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)258-2616 ext 200
SITE CONTACT EMAIL:	paul_vannini@ameron-intl.com
FORM CONTACT NAME:	Paul Vannini
FORM CONTACT ADDR LINE1:	1130 W Marine View Dr
FORM CONTACT ADDR LINE2:	Ste A

AMERON INC PPD (Continued) **1005445302**

FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)258-2616
FORM CONTACT EMAIL:	paul_vannini@ameron-intl.com
GEN STATUS CD:	SQG
MONTHLY GENERATION:	True
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	True
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Facility Site ID Number:	68853261
SWC Desc:	Not reported
FWC Desc:	D001 U002
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	FALSE
Treatment by Generator:	FALSE
Mixed radioactive waste:	FALSE
Importer of hazardous waste:	FALSE
Immediate recycler:	FALSE
Treatment/Storage/Disposal/Recycling Facility:	FALSE
Generator of dangerous fuel waste:	FALSE
Generator marketing to burner:	FALSE
"Other marketers (i.e., blender, distributor, etc.)":	FALSE
Utility boiler burner:	FALSE
Industry boiler burner:	FALSE
Industrial Furnace:	FALSE
Smelter defferal:	FALSE
Universal waste - batteries - generate:	FALSE
Universal waste - thermostats - generate:	FALSE
Universal waste - mercury - generate:	FALSE
Universal waste - lamps - generate:	FALSE
Universal waste - batteries - accumulate:	FALSE
Universal waste - thermostats - accumulate:	FALSE
Universal waste - mercury - accumulate:	FALSE
Universal waste - lamps - accumulate:	FALSE
Destination Facility for Universal Waste:	FALSE
Off-specification used oil burner - utility boiler:	FALSE
Off-specification used oil burner - industrial boiler:	FALSE
Off-specification used oil burner - industrial furnace:	FALSE
EPA ID:	WAH000015677
Facility Address 2:	Not reported
TAX REG NBR:	600070733
NAICS CD:	32739
BUSINESS TYPE:	Not reported
MAIL NAME:	Ameron Intl. Corp. PPD

AMERON INC PPD (Continued) **1005445302**

MAIL ADDR LINE1:	1130 W Marine View Dr
MAIL ADDR LINE2:	Ste A
MAIL CITY,ST,ZIP:	EVERETT, WA 98201
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Ameron Intl. Corp. PPD
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1130 W Marine View Dr
LEGAL ADDR LINE2:	Ste A
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)258-2616
LEGAL EFFECTIVE DATE:	8/1/2001
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	Municipal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	2911 BOND ST
LAND CITY,ST,ZIP:	EVERETT, WA 98201-3943
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-3164
OPERATOR ORG NAME:	Ameron Intl. Corp. PPD
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1130 W Marine View Dr
OPERATOR ADDR LINE2:	Ste A
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)258-2616
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	Paul Vannini
SITE CONTACT ADDR LINE1:	1130 W Marine View Dr
SITE CONTACT ADDR LINE2:	Ste A
SITE CONTACT ZIP:	EVERETT, WA 98201
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)258-2616 ext 200
SITE CONTACT EMAIL:	Not reported
FORM CONTACT NAME:	Paul Vannini
FORM CONTACT ADDR LINE1:	1130 W Marine View Dr
FORM CONTACT ADDR LINE2:	Ste A
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)258-2616
FORM CONTACT EMAIL:	paul_vannini@ameron-intl.com
GEN STATUS CD:	SQG
MONTHLY GENERATION:	TRUE
BATCH GENERATION:	FALSE
ONE TIME GENERATION:	FALSE
TRANSPORTS OWN WASTE:	FALSE
TRANSPORTS OTHRS WASTE:	FALSE
RECYCLER ONSITE:	FALSE
TRANSFER FACILITY:	FALSE
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	FALSE
USED OIL TRANSPORTER:	FALSE
USED OIL TRANSFER FACLTY:	FALSE
USED OIL PROCESSOR:	FALSE
USED OIL REREFINER:	FALSE
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	FALSE
USED OIL FUEL MRKTR MEETS SPECS:	FALSE

AMERON INC PPD (Continued) **1005445302**

Facility Site ID Number:	68853261
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Not reported
Data Year:	2008
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAH000015677
Facility Address 2:	Not reported
TAX REG NBR:	600070733
NAICS CD:	32739
BUSINESS TYPE:	Not reported
MAIL NAME:	Ameron Intl. Corp. PPD
MAIL ADDR LINE1:	1130 W Marine View Dr
MAIL ADDR LINE2:	Ste A
MAIL CITY,ST,ZIP:	EVERETT, WA 98201
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Ameron Intl. Corp. PPD
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1130 W Marine View Dr
LEGAL ADDR LINE2:	Ste A
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)258-2616
LEGAL EFFECTIVE DATE:	8/1/2001
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	Municipal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	2911 BOND ST
LAND CITY,ST,ZIP:	EVERETT, WA 98201-3943
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-3164
OPERATOR ORG NAME:	Ameron Intl. Corp. PPD
OPERATOR ORG TYPE:	Private

AMERON INC PPD (Continued) **1005445302**

OPERATOR ADDR LINE1:	1130 W Marine View Dr
OPERATOR ADDR LINE2:	Ste A
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)258-2616
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	Paul Vannini
SITE CONTACT ADDR LINE1:	1130 W Marine View Dr
SITE CONTACT ADDR LINE2:	Ste A
SITE CONTACT ZIP:	EVERETT, WA 98201
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)258-2616 ext 200
SITE CONTACT EMAIL:	paul_vannini@ameron-intl.com
FORM CONTACT NAME:	Paul Vannini
FORM CONTACT ADDR LINE1:	1130 W Marine View Dr
FORM CONTACT ADDR LINE2:	Ste A
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)258-2616
FORM CONTACT EMAIL:	paul_vannini@ameron-intl.com
GEN STATUS CD:	MQG
MONTHLY GENERATION:	False
BATCH GENERATION:	True
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Click this hyperlink while viewing on your computer to access additional WA MANIFEST: detail in the EDR Site Report.

B5 **SUNSET BODY WORKS INC** **RCRA-NonGen** **1004793823**
South **1130 W MARINE VIEW DR STE B** **FINDS** **WAD981772437**
< 1/8 **EVERETT, WA 98201** **ALLSITES**
0.042 mi. **MANIFEST**
224 ft. **Site 2 of 2 in cluster B**

Relative:
Higher

Actual:
11 ft.

RCRA-NonGen:

Date form received by agency:	06/20/2006
Facility name:	SUNSET BODY WORKS INC
Facility address:	1130 W MARINE VIEW DR STE B EVERETT, WA 98201
EPA ID:	WAD981772437
Contact:	MICHAEL HOWARD
Contact address:	1130 W MARINE VIEW DR STE B EVERETT, WA 98201
Contact country:	US
Contact telephone:	(425)259-4446
Contact email:	Not reported

SUNSET BODY WORKS INC (Continued) **1004793823**

EPA Region: 10
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: MICHAEL HOWARD
Owner/operator address: 1130 W MARINE VIEW DR STE B
EVERETT, WA 98201
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 02/10/1988
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Historical Generators:
Date form received by agency: 12/31/2005
Facility name: SUNSET BODY WORKS INC
Classification: Not a generator, verified

Date form received by agency: 12/31/2003
Facility name: SUNSET BODY WORKS INC
Classification: Not a generator, verified

Date form received by agency: 03/01/1996
Facility name: SUNSET BODY WORKS INC
Classification: Large Quantity Generator

Date form received by agency: 09/01/1993
Facility name: SUNSET BODY WORKS INC
Site name: SUNSET BODY WORKS INC.
Classification: Large Quantity Generator

Date form received by agency: 12/31/1990
Facility name: SUNSET BODY WORKS INC
Site name: SUNSET BODY WORKS INC.
Classification: Small Quantity Generator

SUNSET BODY WORKS INC (Continued) **1004793823**

Violation Status: No violations found

FINDS:

Registry ID: 110000905557

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ALLSITES:

Facility Id:	52739196
Latitude:	48.007570000000001
Longitude:	-122.21447999999999
Geographic location identifier (alias facid):	52739196
Facility Name:	Sunset Body Works Inc
Latitude Decimal Degrees:	48.007570000000001
Longitude Decimal Degrees:	-122.21447999999999
Coordinate Point Areal Extent Code:	99
Horizontal Accuracy Code:	99
Coordinate Point Geographic Position Code:	99
Location Verified Code:	N

Geographic Location Identifier (Alias Facid):	52739196
Interaction (Aka Env Int) Type Code:	HWG
Interaction (Aka Env Int) Description:	Hazardous Waste Generator
Interaction Status:	I
Federal Program Indentifier:	WAD981772437
Interaction Start Date:	3/30/1988
Interaction End Date:	12/31/2005

WA MANIFEST:

Facility Site ID Number:	52739196
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	No
Treatment by Generator:	No
Mixed radioactive waste:	No
Importer of hazardous waste:	No
Immediate recycler:	No
Treatment/Storage/Disposal/Recycling Facility:	No
Generator of dangerous fuel waste:	No

SUNSET BODY WORKS INC (Continued) **1004793823**

Generator marketing to burner:	No
"Other marketers (i.e., blender, distributor, etc.)":	No
Utility boiler burner:	No
Industry boiler burner:	No
Industrial Furnace:	No
Smelter defferal:	No
Universal waste - batteries - generate:	No
Universal waste - thermostats - generate:	No
Universal waste - mercury - generate:	No
Universal waste - lamps - generate:	No
Universal waste - batteries - accumulate:	No
Universal waste - thermostats - accumulate:	No
Universal waste - mercury - accumulate:	No
Universal waste - lamps - accumulate:	No
Destination Facility for Universal Waste:	No
Off-specification used oil burner - utility boiler:	No
Off-specification used oil burner - industrial boiler:	No
Off-specification used oil burner - industrial furnace:	No
EPA ID:	WAD981772437
Facility Address 2:	Not reported
TAX REG NBR:	600198764
NAICS CD:	811121
BUSINESS TYPE:	Auto Body Repair Shop
MAIL NAME:	Sunset Body Works Inc
MAIL ADDR LINE1:	1130 W Marine View Dr Ste B
MAIL CITY,ST,ZIP:	EVERETT, WA 98201
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Sunset Body Works Inc
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1130 W Marine View Dr Ste B
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)259-4446
LEGAL EFFECTIVE DATE:	3/1/1996
LAND ORG NAME:	Ameron Inc
LAND ORG TYPE:	Private
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	1130 W Marine View Dr Ste A
LAND CITY,ST,ZIP:	EVERETT, WA 98201
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)258-2616
OPERATOR ORG NAME:	Not reported
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1130 W Marine View Dr Ste B
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)259-4446
OPERATOR EFFECTIVE DATE:	2/10/1988
SITE CONTACT NAME:	Michael Howard
SITE CONTACT ADDR LINE1:	1130 W Marine View Dr Ste B
SITE CONTACT ZIP:	EVERETT, WA 98201
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)259-4446
SITE CONTACT EMAIL:	sunsetbodyworksinc@verizon.net
FORM CONTACT NAME:	Michael Howard
FORM CONTACT ADDR LINE1:	1130 W Marine View Dr Ste B
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201

SUNSET BODY WORKS INC (Continued) **1004793823**

FORM CONTACT COUNTRY: UNITED STATES
FORM CONTACT PHONE NBR: (425)259-4446
FORM CONTACT EMAIL: sunsetbodyworksinc@verizon.net
GEN STATUS CD: SQG
MONTHLY GENERATION: Yes
BATCH GENERATION: No
ONE TIME GENERATION: No
TRANSPORTS OWN WASTE: No
TRANSPORTS OTHRS WASTE: No
RECYCLER ONSITE: No
TRANSFER FACILITY: No
OTHER EXEMPTION: Not reported
UW BATTERY GEN: No
USED OIL TRANSPORTER: No
USED OIL TRANSFER FACLTY: No
USED OIL PROCESSOR: No
USED OIL REREFINER: No
USED OIL FUEL MRKTR DIRECTS SHPMNTS: No
USED OIL FUEL MRKTR MEETS SPECS: No

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6 **OW GLASS** **RCRA-NonGen** **1000135796**
West **1020 10TH ST** **FINDS** **WAD982658197**
< 1/8 **EVERETT, WA 98201** **ALLSITES**
0.048 mi.
252 ft.

Relative:
Lower

Actual:
3 ft.

RCRA-NonGen:
Date form received by agency: 06/23/1989
Facility name: OW GLASS
Facility address: 1020 10TH ST
EVERETT, WA 98201
EPA ID: WAD982658197
Contact: GREGORY KNIGHT
Contact address: 1020 10TH ST
EVERETT, WA 98201-1580
Contact country: US
Contact telephone: (425)339-2500
Contact email: Not reported
EPA Region: 10
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: OW GLASS
Owner/operator address: 1020 10TH ST
EVERETT, WA 98201
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 06/23/1989
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No

OW GLASS (Continued) **1000135796**

Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Commercial status unknown

Violation Status: No violations found

FINDS:

Registry ID: 110005347785

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ALLSITES:

Facility Id:	89723881
Latitude:	48.004269999999998
Longitude:	-122.21352
Geographic location identifier (alias facid):	89723881
Facility Name:	OW Glass
Latitude Decimal Degrees:	48.004269999999998
Longitude Decimal Degrees:	-122.21352
Coordinate Point Areal Extent Code:	99
Horizontal Accuracy Code:	99
Coordinate Point Geographic Position Code:	99
Location Verified Code:	N

Geographic Location Identifier (Alias Facid):	89723881
Interaction (Aka Env Int) Type Code:	HWG
Interaction (Aka Env Int) Description:	Hazardous Waste Generator
Interaction Status:	I
Federal Program Indentifier:	WAD982658197
Interaction Start Date:	6/23/1989
Interaction End Date:	12/31/1992

7
SE
< 1/8
0.057 mi.
302 ft.

NORTH MARINA AMERON HULBERT
EVERETT, WA

CSCSL **S110040835**
ALLSITES **N/A**
HSL

Relative:
Higher

Actual:
21 ft.

CSCSL:

Facility ID:	68853261
Facility Type:	Program Plan
Region:	Northwest
Ecology Status Code:	3
Entered Date:	11/14/2008
Updated Date:	8/12/2009
Brownfield Status:	0
Rank Status:	1
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.0023477239161
Longitude:	-122.215507347789
Lat/Long:	48.0023477239161 / -122.215507347789
Lat/Long (dms):	48 0 8.452 / -122 12 55.826
Media Status Desc:	5/1/2009
Affected Media:	Sediment
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported

Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Confirmed
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Suspected
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Confirmed
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	68853261
Facility Type:	Program Plan
Region:	Northwest
Ecology Status Code:	3
Entered Date:	11/14/2008

NORTH MARINA AMERON HULBERT (Continued) **S110040835**

Updated Date:	8/12/2009
Brownfield Status:	0
Rank Status:	1
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.0023477239161
Longitude:	-122.215507347789
Lat/Long:	48.0023477239161 / -122.215507347789
Lat/Long (dms):	48 0 8.452 / -122 12 55.826
Media Status Desc:	12/31/2008
Affected Media:	Soil
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Confirmed
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Confirmed
Polynuclear Aromatic Hydrocarbons (PAH):	Confirmed
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Confirmed
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Confirmed
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	68853261
Facility Type:	Program Plan
Region:	Northwest
Ecology Status Code:	3
Entered Date:	11/14/2008
Updated Date:	8/12/2009
Brownfield Status:	0
Rank Status:	1
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.0023477239161
Longitude:	-122.215507347789

NORTH MARINA AMERON HULBERT (Continued) **S110040835**

Lat/Long:	48.0023477239161 / -122.215507347789
Lat/Long (dms):	48 0 8.452 / -122 12 55.826
Media Status Desc:	12/31/2008
Affected Media:	Groundwater
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Confirmed
EPA Priority Pollutants - Metals and Cyanide:	Confirmed
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

ALLSITES:

Facility Id:	68853261
Latitude:	48.002347723916102
Longitude:	-122.215507347789
Geographic location identifier (alias facid):	68853261
Facility Name:	North Marina Ameron Hulbert
Latitude Decimal Degrees:	48.002347720000003
Longitude Decimal Degrees:	-122.21550734
Coordinate Point Areal Extent Code:	4
Horizontal Accuracy Code:	6
Coordinate Point Geographic Position Code:	8
Location Verified Code:	Not reported

Geographic Location Identifier (Alias Facid):	68853261
Interaction (Aka Env Int) Type Code:	TRI
Interaction (Aka Env Int) Description:	Toxics Release Inventory
Interaction Status:	I
Federal Program Indentifier:	CRK000043780
Interaction Start Date:	1/1/1996
Interaction End Date:	10/9/2002

Geographic Location Identifier (Alias Facid):	68853261
Interaction (Aka Env Int) Type Code:	HWP
Interaction (Aka Env Int) Description:	Hazardous Waste Planner
Interaction Status:	I

NORTH MARINA AMERON HULBERT (Continued) **S110040835**

Federal Program Indentifier: CRK000043780
Interaction Start Date: 1/1/1998
Interaction End Date: 12/31/1998

Geographic Location Identifier (Alias Facid): 68853261
Interaction (Aka Env Int) Type Code: UST
Interaction (Aka Env Int) Description: Underground Storage Tank
Interaction Status: I
Federal Program Indentifier: 1963
Interaction Start Date: 6/8/1998
Interaction End Date: 5/3/2000

Geographic Location Identifier (Alias Facid): 68853261
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: I
Federal Program Indentifier: WAH000015677
Interaction Start Date: 8/1/2001
Interaction End Date: 1/28/2004

Geographic Location Identifier (Alias Facid): 68853261
Interaction (Aka Env Int) Type Code: HWOTHER
Interaction (Aka Env Int) Description: Haz Waste Management Activity
Interaction Status: I
Federal Program Indentifier: WAH000015677
Interaction Start Date: 12/31/2002
Interaction End Date: 12/31/2003

Geographic Location Identifier (Alias Facid): 68853261
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: I
Federal Program Indentifier: WAH000015677
Interaction Start Date: 12/31/2003
Interaction End Date: 12/31/2005

Geographic Location Identifier (Alias Facid): 68853261
Interaction (Aka Env Int) Type Code: HWOTHER
Interaction (Aka Env Int) Description: Haz Waste Management Activity
Interaction Status: I
Federal Program Indentifier: WAH000015677
Interaction Start Date: 12/31/2005
Interaction End Date: 3/2/2006

Geographic Location Identifier (Alias Facid): 68853261
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: A
Federal Program Indentifier: WAH000015677
Interaction Start Date: 3/2/2006
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 68853261
Interaction (Aka Env Int) Type Code: SCS
Interaction (Aka Env Int) Description: State Cleanup Site
Interaction Status: A
Federal Program Indentifier: Not reported

NORTH MARINA AMERON HULBERT (Continued) **S110040835**

Interaction Start Date:	11/13/2008
Interaction End Date:	Not reported
Geographic Location Identifier (Alias Facid):	68853261
Interaction (Aka Env Int) Type Code:	HWP
Interaction (Aka Env Int) Description:	Hazardous Waste Planner
Interaction Status:	A
Federal Program Indentifier:	WAH000015677
Interaction Start Date:	5/15/2009
Interaction End Date:	Not reported
Geographic Location Identifier (Alias Facid):	68853261
Interaction (Aka Env Int) Type Code:	ENFORFNL
Interaction (Aka Env Int) Description:	Enforcement Final
Interaction Status:	A
Federal Program Indentifier:	Not reported
Interaction Start Date:	6/16/2009
Interaction End Date:	Not reported
Geographic Location Identifier (Alias Facid):	68853261
Interaction (Aka Env Int) Type Code:	INDUSTGP
Interaction (Aka Env Int) Description:	Industrial SW GP
Interaction Status:	A
Federal Program Indentifier:	WAR011666
Interaction Start Date:	5/20/2009
Interaction End Date:	Not reported

HSL:

edr_fstat:	WA
edr_fzip:	Not reported
edr_fcnty:	SNOHOMISH
edr_zip:	Not reported
Facility Type:	**Hazardous Sites List**
Facility Status:	RA in progress
FSID Number:	68853261
Rank:	1
Region:	HQ

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8 **PERFORMANCE MARINE INC** **RCRA-CESQG** **1000838866**
NNE **930 W MARINE VIEW DR** **FINDS** **WAD988516704**
< 1/8 **EVERETT, WA 98201** **ALLSITES**
0.062 mi.
330 ft.

Relative:
Higher

Actual:
16 ft.

RCRA-CESQG:

Date form received by agency:	06/06/1997
Facility name:	PERFORMANCE MARINE INC
Facility address:	930 W MARINE VIEW DR EVERETT, WA 98201
EPA ID:	WAD988516704
Contact:	WILLIAM HOOK
Contact address:	930 W MARINE VIEW DR EVERETT, WA 98201-1300
Contact country:	US
Contact telephone:	(425) 258-9292
Contact email:	Not reported

PERFORMANCE MARINE INC (Continued) **1000838866**

EPA Region: 10
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: PERFORMANCE MARINE INC
Owner/operator address: 930 W MARINE VIEW DR
EVERETT, WA 98201
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Other
Owner/Operator Type: Owner
Owner/Op start date: 03/06/1997
Owner/Op end date: Not reported

Owner/operator name: WILLIAM HOOK
Owner/operator address: 930 W MARINE VIEW DR
EVERETT, WA 98201
Owner/operator country: US
Owner/operator telephone: (425) 258-9292
Legal status: Other
Owner/Operator Type: Operator
Owner/Op start date: 03/06/1997
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: Not reported
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

PERFORMANCE MARINE INC (Continued) **1000838866**

Historical Generators:
Date form received by agency: 02/24/1997
Facility name: PERFORMANCE MARINE INC
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 12/31/1993
Facility name: PERFORMANCE MARINE INC
Classification: Small Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 11/15/1995
Evaluation: COMPLIANCE ASSISTANCE VISIT
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110005383254

Environmental Interest/Information System
Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ALLSITES:
Facility Id: 63645684
Latitude: 48.010429999999999
Longitude: -122.21301
Geographic location identifier (alias facid): 63645684
Facility Name: Performance Marine Inc
Latitude Decimal Degrees: 48.010429999999999
Longitude Decimal Degrees: -122.21301
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 63645684
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: I
Federal Program Indentifier: WAD988516704

PERFORMANCE MARINE INC (Continued) **1000838866**

Interaction Start Date: 1/11/1993
Interaction End Date: 12/31/1996

C9 **MARINE SPILL RESPONSE CORP EVERETT** **RCRA-CESQG** **1004793809**
South **1105 13TH ST** **FINDS** **WAD981770365**
1/8-1/4 **EVERETT, WA 98201** **ALLSITES**
0.206 mi.
1088 ft. **Site 1 of 3 in cluster C**

Relative:
Higher

Actual:
16 ft.

RCRA-CESQG:
Date form received by agency: 04/29/2005
Facility name: MARINE SPILL RESPONSE CORP EVERETT
Facility address: 1105 13TH ST
EVERETT, WA 982010653
EPA ID: WAD981770365
Contact: STUART LARSON
Contact address: 1105 13TH ST
EVERETT, WA 98201-1653
Contact country: US
Contact telephone: (425)304-1547
Contact email: Not reported
EPA Region: 10
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: MARINE SPILL RESPONSE CORP NW
Owner/operator address: 1105 13TH ST
EVERETT, WA 98201
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1997
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No

MARINE SPILL RESPONSE CORP EVERETT (Continued) **1004793809**

On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Historical Generators:
Date form received by agency: 12/31/2003
Facility name: MARINE SPILL RESPONSE CORP EVERETT
Classification: Not a generator, verified

Violation Status: No violations found

FINDS:

Registry ID: 110005343262

Environmental Interest/Information System
Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ALLSITES:
Facility Id: 66396823
Latitude: 48.000050000000002
Longitude: -122.21567
Geographic location identifier (alias facid): 66396823
Facility Name: Marine Spill Response Corp Everett
Latitude Decimal Degrees: 48.000050000000002
Longitude Decimal Degrees: -122.21567
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 66396823
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: I
Federal Program Indentifier: WAD981770365
Interaction Start Date: 8/26/1987

MARINE SPILL RESPONSE CORP EVERETT (Continued) **1004793809**

Interaction End Date: 12/31/2004

Geographic Location Identifier (Alias Facid): 66396823
Interaction (Aka Env Int) Type Code: TIER2
Interaction (Aka Env Int) Description: Emergency/Haz Chem Rpt TIER2
Interaction Status: I
Federal Program Indentifier: WAD981770365
Interaction Start Date: 1/1/1994
Interaction End Date: 2/10/2005

C10 **EVERETT PORT** **ALLSITES** **U001128234**
South **1100 13TH ST** **LUST** **N/A**
1/8-1/4 **EVERETT, WA 98201** **UST**
0.206 mi.
1090 ft. **Site 2 of 3 in cluster C**

Relative:
Higher

Actual:
16 ft.

ALLSITES:
Facility Id: 98335668
Latitude: 47.999847000000003
Longitude: -122.21012
Geographic location identifier (alias facid): 98335668
Facility Name: EVERETT PORT
Latitude Decimal Degrees: 47.999847000000003
Longitude Decimal Degrees: -122.21012
Coordinate Point Areal Extent Code: 4
Horizontal Accuracy Code: 6
Coordinate Point Geographic Position Code: 5
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 98335668
Interaction (Aka Env Int) Type Code: LUST
Interaction (Aka Env Int) Description: LUST Facility
Interaction Status: I
Federal Program Indentifier: 101153
Interaction Start Date: 8/26/1991
Interaction End Date: 6/1/1995

Geographic Location Identifier (Alias Facid): 98335668
Interaction (Aka Env Int) Type Code: UST
Interaction (Aka Env Int) Description: Underground Storage Tank
Interaction Status: A
Federal Program Indentifier: 101153
Interaction Start Date: 10/16/1991
Interaction End Date: Not reported

LUST:
edr_fstat: WA
edr_fzip: 98201
edr_fcnty: SNOHOMISH
edr_zip: 98201-1652
FS ID: 98335668
Facility ID: 101153
Facility Status: Reported Cleaned Up
Release ID: 4704
Affected Media: Soil

EVERETT PORT (Continued) **U001128234**

Alternate Name: PORT OF EVERETT 13TH ST
Release Notification Date: 8/26/1991
Release Status Date: 6/1/1995
Site Response Unit Code: NORTHWEST
Lat/Long: 47.999847 / -122.21012

edr_fstat: WA
edr_fzip: 98201
edr_fcnty: SNOHOMISH
edr_zip: 98201-1652
FS ID: 98335668
Facility ID: 101153
Facility Status: Cleanup Started
Release ID: 4704
Affected Media: Soil
Alternate Name: PORT OF EVERETT 13TH ST
Release Notification Date: 8/26/1991
Release Status Date: 8/26/1991
Site Response Unit Code: NORTHWEST
Lat/Long: 47.999847 / -122.21012

UST:
Facility ID: 98335668
Site ID: 101153
Lat Deg: 47
Lat Min: 59
Lat Sec: 59.4492000000093
Long Deg: -122
Long Min: 12
Long Sec: 36.4320000000123
UBI: Not reported
Phone Number: 2062593164

Tank ID: 17652
Tank Name: 2
Install Date: 12/31/1964
Capacity: 111 TO 1,100 Gallons
Tank Upgrade Date: 1/1/0001
TankSystem Status: Removed
TankSystem Status Change Date: 8/26/1996
Tank Status: Removed
Tank Permit Expiration Date: 1/1/0001
Tank Closure Date: 1/1/0001
Tank Pumping System: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Not reported
Tank Construction: Not reported
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Pipe Material: Not reported
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Tank Primary Release Detection: Not reported
Tank Second Release Detection: Not reported

EVERETT PORT (Continued) **U001128234**

Pipe Tightness Test:	Not reported
Tank Actual Status Date:	8/6/1996
Tag Number:	Not reported

Tank ID:	17720
Tank Name:	1
Install Date:	12/31/1964
Capacity:	Not reported
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Removed
TankSystem Status Change Date:	8/26/1996
Tank Status:	Removed
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Material:	Not reported
Pipe Construction:	Not reported
Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Not reported
Tank Primary Release Detection:	Not reported
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	8/6/1996
Tag Number:	Not reported

Tank ID:	17874
Tank Name:	3
Install Date:	12/31/1964
Capacity:	111 TO 1,100 Gallons
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Removed
TankSystem Status Change Date:	8/26/1996
Tank Status:	Removed
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Material:	Not reported
Pipe Construction:	Not reported
Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Not reported
Tank Primary Release Detection:	Not reported

EVERETT PORT (Continued) **U001128234**

Tank Second Release Detection: Not reported
Pipe Tightness Test: Not reported
Tank Actual Status Date: 8/6/1996
Tag Number: Not reported

C11 **PORT OF EVERETT** **ICR** **S103508147**
South **1105 13TH ST.** **N/A**
1/8-1/4 **EVERETT, WA 98201**
0.206 mi.
1090 ft. **Site 3 of 3 in cluster C**

Relative:
Higher

Actual:
16 ft.

ICR:
Date Ecology Received Report: 09/27/93
Contaminants Found at Site: Petroleum products
Media Contaminated: Soil
Waste Management: Not reported
Region: North Western
Type of Report Ecology Received: Interim cleanup report
Site Register Issue: 93-10
County Code: 31
Contact: Not reported
Report Title: Not reported

Date Ecology Received Report: 12/29/93
Contaminants Found at Site: Petroleum products
Media Contaminated: Soil
Waste Management: Not reported
Region: North Western
Type of Report Ecology Received: Final cleanup report
Site Register Issue: 93-18
County Code: 31
Contact: Not reported
Report Title: Not reported

D12 **EVERETT FIRE DEPT 3** **RCRA-NonGen** **1000659532**
South **920 13TH ST** **FINDS** **WAD988492062**
1/8-1/4 **EVERETT, WA 98201** **ALLSITES**
0.208 mi. **UST**
1099 ft. **Site 1 of 2 in cluster D**

Relative:
Lower

Actual:
9 ft.

RCRA-NonGen:
Date form received by agency: 09/11/1991
Facility name: EVERETT FIRE DEPT 3
Facility address: 920 13TH ST
EVERETT, WA 98201
EPA ID: WAD988492062
Mailing address: 3190 160TH AVE SE
BELLEVUE, WA 98008-5452
Contact: KURT SMITH
Contact address: 3190 160TH AVE SE
BELLEVUE, WA 98008-5452
Contact country: US
Contact telephone: (425)649-7124
Contact email: Not reported
EPA Region: 10
Classification: Non-Generator

EVERETT FIRE DEPT 3 (Continued) **1000659532**

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: WA ECY
Owner/operator address: 3190 160TH AVE SE
BELLEVUE, WA 98008
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 09/11/1991
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Violation Status: No violations found

FINDS:

Registry ID: 110005364961

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ALLSITES:
Facility Id: 3781166
Latitude: 47.999876999999998

EVERETT FIRE DEPT 3 (Continued) **1000659532**

Longitude:	-122.21843699999999
Geographic location identifier (alias facid):	3781166
Facility Name:	Everett Fire Dept 3
Latitude Decimal Degrees:	47.999876999999998
Longitude Decimal Degrees:	-122.21843699999999
Coordinate Point Areal Extent Code:	4
Horizontal Accuracy Code:	6
Coordinate Point Geographic Position Code:	5
Location Verified Code:	N

Geographic Location Identifier (Alias Facid):	3781166
Interaction (Aka Env Int) Type Code:	HWG
Interaction (Aka Env Int) Description:	Hazardous Waste Generator
Interaction Status:	I
Federal Program Indentifier:	WAD988492062
Interaction Start Date:	9/11/1991
Interaction End Date:	12/31/1991

Geographic Location Identifier (Alias Facid):	3781166
Interaction (Aka Env Int) Type Code:	UST
Interaction (Aka Env Int) Description:	Underground Storage Tank
Interaction Status:	I
Federal Program Indentifier:	5728
Interaction Start Date:	1/1/1971
Interaction End Date:	5/3/2000

Geographic Location Identifier (Alias Facid):	3781166
Interaction (Aka Env Int) Type Code:	TIER2
Interaction (Aka Env Int) Description:	Emergency/Haz Chem Rpt TIER2
Interaction Status:	A
Federal Program Indentifier:	WAD988492062
Interaction Start Date:	1/1/1991
Interaction End Date:	Not reported

UST:

Facility ID:	3781166
Site ID:	5728
Lat Deg:	47
Lat Min:	59
Lat Sec:	59.5571999999925
Long Deg:	-122
Long Min:	13
Long Sec:	6.37319999997999
UBI:	3130006560010013
Phone Number:	2062598803

Tank ID:	11234
Tank Name:	1
Install Date:	1/1/1971
Capacity:	111 TO 1,100 Gallons
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Removed
TankSystem Status Change Date:	8/26/1996
Tank Status:	Removed
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001

EVERETT FIRE DEPT 3 (Continued) **1000659532**

Tank Pumping System:	Not reported
Tank Spill Prevention:	None
Tank Overfill Prevention:	None
Tank Material:	Not reported
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	None
Pipe Material:	Not reported
Pipe Construction:	Single Wall Pipe
Pipe Primary Release Detection:	Suction
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	None
Tank Primary Release Detection:	Weekly Manual Gauging
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	8/6/1996
Tag Number:	Not reported

D13 **CHUCKS BOAT HOSPITAL** **RCRA-NonGen** **1001126055**
South **915 13TH ST** **FINDS** **WAR000011379**
1/8-1/4 **EVERETT, WA 98201** **ALLSITES**
0.209 mi.
1106 ft. **Site 2 of 2 in cluster D**

Relative:
Lower

Actual:
9 ft.

RCRA-NonGen:

Date form received by agency:	07/21/2000
Facility name:	CHUCKS BOAT HOSPITAL
Facility address:	915 13TH ST EVERETT, WA 98201
EPA ID:	WAR000011379
Mailing address:	PO BOX 538 EVERETT, WA 98206
Contact:	BOB MCCHESNEY
Contact address:	PO BOX 538 EVERETT, WA 98206
Contact country:	US
Contact telephone:	(425)259-3164
Contact email:	Not reported
EPA Region:	10
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	EVERETT PORT
Owner/operator address:	PO BOX 538 EVERETT, WA 98206
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	10/03/1996
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No

CHUCKS BOAT HOSPITAL (Continued) **1001126055**

Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Commercial status unknown

Violation Status: No violations found

FINDS:

Registry ID: 110005406257

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ALLSITES:

Facility Id:	17134133
Latitude:	47.999900593571098
Longitude:	-122.21955169791499
Geographic location identifier (alias facid):	17134133
Facility Name:	Chucks Boat Hospital
Latitude Decimal Degrees:	47.999900590000003
Longitude Decimal Degrees:	-122.21955169
Coordinate Point Areal Extent Code:	99
Horizontal Accuracy Code:	99
Coordinate Point Geographic Position Code:	8
Location Verified Code:	N

Geographic Location Identifier (Alias Facid):	17134133
Interaction (Aka Env Int) Type Code:	HWG
Interaction (Aka Env Int) Description:	Hazardous Waste Generator
Interaction Status:	I
Federal Program Indentifier:	WAR000011379
Interaction Start Date:	10/3/1996
Interaction End Date:	10/4/1996

E14
South
1/8-1/4
0.231 mi.
1222 ft.

NORTH MARINA BAYSIDE ABW SITE
1332 W MARINE VIEW DR
EVERETT, WA 98201

Site 1 of 2 in cluster E

CSCSL **S108969458**
ALLSITES **N/A**

Relative:
Higher

Actual:
19 ft.

CSCSL:

Facility ID:	9286485
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	1
Entered Date:	1/18/2008
Updated Date:	3/12/2010
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	Not reported
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48
Longitude:	-122
Lat/Long:	48 / -122
Lat/Long (dms):	48 0 0 / -122 0 0
Media Status Desc:	1/18/2008
Affected Media:	Soil
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Confirmed
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Confirmed
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Awaiting SHA

ALLSITES:

Facility Id:	9286485
Latitude:	48
Longitude:	-122
Geographic location identifier (alias facid):	9286485

NORTH MARINA BAYSIDE ABW SITE (Continued) **S108969458**

Facility Name: North Marina Bayside ABW Site
Latitude Decimal Degrees: 48
Longitude Decimal Degrees: -122
Coordinate Point Areal Extent Code: 2
Horizontal Accuracy Code: 12
Coordinate Point Geographic Position Code: 25
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 9286485
Interaction (Aka Env Int) Type Code: VOLCLNST
Interaction (Aka Env Int) Description: Voluntary Cleanup Sites
Interaction Status: I
Federal Program Indentifier: NW1876
Interaction Start Date: 1/18/2008
Interaction End Date: 12/30/2009

Facility Id: 13998542
Latitude: 47.999540000000003
Longitude: -122.21402
Geographic location identifier (alias facid): 13998542
Facility Name: ABW Technologies Inc
Latitude Decimal Degrees: 47.999540000000003
Longitude Decimal Degrees: -122.21402
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 13998542
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: I
Federal Program Indentifier: WAD009273194
Interaction Start Date: 5/19/1986
Interaction End Date: 12/31/2004

Geographic Location Identifier (Alias Facid): 13998542
Interaction (Aka Env Int) Type Code: TRI
Interaction (Aka Env Int) Description: Toxics Release Inventory
Interaction Status: I
Federal Program Indentifier: WAD009273194
Interaction Start Date: 1/1/1991
Interaction End Date: 12/31/2003

Geographic Location Identifier (Alias Facid): 13998542
Interaction (Aka Env Int) Type Code: TIER2
Interaction (Aka Env Int) Description: Emergency/Haz Chem Rpt TIER2
Interaction Status: A
Federal Program Indentifier: WAD009273194
Interaction Start Date: 1/1/1999
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 13998542
Interaction (Aka Env Int) Type Code: INDUSTGP
Interaction (Aka Env Int) Description: Industrial SW GP
Interaction Status: I

NORTH MARINA BAYSIDE ABW SITE (Continued) **S108969458**

Federal Program Indentifier:	SO3000839
Interaction Start Date:	3/12/1993
Interaction End Date:	5/23/2005
Geographic Location Identifier (Alias Facid):	13998542
Interaction (Aka Env Int) Type Code:	HWP
Interaction (Aka Env Int) Description:	Hazardous Waste Planner
Interaction Status:	I
Federal Program Indentifier:	WAD009273194
Interaction Start Date:	1/1/1996
Interaction End Date:	11/20/2006

E15 **ABW TECHNOLOGIES INC** **RCRA-SQG 1000360918**
South **1332 W MARINE VIEW DR** **FINDS WAD009273194**
1/8-1/4 **EVERETT, WA 98201**
0.232 mi.
1223 ft. **Site 2 of 2 in cluster E**

Relative:
Higher

Actual:
19 ft.

RCRA-SQG:

Date form received by agency:	03/31/2005
Facility name:	ABW TECHNOLOGIES INC
Facility address:	1332 W MARINE VIEW DR EVERETT, WA 982011645
EPA ID:	WAD009273194
Mailing address:	6720 191ST PL. NE ARLINGTON, WA 98223-4666
Contact:	DANIUL MATTERN
Contact address:	6720 191ST PL. NE ARLINGTON, WA 98223-4666
Contact country:	US
Contact telephone:	(360)618-4400
Contact email:	Not reported
EPA Region:	10
Land type:	Private
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	ABW TECHNOLOGIES, INC.
Owner/operator address:	6720 191ST PL. NE ARLINGTON, WA 98223
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1997
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No

ABW TECHNOLOGIES INC (Continued) **1000360918**

Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Historical Generators:
Date form received by agency: 12/31/2003
Facility name: ABW TECHNOLOGIES INC
Classification: Small Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: SR - -630(5)(a)
Area of violation: Generators - General
Date violation determined: 11/21/2002
Date achieved compliance: 12/30/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/05/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200(1)(d) / -170(2)
Area of violation: Generators - General
Date violation determined: 11/21/2002
Date achieved compliance: 12/30/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/05/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -141(1)
Area of violation: Generators - General
Date violation determined: 11/21/2002
Date achieved compliance: 12/30/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/05/2002
Enf. disposition status: Not reported

ABW TECHNOLOGIES INC (Continued) **1000360918**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -630(3) / -200(1)(b)
Area of violation: Generators - General
Date violation determined: 11/21/2002
Date achieved compliance: 12/30/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/05/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200(1)(c) / -170(2)
Area of violation: Generators - General
Date violation determined: 11/21/2002
Date achieved compliance: 12/30/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/05/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 11/21/2002
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 12/30/2002
Evaluation lead agency: State

FINDS:

Registry ID: 110000489855

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions,

ABW TECHNOLOGIES INC (Continued) **1000360918**

and settlements.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

16
SSW
1/8-1/4
0.243 mi.
1281 ft.

EVERETT MARINE CO OP **ALLSITES** **S110038425**
733 13TH ST **N/A**
EVERETT, WA 98201

Relative:
Lower

Actual:
6 ft.

ALLSITES:

Facility Id:	21246
Latitude:	47.987500000000004
Longitude:	-122.218
Geographic location identifier (alias facid):	21246
Facility Name:	EVERETT MARINE CO OP
Latitude Decimal Degrees:	47.987499999999997
Longitude Decimal Degrees:	-122.218
Coordinate Point Areal Extent Code:	0
Horizontal Accuracy Code:	99
Coordinate Point Geographic Position Code:	0
Location Verified Code:	Not reported
Geographic Location Identifier (Alias Facid):	21246
Interaction (Aka Env Int) Type Code:	BOATGP
Interaction (Aka Env Int) Description:	Boatyard GP
Interaction Status:	A
Federal Program Indentifier:	WAG030098

EVERETT MARINE CO OP (Continued) **S110038425**

Interaction Start Date: 3/8/1996
Interaction End Date: Not reported

F17
South
1/4-1/2
0.267 mi.
1409 ft.

B & B MARINE SERVICES LLC **FINDS** **1007077384**
949 14TH ST **ALLSITES** **N/A**
EVERETT, WA 98201

Site 1 of 7 in cluster F

Relative:
Lower

Actual:
7 ft.

FINDS:

Registry ID: 110015540583

Environmental Interest/Information System
Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

ALLSITES:

Facility Id: 7167100
Latitude: 47.998803806010599
Longitude: -122.21722049214701
Geographic location identifier (alias facid): 7167100
Facility Name: B & B MARINE SERVICES LLC
Latitude Decimal Degrees: 47.998803799999997
Longitude Decimal Degrees: -122.21722049
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 7167100
Interaction (Aka Env Int) Type Code: ENFORFNL
Interaction (Aka Env Int) Description: Enforcement Final
Interaction Status: A
Federal Program Indentifier: Not reported
Interaction Start Date: 5/9/2005
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 7167100
Interaction (Aka Env Int) Type Code: BOATGP
Interaction (Aka Env Int) Description: Boatyard GP
Interaction Status: I
Federal Program Indentifier: WAG030086
Interaction Start Date: 12/8/2002
Interaction End Date: 9/12/2006

Geographic Location Identifier (Alias Facid): 7167100
Interaction (Aka Env Int) Type Code: BOATGP
Interaction (Aka Env Int) Description: Boatyard GP
Interaction Status: A
Federal Program Indentifier: WAG030086

B & B MARINE SERVICES LLC (Continued) **1007077384**

Interaction Start Date: 8/11/1993
Interaction End Date: Not reported

F18 **JIMS L & M MARINE INC** **ALLSITES** **S109553863**
South **999 14TH ST** **N/A**
1/4-1/2 **EVERETT, WA**
0.272 mi.
1436 ft. **Site 2 of 7 in cluster F**

Relative:
Lower

Actual:
9 ft.

ALLSITES:
Facility Id: 2783932
Latitude: 47.998803806010599
Longitude: -122.21722049214701
Geographic location identifier (alias facid): 2783932
Facility Name: JIMS L & M MARINE INC
Latitude Decimal Degrees: 47.998803799999997
Longitude Decimal Degrees: -122.21722049
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 2783932
Interaction (Aka Env Int) Type Code: ENFORFNL
Interaction (Aka Env Int) Description: Enforcement Final
Interaction Status: A
Federal Program Indentifier: Not reported
Interaction Start Date: 5/9/2005
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 2783932
Interaction (Aka Env Int) Type Code: BOATGP
Interaction (Aka Env Int) Description: Boatyard GP
Interaction Status: I
Federal Program Indentifier: WAG030108
Interaction Start Date: 12/8/2002
Interaction End Date: 11/13/2006

Geographic Location Identifier (Alias Facid): 2783932
Interaction (Aka Env Int) Type Code: BOATGP
Interaction (Aka Env Int) Description: Boatyard GP
Interaction Status: A
Federal Program Indentifier: WAG030108
Interaction Start Date: 4/10/1998
Interaction End Date: Not reported

F19 **EVERETT BAYSIDE MARINE INC** **LUST 1000659690**
South **1001 14TH ST** **UST N/A**
1/4-1/2 **EVERETT, WA 98201**
0.272 mi.
1437 ft. **Site 3 of 7 in cluster F**

Relative:
Lower

Actual:
9 ft.

LUST:

edr_fstat:	WA
edr_fzip:	982011643
edr_fcnty:	SNOHOMISH
edr_zip:	98201-1675
FS ID:	98168816
Facility ID:	9632
Facility Status:	Reported Cleaned Up
Release ID:	1940
Affected Media:	Soil
Alternate Name:	EVERETT BOATHOUSE
Release Notification Date:	2/6/1991
Release Status Date:	4/20/2000
Site Response Unit Code:	HEADQUARTERS
Lat/Long:	47.998827 / -122.216677

edr_fstat:	WA
edr_fzip:	982011643
edr_fcnty:	SNOHOMISH
edr_zip:	98201-1675
FS ID:	98168816
Facility ID:	9632
Facility Status:	Cleanup Started
Release ID:	1940
Affected Media:	Soil
Alternate Name:	EVERETT BOATHOUSE
Release Notification Date:	2/6/1991
Release Status Date:	8/23/1991
Site Response Unit Code:	HEADQUARTERS
Lat/Long:	47.998827 / -122.216677

UST:

Facility ID:	98168816
Site ID:	9632
Lat Deg:	47
Lat Min:	59
Lat Sec:	55.7771999999949
Long Deg:	-122
Long Min:	13
Long Sec:	3.72000000152184E-0
UBI:	Not reported
Phone Number:	2062596053

Tank ID:	22246
Tank Name:	1
Install Date:	12/31/1964
Capacity:	Not reported
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Removed
TankSystem Status Change Date:	8/26/1996
Tank Status:	Removed
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001

EVERETT BAYSIDE MARINE INC (Continued) **1000659690**

Tank Pumping System:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Steel
Tank Construction:	Not reported
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Material:	Steel
Pipe Construction:	Not reported
Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Not reported
Tank Primary Release Detection:	Not reported
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	8/6/1996
Tag Number:	Not reported

Tank ID:	22420
Tank Name:	2
Install Date:	12/31/1964
Capacity:	111 TO 1,100 Gallons
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Removed
TankSystem Status Change Date:	8/26/1996
Tank Status:	Removed
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Steel
Tank Construction:	Not reported
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Material:	Steel
Pipe Construction:	Not reported
Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Not reported
Tank Primary Release Detection:	Not reported
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	8/6/1996
Tag Number:	Not reported

F20 **EVERETT BOAT HOUSE - PORT OF EVERETT** **ICR** **S103506787**
South **1001 14TH ST.** **N/A**
1/4-1/2 **EVERETT, WA 98201**
0.272 mi.
1437 ft. **Site 4 of 7 in cluster F**

Relative:
Lower

Actual:
9 ft.

ICR:

Date Ecology Received Report:	03/20/91
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Groundwater, Soil
Waste Management:	Tank

EVERETT BOAT HOUSE - PORT OF EVERETT (Continued) **S103506787**

Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	91-26
County Code:	31
Contact:	Not reported
Report Title:	Not reported

F21 **EVERETT BAYSIDE MARINE INC** **RCRA-NonGen** **1004794154**
South **1001 14TH ST** **FINDS** **WAD988493664**
1/4-1/2 **EVERETT, WA 98201** **ALLSITES**
0.272 mi. **MANIFEST**
1437 ft. **Site 5 of 7 in cluster F**

Relative:
Lower

Actual:
9 ft.

RCRA-NonGen:

Date form received by agency:	02/08/2008
Facility name:	EVERETT BAYSIDE MARINE INC
Facility address:	1001 14TH ST EVERETT, WA 982011696
EPA ID:	WAD988493664
Contact:	JEFF LALONE
Contact address:	1001 14TH ST EVERETT, WA 98201-1675
Contact country:	US
Contact telephone:	(425)252-3088
Contact email:	Not reported
EPA Region:	10
Land type:	District
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	EVERETT BAYSIDE MARINE INC
Owner/operator address:	1001 14TH ST EVERETT, WA 98201
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1997
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

EVERETT BAYSIDE MARINE INC (Continued) **1004794154**

Off-site waste receiver: Commercial status unknown

Historical Generators:
Date form received by agency: 12/31/2007
Facility name: EVERETT BAYSIDE MARINE INC
Classification: Not a generator, verified

Date form received by agency: 12/31/2005
Facility name: EVERETT BAYSIDE MARINE INC
Classification: Not a generator, verified

Date form received by agency: 12/31/2003
Facility name: EVERETT BAYSIDE MARINE INC
Classification: Not a generator, verified

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 10/17/2007
Evaluation: COMPLIANCE ASSISTANCE VISIT
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110005366264

Environmental Interest/Information System
Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ALLSITES:
Facility Id: 98168816
Latitude: 47.998826999999999
Longitude: -122.216677
Geographic location identifier (alias facid): 98168816
Facility Name: Everett Bayside Marine Inc
Latitude Decimal Degrees: 47.998826999999999
Longitude Decimal Degrees: -122.216677
Coordinate Point Areal Extent Code: 4
Horizontal Accuracy Code: 6
Coordinate Point Geographic Position Code: 5
Location Verified Code: N

EVERETT BAYSIDE MARINE INC (Continued) **1004794154**

Geographic Location Identifier (Alias Facid): 98168816
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: I
Federal Program Indentifier: WAD988493664
Interaction Start Date: 9/17/1991
Interaction End Date: 12/31/2007

Geographic Location Identifier (Alias Facid): 98168816
Interaction (Aka Env Int) Type Code: BOATGP
Interaction (Aka Env Int) Description: Boatyard GP
Interaction Status: I
Federal Program Indentifier: WAG030078
Interaction Start Date: 12/8/2002
Interaction End Date: 5/1/2008

Geographic Location Identifier (Alias Facid): 98168816
Interaction (Aka Env Int) Type Code: BOATGP
Interaction (Aka Env Int) Description: Boatyard GP
Interaction Status: I
Federal Program Indentifier: WAG030078
Interaction Start Date: 3/22/1993
Interaction End Date: 5/1/2008

Geographic Location Identifier (Alias Facid): 98168816
Interaction (Aka Env Int) Type Code: UST
Interaction (Aka Env Int) Description: Underground Storage Tank
Interaction Status: A
Federal Program Indentifier: 9632
Interaction Start Date: 3/20/2000
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 98168816
Interaction (Aka Env Int) Type Code: LUST
Interaction (Aka Env Int) Description: LUST Facility
Interaction Status: I
Federal Program Indentifier: 9632
Interaction Start Date: 2/6/1991
Interaction End Date: 4/20/2000

WA MANIFEST:
Facility Site ID Number: 98168816
SWC Desc: Not reported
FWC Desc: Not reported
Form Comm: Our location has changed and we are not generating regulated hazardous waste.
Data Year: Not reported
Permit by Rule: False
Treatment by Generator: False
Mixed radioactive waste: False
Importer of hazardous waste: False
Immediate recycler: False
Treatment/Storage/Disposal/Recycling Facility: False
Generator of dangerous fuel waste: False
Generator marketing to burner: False
"Other marketers (i.e., blender, distributor, etc.)": False

EVERETT BAYSIDE MARINE INC (Continued) **1004794154**

Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD988493664
Facility Address 2:	Not reported
TAX REG NBR:	600603639
NAICS CD:	336612
BUSINESS TYPE:	Not reported
MAIL NAME:	Everett Bayside Marine Inc
MAIL ADDR LINE1:	1001 14TH ST
MAIL CITY,ST,ZIP:	EVERETT, WA 98201-1675
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Everett Bayside Marine Inc
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1001 14TH ST
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1675
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(360)252-3088
LEGAL EFFECTIVE DATE:	9/26/1996
LAND ORG NAME:	Port of Everett
LAND ORG TYPE:	District
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 538
LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-6001
OPERATOR ORG NAME:	Everett Bayside Marine Inc
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1001 14th St
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1975
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-252-3088
OPERATOR EFFECTIVE DATE:	01/01/97
SITE CONTACT NAME:	Jeff Lalone
SITE CONTACT ADDR LINE1:	1111 Craftsman Way
SITE CONTACT ZIP:	EVERETT, WA 98201
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	425-252-3088
SITE CONTACT EMAIL:	jeff@baysidemarine.com
FORM CONTACT NAME:	Jeff Lalone
FORM CONTACT ADDR LINE1:	1111 Craftsman Way
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	425-252-3088

EVERETT BAYSIDE MARINE INC (Continued) **1004794154**

FORM CONTACT EMAIL:	jeff@baysidemarine.com
GEN STATUS CD:	XQG
MONTHLY GENERATION:	False
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Facility Site ID Number:	98168816
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Our location has changed and we are not generating regulated hazardous waste.
Data Year:	Not reported
Permit by Rule:	No
Treatment by Generator:	No
Mixed radioactive waste:	No
Importer of hazardous waste:	No
Immediate recycler:	No
Treatment/Storage/Disposal/Recycling Facility:	No
Generator of dangerous fuel waste:	No
Generator marketing to burner:	No
"Other marketers (i.e., blender, distributor, etc.)":	No
Utility boiler burner:	No
Industry boiler burner:	No
Industrial Furnace:	No
Smelter defferal:	No
Universal waste - batteries - generate:	No
Universal waste - thermostats - generate:	No
Universal waste - mercury - generate:	No
Universal waste - lamps - generate:	No
Universal waste - batteries - accumulate:	No
Universal waste - thermostats - accumulate:	No
Universal waste - mercury - accumulate:	No
Universal waste - lamps - accumulate:	No
Destination Facility for Universal Waste:	No
Off-specification used oil burner - utility boiler:	No
Off-specification used oil burner - industrial boiler:	No
Off-specification used oil burner - industrial furnace:	No
EPA ID:	WAD988493664
Facility Address 2:	Not reported
TAX REG NBR:	600603639
NAICS CD:	336612
BUSINESS TYPE:	Not reported
MAIL NAME:	Everett Bayside Marine Inc
MAIL ADDR LINE1:	1001 14TH ST
MAIL CITY,ST,ZIP:	EVERETT, WA 98201-1675

EVERETT BAYSIDE MARINE INC (Continued) **1004794154**

MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Everett Bayside Marine Inc
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1001 14TH ST
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1675
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(360)252-3088
LEGAL EFFECTIVE DATE:	9/26/1996
LAND ORG NAME:	Port of Everett
LAND ORG TYPE:	District
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 538
LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-6001
OPERATOR ORG NAME:	Everett Bayside Marine Inc
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1001 14TH ST
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1675
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-252-3088
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	Jeff LaLone
SITE CONTACT ADDR LINE1:	1001 14TH ST
SITE CONTACT ZIP:	EVERETT, WA 98201-1675
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)252-3088
SITE CONTACT EMAIL:	jeff@baysidemarine.com
FORM CONTACT NAME:	Diane Raser
FORM CONTACT ADDR LINE1:	1001 14th St
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1675
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)252-3088
FORM CONTACT EMAIL:	diane@baysidemarine.com
GEN STATUS CD:	SQG
MONTHLY GENERATION:	No
BATCH GENERATION:	No
ONE TIME GENERATION:	No
TRANSPORTS OWN WASTE:	No
TRANSPORTS OTHRS WASTE:	No
RECYCLER ONSITE:	No
TRANSFER FACILITY:	No
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	No
USED OIL TRANSPORTER:	No
USED OIL TRANSFER FACLTY:	No
USED OIL PROCESSOR:	No
USED OIL REREFINER:	No
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	No
USED OIL FUEL MRKTR MEETS SPECS:	No

F22
South
1/4-1/2
0.274 mi.
1445 ft.

EVERETT SHIPYARD PIERS 1 3
1016 14TH ST
EVERETT, WA 98201

Site 6 of 7 in cluster F

ALLSITES **S110038472**
N/A

Relative:
Lower

Actual:
9 ft.

ALLSITES:

Facility Id:	19275
Latitude:	47.999200000000002
Longitude:	-122.214
Geographic location identifier (alias facid):	19275
Facility Name:	EVERETT SHIPYARD PIERS 1 3
Latitude Decimal Degrees:	47.999200000000002
Longitude Decimal Degrees:	-122.214
Coordinate Point Areal Extent Code:	0
Horizontal Accuracy Code:	99
Coordinate Point Geographic Position Code:	0
Location Verified Code:	Not reported
Geographic Location Identifier (Alias Facid):	19275
Interaction (Aka Env Int) Type Code:	INDUSTIP
Interaction (Aka Env Int) Description:	Industrial IP
Interaction Status:	A
Federal Program Indentifier:	WA0032000
Interaction Start Date:	7/1/2004
Interaction End Date:	Not reported

F23
South
1/4-1/2
0.274 mi.
1445 ft.

EVERETT SHIPYARD INC
1016 14TH STREET
EVERETT, WA 98201

Site 7 of 7 in cluster F

RCRA-CESQG **1000232093**
FINDS **WAD988469706**
CSCSL
HSL
ALLSITES
MANIFEST
SPILLS

Relative:
Lower

Actual:
9 ft.

RCRA-CESQG:

Date form received by agency:	01/03/2008
Facility name:	EVERETT SHIPYARD INC
Facility address:	1016 14TH ST EVERETT, WA 982011691
EPA ID:	WAD988469706
Contact:	KEVIN W QUIGLEY
Contact address:	1016 14TH ST EVERETT, WA 98201-1644
Contact country:	US
Contact telephone:	(425)259-0137
Contact email:	Not reported
EPA Region:	10
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely

EVERETT SHIPYARD INC (Continued) **1000232093**

hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	EVERETT SHIPYARD INC
Owner/operator address:	1016 14TH ST EVERETT, WA 98201
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1997
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No
Off-site waste receiver:	Commercial status unknown

Historical Generators:

Date form received by agency:	12/31/2007
Facility name:	EVERETT SHIPYARD INC
Classification:	Not a generator, verified

Date form received by agency:	12/31/2005
Facility name:	EVERETT SHIPYARD INC
Classification:	Not a generator, verified

Date form received by agency:	12/31/2003
Facility name:	EVERETT SHIPYARD INC
Classification:	Not a generator, verified

Date form received by agency:	03/31/1994
Facility name:	EVERETT SHIPYARD INC
Site name:	FISHERMENS BOAT SHOP INC
Classification:	Large Quantity Generator

Date form received by agency:	09/01/1993
Facility name:	EVERETT SHIPYARD INC
Site name:	FISHERMENS BOAT SHOP INC.

EVERETT SHIPYARD INC (Continued) **1000232093**

Classification: Large Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: SR - -145
Area of violation: Generators - General
Date violation determined: 07/10/1992
Date achieved compliance: 08/04/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/10/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -070
Area of violation: Generators - General
Date violation determined: 07/10/1992
Date achieved compliance: 09/18/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/10/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200
Area of violation: Generators - General
Date violation determined: 07/10/1992
Date achieved compliance: 09/18/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/10/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -180
Area of violation: Generators - General
Date violation determined: 07/10/1992
Date achieved compliance: 09/18/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/10/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

EVERETT SHIPYARD INC (Continued) **1000232093**

Paid penalty amount: Not reported

Regulation violated: SR - -060
Area of violation: Generators - General
Date violation determined: 07/10/1992
Date achieved compliance: 08/24/1992
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/10/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 04/23/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 08/04/1992
Evaluation lead agency: State

Evaluation date: 04/23/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 08/24/1992
Evaluation lead agency: State

Evaluation date: 04/23/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 09/18/1992
Evaluation lead agency: State

FINDS:

Registry ID: 110005350967

Environmental Interest/Information System
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PCS (Permit Compliance System) is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the

EVERETT SHIPYARD INC (Continued) **1000232093**

permit, compliance, and enforcement status of NPDES facilities.

CSCSL:

Facility ID:	2794
Facility Type:	Independent
Region:	Northwest
Ecology Status Code:	3
Entered Date:	9/9/1992
Updated Date:	7/8/2008
Brownfield Status:	0
Rank Status:	3
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.9988185229639
Longitude:	-122.216747577327
Lat/Long:	47.9988185229639 / -122.216747577327
Lat/Long (dms):	47 59 55.747 / -122 13 0.291
Media Status Desc:	1/1/0001
Affected Media:	Soil
Affected Media Status:	Confirmed
Pesticides:	Suspected
Petroleum Products:	Not reported
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Confirmed
Halogenated Organic Compounds:	Confirmed
EPA Priority Pollutants - Metals and Cyanide:	Confirmed
Metals - Other non-priority pollutant medals:	Confirmed
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	2794
Facility Type:	Independent
Region:	Northwest
Ecology Status Code:	3
Entered Date:	9/9/1992
Updated Date:	7/8/2008

EVERETT SHIPYARD INC (Continued) **1000232093**

Brownfield Status:	0
Rank Status:	3
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.9988185229639
Longitude:	-122.216747577327
Lat/Long:	47.9988185229639 / -122.216747577327
Lat/Long (dms):	47 59 55.747 / -122 13 0.291
Media Status Desc:	5/1/2009
Affected Media:	Sediment
Affected Media Status:	Confirmed
Pesticides:	Confirmed
Petroleum Products:	Not reported
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Confirmed
Halogenated Organic Compounds:	Confirmed
EPA Priority Pollutants - Metals and Cyanide:	Confirmed
Metals - Other non-priority pollutant medals:	Confirmed
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Confirmed
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Confirmed
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	2794
Facility Type:	Independent
Region:	Northwest
Ecology Status Code:	3
Entered Date:	9/9/1992
Updated Date:	7/8/2008
Brownfield Status:	0
Rank Status:	3
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.9988185229639
Longitude:	-122.216747577327
Lat/Long:	47.9988185229639 / -122.216747577327

EVERETT SHIPYARD INC (Continued) **1000232093**

Lat/Long (dms):	47 59 55.747 / -122 13 0.291
Media Status Desc:	1/1/0001
Affected Media:	Groundwater
Affected Media Status:	Suspected
Pesticides:	Suspected
Petroleum Products:	Not reported
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Suspected
Halogenated Organic Compounds:	Suspected
EPA Priority Pollutants - Metals and Cyanide:	Suspected
Metals - Other non-priority pollutant medals:	Suspected
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	2794
Facility Type:	Independent
Region:	Northwest
Ecology Status Code:	3
Entered Date:	9/9/1992
Updated Date:	7/8/2008
Brownfield Status:	0
Rank Status:	3
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.9988185229639
Longitude:	-122.216747577327
Lat/Long:	47.9988185229639 / -122.216747577327
Lat/Long (dms):	47 59 55.747 / -122 13 0.291
Media Status Desc:	1/1/0001
Affected Media:	Surface Water
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Not reported
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported

EVERETT SHIPYARD INC (Continued) **1000232093**

Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Confirmed
Halogenated Organic Compounds:	Confirmed
EPA Priority Pollutants - Metals and Cyanide:	Confirmed
Metals - Other non-priority pollutant medals:	Suspected
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	2794
Facility Type:	Independent
Region:	Northwest
Ecology Status Code:	3
Entered Date:	9/9/1992
Updated Date:	7/8/2008
Brownfield Status:	0
Rank Status:	3
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.9988185229639
Longitude:	-122.216747577327
Lat/Long:	47.9988185229639 / -122.216747577327
Lat/Long (dms):	47 59 55.747 / -122 13 0.291
Media Status Desc:	1/1/0001
Affected Media:	Air
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Not reported
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Confirmed
Halogenated Organic Compounds:	Confirmed
EPA Priority Pollutants - Metals and Cyanide:	Confirmed

EVERETT SHIPYARD INC (Continued) **1000232093**

Metals - Other non-priority pollutant medals:	Suspected
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

HSL:

edr_fstat:	WA
edr_fzip:	Not reported
edr_fcnty:	SNOHOMISH
edr_zip:	Not reported
Facility Type:	**Hazardous Sites List**
Facility Status:	RA in progress
FSID Number:	2794
Rank:	3
Region:	HQ

ALLSITES:

Facility Id:	2794
Latitude:	47.998818522963902
Longitude:	-122.216747577327
Geographic location identifier (alias facid):	2794
Facility Name:	EVERETT SHIPYARD INC
Latitude Decimal Degrees:	47.99881852
Longitude Decimal Degrees:	-122.21674757
Coordinate Point Areal Extent Code:	99
Horizontal Accuracy Code:	99
Coordinate Point Geographic Position Code:	99
Location Verified Code:	Not reported

Geographic Location Identifier (Alias Facid):	2794
Interaction (Aka Env Int) Type Code:	HWG
Interaction (Aka Env Int) Description:	Hazardous Waste Generator
Interaction Status:	A
Federal Program Indentifier:	WAD988469706
Interaction Start Date:	1/5/1990
Interaction End Date:	Not reported

Geographic Location Identifier (Alias Facid):	2794
Interaction (Aka Env Int) Type Code:	UST
Interaction (Aka Env Int) Description:	Underground Storage Tank
Interaction Status:	I
Federal Program Indentifier:	972
Interaction Start Date:	6/8/1998
Interaction End Date:	5/3/2000

Geographic Location Identifier (Alias Facid):	2794
Interaction (Aka Env Int) Type Code:	INDUSTIP
Interaction (Aka Env Int) Description:	Industrial IP
Interaction Status:	I
Federal Program Indentifier:	ST0000008

EVERETT SHIPYARD INC (Continued) **1000232093**

Interaction Start Date:	1/13/1993
Interaction End Date:	1/13/1993
Geographic Location Identifier (Alias Facid):	2794
Interaction (Aka Env Int) Type Code:	INDPNDNT
Interaction (Aka Env Int) Description:	Independent Cleanup
Interaction Status:	A
Federal Program Indentifier:	Not reported
Interaction Start Date:	1/1/1900
Interaction End Date:	Not reported
Geographic Location Identifier (Alias Facid):	2794
Interaction (Aka Env Int) Type Code:	ENFORFNL
Interaction (Aka Env Int) Description:	Enforcement Final
Interaction Status:	A
Federal Program Indentifier:	Not reported
Interaction Start Date:	12/4/2007
Interaction End Date:	Not reported
Geographic Location Identifier (Alias Facid):	2794
Interaction (Aka Env Int) Type Code:	INDUSTIP
Interaction (Aka Env Int) Description:	Industrial IP
Interaction Status:	I
Federal Program Indentifier:	WA0030961
Interaction Start Date:	6/30/1994
Interaction End Date:	10/23/2009
Geographic Location Identifier (Alias Facid):	2794
Interaction (Aka Env Int) Type Code:	HWP
Interaction (Aka Env Int) Description:	Hazardous Waste Planner
Interaction Status:	I
Federal Program Indentifier:	WAD988469706
Interaction Start Date:	1/1/1995
Interaction End Date:	12/31/1995

WA MANIFEST:

Facility Site ID Number:	2794
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Not reported
Data Year:	2008
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False

EVERETT SHIPYARD INC (Continued) **1000232093**

Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD988469706
Facility Address 2:	Not reported
TAX REG NBR:	313013490
NAICS CD:	336612
BUSINESS TYPE:	Not reported
MAIL NAME:	Everett Shipyard Inc
MAIL ADDR LINE1:	1016 14TH ST
MAIL CITY,ST,ZIP:	EVERETT, WA 98201-1644
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Everett Shipyard Inc
LEGAL ORG TYPE:	Municipal
LEGAL ADDR LINE1:	1016 14TH ST
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1644
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)259-0137
LEGAL EFFECTIVE DATE:	8/9/1996
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	Municipal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 538
LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-3164
OPERATOR ORG NAME:	Everett Shipyard Inc
OPERATOR ORG TYPE:	Municipal
OPERATOR ADDR LINE1:	1016 14TH ST
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1644
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-259-0137
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	Kevin W Quigley
SITE CONTACT ADDR LINE1:	1016 14TH ST
SITE CONTACT ZIP:	EVERETT, WA 98201-1644
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	425259-0137
SITE CONTACT EMAIL:	Not reported
FORM CONTACT NAME:	Kevin W Quigley
FORM CONTACT ADDR LINE1:	1016 14TH ST
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1644
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	425259-0137
FORM CONTACT EMAIL:	kevin@everettship.com
GEN STATUS CD:	SQG
MONTHLY GENERATION:	False
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False

EVERETT SHIPYARD INC (Continued) **1000232093**

TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Facility Site ID Number:	2794
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD988469706
Facility Address 2:	Not reported
TAX REG NBR:	313013490
NAICS CD:	336612
BUSINESS TYPE:	Not reported
MAIL NAME:	Everett Shipyard Inc
MAIL ADDR LINE1:	1016 14TH ST
MAIL CITY,ST,ZIP:	EVERETT, WA 98201-1644
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Everett Shipyard Inc
LEGAL ORG TYPE:	Municipal
LEGAL ADDR LINE1:	1016 14TH ST
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1644
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)259-0137

EVERETT SHIPYARD INC (Continued) **1000232093**

LEGAL EFFECTIVE DATE:	8/9/1996
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	Municipal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 538
LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-3164
OPERATOR ORG NAME:	Everett Shipyard Inc
OPERATOR ORG TYPE:	Municipal
OPERATOR ADDR LINE1:	1016 14TH ST
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1644
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-259-0137
OPERATOR EFFECTIVE DATE:	01/01/97
SITE CONTACT NAME:	Kevin W Quigley
SITE CONTACT ADDR LINE1:	1016 14TH ST
SITE CONTACT ZIP:	EVERETT, WA 98201-1644
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	425259-0137
SITE CONTACT EMAIL:	Not reported
FORM CONTACT NAME:	Kevin W Quigley
FORM CONTACT ADDR LINE1:	1016 14TH ST
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1644
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	425259-0137
FORM CONTACT EMAIL:	kevin@everettship.com
GEN STATUS CD:	SQG
MONTHLY GENERATION:	False
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Facility Site ID Number:	2794
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Not reported
Data Year:	2009
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False

EVERETT SHIPYARD INC (Continued) **1000232093**

"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD988469706
Facility Address 2:	Not reported
TAX REG NBR:	313013490
NAICS CD:	336612
BUSINESS TYPE:	Not reported
MAIL NAME:	Everett Shipyard Inc
MAIL ADDR LINE1:	2730 Federal Avenue
MAIL CITY,ST,ZIP:	EVERETT, WA 98201-1644
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Everett Shipyard Inc
LEGAL ORG TYPE:	Municipal
LEGAL ADDR LINE1:	2730 Federal Avenue
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1644
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)259-0137
LEGAL EFFECTIVE DATE:	8/9/1996
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	Municipal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 538
LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-3164
OPERATOR ORG NAME:	Everett Shipyard Inc
OPERATOR ORG TYPE:	Municipal
OPERATOR ADDR LINE1:	2730 Federal Avenue
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1644
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-259-0137
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	Kevin W Quigley
SITE CONTACT ADDR LINE1:	2730 Federal Avenue
SITE CONTACT ZIP:	EVERETT, WA 98201-1644
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	425259-0137
SITE CONTACT EMAIL:	Not reported
FORM CONTACT NAME:	Kevin W Quigley
FORM CONTACT ADDR LINE1:	2730 Federal Avenue
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1644
FORM CONTACT COUNTRY:	UNITED STATES

EVERETT SHIPYARD INC (Continued) **1000232093**

FORM CONTACT PHONE NBR:	425259-0137
FORM CONTACT EMAIL:	kevin@everettship.com
GEN STATUS CD:	SQG
MONTHLY GENERATION:	False
BATCH GENERATION:	True
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Facility Site ID Number:	2794
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	No
Treatment by Generator:	No
Mixed radioactive waste:	No
Importer of hazardous waste:	No
Immediate recycler:	No
Treatment/Storage/Disposal/Recycling Facility:	No
Generator of dangerous fuel waste:	No
Generator marketing to burner:	No
"Other marketers (i.e., blender, distributor, etc.)":	No
Utility boiler burner:	No
Industry boiler burner:	No
Industrial Furnace:	No
Smelter defferal:	No
Universal waste - batteries - generate:	No
Universal waste - thermostats - generate:	No
Universal waste - mercury - generate:	No
Universal waste - lamps - generate:	No
Universal waste - batteries - accumulate:	No
Universal waste - thermostats - accumulate:	No
Universal waste - mercury - accumulate:	No
Universal waste - lamps - accumulate:	No
Destination Facility for Universal Waste:	No
Off-specification used oil burner - utility boiler:	No
Off-specification used oil burner - industrial boiler:	No
Off-specification used oil burner - industrial furnace:	No
EPA ID:	WAD988469706
Facility Address 2:	Not reported
TAX REG NBR:	313013490
NAICS CD:	336612
BUSINESS TYPE:	Not reported
MAIL NAME:	Everett Shipyard Inc
MAIL ADDR LINE1:	1016 14TH ST
MAIL CITY,ST,ZIP:	EVERETT, WA 98201-1644

EVERETT SHIPYARD INC (Continued) **1000232093**

MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Everett Shipyard Inc
LEGAL ORG TYPE:	Municipal
LEGAL ADDR LINE1:	1016 14TH ST
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1644
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)259-0137
LEGAL EFFECTIVE DATE:	8/9/1996
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	Municipal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 538
LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-3164
OPERATOR ORG NAME:	Everett Shipyard Inc
OPERATOR ORG TYPE:	Municipal
OPERATOR ADDR LINE1:	1016 14TH ST
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1644
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-259-0137
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	Kevin W Quigley
SITE CONTACT ADDR LINE1:	1016 14TH ST
SITE CONTACT ZIP:	EVERETT, WA 98201-1644
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	425259-0137
SITE CONTACT EMAIL:	Not reported
FORM CONTACT NAME:	Kevin W Quigley
FORM CONTACT ADDR LINE1:	1016 14TH ST
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1644
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	425259-0137
FORM CONTACT EMAIL:	kevin@everettship.com
GEN STATUS CD:	SQG
MONTHLY GENERATION:	No
BATCH GENERATION:	No
ONE TIME GENERATION:	No
TRANSPORTS OWN WASTE:	No
TRANSPORTS OTHRS WASTE:	No
RECYCLER ONSITE:	No
TRANSFER FACILITY:	No
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	No
USED OIL TRANSPORTER:	No
USED OIL TRANSFER FACLTY:	No
USED OIL PROCESSOR:	No
USED OIL REREFINER:	No
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	No
USED OIL FUEL MRKTR MEETS SPECS:	No

Facility Site ID Number:	2794
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	FALSE

EVERETT SHIPYARD INC (Continued) **1000232093**

Treatment by Generator:	FALSE
Mixed radioactive waste:	FALSE
Importer of hazardous waste:	FALSE
Immediate recycler:	FALSE
Treatment/Storage/Disposal/Recycling Facility:	FALSE
Generator of dangerous fuel waste:	FALSE
Generator marketing to burner:	FALSE
"Other marketers (i.e., blender, distributor, etc.)":	FALSE
Utility boiler burner:	FALSE
Industry boiler burner:	FALSE
Industrial Furnace:	FALSE
Smelter defferal:	FALSE
Universal waste - batteries - generate:	FALSE
Universal waste - thermostats - generate:	FALSE
Universal waste - mercury - generate:	FALSE
Universal waste - lamps - generate:	FALSE
Universal waste - batteries - accumulate:	FALSE
Universal waste - thermostats - accumulate:	FALSE
Universal waste - mercury - accumulate:	FALSE
Universal waste - lamps - accumulate:	FALSE
Destination Facility for Universal Waste:	FALSE
Off-specification used oil burner - utility boiler:	FALSE
Off-specification used oil burner - industrial boiler:	FALSE
Off-specification used oil burner - industrial furnace:	FALSE
EPA ID:	WAD988469706
Facility Address 2:	Not reported
TAX REG NBR:	313013490
NAICS CD:	336612
BUSINESS TYPE:	Not reported
MAIL NAME:	Everett Shipyard Inc
MAIL ADDR LINE1:	1016 14TH ST
MAIL CITY,ST,ZIP:	EVERETT, WA 98201-1644
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Everett Shipyard Inc
LEGAL ORG TYPE:	Municipal
LEGAL ADDR LINE1:	1016 14TH ST
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1644
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)259-0137
LEGAL EFFECTIVE DATE:	8/9/1996
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	Municipal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 538
LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-3164
OPERATOR ORG NAME:	Everett Shipyard Inc
OPERATOR ORG TYPE:	Municipal
OPERATOR ADDR LINE1:	1016 14TH ST
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1644
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-259-0137
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	Kevin W Quigley
SITE CONTACT ADDR LINE1:	1016 14TH ST
SITE CONTACT ZIP:	EVERETT, WA 98201-1644

EVERETT SHIPYARD INC (Continued) **1000232093**

SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	425259-0137
SITE CONTACT EMAIL:	Not reported
FORM CONTACT NAME:	Kevin W Quigley
FORM CONTACT ADDR LINE1:	1016 14TH ST
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1644
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	425259-0137
FORM CONTACT EMAIL:	kevin@everettship.com
GEN STATUS CD:	SQG
MONTHLY GENERATION:	FALSE
BATCH GENERATION:	FALSE
ONE TIME GENERATION:	FALSE
TRANSPORTS OWN WASTE:	FALSE
TRANSPORTS OTHRS WASTE:	FALSE
RECYCLER ONSITE:	FALSE
TRANSFER FACILITY:	FALSE
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	FALSE
USED OIL TRANSPORTER:	FALSE
USED OIL TRANSFER FACLTY:	FALSE
USED OIL PROCESSOR:	FALSE
USED OIL REREFINER:	FALSE
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	FALSE
USED OIL FUEL MRKTR MEETS SPECS:	FALSE

Click this hyperlink while viewing on your computer to access additional WA MANIFEST: detail in the EDR Site Report.

SPILLS:

Facility ID:	539741
Medium:	Not reported
Material Desc:	OTHER HAZARDOUS
Material Qty:	1
Material Units:	GALLON
Date Received:	3/21/2004
Contact Name:	Not reported

Facility ID:	612248
Medium:	SURFACE WATER-MARINE
Material Desc:	PETROLEUM - OIL OTHER
Material Qty:	Not reported
Material Units:	GALLON
Date Received:	4/20/2009 9:34:00 AM
Contact Name:	GILBERTSON

G24 **EVERETT PORT NORTH MARINE** **FINDS** **1007079908**
South **1400 W MARINE VIEW DR** **ALLSITES** **N/A**
1/4-1/2 **EVERETT, WA 98206**
0.279 mi.
1471 ft. **Site 1 of 3 in cluster G**

Relative:
Higher

Actual:
19 ft.

FINDS:

Registry ID: 110015566252

Environmental Interest/Information System

EVERETT PORT NORTH MARINE (Continued) **1007079908**

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

ALLSITES:

Facility Id:	624398
Latitude:	47.991304198553998
Longitude:	-122.219158047641
Geographic location identifier (alias facid):	624398
Facility Name:	EVERETT PORT NORTH MARINE
Latitude Decimal Degrees:	47.991304190000001
Longitude Decimal Degrees:	-122.21915804
Coordinate Point Areal Extent Code:	99
Horizontal Accuracy Code:	99
Coordinate Point Geographic Position Code:	99
Location Verified Code:	N

Geographic Location Identifier (Alias Facid):	624398
Interaction (Aka Env Int) Type Code:	BOATGP
Interaction (Aka Env Int) Description:	Boatyard GP
Interaction Status:	I
Federal Program Indentifier:	WAG030035
Interaction Start Date:	12/8/2002
Interaction End Date:	9/1/2007

Geographic Location Identifier (Alias Facid):	624398
Interaction (Aka Env Int) Type Code:	401PROJ
Interaction (Aka Env Int) Description:	401CZM Project Site
Interaction Status:	I
Federal Program Indentifier:	200301007
Interaction Start Date:	1/8/2004
Interaction End Date:	9/19/2005

Geographic Location Identifier (Alias Facid):	624398
Interaction (Aka Env Int) Type Code:	NONENFNL
Interaction (Aka Env Int) Description:	Non Enforcement Final
Interaction Status:	A
Federal Program Indentifier:	Not reported
Interaction Start Date:	5/2/2005
Interaction End Date:	Not reported

Geographic Location Identifier (Alias Facid):	624398
Interaction (Aka Env Int) Type Code:	401PROJ
Interaction (Aka Env Int) Description:	401CZM Project Site
Interaction Status:	A
Federal Program Indentifier:	200301007
Interaction Start Date:	6/3/2005
Interaction End Date:	Not reported

Geographic Location Identifier (Alias Facid):	624398
Interaction (Aka Env Int) Type Code:	BOATGP
Interaction (Aka Env Int) Description:	Boatyard GP
Interaction Status:	I

EVERETT PORT NORTH MARINE (Continued) **1007079908**

Federal Program Indentifier: WAG030035
Interaction Start Date: 2/5/1993
Interaction End Date: 9/1/2007

H25 **PUGET SOUND TRUCK LINES** **FINDS** **1007080229**
SW **615 13TH ST** **ALLSITES** **N/A**
1/4-1/2 **EVERETT, WA 98201** **CSCSL NFA**
0.281 mi. **LUST**
1483 ft. **Site 1 of 2 in cluster H**

Relative: Lower

Actual: 6 ft.

FINDS:

Registry ID: 110015569473

Environmental Interest/Information System
Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

ALLSITES:
Facility Id: 2809
Latitude: 48.000100000000003
Longitude: -122.2201
Geographic location identifier (alias facid): 2809
Facility Name: PUGET SOUND TRUCK LINES
Latitude Decimal Degrees: 48.000100000000003
Longitude Decimal Degrees: -122.2201
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 2809
Interaction (Aka Env Int) Type Code: INDUSTGP
Interaction (Aka Env Int) Description: Industrial SW GP
Interaction Status: I
Federal Program Indentifier: SO3000945
Interaction Start Date: 3/12/1993
Interaction End Date: 6/5/2003

Geographic Location Identifier (Alias Facid): 2809
Interaction (Aka Env Int) Type Code: UST
Interaction (Aka Env Int) Description: Underground Storage Tank
Interaction Status: I
Federal Program Indentifier: 7819
Interaction Start Date: 3/20/2000
Interaction End Date: 3/21/2000

Geographic Location Identifier (Alias Facid): 2809
Interaction (Aka Env Int) Type Code: SCS
Interaction (Aka Env Int) Description: State Cleanup Site
Interaction Status: I

PUGET SOUND TRUCK LINES (Continued) **1007080229**

Federal Program Indentifier: Not reported
Interaction Start Date: 3/3/1993
Interaction End Date: 8/28/2003

Geographic Location Identifier (Alias Facid): 2809
Interaction (Aka Env Int) Type Code: LUST
Interaction (Aka Env Int) Description: LUST Facility
Interaction Status: I
Federal Program Indentifier: 7819
Interaction Start Date: 1/16/1991
Interaction End Date: 6/1/1995

CSCSL NFA:
Facility/Site Id: 2809
NFA Type: NFA after assessment, IRAP, or VCP
NFA Date: 8/25/2003
Rank: Not reported
VCP: Not reported

LUST:
edr_fstat: WA
edr_fzip: 982011669
edr_fcnty: SNOHOMISH
edr_zip: 98201-1669
FS ID: 2809
Facility ID: 7819
Facility Status: Reported Cleaned Up
Release ID: 1909
Affected Media: Soil
Alternate Name: PUGET SOUND TRUCK EVERETT
Release Notification Date: 1/16/1991
Release Status Date: 6/1/1995
Site Response Unit Code: NORTHWEST
Lat/Long: 48.0001 / -122.2201

edr_fstat: WA
edr_fzip: 982011669
edr_fcnty: SNOHOMISH
edr_zip: 98201-1669
FS ID: 2809
Facility ID: 7819
Facility Status: Cleanup Started
Release ID: 1909
Affected Media: Soil
Alternate Name: PUGET SOUND TRUCK EVERETT
Release Notification Date: 1/16/1991
Release Status Date: 1/16/1991
Site Response Unit Code: NORTHWEST
Lat/Long: 48.0001 / -122.2201

H26
SW
1/4-1/2
0.281 mi.
1483 ft.

PUGET SOUND TRUCK EVERETT — **ICR** — **S103508757**
615 13TH ST. — **N/A**
EVERETT, WA 98201

Site 2 of 2 in cluster H

Relative:
Lower

Actual:
6 ft.

ICR:

Date Ecology Received Report:	06/12/91
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Not reported
Site Register Issue:	92-01
County Code:	31
Contact:	Not reported
Report Title:	Not reported

G27
South
1/4-1/2
0.281 mi.
1486 ft.

EVERETT PORT MARINA SUPPORT SVCS — **RCRA-NonGen** — **1001805458**
1402 W MARINE VIEW DR — **ALLSITES** — **WAH000001875**
EVERETT, WA 98201 — **MANIFEST**

Site 2 of 3 in cluster G

Relative:
Higher

Actual:
19 ft.

RCRA-NonGen:

Date form received by agency:	04/14/2008
Facility name:	EVERETT PORT MARINA SUPPORT SVCS
Facility address:	1402 W MARINE VIEW DR EVERETT, WA 98201
EPA ID:	WAH000001875
Mailing address:	PO BOX 538 EVERETT, WA 98206-0538
Contact:	BRANDON WHITAKER
Contact address:	PO BOX 538 EVERETT, WA 98206-0538
Contact country:	US
Contact telephone:	(425)259-3164
Contact email:	Not reported
EPA Region:	10
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	PORT OF EVERETT
Owner/operator address:	PO BOX 538 EVERETT, WA 98206
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	District
Owner/Operator Type:	Operator
Owner/Op start date:	06/09/1997
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No

EVERETT PORT MARINA SUPPORT SVCS (Continued) **1001805458**

Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Historical Generators:
Date form received by agency: 12/31/2007
Facility name: EVERETT PORT MARINA SUPPORT SVCS
Classification: Not a generator, verified

Violation Status: No violations found

ALLSITES:
Facility Id: 5214273
Latitude: 48.003129999999999
Longitude: -122.21431
Geographic location identifier (alias facid): 5214273
Facility Name: Everett Port Marina Support Svcs
Latitude Decimal Degrees: 48.003129999999999
Longitude Decimal Degrees: -122.21431
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 5214273
Interaction (Aka Env Int) Type Code: HWOTHER
Interaction (Aka Env Int) Description: Haz Waste Management Activity
Interaction Status: A
Federal Program Indentifier: WAH000001875
Interaction Start Date: 12/31/2006
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 5214273
Interaction (Aka Env Int) Type Code: NONENFNL
Interaction (Aka Env Int) Description: Non Enforcement Final
Interaction Status: A
Federal Program Indentifier: Not reported
Interaction Start Date: 5/24/2005
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 5214273
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: I
Federal Program Indentifier: WAH000001875
Interaction Start Date: 6/9/1997
Interaction End Date: 12/31/2003

Geographic Location Identifier (Alias Facid): 5214273

EVERETT PORT MARINA SUPPORT SVCS (Continued) **1001805458**

Interaction (Aka Env Int) Type Code:	HWG
Interaction (Aka Env Int) Description:	Hazardous Waste Generator
Interaction Status:	I
Federal Program Indentifier:	WAH000001875
Interaction Start Date:	3/21/2006
Interaction End Date:	12/31/2006

Geographic Location Identifier (Alias Facid):	5214273
Interaction (Aka Env Int) Type Code:	401PROJ
Interaction (Aka Env Int) Description:	401CZM Project Site
Interaction Status:	A
Federal Program Indentifier:	200400302
Interaction Start Date:	6/29/2005
Interaction End Date:	Not reported

WA MANIFEST:

Facility Site ID Number:	5214273
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False

Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False

EPA ID:	WAH000001875
Facility Address 2:	Not reported
TAX REG NBR:	313002656
NAICS CD:	92119
BUSINESS TYPE:	Not reported
MAIL NAME:	Everett Port
MAIL ADDR LINE1:	PO Box 538
MAIL CITY,ST,ZIP:	EVERETT, WA 98206-0538
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Everett Port

EVERETT PORT MARINA SUPPORT SVCS (Continued) **1001805458**

LEGAL ORG TYPE:	District
LEGAL ADDR LINE1:	PO Box 538
LEGAL CITY,ST,ZIP:	EVERETT, WA 98206-0538
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)259-6001
LEGAL EFFECTIVE DATE:	6/9/1997
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	District
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 538
LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-6001
OPERATOR ORG NAME:	Port of Everett
OPERATOR ORG TYPE:	District
OPERATOR ADDR LINE1:	PO Box 538
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98206
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)259-3164
OPERATOR EFFECTIVE DATE:	06/09/97
SITE CONTACT NAME:	Brandon Whitaker
SITE CONTACT ADDR LINE1:	PO Box 538
SITE CONTACT ZIP:	EVERETT, WA 98206
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)259-3164
SITE CONTACT EMAIL:	ericr@portofeverett.com
FORM CONTACT NAME:	Brandon Whitaker
FORM CONTACT ADDR LINE1:	PO Box 538
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98206
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)259-3164
FORM CONTACT EMAIL:	bwhitaker@portofeverett.com
GEN STATUS CD:	XQG
MONTHLY GENERATION:	False
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Facility Site ID Number:	5214273
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	FALSE
Treatment by Generator:	FALSE
Mixed radioactive waste:	FALSE

EVERETT PORT MARINA SUPPORT SVCS (Continued) **1001805458**

Importer of hazardous waste:	FALSE
Immediate recycler:	FALSE
Treatment/Storage/Disposal/Recycling Facility:	FALSE
Generator of dangerous fuel waste:	FALSE
Generator marketing to burner:	FALSE
"Other marketers (i.e., blender, distributor, etc.)":	FALSE
Utility boiler burner:	FALSE
Industry boiler burner:	FALSE
Industrial Furnace:	FALSE
Smelter defferal:	FALSE
Universal waste - batteries - generate:	FALSE
Universal waste - thermostats - generate:	FALSE
Universal waste - mercury - generate:	FALSE
Universal waste - lamps - generate:	FALSE
Universal waste - batteries - accumulate:	FALSE
Universal waste - thermostats - accumulate:	FALSE
Universal waste - mercury - accumulate:	FALSE
Universal waste - lamps - accumulate:	FALSE
Destination Facility for Universal Waste:	FALSE
Off-specification used oil burner - utility boiler:	FALSE
Off-specification used oil burner - industrial boiler:	FALSE
Off-specification used oil burner - industrial furnace:	FALSE
EPA ID:	WAH000001875
Facility Address 2:	Not reported
TAX REG NBR:	313002656
NAICS CD:	92119
BUSINESS TYPE:	Not reported
MAIL NAME:	Everett Port
MAIL ADDR LINE1:	PO Box 538
MAIL CITY,ST,ZIP:	EVERETT, WA 98206-0538
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Everett Port
LEGAL ORG TYPE:	District
LEGAL ADDR LINE1:	PO Box 538
LEGAL CITY,ST,ZIP:	EVERETT, WA 98206-0538
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)259-6001
LEGAL EFFECTIVE DATE:	6/9/1997
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	District
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 538
LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-6001
OPERATOR ORG NAME:	Not reported
OPERATOR ORG TYPE:	District
OPERATOR ADDR LINE1:	PO Box 538
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98206
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)259-3164
OPERATOR EFFECTIVE DATE:	6/9/1997
SITE CONTACT NAME:	Eric Russell
SITE CONTACT ADDR LINE1:	PO Box 538
SITE CONTACT ZIP:	EVERETT, WA 98206
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)259-3164

EVERETT PORT MARINA SUPPORT SVCS (Continued) **1001805458**

SITE CONTACT EMAIL:	ericr@portofeverett.com
FORM CONTACT NAME:	Eric Russell
FORM CONTACT ADDR LINE1:	PO Box 538
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98206
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)259-3164
FORM CONTACT EMAIL:	ericr@portofeverett.com
GEN STATUS CD:	XQG
MONTHLY GENERATION:	FALSE
BATCH GENERATION:	FALSE
ONE TIME GENERATION:	FALSE
TRANSPORTS OWN WASTE:	FALSE
TRANSPORTS OTHRS WASTE:	FALSE
RECYCLER ONSITE:	FALSE
TRANSFER FACILITY:	FALSE
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	FALSE
USED OIL TRANSPORTER:	FALSE
USED OIL TRANSFER FACLTY:	FALSE
USED OIL PROCESSOR:	FALSE
USED OIL REREFINER:	FALSE
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	FALSE
USED OIL FUEL MRKTR MEETS SPECS:	FALSE

Facility Site ID Number:	5214273
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Not reported
Data Year:	2009
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAH000001875
Facility Address 2:	Not reported
TAX REG NBR:	313002656

EVERETT PORT MARINA SUPPORT SVCS (Continued) **1001805458**

NAICS CD:	921190
BUSINESS TYPE:	Not reported
MAIL NAME:	Everett Port
MAIL ADDR LINE1:	PO Box 538
MAIL CITY,ST,ZIP:	EVERETT, WA 98206-0538
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Everett Port
LEGAL ORG TYPE:	District
LEGAL ADDR LINE1:	PO Box 538
LEGAL CITY,ST,ZIP:	EVERETT, WA 98206-0538
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)259-6001
LEGAL EFFECTIVE DATE:	6/9/1997
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	District
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 538
LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-6001
OPERATOR ORG NAME:	Port of Everett
OPERATOR ORG TYPE:	District
OPERATOR ADDR LINE1:	PO Box 538
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98206
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)259-3164
OPERATOR EFFECTIVE DATE:	6/9/1997
SITE CONTACT NAME:	Brandon Whitaker
SITE CONTACT ADDR LINE1:	PO Box 538
SITE CONTACT ZIP:	EVERETT, WA 98206
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)259-3164
SITE CONTACT EMAIL:	bwhitaker@portofeverett.com
FORM CONTACT NAME:	Brandon Whitaker
FORM CONTACT ADDR LINE1:	PO Box 538
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98206
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)259-3164
FORM CONTACT EMAIL:	bwhitaker@portofeverett.com
GEN STATUS CD:	XQG
MONTHLY GENERATION:	False
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Facility Site ID Number: 5214273

EVERETT PORT MARINA SUPPORT SVCS (Continued) **1001805458**

SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Not reported
Data Year:	2008
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAH000001875
Facility Address 2:	Not reported
TAX REG NBR:	313002656
NAICS CD:	92119
BUSINESS TYPE:	Not reported
MAIL NAME:	Everett Port
MAIL ADDR LINE1:	PO Box 538
MAIL CITY,ST,ZIP:	EVERETT, WA 98206-0538
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Everett Port
LEGAL ORG TYPE:	District
LEGAL ADDR LINE1:	PO Box 538
LEGAL CITY,ST,ZIP:	EVERETT, WA 98206-0538
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)259-6001
LEGAL EFFECTIVE DATE:	6/9/1997
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	District
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 538
LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-6001
OPERATOR ORG NAME:	Port of Everett
OPERATOR ORG TYPE:	District
OPERATOR ADDR LINE1:	PO Box 538
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98206
OPERATOR COUNTRY:	UNITED STATES

EVERETT PORT MARINA SUPPORT SVCS (Continued) **1001805458**

OPERATOR PHONE NBR:	(425)259-3164
OPERATOR EFFECTIVE DATE:	6/9/1997
SITE CONTACT NAME:	Brandon Whitaker
SITE CONTACT ADDR LINE1:	PO Box 538
SITE CONTACT ZIP:	EVERETT, WA 98206
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)259-3164
SITE CONTACT EMAIL:	bwhitaker@portofeverett.com
FORM CONTACT NAME:	Brandon Whitaker
FORM CONTACT ADDR LINE1:	PO Box 538
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98206
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)259-3164
FORM CONTACT EMAIL:	bwhitaker@portofeverett.com
GEN STATUS CD:	XQG
MONTHLY GENERATION:	False
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

G28 **EVERETT ENGINEERING INC** **RCRA-CESQG** **1000839070**
South **1420 W MARINE VIEW DR** **FINDS** **WAD988519054**
1/4-1/2 **EVERETT, WA 98201** **ALLSITES**
0.299 mi. **MANIFEST**
1579 ft. **Site 3 of 3 in cluster G**

Relative:
Higher

Actual:
19 ft.

RCRA-CESQG:

Date form received by agency:	04/15/2008
Facility name:	EVERETT ENGINEERING INC
Facility address:	1420 W MARINE VIEW DR EVERETT, WA 982011646
EPA ID:	WAD988519054
Mailing address:	PO BOX 12100 EVERETT, WA 982061646
Contact:	JOHN HARTLE
Contact address:	PO BOX 12100 EVERETT, WA 982061646
Contact country:	US
Contact telephone:	(425)259-3117
Contact email:	Not reported
EPA Region:	10
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous

EVERETT ENGINEERING INC (Continued) **1000839070**

waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: EVERETT ENGINEERING INC
Owner/operator address: PO BOX 12100
EVERETT, WA 98206
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1997
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Historical Generators:
Date form received by agency: 12/31/2007
Facility name: EVERETT ENGINEERING INC
Classification: Not a generator, verified

Date form received by agency: 12/31/2005
Facility name: EVERETT ENGINEERING INC
Classification: Not a generator, verified

Date form received by agency: 12/31/2003
Facility name: EVERETT ENGINEERING INC
Classification: Not a generator, verified

Violation Status: No violations found

EVERETT ENGINEERING INC (Continued) **1000839070**

Evaluation Action Summary:
Evaluation date: 01/12/1994
Evaluation: COMPLIANCE ASSISTANCE VISIT
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110005384976

Environmental Interest/Information System
Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ALLSITES:
Facility Id: 1527921
Latitude: 47.998150000000003
Longitude: -122.21402
Geographic location identifier (alias facid): 1527921
Facility Name: Everett Engineering Inc
Latitude Decimal Degrees: 47.998150000000003
Longitude Decimal Degrees: -122.21402
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 1527921
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: A
Federal Program Indentifier: WAD988519054
Interaction Start Date: 3/25/1993
Interaction End Date: Not reported

WA MANIFEST:
Facility Site ID Number: 1527921
SWC Desc: Not reported
FWC Desc: D001 D018 D039 D040D001, D018, Doo39, Do4o
Form Comm: Not reported
Data Year: Not reported
Permit by Rule: False

EVERETT ENGINEERING INC (Continued) **1000839070**

Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD988519054
Facility Address 2:	Not reported
TAX REG NBR:	313015525
NAICS CD:	333319
BUSINESS TYPE:	machining & fabrication
MAIL NAME:	Everett Engineering Inc
MAIL ADDR LINE1:	PO Box 12100
MAIL CITY,ST,ZIP:	EVERETT, WA 982061646
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Everett Engineering Inc
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1420 W MARINE VIEW DR
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1646
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)259-3117
LEGAL EFFECTIVE DATE:	9/17/1996
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	Municipal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 538
LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-6001
OPERATOR ORG NAME:	Everett Engineering Inc
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1420 W MARINE VIEW DR
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1646
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-259-3117
OPERATOR EFFECTIVE DATE:	01/01/97
SITE CONTACT NAME:	John Hartle
SITE CONTACT ADDR LINE1:	1420 W MARINE VIEW DR
SITE CONTACT ZIP:	EVERETT, WA 98201-1646

EVERETT ENGINEERING INC (Continued) **1000839070**

SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)259-3117
SITE CONTACT EMAIL:	john@everettengineering.com
FORM CONTACT NAME:	John Hartle
FORM CONTACT ADDR LINE1:	1420 W MARINE VIEW DR
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1646
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)259-3117
FORM CONTACT EMAIL:	john@everettengineering.com
GEN STATUS CD:	SQG
MONTHLY GENERATION:	False
BATCH GENERATION:	True
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Facility Site ID Number:	1527921
SWC Desc:	Not reported
FWC Desc:	Doo1, D018, D0039, D040
Form Comm:	Not reported
Data Year:	2009
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD988519054

EVERETT ENGINEERING INC (Continued) **1000839070**

Facility Address 2:	Not reported
TAX REG NBR:	313015525
NAICS CD:	333319
BUSINESS TYPE:	machining & fabrication
MAIL NAME:	Everett Engineering Inc
MAIL ADDR LINE1:	PO Box 12100
MAIL CITY,ST,ZIP:	EVERETT, WA 982061646
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Everett Engineering Inc
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1420 W MARINE VIEW DR
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1646
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)259-3117
LEGAL EFFECTIVE DATE:	9/17/1996
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	Municipal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 538
LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-6001
OPERATOR ORG NAME:	Everett Engineering Inc
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1420 W MARINE VIEW DR
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1646
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-259-3117
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	John Hartle
SITE CONTACT ADDR LINE1:	1420 W MARINE VIEW DR
SITE CONTACT ZIP:	EVERETT, WA 98201-1646
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)259-3117
SITE CONTACT EMAIL:	john@everettengineering.com
FORM CONTACT NAME:	John Hartle
FORM CONTACT ADDR LINE1:	1420 W MARINE VIEW DR
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1646
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)259-3117
FORM CONTACT EMAIL:	john@everettengineering.com
GEN STATUS CD:	SQG
MONTHLY GENERATION:	False
BATCH GENERATION:	True
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

EVERETT ENGINEERING INC (Continued) **1000839070**

Facility Site ID Number:	1527921
SWC Desc:	Not reported
FWC Desc:	D001 D018 D039 D040D001, D018, Doo39, Do4o
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	No
Treatment by Generator:	No
Mixed radioactive waste:	No
Importer of hazardous waste:	No
Immediate recycler:	No
Treatment/Storage/Disposal/Recycling Facility:	No
Generator of dangerous fuel waste:	No
Generator marketing to burner:	No
"Other marketers (i.e., blender, distributor, etc.)":	No
Utility boiler burner:	No
Industry boiler burner:	No
Industrial Furnace:	No
Smelter defferal:	No
Universal waste - batteries - generate:	No
Universal waste - thermostats - generate:	No
Universal waste - mercury - generate:	No
Universal waste - lamps - generate:	No
Universal waste - batteries - accumulate:	No
Universal waste - thermostats - accumulate:	No
Universal waste - mercury - accumulate:	No
Universal waste - lamps - accumulate:	No
Destination Facility for Universal Waste:	No
Off-specification used oil burner - utility boiler:	No
Off-specification used oil burner - industrial boiler:	No
Off-specification used oil burner - industrial furnace:	No
EPA ID:	WAD988519054
Facility Address 2:	Not reported
TAX REG NBR:	313015525
NAICS CD:	333319
BUSINESS TYPE:	machining & fabrication
MAIL NAME:	Everett Engineering Inc
MAIL ADDR LINE1:	1420 W MARINE VIEW DR
MAIL CITY,ST,ZIP:	EVERETT, WA 98201-1646
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Everett Engineering Inc
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1420 W MARINE VIEW DR
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1646
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)259-3117
LEGAL EFFECTIVE DATE:	9/17/1996
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	Municipal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 538
LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-6001
OPERATOR ORG NAME:	Everett Engineering Inc
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1420 W MARINE VIEW DR
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1646

EVERETT ENGINEERING INC (Continued) **1000839070**

OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-259-3117
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	John Hartle
SITE CONTACT ADDR LINE1:	1420 W MARINE VIEW DR
SITE CONTACT ZIP:	EVERETT, WA 98201-1646
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)259-3117
SITE CONTACT EMAIL:	john@everettengineering.com
FORM CONTACT NAME:	John Hartle
FORM CONTACT ADDR LINE1:	1420 W MARINE VIEW DR
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1646
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)259-3117
FORM CONTACT EMAIL:	john@everettengineering.com
GEN STATUS CD:	SQG
MONTHLY GENERATION:	No
BATCH GENERATION:	Yes
ONE TIME GENERATION:	No
TRANSPORTS OWN WASTE:	No
TRANSPORTS OTHRS WASTE:	No
RECYCLER ONSITE:	No
TRANSFER FACILITY:	No
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	No
USED OIL TRANSPORTER:	No
USED OIL TRANSFER FACLTY:	No
USED OIL PROCESSOR:	No
USED OIL REREFINER:	No
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	No
USED OIL FUEL MRKTR MEETS SPECS:	No

Facility Site ID Number:	1527921
SWC Desc:	Not reported
FWC Desc:	D001, D018, D0039, D040
Form Comm:	Not reported
Data Year:	2008
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False

EVERETT ENGINEERING INC (Continued) **1000839070**

Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD988519054
Facility Address 2:	Not reported
TAX REG NBR:	313015525
NAICS CD:	333319
BUSINESS TYPE:	machining & fabrication
MAIL NAME:	Everett Engineering Inc
MAIL ADDR LINE1:	PO Box 12100
MAIL CITY,ST,ZIP:	EVERETT, WA 982061646
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Everett Engineering Inc
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1420 W MARINE VIEW DR
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1646
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)259-3117
LEGAL EFFECTIVE DATE:	9/17/1996
LAND ORG NAME:	Everett Port
LAND ORG TYPE:	Municipal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 538
LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-6001
OPERATOR ORG NAME:	Everett Engineering Inc
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1420 W MARINE VIEW DR
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1646
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-259-3117
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	John Hartle
SITE CONTACT ADDR LINE1:	1420 W MARINE VIEW DR
SITE CONTACT ZIP:	EVERETT, WA 98201-1646
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)259-3117
SITE CONTACT EMAIL:	john@everettengineering.com
FORM CONTACT NAME:	John Hartle
FORM CONTACT ADDR LINE1:	1420 W MARINE VIEW DR
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1646
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)259-3117
FORM CONTACT EMAIL:	john@everettengineering.com
GEN STATUS CD:	SQG
MONTHLY GENERATION:	False
BATCH GENERATION:	True
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False

EVERETT ENGINEERING INC (Continued) **1000839070**

USED OIL TRANSPORTER: False
USED OIL TRANSFER FACLTY: False
USED OIL PROCESSOR: False
USED OIL REREFINER: False
USED OIL FUEL MRKTR DIRECTS SHPMNTS: False
USED OIL FUEL MRKTR MEETS SPECS: False

Facility Site ID Number: 1527921
SWC Desc: Not reported
FWC Desc: D001 D018 D039 D040D001, D018, Doo39, Do4o
Form Comm: Not reported
Data Year: Not reported
Permit by Rule: FALSE
Treatment by Generator: FALSE
Mixed radioactive waste: FALSE
Importer of hazardous waste: FALSE
Immediate recycler: FALSE
Treatment/Storage/Disposal/Recycling Facility: FALSE
Generator of dangerous fuel waste: FALSE
Generator marketing to burner: FALSE
"Other marketers (i.e., blender, distributor, etc.)": FALSE
Utility boiler burner: FALSE
Industry boiler burner: FALSE
Industrial Furnace: FALSE
Smelter defferal: FALSE
Universal waste - batteries - generate: FALSE
Universal waste - thermostats - generate: FALSE
Universal waste - mercury - generate: FALSE
Universal waste - lamps - generate: FALSE
Universal waste - batteries - accumulate: FALSE
Universal waste - thermostats - accumulate: FALSE
Universal waste - mercury - accumulate: FALSE
Universal waste - lamps - accumulate: FALSE
Destination Facility for Universal Waste: FALSE
Off-specification used oil burner - utility boiler: FALSE
Off-specification used oil burner - industrial boiler: FALSE
Off-specification used oil burner - industrial furnace: FALSE
EPA ID: WAD988519054
Facility Address 2: Not reported
TAX REG NBR: 313015525
NAICS CD: 333319
BUSINESS TYPE: machining & fabrication
MAIL NAME: Everett Engineering Inc
MAIL ADDR LINE1: 1420 W MARINE VIEW DR
MAIL CITY,ST,ZIP: EVERETT, WA 98201-1646
MAIL COUNTRY: UNITED STATES
LEGAL ORG NAME: Everett Engineering Inc
LEGAL ORG TYPE: Private
LEGAL ADDR LINE1: 1420 W MARINE VIEW DR
LEGAL CITY,ST,ZIP: EVERETT, WA 98201-1646
LEGAL COUNTRY: UNITED STATES
LEGAL PHONE NBR: (425)259-3117
LEGAL EFFECTIVE DATE: 9/17/1996
LAND ORG NAME: Everett Port
LAND ORG TYPE: Municipal
LAND PERSON NAME: Not reported
LAND ADDR LINE1: PO Box 538

EVERETT ENGINEERING INC (Continued) **1000839070**

LAND CITY,ST,ZIP:	EVERETT, WA 98206-0538
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)259-6001
OPERATOR ORG NAME:	Everett Engineering Inc
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1420 W MARINE VIEW DR
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1646
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-259-3117
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	John Hartle
SITE CONTACT ADDR LINE1:	1420 W MARINE VIEW DR
SITE CONTACT ZIP:	EVERETT, WA 98201-1646
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)259-3117
SITE CONTACT EMAIL:	john@everettengineering.com
FORM CONTACT NAME:	John Hartle
FORM CONTACT ADDR LINE1:	1420 W MARINE VIEW DR
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1646
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)259-3117
FORM CONTACT EMAIL:	john@everettengineering.com
GEN STATUS CD:	SQG
MONTHLY GENERATION:	FALSE
BATCH GENERATION:	TRUE
ONE TIME GENERATION:	FALSE
TRANSPORTS OWN WASTE:	FALSE
TRANSPORTS OTHRS WASTE:	FALSE
RECYCLER ONSITE:	FALSE
TRANSFER FACILITY:	FALSE
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	FALSE
USED OIL TRANSPORTER:	FALSE
USED OIL TRANSFER FACLTY:	FALSE
USED OIL PROCESSOR:	FALSE
USED OIL REREFINER:	FALSE
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	FALSE
USED OIL FUEL MRKTR MEETS SPECS:	FALSE

Click this hyperlink while viewing on your computer to access additional WA MANIFEST: detail in the EDR Site Report.

I29 **EVERETT PORT 14TH ST** **FINDS** **1007079557**
SW **609 14TH ST** **ALLSITES** **N/A**
1/4-1/2 **EVERETT, WA 98201**
0.327 mi.
1726 ft. **Site 1 of 2 in cluster I**

Relative:
Lower

Actual:
4 ft.

FINDS:

Registry ID: 110015562700

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water

EVERETT PORT 14TH ST (Continued) **1007079557**

Quality Programs.

ALLSITES:
Facility Id: 1613865
Latitude: 47.999173999999996
Longitude: -122.21916299999999
Geographic location identifier (alias facid): 1613865
Facility Name: EVERETT PORT 14TH ST
Latitude Decimal Degrees: 47.999173999999996
Longitude Decimal Degrees: -122.21916299999999
Coordinate Point Areal Extent Code: 4
Horizontal Accuracy Code: 6
Coordinate Point Geographic Position Code: 5
Location Verified Code: Y

Geographic Location Identifier (Alias Facid): 1613865
Interaction (Aka Env Int) Type Code: UST
Interaction (Aka Env Int) Description: Underground Storage Tank
Interaction Status: A
Federal Program Indentifier: 7044
Interaction Start Date: 3/20/2000
Interaction End Date: Not reported

I30 **EVERETT ENGINEERING BLDG M 11** **RCRA-NonGen** **1000838468**
SW **800 BLOCK OF 13TH ST** **FINDS** **WAD988512539**
1/4-1/2 **EVERETT, WA 98201** **ALLSITES**
0.330 mi.
1742 ft. **Site 2 of 2 in cluster I**

Relative:
Lower

Actual:
5 ft.

RCRA-NonGen:
Date form received by agency: 10/08/1992
Facility name: EVERETT ENGINEERING BLDG M 11
Facility address: 800 BLOCK OF 13TH ST
EVERETT, WA 982011689
EPA ID: WAD988512539
Mailing address: 1420 W MARINE VIEW DR
EVERETT, WA 98201-1646
Contact: JOHN HARTLE
Contact address: 1420 W MARINE VIEW DR
EVERETT, WA 98201-1646
Contact country: US
Contact telephone: (425)259-3117
Contact email: Not reported
EPA Region: 10
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: EVERETT ENGINEERING BLDG M11
Owner/operator address: 1420 W MARINE VIEW DR
EVERETT, WA 98201
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner

EVERETT ENGINEERING BLDG M 11 (Continued) **1000838468**

Owner/Op start date: 10/08/1992
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Violation Status: No violations found

FINDS:

Registry ID: 110006460301

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ALLSITES:
Facility Id: 53683551
Latitude: 48.000070000000001
Longitude: -122.21897
Geographic location identifier (alias facid): 53683551
Facility Name: Everett Engineering Bldg M 11
Latitude Decimal Degrees: 48.000070000000001
Longitude Decimal Degrees: -122.21897
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 13
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 53683551
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: I
Federal Program Indentifier: WAD988512539
Interaction Start Date: 10/8/1992
Interaction End Date: 12/24/1992

31 SW 1/4-1/2 0.363 mi. 1918 ft. **NORTH MARINA WEST END** **EVERETT, WA** **CSCSL HSL ALLSITES INST CONTROL** **S108969346 N/A**

Relative: Lower

Actual: 4 ft.

CSCSL:

Facility ID:	3306834
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	3
Entered Date:	12/31/2007
Updated Date:	3/2/2010
Brownfield Status:	0
Rank Status:	2
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.000278
Longitude:	-122.222778
Lat/Long:	48.000278 / -122.222778
Lat/Long (dms):	48 0 1.001 / -122 13 22.001
Media Status Desc:	12/31/2007
Affected Media:	Groundwater
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported

Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Confirmed
EPA Priority Pollutants - Metals and Cyanide:	Confirmed
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	3306834
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	3
Entered Date:	12/31/2007

NORTH MARINA WEST END (Continued) **S108969346**

Updated Date:	3/2/2010
Brownfield Status:	0
Rank Status:	2
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.000278
Longitude:	-122.222778
Lat/Long:	48.000278 / -122.222778
Lat/Long (dms):	48 0 1.001 / -122 13 22.001
Media Status Desc:	5/1/2009
Affected Media:	Sediment
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Confirmed
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Confirmed
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Confirmed
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Suspected
Polynuclear Aromatic Hydrocarbons (PAH):	Confirmed
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Confirmed
Bioassay/Benthic Failures Contaminant Group:	Suspected
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	3306834
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	3
Entered Date:	12/31/2007
Updated Date:	3/2/2010
Brownfield Status:	0
Rank Status:	2
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.000278
Longitude:	-122.222778

NORTH MARINA WEST END (Continued) **S108969346**

Lat/Long:	48.000278 / -122.222778
Lat/Long (dms):	48 0 1.001 / -122 13 22.001
Media Status Desc:	1/1/0001
Affected Media:	Soil
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported

Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Confirmed
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Confirmed
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	3306834
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	3
Entered Date:	12/31/2007
Updated Date:	3/2/2010
Brownfield Status:	0
Rank Status:	2
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.000278
Longitude:	-122.222778
Lat/Long:	48.000278 / -122.222778
Lat/Long (dms):	48 0 1.001 / -122 13 22.001
Media Status Desc:	8/16/2008
Affected Media:	Surface Water
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported

NORTH MARINA WEST END (Continued) **S108969346**

Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Suspected
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Suspected
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	3306834
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	3
Entered Date:	12/31/2007
Updated Date:	3/2/2010
Brownfield Status:	0
Rank Status:	2
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.000278
Longitude:	-122.222778
Lat/Long:	48.000278 / -122.222778
Lat/Long (dms):	48 0 1.001 / -122 13 22.001
Media Status Desc:	8/16/2008
Affected Media:	Air
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported

NORTH MARINA WEST END (Continued) **S108969346**

EPA Priority Pollutants - Metals and Cyanide:	Suspected
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Suspected
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

HSL:

edr_fstat:	WA
edr_fzip:	Not reported
edr_fcnty:	SNOHOMISH
edr_zip:	Not reported
Facility Type:	**Hazardous Sites List**
Facility Status:	RA in progress
FSID Number:	3306834
Rank:	2
Region:	HQ

ALLSITES:

Facility Id:	3306834
Latitude:	48.000278000000002
Longitude:	-122.22277800000001
Geographic location identifier (alias facid):	3306834
Facility Name:	North Marina West End
Latitude Decimal Degrees:	48.000278000000002
Longitude Decimal Degrees:	-122.22277800000001
Coordinate Point Areal Extent Code:	1
Horizontal Accuracy Code:	10
Coordinate Point Geographic Position Code:	5
Location Verified Code:	N

Geographic Location Identifier (Alias Facid):	3306834
Interaction (Aka Env Int) Type Code:	SCS
Interaction (Aka Env Int) Description:	State Cleanup Site
Interaction Status:	A
Federal Program Indentifier:	Not reported
Interaction Start Date:	12/31/2007
Interaction End Date:	Not reported

Geographic Location Identifier (Alias Facid):	3306834
Interaction (Aka Env Int) Type Code:	ENFORFNL
Interaction (Aka Env Int) Description:	Enforcement Final
Interaction Status:	A
Federal Program Indentifier:	Not reported
Interaction Start Date:	4/11/2008
Interaction End Date:	Not reported

INST CONTROL:

Facility Site ID:	3306834
Decision Type:	Agreed Order

NORTH MARINA WEST END (Continued) **S108969346**

Document Type:	Not reported
County Filing # For Individual IC Doc:	Not reported
Filing Date Of Individual IC Doc:	Not reported
Status:	Not reported
Status Date:	Not reported
Anchorage Restrictions:	No
Drinking Water Restrictions:	No
Education Programs:	No
Financial Assurance:	No
Finfish Harvesting Restrictions:	No
Groundwater Restriction:	No
Maintenance Requirements:	No
No Dredge Zone:	No
No Wake Zone:	No
Physical Measures:	No
Property Use Restriction:	No
Restrictive Signage:	No
Shellfish Harvesting Restrictions:	No
Soil Restriction:	No
Surface Water Restriction:	No
Swimming Restriction:	No
Vessel Draft Restriction:	No

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32 **PROVIDENCE GEN MED CTR** **ALLSITES** **U001124575**
SE **1321 COLBY AVE** **UST** **N/A**
1/4-1/2 **EVERETT, WA 98201**
0.377 mi.
1991 ft.

Relative:
Higher

Actual:
139 ft.

ALLSITES:

Facility Id:	84432355
Latitude:	47.999766999999999
Longitude:	-122.209557
Geographic location identifier (alias facid):	84432355
Facility Name:	PROVIDENCE GEN MED CTR
Latitude Decimal Degrees:	47.999766999999999
Longitude Decimal Degrees:	-122.209557
Coordinate Point Areal Extent Code:	4
Horizontal Accuracy Code:	6
Coordinate Point Geographic Position Code:	5
Location Verified Code:	N
Geographic Location Identifier (Alias Facid):	84432355
Interaction (Aka Env Int) Type Code:	UST
Interaction (Aka Env Int) Description:	Underground Storage Tank
Interaction Status:	I
Federal Program Indentifier:	6566
Interaction Start Date:	2/9/1999
Interaction End Date:	5/3/2000

UST:

Facility ID:	84432355
Site ID:	6566
Lat Deg:	47
Lat Min:	59
Lat Sec:	59.1611999999947

PROVIDENCE GEN MED CTR (Continued) **U001124575**

Long Deg:	-122
Long Min:	12
Long Sec:	34.4052000000136
UBI:	3130079770010047
Phone Number:	4253170279

Tank ID:	470176
Tank Name:	2DIESEL
Install Date:	12/31/1964
Capacity:	2,001 to 4,999 Gallons
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Closed in Place
TankSystem Status Change Date:	2/9/1999
Tank Status:	Closed in Place
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Material:	Not reported
Pipe Construction:	Not reported
Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Not reported
Tank Primary Release Detection:	Not reported
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	12/10/1999
Tag Number:	A5360

Tank ID:	619220
Tank Name:	1
Install Date:	10/29/1994
Capacity:	Not reported
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Operational
TankSystem Status Change Date:	1/1/0001
Tank Status:	Operational
Tank Permit Expiration Date:	1/31/2011
Tank Closure Date:	1/1/0001
Tank Pumping System:	Suction System Pump Check Valve
Tank Spill Prevention:	Spill Bucket/Spill Box
Tank Overfill Prevention:	Automatic Shutoff (fill pipe)
Tank Material:	Steel
Tank Construction:	Double Wall Tank
Tank Tightness Test:	Annual
Tank Corrosion Protection:	Sacrificial Anode
Pipe Material:	Steel
Pipe Construction:	Single Wall Pipe
Pipe Primary Release Detection:	Suction
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Corrosion Resistant

PROVIDENCE GEN MED CTR (Continued) **U001124575**

Tank Primary Release Detection:	Automatic Tank Gauging
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Every 3 Years (suction tank check valve)
Tank Actual Status Date:	1/1/0001
Tag Number:	A5360

Tank ID:	619221
Tank Name:	2
Install Date:	10/29/1994
Capacity:	Not reported
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Operational
TankSystem Status Change Date:	1/1/0001
Tank Status:	Operational
Tank Permit Expiration Date:	1/31/2011
Tank Closure Date:	1/1/0001
Tank Pumping System:	Suction System Pump Check Valve
Tank Spill Prevention:	Spill Bucket/Spill Box
Tank Overfill Prevention:	Automatic Shutoff (fill pipe)
Tank Material:	Steel
Tank Construction:	Double Wall Tank
Tank Tightness Test:	Annual
Tank Corrosion Protection:	Sacrificial Anode
Pipe Material:	Steel
Pipe Construction:	Double Wall Pipe
Pipe Primary Release Detection:	Suction
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Corrosion Resistant
Tank Primary Release Detection:	Automatic Tank Gauging
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Every 3 Years (suction tank check valve)
Tank Actual Status Date:	1/1/0001
Tag Number:	A5360

Tank ID:	619222
Tank Name:	3
Install Date:	2/29/2004
Capacity:	Not reported
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Operational
TankSystem Status Change Date:	1/1/0001
Tank Status:	Operational
Tank Permit Expiration Date:	1/31/2011
Tank Closure Date:	1/1/0001
Tank Pumping System:	Suction System Pump Check Valve
Tank Spill Prevention:	Spill Bucket/Spill Box
Tank Overfill Prevention:	Automatic Shutoff (fill pipe)
Tank Material:	Steel
Tank Construction:	Double Wall Tank
Tank Tightness Test:	Annual
Tank Corrosion Protection:	Sacrificial Anode
Pipe Material:	Steel
Pipe Construction:	Double Wall Pipe
Pipe Primary Release Detection:	Suction
Pipe Second Release Detection:	Not reported

PROVIDENCE GEN MED CTR (Continued) **U001124575**

Pipe Corrosion Protection:	Corrosion Resistant
Tank Primary Release Detection:	Automatic Tank Gauging
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Every 3 Years (suction tank check valve)
Tank Actual Status Date:	1/1/0001
Tag Number:	A5360

Tank ID:	7406
Tank Name:	1DIESEL
Install Date:	1/1/1982
Capacity:	5,000 to 9,999 Gallons
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Removed
TankSystem Status Change Date:	2/9/1999
Tank Status:	Removed
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Not reported
Tank Spill Prevention:	None
Tank Overfill Prevention:	None
Tank Material:	Not reported
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	None
Pipe Material:	Other
Pipe Construction:	Single Wall Pipe
Pipe Primary Release Detection:	Suction
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	None
Tank Primary Release Detection:	Other
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	8/6/1996
Tag Number:	A5360

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33 **OLYMPIC FISH CO** **ALLSITES** **S105465000**
South **1520 W MARINE VIEW DR** **SPILLS** **N/A**
1/4-1/2 **EVERETT, WA**
0.400 mi.
2114 ft.

Relative:
Higher

Actual:
19 ft.

ALLSITES:

Facility Id:	62398943
Latitude:	47.997135664523498
Longitude:	-122.216662466202
Geographic location identifier (alias facid):	62398943
Facility Name:	OLYMPIC FISH CO
Latitude Decimal Degrees:	47.997135659999998
Longitude Decimal Degrees:	-122.21666245999999
Coordinate Point Areal Extent Code:	99
Horizontal Accuracy Code:	99
Coordinate Point Geographic Position Code:	99
Location Verified Code:	N

Geographic Location Identifier (Alias Facid):	62398943
Interaction (Aka Env Int) Type Code:	TIER2
Interaction (Aka Env Int) Description:	Emergency/Haz Chem Rpt TIER2

OLYMPIC FISH CO (Continued) **S105465000**

Interaction Status: A
Federal Program Indentifier: CRK000039450
Interaction Start Date: 1/1/1994
Interaction End Date: Not reported

SPILLS:
Facility ID: 525965
Medium: Not reported
Material Desc: CHEMICAL
Material Qty: 15
Material Units: POUND
Date Received: 4/22/2002
Contact Name: Not reported

Facility ID: 525965
Medium: Not reported
Material Desc: CHEMICAL
Material Qty: 15
Material Units: POUND
Date Received: 4/23/2002
Contact Name: Not reported

34
ENE
1/4-1/2
0.416 mi.
2197 ft.

Relative:
Higher

Actual:
113 ft.

EVERETT COMMUNITY COLLEGE
2000 TOWER ST
EVERETT, WA 98201

RCRA-NonGen **1000356785**
FTTS **WAD070974142**
HIST FTTS
FINDS
ALLSITES
MANIFEST
ICR
NPDES

RCRA-NonGen:
Date form received by agency: 02/26/2008
Facility name: EVERETT COMMUNITY COLLEGE
Facility address: 2000 TOWER ST
EVERETT, WA 98201
EPA ID: WAD070974142
Contact: MARC TOLLE
Contact address: 2000 TOWER ST
EVERETT, WA 98201-1327
Contact country: US
Contact telephone: (425)388-9915
Contact email: Not reported
EPA Region: 10
Land type: State
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: WA EVC
Owner/operator address: 2000 TOWER ST
EVERETT, WA 98201
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Operator

EVERETT COMMUNITY COLLEGE (Continued) **1000356785**

Owner/Op start date: 10/04/1996
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Historical Generators:
Date form received by agency: 12/31/2007
Facility name: EVERETT COMMUNITY COLLEGE
Classification: Large Quantity Generator

Date form received by agency: 12/31/2005
Facility name: EVERETT COMMUNITY COLLEGE
Classification: Not a generator, verified

Date form received by agency: 12/31/2003
Facility name: EVERETT COMMUNITY COLLEGE
Classification: Not a generator, verified

Date form received by agency: 01/14/1998
Facility name: EVERETT COMMUNITY COLLEGE
Classification: Large Quantity Generator

Biennial Reports:

Last Biennial Reporting Year: 2009

Annual Waste Handled:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 1680

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN

EVERETT COMMUNITY COLLEGE (Continued) **1000356785**

OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs): 35

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
Amount (Lbs): 50

Waste code: D006
Waste name: CADMIUM
Amount (Lbs): 3200

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 3200

Waste code: D008
Waste name: LEAD
Amount (Lbs): 3200

Waste code: D035
Waste name: METHYL ETHYL KETONE
Amount (Lbs): 220

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 1375

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 1595

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL

EVERETT COMMUNITY COLLEGE (Continued) **1000356785**

KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Amount (Lbs): 1375

Waste code: P005
Waste name: ALLYL ALCOHOL
Amount (Lbs): 5

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 03/28/2007
Evaluation: COMPLIANCE ASSISTANCE VISIT
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/17/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FTTS INSP:
Inspection Number: 19901101WA003 1
Region: 10
Inspection Date: 11/01/90
Inspector: MAULE
Violation occurred: No
Investigation Type: Section 6 PCB State Conducted
Investigation Reason: Neutral Scheme, Region
Legislation Code: TSCA
Facility Function: User

HIST FTTS INSP:
Inspection Number: 19901101WA003 1
Region: 10
Inspection Date: Not reported
Inspector: MAULE
Violation occurred: No
Investigation Type: Section 6 PCB State Conducted
Investigation Reason: Neutral Scheme, Region
Legislation Code: TSCA
Facility Function: User

FINDS:

Registry ID: 110000828114

EVERETT COMMUNITY COLLEGE (Continued) **1000356785**

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ALLSITES:

Facility Id:	71974753
Latitude:	48.006587000000003
Longitude:	-122.20791699999999
Geographic location identifier (alias facid):	71974753
Facility Name:	Everett Community College
Latitude Decimal Degrees:	48.006587000000003
Longitude Decimal Degrees:	-122.20791699999999
Coordinate Point Areal Extent Code:	4
Horizontal Accuracy Code:	6
Coordinate Point Geographic Position Code:	5
Location Verified Code:	N
Geographic Location Identifier (Alias Facid):	71974753
Interaction (Aka Env Int) Type Code:	HWOTHER
Interaction (Aka Env Int) Description:	Haz Waste Management Activity
Interaction Status:	I
Federal Program Indentifier:	WAD070974142
Interaction Start Date:	12/31/2006
Interaction End Date:	2/23/2009
Geographic Location Identifier (Alias Facid):	71974753
Interaction (Aka Env Int) Type Code:	HWG
Interaction (Aka Env Int) Description:	Hazardous Waste Generator
Interaction Status:	I
Federal Program Indentifier:	WAD070974142
Interaction Start Date:	2/19/1985
Interaction End Date:	12/31/2009
Geographic Location Identifier (Alias Facid):	71974753
Interaction (Aka Env Int) Type Code:	HWOTHER
Interaction (Aka Env Int) Description:	Haz Waste Management Activity
Interaction Status:	A
Federal Program Indentifier:	WAD070974142
Interaction Start Date:	12/31/2009

EVERETT COMMUNITY COLLEGE (Continued) **1000356785**

Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 71974753
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: A
Federal Program Indentifier: WAD070974142
Interaction Start Date: 2/23/2009
Interaction End Date: Not reported

WA MANIFEST:
Facility Site ID Number: 71974753
SWC Desc: WL02
FWC Desc: D001 & D002
Form Comm: Not reported
Data Year: Not reported
Permit by Rule: False
Treatment by Generator: False
Mixed radioactive waste: False
Importer of hazardous waste: False
Immediate recycler: False
Treatment/Storage/Disposal/Recycling Facility: False
Generator of dangerous fuel waste: False
Generator marketing to burner: False
"Other marketers (i.e., blender, distributor, etc.)": False
Utility boiler burner: False
Industry boiler burner: False
Industrial Furnace: False
Smelter defferal: False
Universal waste - batteries - generate: False
Universal waste - thermostats - generate: False
Universal waste - mercury - generate: False
Universal waste - lamps - generate: False
Universal waste - batteries - accumulate: False
Universal waste - thermostats - accumulate: False
Universal waste - mercury - accumulate: False
Universal waste - lamps - accumulate: False
Destination Facility for Universal Waste: False
Off-specification used oil burner - utility boiler: False
Off-specification used oil burner - industrial boiler: False
Off-specification used oil burner - industrial furnace: False
EPA ID: WAD070974142
Facility Address 2: Not reported
TAX REG NBR: 312005057
NAICS CD: 61121
BUSINESS TYPE: Not reported
MAIL NAME: WA EVC
MAIL ADDR LINE1: 2000 TOWER ST
MAIL CITY,ST,ZIP: EVERETT, WA 98201-1327
MAIL COUNTRY: UNITED STATES
LEGAL ORG NAME: WA EVC
LEGAL ORG TYPE: State
LEGAL ADDR LINE1: 2000 TOWER ST
LEGAL CITY,ST,ZIP: EVERETT, WA 98201-1327
LEGAL COUNTRY: UNITED STATES
LEGAL PHONE NBR: (425)388-9912

EVERETT COMMUNITY COLLEGE (Continued) **1000356785**

LEGAL EFFECTIVE DATE:	1/9/2001
LAND ORG NAME:	WA EVC
LAND ORG TYPE:	State
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	2000 TOWER ST
LAND CITY,ST,ZIP:	EVERETT, WA 98201-1327
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)388-9253
OPERATOR ORG NAME:	WA EVC
OPERATOR ORG TYPE:	State
OPERATOR ADDR LINE1:	2000 TOWER ST
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1327
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)388-9912
OPERATOR EFFECTIVE DATE:	10/04/96
SITE CONTACT NAME:	Marc Tolle
SITE CONTACT ADDR LINE1:	2000 TOWER ST
SITE CONTACT ZIP:	EVERETT, WA 98201-1327
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)388-9115
SITE CONTACT EMAIL:	Not reported
FORM CONTACT NAME:	Marc Tolle
FORM CONTACT ADDR LINE1:	2000 TOWER ST
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1327
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)388-9915
FORM CONTACT EMAIL:	mtolle@everettcc.edu
GEN STATUS CD:	LQG
MONTHLY GENERATION:	False
BATCH GENERATION:	False
ONE TIME GENERATION:	True
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Facility Site ID Number:	71974753
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	We did not have any dangerous waste disposal in 2009
Data Year:	2009
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False

EVERETT COMMUNITY COLLEGE (Continued) **1000356785**

"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD070974142
Facility Address 2:	Not reported
TAX REG NBR:	312005057
NAICS CD:	611210
BUSINESS TYPE:	Not reported
MAIL NAME:	WA EVC
MAIL ADDR LINE1:	2000 TOWER ST
MAIL CITY,ST,ZIP:	EVERETT, WA 98201-1327
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	WA EVC
LEGAL ORG TYPE:	State
LEGAL ADDR LINE1:	2000 TOWER ST
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1327
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)388-9990
LEGAL EFFECTIVE DATE:	1/9/2001
LAND ORG NAME:	WA EVC
LAND ORG TYPE:	State
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	2000 TOWER ST
LAND CITY,ST,ZIP:	EVERETT, WA 98201-1327
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)388-9100
OPERATOR ORG NAME:	WA EVC
OPERATOR ORG TYPE:	State
OPERATOR ADDR LINE1:	2000 TOWER ST
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1327
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)388-9990
OPERATOR EFFECTIVE DATE:	10/4/1996
SITE CONTACT NAME:	Robert Wright
SITE CONTACT ADDR LINE1:	2000 TOWER ST
SITE CONTACT ZIP:	EVERETT, WA 98201-1327
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)388-9913
SITE CONTACT EMAIL:	mtolle@everettcc.edu
FORM CONTACT NAME:	Robert Wright
FORM CONTACT ADDR LINE1:	2000 TOWER ST
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1327
FORM CONTACT COUNTRY:	UNITED STATES

EVERETT COMMUNITY COLLEGE (Continued) **1000356785**

FORM CONTACT PHONE NBR:	(425)388-9913
FORM CONTACT EMAIL:	bobwright@everettcc.edu
GEN STATUS CD:	XQG
MONTHLY GENERATION:	False
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Facility Site ID Number:	71974753
SWC Desc:	WL02
FWC Desc:	D001 & D002
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	No
Treatment by Generator:	No
Mixed radioactive waste:	No
Importer of hazardous waste:	No
Immediate recycler:	No
Treatment/Storage/Disposal/Recycling Facility:	No
Generator of dangerous fuel waste:	No
Generator marketing to burner:	No
"Other marketers (i.e., blender, distributor, etc.)":	No
Utility boiler burner:	No
Industry boiler burner:	No
Industrial Furnace:	No
Smelter defferal:	No
Universal waste - batteries - generate:	No
Universal waste - thermostats - generate:	No
Universal waste - mercury - generate:	No
Universal waste - lamps - generate:	No
Universal waste - batteries - accumulate:	No
Universal waste - thermostats - accumulate:	No
Universal waste - mercury - accumulate:	No
Universal waste - lamps - accumulate:	No
Destination Facility for Universal Waste:	No
Off-specification used oil burner - utility boiler:	No
Off-specification used oil burner - industrial boiler:	No
Off-specification used oil burner - industrial furnace:	No
EPA ID:	WAD070974142
Facility Address 2:	Not reported
TAX REG NBR:	312005057
NAICS CD:	61121
BUSINESS TYPE:	Not reported
MAIL NAME:	WA EVC
MAIL ADDR LINE1:	2000 TOWER ST
MAIL CITY,ST,ZIP:	EVERETT, WA 98201-1327

EVERETT COMMUNITY COLLEGE (Continued) **1000356785**

MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	WA EVC
LEGAL ORG TYPE:	State
LEGAL ADDR LINE1:	2000 TOWER ST
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1327
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)388-9112
LEGAL EFFECTIVE DATE:	1/9/2001
LAND ORG NAME:	WA EVC
LAND ORG TYPE:	State
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	2000 TOWER ST
LAND CITY,ST,ZIP:	EVERETT, WA 98201-1327
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)388-9253
OPERATOR ORG NAME:	WA EVC
OPERATOR ORG TYPE:	State
OPERATOR ADDR LINE1:	2000 TOWER ST
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1327
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)388-9112
OPERATOR EFFECTIVE DATE:	10/4/1996
SITE CONTACT NAME:	George Olson
SITE CONTACT ADDR LINE1:	2000 TOWER ST
SITE CONTACT ZIP:	EVERETT, WA 98201-1327
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)388-9113
SITE CONTACT EMAIL:	Not reported
FORM CONTACT NAME:	George Olson
FORM CONTACT ADDR LINE1:	2000 TOWER ST
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1327
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	425388-9113
FORM CONTACT EMAIL:	golson@everettcc.edu
GEN STATUS CD:	SQG
MONTHLY GENERATION:	No
BATCH GENERATION:	No
ONE TIME GENERATION:	No
TRANSPORTS OWN WASTE:	No
TRANSPORTS OTHRS WASTE:	No
RECYCLER ONSITE:	No
TRANSFER FACILITY:	No
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	No
USED OIL TRANSPORTER:	No
USED OIL TRANSFER FACLTY:	No
USED OIL PROCESSOR:	No
USED OIL REREFINER:	No
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	No
USED OIL FUEL MRKTR MEETS SPECS:	No

Facility Site ID Number:	71974753
SWC Desc:	WL02
FWC Desc:	D001 & D002
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	FALSE

EVERETT COMMUNITY COLLEGE (Continued) **1000356785**

Treatment by Generator:	FALSE
Mixed radioactive waste:	FALSE
Importer of hazardous waste:	FALSE
Immediate recycler:	FALSE
Treatment/Storage/Disposal/Recycling Facility:	FALSE
Generator of dangerous fuel waste:	FALSE
Generator marketing to burner:	FALSE
"Other marketers (i.e., blender, distributor, etc.)":	FALSE
Utility boiler burner:	FALSE
Industry boiler burner:	FALSE
Industrial Furnace:	FALSE
Smelter defferal:	FALSE
Universal waste - batteries - generate:	FALSE
Universal waste - thermostats - generate:	FALSE
Universal waste - mercury - generate:	FALSE
Universal waste - lamps - generate:	FALSE
Universal waste - batteries - accumulate:	FALSE
Universal waste - thermostats - accumulate:	FALSE
Universal waste - mercury - accumulate:	FALSE
Universal waste - lamps - accumulate:	FALSE
Destination Facility for Universal Waste:	FALSE
Off-specification used oil burner - utility boiler:	FALSE
Off-specification used oil burner - industrial boiler:	FALSE
Off-specification used oil burner - industrial furnace:	FALSE
EPA ID:	WAD070974142
Facility Address 2:	Not reported
TAX REG NBR:	312005057
NAICS CD:	61121
BUSINESS TYPE:	Not reported
MAIL NAME:	WA EVC
MAIL ADDR LINE1:	2000 TOWER ST
MAIL CITY,ST,ZIP:	EVERETT, WA 98201-1327
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	WA EVC
LEGAL ORG TYPE:	State
LEGAL ADDR LINE1:	2000 TOWER ST
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1327
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)388-9912
LEGAL EFFECTIVE DATE:	1/9/2001
LAND ORG NAME:	WA EVC
LAND ORG TYPE:	State
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	2000 TOWER ST
LAND CITY,ST,ZIP:	EVERETT, WA 98201-1327
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)388-9253
OPERATOR ORG NAME:	WA EVC
OPERATOR ORG TYPE:	State
OPERATOR ADDR LINE1:	2000 TOWER ST
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1327
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)388-9912
OPERATOR EFFECTIVE DATE:	10/4/1996
SITE CONTACT NAME:	George Olson
SITE CONTACT ADDR LINE1:	2000 TOWER ST
SITE CONTACT ZIP:	EVERETT, WA 98201-1327

EVERETT COMMUNITY COLLEGE (Continued) **1000356785**

SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)388-9113
SITE CONTACT EMAIL:	Not reported
FORM CONTACT NAME:	George Olson
FORM CONTACT ADDR LINE1:	2000 TOWER ST
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1327
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)388-9913
FORM CONTACT EMAIL:	golson@everettcc.edu
GEN STATUS CD:	XQG
MONTHLY GENERATION:	FALSE
BATCH GENERATION:	FALSE
ONE TIME GENERATION:	FALSE
TRANSPORTS OWN WASTE:	FALSE
TRANSPORTS OTHRS WASTE:	FALSE
RECYCLER ONSITE:	FALSE
TRANSFER FACILITY:	FALSE
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	FALSE
USED OIL TRANSPORTER:	FALSE
USED OIL TRANSFER FACLTY:	FALSE
USED OIL PROCESSOR:	FALSE
USED OIL REREFINER:	FALSE
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	FALSE
USED OIL FUEL MRKTR MEETS SPECS:	FALSE

Facility Site ID Number:	71974753
SWC Desc:	WT02
FWC Desc:	D001;F002;F003;F005;D002
Form Comm:	Not reported
Data Year:	2008
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD070974142

EVERETT COMMUNITY COLLEGE (Continued) **1000356785**

Facility Address 2:	Not reported
TAX REG NBR:	312005057
NAICS CD:	61121
BUSINESS TYPE:	Not reported
MAIL NAME:	WA EVC
MAIL ADDR LINE1:	2000 TOWER ST
MAIL CITY,ST,ZIP:	EVERETT, WA 98201-1327
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	WA EVC
LEGAL ORG TYPE:	State
LEGAL ADDR LINE1:	2000 TOWER ST
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1327
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(425)388-9912
LEGAL EFFECTIVE DATE:	1/9/2001
LAND ORG NAME:	WA EVC
LAND ORG TYPE:	State
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	2000 TOWER ST
LAND CITY,ST,ZIP:	EVERETT, WA 98201-1327
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(425)388-9253
OPERATOR ORG NAME:	WA EVC
OPERATOR ORG TYPE:	State
OPERATOR ADDR LINE1:	2000 TOWER ST
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1327
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)388-9912
OPERATOR EFFECTIVE DATE:	10/4/1996
SITE CONTACT NAME:	Jene Ladke
SITE CONTACT ADDR LINE1:	2000 TOWER ST
SITE CONTACT ZIP:	EVERETT, WA 98201-1327
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)388-9913
SITE CONTACT EMAIL:	mtolle@everettcc.edu
FORM CONTACT NAME:	Jene Ladke
FORM CONTACT ADDR LINE1:	2000 TOWER ST
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98201-1327
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)388-9915
FORM CONTACT EMAIL:	golson@everettcc.edu
GEN STATUS CD:	MQG
MONTHLY GENERATION:	False
BATCH GENERATION:	False
ONE TIME GENERATION:	True
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

EVERETT COMMUNITY COLLEGE (Continued) **1000356785**

Click this hyperlink while viewing on your computer to access additional WA MANIFEST: detail in the EDR Site Report.

ICR:

Date Ecology Received Report:	01/09/91
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	91-20
County Code:	31
Contact:	Not reported
Report Title:	Not reported

NPDES:

Facility Type:	Stormwater Construction
Latitude:	48.00611
Longitude:	122.20083
Contact Name:	Larry Price
Contact Phone Number:	425.388.9513
Permit ID:	WAR011689A
Permit Issue Date:	11/16/2005
Facility Size:	General Permits
Ecology Contact:	Jeff Killelea
WRIA:	Snohomish
Permit Expiration Date:	12/16/2010
Effective Date:	6/16/2009

35
SE
1/4-1/2
0.420 mi.
2217 ft.

PROVIDENCE EVERETT MEDICAL CTR COLBY CAM **RCRA-CESQG** **1004794012**
14TH & COLBY **FINDS** **WAD988483004**
EVERETT, WA 98201 **ALLSITES**
MANIFEST

Relative:
Higher

Actual:
130 ft.

RCRA-CESQG:

Date form received by agency:	02/27/2008
Facility name:	PROVIDENCE EVERETT MEDICAL CTR COLBY CAM
Facility address:	14TH & COLBY EVERETT, WA 98201
EPA ID:	WAD988483004
Mailing address:	PO BOX 1147 EVERETT, WA 98206
Contact:	GIL BODRAK
Contact address:	PO BOX 1147 EVERETT, WA 98206
Contact country:	US
Contact telephone:	(425)261-3912
Contact email:	Not reported
EPA Region:	10
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or

PROVIDENCE EVERETT MEDICAL CTR COLBY CAM (Continued) **1004794012**

other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: 425-261-2000
Owner/operator address: PO BOX 1147
EVERETT, WA 98206
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 05/06/1997
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Historical Generators:
Date form received by agency: 12/31/2007
Facility name: PROVIDENCE EVERETT MEDICAL CTR COLBY CAM
Classification: Not a generator, verified

Date form received by agency: 12/31/2005
Facility name: PROVIDENCE EVERETT MEDICAL CTR COLBY CAM
Classification: Not a generator, verified

Date form received by agency: 12/31/2003
Facility name: PROVIDENCE EVERETT MEDICAL CTR COLBY CAM
Classification: Not a generator, verified

Violation Status: No violations found

FINDS:

PROVIDENCE EVERETT MEDICAL CTR COLBY CAM (Continued) **1004794012**

Registry ID: 110008222814

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ALLSITES:

Facility Id:	71498228
Latitude:	47.998930000000001
Longitude:	-122.20835
Geographic location identifier (alias facid):	71498228
Facility Name:	Providence Everett Medical Ctr Colby Cam
Latitude Decimal Degrees:	47.998930000000001
Longitude Decimal Degrees:	-122.20835
Coordinate Point Areal Extent Code:	99
Horizontal Accuracy Code:	99
Coordinate Point Geographic Position Code:	99
Location Verified Code:	N

Geographic Location Identifier (Alias Facid):	71498228
Interaction (Aka Env Int) Type Code:	HWG
Interaction (Aka Env Int) Description:	Hazardous Waste Generator
Interaction Status:	A
Federal Program Indentifier:	WAD988483004
Interaction Start Date:	3/13/1991
Interaction End Date:	Not reported

WA MANIFEST:

Facility Site ID Number:	71498228
SWC Desc:	WT02 - ToxWT02 WP02 WL02
FWC Desc:	D001 - Ignitable, D002 - Corrosive, D005 - Barium, D008 - Lead, D011 - SilverD001 D002
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False

PROVIDENCE EVERETT MEDICAL CTR COLBY CAM (Continued) **1004794012**

Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD988483004
Facility Address 2:	Not reported
TAX REG NBR:	313005119
NAICS CD:	62211
BUSINESS TYPE:	Hospital
MAIL NAME:	Providence Everett Medical Center
MAIL ADDR LINE1:	PO BOX 1147
MAIL CITY,ST,ZIP:	EVERETT, WA 98206
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Providence Everett Medical Ctr
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1321 COLBY AVE
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1665
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	425-261-2000
LEGAL EFFECTIVE DATE:	1/1/2000
LAND ORG NAME:	Providence Everett Medical Center
LAND ORG TYPE:	Private
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 1147
LAND CITY,ST,ZIP:	EVERETT, WA 98206-1147
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	425-261-2000
OPERATOR ORG NAME:	425-261-2000
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1321 COLBY AVE
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1665
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-261-2000
OPERATOR EFFECTIVE DATE:	05/06/97
SITE CONTACT NAME:	Gil Bodrak
SITE CONTACT ADDR LINE1:	PO BOX 1147
SITE CONTACT ZIP:	EVERETT, WA 98206
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	425-261-3912
SITE CONTACT EMAIL:	gilbert.bodrak@providence.org
FORM CONTACT NAME:	Gil Bodrak
FORM CONTACT ADDR LINE1:	PO BOX 1147
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98206
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	425-261-3912
FORM CONTACT EMAIL:	gilbert.bodrak@providence.org

PROVIDENCE EVERETT MEDICAL CTR COLBY CAM (Continued) **1004794012**

GEN STATUS CD:	SQG
MONTHLY GENERATION:	False
BATCH GENERATION:	True
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Facility Site ID Number:	71498228
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Not reported
Data Year:	2009
Permit by Rule:	False
Treatment by Generator:	True
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD988483004
Facility Address 2:	Not reported
TAX REG NBR:	313005119
NAICS CD:	622110
BUSINESS TYPE:	Hospital
MAIL NAME:	Providence Everett Medical Center
MAIL ADDR LINE1:	PO BOX 1147
MAIL CITY,ST,ZIP:	EVERETT, WA 98206-1147
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Providence Everett Medical Ctr

PROVIDENCE EVERETT MEDICAL CTR COLBY CAM (Continued) **1004794012**

LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1321 COLBY AVE
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1665
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	425-261-2000
LEGAL EFFECTIVE DATE:	1/1/2000
LAND ORG NAME:	Providence Everett Medical Center
LAND ORG TYPE:	Private
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 1147
LAND CITY,ST,ZIP:	EVERETT, WA 98206-1147
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	425-261-2000
OPERATOR ORG NAME:	425-261-2000
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1321 COLBY AVE
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1665
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-261-2000
OPERATOR EFFECTIVE DATE:	5/6/1997
SITE CONTACT NAME:	Gil Bodrak
SITE CONTACT ADDR LINE1:	PO BOX 1147
SITE CONTACT ZIP:	EVERETT, WA 98206-1147
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	425-261-3912
SITE CONTACT EMAIL:	gilbert.bodrak@providence.org
FORM CONTACT NAME:	Gil Bodrak
FORM CONTACT ADDR LINE1:	PO BOX 1147
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98206-1147
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	425-261-3912
FORM CONTACT EMAIL:	gilbert.bodrak@providence.org
GEN STATUS CD:	MQG
MONTHLY GENERATION:	False
BATCH GENERATION:	True
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Facility Site ID Number:	71498228
SWC Desc:	WT02 - ToxWT02 WP02 WL02
FWC Desc:	D001 - Ignitable, D002 - Corrosive, D005 - Barium, D008 - Lead, D011 - SilverD001 D002
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	FALSE
Treatment by Generator:	FALSE
Mixed radioactive waste:	FALSE

PROVIDENCE EVERETT MEDICAL CTR COLBY CAM (Continued) **1004794012**

Importer of hazardous waste:	FALSE
Immediate recycler:	FALSE
Treatment/Storage/Disposal/Recycling Facility:	FALSE
Generator of dangerous fuel waste:	FALSE
Generator marketing to burner:	FALSE
"Other marketers (i.e., blender, distributor, etc.)":	FALSE
Utility boiler burner:	FALSE
Industry boiler burner:	FALSE
Industrial Furnace:	FALSE
Smelter defferal:	FALSE
Universal waste - batteries - generate:	FALSE
Universal waste - thermostats - generate:	FALSE
Universal waste - mercury - generate:	FALSE
Universal waste - lamps - generate:	FALSE
Universal waste - batteries - accumulate:	FALSE
Universal waste - thermostats - accumulate:	FALSE
Universal waste - mercury - accumulate:	FALSE
Universal waste - lamps - accumulate:	FALSE
Destination Facility for Universal Waste:	FALSE
Off-specification used oil burner - utility boiler:	FALSE
Off-specification used oil burner - industrial boiler:	FALSE
Off-specification used oil burner - industrial furnace:	FALSE
EPA ID:	WAD988483004
Facility Address 2:	Not reported
TAX REG NBR:	313005119
NAICS CD:	62211
BUSINESS TYPE:	Hospital
MAIL NAME:	Providence Everett Medical Center
MAIL ADDR LINE1:	PO BOX 1147
MAIL CITY,ST,ZIP:	EVERETT, WA 98206
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Providence Everett Medical Ctr
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1321 COLBY AVE
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1665
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	425-261-2000
LEGAL EFFECTIVE DATE:	1/1/2000
LAND ORG NAME:	Providence Everett Medical Center
LAND ORG TYPE:	Private
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 1147
LAND CITY,ST,ZIP:	EVERETT, WA 98206-1147
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	425-261-2000
OPERATOR ORG NAME:	425-261-2000
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1321 COLBY AVE
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1665
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-261-2000
OPERATOR EFFECTIVE DATE:	5/6/1997
SITE CONTACT NAME:	Gil Bodrak
SITE CONTACT ADDR LINE1:	PO BOX 1147
SITE CONTACT ZIP:	EVERETT, WA 98206
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	425-261-3912

PROVIDENCE EVERETT MEDICAL CTR COLBY CAM (Continued) **1004794012**

SITE CONTACT EMAIL:	gilbert.bodrak@providence.org
FORM CONTACT NAME:	Gil Bodrak
FORM CONTACT ADDR LINE1:	PO BOX 1147
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98206
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	425-261-3912
FORM CONTACT EMAIL:	gilbert.bodrak@providence.org
GEN STATUS CD:	SQG
MONTHLY GENERATION:	FALSE
BATCH GENERATION:	TRUE
ONE TIME GENERATION:	FALSE
TRANSPORTS OWN WASTE:	FALSE
TRANSPORTS OTHRS WASTE:	FALSE
RECYCLER ONSITE:	FALSE
TRANSFER FACILITY:	FALSE
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	FALSE
USED OIL TRANSPORTER:	FALSE
USED OIL TRANSFER FACLTY:	FALSE
USED OIL PROCESSOR:	FALSE
USED OIL REREFINER:	FALSE
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	FALSE
USED OIL FUEL MRKTR MEETS SPECS:	FALSE

Facility Site ID Number:	71498228
SWC Desc:	WT02 - ToxWT02 WP02 WL02
FWC Desc:	D001 - Ignitable, D002 - Corrosive, D005 - Barium, D008 - Lead, D011 - SilverD001 D002
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	No
Treatment by Generator:	No
Mixed radioactive waste:	No
Importer of hazardous waste:	No
Immediate recycler:	No
Treatment/Storage/Disposal/Recycling Facility:	No
Generator of dangerous fuel waste:	No
Generator marketing to burner:	No
"Other marketers (i.e., blender, distributor, etc.)":	No
Utility boiler burner:	No
Industry boiler burner:	No
Industrial Furnace:	No
Smelter defferal:	No
Universal waste - batteries - generate:	No
Universal waste - thermostats - generate:	No
Universal waste - mercury - generate:	No
Universal waste - lamps - generate:	No
Universal waste - batteries - accumulate:	No
Universal waste - thermostats - accumulate:	No
Universal waste - mercury - accumulate:	No
Universal waste - lamps - accumulate:	No
Destination Facility for Universal Waste:	No
Off-specification used oil burner - utility boiler:	No
Off-specification used oil burner - industrial boiler:	No
Off-specification used oil burner - industrial furnace:	No
EPA ID:	WAD988483004
Facility Address 2:	Not reported
TAX REG NBR:	313005119

PROVIDENCE EVERETT MEDICAL CTR COLBY CAM (Continued) **1004794012**

NAICS CD:	62211
BUSINESS TYPE:	Hospital
MAIL NAME:	Providence Everett Medical Center
MAIL ADDR LINE1:	PO BOX 1147
MAIL CITY,ST,ZIP:	EVERETT, WA 98206
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Providence Everett Medical Ctr
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1321 COLBY AVE
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1665
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	425-261-2000
LEGAL EFFECTIVE DATE:	1/1/2000
LAND ORG NAME:	Providence Everett Medical Center
LAND ORG TYPE:	Private
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 1147
LAND CITY,ST,ZIP:	EVERETT, WA 98206-1147
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	425-261-2000
OPERATOR ORG NAME:	425-261-2000
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1321 COLBY AVE
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1665
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-261-2000
OPERATOR EFFECTIVE DATE:	5/6/1997
SITE CONTACT NAME:	William H Tyler
SITE CONTACT ADDR LINE1:	PO BOX 1147
SITE CONTACT ZIP:	EVERETT, WA 98206
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	425-261-3912
SITE CONTACT EMAIL:	william.tyler@providence.org
FORM CONTACT NAME:	William Tyler
FORM CONTACT ADDR LINE1:	PO BOX 1147
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98206
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	425-261-3912
FORM CONTACT EMAIL:	william.tyler@providence.org
GEN STATUS CD:	SQG
MONTHLY GENERATION:	Yes
BATCH GENERATION:	No
ONE TIME GENERATION:	No
TRANSPORTS OWN WASTE:	No
TRANSPORTS OTHRS WASTE:	No
RECYCLER ONSITE:	No
TRANSFER FACILITY:	No
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	No
USED OIL TRANSPORTER:	No
USED OIL TRANSFER FACLTY:	No
USED OIL PROCESSOR:	No
USED OIL REREFINER:	No
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	No
USED OIL FUEL MRKTR MEETS SPECS:	No

Facility Site ID Number: 71498228

PROVIDENCE EVERETT MEDICAL CTR COLBY CAM (Continued) **1004794012**

SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Not reported
Data Year:	2008
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD988483004
Facility Address 2:	Not reported
TAX REG NBR:	313005119
NAICS CD:	62211
BUSINESS TYPE:	Hospital
MAIL NAME:	Providence Everett Medical Center
MAIL ADDR LINE1:	PO BOX 1147
MAIL CITY,ST,ZIP:	EVERETT, WA 98206
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Providence Everett Medical Ctr
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	1321 COLBY AVE
LEGAL CITY,ST,ZIP:	EVERETT, WA 98201-1665
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	425-261-2000
LEGAL EFFECTIVE DATE:	1/1/2000
LAND ORG NAME:	Providence Everett Medical Center
LAND ORG TYPE:	Private
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 1147
LAND CITY,ST,ZIP:	EVERETT, WA 98206-1147
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	425-261-2000
OPERATOR ORG NAME:	425-261-2000
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	1321 COLBY AVE
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98201-1665
OPERATOR COUNTRY:	UNITED STATES

PROVIDENCE EVERETT MEDICAL CTR COLBY CAM (Continued) **1004794012**

OPERATOR PHONE NBR:	425-261-2000
OPERATOR EFFECTIVE DATE:	5/6/1997
SITE CONTACT NAME:	Gil Bodrak
SITE CONTACT ADDR LINE1:	PO BOX 1147
SITE CONTACT ZIP:	EVERETT, WA 98206
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	425-261-3912
SITE CONTACT EMAIL:	gilbert.bodrak@providence.org
FORM CONTACT NAME:	Gil Bodrak
FORM CONTACT ADDR LINE1:	PO BOX 1147
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98206
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	425-261-3912
FORM CONTACT EMAIL:	gilbert.bodrak@providence.org
GEN STATUS CD:	MQG
MONTHLY GENERATION:	False
BATCH GENERATION:	True
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Click this hyperlink while viewing on your computer to access additional WA MANIFEST: detail in the EDR Site Report.

36
ESE
1/4-1/2
0.495 mi.
2612 ft.

EVERETT COMMUNITY COLLEGE ROCKEFELLER **ALLSITES U000588305**
13TH ST & ROCKEFELLER AVE **UST N/A**
EVERETT, WA 98201

Relative:
Higher

Actual:
121 ft.

ALLSITES:

Facility Id:	25767692
Latitude:	48.002043653176798
Longitude:	-122.20326845114801
Geographic location identifier (alias facid):	25767692
Facility Name:	EVERETT COMMUNITY COLLEGE ROCKEFELLER
Latitude Decimal Degrees:	48.002043649999997
Longitude Decimal Degrees:	-122.20326845
Coordinate Point Areal Extent Code:	4
Horizontal Accuracy Code:	6
Coordinate Point Geographic Position Code:	8
Location Verified Code:	Not reported
Geographic Location Identifier (Alias Facid):	25767692
Interaction (Aka Env Int) Type Code:	UST
Interaction (Aka Env Int) Description:	Underground Storage Tank
Interaction Status:	I
Federal Program Indentifier:	3265

EVERETT COMMUNITY COLLEGE ROCKEFELLER (Continued) **U000588305**

Interaction Start Date: 6/8/1998
Interaction End Date: 5/3/2000

UST:

Facility ID:	25767692
Site ID:	3265
Lat Deg:	Not reported
Lat Min:	Not reported
Lat Sec:	Not reported
Long Deg:	Not reported
Long Min:	Not reported
Long Sec:	Not reported
UBI:	Not reported
Phone Number:	2062595615
Tank ID:	38797
Tank Name:	6
Install Date:	12/31/1964
Capacity:	Not reported
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Exempt
TankSystem Status Change Date:	8/26/1996
Tank Status:	Exempt
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Steel
Tank Construction:	Not reported
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Material:	Not reported
Pipe Construction:	Not reported
Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Not reported
Tank Primary Release Detection:	Not reported
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	8/6/1996
Tag Number:	Not reported

37
South
1/2-1
0.570 mi.
3010 ft.

PIONEER MARINE PLAZA **FINDS** **1007080294**
17TH ST & W MARINE VIEW DR **CSCSL** **N/A**
EVERETT, WA 98201 **ALLSITES**
HSL

Relative:
Lower

Actual:
7 ft.

FINDS:

Registry ID: 110015570121

Environmental Interest/Information System
Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington

PIONEER MARINE PLAZA (Continued) **1007080294**

Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

CSCSL:

Facility ID:	2742
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	2
Entered Date:	12/10/1990
Updated Date:	6/24/2009
Brownfield Status:	0
Rank Status:	5
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.99497
Longitude:	-122.21401
Lat/Long:	47.99497 / -122.21401
Lat/Long (dms):	47 59 41.892 / -122 12 50.436
Media Status Desc:	1/1/0001
Affected Media:	Groundwater
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Ranked, Awaiting RA

Facility ID:	2742
Facility Type:	Not reported
Region:	Northwest

PIONEER MARINE PLAZA (Continued) **1007080294**

Ecology Status Code:	2
Entered Date:	12/10/1990
Updated Date:	6/24/2009
Brownfield Status:	0
Rank Status:	5
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.99497
Longitude:	-122.21401
Lat/Long:	47.99497 / -122.21401
Lat/Long (dms):	47 59 41.892 / -122 12 50.436
Media Status Desc:	1/1/0001
Affected Media:	Soil
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Ranked, Awaiting RA

Facility ID:	2742
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	2
Entered Date:	12/10/1990
Updated Date:	6/24/2009
Brownfield Status:	0
Rank Status:	5
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported

PIONEER MARINE PLAZA (Continued) **1007080294**

Latitude:	47.99497
Longitude:	-122.21401
Lat/Long:	47.99497 / -122.21401
Lat/Long (dms):	47 59 41.892 / -122 12 50.436
Media Status Desc:	1/1/0001
Affected Media:	Surface Water
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Ranked, Awaiting RA

Facility ID:	2742
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	2
Entered Date:	12/10/1990
Updated Date:	6/24/2009
Brownfield Status:	0
Rank Status:	5
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.99497
Longitude:	-122.21401
Lat/Long:	47.99497 / -122.21401
Lat/Long (dms):	47 59 41.892 / -122 12 50.436
Media Status Desc:	1/1/0001
Affected Media:	Sediment
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Not reported

PIONEER MARINE PLAZA (Continued) **1007080294**

Reactive Wastes: Not reported
Corrosive Wastes: Not reported
Radioactive Wastes: Not reported
Asbestos: Not reported
Responsible Unit: NORTHWEST
Arsenic Code: Not reported
MTBE Code: Not reported
UXO Code: Not reported
Dioxin: Not reported
Non-Halogenated Solvents: Not reported
Base/Neutral/Acid Organics: Not reported
Halogenated Organic Compounds: Not reported
EPA Priority Pollutants - Metals and Cyanide: Not reported
Metals - Other non-priority pollutant medals: Not reported
Polychlorinated biPhenyls (PCBs): Not reported
Polynuclear Aromatic Hydrocarbons (PAH): Not reported
Conventional Contaminants, Organic: Not reported
Conventional Contaminants, Inorganic: Not reported
Tibutyl Tin Contaminant Group: Not reported
Bioassay/Benthic Failures Contaminant Group: Not reported
Wood Debris Contaminant Group: Not reported
Other Deleterious Substance Group: Not reported
Ecology Site Status (MTCA cleanup process): Ranked, Awaiting RA

ALLSITES:
Facility Id: 2742
Latitude: 47.994970000000002
Longitude: -122.21401
Geographic location identifier (alias facid): 2742
Facility Name: PIONEER MARINE PLAZA
Latitude Decimal Degrees: 47.994970000000002
Longitude Decimal Degrees: -122.21401
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 2742
Interaction (Aka Env Int) Type Code: SCS
Interaction (Aka Env Int) Description: State Cleanup Site
Interaction Status: A
Federal Program Indentifier: Not reported
Interaction Start Date: 1/1/1900
Interaction End Date: Not reported

HSL:
edr_fstat: WA
edr_fzip: Not reported
edr_fcnty: SNOHOMISH
edr_zip: Not reported
Facility Type: Hazardous Sites List
Facility Status: Ranked, Awaiting RA
FSID Number: 2742
Rank: 5
Region: NW

38 EVERETT LAUNDRY — **RCRA-NonGen** **1000892021**
East 1130 N BROADWAY — **FINDS** **WA0000312983**
1/2-1 EVERETT, WA 98201 — **CSCSL**
0.638 mi. — **ALLSITES**
3370 ft. — **HSL**

Relative: Higher

Actual: 122 ft.

RCRA-NonGen:
Date form received by agency: 08/05/2002
Facility name: EVERETT LAUNDRY
Facility address: 1130 N BROADWAY
EVERETT, WA 982011412
EPA ID: WA0000312983
Contact: CHOON HWA KU
Contact address: 1130 N BROADWAY
EVERETT, WA 98201-1412
Contact country: US
Contact telephone: (425)304-0749
Contact email: Not reported
EPA Region: 10
Land type: Other land type
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Historical Generators:
Date form received by agency: 05/07/2001
Facility name: EVERETT LAUNDRY
Classification: Not a generator, verified

Date form received by agency: 06/05/2000
Facility name: EVERETT LAUNDRY
Classification: Not a generator, verified

Date form received by agency: 08/19/1999
Facility name: EVERETT LAUNDRY
Classification: Not a generator, verified

Date form received by agency: 07/16/1997
Facility name: EVERETT LAUNDRY
Classification: Not a generator, verified

EVERETT LAUNDRY (Continued) **1000892021**

Date form received by agency: 07/07/1997
Facility name: EVERETT LAUNDRY
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 07/06/1997
Facility name: EVERETT LAUNDRY
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 12/31/1993
Facility name: EVERETT LAUNDRY
Classification: Conditionally Exempt Small Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 06/25/1997
Evaluation: COMPLIANCE ASSISTANCE VISIT
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110005305062

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CSCSL:
Facility ID: 45998439
Facility Type: Not reported
Region: Northwest
Ecology Status Code: 2
Entered Date: 7/7/1999
Updated Date: 6/24/2009
Brownfield Status: 0
Rank Status: 5
PSI Status: Not reported
Clean Method: Not reported
Drinking Water Type: Not reported
Cleanup Standard: Not reported
Acres Remediated: Not reported
Latitude: 48.00222
Longitude: -122.20116

EVERETT LAUNDRY (Continued) **1000892021**

Lat/Long:	48.00222 / -122.20116
Lat/Long (dms):	48 0 7.992 / -122 12 4.176
Media Status Desc:	1/1/0001
Affected Media:	Soil
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Not reported
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported

Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Confirmed
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Ranked, Awaiting RA

Facility ID:	45998439
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	2
Entered Date:	7/7/1999
Updated Date:	6/24/2009
Brownfield Status:	0
Rank Status:	5
PSI Status:	Not reported
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.00222
Longitude:	-122.20116
Lat/Long:	48.00222 / -122.20116
Lat/Long (dms):	48 0 7.992 / -122 12 4.176
Media Status Desc:	1/1/0001
Affected Media:	Groundwater
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Not reported
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported

EVERETT LAUNDRY (Continued) **1000892021**

Radioactive Wastes: Not reported
Asbestos: Not reported
Responsible Unit: NORTHWEST
Arsenic Code: Not reported
MTBE Code: Not reported
UXO Code: Not reported
Dioxin: Not reported
Non-Halogenated Solvents: Not reported
Base/Neutral/Acid Organics: Not reported
Halogenated Organic Compounds: Suspected
EPA Priority Pollutants - Metals and Cyanide: Not reported
Metals - Other non-priority pollutant medals: Not reported
Polychlorinated biPhenyls (PCBs): Not reported
Polynuclear Aromatic Hydrocarbons (PAH): Not reported
Conventional Contaminants, Organic: Not reported
Conventional Contaminants, Inorganic: Not reported
Tibutyl Tin Contaminant Group: Not reported
Bioassay/Benthic Failures Contaminant Group: Not reported
Wood Debris Contaminant Group: Not reported
Other Deleterious Substance Group: Not reported
Ecology Site Status (MTCA cleanup process): Ranked, Awaiting RA

ALLSITES:
Facility Id: 45998439
Latitude: 48.002220000000001
Longitude: -122.20116
Geographic location identifier (alias facid): 45998439
Facility Name: Everett Laundry
Latitude Decimal Degrees: 48.002220000000001
Longitude Decimal Degrees: -122.20116
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 99
Location Verified Code: Y

Geographic Location Identifier (Alias Facid): 45998439
Interaction (Aka Env Int) Type Code: SCS
Interaction (Aka Env Int) Description: State Cleanup Site
Interaction Status: A
Federal Program Indentifier: Not reported
Interaction Start Date: 4/7/1999
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 45998439
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: I
Federal Program Indentifier: WA0000312983
Interaction Start Date: 5/23/1994
Interaction End Date: 12/31/2000

HSL:
edr_fstat: WA
edr_fzip: Not reported
edr_fcnty: SNOHOMISH

EVERETT LAUNDRY (Continued) **1000892021**

edr_zip: Not reported
Facility Type: Hazardous Sites List
Facility Status: Ranked, Awaiting RA
FSID Number: 45998439
Rank: 5
Region: NW

39
ESE
1/2-1
0.669 mi.
3530 ft.

THE ALLEY SHOP
1321 BROADWAY
EVERETT, WA 98201

FINDS **1007080286**
CSCSL **N/A**
ALLSITES
HSL

Relative: Higher

Actual: 114 ft.

FINDS:

Registry ID: 110015570041

Environmental Interest/Information System
Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

CSCSL:

Facility ID: 2730
Facility Type: Not reported
Region: Northwest
Ecology Status Code: 2
Entered Date: 3/1/1988
Updated Date: 6/24/2009
Brownfield Status: 0
Rank Status: 5
PSI Status: Not reported
Clean Method: Not reported
Drinking Water Type: Not reported
Cleanup Standard: Not reported
Acres Remediated: Not reported
Latitude: 47.99978
Longitude: -122.20125
Lat/Long: 47.99978 / -122.20125
Lat/Long (dms): 47 59 59.208 / -122 12 4.5
Media Status Desc: 1/1/0001
Affected Media: Soil
Affected Media Status: Confirmed
Pesticides: Not reported
Petroleum Products: Confirmed
Phenolic Compounds: Not reported
Reactive Wastes: Not reported
Corrosive Wastes: Not reported
Radioactive Wastes: Not reported
Asbestos: Not reported
Responsible Unit: NORTHWEST
Arsenic Code: Not reported
MTBE Code: Not reported

THE ALLEY SHOP (Continued) **1007080286**

UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Suspected
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Suspected
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Ranked, Awaiting RA

Facility ID:	2730
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	2
Entered Date:	3/1/1988
Updated Date:	6/24/2009
Brownfield Status:	0
Rank Status:	5
PSI Status:	Not reported
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.99978
Longitude:	-122.20125
Lat/Long:	47.99978 / -122.20125
Lat/Long (dms):	47 59 59.208 / -122 12 4.5
Media Status Desc:	1/1/0001
Affected Media:	Surface Water
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Suspected
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Suspected
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported

THE ALLEY SHOP (Continued) **1007080286**

Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Ranked, Awaiting RA

Facility ID:	2730
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	2
Entered Date:	3/1/1988
Updated Date:	6/24/2009
Brownfield Status:	0
Rank Status:	5
PSI Status:	Not reported
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.99978
Longitude:	-122.20125
Lat/Long:	47.99978 / -122.20125
Lat/Long (dms):	47 59 59.208 / -122 12 4.5
Media Status Desc:	1/1/0001
Affected Media:	Sediment
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Suspected
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Suspected
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Ranked, Awaiting RA

ALLSITES:

Facility Id:	2730
Latitude:	47.999780000000001

THE ALLEY SHOP (Continued) **1007080286**

Longitude:	-122.20125
Geographic location identifier (alias facid):	2730
Facility Name:	THE ALLEY SHOP
Latitude Decimal Degrees:	47.999780000000001
Longitude Decimal Degrees:	-122.20125
Coordinate Point Areal Extent Code:	99
Horizontal Accuracy Code:	99
Coordinate Point Geographic Position Code:	99
Location Verified Code:	N
Geographic Location Identifier (Alias Facid):	2730
Interaction (Aka Env Int) Type Code:	SCS
Interaction (Aka Env Int) Description:	State Cleanup Site
Interaction Status:	A
Federal Program Indentifier:	Not reported
Interaction Start Date:	1/1/1900
Interaction End Date:	Not reported

HSL:

edr_fstat:	WA
edr_fzip:	Not reported
edr_fcnty:	SNOHOMISH
edr_zip:	Not reported
Facility Type:	**Hazardous Sites List**
Facility Status:	Ranked, Awaiting RA
FSID Number:	2730
Rank:	5
Region:	NW

40
NNE
1/2-1
0.698 mi.
3687 ft.

Relative:
Higher

Actual:
15 ft.

JELD WEN **RCRA-CESQG** **1004614038**
300 WEST MARINE VIEW DRIVE **FINDS** **WAD981765654**
EVERETT, WA 98201 **CSCSL**
HSL
ALLSITES
MANIFEST
INST CONTROL

RCRA-CESQG:

Date form received by agency:	02/29/2008
Facility name:	JELD WEN
Facility address:	300 W MARINE VIEW DR EVERETT, WA 982011030
EPA ID:	WAD981765654
Mailing address:	PO BOX 1540 KLAMATH FALLS, OR 97601
Contact:	CASSANDRA A FORRESTER
Contact address:	PO BOX 1540 KLAMATH FALLS, OR 97601
Contact country:	US
Contact telephone:	(541)883-3373
Contact email:	Not reported
EPA Region:	10
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time;

JELD WEN (Continued) **1004614038**

or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: JELD WEN INC DBA JELD WEN
Owner/operator address: PO BOX 1540
KLAMATH FALLS, OR 97601
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1997
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Historical Generators:
Date form received by agency: 12/31/2007
Facility name: JELD WEN
Classification: Not a generator, verified

Date form received by agency: 12/31/2005
Facility name: JELD WEN
Classification: Large Quantity Generator

Date form received by agency: 12/31/2003
Facility name: JELD WEN
Classification: Small Quantity Generator

Violation Status: No violations found

JELD WEN (Continued) **1004614038**

Evaluation Action Summary:
Evaluation date: 12/20/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110009511144

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CSCSL:
Facility ID: 2757
Facility Type: Independent
Region: Northwest
Ecology Status Code: 3
Entered Date: 3/13/1991
Updated Date: 3/31/2010
Brownfield Status: 0
Rank Status: 5
PSI Status: 1
Clean Method: Not reported
Drinking Water Type: Not reported
Cleanup Standard: Not reported
Acres Remediated: Not reported
Latitude: 48.01574
Longitude: -122.20775
Lat/Long: 48.01574 / -122.20775
Lat/Long (dms): 48 0 56.664 / -122 12 27.9
Media Status Desc: 1/1/0001
Affected Media: Soil

JELD WEN (Continued) **1004614038**

Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported

Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Confirmed
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Suspected
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	2757
Facility Type:	Independent
Region:	Northwest
Ecology Status Code:	3
Entered Date:	3/13/1991
Updated Date:	3/31/2010
Brownfield Status:	0
Rank Status:	5
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.01574
Longitude:	-122.20775
Lat/Long:	48.01574 / -122.20775
Lat/Long (dms):	48 0 56.664 / -122 12 27.9
Media Status Desc:	1/1/0001
Affected Media:	Air
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Not reported
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported

JELD WEN (Continued) **1004614038**

MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Confirmed
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	2757
Facility Type:	Independent
Region:	Northwest
Ecology Status Code:	3
Entered Date:	3/13/1991
Updated Date:	3/31/2010
Brownfield Status:	0
Rank Status:	5
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.01574
Longitude:	-122.20775
Lat/Long:	48.01574 / -122.20775
Lat/Long (dms):	48 0 56.664 / -122 12 27.9
Media Status Desc:	1/1/0001
Affected Media:	Groundwater
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Suspected
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported

JELD WEN (Continued) **1004614038**

Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	2757
Facility Type:	Independent
Region:	Northwest
Ecology Status Code:	3
Entered Date:	3/13/1991
Updated Date:	3/31/2010
Brownfield Status:	0
Rank Status:	5
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.01574
Longitude:	-122.20775
Lat/Long:	48.01574 / -122.20775
Lat/Long (dms):	48 0 56.664 / -122 12 27.9
Media Status Desc:	1/1/0001
Affected Media:	Surface Water
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Confirmed
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	2757
Facility Type:	Independent

JELD WEN (Continued) **1004614038**

Region:	Northwest
Ecology Status Code:	3
Entered Date:	3/13/1991
Updated Date:	3/31/2010
Brownfield Status:	0
Rank Status:	5
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.01574
Longitude:	-122.20775
Lat/Long:	48.01574 / -122.20775
Lat/Long (dms):	48 0 56.664 / -122 12 27.9
Media Status Desc:	5/1/2009
Affected Media:	Sediment
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Suspected
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Suspected
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Suspected
EPA Priority Pollutants - Metals and Cyanide:	Suspected
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Suspected
Polynuclear Aromatic Hydrocarbons (PAH):	Suspected
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Confirmed
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

HSL:

edr_fstat:	WA
edr_fzip:	Not reported
edr_fcnty:	SNOHOMISH
edr_zip:	Not reported
Facility Type:	**Hazardous Sites List**
Facility Status:	RA in progress
FSID Number:	2757
Rank:	5
Region:	HQ

JELD WEN (Continued) **1004614038**

ALLSITES:

Facility Id:	2757
Latitude:	48.015740000000001
Longitude:	-122.20775
Geographic location identifier (alias facid):	2757
Facility Name:	Jeld Wen
Latitude Decimal Degrees:	48.015740000000001
Longitude Decimal Degrees:	-122.20775
Coordinate Point Areal Extent Code:	99
Horizontal Accuracy Code:	99
Coordinate Point Geographic Position Code:	8
Location Verified Code:	N

Geographic Location Identifier (Alias Facid):	2757
Interaction (Aka Env Int) Type Code:	ENFORFNL
Interaction (Aka Env Int) Description:	Enforcement Final
Interaction Status:	A
Federal Program Indentifier:	Not reported
Interaction Start Date:	9/5/2007
Interaction End Date:	Not reported

Geographic Location Identifier (Alias Facid):	2757
Interaction (Aka Env Int) Type Code:	UST
Interaction (Aka Env Int) Description:	Underground Storage Tank
Interaction Status:	I
Federal Program Indentifier:	783
Interaction Start Date:	1/1/1973
Interaction End Date:	8/6/1996

Geographic Location Identifier (Alias Facid):	2757
Interaction (Aka Env Int) Type Code:	HWOTHER
Interaction (Aka Env Int) Description:	Haz Waste Management Activity
Interaction Status:	A
Federal Program Indentifier:	WAD981765654
Interaction Start Date:	12/31/2008
Interaction End Date:	Not reported

Geographic Location Identifier (Alias Facid):	2757
Interaction (Aka Env Int) Type Code:	LUST
Interaction (Aka Env Int) Description:	LUST Facility
Interaction Status:	I
Federal Program Indentifier:	783
Interaction Start Date:	12/26/1990
Interaction End Date:	4/20/2000

Geographic Location Identifier (Alias Facid):	2757
Interaction (Aka Env Int) Type Code:	HWG
Interaction (Aka Env Int) Description:	Hazardous Waste Generator
Interaction Status:	I
Federal Program Indentifier:	WAD981765654
Interaction Start Date:	2/20/2007
Interaction End Date:	12/31/2008

Geographic Location Identifier (Alias Facid):	2757
Interaction (Aka Env Int) Type Code:	INDPNDNT
Interaction (Aka Env Int) Description:	Independent Cleanup
Interaction Status:	A

JELD WEN (Continued) **1004614038**

Federal Program Indentifier: Not reported
Interaction Start Date: 1/1/1900
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 2757
Interaction (Aka Env Int) Type Code: INDUSTGP
Interaction (Aka Env Int) Description: Industrial SW GP
Interaction Status: I
Federal Program Indentifier: SO3000158
Interaction Start Date: 12/24/1992
Interaction End Date: 6/11/2007

Geographic Location Identifier (Alias Facid): 2757
Interaction (Aka Env Int) Type Code: TIER2
Interaction (Aka Env Int) Description: Emergency/Haz Chem Rpt TIER2
Interaction Status: A
Federal Program Indentifier: WAD981765654
Interaction Start Date: 1/1/1996
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 2757
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: I
Federal Program Indentifier: WAD981765654
Interaction Start Date: 1/6/1987
Interaction End Date: 12/31/2005

WA MANIFEST:
Facility Site ID Number: 2757
SWC Desc: Not reported
FWC Desc: D002D001 D002 D005 D006 D007 D035 F003 F005
Form Comm: 3-8-06 Changed punctutation in name. TW
Data Year: Not reported
Permit by Rule: False
Treatment by Generator: False
Mixed radioactive waste: False
Importer of hazardous waste: False
Immediate recycler: False
Treatment/Storage/Disposal/Recycling Facility: False
Generator of dangerous fuel waste: False
Generator marketing to burner: False
"Other marketers (i.e., blender, distributor, etc.)": False
Utility boiler burner: False
Industry boiler burner: False
Industrial Furnace: False
Smelter defferal: False
Universal waste - batteries - generate: False
Universal waste - thermostats - generate: False
Universal waste - mercury - generate: False
Universal waste - lamps - generate: False
Universal waste - batteries - accumulate: False
Universal waste - thermostats - accumulate: False
Universal waste - mercury - accumulate: False
Universal waste - lamps - accumulate: False
Destination Facility for Universal Waste: False

JELD WEN (Continued) **1004614038**

Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD981765654
Facility Address 2:	Not reported
TAX REG NBR:	Not reported
NAICS CD:	321911
BUSINESS TYPE:	Not reported
MAIL NAME:	JELD WEN
MAIL ADDR LINE1:	PO Box 1540
MAIL CITY,ST,ZIP:	Klamath Falls, OR 97601
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Jeld Wen Inc
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	PO Box 1329
LEGAL CITY,ST,ZIP:	KLAMATH FALLS, OR 97601-1036
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(541)882-3451
LEGAL EFFECTIVE DATE:	6/19/1996
LAND ORG NAME:	JELD WEN Inc
LAND ORG TYPE:	Private
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 1329
LAND CITY,ST,ZIP:	KLAMATH FALLS, OR 97601-1036
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(541)882-3451
OPERATOR ORG NAME:	JELD WEN INC DBA JELD WEN
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	PO Box 1187
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98206-1187
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-252-4064
OPERATOR EFFECTIVE DATE:	01/01/97
SITE CONTACT NAME:	Cassandra A Forrester
SITE CONTACT ADDR LINE1:	PO Box 1540
SITE CONTACT ZIP:	Klamath Falls, OR 97601
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	541-883-3373
SITE CONTACT EMAIL:	cassandraf@jeld-wen.com
FORM CONTACT NAME:	Cassandra A Forrester
FORM CONTACT ADDR LINE1:	PO Box 1540
FORM CONTACT CITY,ST,ZIP:	Klamath Falls, OR 97601
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	541-883-3373
FORM CONTACT EMAIL:	cassandraf@jeld-wen.com
GEN STATUS CD:	SQG
MONTHLY GENERATION:	False
BATCH GENERATION:	False
ONE TIME GENERATION:	True
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False

JELD WEN (Continued) **1004614038**

USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Facility Site ID Number:	2757
SWC Desc:	Not reported
FWC Desc:	D002D001 D002 D005 D006 D007 D035 F003 F005
Form Comm:	3-8-06 Changed punctutation in name. TW
Data Year:	Not reported
Permit by Rule:	FALSE
Treatment by Generator:	FALSE
Mixed radioactive waste:	FALSE
Importer of hazardous waste:	FALSE
Immediate recycler:	FALSE
Treatment/Storage/Disposal/Recycling Facility:	FALSE
Generator of dangerous fuel waste:	FALSE
Generator marketing to burner:	FALSE
"Other marketers (i.e., blender, distributor, etc.)":	FALSE
Utility boiler burner:	FALSE
Industry boiler burner:	FALSE
Industrial Furnace:	FALSE
Smelter defferal:	FALSE
Universal waste - batteries - generate:	FALSE
Universal waste - thermostats - generate:	FALSE
Universal waste - mercury - generate:	FALSE
Universal waste - lamps - generate:	FALSE
Universal waste - batteries - accumulate:	FALSE
Universal waste - thermostats - accumulate:	FALSE
Universal waste - mercury - accumulate:	FALSE
Universal waste - lamps - accumulate:	FALSE
Destination Facility for Universal Waste:	FALSE
Off-specification used oil burner - utility boiler:	FALSE
Off-specification used oil burner - industrial boiler:	FALSE
Off-specification used oil burner - industrial furnace:	FALSE
EPA ID:	WAD981765654
Facility Address 2:	Not reported
TAX REG NBR:	Not reported
NAICS CD:	321911
BUSINESS TYPE:	Not reported
MAIL NAME:	JELD WEN
MAIL ADDR LINE1:	PO Box 1540
MAIL CITY,ST,ZIP:	Klamath Falls, OR 97601
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Jeld Wen Inc
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	PO Box 1329
LEGAL CITY,ST,ZIP:	KLAMATH FALLS, OR 97601-1036
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(541)882-3451
LEGAL EFFECTIVE DATE:	6/19/1996
LAND ORG NAME:	JELD WEN Inc
LAND ORG TYPE:	Private
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 1329
LAND CITY,ST,ZIP:	KLAMATH FALLS, OR 97601-1036
LAND COUNTRY:	UNITED STATES

JELD WEN (Continued) **1004614038**

LAND PHONE NBR:	(541)882-3451
OPERATOR ORG NAME:	JELD WEN INC DBA JELD WEN
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	PO Box 1187
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98206-1187
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-252-4064
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	Cassandra A Forrester
SITE CONTACT ADDR LINE1:	PO Box 1540
SITE CONTACT ZIP:	Klamath Falls, OR 97601
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	541-883-3373
SITE CONTACT EMAIL:	cassandraf@jeld-wen.com
FORM CONTACT NAME:	Cassandra A Forrester
FORM CONTACT ADDR LINE1:	PO Box 1540
FORM CONTACT CITY,ST,ZIP:	Klamath Falls, OR 97601
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	541-883-3373
FORM CONTACT EMAIL:	cassandraf@jeld-wen.com
GEN STATUS CD:	MQG
MONTHLY GENERATION:	FALSE
BATCH GENERATION:	FALSE
ONE TIME GENERATION:	TRUE
TRANSPORTS OWN WASTE:	FALSE
TRANSPORTS OTHRS WASTE:	FALSE
RECYCLER ONSITE:	FALSE
TRANSFER FACILITY:	FALSE
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	FALSE
USED OIL TRANSPORTER:	FALSE
USED OIL TRANSFER FACLTY:	FALSE
USED OIL PROCESSOR:	FALSE
USED OIL REREFINER:	FALSE
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	FALSE
USED OIL FUEL MRKTR MEETS SPECS:	FALSE

Facility Site ID Number:	2757
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Not reported
Data Year:	2009
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False

JELD WEN (Continued) **1004614038**

Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD981765654
Facility Address 2:	Not reported
TAX REG NBR:	Not reported
NAICS CD:	321911
BUSINESS TYPE:	Not reported
MAIL NAME:	JELD WEN
MAIL ADDR LINE1:	PO Box 1540
MAIL CITY,ST,ZIP:	Klamath Falls, OR 97601
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Jeld Wen Inc
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	PO Box 1540
LEGAL CITY,ST,ZIP:	KLAMATH FALLS, OR 97601
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(541)883-3373 x2812
LEGAL EFFECTIVE DATE:	6/19/1996
LAND ORG NAME:	JELD WEN Inc
LAND ORG TYPE:	Private
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 1540
LAND CITY,ST,ZIP:	KLAMATH FALLS, OR 97601
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(541)883-3373 x2812
OPERATOR ORG NAME:	JELD WEN Inc.
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	PO Box 1540
OPERATOR CITY,ST,ZIP:	Klamath Falls, OR 97601
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(541)883-3373 x2812
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	Diane K Keith
SITE CONTACT ADDR LINE1:	PO Box 1540
SITE CONTACT ZIP:	Klamath Falls, OR 97601
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(541) 883-3373 x2812
SITE CONTACT EMAIL:	dianek@jeld-wen.com
FORM CONTACT NAME:	Diane K Keith
FORM CONTACT ADDR LINE1:	PO Box 1540
FORM CONTACT CITY,ST,ZIP:	Klamath Falls, OR 97601
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	541-883-3373 x2812
FORM CONTACT EMAIL:	dianek@jeld-wen.com
GEN STATUS CD:	XQG
MONTHLY GENERATION:	False
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False

JELD WEN (Continued) **1004614038**

TRANSPORTS OTHRS WASTE: False
RECYCLER ONSITE: False
TRANSFER FACILITY: False
OTHER EXEMPTION: Not reported
UW BATTERY GEN: False
USED OIL TRANSPORTER: False
USED OIL TRANSFER FACLTY: False
USED OIL PROCESSOR: False
USED OIL REREFINER: False
USED OIL FUEL MRKTR DIRECTS SHPMNTS: False
USED OIL FUEL MRKTR MEETS SPECS: False

Facility Site ID Number: 2757
SWC Desc: Not reported
FWC Desc: D002D001 D002 D005 D006 D007 D035 F003 F005
Form Comm: 3-8-06 Changed punctutation in name. TW
Data Year: Not reported
Permit by Rule: No
Treatment by Generator: No
Mixed radioactive waste: No
Importer of hazardous waste: No
Immediate recycler: No
Treatment/Storage/Disposal/Recycling Facility: No
Generator of dangerous fuel waste: No
Generator marketing to burner: No
"Other marketers (i.e., blender, distributor, etc.)": No
Utility boiler burner: No
Industry boiler burner: No
Industrial Furnace: No
Smelter defferal: No
Universal waste - batteries - generate: No
Universal waste - thermostats - generate: No
Universal waste - mercury - generate: No
Universal waste - lamps - generate: No
Universal waste - batteries - accumulate: No
Universal waste - thermostats - accumulate: No
Universal waste - mercury - accumulate: No
Universal waste - lamps - accumulate: No
Destination Facility for Universal Waste: No
Off-specification used oil burner - utility boiler: No
Off-specification used oil burner - industrial boiler: No
Off-specification used oil burner - industrial furnace: No
EPA ID: WAD981765654
Facility Address 2: Not reported
TAX REG NBR: Not reported
NAICS CD: 321911
BUSINESS TYPE: Not reported
MAIL NAME: JELD WEN
MAIL ADDR LINE1: PO Box 1540
MAIL CITY,ST,ZIP: Klamath Falls, OR 97601
MAIL COUNTRY: UNITED STATES
LEGAL ORG NAME: Jeld Wen Inc
LEGAL ORG TYPE: Private
LEGAL ADDR LINE1: PO Box 1329
LEGAL CITY,ST,ZIP: KLAMATH FALLS, OR 97601-1036
LEGAL COUNTRY: UNITED STATES
LEGAL PHONE NBR: (541)882-3451

JELD WEN (Continued) **1004614038**

LEGAL EFFECTIVE DATE:	6/19/1996
LAND ORG NAME:	JELD WEN Inc
LAND ORG TYPE:	Private
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 1329
LAND CITY,ST,ZIP:	KLAMATH FALLS, OR 97601-1036
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(541)882-3451
OPERATOR ORG NAME:	JELD WEN INC DBA JELD WEN
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	PO Box 1187
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98206-1187
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-252-4064
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	Robert A Roach
SITE CONTACT ADDR LINE1:	PO Box 1540
SITE CONTACT ZIP:	Klamath Falls, OR 97601
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	541-883-3373
SITE CONTACT EMAIL:	bobr@jeld-wen.com
FORM CONTACT NAME:	Robert A Roach
FORM CONTACT ADDR LINE1:	PO Box 1540
FORM CONTACT CITY,ST,ZIP:	Klamath Falls, OR 97601
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	541-883-3373
FORM CONTACT EMAIL:	bobr@jeld-wen.com
GEN STATUS CD:	LQG
MONTHLY GENERATION:	No
BATCH GENERATION:	Yes
ONE TIME GENERATION:	No
TRANSPORTS OWN WASTE:	No
TRANSPORTS OTHRS WASTE:	No
RECYCLER ONSITE:	No
TRANSFER FACILITY:	No
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	No
USED OIL TRANSPORTER:	No
USED OIL TRANSFER FACLTY:	No
USED OIL PROCESSOR:	No
USED OIL REREFINER:	No
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	No
USED OIL FUEL MRKTR MEETS SPECS:	No

Facility Site ID Number:	2757
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	There was no waste generated at the site in 2008.
Data Year:	2008
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False

JELD WEN (Continued) **1004614038**

"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD981765654
Facility Address 2:	Not reported
TAX REG NBR:	Not reported
NAICS CD:	321911
BUSINESS TYPE:	Not reported
MAIL NAME:	JELD WEN
MAIL ADDR LINE1:	PO Box 1540
MAIL CITY,ST,ZIP:	Klamath Falls, OR 97601
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Jeld Wen Inc
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	PO Box 1329
LEGAL CITY,ST,ZIP:	KLAMATH FALLS, OR 97601-1036
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(541)882-3451
LEGAL EFFECTIVE DATE:	6/19/1996
LAND ORG NAME:	JELD WEN Inc
LAND ORG TYPE:	Private
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 1329
LAND CITY,ST,ZIP:	KLAMATH FALLS, OR 97601-1036
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(541)882-3451
OPERATOR ORG NAME:	JELD WEN INC DBA JELD WEN
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	PO Box 1187
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98206-1187
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	425-252-4064
OPERATOR EFFECTIVE DATE:	1/1/1997
SITE CONTACT NAME:	Cassandra A Forrester
SITE CONTACT ADDR LINE1:	PO Box 1540
SITE CONTACT ZIP:	Klamath Falls, OR 97601
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	541-883-3373
SITE CONTACT EMAIL:	cassandraf@jeld-wen.com
FORM CONTACT NAME:	Cassandra A Forrester
FORM CONTACT ADDR LINE1:	PO Box 1540
FORM CONTACT CITY,ST,ZIP:	Klamath Falls, OR 97601
FORM CONTACT COUNTRY:	UNITED STATES

JELD WEN (Continued) **1004614038**

FORM CONTACT PHONE NBR:	541-883-3373
FORM CONTACT EMAIL:	cassandraf@jeld-wen.com
GEN STATUS CD:	XQG
MONTHLY GENERATION:	False
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Click this hyperlink while viewing on your computer to access additional WA MANIFEST: detail in the EDR Site Report.

INST CONTROL:

Facility Site ID:	2757
Decision Type:	Agreed Order
Document Type:	Not reported
County Filing # For Individual IC Doc:	Not reported
Filing Date Of Individual IC Doc:	Not reported
Status:	Not reported
Status Date:	Not reported
Anchorage Restrictions:	No
Drinking Water Restrictions:	No
Education Programs:	No
Financial Assurance:	No
Finfish Harvesting Restrictions:	No
Groundwater Restriction:	No
Maintenance Requirements:	No
No Dredge Zone:	No
No Wake Zone:	No
Physical Measures:	No
Property Use Restriction:	No
Restrictive Signage:	No
Shellfish Harvesting Restrictions:	No
Soil Restriction:	No
Surface Water Restriction:	No
Swimming Restriction:	No
Vessel Draft Restriction:	No

41
East
1/2-1
0.771 mi.
4070 ft.

TIME STATION 168
928 N BROADWAY
EVERETT, WA 98201

FINDS
CSCSL
ALLSITES
VCP

1007069543
N/A

Relative:
Higher

Actual:
85 ft.

FINDS:

Registry ID: 110015461454

Environmental Interest/Information System
Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

CSCSL:

Facility ID:	51474832
Facility Type:	VCP
Region:	Northwest
Ecology Status Code:	3
Entered Date:	7/31/2007
Updated Date:	3/31/2009
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	Not reported
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.004607
Longitude:	-122.199917
Lat/Long:	48.004607 / -122.199917
Lat/Long (dms):	48 0 16.585 / -122 11 59.701
Media Status Desc:	7/31/2007
Affected Media:	Groundwater
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported

TIME STATION 168 (Continued) **1007069543**

Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	51474832
Facility Type:	VCP
Region:	Northwest
Ecology Status Code:	3
Entered Date:	7/31/2007
Updated Date:	3/31/2009
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	Not reported
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.004607
Longitude:	-122.199917
Lat/Long:	48.004607 / -122.199917
Lat/Long (dms):	48 0 16.585 / -122 11 59.701
Media Status Desc:	1/1/0001
Affected Media:	Soil
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

ALLSITES:
Facility Id: 51474832

TIME STATION 168 (Continued) **1007069543**

Latitude:	48.004607
Longitude:	-122.199917
Geographic location identifier (alias facid):	51474832
Facility Name:	TIME STATION 168
Latitude Decimal Degrees:	48.004607
Longitude Decimal Degrees:	-122.199917
Coordinate Point Areal Extent Code:	4
Horizontal Accuracy Code:	6
Coordinate Point Geographic Position Code:	5
Location Verified Code:	N

Geographic Location Identifier (Alias Facid):	51474832
Interaction (Aka Env Int) Type Code:	LUST
Interaction (Aka Env Int) Description:	LUST Facility
Interaction Status:	A
Federal Program Indentifier:	4065
Interaction Start Date:	10/28/1992
Interaction End Date:	Not reported

Geographic Location Identifier (Alias Facid):	51474832
Interaction (Aka Env Int) Type Code:	UST
Interaction (Aka Env Int) Description:	Underground Storage Tank
Interaction Status:	I
Federal Program Indentifier:	4065
Interaction Start Date:	3/20/2000
Interaction End Date:	3/20/2000

Geographic Location Identifier (Alias Facid):	51474832
Interaction (Aka Env Int) Type Code:	VOLCLNST
Interaction (Aka Env Int) Description:	Voluntary Cleanup Sites
Interaction Status:	I
Federal Program Indentifier:	NW1809
Interaction Start Date:	7/31/2007
Interaction End Date:	11/13/2007

VCP:

edr_fstat:	WA
edr_fzip:	98201-1409
edr_fcnty:	SNOHOMISH
edr_zip:	98201-1409
Facility ID:	51474832
VCP Status:	VCP
VCP:	Not reported
Ecology Status:	RA in Progress
NFA Type:	RA in Progress
Date NFA:	RA in Progress
Rank:	RA in Progress

edr_fstat:	WA
edr_fzip:	98201-1409
edr_fcnty:	SNOHOMISH
edr_zip:	98201-1409
Facility ID:	51474832
VCP Status:	VCP
VCP:	Not reported
Ecology Status:	RA in Progress

TIME STATION 168 (Continued) **1007069543**

NFA Type: RA in Progress
Date NFA: RA in Progress
Rank: RA in Progress

42
SE
1/2-1
0.786 mi.
4151 ft.

TREPANIER ENGINEERING
1601 BROADWAY AVE
EVERETT, WA 98201

CSCSL **S109139822**
ALLSITES **N/A**
VCP

Relative:
Higher

Actual:
103 ft.

CSCSL:

Facility ID:	6204574
Facility Type:	VCP
Region:	Northwest
Ecology Status Code:	3
Entered Date:	5/29/2008
Updated Date:	4/7/2010
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	Not reported
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.996298
Longitude:	-122.20113
Lat/Long:	47.996298 / -122.20113
Lat/Long (dms):	47 59 46.673 / -122 12 4.068
Media Status Desc:	5/29/2008
Affected Media:	Soil
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

TREPANIER ENGINEERING (Continued) **S109139822**

ALLSITES:

Facility Id:	6204574
Latitude:	47.996298000000003
Longitude:	-122.20113000000001
Geographic location identifier (alias facid):	6204574
Facility Name:	Trepanier Engineering
Latitude Decimal Degrees:	47.996298000000003
Longitude Decimal Degrees:	-122.20113000000001
Coordinate Point Areal Extent Code:	3
Horizontal Accuracy Code:	12
Coordinate Point Geographic Position Code:	5
Location Verified Code:	N

Geographic Location Identifier (Alias Facid):	6204574
Interaction (Aka Env Int) Type Code:	VOLCLNST
Interaction (Aka Env Int) Description:	Voluntary Cleanup Sites
Interaction Status:	A
Federal Program Indentifier:	NW1951
Interaction Start Date:	5/29/2008
Interaction End Date:	Not reported

VCP:

edr_fstat:	WA
edr_fzip:	98201
edr_fcnty:	SNOHOMISH
edr_zip:	98201-1723
Facility ID:	6204574
VCP Status:	VCP
VCP:	Not reported
Ecology Status:	RA in Progress
NFA Type:	RA in Progress
Date NFA:	RA in Progress
Rank:	RA in Progress

---

43 **JACKPOT FOOD MART CO 169** **CSCSL** **U000920695**
East **851 N BROADWAY** **ALLSITES** **N/A**
1/2-1 **EVERETT, WA 98201** **LUST**
0.840 mi. **UST**
4435 ft. **VCP**

Relative:
Higher

Actual:
88 ft.

CSCSL:

Facility ID:	54678156
Facility Type:	VCP
Region:	Northwest
Ecology Status Code:	3
Entered Date:	5/22/2009
Updated Date:	12/18/2009
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	Not reported
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.005738
Longitude:	-122.198667

JACKPOT FOOD MART CO 169 (Continued) **U000920695**

Lat/Long:	48.005738 / -122.198667
Lat/Long (dms):	48 0 20.657 / -122 11 55.201
Media Status Desc:	5/27/2009
Affected Media:	Soil
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported

Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	54678156
Facility Type:	VCP
Region:	Northwest
Ecology Status Code:	3
Entered Date:	5/22/2009
Updated Date:	12/18/2009
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	Not reported
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.005738
Longitude:	-122.198667
Lat/Long:	48.005738 / -122.198667
Lat/Long (dms):	48 0 20.657 / -122 11 55.201
Media Status Desc:	1/1/0001
Affected Media:	Groundwater
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported

JACKPOT FOOD MART CO 169 (Continued) **U000920695**

Radioactive Wastes: Not reported
Asbestos: Not reported
Responsible Unit: NORTHWEST
Arsenic Code: Not reported
MTBE Code: Not reported
UXO Code: Not reported
Dioxin: Not reported
Non-Halogenated Solvents: Not reported
Base/Neutral/Acid Organics: Not reported
Halogenated Organic Compounds: Not reported
EPA Priority Pollutants - Metals and Cyanide: Not reported
Metals - Other non-priority pollutant medals: Not reported
Polychlorinated biPhenyls (PCBs): Not reported
Polynuclear Aromatic Hydrocarbons (PAH): Not reported
Conventional Contaminants, Organic: Not reported
Conventional Contaminants, Inorganic: Not reported
Tibutyl Tin Contaminant Group: Not reported
Bioassay/Benthic Failures Contaminant Group: Not reported
Wood Debris Contaminant Group: Not reported
Other Deleterious Substance Group: Not reported
Ecology Site Status (MTCA cleanup process): RA in Progress

ALLSITES:
Facility Id: 54678156
Latitude: 48.005738000000001
Longitude: -122.198667
Geographic location identifier (alias facid): 54678156
Facility Name: JACKPOT FOOD MART CO 169
Latitude Decimal Degrees: 48.005738000000001
Longitude Decimal Degrees: -122.198667
Coordinate Point Areal Extent Code: 4
Horizontal Accuracy Code: 6
Coordinate Point Geographic Position Code: 5
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 54678156
Interaction (Aka Env Int) Type Code: UST
Interaction (Aka Env Int) Description: Underground Storage Tank
Interaction Status: I
Federal Program Indentifier: 4064
Interaction Start Date: 1/1/1958
Interaction End Date: 12/2/2003

Geographic Location Identifier (Alias Facid): 54678156
Interaction (Aka Env Int) Type Code: TIER2
Interaction (Aka Env Int) Description: Emergency/Haz Chem Rpt TIER2
Interaction Status: I
Federal Program Indentifier: CRK000013730
Interaction Start Date: 1/1/1990
Interaction End Date: 7/4/1776

Geographic Location Identifier (Alias Facid): 54678156
Interaction (Aka Env Int) Type Code: LUST
Interaction (Aka Env Int) Description: LUST Facility
Interaction Status: A
Federal Program Indentifier: 4064
Interaction Start Date: 3/30/2004

JACKPOT FOOD MART CO 169 (Continued) **U000920695**

Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 54678156
Interaction (Aka Env Int) Type Code: VOLCLNST
Interaction (Aka Env Int) Description: Voluntary Cleanup Sites
Interaction Status: A
Federal Program Indentifier: nw2157
Interaction Start Date: 5/22/2009
Interaction End Date: Not reported

LUST:
edr_fstat: WA
edr_fzip: 982011204
edr_fcnty: SNOHOMISH
edr_zip: 98201-1204
FS ID: 54678156
Facility ID: 4064
Facility Status: Cleanup Started
Release ID: 591809
Affected Media: Ground Water
Alternate Name: TIME OIL 01-169 / JACKPOT
Release Notification Date: 3/30/2004
Release Status Date: 12/3/2003
Site Response Unit Code: NORTHWEST
Lat/Long: 48.005738 / -122.198667

edr_fstat: WA
edr_fzip: 982011204
edr_fcnty: SNOHOMISH
edr_zip: 98201-1204
FS ID: 54678156
Facility ID: 4064
Facility Status: Cleanup Started
Release ID: 591809
Affected Media: Soil
Alternate Name: TIME OIL 01-169 / JACKPOT
Release Notification Date: 3/30/2004
Release Status Date: 12/3/2003
Site Response Unit Code: NORTHWEST
Lat/Long: 48.005738 / -122.198667

UST:
Facility ID: 54678156
Site ID: 4064
Lat Deg: 48
Lat Min: 0
Lat Sec: 20.6568000000033
Long Deg: -122
Long Min: 11
Long Sec: 55.2012000000013
UBI: 1780475260010057
Phone Number: 2062866450

Tank ID: 13470
Tank Name: 45

JACKPOT FOOD MART CO 169 (Continued) **U000920695**

Install Date:	1/1/1958
Capacity:	5,000 to 9,999 Gallons
Tank Upgrade Date:	4/15/1987
TankSystem Status:	Removed
TankSystem Status Change Date:	4/7/2004
Tank Status:	Removed
Tank Permit Expiration Date:	11/30/2003
Tank Closure Date:	12/2/2003
Tank Pumping System:	Pressurized System
Tank Spill Prevention:	Spill Bucket/Spill Box
Tank Overfill Prevention:	Automatic Shutoff (fill pipe)
Tank Material:	Coated Steel
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Annual
Tank Corrosion Protection:	Impressed Current
Pipe Material:	Fiberglass
Pipe Construction:	Single Wall Pipe
Pipe Primary Release Detection:	Automatic Line Leak Detection
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Impressed Current
Tank Primary Release Detection:	Manual Inventory Control (daily)
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Annual
Tank Actual Status Date:	8/6/1996
Tag Number:	A0052

Tank ID:	13736
Tank Name:	48
Install Date:	1/1/1958
Capacity:	5,000 to 9,999 Gallons
Tank Upgrade Date:	4/15/1987
TankSystem Status:	Removed
TankSystem Status Change Date:	4/7/2004
Tank Status:	Removed
Tank Permit Expiration Date:	11/30/2003
Tank Closure Date:	12/2/2003
Tank Pumping System:	Pressurized System
Tank Spill Prevention:	Spill Bucket/Spill Box
Tank Overfill Prevention:	Automatic Shutoff (fill pipe)
Tank Material:	Coated Steel
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Annual
Tank Corrosion Protection:	Impressed Current
Pipe Material:	Fiberglass
Pipe Construction:	Single Wall Pipe
Pipe Primary Release Detection:	Automatic Line Leak Detection
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Impressed Current
Tank Primary Release Detection:	Manual Inventory Control (daily)
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Annual
Tank Actual Status Date:	8/6/1996
Tag Number:	A0052

Tank ID:	19816

JACKPOT FOOD MART CO 169 (Continued) **U000920695**

Tank Name:	50
Install Date:	1/1/1958
Capacity:	5,000 to 9,999 Gallons
Tank Upgrade Date:	4/15/1987
TankSystem Status:	Removed
TankSystem Status Change Date:	4/7/2004
Tank Status:	Removed
Tank Permit Expiration Date:	11/30/2003
Tank Closure Date:	12/2/2003
Tank Pumping System:	Pressurized System
Tank Spill Prevention:	Spill Bucket/Spill Box
Tank Overfill Prevention:	Automatic Shutoff (fill pipe)
Tank Material:	Coated Steel
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Annual
Tank Corrosion Protection:	Impressed Current
Pipe Material:	Fiberglass
Pipe Construction:	Single Wall Pipe
Pipe Primary Release Detection:	Automatic Line Leak Detection
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Impressed Current
Tank Primary Release Detection:	Manual Inventory Control (daily)
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Annual
Tank Actual Status Date:	8/6/1996
Tag Number:	A0052

Tank ID:	21720
Tank Name:	193
Install Date:	7/1/1976
Capacity:	10,000 to 19,999 Gallons
Tank Upgrade Date:	4/15/1987
TankSystem Status:	Removed
TankSystem Status Change Date:	4/7/2004
Tank Status:	Removed
Tank Permit Expiration Date:	11/30/2003
Tank Closure Date:	12/2/2003
Tank Pumping System:	Pressurized System
Tank Spill Prevention:	Spill Bucket/Spill Box
Tank Overfill Prevention:	Automatic Shutoff (fill pipe)
Tank Material:	Coated Steel
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Annual
Tank Corrosion Protection:	Impressed Current
Pipe Material:	Fiberglass
Pipe Construction:	Single Wall Pipe
Pipe Primary Release Detection:	Automatic Line Leak Detection
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Impressed Current
Tank Primary Release Detection:	Manual Inventory Control (daily)
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Annual
Tank Actual Status Date:	8/6/1996
Tag Number:	A0052

JACKPOT FOOD MART CO 169 (Continued) **U000920695**

VCP:

edr_fstat:	WA
edr_fzip:	98201-1204
edr_fcnty:	SNOHOMISH
edr_zip:	98201-1204
Facility ID:	54678156
VCP Status:	VCP
VCP:	Not reported
Ecology Status:	RA in Progress
NFA Type:	RA in Progress
Date NFA:	RA in Progress
Rank:	RA in Progress

edr_fstat:	WA
edr_fzip:	98201-1204
edr_fcnty:	SNOHOMISH
edr_zip:	98201-1204
Facility ID:	54678156
VCP Status:	VCP
VCP:	Not reported
Ecology Status:	RA in Progress
NFA Type:	RA in Progress
Date NFA:	RA in Progress
Rank:	RA in Progress

J44 **BAY WOOD PRODUCTS** **CSCSL** **S108969368**
NNE **HSL** **N/A**
1/2-1 **EVERETT, WA** **ALLSITES**
0.898 mi. **SPILLS**
4741 ft. **Site 1 of 2 in cluster J** **INST CONTROL**

Relative:
Higher

Actual:
17 ft.

CSCSL:

Facility ID:	4438651
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	3
Entered Date:	12/10/2007
Updated Date:	1/30/2009
Brownfield Status:	0
Rank Status:	4
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.016856
Longitude:	-122.209633
Lat/Long:	48.016856 / -122.209633
Lat/Long (dms):	48 1 0.682 / -122 12 34.679
Media Status Desc:	5/1/2009
Affected Media:	Sediment
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Suspected
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported

BAY WOOD PRODUCTS (Continued) **S108969368**

Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Suspected
Non-Halogenated Solvents:	Suspected
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Suspected
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Suspected
Polynuclear Aromatic Hydrocarbons (PAH):	Suspected
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Confirmed
Wood Debris Contaminant Group:	Confirmed
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	4438651
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	3
Entered Date:	12/10/2007
Updated Date:	1/30/2009
Brownfield Status:	0
Rank Status:	4
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.016856
Longitude:	-122.209633
Lat/Long:	48.016856 / -122.209633
Lat/Long (dms):	48 1 0.682 / -122 12 34.679
Media Status Desc:	1/1/0001
Affected Media:	Soil
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported

BAY WOOD PRODUCTS (Continued) **S108969368**

EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Suspected
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Suspected
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	RA in Progress

Facility ID:	4438651
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	3
Entered Date:	12/10/2007
Updated Date:	1/30/2009
Brownfield Status:	0
Rank Status:	4
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.016856
Longitude:	-122.209633
Lat/Long:	48.016856 / -122.209633
Lat/Long (dms):	48 1 0.682 / -122 12 34.679
Media Status Desc:	1/1/0001
Affected Media:	Groundwater
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	HEADQUARTERS
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Not reported
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Suspected
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Suspected
Other Deleterious Substance Group:	Not reported

BAY WOOD PRODUCTS (Continued) **S108969368**

Ecology Site Status (MTCA cleanup process): RA in Progress

HSL:
edr_fstat: WA
edr_fzip: Not reported
edr_fcnty: SNOHOMISH
edr_zip: Not reported
Facility Type: Hazardous Sites List
Facility Status: RA in progress
FSID Number: 4438651
Rank: 4
Region: HQ

ALLSITES:
Facility Id: 4438651
Latitude: 48.016855999999997
Longitude: -122.209633
Geographic location identifier (alias facid): 4438651
Facility Name: BAY WOOD PRODUCTS
Latitude Decimal Degrees: 48.016855999999997
Longitude Decimal Degrees: -122.209633
Coordinate Point Areal Extent Code: 1
Horizontal Accuracy Code: 9
Coordinate Point Geographic Position Code: 5
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 4438651
Interaction (Aka Env Int) Type Code: ENFORFNL
Interaction (Aka Env Int) Description: Enforcement Final
Interaction Status: A
Federal Program Indentifier: Not reported
Interaction Start Date: 3/12/2008
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 4438651
Interaction (Aka Env Int) Type Code: SCS
Interaction (Aka Env Int) Description: State Cleanup Site
Interaction Status: A
Federal Program Indentifier: Not reported
Interaction Start Date: 12/10/2007
Interaction End Date: Not reported

SPILLS:
Facility ID: 605740
Medium: Not reported
Material Desc: PETROLEUM - UNKNOWN
Material Qty: Not reported
Material Units: GALLON
Date Received: 5/14/2008 3:35:00 PM
Contact Name: UNKNOWN

Facility ID: 604190
Medium: Not reported
Material Desc: PETROLEUM - MOTOR OIL
Material Qty: 0

BAY WOOD PRODUCTS (Continued) **S108969368**

Material Units: GALLON
Date Received: 3/6/2008 5:00:00 PM
Contact Name: ANDERSON

Facility ID: 615867
Medium: SURFACE WATER-MARINE
Material Desc: PETROLEUM - HYDRAULIC OIL
Material Qty: Not reported
Material Units: GALLON
Date Received: 10/13/2009 5:46:00 PM
Contact Name: MILLER

INST CONTROL:

Facility Site ID:	4438651
Decision Type:	Agreed Order
Document Type:	Not reported
County Filing # For Individual IC Doc:	Not reported
Filing Date Of Individual IC Doc:	Not reported
Status:	Not reported
Status Date:	Not reported
Anchorage Restrictions:	No
Drinking Water Restrictions:	No
Education Programs:	No
Financial Assurance:	No
Finfish Harvesting Restrictions:	No
Groundwater Restriction:	No
Maintenance Requirements:	No
No Dredge Zone:	No
No Wake Zone:	No
Physical Measures:	No
Property Use Restriction:	No
Restrictive Signage:	No
Shellfish Harvesting Restrictions:	No
Soil Restriction:	No
Surface Water Restriction:	No
Swimming Restriction:	No
Vessel Draft Restriction:	No

J45 **LEGION MEMORIAL GOLF COURSE** **CSCSL** **S104971344**
NNE **E MARINE VIEW DRIVE** **ALLSITES** **N/A**
1/2-1 **EVERETT, WA 98201**
0.907 mi.
4787 ft. **Site 2 of 2 in cluster J**

Relative:
Higher

Actual:
18 ft.

CSCSL:

Facility ID:	9311679
Facility Type:	Not reported
Region:	Northwest
Ecology Status Code:	1
Entered Date:	12/19/1997
Updated Date:	12/15/2009
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported

LEGION MEMORIAL GOLF COURSE (Continued) **S104971344**

Acres Remediated: Not reported
Latitude: 48.016416
Longitude: -122.207083
Lat/Long: 48.016416 / -122.207083
Lat/Long (dms): 48 0 59.098 / -122 12 25.499
Media Status Desc: 1/1/0001
Affected Media: Soil
Affected Media Status: Confirmed
Pesticides: Not reported
Petroleum Products: Not reported
Phenolic Compounds: Not reported
Reactive Wastes: Not reported
Corrosive Wastes: Not reported
Radioactive Wastes: Not reported
Asbestos: Not reported
Responsible Unit: NORTHWEST
Arsenic Code: Not reported
MTBE Code: Not reported
UXO Code: Not reported
Dioxin: Not reported
Non-Halogenated Solvents: Not reported
Base/Neutral/Acid Organics: Not reported
Halogenated Organic Compounds: Not reported
EPA Priority Pollutants - Metals and Cyanide: Confirmed
Metals - Other non-priority pollutant medals: Not reported
Polychlorinated biPhenyls (PCBs): Not reported
Polynuclear Aromatic Hydrocarbons (PAH): Not reported
Conventional Contaminants, Organic: Not reported
Conventional Contaminants, Inorganic: Not reported
Tibutyl Tin Contaminant Group: Not reported
Bioassay/Benthic Failures Contaminant Group: Not reported
Wood Debris Contaminant Group: Not reported
Other Deleterious Substance Group: Not reported
Ecology Site Status (MTCA cleanup process): Awaiting SHA

ALLSITES:
Facility Id: 9311679
Latitude: 48.016416
Longitude: -122.207083
Geographic location identifier (alias facid): 9311679
Facility Name: Legion Memorial Golf Course
Latitude Decimal Degrees: 48.016416
Longitude Decimal Degrees: -122.207083
Coordinate Point Areal Extent Code: 1
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 8
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 9311679
Interaction (Aka Env Int) Type Code: VOLCLNST
Interaction (Aka Env Int) Description: Voluntary Cleanup Sites
Interaction Status: I
Federal Program Indentifier: NW2017
Interaction Start Date: 12/9/2008
Interaction End Date: 12/14/2009

Geographic Location Identifier (Alias Facid): 9311679

LEGION MEMORIAL GOLF COURSE (Continued) **S104971344**

Interaction (Aka Env Int) Type Code:	VOLCLNST
Interaction (Aka Env Int) Description:	Voluntary Cleanup Sites
Interaction Status:	I
Federal Program Indentifier:	NW0185
Interaction Start Date:	12/20/1997
Interaction End Date:	9/4/2008

46
ENE
1/2-1
0.951 mi.
5021 ft.

WA DOT EVERETT MAINTENANCE FACILITY **CSCSL S103398303**
709 N BROADWAY **ALLSITES N/A**
EVERETT, WA 98201

Relative:
Higher

Actual:
115 ft.

CSCSL:

Facility ID:	39896563
Facility Type:	Independent
Region:	Northwest
Ecology Status Code:	1
Entered Date:	11/10/1998
Updated Date:	6/24/2009
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	Not reported
Clean Method:	Thermal Desorption
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	48.00753
Longitude:	-122.19514
Lat/Long:	48.00753 / -122.19514
Lat/Long (dms):	48 0 27.108 / -122 11 42.504
Media Status Desc:	1/1/0001
Affected Media:	Soil
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Not reported
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Confirmed
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Not reported
EPA Priority Pollutants - Metals and Cyanide:	Not reported
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Not reported
Conventional Contaminants, Organic:	Not reported
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported

WA DOT EVERETT MAINTENANCE FACILITY (Continued) **S103398303**

Wood Debris Contaminant Group: Not reported
Other Deleterious Substance Group: Not reported
Ecology Site Status (MTCA cleanup process): Awaiting SHA

ALLSITES:
Facility Id: 39896563
Latitude: 48.007530000000003
Longitude: -122.19513999999999
Geographic location identifier (alias facid): 39896563
Facility Name: WA DOT Everett Maintenance Facility
Latitude Decimal Degrees: 48.007530000000003
Longitude Decimal Degrees: -122.19513999999999
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 99
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 39896563
Interaction (Aka Env Int) Type Code: LUST
Interaction (Aka Env Int) Description: LUST Facility
Interaction Status: I
Federal Program Indentifier: 12269
Interaction Start Date: 11/20/1990
Interaction End Date: 6/1/1995

Geographic Location Identifier (Alias Facid): 39896563
Interaction (Aka Env Int) Type Code: INDPNDNT
Interaction (Aka Env Int) Description: Independent Cleanup
Interaction Status: A
Federal Program Indentifier: Not reported
Interaction Start Date: 11/10/1998
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 39896563
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: I
Federal Program Indentifier: WAD981772197
Interaction Start Date: 3/11/1988
Interaction End Date: 12/31/1996

Geographic Location Identifier (Alias Facid): 39896563
Interaction (Aka Env Int) Type Code: UST
Interaction (Aka Env Int) Description: Underground Storage Tank
Interaction Status: A
Federal Program Indentifier: 12269
Interaction Start Date: 3/20/2000
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 39896563
Interaction (Aka Env Int) Type Code: TIER2
Interaction (Aka Env Int) Description: Emergency/Haz Chem Rpt TIER2
Interaction Status: A
Federal Program Indentifier: CRK000047580
Interaction Start Date: 1/1/1998
Interaction End Date: Not reported

47
South
1/2-1
0.987 mi.
5210 ft.

Relative:
Higher

Actual:
21 ft.

NAVAL STATION EVERETT
2000 W MARINE VIEW DR
EVERETT, WA 98201

Database(s): CERCLIS, RCRA-LQG, FINDS, CSCSL, ALLSITES, MANIFEST, SPILLS

EDR ID Number: 1000660753
EPA ID Number: WA2170000127

CERCLIS:
Site ID: 1001863
Federal Facility: Federal Facility
NPL Status: Not on the NPL
Non NPL Status: Fed Fac Site Inspection Review Start Needed

CERCLIS Site Contact Name(s):
Contact Name: KEN MARCY
Contact Tel: (206) 553-2782
Contact Title: Site Assessment Manager (SAM)

CERCLIS Site Alias Name(s):
Alias Name: USNAVY PUGET SOUND NAVAL STA:EVERETT
Alias Address: WEST MARINE DRIVE
EVERETT, WA 98201
Alias Name: EVERETT NAVAL STATION
Alias Address: 2000 W MARINE VIEW DR
EVERETT, WA 99652
Site Description: Not reported

CERCLIS Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 04/16/92
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: 09/28/95
Date Completed: 09/28/95
Priority Level: Higher priority for further assessment

RCRA-LQG:
Date form received by agency: 02/04/2008
Facility name: NAVAL STATION EVERETT
Facility address: 2000 W MARINE VIEW DR
EVERETT, WA 982012282
EPA ID: WA2170000127
Mailing address: BLDG 2000 RM 225
2000 WEST MARINE VIEW DR
EVERETT, WA 98207-5001
Contact: KATHRYN A SOUDERS
Contact address: BLDG 2000 RM 225 2000 WEST MARINE VIEW DR
EVERETT, WA 98207-5001
Contact country: US
Contact telephone: (425)304-3463
Contact email: Not reported
EPA Region: 10
Land type: Federal
Classification: Large Quantity Generator

NAVAL STATION EVERETT (Continued) **1000660753**

Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:
Owner/operator name: COMMANDING OFFICER
Owner/operator address: BLDG 2000 RM 225 2000 WEST MARINE VIEW DR
EVERETT, WA 98207
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Federal
Owner/Operator Type: Operator
Owner/Op start date: 01/06/1998
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Universal Waste Summary:
Waste type: Batteries
Accumulated waste on-site: No
Generated waste on-site: Yes

Waste type: Lamps
Accumulated waste on-site: No
Generated waste on-site: Yes

Historical Generators:
Date form received by agency: 12/31/2007
Facility name: NAVAL STATION EVERETT
Classification: Large Quantity Generator

NAVAL STATION EVERETT (Continued) **1000660753**

Date form received by agency: 12/31/2005
Facility name: NAVAL STATION EVERETT
Classification: Large Quantity Generator

Date form received by agency: 12/31/2003
Facility name: NAVAL STATION EVERETT
Site name: US NAVY STATION EVERETT
Classification: Large Quantity Generator

Date form received by agency: 03/01/2002
Facility name: NAVAL STATION EVERETT
Site name: US NAVY STATION EVERETT
Classification: Large Quantity Generator

Date form received by agency: 02/28/2000
Facility name: NAVAL STATION EVERETT
Site name: US NAVY STATION EVERETT
Classification: Large Quantity Generator

Date form received by agency: 03/03/1998
Facility name: NAVAL STATION EVERETT
Site name: US NAVY STATION EVERETT
Classification: Large Quantity Generator

Date form received by agency: 03/01/1996
Facility name: NAVAL STATION EVERETT
Site name: UNITED STATES NAVAL STATION - EVERETT
Classification: Large Quantity Generator

Date form received by agency: 03/31/1994
Facility name: NAVAL STATION EVERETT
Classification: Large Quantity Generator

Biennial Reports:

Last Biennial Reporting Year: 2009

Annual Waste Handled:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 54018

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs): 7435

NAVAL STATION EVERETT (Continued) **1000660753**

Waste code:	D003
Waste name:	A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
Amount (Lbs):	197
Waste code:	D004
Waste name:	ARSENIC
Amount (Lbs):	2
Waste code:	D005
Waste name:	BARIUM
Amount (Lbs):	47470
Waste code:	D006
Waste name:	CADMIUM
Amount (Lbs):	17898
Waste code:	D007
Waste name:	CHROMIUM
Amount (Lbs):	46619
Waste code:	D008
Waste name:	LEAD
Amount (Lbs):	27437
Waste code:	D009
Waste name:	MERCURY
Amount (Lbs):	605
Waste code:	D011
Waste name:	SILVER
Amount (Lbs):	346
Waste code:	D018
Waste name:	BENZENE
Amount (Lbs):	37922
Waste code:	D035
Waste name:	METHYL ETHYL KETONE
Amount (Lbs):	41001
Waste code:	D039
Waste name:	TETRACHLOROETHYLENE
Amount (Lbs):	125
Waste code:	F003
Waste name:	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL

NAVAL STATION EVERETT (Continued) **1000660753**

BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 1784

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 2005

Waste code: U002
Waste name: ACETONE (I)
Amount (Lbs): 864

Waste code: U154
Waste name: METHANOL (I)
Amount (Lbs): 297

Waste code: U210
Waste name: ETHENE, TETRACHLORO-
Amount (Lbs): 20

Waste code: U359
Waste name: ETHANOL, 2-ETHOXY-
Amount (Lbs): 291

Facility Has Received Notices of Violations:
Regulation violated: SR - -630(6)
Area of violation: Generators - General
Date violation determined: 06/28/2001
Date achieved compliance: 07/16/2001
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/11/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200(1)(c)
Area of violation: Generators - General
Date violation determined: 06/28/2001
Date achieved compliance: 06/28/2001
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/11/2001
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

NAVAL STATION EVERETT (Continued) **1000660753**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 170(1)(A)/070(3)
Area of violation: Generators - General
Date violation determined: 03/17/1999
Date achieved compliance: 03/17/1999
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/27/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 200(1)(C)
Area of violation: Generators - General
Date violation determined: 03/17/1999
Date achieved compliance: 05/11/1999
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/27/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 330
Area of violation: Generators - General
Date violation determined: 03/17/1999
Date achieved compliance: 05/20/1999
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/27/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 200(1)(c)(d)
Area of violation: Generators - General
Date violation determined: 05/24/1996
Date achieved compliance: 05/28/1996
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/24/1996
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

NAVAL STATION EVERETT (Continued) **1000660753**

Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 06/28/2001
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 06/28/2001
Evaluation lead agency: State

Evaluation date: 06/28/2001
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/16/2001
Evaluation lead agency: State

Evaluation date: 03/17/1999
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/11/1999
Evaluation lead agency: State

Evaluation date: 03/17/1999
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 03/17/1999
Evaluation lead agency: State

Evaluation date: 03/17/1999
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/20/1999
Evaluation lead agency: State

Evaluation date: 05/24/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/28/1996
Evaluation lead agency: State

FINDS:

Registry ID: 110000896941

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants.

NAVAL STATION EVERETT (Continued) **1000660753**

AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

US Facility Response Plan (FRP) contains plans for responding, to the maximum extent practical, to worst case discharges of oil.

CSCSL:

Facility ID:	2776
Facility Type:	Independent
Region:	Northwest
Ecology Status Code:	1
Entered Date:	1/8/1992
Updated Date:	6/24/2009
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.99159
Longitude:	-122.21416
Lat/Long:	47.99159 / -122.21416
Lat/Long (dms):	47 59 29.724 / -122 12 50.976
Media Status Desc:	1/1/0001
Affected Media:	Groundwater
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Confirmed
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported

NAVAL STATION EVERETT (Continued) **1000660753**

Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Suspected
Non-Halogenated Solvents:	Confirmed
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Confirmed
EPA Priority Pollutants - Metals and Cyanide:	Confirmed
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Confirmed
Polynuclear Aromatic Hydrocarbons (PAH):	Confirmed
Conventional Contaminants, Organic:	Confirmed
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Awaiting SHA

Facility ID:	2776
Facility Type:	Independent
Region:	Northwest
Ecology Status Code:	1
Entered Date:	1/8/1992
Updated Date:	6/24/2009
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.99159
Longitude:	-122.21416
Lat/Long:	47.99159 / -122.21416
Lat/Long (dms):	47 59 29.724 / -122 12 50.976
Media Status Desc:	1/1/0001
Affected Media:	Soil
Affected Media Status:	Confirmed
Pesticides:	Not reported
Petroleum Products:	Confirmed
Phenolic Compounds:	Confirmed
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Suspected
Non-Halogenated Solvents:	Confirmed
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Confirmed
EPA Priority Pollutants - Metals and Cyanide:	Confirmed

NAVAL STATION EVERETT (Continued) **1000660753**

Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Confirmed
Polynuclear Aromatic Hydrocarbons (PAH):	Confirmed
Conventional Contaminants, Organic:	Confirmed
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Awaiting SHA

Facility ID:	2776
Facility Type:	Independent
Region:	Northwest
Ecology Status Code:	1
Entered Date:	1/8/1992
Updated Date:	6/24/2009
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.99159
Longitude:	-122.21416
Lat/Long:	47.99159 / -122.21416
Lat/Long (dms):	47 59 29.724 / -122 12 50.976
Media Status Desc:	1/1/0001
Affected Media:	Surface Water
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Suspected
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Suspected
Non-Halogenated Solvents:	Suspected
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Suspected
EPA Priority Pollutants - Metals and Cyanide:	Suspected
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Suspected
Polynuclear Aromatic Hydrocarbons (PAH):	Suspected
Conventional Contaminants, Organic:	Suspected
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Awaiting SHA

NAVAL STATION EVERETT (Continued) **1000660753**

Facility ID:	2776
Facility Type:	Independent
Region:	Northwest
Ecology Status Code:	1
Entered Date:	1/8/1992
Updated Date:	6/24/2009
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	1
Clean Method:	Not reported
Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.99159
Longitude:	-122.21416
Lat/Long:	47.99159 / -122.21416
Lat/Long (dms):	47 59 29.724 / -122 12 50.976
Media Status Desc:	1/1/0001
Affected Media:	Air
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Suspected
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Not reported
Non-Halogenated Solvents:	Suspected
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Suspected
EPA Priority Pollutants - Metals and Cyanide:	Suspected
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Not reported
Polynuclear Aromatic Hydrocarbons (PAH):	Suspected
Conventional Contaminants, Organic:	Suspected
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Awaiting SHA

Facility ID:	2776
Facility Type:	Independent
Region:	Northwest
Ecology Status Code:	1
Entered Date:	1/8/1992
Updated Date:	6/24/2009
Brownfield Status:	0
Rank Status:	Not reported
PSI Status:	1
Clean Method:	Not reported

NAVAL STATION EVERETT (Continued) **1000660753**

Drinking Water Type:	Not reported
Cleanup Standard:	Not reported
Acres Remediated:	Not reported
Latitude:	47.99159
Longitude:	-122.21416
Lat/Long:	47.99159 / -122.21416
Lat/Long (dms):	47 59 29.724 / -122 12 50.976
Media Status Desc:	1/1/0001
Affected Media:	Sediment
Affected Media Status:	Suspected
Pesticides:	Not reported
Petroleum Products:	Suspected
Phenolic Compounds:	Suspected
Reactive Wastes:	Not reported
Corrosive Wastes:	Not reported
Radioactive Wastes:	Not reported
Asbestos:	Not reported
Responsible Unit:	NORTHWEST
Arsenic Code:	Not reported
MTBE Code:	Not reported
UXO Code:	Not reported
Dioxin:	Suspected
Non-Halogenated Solvents:	Suspected
Base/Neutral/Acid Organics:	Not reported
Halogenated Organic Compounds:	Suspected
EPA Priority Pollutants - Metals and Cyanide:	Suspected
Metals - Other non-priority pollutant medals:	Not reported
Polychlorinated biPhenyls (PCBs):	Suspected
Polynuclear Aromatic Hydrocarbons (PAH):	Suspected
Conventional Contaminants, Organic:	Suspected
Conventional Contaminants, Inorganic:	Not reported
Tibutyl Tin Contaminant Group:	Not reported
Bioassay/Benthic Failures Contaminant Group:	Not reported
Wood Debris Contaminant Group:	Not reported
Other Deleterious Substance Group:	Not reported
Ecology Site Status (MTCA cleanup process):	Awaiting SHA

ALLSITES:

Facility Id:	2776
Latitude:	47.991590000000002
Longitude:	-122.21416000000001
Geographic location identifier (alias facid):	2776
Facility Name:	US NAVY Station Everett
Latitude Decimal Degrees:	47.991590000000002
Longitude Decimal Degrees:	-122.21416000000001
Coordinate Point Areal Extent Code:	99
Horizontal Accuracy Code:	99
Coordinate Point Geographic Position Code:	99
Location Verified Code:	N

Geographic Location Identifier (Alias Facid):	2776
Interaction (Aka Env Int) Type Code:	TIER2
Interaction (Aka Env Int) Description:	Emergency/Haz Chem Rpt TIER2
Interaction Status:	A
Federal Program Indentifier:	WA2170000127
Interaction Start Date:	1/1/1994
Interaction End Date:	Not reported

NAVAL STATION EVERETT (Continued) **1000660753**

Geographic Location Identifier (Alias Facid): 2776
Interaction (Aka Env Int) Type Code: INDPNDNT
Interaction (Aka Env Int) Description: Independent Cleanup
Interaction Status: A
Federal Program Indentifier: Not reported
Interaction Start Date: 1/1/1900
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 2776
Interaction (Aka Env Int) Type Code: HWP
Interaction (Aka Env Int) Description: Hazardous Waste Planner
Interaction Status: A
Federal Program Indentifier: WA2170000127
Interaction Start Date: 1/1/1996
Interaction End Date: Not reported

Geographic Location Identifier (Alias Facid): 2776
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: A
Federal Program Indentifier: WA2170000127
Interaction Start Date: 7/30/1991
Interaction End Date: Not reported

WA MANIFEST:
Facility Site ID Number: 2776
SWC Desc: WT02, WP01WT02 WP01 WP02 WL02 WSC2
FWC Desc: F001, F002, F003, F005, D001, D002, D003, D007, D008, D009, D011F001 F002 F003 F005 D001 D0
Form Comm: Not reported
Data Year: Not reported
Permit by Rule: False
Treatment by Generator: False
Mixed radioactive waste: False
Importer of hazardous waste: False
Immediate recycler: False
Treatment/Storage/Disposal/Recycling Facility: False
Generator of dangerous fuel waste: False
Generator marketing to burner: False
"Other marketers (i.e., blender, distributor, etc.)": False
Utility boiler burner: False
Industry boiler burner: False
Industrial Furnace: False
Smelter defferal: False
Universal waste - batteries - generate: False
Universal waste - thermostats - generate: False
Universal waste - mercury - generate: False
Universal waste - lamps - generate: True
Universal waste - batteries - accumulate: False
Universal waste - thermostats - accumulate: False
Universal waste - mercury - accumulate: False
Universal waste - lamps - accumulate: False
Destination Facility for Universal Waste: False
Off-specification used oil burner - utility boiler: False
Off-specification used oil burner - industrial boiler: False
Off-specification used oil burner - industrial furnace: False
EPA ID: WA2170000127

NAVAL STATION EVERETT (Continued) **1000660753**

Facility Address 2:	Not reported
TAX REG NBR:	NA
NAICS CD:	928110
BUSINESS TYPE:	US Navy
MAIL NAME:	NAVAL STATION EVERETT, ENVIRONMENTAL
MAIL ADDR LINE1:	BLDG 2000 RM 225
MAIL ADDR LINE2:	2000 WEST MARINE VIEW DR
MAIL CITY,ST,ZIP:	EVERETT, WA 98207-5001
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	USN Commander, Navy Region Northwest
LEGAL ORG TYPE:	Federal
LEGAL ADDR LINE1:	1103 HUNLEY RD
LEGAL CITY,ST,ZIP:	SILVERDALE, WA 98315-1103
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(360)315-5012
LEGAL EFFECTIVE DATE:	9/7/2001
LAND ORG NAME:	USN Commander, Navy Region Northwest
LAND ORG TYPE:	Federal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	1103 HUNLEY RD
LAND CITY,ST,ZIP:	SILVERDALE, WA 98315-1103
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(360)315-5012
OPERATOR ORG NAME:	Commanding Officer
OPERATOR ORG TYPE:	Federal
OPERATOR ADDR LINE1:	2000 W. Marine View Dr.
OPERATOR ADDR LINE2:	Environmental Affairs, Rm 225
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98207-5001
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)304-3463
OPERATOR EFFECTIVE DATE:	01/06/98
SITE CONTACT NAME:	Kathryn A Souders
SITE CONTACT ADDR LINE1:	2000 W. Marine View Dr Code N453
SITE CONTACT ADDR LINE2:	Environmental Affairs
SITE CONTACT ZIP:	EVERETT, WA 98207-5001
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)304-3463
SITE CONTACT EMAIL:	kathryn.souders@navy.mil
FORM CONTACT NAME:	Glen A Miller
FORM CONTACT ADDR LINE1:	2000 W. Marine View Dr.
FORM CONTACT ADDR LINE2:	Environmental Affairs, Rm 225
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98207-5001
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)304-3396
FORM CONTACT EMAIL:	glen.miller@navy.mil
GEN STATUS CD:	LQG
MONTHLY GENERATION:	True
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	True
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False

NAVAL STATION EVERETT (Continued) **1000660753**

USED OIL PROCESSOR: False
USED OIL REREFINER: False
USED OIL FUEL MRKTR DIRECTS SHPMNTS: False
USED OIL FUEL MRKTR MEETS SPECS: False

Facility Site ID Number: 2776
SWC Desc: WT02, WP01WT02 WP01 WP02 WL02 WSC2
FWC Desc: F001, F002, F003, F005, D001, D002, D003, D007, D008, D009, D011F001 F002 F003 F005 D001 D0
Form Comm: Not reported
Data Year: Not reported
Permit by Rule: FALSE
Treatment by Generator: FALSE
Mixed radioactive waste: FALSE
Importer of hazardous waste: FALSE
Immediate recycler: FALSE
Treatment/Storage/Disposal/Recycling Facility: FALSE
Generator of dangerous fuel waste: FALSE
Generator marketing to burner: FALSE
"Other marketers (i.e., blender, distributor, etc.)": FALSE
Utility boiler burner: FALSE
Industry boiler burner: FALSE
Industrial Furnace: FALSE
Smelter defferal: FALSE
Universal waste - batteries - generate: FALSE
Universal waste - thermostats - generate: FALSE
Universal waste - mercury - generate: FALSE
Universal waste - lamps - generate: TRUE
Universal waste - batteries - accumulate: FALSE
Universal waste - thermostats - accumulate: FALSE
Universal waste - mercury - accumulate: FALSE
Universal waste - lamps - accumulate: FALSE
Destination Facility for Universal Waste: FALSE
Off-specification used oil burner - utility boiler: FALSE
Off-specification used oil burner - industrial boiler: FALSE
Off-specification used oil burner - industrial furnace: FALSE
EPA ID: WA2170000127
Facility Address 2: Not reported
TAX REG NBR: NA
NAICS CD: 928110
BUSINESS TYPE: US Navy
MAIL NAME: Naval Station Everett, Environmental
MAIL ADDR LINE1: 2000 W Marine View Dr
MAIL ADDR LINE2: Environmental Affairs
MAIL CITY,ST,ZIP: EVERETT, WA 98207-5001
MAIL COUNTRY: UNITED STATES
LEGAL ORG NAME: USN Commander, Navy Region Northwest
LEGAL ORG TYPE: Federal
LEGAL ADDR LINE1: 1103 HUNLEY RD
LEGAL CITY,ST,ZIP: SILVERDALE, WA 98315-1103
LEGAL COUNTRY: UNITED STATES
LEGAL PHONE NBR: (360)315-5012
LEGAL EFFECTIVE DATE: 9/7/2001
LAND ORG NAME: USN Commander, Navy Region Northwest
LAND ORG TYPE: Federal
LAND PERSON NAME: Not reported
LAND ADDR LINE1: 1103 HUNLEY RD
LAND CITY,ST,ZIP: SILVERDALE, WA 98315-1103

NAVAL STATION EVERETT (Continued) **1000660753**

LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(360)315-5012
OPERATOR ORG NAME:	Commanding Officer
OPERATOR ORG TYPE:	Federal
OPERATOR ADDR LINE1:	2000 W. Marine View Dr.
OPERATOR ADDR LINE2:	Environmental Affairs, Rm 225
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98207-5001
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)304-3463
OPERATOR EFFECTIVE DATE:	1/6/1998
SITE CONTACT NAME:	Kathryn A Souders
SITE CONTACT ADDR LINE1:	2000 W. Marine View Dr Code N453
SITE CONTACT ADDR LINE2:	Environmental Affairs
SITE CONTACT ZIP:	EVERETT, WA 98207-5001
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)304-3463
SITE CONTACT EMAIL:	kathryn.souders@navy.mil
FORM CONTACT NAME:	Glen A Miller
FORM CONTACT ADDR LINE1:	2000 W. Marine View Dr.
FORM CONTACT ADDR LINE2:	Environmental Affairs, Rm 225
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98207-5001
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)304-3396
FORM CONTACT EMAIL:	glen.miller@navy.mil
GEN STATUS CD:	LQG
MONTHLY GENERATION:	TRUE
BATCH GENERATION:	FALSE
ONE TIME GENERATION:	FALSE
TRANSPORTS OWN WASTE:	FALSE
TRANSPORTS OTHRS WASTE:	FALSE
RECYCLER ONSITE:	FALSE
TRANSFER FACILITY:	FALSE
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	TRUE
USED OIL TRANSPORTER:	FALSE
USED OIL TRANSFER FACLTY:	FALSE
USED OIL PROCESSOR:	FALSE
USED OIL REREFINER:	FALSE
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	FALSE
USED OIL FUEL MRKTR MEETS SPECS:	FALSE

Facility Site ID Number:	2776
SWC Desc:	WT02, WP01WT02 WP01 WP02 WL02 WSC2
FWC Desc:	F001, F002, F003, F005, D001, D002, D003, D007, D008, D009, D011F001 F002 F003 F005 D001 D0
Form Comm:	Not reported
Data Year:	Not reported
Permit by Rule:	No
Treatment by Generator:	No
Mixed radioactive waste:	No
Importer of hazardous waste:	No
Immediate recycler:	No
Treatment/Storage/Disposal/Recycling Facility:	No
Generator of dangerous fuel waste:	No
Generator marketing to burner:	No
"Other marketers (i.e., blender, distributor, etc.)":	No
Utility boiler burner:	No
Industry boiler burner:	No

NAVAL STATION EVERETT (Continued) **1000660753**

Industrial Furnace:	No
Smelter defferal:	No
Universal waste - batteries - generate:	No
Universal waste - thermostats - generate:	No
Universal waste - mercury - generate:	No
Universal waste - lamps - generate:	Yes
Universal waste - batteries - accumulate:	No
Universal waste - thermostats - accumulate:	No
Universal waste - mercury - accumulate:	No
Universal waste - lamps - accumulate:	No
Destination Facility for Universal Waste:	No
Off-specification used oil burner - utility boiler:	No
Off-specification used oil burner - industrial boiler:	No
Off-specification used oil burner - industrial furnace:	No
EPA ID:	WA2170000127
Facility Address 2:	Not reported
TAX REG NBR:	NA
NAICS CD:	928110
BUSINESS TYPE:	US Navy
MAIL NAME:	Naval Station Everett Environmental
MAIL ADDR LINE1:	2000 W Marine View Dr
MAIL ADDR LINE2:	Environmental Affairs
MAIL CITY,ST,ZIP:	EVERETT, WA 98207-5001
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	USN Commander Navy Region Northwest
LEGAL ORG TYPE:	Federal
LEGAL ADDR LINE1:	1103 HUNLEY RD
LEGAL CITY,ST,ZIP:	SILVERDALE, WA 98315-1103
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(360)315-5012
LEGAL EFFECTIVE DATE:	9/7/2001
LAND ORG NAME:	USN Commander Navy Region Northwest
LAND ORG TYPE:	Federal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	1103 HUNLEY RD
LAND CITY,ST,ZIP:	SILVERDALE, WA 98315-1103
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(360)315-5012
OPERATOR ORG NAME:	Environmental Department
OPERATOR ORG TYPE:	Federal
OPERATOR ADDR LINE1:	2000 W. Marine View Dr.
OPERATOR ADDR LINE2:	Environmental Affairs Rm 225
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98207-5001
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)304-3463
OPERATOR EFFECTIVE DATE:	1/6/1998
SITE CONTACT NAME:	Kathryn A Souders
SITE CONTACT ADDR LINE1:	2000 W. Marine View Dr Code N453
SITE CONTACT ADDR LINE2:	Environmental Affairs
SITE CONTACT ZIP:	EVERETT, WA 98207-5001
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)304-3463
SITE CONTACT EMAIL:	kathryn.souders@navy.mil
FORM CONTACT NAME:	Glen A Miller
FORM CONTACT ADDR LINE1:	2000 W. Marine View Dr.
FORM CONTACT ADDR LINE2:	Environmental Affairs Rm 225
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98207-5001

NAVAL STATION EVERETT (Continued) **1000660753**

FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)304-3396
FORM CONTACT EMAIL:	glen.miller@navy.mil
GEN STATUS CD:	LQG
MONTHLY GENERATION:	Yes
BATCH GENERATION:	No
ONE TIME GENERATION:	No
TRANSPORTS OWN WASTE:	No
TRANSPORTS OTHRS WASTE:	No
RECYCLER ONSITE:	No
TRANSFER FACILITY:	No
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	Yes
USED OIL TRANSPORTER:	No
USED OIL TRANSFER FACLTY:	No
USED OIL PROCESSOR:	No
USED OIL REREFINER:	No
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	No
USED OIL FUEL MRKTR MEETS SPECS:	No

Facility Site ID Number:	2776
SWC Desc:	WT02, WP02, WL02
FWC Desc:	F001, F002, F003, F005, D001, D002, D007, D008, D009, D011
Form Comm:	Not reported
Data Year:	2009
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	True
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WA2170000127
Facility Address 2:	Not reported
TAX REG NBR:	NA
NAICS CD:	928110
BUSINESS TYPE:	US Navy
MAIL NAME:	NAVAL STATION EVERETT, ENVIRONMENTAL
MAIL ADDR LINE1:	BLDG 2000 RM 225

NAVAL STATION EVERETT (Continued) **1000660753**

MAIL ADDR LINE2:	2000 WEST MARINE VIEW DR
MAIL CITY,ST,ZIP:	EVERETT, WA 98207-5001
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	USN Commander, Navy Region Northwest
LEGAL ORG TYPE:	Federal
LEGAL ADDR LINE1:	1103 HUNLEY RD
LEGAL CITY,ST,ZIP:	SILVERDALE, WA 98315-1103
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(360)315-5012
LEGAL EFFECTIVE DATE:	9/7/2001
LAND ORG NAME:	USN Commander, Navy Region Northwest
LAND ORG TYPE:	Federal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	1103 HUNLEY RD
LAND CITY,ST,ZIP:	SILVERDALE, WA 98315-1103
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(360)315-5012
OPERATOR ORG NAME:	Commanding Officer
OPERATOR ORG TYPE:	Federal
OPERATOR ADDR LINE1:	2000 W. Marine View Dr.
OPERATOR ADDR LINE2:	Environmental Affairs, Rm 225
OPERATOR CITY,ST,ZIP:	EVERETT, WA 98207-5001
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)304-3463
OPERATOR EFFECTIVE DATE:	1/6/1998
SITE CONTACT NAME:	Anne Huebner
SITE CONTACT ADDR LINE1:	2000 W. Marine View Dr Code N453
SITE CONTACT ADDR LINE2:	Environmental Affairs
SITE CONTACT ZIP:	EVERETT, WA 98207-5001
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)304-3463
SITE CONTACT EMAIL:	glen.miller@navy.mil
FORM CONTACT NAME:	Glen A Miller
FORM CONTACT ADDR LINE1:	2000 W. Marine View Dr.
FORM CONTACT ADDR LINE2:	Environmental Affairs, Rm 225
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98207-5001
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)304-3396
FORM CONTACT EMAIL:	glen.miller@navy.mil
GEN STATUS CD:	LQG
MONTHLY GENERATION:	True
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	True
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Facility Site ID Number: 2776

NAVAL STATION EVERETT (Continued) **1000660753**

SWC Desc:	WT02, WP01, WP02, WSC2
FWC Desc:	F001, F002, F003, F005, D001, d002, D003, D007, D008, D009, D011
Form Comm:	Not reported
Data Year:	2008
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	True
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WA2170000127
Facility Address 2:	Not reported
TAX REG NBR:	NA
NAICS CD:	928110
BUSINESS TYPE:	US Navy
MAIL NAME:	NAVAL STATION EVERETT, ENVIRONMENTAL
MAIL ADDR LINE1:	BLDG 2000 RM 225
MAIL ADDR LINE2:	2000 WEST MARINE VIEW DR
MAIL CITY,ST,ZIP:	EVERETT, WA 98207-5001
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	USN Commander, Navy Region Northwest
LEGAL ORG TYPE:	Federal
LEGAL ADDR LINE1:	1103 HUNLEY RD
LEGAL CITY,ST,ZIP:	SILVERDALE, WA 98315-1103
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(360)315-5012
LEGAL EFFECTIVE DATE:	9/7/2001
LAND ORG NAME:	USN Commander, Navy Region Northwest
LAND ORG TYPE:	Federal
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	1103 HUNLEY RD
LAND CITY,ST,ZIP:	SILVERDALE, WA 98315-1103
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(360)315-5012
OPERATOR ORG NAME:	Commanding Officer
OPERATOR ORG TYPE:	Federal
OPERATOR ADDR LINE1:	2000 W. Marine View Dr.
OPERATOR ADDR LINE2:	Environmental Affairs, Rm 225

NAVAL STATION EVERETT (Continued) **1000660753**

OPERATOR CITY,ST,ZIP:	EVERETT, WA 98207-5001
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(425)304-3463
OPERATOR EFFECTIVE DATE:	1/6/1998
SITE CONTACT NAME:	Glen Miller
SITE CONTACT ADDR LINE1:	2000 W. Marine View Dr Code N453
SITE CONTACT ADDR LINE2:	Environmental Affairs
SITE CONTACT ZIP:	EVERETT, WA 98207-5001
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(425)304-3463
SITE CONTACT EMAIL:	glen.miller@navy.mil
FORM CONTACT NAME:	Glen A Miller
FORM CONTACT ADDR LINE1:	2000 W. Marine View Dr.
FORM CONTACT ADDR LINE2:	Environmental Affairs, Rm 225
FORM CONTACT CITY,ST,ZIP:	EVERETT, WA 98207-5001
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(425)304-3396
FORM CONTACT EMAIL:	glen.miller@navy.mil
GEN STATUS CD:	LQG
MONTHLY GENERATION:	True
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	True
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

Click this hyperlink while viewing on your computer to access additional WA MANIFEST: detail in the EDR Site Report.

SPILLS:

Facility ID:	422202
Medium:	Not reported
Material Desc:	PETROLEUM - DIESEL FUEL
Material Qty:	15
Material Units:	GALLON
Date Received:	9/23/1995
Contact Name:	VESSEL 'WINNEPEG'

Facility ID:	514281
Medium:	Not reported
Material Desc:	PETROLEUM - UNKNOWN
Material Qty:	1
Material Units:	SHEEN
Date Received:	10/27/2000
Contact Name:	Not reported

Facility ID:	525988
Medium:	Not reported

NAVAL STATION EVERETT (Continued) **1000660753**

Material Desc: PETROLEUM - HYDRAULIC OIL
Material Qty: 1
Material Units: DRIPS/MINUTE
Date Received: 4/24/2002
Contact Name: Not reported

Facility ID: 528387
Medium: Not reported
Material Desc: PETROLEUM - DIESEL FUEL
Material Qty: 0
Material Units: GALLON
Date Received: 8/14/2002
Contact Name: Koprowski

Facility ID: 529419
Medium: Not reported
Material Desc: PETROLEUM - UNKNOWN
Material Qty: 1
Material Units: SHEEN
Date Received: 10/4/2002
Contact Name: Not reported

Facility ID: 555500
Medium: Not reported
Material Desc: PETROLEUM - UNKNOWN
Material Qty: 1
Material Units: SHEEN
Date Received: 6/1/2006
Contact Name: UNK

Facility ID: 553278
Medium: Not reported
Material Desc: PETROLEUM - FUEL OIL
Material Qty: Not reported
Material Units: SHEEN
Date Received: 2/8/2006
Contact Name: Not reported

Facility ID: 552949
Medium: Not reported
Material Desc: PETROLEUM - OIL OTHER
Material Qty: 5
Material Units: GALLON
Date Received: 1/21/2006
Contact Name: Not reported

Facility ID: 559033
Medium: Not reported
Material Desc: PETROLEUM - UNKNOWN
Material Qty: 1
Material Units: SHEEN
Date Received: 11/17/2006
Contact Name: UNK

Facility ID: 600295
Medium: Not reported
Material Desc: BILGE WATER

NAVAL STATION EVERETT (Continued) **1000660753**

Material Qty: Not reported
Material Units: GALLON
Date Received: 8/29/2007 9:33:00 AM
Contact Name: Not reported

Facility ID: 558452
Medium: Not reported
Material Desc: PETROLEUM - OIL OTHER
Material Qty: Not reported
Material Units: Not reported
Date Received: 10/24/2006
Contact Name: Not reported

Facility ID: 563867
Medium: Not reported
Material Desc: PETROLEUM - OIL OTHER
Material Qty: 1
Material Units: GALLON
Date Received: 7/16/2007
Contact Name: Not reported

Facility ID: 600587
Medium: Not reported
Material Desc: BILGE WATER
Material Qty: Not reported
Material Units: GALLON
Date Received: 9/10/2007 10:43:00 AM
Contact Name: Not reported

Facility ID: 601514
Medium: Not reported
Material Desc: PETROLEUM - DIESEL FUEL
Material Qty: 2
Material Units: GALLON
Date Received: 10/18/2007 7:13:00 PM
Contact Name: Not reported

Facility ID: 603581
Medium: Not reported
Material Desc: PETROLEUM - HYDRAULIC OIL
Material Qty: Not reported
Material Units: GALLON
Date Received: 2/1/2008 12:31:00 PM
Contact Name: MILLER

Facility ID: 604197
Medium: Not reported
Material Desc: PETROLEUM - UNKNOWN
Material Qty: Not reported
Material Units: GALLON
Date Received: 3/7/2008 12:52:00 PM
Contact Name: MURPHY

Facility ID: 601514
Medium: Not reported
Material Desc: PETROLEUM - DIESEL FUEL
Material Qty: 2

NAVAL STATION EVERETT (Continued) **1000660753**

Material Units: GALLON
Date Received: 10/18/2007 7:08:00 PM
Contact Name: UNKNOWN

Facility ID: 617579
Medium: SURFACE WATER-MARINE
Material Desc: PETROLEUM - WASTE/USED OIL
Material Qty: Not reported
Material Units: GALLON
Date Received: 1/15/2010 10:45:00 AM
Contact Name: Not reported

Facility ID: 618042
Medium: SURFACE WATER-MARINE
Material Desc: PETROLEUM - DIESEL FUEL
Material Qty: Not reported
Material Units: GALLON
Date Received: 2/10/2010 12:43:00 PM
Contact Name: FORD

Facility ID: 615933
Medium: SURFACE WATER-MARINE
Material Desc: PETROLEUM - WASTE/USED OIL
Material Qty: Not reported
Material Units: GALLON
Date Received: 10/15/2009 3:54:00 PM
Contact Name: Not reported

Facility ID: 612203
Medium: SURFACE WATER-MARINE
Material Desc: PETROLEUM - UNKNOWN
Material Qty: Not reported
Material Units: GALLON
Date Received: 4/17/2009 8:04:00 AM
Contact Name: UNKNOWN

Facility ID: 615361
Medium: SURFACE WATER-MARINE
Material Desc: PETROLEUM - GASOLINE
Material Qty: Not reported
Material Units: GALLON
Date Received: 9/15/2009 11:05:00 AM
Contact Name: PATRON

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CLEARVIEW	U003029199	FOOD MART 164	17927 HWY 9	98201	ALLSITES, UST
EVERETT	1000838420		144TH ALVERSON & W MARINE DR	98201	RCRA-NonGen, FINDS, ALLSITES
EVERETT	1007453363		1100 TO 1500 BLOCK W MARINE VI	98201	FINDS, ALLSITES
EVERETT	S103511239	Y & F PROPERTY	3200TH ST & RUCKER AVE	98201	ICR
EVERETT	S109556166	ALLEY BEHIND 3601 BRO	3600TH BLK ALLEY BTWN MCDOUGAL	98201	ALLSITES
EVERETT	1011848047	SMITH ISLAND LANDFILL	2800 HWY 529	98201	FINDS, ALLSITES
EVERETT	S108969415	NORTH MARINA PHASE 1 VCP	600 TO 900 BLOCK OF 13TH ST	98201	ALLSITES, CSCSL NFA, VCP
EVERETT	S103504805	EAST MARINE VIEW DR. & LEGION MEMO	E MARINE VIEW DR	98201	ICR
EVERETT	1007265287		3 MARINE TERMINAL NORTH PIER	98201	RCRA-LQG, ALLSITES
EVERETT	1007677383		1616 MARINE VIEW DR		FINDS, UST
EVERETT	S109552574	CEMEX	17 W MARINE VIEW DR	98201	ALLSITES
EVERETT	S106495879	SHAFFER CRANE	1616 MARINE VIEW DR	98201	LUST
EVERETT	1007064024		3400 OLD HWY 99 N		FINDS, ALLSITES, UST
EVERETT	1004793598		331 RUCKER AVE	98201	RCRA-CESQG, FINDS, ALLSITES, Inactive Drycleaners
EVERETT	1007063513		SEC AIRPORT RD & HWY 99	98201	FINDS, ALLSITES, UST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/31/2010
Date Data Arrived at EDR: 04/02/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 05/07/2010
Next Scheduled EDR Contact: 07/26/2010
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/31/2010
Date Data Arrived at EDR: 04/02/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 05/07/2010
Next Scheduled EDR Contact: 07/26/2010
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 05/17/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/31/2010
Date Data Arrived at EDR: 04/02/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 05/07/2010
Next Scheduled EDR Contact: 07/26/2010
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/29/2010
Date Data Arrived at EDR: 02/09/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 62

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 05/07/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of NPL and Base Realighnment & Closure sites found in the CERCLIS database where FERRO is involved in cleanup projects.

Date of Government Version: 06/23/2009
Date Data Arrived at EDR: 01/15/2010
Date Made Active in Reports: 02/10/2010
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/30/2010
Next Scheduled EDR Contact: 07/26/2010
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 06/23/2009
Date Data Arrived at EDR: 09/02/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 19

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 05/07/2010
Next Scheduled EDR Contact: 06/14/2010
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2010
Date Data Arrived at EDR: 03/31/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 57

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/17/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 04/29/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 04/29/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 04/29/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 04/29/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 12/20/2009
Date Data Arrived at EDR: 01/20/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 03/15/2010
Next Scheduled EDR Contact: 06/28/2010
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 12/20/2009
Date Data Arrived at EDR: 01/20/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 03/15/2010
Next Scheduled EDR Contact: 06/28/2010
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 01/22/2010
Date Made Active in Reports: 02/11/2010
Number of Days to Update: 20

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 04/07/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Annually

State- and tribal - equivalent NPL

HSL: Hazardous Sites List

The Hazardous Sites List is a subset of the CSCSL Report. It includes sites which have been assessed and ranked using the Washington Ranking Method (WARM).

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 02/24/2010
Number of Days to Update: 5

Source: Department of Ecology
Telephone: 360-407-7200
Last EDR Contact: 05/18/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: Semi-Annually

State- and tribal - equivalent CERCLIS

CSCSL: Confirmed and Suspected Contaminated Sites List

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 04/26/2010
Date Data Arrived at EDR: 04/29/2010
Date Made Active in Reports: 05/19/2010
Number of Days to Update: 20

Source: Department of Ecology
Telephone: 360-407-7200
Last EDR Contact: 04/29/2010
Next Scheduled EDR Contact: 08/09/2010
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facility Database

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 02/04/2010
Date Made Active in Reports: 03/09/2010
Number of Days to Update: 33

Source: Department of Ecology
Telephone: 360-407-6132
Last EDR Contact: 03/15/2010
Next Scheduled EDR Contact: 06/28/2010
Data Release Frequency: Annually

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tanks Site List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 05/24/2010
Date Data Arrived at EDR: 05/26/2010
Date Made Active in Reports: 05/28/2010
Number of Days to Update: 2

Source: Department of Ecology
Telephone: 360-407-7183
Last EDR Contact: 05/26/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/01/2010
Date Data Arrived at EDR: 03/03/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Quarterly

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 03/10/2010
Date Data Arrived at EDR: 03/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 27

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Semi-Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 05/04/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 22

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/19/2009
Date Data Arrived at EDR: 02/19/2009
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 25

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/03/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 22

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/24/2009
Date Data Arrived at EDR: 05/20/2009
Date Made Active in Reports: 06/17/2009
Number of Days to Update: 28

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/04/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 02/25/2010
Date Data Arrived at EDR: 02/25/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 46

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Underground Storage Tank Database
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 05/24/2010
Date Data Arrived at EDR: 05/26/2010
Date Made Active in Reports: 05/28/2010
Number of Days to Update: 2

Source: Department of Ecology
Telephone: 360-407-7183
Last EDR Contact: 05/26/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Quarterly

AST: Aboveground Storage Tank Locations
A listing of aboveground storage tank locations regulated by the Department of Ecology's Spill Prevention, Preparedness and Response Program.

Date of Government Version: 05/27/2009
Date Data Arrived at EDR: 05/28/2009
Date Made Active in Reports: 06/19/2009
Number of Days to Update: 22

Source: Department of Ecology
Telephone: 360-407-7562
Last EDR Contact: 05/10/2010
Next Scheduled EDR Contact: 08/23/2010
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 03/10/2010
Date Data Arrived at EDR: 03/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 27

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Semi-Annually

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/01/2010
Date Data Arrived at EDR: 03/03/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 40

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 02/25/2010
Date Data Arrived at EDR: 02/25/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 46

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/04/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 22

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/19/2009
Date Data Arrived at EDR: 02/19/2009
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 25

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 02/11/2010
Date Data Arrived at EDR: 02/11/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 60

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/03/2010
Date Data Arrived at EDR: 05/05/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 22

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/01/2008
Date Data Arrived at EDR: 12/30/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 76

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/12/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/19/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

INST CONTROL: Institutional Control Site List

Sites that have institutional controls.

Date of Government Version: 05/18/2010
Date Data Arrived at EDR: 05/18/2010
Date Made Active in Reports: 05/28/2010
Number of Days to Update: 10

Source: Department of Ecology
Telephone: 360-407-7170
Last EDR Contact: 05/18/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 04/02/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 04/05/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Sites

Sites that have entered either the Voluntary Cleanup Program or its predecessor Independent Remedial Action Program.

Date of Government Version: 04/22/2010
Date Data Arrived at EDR: 04/30/2010
Date Made Active in Reports: 05/19/2010
Number of Days to Update: 19

Source: Department of Ecology
Telephone: 360-407-7200
Last EDR Contact: 04/29/2010
Next Scheduled EDR Contact: 08/09/2010
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

ICR: Independent Cleanup Reports
These are remedial action reports Ecology has received from either the owner or operator of the sites. These actions have been conducted without department oversight or approval and are not under an order or decree. This database is no longer updated by the Department of Ecology.

Date of Government Version: 12/01/2002
Date Data Arrived at EDR: 01/03/2003
Date Made Active in Reports: 01/22/2003
Number of Days to Update: 19
Source: Department of Ecology
Telephone: 360-407-7200
Last EDR Contact: 08/10/2009
Next Scheduled EDR Contact: 11/09/2009
Data Release Frequency: No Update Planned

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Sites Listing
A listing of brownfields sites included in the Confirmed & Suspected Sites Listing. Brownfields are abandoned, idle or underused commercial or industrial properties, where the expansion or redevelopment is hindered by real or perceived contamination. Brownfields vary in size, location, age, and past use -- they can be anything from a five-hundred acre automobile assembly plant to a small, abandoned corner gas station.

Date of Government Version: 04/26/2010
Date Data Arrived at EDR: 04/29/2010
Date Made Active in Reports: 05/19/2010
Number of Days to Update: 20
Source: Department of Ecology
Telephone: 360-725-4030
Last EDR Contact: 04/29/2010
Next Scheduled EDR Contact: 08/09/2010
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 03/02/2010
Date Data Arrived at EDR: 03/23/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 55
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/23/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-972-3336
Last EDR Contact: 06/07/2010
Next Scheduled EDR Contact: 09/20/2010
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWTIRE: Solid Waste Tire Facilities
This study identified sites statewide with unauthorized accumulations of scrap tires.

Date of Government Version: 11/01/2005
Date Data Arrived at EDR: 03/16/2006
Date Made Active in Reports: 04/13/2006
Number of Days to Update: 28
Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 03/17/2010
Next Scheduled EDR Contact: 06/28/2010
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 06/08/2010
Next Scheduled EDR Contact: 08/23/2010
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/19/2009
Date Data Arrived at EDR: 12/29/2009
Date Made Active in Reports: 02/10/2010
Number of Days to Update: 43
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/08/2010
Next Scheduled EDR Contact: 09/20/2010
Data Release Frequency: Quarterly

ALLSITES: Facility/Site Identification System Listing
Information on facilities and sites of interest to the Department of Ecology.

Date of Government Version: 05/12/2010
Date Data Arrived at EDR: 05/13/2010
Date Made Active in Reports: 05/19/2010
Number of Days to Update: 6
Source: Department of Ecology
Telephone: 360-407-6423
Last EDR Contact: 05/12/2010
Next Scheduled EDR Contact: 08/23/2010
Data Release Frequency: Quarterly

CSCSL NFA: Confirmed and Contaminated Sites - No Further Action
The data set contains information about sites previously on the Confirmed and Suspected Contaminated Sites list that have received a No Further Action (NFA) determination. Because it is necessary to maintain historical records of sites that have been investigated and cleaned up, sites are not deleted from the database when cleanup activities are completed. Instead, a No Further Action code is entered based upon the type of NFA determination the site received.

Date of Government Version: 04/26/2010
Date Data Arrived at EDR: 04/29/2010
Date Made Active in Reports: 05/19/2010
Number of Days to Update: 20

Source: Department of Ecology
Telephone: 360-407-7170
Last EDR Contact: 04/29/2010
Next Scheduled EDR Contact: 08/09/2010
Data Release Frequency: Semi-Annually

CDL: Clandestine Drug Lab Contaminated Site List

Illegal methamphetamine labs use hazardous chemicals that create public health hazards. Chemicals and residues can cause burns, respiratory and neurological damage, and death. Biological hazards associated with intravenous needles, feces, and blood also pose health risks.

Date of Government Version: 02/09/2009
Date Data Arrived at EDR: 03/18/2009
Date Made Active in Reports: 03/24/2009
Number of Days to Update: 6

Source: Department of Health
Telephone: 360-236-3380
Last EDR Contact: 05/18/2010
Next Scheduled EDR Contact: 08/30/2010
Data Release Frequency: Varies

HIST CDL: List of Sites Contaminated by Clandestine Drug Labs

This listing of contaminated sites by Clandestine Drug Labs includes non-remediated properties. The current CDL listing does not. This listing is no longer updated by the state agency.

Date of Government Version: 02/08/2007
Date Data Arrived at EDR: 06/26/2007
Date Made Active in Reports: 07/19/2007
Number of Days to Update: 23

Source: Department of Health
Telephone: 360-236-3381
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/05/2010
Date Data Arrived at EDR: 02/11/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 60

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/24/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 04/06/2010
Date Data Arrived at EDR: 04/07/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 50

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 04/07/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Annually

SPILLS: Reported Spills

Spills reported to the Spill Prevention, Preparedness and Response Division.

Date of Government Version: 04/13/2010
Date Data Arrived at EDR: 04/15/2010
Date Made Active in Reports: 05/19/2010
Number of Days to Update: 34

Source: Department of Ecology
Telephone: 360-407-6950
Last EDR Contact: 04/13/2010
Next Scheduled EDR Contact: 06/28/2010
Data Release Frequency: Semi-Annually

Other Ascertainable Records

RCRA-NonGen: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/17/2010
Date Data Arrived at EDR: 02/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: (206) 553-1200
Last EDR Contact: 04/29/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/12/2010
Date Data Arrived at EDR: 02/09/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 62

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/12/2010
Next Scheduled EDR Contact: 08/23/2010
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 703-692-8801
Last EDR Contact: 04/21/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 09/30/2009
Date Made Active in Reports: 12/01/2009
Number of Days to Update: 62

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 03/18/2010
Next Scheduled EDR Contact: 06/28/2010
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 04/11/2010
Date Data Arrived at EDR: 04/19/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 28

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/05/2010
Next Scheduled EDR Contact: 07/19/2010
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/29/2010
Date Data Arrived at EDR: 05/07/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 20

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 05/07/2010
Next Scheduled EDR Contact: 06/28/2010
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 01/05/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 05/08/2009
Number of Days to Update: 1

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 06/01/2010
Next Scheduled EDR Contact: 09/13/2010
Data Release Frequency: Varies

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/12/2010
Date Data Arrived at EDR: 03/10/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 68

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 06/09/2010
Next Scheduled EDR Contact: 09/20/2010
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 01/13/2010
Date Made Active in Reports: 02/18/2010
Number of Days to Update: 36

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 06/04/2010
Next Scheduled EDR Contact: 09/13/2010
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002
Date Data Arrived at EDR: 04/14/2006
Date Made Active in Reports: 05/30/2006
Number of Days to Update: 46

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 04/21/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: Every 4 Years

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 06/01/2010
Next Scheduled EDR Contact: 09/13/2010
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 06/01/2010
Next Scheduled EDR Contact: 09/13/2010
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 01/06/2010
Date Made Active in Reports: 02/10/2010
Number of Days to Update: 35
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 05/03/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 04/24/2010
Date Data Arrived at EDR: 04/29/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 18

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 03/29/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/01/2009
Date Data Arrived at EDR: 10/21/2009
Date Made Active in Reports: 12/01/2009
Number of Days to Update: 41

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/22/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/18/2010
Date Data Arrived at EDR: 04/06/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 51

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 03/15/2010
Next Scheduled EDR Contact: 06/28/2010
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/13/2010
Date Data Arrived at EDR: 04/14/2010
Date Made Active in Reports: 05/17/2010
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/14/2010
Next Scheduled EDR Contact: 07/26/2010
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/14/2010
Date Data Arrived at EDR: 04/16/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 41

Source: EPA
Telephone: (206) 553-1200
Last EDR Contact: 03/15/2010
Next Scheduled EDR Contact: 06/28/2010
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 02/25/2010
Date Made Active in Reports: 05/12/2010
Number of Days to Update: 76

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/25/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Biennially

UIC: Underground Injection Wells Listing

A listing of underground injection wells.

Date of Government Version: 02/24/2010
Date Data Arrived at EDR: 02/25/2010
Date Made Active in Reports: 03/09/2010
Number of Days to Update: 12

Source: Department of Ecology
Telephone: 360-407-6143
Last EDR Contact: 05/27/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Varies

WA MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 05/13/2010
Date Made Active in Reports: 05/19/2010
Number of Days to Update: 6

Source: Department of Ecology
Telephone: N/A
Last EDR Contact: 04/22/2010
Next Scheduled EDR Contact: 08/09/2010
Data Release Frequency: Annually

DRYCLEANERS: Drycleaner List

A listing of registered drycleaners who registered with the Department of Ecology (using the SIC code of 7215 and 7216) as hazardous waste generators.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 05/13/2010
Date Made Active in Reports: 05/19/2010
Number of Days to Update: 6

Source: Department of Ecology
Telephone: 360-407-6732
Last EDR Contact: 04/22/2010
Next Scheduled EDR Contact: 08/09/2010
Data Release Frequency: Varies

NPDES: Water Quality Permit System Data

A listing of permitted wastewater facilities.

Date of Government Version: 04/19/2010
Date Data Arrived at EDR: 04/29/2010
Date Made Active in Reports: 05/19/2010
Number of Days to Update: 20

Source: Department of Ecology
Telephone: 360-407-6073
Last EDR Contact: 04/29/2010
Next Scheduled EDR Contact: 08/09/2010
Data Release Frequency: Quarterly

AIRS (EMI): Washington Emissions Data System

Emissions inventory data.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 01/05/2010
Date Made Active in Reports: 01/15/2010
Number of Days to Update: 10

Source: Department of Ecology
Telephone: 360-407-6040
Last EDR Contact: 03/29/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: Annually

INACTIVE DRYCLEANERS: Inactive Drycleaners
A listing of inactive drycleaner facility locations.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 05/13/2010
Date Made Active in Reports: 05/19/2010
Number of Days to Update: 6
Source: Department of Ecology
Telephone: 360-407-6732
Last EDR Contact: 04/22/2010
Next Scheduled EDR Contact: 08/09/2010
Data Release Frequency: Annually

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34
Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/21/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing
The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 02/10/2010
Date Data Arrived at EDR: 02/11/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 60
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/10/2010
Next Scheduled EDR Contact: 08/09/2010
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Site Listing
A listing of coal ash disposal site locations.

Date of Government Version: 06/29/2009
Date Data Arrived at EDR: 07/02/2009
Date Made Active in Reports: 07/08/2009
Number of Days to Update: 6
Source: Department of Ecology
Telephone: 360-407-6933
Last EDR Contact: 03/15/2010
Next Scheduled EDR Contact: 06/28/2010
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 04/21/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 11/09/2009
Date Data Arrived at EDR: 12/18/2009
Date Made Active in Reports: 02/10/2010
Number of Days to Update: 54
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/16/2010
Next Scheduled EDR Contact: 06/28/2010
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 01/01/2008
Date Data Arrived at EDR: 02/18/2009
Date Made Active in Reports: 05/29/2009
Number of Days to Update: 100

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/14/2010
Next Scheduled EDR Contact: 08/16/2010
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/21/2010
Next Scheduled EDR Contact: 08/02/2010
Data Release Frequency: N/A

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Historical Auto Stations: EDR Proprietary Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Historical Cleaners: EDR Proprietary Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

KING COUNTY:

Abandoned Landfill Study in King County

The King County Abandoned Landfill Survey was conducted from October through December 1984 by the Health Department's Environmental Health Division at the request of the King County Council. The primary objective of the survey was to determine if any public health problems existed at the predetermined 24 sites.

Date of Government Version: 04/30/1985
Date Data Arrived at EDR: 11/07/1994
Date Made Active in Reports: N/A
Number of Days to Update: 0

Source: Seattle-King County Department of Public Health
Telephone: 206-296-4785
Last EDR Contact: 10/21/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SEATTLE COUNTY:

Abandoned Landfill Study in the City of Seattle

The Seattle Abandoned Landfill Survey was conducted in June and July of 1984 by the Health Department's Environmental Health Division at the request of the Mayor's Office. The primary objective of the survey was to determine if any public health problems existed at the predetermined 12 sites.

Date of Government Version: 07/30/1984
Date Data Arrived at EDR: 11/07/1994
Date Made Active in Reports: N/A
Number of Days to Update: 0

Source: Seattle - King County Department of Public Health
Telephone: 206-296-4785
Last EDR Contact: 10/21/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SEATTLE/KING COUNTY:

Seattle - King County Abandoned Landfill Toxicity / Hazard Assessment Project

This report presents the Seattle-King County Health Department's follow-up investigation of two city owned and four county owned abandoned landfills which was conducted from February to December 1986.

Date of Government Version: 12/31/1986
Date Data Arrived at EDR: 08/18/1995
Date Made Active in Reports: 09/20/1995
Number of Days to Update: 33

Source: Department of Public Health
Telephone: 206-296-4785
Last EDR Contact: 08/14/1995
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SNOHOMISH COUNTY:

Solid Waste Sites of Record at Snohomish Health District

Solid waste disposal and/or utilization sites in Snohomish County.

Date of Government Version: 10/01/2008
Date Data Arrived at EDR: 01/30/2009
Date Made Active in Reports: 03/24/2009
Number of Days to Update: 53

Source: Snohomish Health District
Telephone: 206-339-5250
Last EDR Contact: 03/30/2010
Next Scheduled EDR Contact: 07/12/2010
Data Release Frequency: Semi-Annually

TACOMA/PIERCE COUNTY:

Closed Landfill Survey

Following numerous requests for information about closed dumpsites and landfills in Pierce County, the Tacoma-Pierce County Health Department decided to conduct a study on the matter. The aim of the study was to evaluate public health risks associated with the closed dumpsites and landfills, and to determine the need, if any, for further investigations of a more detailed nature. The sites represent all of the known dumpsites and landfills closed after 1950.

Date of Government Version: 09/01/2002
Date Data Arrived at EDR: 03/24/2003
Date Made Active in Reports: 05/14/2003
Number of Days to Update: 51

Source: Tacoma-Pierce County Health Department
Telephone: 206-591-6500
Last EDR Contact: 03/19/2003
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 08/26/2009
Date Made Active in Reports: 09/11/2009
Number of Days to Update: 16

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 06/04/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/04/2010
Date Data Arrived at EDR: 02/11/2010
Date Made Active in Reports: 03/17/2010
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/13/2010
Next Scheduled EDR Contact: 08/23/2010
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 12/01/2009
Date Made Active in Reports: 12/14/2009
Number of Days to Update: 13

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 05/24/2010
Next Scheduled EDR Contact: 09/06/2010
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 07/17/2009
Date Made Active in Reports: 08/10/2009
Number of Days to Update: 24

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/22/2010
Next Scheduled EDR Contact: 07/05/2010
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: PennWell Corporation
Telephone: (800) 823-6277

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Daycare Center Listing
Source: Department of Social & Health Services
Telephone: 253-383-1735

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2009 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

TC SYSTEMS
1032 WEST MARINE DRIVE
EVERETT, WA 98201

TARGET PROPERTY COORDINATES

Latitude (North):	48.00380 - 48° 0' 13.7''
Longitude (West):	122.2155 - 122° 12' 55.8''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	558517.5
UTM Y (Meters):	5316801.5
Elevation:	11 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	48122-A2 MARYSVILLE, WA
Most Recent Revision:	1973
South Map:	47122-H2 EVERETT, WA
Most Recent Revision:	1973

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

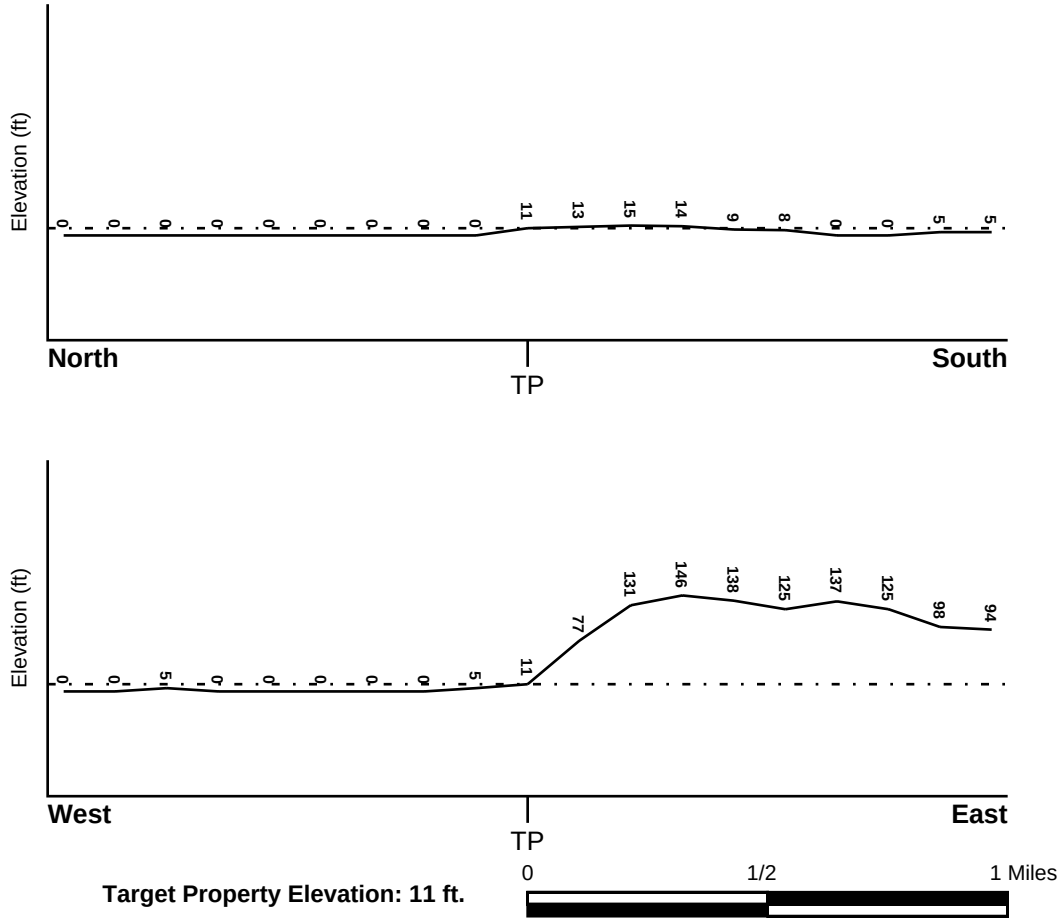
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 11 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
SNOHOMISH, WA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 5301640001B - FEMA Q3 Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
MARYSVILLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Location Relative to TP:	1/2 - 1 Mile South
Site Name:	USNAVY PUGET SOUND NAVAL STA:EVERETT
Site EPA ID Number:	WA2170000127
Groundwater Flow Direction:	VARIABLE BASED ON THE DENSITY OF FILL IN DIFFERENT AREAS OF THE SITE, BUT FLOW MOST LIKELY FLOWS S AND THEN SW INTO THE EAST WATERWAY
Measured Depth to Water:	2 feet to 9 feet above mean sea level
Hydraulic Connection:	The site is located on land created by several fill events.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information based on site-specific subsurface investigations is documented in the CERCLIS investigation report(s)

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
2	1/4 - 1/2 Mile SW	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
A3	1/2 - 1 Mile East	NW
5	1/2 - 1 Mile East	NNE
6	1/2 - 1 Mile NNE	Not Reported

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

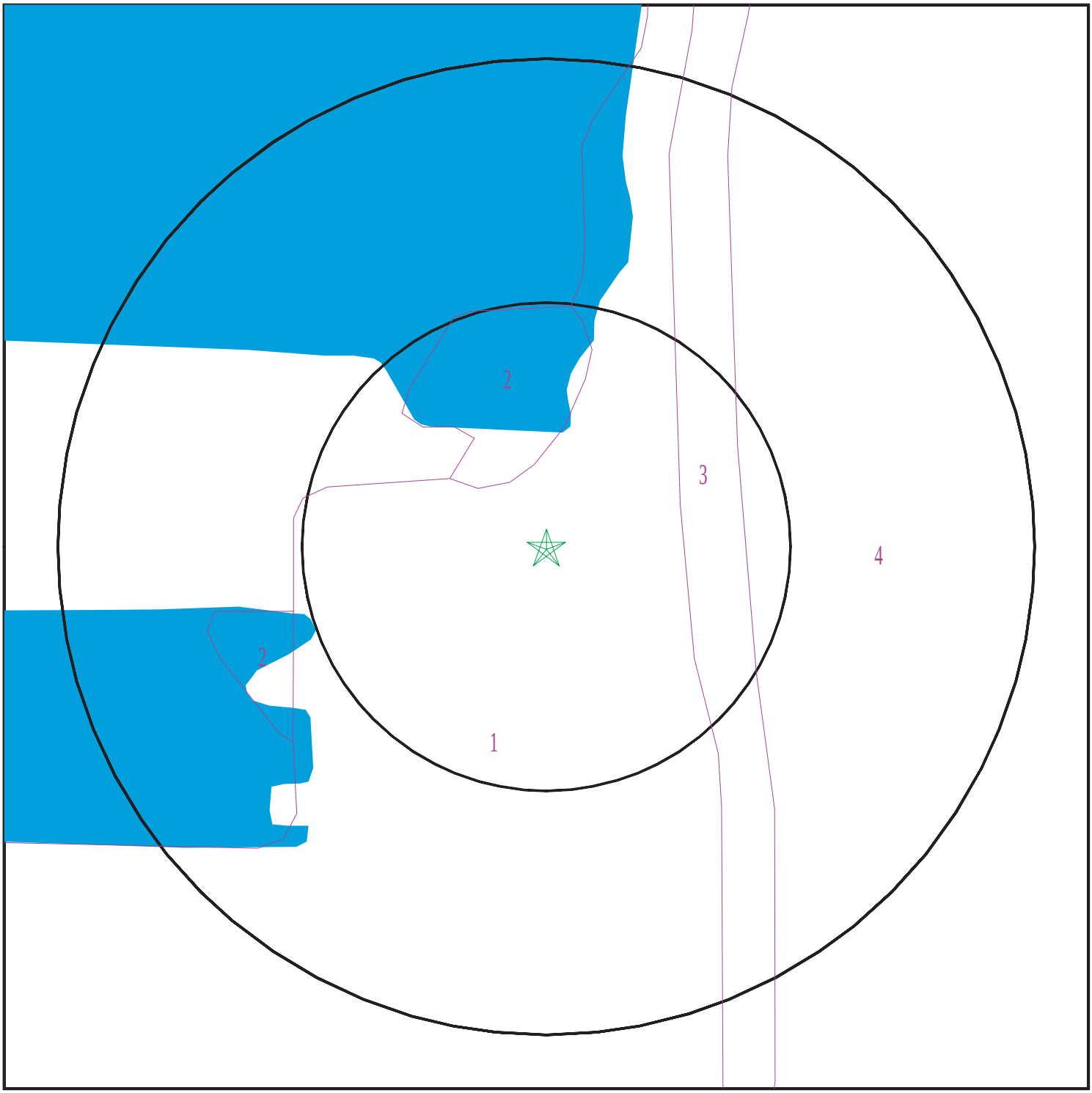
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 2790806.1s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	TC Systems	CLIENT:	Kane Environmental Inc.
ADDRESS:	1032 West Marine Drive Everett WA 98201	CONTACT:	Luke Martinkosky
LAT/LONG:	48.0038 / 122.2155	INQUIRY #:	2790806.1s
		DATE:	June 11, 2010 7:52 am

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name:	Urban land
Soil Surface Texture:	
Hydrologic Group:	Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.
Soil Drainage Class:	
Hydric Status: Not hydric	
Corrosion Potential - Uncoated Steel:	Not Reported
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

No Layer Information available.

Soil Map ID: 2

Soil Component Name:	Fluvaquents
Soil Surface Texture:	silt loam
Hydrologic Group:	Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.
Soil Drainage Class:	Poorly drained
Hydric Status: All hydric	
Corrosion Potential - Uncoated Steel:	High
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 7.3 Min: 3.6
2	7 inches	59 inches	stratified sand to silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 1.4 Min: 0.42	Max: 7.3 Min: 3.6

Soil Map ID: 3

Soil Component Name: Alderwood

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 69 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 0.42 Min: 0.01	Max: 6.5 Min: 5.1

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	7 inches	35 inches	very gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 0.42 Min: 0.01	Max: 6.5 Min: 5.1
3	35 inches	59 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 0.42 Min: 0.01	Max: 6.5 Min: 5.1

Soil Map ID: 4

Soil Component Name: Alderwood

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 69 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 0.42 Min: 0.01	Max: 6.5 Min: 5.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	7 inches	35 inches	very gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 0.42 Min: 0.01	Max: 6.5 Min: 5.1
3	35 inches	59 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 0.42 Min: 0.01	Max: 6.5 Min: 5.1

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS3256156	1/8 - 1/4 Mile South
A4	USGS3256226	1/2 - 1 Mile East

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

No PWS System Found

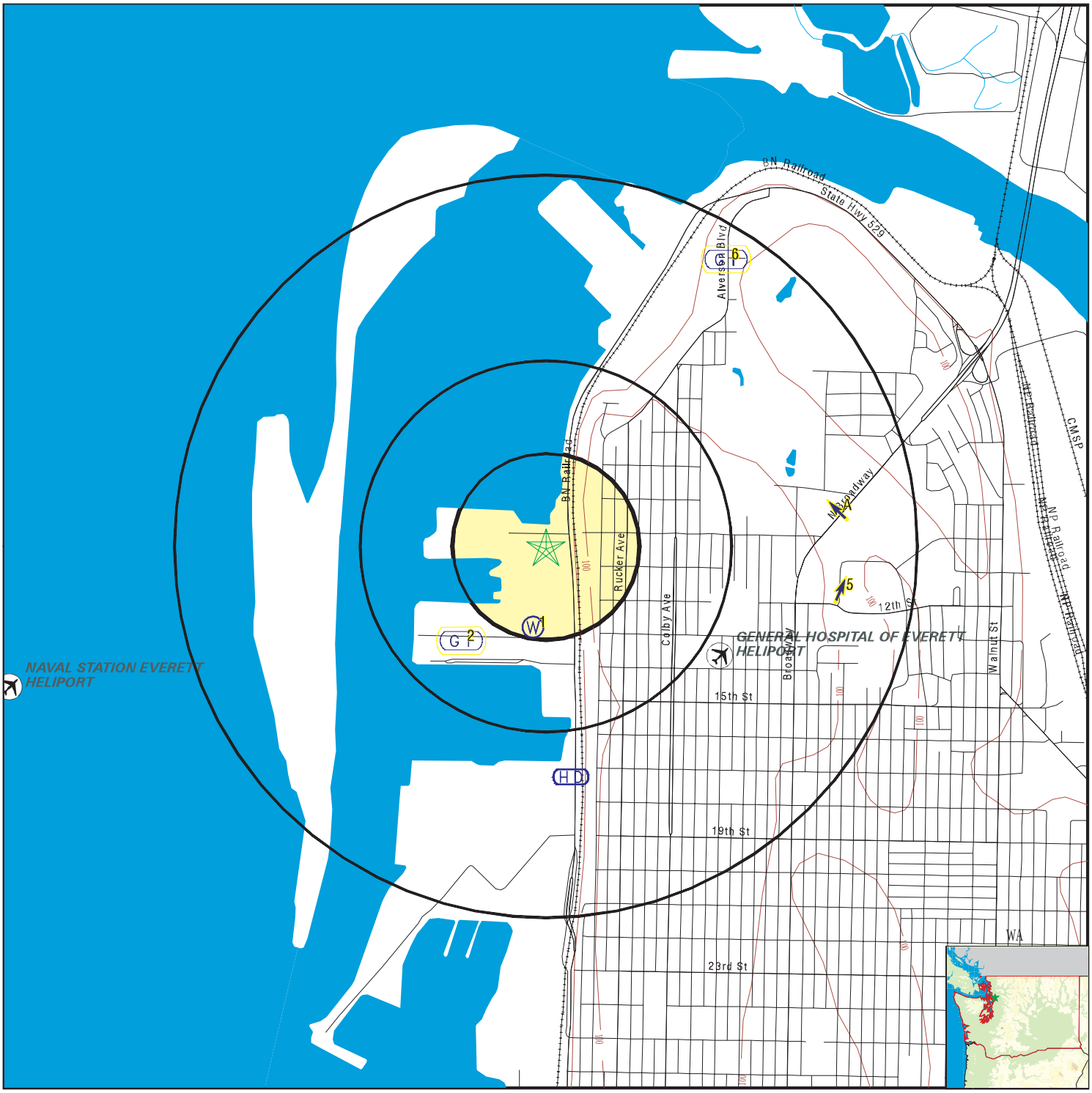
Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

No Wells Found

PHYSICAL SETTING SOURCE MAP - 2790806.1s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data

SITE NAME: TC Systems	CLIENT: Kane Environmental Inc.
ADDRESS: 1032 West Marine Drive Everett WA 98201	CONTACT: Luke Martinkosky
LAT/LONG: 48.0038 / 122.2155	INQUIRY #: 2790806.1s DATE: June 11, 2010 7:52 am

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
South
1/8 - 1/4 Mile
Higher | **FED USGS** | **USGS3256156**

Agency cd:	USGS	Site no:	480003122125401
Site name:	29N/05E-18G01		
Latitude:	480003	EDR Site id:	USGS3256156
Longitude:	1221254	Dec lat:	48.00065099
Dec lon:	-122.21624761	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	061
Country:	US	Land net:	SW NE S18 T29N R05E W
Location map:	MARYSVILLE	Map scale:	24000
Altitude:	5		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	1		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Puget Sound. Washington. Area = 2550 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	19911106
Date inventoried:	19930818	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	16	Hole depth:	16
Source of depth data:	driller		
Project number:	WA37600		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1993-08-18	Ground water data end date:	1993-08-18
Ground water data count:	1		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1993-08-18	4.15		1993-08-18	4.15	

2
SW
1/4 - 1/2 Mile
Lower | **AQUIFLOW** | **41760**

Site ID:	Not Reported
Groundwater Flow:	Not Reported
Shallowest Water Table Depth:	8
Deepest Water Table Depth:	10
Average Water Table Depth:	Not Reported
Date:	05/16/1991

A3
East
1/2 - 1 Mile
Higher | **AQUIFLOW** | **42026**

Site ID:	4062
Groundwater Flow:	NW
Shallowest Water Table Depth:	9.99
Deepest Water Table Depth:	67.48
Average Water Table Depth:	Not Reported
Date:	03/25/1998

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A4
East
1/2 - 1 Mile
Higher

FED USGS **USGS3256226**

Agency cd:	USGS	Site no:	480021122115001
Site name:	29N/05E-17C01		
Latitude:	480021	EDR Site id:	USGS3256226
Longitude:	1221150	Dec lat:	48.00565135
Dec lon:	-122.19846941	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	53
State:	53	County:	061
Country:	US	Land net:	NE NW S17 T29N R05E W
Location map:	MARYSVILLE	Map scale:	24000
Altitude:	80		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	10		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Snohomish. Washington. Area = 278 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	19930420
Date inventoried:	19930818	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	30	Hole depth:	30
Source of depth data:	driller		
Project number:	WA37600		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1993-08-18	Ground water data end date:	1993-08-18
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1993-08-18	13	

5
East
1/2 - 1 Mile
Higher

AQUIFLOW **41883**

Site ID:	2398
Groundwater Flow:	NNE
Shallowest Water Table Depth:	Not Reported
Deepest Water Table Depth:	Not Reported
Average Water Table Depth:	Not Reported
Date:	08/23/1991

6
NNE
1/2 - 1 Mile
Higher

AQUIFLOW **42093**

Site ID:	5724
Groundwater Flow:	Not Reported
Shallowest Water Table Depth:	Not Reported
Deepest Water Table Depth:	Not Reported
Average Water Table Depth:	4
Date:	01/09/1997

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for SNOHOMISH County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 98201

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.033 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	1.400 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2009 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Wells
Source: Department of Health
Telephone: 360-236-3148
Group A and B well locations.

Water Well Listing
Source: Public Utility District
Telephone: 206-779-7656
A listing of water well locations in Kitsap County.

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

STREET AND ADDRESS INFORMATION

APPENDIX O

INTERIM ACTION REPORT, NORTH MARINA AMERON/HULBERT SITE

LANDAU ASSOCIATES, APRIL 2010

Interim Action Report
North Marina Ameron/Hulbert Site
Everett, WA

April 7, 2010

Prepared for

Port of Everett, Washington

LANDAU ASSOCIATES
130 2nd Avenue South
Edmonds, WA 98020
(425) 778-0907

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LIST OF ABBREVIATIONS AND ACRONYMS

1,1,1-TCA	1,1,1-Trichloroethane
1,2-DCA	1,2-Dichloroethane
ACM	Asbestos Containing Material
AO	Agreed Order
ARARs	Applicable or Relevant and Appropriate Requirements
AST	Aboveground Storage Tank
BEHP	bis(2-ethylhexyl) phthalate
BGS	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CAOs	Cleanup Action Objectives
CAP	Cleanup Action Plan
CCP	Contamination Contingency Plan
CLARC	Cleanup Levels and Risk Calculations
CMPs	Compliance Monitoring Plans
COCs	Constituents of Concern
cPAH	Carcinogenic Polycyclic Aromatic Hydrocarbons
CSL	Cleanup Screening Level
DGI	Data Gaps Investigation
DMMUs	Dredged Material Management Units
ECI	Earth Consultants, Inc.
Ecology	Washington State Department of Ecology
EOX	Extractable Organic Halides
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
FA	Focus Area
FS	Feasibility Study
ft	Feet
GC	General Characterization
HCID	Hydrocarbon Identification
IHS	Indicator Hazardous Substances
LSI	Layton and Sell, Inc.,P.S.
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goals
mg/kg	Milligrams per Kilogram
MLLW	Mean Lower Low Water
MS/MSD	Matrix Spike/Matrix Spike Duplicate
MSRC	Marine Spill Response Corporation
MTCA	Model Toxics Control Act
NWTPH-Dx	Total Petroleum Hydrocarbon-Diesel/Oil Ranges
NWTPH-Gx	Total Petroleum Hydrocarbon-Gasoline Range
OVM	Organic Vapor Meter
PCBs	Polychlorinated Biphenyls
PLPs	Potentially Responsible Parties
Port	Port of Everett
ppm	Parts per Million
PQL	Practical Quantitation Limits
PSDDA	Puget Sound Dredge Disposal Analysis
PSI	Puget Sound Initiative
RCW	Revised Code of Washington
RI	Remedial Investigation

LIST OF ABBREVIATIONS AND ACRONYMS (Continued)

RZA	Rittenhouse-Zeman Associates
SAPs	Sampling and Analysis Plans
SMA	Shoreline Management Act
SOW	Scope of Work
SPLP	Synthetic Precipitation Leaching Procedure
SQS	Sediment Quality Standards
SVOCs	Semivolatile Organic Compounds
TBT	Tributyl Tin
TCLP	Toxicity Characteristic Leaching Procedure
TEF	Toxicity Equivalency Factors
TEQ	Toxicity Equivalency Quotient
TPH	Total Petroleum Hydrocarbons
TSCA	Toxic Substances Cleanup Act
U.S.	United States
UST	Underground Storage Tank
VCP	Voluntary Cleanup Program
VOCs	Volatile Organic Compounds
WAC	Washington Administrative Code
WISHA	Washington Industrial Safety and Health Act
yd^3	Cubic Yards
µg/L	Micrograms per Liter

1.0 INTRODUCTION

This report documents the interim actions completed for the North Marina Ameron/ Hulbert Site (Site), located within the Port of Everett (Port) North Marina Redevelopment project boundary in Everett, Washington, and represents the initial submittal required under Agreed Order DE 6677 (AO) between the Port, Ameron International and the Hulberts (the PLPs), and the Washington State Department of Ecology (Ecology). This report provides information on Site background (Section 2.0), presents the results of previous Site characterization activities (Section 3.0), describes the bases for and development of the interim action (Section 4.0), presents the results of the interim action (Section 5.0), and provides conclusions regarding the effectiveness of the interim action (Section 6.0). Although this report discusses the adequacy of the interim actions, the evaluation of the adequacy of previous investigations and the interim action in addressing the release, or potential release, of hazardous substances under the Model Toxics Control Act (MTCA; WAC 173-340) will be addressed in the remedial investigation/feasibility study (RI/FS) work plan, which is the second submittal required under the AO.

The Site was formerly part of the North Marina Redevelopment site, for which cleanup was being conducted under Ecology's Voluntary Cleanup Program (VCP; VCP No. 1249). However, at Ecology's request, the cleanup for the North Marina Redevelopment project was transitioned to be conducted as part of the Puget Sound Initiative (PSI). Due to this, and a number of other considerations, the North Marina Redevelopment site was eliminated from the VCP on November 14, 2007 and was reclassified into six separate sites. This Site is one of three sites that are being addressed under formal cleanup agreements with Ecology as part of the PSI. The other three sites within the former North Marina Redevelopment site are being addressed as separate sites under the VCP. The location of the Site as currently defined in the AO is shown on Figure 1. The former North Marina Redevelopment site will be referred to as the North Marina Area in this document; the approximate boundaries of the North Marina Area and the Site are shown on Figure 2.

Because the work described in this report was performed under the VCP, some of the terminology used in previous reports does not conform to the terminology used in the MTCA formal process. For instance, active remediation under the interim actions was described as "cleanup action", even though under the formal process the cleanup action is not performed until after the RI/FS and cleanup action plan (CAP) have been approved. Another example is the reference to "cleanup action areas," which would normally be referred to as "interim action areas" if the Site had been processed under the formal program from the beginning.

Interim actions for the Site were conducted in 1991, 1993, and between October 2005 and October 2007. The 1991 and 1993 interim actions were conducted with less rigorous documentation of

the interim action design (A-1 Pump Service 1991; Kleinfelder 1993a), but were generally consistent with the standard of practice at that time. The 2005-2008 interim action was conducted for cleanup of the North Marina Area, in accordance with a CAP and subsequent CAP addendum developed for the North Marina Area under the VCP (Landau Associates 2006a and 2006b). The CAP was developed for the cleanup of contaminated soil located across a majority of the North Marina Area (Landau Associates 2006a). The CAP addendum (Landau Associates 2006b) was developed for cleanup of soil in cleanup area G-1, in the northwest corner of the current Ameron leasehold.

It should be noted that a Contamination Contingency Plan (CCP) was developed for the North Marina Area (Landau Associates 2008a). Any unanticipated soil or groundwater contamination encountered at the Site during future redevelopment activities will be managed using the general approach and procedures outlined in the CCP.

2.0 SITE BACKGROUND

This section presents background information related to the Site, including a description of the Site (Section 2.1), a summary of Site development history (Section 2.2), and a discussion of Site usage history (Section 2.3).

2.1 SITE DESCRIPTION

The Site is located in Everett, WA, between 11th and 13th Streets off West Marine View Drive, in the northeastern portion of the North Marina Area, and includes a large part of the 12th Street Yacht Basin to the west. The Site is owned by the Port and includes approximately 30 acres of upland and adjacent in-water property. Figure 2 presents the location of the Site with respect to the North Marina Area; the final Site boundary will be determined based on the results of the upcoming RI/FS for the Site. Figure 3 presents a site plan showing relevant historical Site features, and Figure 4 presents current Site features.

Because of its large size, the North Marina Area was divided into 13 sub-areas (Investigation Areas A though M) for investigation and data management purposes during the environmental investigation and cleanup activities conducted for the North Marina redevelopment. Only four of these Investigation Areas (G, I, J, and M) fall within the Site boundary. The others are part of other Port MTCA sites. The investigation areas have been defined based on tenant lease areas or other common characteristics.

The investigation areas used in this report are based on the 2004 Phase II environmental site assessment (ESA; Landau Associates 2004). The investigation areas defined for the 2004 Phase II ESA were expanded for the Data Gaps Investigation (DGI; Landau Associates 2005a) to encompass areas not characterized during the Phase II ESA. Investigation Areas I, G, M, and most of Area J are located within the Site uplands. The northern portion of the 12th Street Yacht Basin is located within the aquatic portion of the Site. The investigation areas are shown on Figure 4 and will be referenced in this report when discussing Site features and environmental conditions.

2.2 SITE DEVELOPMENT HISTORY

The first saw milling operations on the Site reportedly started when Fred K. Baker purchased a portion of the Site in 1913. The William Hulbert Mill Company owned the Site and began operations in the early 1920's. At that time, the entire mill was constructed on piles over Port Gardner Bay. According to Hart Crowser's historical research (Hart Crowser 1991):

- In 1947, a sheetpile wall was constructed to form the fill area south of the mill.
- Subsequent filling proceeded rapidly; by 1964, the southern portion of the Site was filled.

- The Hulbert Mill operated until the early 1960s, until the sawmill was removed and the land was unoccupied (other information sources indicate that the Hulbert mill was partly destroyed in a fire in 1956).
- During the 1970s, additional fill was added to the western portion of the Site.
- In the mid-1970s, Centrecon, a concrete pole and piling manufacturer, constructed a factory in the northeastern portion of the Site over the area formerly occupied by the sawmill drying kilns.

The Hulberts leased various portions of the Site to a number of commercial and industrial entities beginning in the early 1970s until they sold it to the Port in March of 1991. The Port has remained the owner of the Site since its purchase in 1991. The Site boundary does not precisely coincide with the parcels formerly owned by the Hulbert Mill Company.

Although tenants have changed over time, the type of operations conducted at the Site did not change substantially under Port ownership until the Port initiated plans for redevelopment of the North Marina Area. In anticipation of redevelopment, starting in about 2004, the Port began relocating tenants within the North Marina Area, and not renewing leases as lease terms ended. Several businesses located in the southern portion of the Site vacated the premises and the buildings were demolished in 2006. The Ameron leasehold was modified in scope and extends to at least 2012.

The western portion of the Site is currently being redeveloped by the Port into its Craftsman District to support marine-based businesses and recreational boaters. Recently developed facilities at the Site include the Bayside Marine dry stack storage and marine retail business in the northwest corner, a new Port Marine Operations Center in the west-center area, and a new travel lift in the southwest corner of the Site. Additionally, the former Marine Spill Response Corporation (MSRC) building constructed in 1993 in the southwest portion of the Site is currently being redeveloped into new Port offices and small business bays for marine services providers. Approximately the southwestern half of the upland portion of the Site has been paved with asphalt as part of the Craftsman District development. Figure 4 shows current upland Site features.

In addition to uplands redevelopment, the aquatic portion of the Site, the northern two-thirds of the 12th Street Channel, was redeveloped in 2005/2006 into the 12th Street Yacht Basin. Development of the Yacht Basin included dredging Site aquatic lands to about elevation -16 ft mean lower low water (MLLW) to create the necessary draft for its new use as a marina. A riparian area and intertidal habitat bench was created along the north shoreline of the Yacht Basin as compensation for the marina development-related impacts, as shown on Figure 4. The mitigation area consists of about a 12-ft wide (plan view) strip of upland and intertidal habitat located between the pedestrian esplanade and the subtidal zone that was planted with native vegetation and is being monitored and maintained by the Port along the entire north shore of the 12th Street Yacht Basin. Figure 4 shows current conditions for the aquatic

portion of the Site, and Figure 3 shows the area over which Site sediment was dredged for construction of the yacht basin.

Current and historical Site uses are discussed generally in the following sections based on existing environmental reports for the Site. A more thorough Site history investigation is being developed and will be conducted as part of the RI/FS work plan.

2.3 CURRENT AND HISTORICAL SITE USE

This section identifies and describes the current and historical uses for properties and leaseholds located within the Site, subdivided into the investigation areas identified in Section 2.1. The Site usage history is based on aerial photos and the following documents, which should be reviewed for a more thorough description of Site historical uses and recognized environmental conditions:

- *Preliminary Environmental Audit, Jensen Reynolds Property* [Earth Consultants, Inc. (ECI) 1987]
- *Supplemental Site Investigation, Jensen Reynolds Property* (ECI 1988)
- *Report on Investigations Conducted at Ameron (Centrecon) Plant in Everett, Washington* (PSM International, Inc. 1989)
- *Supplemental Environmental Review, Hulbert Mill Property* (ECI 1990)
- *Phase I ESA and Phase I Environmental Audit, Business on Thirty Acres* (Kleinfelder 1991)
- *Environmental Engineering Services, Proposed MSRC Facility* (Hart Crowser 1991)
- *Independent Cleanup Action Report, Area West of MSRC* (Kleinfelder 1993b)
- *Phase I Environmental Site Assessment, North Marina Redevelopment Project* (Landau Associates 2001).

A number of areas within the Site were leased by the Hulberts or the Port to various tenants. Many of the former buildings and tenants are shown on Figure 3, and current tenants and buildings are shown on Figure 4.

In addition to specific building leases identified on Figures 3 and 4, areas of the Site were used by the property owners for various activities, including storage of materials, treatment of petroleum-contaminated soil, and parking. Investigation Area I, the area that has undergone the most extensive interim action to date at the Site, was a large area without a single long-term leaseholder or permanent building, but an area within which a significant amount of soil contamination was present. About the western half of Area I was aquatic land until 1973 when the Port and the Hulbert Mill Company jointly contracted to fill the area with dredge materials from creation of the barge channel on the south side of the 12th Street Channel. Subsequent filling, which has apparently occurred within this parcel, will be further investigated during the site history evaluation planned as part of the RI/FS work plan.

The current and former tenants utilized the leaseholds for a variety of businesses, primarily related to marine repair; concrete products manufacturing; and other marine, commercial, and light industrial activities. The following is a partial list, based on available information, of current and former tenants and activities for each investigation area located within the Site boundary:

- Investigation Area G:
  - Ameron International (current tenant): Concrete manufacturing, including piling and decorative poles
  - Utility Vault (former tenant): Concrete manufacturing, including piling, piers, and decorative poles
  - Centrecon (former tenant and predecessor of Utility Vault): Concrete manufacturing, including piling, piers, and decorative poles
  - Hulbert Mill (former property owner; operations in multiple areas): Saw and Shingle milling, log rafting, related wood products activities
- Investigation Area I:
  - Commercial Steel Fabricators (former tenant): Construction of prefabricated buildings, including painting operations
  - Jensen Reynolds (former tenant): manufacturing and storage of prefabricated waterfront buildings
  - Hulbert Mill (former owner): See uses above.
  - Port of Everett: petroleum-contaminated soil landfarming, disposal of landscape clippings and debris, boat impoundment, and storage of materials and equipment
- Investigation Area J:
  - MSRC (former tenant): Storage of marine spill response supplies
  - Veco, Inc. (former tenant): subleased warehouse areas from Jensen-Reynolds Construction; specific uses unknown
  - Port of Everett: storage and parking
  - Hulbert Mill (former owner): See uses above.
- Investigation Area M:
  - Ameron International Office (current tenant); Centrecon and Utility Vault (former tenants); partially subleased portions of building to:
    - Dunlap Wire Rope, Inc. and Dunlap Industrial Hardware (current tenant): Marine hardware supplier and fabricator
    - Tri-Coatings, Inc. (former tenant): Metal Finishing/Commercial coatings applications
    - BESCO, Inc.(former tenant): Vehicle and machinery parts supplier
    - Churchill Brothers Marine Canvas and Upholstery (current tenant): Fabrication of marine canvas and boat interiors
    - Sunset Body Works (former tenant) and North Central Collision (current tenant): Auto body repair

- Hulbert Mill (former owner): Former mill office (commonly referred to as the Collins Building), smoke shack, and numerous mill operations buildings demolished or burned in the 1960s
- Collins Casket Manufacturing (former tenant): Manufactured wood caskets; occupied multiple buildings, including former Hulbert Mill office (Collins Building), and smoke shack, and a covered storage building. Collins Casket sublet portions of the Collins Building to:
  - Michael's Woodcraft (former tenant; occupied 2nd floor of Collins Building: Manufactured wood products
  - RL Enterprises (former tenant; occupied 2nd and 3rd floors of Collins Building: Manufactured wood cabinetry
- Nalley's (former tenant): Operated a food warehouse
- Sandy's Boathouse (current tenant): Sells and services boat equipment and motors
- Washington Belt and Drive Systems (current tenant): Retail sales of machinery parts
- American Boiler Works (former tenant): Administration offices for manufacturing operations elsewhere on Port property
- Jensen Reynolds Company (former tenant): construction of pre-fabricated waterfront buildings including manufacturing and storage of materials.
- Port of Everett Marina Maintenance Facility: Offices and vehicle maintenance shop for Port marina maintenance staff
- Veco, Inc. (former tenant): Subleased warehouse area from Jensen-Reynolds Construction; storage of vehicles, welding equipment, construction equipment and shipping container boxes.

- 12th Street Channel aquatic lands (current 12th Street Yacht Basin): Historically used for log rafting. Some saw milling operations appeared to extend over the eastern end of the 12th Street Channel based on historic aerial photographs (See Appendix A, Figure A-1).

The following subsections provide a description of each investigation area, including a description of environmental concerns identified to date [e.g., underground storage tanks (UST)] associated with current and former tenant and owner activities based on available environmental reports. In addition to observed environmental concerns, any building constructed prior to 1975 should be considered for the potential to contain asbestos containing materials (ACMs) or lead-based paints. Later sections of this report describe the characterization and intrusive remedial actions (e.g., excavation) performed as part of the interim action. The investigation areas are labeled on Figure 4.

2.3.1 INVESTIGATION AREA G

Investigation Area G roughly consists of the Ameron leasehold property prior to the leasehold boundary being revised in mid 2007. There are four buildings and one covered work area on the current leasehold. The largest building is the main manufacturing building used for making concrete poles.

Three auxiliary buildings located along the west edge of Area G include a laboratory and storage building, a pole polishing building, and a pole finishing and dry storage building. Along with the four buildings, there is a covered work area located over the loading and unloading area between the manufacturing building, pole polishing building, and pole finishing and dry storage area. Based on review of available aerial photographs, the manufacturing building, lab/storage building, and pole polishing building were built sometime in the early 1970s. The pole finishing/warehouse building was added in the late 1980s, and the covered area was added in the early 2000s. All of these structures are still present and used as part of Ameron operations. The following sections discuss environmental conditions observed in and around these buildings during previous environmental investigations.

2.3.1.1 Main Manufacturing Building

The concrete manufacturing building houses the main production facilities. Within the building is a basin used in the construction of the long concrete poles produced at the facility. The basin extends below the groundwater table and previously collected and discharged both groundwater and floor wash water that drained into the basin. The basin discharged to an outside settling pond for infiltration. In 1992, the basin was reconfigured so that the groundwater is collected in a separate enclosed drainage system and pumped directly into the storm drain.

There is a compressor room in the northwest corner where oil, diesel, and concrete-release agent drums were stored. Concrete settling basins are located to the east of the Manufacturing building and are used to settle concrete solids from the batch operations process water. The process water is either recycled or discharged to the sanitary sewer system.

Several environmental issues were noted during the Kleinfelder 1991 Phase I ESA in and around the main manufacturing building. These included:

- Drum storage outside the east side of the building with soil staining
- Accumulated brown, rust, and green sandblasting waste on the northwest side (outside) of the building.
- Numerous reportedly empty, rusted, dented hazardous waste drums stored along the west side of the building.
- Noticeable spills of petroleum product on the compressor room floor
- Open containers of flammable liquids that did not have secondary containment.

At the time of the 1992 ECI Phase 2 investigation, the drums had been removed and there were no signs of soil or pavement staining remaining. Ameron indicated that the stained soil (characterized as petroleum staining in the Phase 2 investigation) had been excavated and drummed for offsite disposal.

2.3.1.2 Laboratory and Storage Building Area

A 12,000-gallon diesel UST was removed in 1988 from the west side of the storage/laboratory building. The removal and a soil and groundwater investigation conducted by Sweet-Edwards/Emcon was reported in an Environmental Audit Report by PSM International, Inc. (PSM 1989). The environmental investigation indicated no reportable concentrations of petroleum hydrocarbons or free product in the soil or groundwater. The testing is discussed further in Section 3.1.1.2. The UST is listed on Ecology's UST database as removed. The approximate former location of the UST is shown on Figure 3.

At the same time as the UST investigation, PSM also investigated an unlined settling pond located north of the laboratory building, near the fenceline west of the main manufacturing building. The pond reportedly collected water, pumped through an underground pipe, from a settling basin adjacent to the pole-polishing building. The pond basin was created by an earth berm that extended approximately 5 ft above ground surface.

2.3.1.3 Pole Polishing and Pole Finishing and Dry Storage Buildings

Kleinfelder (1991) noted 55-gallon drums and evidence of sandblasting and concrete pole polishing in the area of the pole polishing building. Air pollution equipment (baghouse) was observed although the air was noted to be very dusty inside the pole polishing building during the site reconnaissance. Three concrete settling ponds were reportedly located on the east side of the pole polishing building, but two had been filled with onsite backfill prior to the 1991 Kleinfelder site reconnaissance, and the third was collecting rainwater. West of the pole finishing and dry storage building sandblasting debris and a storm drain were observed (Kleinfelder 1991). No floor drains were identified inside the building.

A very limited oil-stained surface soil area, estimated to be 2.5 ft in diameter and 1 ft in depth, adjacent to the drum storage area, was observed at the northwest corner of the pole polishing building (ECI 1992). The stained soil was removed by Ameron and a soil sample collected following removal exhibited a total petroleum hydrocarbon (TPH) concentration of 1,400 milligrams per kilogram (mg/kg) using U.S. Environmental Protection Agency (EPA) Method 418.1 (ECI 1992).

2.3.2 INVESTIGATION AREA I

Investigation Area I comprises the property between the 12th Street Channel Waterway (now the 12th Street Yacht Basin) and Investigation Area G to the east, the property line that separates Port property from Norton Industries property to the north, and Investigation Area J to the south. This portion of the Site has been recently redeveloped as part of the Craftsman District as described in Section 2.2, and currently contains a large Bayside Marine building at the north end, the Port Marina Operations Center

near the center, a concrete esplanade along the shoreline, and asphalt pavement covering on the rest of the area.

Prior to the recent redevelopment, no permanent structures existed in Area I except for structures associated with the Hulbert Mill that were demolished in the 1960s. However, several lessees and operations were identified during site reconnaissance and historical Phase I ESA reviews conducted by ECI (1987, 1988, and 1992), Kleinfelder (1991), and Hart Crowser (1991). The environmental conditions and concerns observed in this Area by these investigations are discussed below.

2.3.2.1 Jenson Reynolds Lease Area

Between 1987 and 1990, ECI conducted several environmental investigations of the Jenson Reynolds leasehold (see approximate leasehold boundary depicted in orange on Figure 3) for the Hulbert Mill Company (the property owner at that time). Hart Crowser conducted a preliminary environmental assessment of the former lease area in 1991 for HNTB (parent company of MSRC) prior to MSRC leasing a portion of the former lease area for a new warehouse. According to maps in their reports, the Jenson Reynolds lease included portions of Areas I, J, and M.

Jensen Reynolds was a waterfront construction concern and used the property as an administrative base of operations (Building on Area M) as well as a lay-down and fabrication yard for numerous projects (ECI 1987). According to ECI, they sub-leased the property from Centrecon in 1982. According to Hart Crowser (1991), Jensen Reynolds leased the site until 1991 when it was bought by the Port. Hart Crowser also indicates that Jensen Reynolds constructed prefabricated waterfront buildings and used the leasehold for manufacturing and storage of materials.

The 1987 and 1988 ECI reports on the Jensen Reynolds lease identified numerous environmental issues including drums of varying contents and condition scattered throughout the entire site, leaking drums, areas of paint chips and discolored soil, black sand-blasting waste deposited on soil, and demolished building debris. Within Area I, the following were noted:

- Large areas of discolored soil on the ground in the northern half of the leasehold that appeared to be surficial overspray from the painting of large components fabricated in the yard (ECI 1987)
- An assortment of full, partially full, and empty drums scattered throughout the property, including fifteen 55-gallon drums that showed clear evidence of minor spills and leaks onto unprotected ground along the north property boundary
- Black sand blasting abrasive in small piles adjacent the eastern fence line (Centrecon fence line)
- An accumulation of metal paint chips up to 2 ft high over a 20 ft by 20 ft area southeast quadrant of Area I
- An area about 200 ft square was covered with blasting sand about 4 inches thick in the north-central portion of Area I

- An area of building demolition and household debris immediately north of the blasting sand
- Piles of miscellaneous wood scraps and insulation foam scattered over the entire area
- Piles of gray/black sludge-like material spread randomly around the northern portion of the property (Hart Crowser 1991).

The 1988 ECI report noted that the surficial evidence of spray paint, blasting sand, numerous barrels, and spillage of barrel contents noted in the 1987 ECI audit were no longer apparent.

2.3.2.2 Commercial Steel Fabricators

When Kleinfelder conducted their Phase I ESA in 1991, the property was being used by Commercial Steel Fabricators to manufacture prefabricated buildings. Several environmental conditions were noted by Kleinfelder (1991) in the area used by Commercial Steel Fabricators including:

- An open hazardous materials shed with drums of diesel and gasoline stored inside
- Soil staining in and to the west of the shed
- Areas of paint chips and sandblast grit deposited on soil
- Soil at the storm drain discharge to the 12th Street Channel in the northwest corner of the area noted to be darker than the surrounding soil.

By June of 1992, AGI (1992) indicated that the structures and features associated with Commercial Steel Fabricators had been removed from the site and the site freshly graded with new base rock.

2.3.2.3 Port Operations

The Port conducted limited operations in Investigation Area I subsequent to purchase of the Site in 1991 and prior to the start of recent redevelopment in 2006. These operations consisted of conducting petroleum hydrocarbon treatment (landfarming) as described below, the disposal of brush and landscape trimmings in the northeast portion of the area, boat impound storage, and the storage of a small number of creosote-treated piles in the central-eastern portion of the area. Additionally, an alumina crane from the Port's Pier 1 was relocated for storage purposes to the southwestern portion of the area and a submarine was hauled upland from the barge channel and dismantled, and several of its fiberglass panels were stored in the southeast corner of the property.

Soil landfarming for remediation of petroleum hydrocarbon-contaminated soil was conducted in the northeast corner of Investigation Area I (AGI 1992). Although documentation is limited, available information indicates that the landfarming was related to a number of UST closures conducted by the Port throughout the North Marina Area in the early 1990s. The apparent landfarming area was reportedly lined with plastic sheeting and contained within straw bales (AGI 1992). The former landfarming area is visible in a 1992 aerial photograph of the Site (Appendix A, Figure A-3). Much of the area was reportedly

cleared of the remnants of the Commercial Steel Fabricators operations and freshly graded with new base rock surfacing by 1992 (AGI 1992), which is also evident in the 1992 aerial photograph.

In addition to these operations, the Port leased a portion of the area along the shoreline to Shaughnessey Co., an industrial moving company, who stored moving containers using the 12th Street Channel barge wharf. They also used steel plates on the ground to support their operations, and stored articulating moving rigs at the property.

On Figure 3, the former boat impound storage is visible in the eastern portion, and former Shaughnessey Co. operations are visible in the western portion of Investigation Area I. The approximate location of the former landfarming area is also shown on Figure 3.

The northern portion of Area I is currently occupied by the Bayside Marine dry stack storage and marine retail business that was constructed in 2007. The new Port Marine Operations Center was constructed in the west-center area concurrent with the Bayside Marine facility, and the remainder of Area I was paved. A new travel lift was constructed in the southwest corner of Area I in 2005, but will not be fully operational until redevelopment of the MSRC building is complete. Figure 4 shows these current upland Area I features.

2.3.3 INVESTIGATION AREA J

Most of Investigation Area J was also formerly part of the Jensen Reynolds lease area until the Port bought the property in 1991 (Hart Crowser 1991). The area includes a former open-sided warehouse, two historical subgrade concrete vault structures of unknown purpose that were discovered and removed during construction activities subsequent to Port purchase of the property, and the former MSRC leasehold whose building currently remains.

In 1993, a buried concrete structure was discovered during the construction of a drainage swale associated with the partially built MSRC building. The buried concrete structure, located outside the west wall of the southern half of the MSRC building, was filled with wood debris, soil, and what appeared to have been drums containing oil (Kleinfelder 1993a). Investigation and cleanup of the historical structure and surrounding soil are discussed in Sections 3.1.1.7, 4.2, and 5.2.

Environmental conditions observed in this area during the numerous environmental assessments conducted on the property between 1987 and 1993 are discussed below. In 1993, the MSRC building shown on Figure 3 was constructed. Much of the area around the building was paved when the building was constructed, although portions of the area to the west are unpaved near the fenceline. The MSRC building remains and is being remodeled as part of the Craftsman District development plan, as discussed in Section 2.2.

2.3.3.1 Former Open-sided Warehouse

Before the MSRC building was constructed, a warehouse approximately one third of the size of the MSRC building was located slightly to the east of, and overlapping, the area where the MSRC building now stands (Figure 3). In 1991, the southern half of the warehouse was being used by Veco Inc. to store welding and construction supplies, and the Port was using the northern half to store old electric meters and light posts removed from marinas, waste oil containers, drums, and wood piles (Hart Crowser 1991). The warehouse and surrounding area were assessed as part of the Phase 1 ESAs conducted between 1987 and 1991. The areas of environmental concern noted in and around the open-sided warehouse included:

- Numerous leaking drums of various contents, some of which include gasoline, diesel, and lubricant
- An aboveground storage tank (AST)
- A flooded area with an oily sheen north of the former warehouse and free-standing product on the asphalt in the warehouse
- Piles of blasting sand on the floor inside the warehouse.

ECI made housekeeping recommendations based on their observations (ECI 1988) and a subsequent site reconnaissance in 1989 indicated that the recommended housekeeping measures appeared to have been implemented.

In 1991, Hart Crowser noted waste oil tanks, waste oil in drums, open-topped buckets, and empty drums in very poor condition stored adjacent the Ameron fenceline and the north side of the open-ended warehouse. They also observed green sand believed to be sandblasting sand west of the open-ended warehouse.

During the Kleinfelder Phase I (Kleinfelder 1991), the former warehouse was being leased by Veco, Inc, but was vacant at that time. No environmental concerns were observed; however, they noted that some of the area was covered by storage lockers and containers.

2.3.3.2 Former UST

An approximately 10,000-gallon UST used for fueling Port vehicles, and later for waste oil storage, was reportedly removed in the late 1980s from the southwest corner of the Site, at the location shown on Figure 3. No documentation regarding the presence or decommissioning of this UST is available. The existence of the former tank was not known during Site environmental investigations until it was identified by Port personnel during Landau Associates' 2004 Phase II ESA. Soil and groundwater were characterized in the former UST vicinity during the 2004 Phase II ESA and subsequent DGI.

2.3.3.3 Former MSRC Building

The former MSRC building and the attached open-sided work area on its north end have been the only structures present in Area J since their construction in 1993. The MSRC facility was used for the storage of marine spill response supplies and no environmental issues were identified related to MSRC operations during previous Site investigations. The building is currently unoccupied, but is being redeveloped into new Port offices and small business bays for marine services providers. The area to the east of the MSRC building will be used for boatyard activities by the marine service providers occupying the MSRC building, and boatyard activities will extend into Area M to the east, possibly including the area currently occupied by the Collins Building. The marine service providers' operations will be supported by the new travel lift located in the southeast corner of the 12th Street Yacht Basin to the west.

2.3.4 INVESTIGATION AREA M

Investigation Area M borders West Marine View Drive. The northern section of Area M is narrow and consists of a long building leased by Ameron and subleased to various businesses. The southern section of Area M stretches farther to the West, and historically consisted of several buildings, including the Hulbert Mill company office, Sandy's Boathouse, Washington Belt and Drive Systems, the Collins Building, the Collins warehouses and "smoke shack", a warehouse occupied by Nalley Foods, the Port Marina Maintenance Facility, a warehouse occupied by the Port and Veco, Inc., and two office buildings facing 13th street. The number and locations of some buildings have changed over the operational history of this area. Environmental conditions observed in and around each building are described below.

Area M will likely be redeveloped in the future into an extension of the Port's Craftsman District, currently located to the west, as described in the previous section.

2.3.4.1 Ameron and Subleases Building

The northern portion of Area M has a long building oriented north to south, which is leased by Ameron and subleased to various businesses. The building was constructed in the late 1970s and is still in use. At the time of the 1991 Kleinfelder Phase I ESA, the subleases were (from North to South) Tri-Coatings, Inc., Besco, Inc., Churchill Brothers Sail Loft, and Sunset Body Works, Inc. (Kleinfelder 1991). Several of these subleases have changed since that time. For example, Tri-Coatings, which operated a maintenance and mechanics shop in Area M to support their main facility located on the adjacent property to the north (see Figure 3), changed their name to TC Systems, Inc. in the early 1990s. Dunlap Industrial Hardware has taken over a portion of the northern buildings, and North Central Collision has taken the place of Sunset Body Works.

2.3.4.2 Historical Hulbert Mill Company Office

The southern part of Area M has changed more substantially over time. Just south of the Ameron subleased building was a house, built sometime while the former Hulbert Mill was operating. Historically, the house was used as the Hulbert Mill Company Office, but was vacant by the time of Kleinfelder's site reconnaissance in 1991. No noticeable environmental concerns were noted on inspection of the exterior of the building during the Kleinfelder reconnaissance. The building was demolished in the late 1990s. A paved parking lot now covers the area where the house once stood. The former location of the house is shown on Figure 3.

2.3.4.3 Sandy's Boathouse

South of this area along West Marine View Drive are two current buildings built in the early 1970s. The northern building is Sandy's boathouse, where a parts degreaser, waste oil accumulations, and an engine test tank were noted during the 1991 Phase I ESA (Kleinfelder 1991). The degreaser oil and solvent waste were reportedly being disposed of offsite. Oil and grease associated with the test tank were reportedly being cleaned with oil-absorbent pads and associated wastewater was discharged to the sanitary sewer. An AST storing petroleum hydrocarbons with no visible staining was observed here during the Landau Associates Phase I ESA site reconnaissance in 2000 (Landau Associates 2001).

2.3.4.4 Washington Belt and Drive Systems Building

The building just south of Sandy's Boathouse is occupied by Washington Belt and Drive Systems, a machinery parts retailer. The building has a sanitary sewer drain in the storage area. No recognized environmental conditions were observed at this location during either the 1991 (Kleinfelder 1991) or the 2000 (Landau Associates 2001) Phase 1 ESA Site reconnaissances, although unopened containers of 1,1,1-trichloroethane (1,1,1-TCA) were observed during the 1991 Site reconnaissance.

2.3.4.5 Collins Building

West of these buildings is the Collins Building (formerly North Coast Casket Company), built in 1926 and still present. An abandoned fuel oil boiler system exists at the Collins Building, and small surface stains were observed during the Landau Associates Phase I ESA Site reconnaissance in 2000 (Landau Associates 2001).

2.3.4.7 Former Collins "Smoke Shack" and Covered Storage Shed

The former Collins "smoke shack" and covered storage shed, built in the 1960s, were located to the west of the Collins Building and were associated with Collins Casket Company operations. The building, located off the northwest corner of the Collins Building, was used as a break room for

employees (dubbed the "smoke shack"), and also reportedly stored building materials. During the 1991 Phase I ESA Site reconnaissance (Kleinfelder 1991), waste paint containers and stained soil were observed outside in an area northwest of this building. The covered storage shed, located south of the smoke shack and west of the Collins Building, was made up of two connected open warehouses and was reportedly used as open storage for metal parts, wood scraps, and old machinery; no environmental concerns were noted related to this building. The smoke shack and the northern half of the warehouse were demolished in the early 1990's and the southern half of the open warehouse was demolished in 2001 or 2002, and the location is currently paved with asphalt.

2.3.4.6 Warehouse (Nalley Foods)

From before 1965 until 2005, a warehouse was located adjacent to the east side of the Collins Building, which for a period of time was being used for food storage by Nalley Foods. No recognized environmental conditions were identified for this building, although former tenants (Collins Casket Company, Michael's Woodcraft, and RL Enterprises) all used glues and wood finishing chemicals during the manufacture of wood products.

2.3.4.8 Port of Everett Marina Maintenance Facility

The former Port Marina Maintenance Facility was built over the northern portion of the smoke shack/warehouse area in the early 1990's. During Landau Associates' 2000 Phase I ESA Site reconnaissance, an AST containing petroleum hydrocarbons with no visible surface stains was observed in the paved yard to the south of the maintenance building (Landau Associates 2001). No recognized environmental conditions were identified during the 2000 reconnaissance, although the interior of the building was not observed. The Port Marine Maintenance Facility was demolished in 2007 in conjunction with development of the Craftsman District and construction of the new Marina Operations Center.

2.3.4.9 Covered/Open-Sided Warehouse (Veco, Inc and Port of Everett)

The southwestern part of Area M was the location of an additional warehouse. The warehouse was built in 1983, and in 1991 was being leased by Veco, Inc. from Jensen-Reynolds Construction for storage and occasional use on large jobs. In 1991, the northern portion of the warehouse was being used by the Port of Everett as a maintenance garage prior to construction of its new maintenance facility (Kleinfelder 1991 and Hart Crowser 1991). Several environmental issues were identified at this location by Kleinfelder (1991) and Hart Crowser (1991):

- Dark staining on the surface grating of a storm drain in the building floor, and chemical drums stored onsite and nearby (Kleinfelder 1991).

- Storage of waste oil in cans and drums that showed leakage and spillage outside of the maintenance garage, and small piles of oil absorbent material was observed adjacent to lube, motor and hydraulic oil drums inside the building (Hart Crowser 1991)

- Green sand was observed at multiple locations, including behind the maintenance garage, and was assumed to be related to sandblasting activities (Hart Crowser 1991).

2.3.4.10 Office buildings

Two buildings bordering 13th street in Area M served as office buildings. The westernmost building was present to the south of the Veco/Port warehouse. The eastern half of the office building was constructed in 1982 and a western expansion was added in the early 1990s. The building was demolished in 2007 during construction of the Craftsman District. Two gasoline USTs and one diesel UST were located within the expanded building footprint, which was reportedly the reason for their removal prior to construction of the building addition. These USTs, erroneously listed in Ecology records as having been removed from Bayside Marine (1100 13th Street), were determined to be incorrectly located; the correct location was identified with the assistance of Port personnel and historic aerial photographs. The correct location for these former USTs are shown on Figure 3 and are addressed further in Section 4.1.

The other building, a modular home unit used as an office building, briefly existed in Area M between 2002 and 2006, just south of the Collins building, facing 13th Street. No recognized environmental conditions were identified associated with this structure.

2.3.5 THE 12TH STREET YACHT BASIN

The 12th Street Yacht Basin is located in the 12th Street Channel, and constitutes the aquatic portion of the Site. The currently estimated Site boundary extends from the western shoreline of Area I to the point where the channel intersects the Snohomish River, and from the north shoreline of the channel to the estimated north boundary of the North Marina West End site (about 200 ft north of the Channel's south shoreline). Based on review of historic aerial photos, the Yacht Basin was heavily used for log rafting and other saw milling activities until the Hulbert Mill ceased operations in the 1960s. In addition to log rafting activities, saw mill structures reportedly used for saw and shingle mill operations extended westward from the shoreline into the current channel area. The primary environmental concerns for the aquatic portion of the Site related to former wood products operations is the accumulation of wood waste, which is a common issue associated with historic saw milling operations.

Based on the aerial photos and other information, a navigation channel was dredged along the south side of the channel in the early 1970s to provide adequate vessel draft for both Port and Hulbert operations. The entire Site aquatic area was dredged to about elevation -16 ft MLLW in 2005 as part of the Yacht Basin development, and the Yacht Basin floats and upland infrastructure was built between

2005 and 2007. Sediment investigation studies prior to the construction of the Yacht Basin construction are discussed in Section 3.1.1.7.

A stormwater outfall present in the northeast corner of the Yacht Basin receives stormwater from a stormwater trunk line that runs easterly from the outfall. The age of the trunk line is uncertain, but it pre-dates the Port's ownership of the property. Numerous laterals drain into the main trunk line, including laterals from the northern half of the Ameron leasehold and the Norton Industries property to the north of the Site (including the TC Systems, Dunlap Industrial Hardware, and O&W Glass businesses). Stormwater conveyance from the northern portion of the Bayside Marine leasehold and the access roadway to the west of the Bayside building were recently added to the trunk line during the development of the Craftsman District. Due to its age and the limited documentation of its construction, there could be additional, undocumented laterals connected to the trunk line.

The stormwater trunk line appears to be in poor condition. Replacement of failed sections of the main trunk line was conducted by Ameron in 2005 and the Port in 2008. In addition, recent camera surveys in 2008 and 2009 could not be completed because of sediment accumulation in the trunk line. It is also noted that marine surface water backs up into the main trunk line during high tide due to the lack of a properly functioning tidal gate.

Stormwater was collected and tested from the outfall, and marine sediment was collected and tested from the immediate outfall vicinity during previous Site investigations, as discussed in Section 3.4.

2.3.6 HULBERT MILL

As previously discussed in Section 2.2, the Hulbert Saw and Shingle Mill operated at the Site from the 1920s to the 1960s, and was partially destroyed in a 1956 fire. The Hulbert Mill operated throughout much, if not all, of Areas G, I, J, and M. The majority of the mill structures were razed prior to 1965 in advance of redevelopment of the Site by the Hulbert Mill Company for other industrial and commercial purposes.

A number of environmental concerns are often associated with historic saw/shingle milling operations. However, none of the available environmental investigations have evaluated potential releases associated with historic saw milling activities, and, with the possible exception of affected construction debris encountered in Area J, no releases related to former saw mill activities have been identified. The potential for releases related to former saw milling activities will be further evaluated during scoping for the Site RI/FS work plan.

3.0 SITE CHARACTERIZATION

This section presents Site characterization activities that were conducted to delineate the nature and extent of contamination prior to implementation of the interim actions. The following sections present a description of the investigation activities (Section 3.1), the physical and hydrogeologic setting (Section 3.2), the development of interim action cleanup standards (Section 3.3), and the environmental conditions which led to interim actions (Section 3.4).

3.1 ENVIRONMENTAL INVESTIGATIONS

Prior to the Site's entry into the MTCA formal process, a number of environmental investigations were conducted to determine the nature and extent of contamination within the North Marina Area, including the Site. Up until 2000, investigations were performed by a number of different parties, as listed below. From 2000 onward, Landau Associates performed all environmental investigations, starting with a Phase I ESA (Landau Associates 2001), except for Pentec's DMMP characterization associated with the 12th Street Yacht Basin development and the marine sediment sample collected at the Site in 2009 by SAIC for Ecology in a study covering sediment quality for the entirety of Port Gardner Bay (SAIC 2009).

It should be noted that data from most of the environmental investigations conducted prior to 2000 were not available to Landau Associates during scoping for its environmental investigations and interim actions conducted between 2000 and 2007. As a result, data from these earlier investigations were not used in scoping Landau Associates' environmental investigations or interim actions. However, documentation from the earlier investigations has since been obtained and the investigation results are summarized in this report to provide a more complete understanding of known Site environmental conditions.

This section presents the available data from investigations performed by parties other than Landau Associates, followed by a description of investigations performed by Landau Associates. Investigations performed by parties other than Landau Associates discussed in this section include:

- *Supplemental Site Investigation, Jensen Reynolds Property, conducted for the Hulbert Mill Company* (ECI 1988)
- *Report on Investigations Conducted At Ameron (Centrecon) Plant* (PSM International 1989)
- *Preliminary Environmental Assessment, Proposed MSRC Facility* (Hart Crowser 1991)
- *Additional Site Observations and Testing, Hulbert Mill Property* (AGI 1992)
- *Groundwater Sampling and Analysis, Former Hulbert Mill Company* (Kleinfelder 1992)
- *Phase 2 ESA, Hulbert Mill Property* (ECI 1992)

- *Test Pit Exploration, MSRC Property* (Kleinfelder 1993c)
- *Independent Cleanup Action Report, Area West of MSRC Warehouse Building* (Kleinfelder 1993b).
- Marine Sediment Investigations:
  - *Subsurface Exploration and Engineering Report, William Hulbert Marina Site* (RZA 1988)
  - *Sampling and Analysis Report for Characterization, Proposed 12th Street Marina, for the Hulbert Mill Company* (RZA 1991).
  - *Puget Sound Dredged Disposal Analysis, Full Characterization for the 12th Street Marina* (Pentec Environmental 2001)
  - *Sediment Characterization Study, Port Gardner and Lower Snohomish Estuary, for the Department of Ecology* (SAIC 2009).

Investigations generating environmental data performed by Landau Associates include:

- *Phase II ESA, North Marina Redevelopment Project* (Landau Associates 2004)
- *Data Gaps Investigation (DGI), North Marina Redevelopment Project* (Landau Associates 2005a)
- *Ameron International Leasehold Environmental Investigation of Oil-Affected Area,* (Landau Associates 2005b).
- *Supplemental DGI, North Marina Redevelopment Project* (Landau Associates 2006c)
- *Cleanup Action Plan Addendum,*(Area G-1), (Landau Associates 2006b)
- Early Action Design Characterization
- Additional soil characterization conducted between February and July 2006 during interim action design to better delineate the extent of contamination for interim action design in a number of areas located across the North Marina Area (not previously reported).
- Additional characterization between June 2006 and October 2007 during interim action implementation to characterize materials that were encountered during removal activities that exhibited a unique appearance or other indications that the material may be contaminated (partially reported; Landau Associates 2008b.
- Characterization of soil and groundwater encountered during excavation for the Craftsman District sanitary sewer system in May 2007.

These investigations are described in the following sections and the analytical results are presented in Section 3.4. Both total and dissolved metals were analyzed for most Site groundwater samples. However, metals concentrations are elevated in most of the samples, which appears to be the result of particulates entrained in the water samples. Consequently, only dissolved metals results are discussed in the following sections of this report, although total metals results are also presented in the tables. Concentrations identified as elevated in the sections below exceed site interim action cleanup and/or screening levels identified in Section 3.3.

3.1.1 INVESTIGATIONS BY PARTIES OTHER THAN LANDAU ASSOCIATES

This section summarizes investigations done by others on the Site, organized chronologically starting with the upland investigations and followed by the marine sediment characterizations. The individual investigation reports should be reviewed for a more complete description of investigation activities.

3.1.1.1 *Preliminary Environmental Audit and Supplemental Site Investigation, Jensen Reynolds Property* (ECI 1987 and 1988)

Investigation of the former Jenson Reynolds leasehold was performed by ECI in 1987 and 1988 for the Hulbert Mill Company. During these investigations, ECI noted numerous areas of drum storage with evidence of spills and leaks onto the ground, outdoor metal paint chip accumulations, and an area in Investigation Area I covered with discolored soil potentially caused by paint overspray and blasting sand.

Two samples of the discolored soil in Area I were collected and tested during the 1987 investigation. Sample ECI-G-1 was collected from an area exhibiting reported petroleum hydrocarbon spillage from drums in the western portion of leasehold, and was tested for polychlorinated biphenyls (PCBs) and selected metals, but not petroleum hydrocarbons. The sample did not exhibit detectable concentrations of PCBs and copper was the only sample exhibiting an elevated concentration (111 mg/kg). Sample ECI-G-2 was collected from an area along the eastern leasehold boundary exhibiting the presence of black sand blast grit. This material was tested for lead, arsenic, and petroleum hydrocarbons (oil and grease), and exhibited elevated concentrations of 1,300 mg/kg, 3,000 mg/kg and 17,700 mg/kg, respectively.

During the 1988 Supplemental Investigation, some of the previously identified issues had been cleaned up, but new potential issues were identified including additional piles of blasting sand, piles of paint chips and discolored soil, and construction debris. ECI sampled and tested the blasting sand for E.P. Toxicity for a number of metals (arsenic, barium, cadmium, copper, chromium, lead, mercury, nickel, selenium, silver, and zinc) and the dangerous waste criteria were not exceeded for any of the analytes. The blasting sand was not tested for total metals. The metal paint chips were sampled and analyzed for total lead, arsenic, and zinc, and were found to have a lead concentration above state background levels, although the concentration is well below current MTCA cleanup levels. Based on the results, ECI recommended testing for lead leaching and disposing of the chips at an appropriate offsite facility. The location of the samples, labeled ECI-3448-A (blasting sand) and ECI-3448-B (paint chips), are shown on Figure 5, and the results are presented in Table 1.

3.1.1.2 *Report on Investigations Conducted at Ameron (Centrecon) Plant* (PSM International 1989)

In 1989, as part of Ameron's due diligence in purchasing the assets of the current operator in Area G of the Site, Ameron hired PSM International to conduct an environmental audit. The PSM work identified and evaluated the soil and groundwater conditions associated with the removal of a diesel tank and the sediment and surface water quality associated with process wastewater ponds. The UST was located on the west side of the Ameron storage/laboratory building, as shown on Figure 3, and was removed in December 1988. In January 1989, PSM, in conjunction with its subconsultant Sweet Edwards/EMCON, conducted an investigation of soil and groundwater in the former UST vicinity to evaluate whether residual contamination associated with the former UST was present.

One boring was advanced at the center of the UST excavation area (SEE-EC-1) to a total depth of 9 ft, to test soil down into the water table. Three other borings were completed around the former tank location and monitoring wells were installed in these borings. One well was installed as close as possible to the filling area of the tank (SEE-EC-2), one downgradient (west) of the tank to evaluate potential migration of contaminants (SEE-EC-3), and one upgradient to establish background conditions (SEE-EC-4). Soil samples were taken at multiple depths from each boring and groundwater samples were taken from wells screened from 2 to 12 ft below ground surface (BGS). Sample locations are shown on Figure 5.

A total of 19 soil samples and 3 groundwater samples were tested for TPH by EPA Method 418.1 and benzene, ethylbenzene, toluene and xylene (BTEX) by EPA Method 8020 and 8015-modified. The results for all samples were either below reporting limits or below applicable regulatory criteria, indicating no apparent impacts from the UST. There was also no indication of contamination observed during the field activities. Soil and groundwater results for these analyses are presented in Tables 2 and 3, respectively.

At the same time as the UST investigation, PSM also investigated environmental conditions associated with an unlined settling pond located north of the laboratory building, near the fenceline west of the main manufacturing building. The pond was made of bermed earth and reportedly collected water from a settling basin adjacent to the pole-polishing building. The pond water was observed to be in an overflow condition, with a light to medium emerald green color, and no odor. Two surface water samples and one sediment sample were collected. Both a filtered (PS-1/2) and an unfiltered (PS-3) water sample were collected from the pond. The sediment sample (PS-1/PS-2) was collected at a depth of 0 to 0.2 ft below the bottom. The locations of the samples are shown on Figure 5.

The water samples were tested for total and dissolved metals (arsenic, barium, cadmium, chromium, lead, mercury, silver, thallium, and zinc). The sediment sample was tested for metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc); EP

Toxicity metals, and what appeared to be similar to the Synthetic Precipitation Leaching Procedure (SPLP) test (24-hour acetic acid leach test). Pond sediment results (Table 1) indicate that none of the metals concentrations were elevated, and pond surface water quality results (Table 4) were not elevated except for copper at 10 micrograms per liter (μg/L). However, a high water pH of 11.5 was present in the water sample.

3.1.1.3 Environmental Engineering Services, Proposed MSRC Facility (Hart Crowser 1991)

Hart Crowser performed a preliminary environmental assessment and conducted a limited testing program to identify significant environmental issues that might affect a property transfer. The historical assessment they conducted was discussed previously (Section 2.2). The report indicated that unresolved issues following Hart Crowser's environmental assessment were limited to follow up groundwater quality testing based on elevated total metals concentrations, soil staining near drum storage areas, and sandblasting sand and sludge spread randomly around the leasehold.

Hart Crowser installed four monitoring wells and one soil boring: two wells were installed in Area I (HC-MW02 and HC-MW03) and two in Area J (HC-MW01 and HC-MW04), as shown on Figures 5 and 6, respectively. The additional soil boring was drilled in the southwest corner of Area I. Soil samples were taken during boring advancement and water samples were taken after the wells were developed

Hart Crowser interpreted the soil to be hydraulic fill. Their chemical laboratory analyses indicated identifiable concentrations of fuel and oil-related compounds in soil from HC-MW-2 and tetrachloroethylene was detected in one sample from HC-MW-4. However, all detections are below the cleanup screening levels (Tables 1, 2, and 8).

Soil and groundwater samples were analyzed by Hart Crowser's FAST laboratory using screening techniques and laboratory methods and quality assurance procedures that were not well documented in the report. These analytical results are presented in the tables, but should be considered estimates. Soil samples were tested for some analytes that are not commonly analyzed for environmental characterization purposes, such as aluminum, iron, and sulfur. Analytes that are not typical environmental parameters, and were not tested for during other environmental Site investigations, are not reported in the data tables. However, any constituent for which applicable cleanup criteria are available were evaluated during the identification of indicator hazardous substances (Section 3.3.6).

The groundwater samples were tested for total metals, petroleum hydrocarbons, and volatile organic carbons (VOCs), but the only complete results for VOCs were contained in the copy of the Hart Crowser report available during preparation of this report. Results for VOCs were all below the laboratory detection limit (Table 5). The report text indicates that the highest metals concentrations were

in the water sample taken from HC-MW03, where total chromium and lead were at concentrations of 200 µg/L and 100 µg/L, respectively. However, these were screening level analyses and because the samples were analyzed for total metals, the concentrations were likely affected by particulates entrained in the samples. Hart Crowser recommended that additional sampling and analyses for groundwater be conducted, which was performed by Kleinfelder for the Port in 1992, as described in Section 3.1.1.4, below.

3.1.1.4 Groundwater Sampling and Analysis, Former Hulbert Mill Company (Kleinfelder 1991, 1992

In 1991 Kleinfelder was hired by the Port to perform a Phase 1 ESA, to conduct report reviews of the Phase 1 ESAs being completed by others, and to conduct follow-up sampling of groundwater wells installed by Hart Crowser. The groundwater sampling was conducted in 1992 for total and dissolved metals, total fuel hydrocarbons, and purgable chlorinated solvents. No fuel hydrocarbons or chlorinated solvents were detected, but all samples had elevated concentrations of total arsenic, copper, and lead, which may result from particulates present in the unfiltered samples. Samples from all monitoring wells but HC-MW04 also contained elevated dissolved copper concentrations ranging from 12 to 38 µg/L. Dissolved copper was not detected in the sample from HC-MW04; however, the laboratory reported an elevated reporting limit of 20 µg/L. The analytical results for these samples are presented in Tables 3, 4, and 5 and discussed further in Section 3.4.

3.1.1.5 *Phase 2 ESA, Hulbert Mill Property* (ECI 1992) and *Additional Site Observations and Testing, Hulbert Mill Property* (AGI 1992)

A Phase II ESA was conducted in 1991/1992 to address concerns identified during the Kleinfelder Phase I ESA (discussed in Section 2.3). The initial activities associated with the Phase II ESA were conducted by ECI (1992) and the investigation was completed by AGI (1992). The purpose of the Phase II ESA was to evaluate recognized environmental conditions identified in the 1991 Phase I ESA (Kleinfelder 1991) and included investigation of groundwater, surface water, soil, and marine sediment quality.

The portion of the Phase II ESA conducted by ECI included:

- The collection of five surface soil samples for laboratory analyses
- Excavating 19 test pits at 4 locations identified in the 1991 Kleinfelder Phase I ESA
- The installation of three groundwater monitoring wells (ECI-MW-1, ECI-MW-2, ECI-MW-3)
- The collection and analysis of samples of the stormwater discharge and sediment at the stormwater outfall in the northwest corner of Area I

- The collection and analysis of a sample a sump located in the Ameron manufacturing building.

In 1992, AGI conducted additional sampling, testing, and clarifications of issues identified by ECI in the 1991 Phase II Site Assessment performed at the Hulbert Mill property. Their assessments addressed:

- Site operations at Ameron to evaluate the potential for dichloroethane to occur in groundwater pumped from their manufacturing building basin
- Additional groundwater sampling in ECI well MW-2 (Figure 5) west of the Ameron pole finishing and dry storage building
- Sampling in Area I to address sandblasting material deposits and the soil landfarming stockpile
- Stormwater quality at the 12th Street outfall
- The content and condition of drums located between Ameron's pole polishing and pole finishing buildings.

In AGI's opinion, the drums stored on the Ameron leasehold did not represent an environmental risk. AGI also noted that all structures and features associated with Commercial Steel Fabricators' work had been removed from the site, and that much of the area had been freshly graded and a new base rock layer had been placed. They also noted that a landfarming operation for petroleum-contaminated soil lined with plastic sheeting and bermed with straw bales was located in the northeast corner of the Site. The 1992 photo in Appendix A illustrates the Site at this time, as compared to 1985 (also in Appendix A), when the Site was being used for prefab building manufacturing.

The ECI/AGI Phase II ESA activities and analytical results are presented in the following subsections by media (i.e., groundwater, stormwater, sediment, and soil).

Groundwater Investigation

The ECI 1991 groundwater investigation included the installation and sampling of three monitoring wells (ECI-MW-1 through MW-3). The AGI groundwater investigation included re-sampling ECI-MW-2

Monitoring Well ECI-MW-1 was installed downgradient to the three former USTs removed in 1991 in Area M (discussed in Section 2.3.5) and a groundwater sample was tested for the full suite of TPH analyses and BTEX. ECI-MW-2 was installed just west of the Ameron pole finishing building and a groundwater sample was tested for VOCs. ECI-MW-3 was installed downgradient to a filled-in indoor sump, that was formerly used to collect substances related to the paint stripping being performed in the area, and a groundwater sample was tested for VOCs. Later, AGI collected and tested an additional groundwater sample from ECI-MW-2 (AGI-MW-2; shown on Figure 6) for total and dissolved metals.

Results exhibited a concentration of dissolved arsenic slightly above the cleanup screening level (7.5 µg/L). Although elevated concentrations of other metals (i.e., arsenic, copper, lead, mercury, nickel, and zinc) were detected in the "total metals" analyses, the elevated concentrations are likely the result of particulates entrained in the water samples, as the dissolved metals data from the same well did not detect these other metals.

The groundwater quality data are presented in Tables 3, 4, and 5 for metals, petroleum hydrocarbons, and VOCs, respectively. Groundwater quality results are discussed in Section 3.4.3.

Stormwater and Sediment Investigations

A stormwater discharge sample (ECI-Area-R) was collected by ECI from the outfall in the northeast corner of the 12th Street Channel, as shown on Figure 7. The sample was collected to evaluate stormwater quality based on observations of darkened sediment at the outfall during the 1991 Phase I ESA. The sample was analyzed for VOCs, semivolatile organic compounds (SVOCs); pesticides; PCBs; and priority pollutant metals. Trace levels of chloroform and acetone were detected in the stormwater sample; in a later stormwater sample collected by AGI (Sample R), chloroform was still detected, but not acetone. Although cleanup levels were not developed for either compound, AGI concluded that concentrations were low enough not to be considered an environmental threat, based on drinking water standards.

ECI collected a sediment sample below the outfall from the intertidal zone at the same time as the stormwater outfall sample was collected (also labeled ECI-Area-R), as shown on Figure 8. The sample had elevated concentrations of arsenic and zinc, as indicated in Table 7. Also, total recoverable petroleum hydrocarbons (TRPH) were measured at 2,100 mg/kg (dry weight), which may be a concern in sediment. These sediment quality results are discussed in Section 3.4 in the context of the Sediment Management Standards (SMS; WAC 173-204).

A water sample was collected from the sump located in the Ameron manufacturing building (ECI-D-1), as shown on Figure 5. The sample was taken directly from the discharge pipe that leads from the sump into the northern settling basin, and was tested for VOCs and total metals. Another water sample was collected 2 days later (ECI-Area-D) and analyzed for dissolved metals. The total copper concentration in Sample ECI-D-1 was elevated (14 µg/L), although this may be due to particulates entrained on the water sample. Dissolved copper was not detected (Area D), although the reporting limit (10 µg/L) was relatively high. No VOCs were detected at high concentrations, although a trace amount (1 µg/L) of 1,2-dichloroethane (1,2-DCA) was detected in Sample ECI-D-1. A follow up sample collected by AGI (AGI-D-1) did not contain 1,2-DCA or other VOCs above the laboratory reporting

limits. The analytical results for these water samples are provided in Tables 4 and 5 for metals and VOC analyses, respectively.

Soil Investigations

The 1991 ECI Phase II ESA conducted for the Hulbert Mill Company included the collection of 5 surface soil samples and the excavation of 19 test pits. The investigation resulted in analytical data for Investigation Areas G, I, J, and M. Eight test pits (ECI-TP-1 through ECI-TP-8) were excavated in the northwest corner of Area G to determine the extent and nature of the fill material. A 3-ft high wall of 12-inch by 12-inch treated timbers was found at ECI-TP-6. Blasting sand, ranging from 6 inches to 2-ft thick, was found at the surface at three of the test pits (ECI-TP-2, ECI-TP-7, and ECI-TP-8). Samples were collected from test pits TP-2 (ECI-TP-2), TP-3 (ECI-TP-3), and TP-5 (ECI-TP-5), as well as a surface sample of the blasting sand (ECI-Area F). The test pit and sandblast grit samples were tested for metals; the concentrations for all metals were below the cleanup screening levels, except for the copper concentration in ECI-Area-F, which slightly exceeded the copper cleanup screening level protective of groundwater. The analytical results are presented in Table 1 and the test pit locations are shown on Figure 5.

A soil sample (ECI-B-1) was collected to the east of the Ameron manufacturing building where a drum storage area with soil staining was observed during the Kleinfelder Phase I ESA. The sample was tested for TPH by EPA Method 418.1 and the concentration 7,160 mg/kg; Table 2) was significantly above applicable regulatory criteria.

Petroleum oil staining was observed off the northwest corner of the polishing building and was sampled by ECI (ECI-H-I) for TPH by EPA Method 418.1. The sample exhibited an elevated TPH concentration (1,400 mg/kg; Table 2) that exceeded the cleanup level applicable at that time (200 mg.kg), but is below the current TPH cleanup level (2,000 mg/kg).

A surface soil sample was taken under a discharge pipe for the secondary containment of a discharge tank located between the Collins Building and the adjacent warehouse to the east in Area M. The sample (ECI-M-1; Figure 6; Table 2) was analyzed for petroleum hydrocarbons; concentrations were well below the cleanup screening levels.

An area north of the former smoke shack, in the western portion of Area M, was investigated to evaluate possible contamination from waste paint and stained soil previously observed during the Kleinfelder Phase I ESA. Two surface samples (ECI-N-1 and ECI-N-2) were collected and analyzed for VOCs, BTEX and TPH. VOCs (Table 8) and BTEX (Table 2) were not detected in either sample and, although the petroleum hydrocarbon concentration in ECI-N-1 (310 mg/kg; Table 2) slightly exceeded the

cleanup levels used at the time of the report (200 mg/kg), the concentration is well below the current cleanup screening levels for petroleum hydrocarbons, as presented in Section 3.3.

The quality of soil used to fill three former concrete settling basins, located on the southwest side of the main Ameron building, was investigated with two test pits (J-1 and J-2). The fill was found to be comprised of mostly silty sand, although some blasting sand, concrete dust, and possible steel shot indicated by iron staining were observed in test pit J-2. A sample (ECI-J-2) was taken from J-2, which included the blasting sand and tested for total metals and TCLP metals. Analytical results, shown in Table 1 and Table 9, indicated concentrations above cleanup screening levels for arsenic (40 mg/kg) and copper (514 mg/kg).

Several test pits were excavated in Area I (then referred to as Area Q) to evaluate the soil staining, paint chips, and blasting sand observed during the Kleinfelder Phase I ESA. Three test pits (ECI-Q-5, ECI-Q-7, ECI-Q-8) exhibited a fragmented, soft, brick-like material of various colors within the top foot of soil. Two of the test pits (ECI-Q-6 and ECI-Q-7) revealed a 6-inch layer of black blasting sand within the top foot; a sample of the blasting sand was collected from test pit ECI-Q-6. Samples from 1 to 2 ft BGS were taken from test pits ECI-Q-1 and ECI-Q-5, and a sample from 5 ft BGS was taken from ECI-Q-8. All samples were tested for metals, TPH (EPA Methods 3550/8015 modified), and VOCs. VOCs were not detected in any samples, as presented in Table 8. Although ECI-Q-1 slightly exceeded the cleanup level for petroleum hydrocarbons applicable at the time of the report, none of the samples exceeded current petroleum hydrocarbon cleanup levels, as indicated in Table 2. The sample of blasting sand (ECI-Q-6) exhibited highly elevated concentrations of copper (1,410 mg/kg) and lead (1,350 mg/kg), as presented in Table 1. In addition, a concentration of antimony (58 mg/kg) from sample ECI-Q-6 was moderately elevated.

A test pit (ECI-K-1) was excavated on the west side of the Ameron spray booth to evaluate the sandblast grit that was observed in this area during the Kleinfelder Phase I ESA. A mixture of fill material and blasting sand was observed to a depth of 4 ft BGS, and a soil sample (Area K was collected from about 4 ft depth and tested for metals and TCLP. Although the TCLP results showed the metals do not readily leach from the soil, the sample exhibited elevated concentrations of antimony (106 mg/kg), arsenic (144 mg/kg), copper (398 mg/kg), and lead (304 mg/kg), as presented in Table 1.

A 96-hour bioassay test was conducted using the black blasting sand from Area I and all of the fish survived the test.

3.1.1.6 *Test Pit Exploration, MSRC Property* (Kleinfelder 1993c)

In May 1993, Kleinfelder performed an investigation of the MSRC area to provide information regarding the nature and extent of possible sand-blast waste materials in an area potentially affected by

the adjacent Ameron sandblast waste disposal practices. Four test pits and two surface samples were collected in the north part of Area J. Three of the test pits (TP03, TP01, and TP02) were excavated along the east side of the MSRC fenceline, in an area bordering the Ameron leasehold. These test pits encountered a heterogeneous fill consisting of brick, wood fragments, and concrete rubble, but did not identify any sandblast waste materials.

A fourth test pit (TP05) was located along the western border of the MSRC property. That test pit encountered a 2- to 3-inch layer of green sand, described as sandblast waste, which they indicated to be of an unknown origin (Kleinfelder 1993c). Soil samples collected from TP03 and TP05 had slightly elevated copper concentrations of 55 mg/kg and 65 mg/kg, respectively.

In addition, two surface samples were collected (SS01 and SS02) along the Ameron fenceline. One of the two samples indicated highly elevated concentrations of antimony (580 mg/kg), arsenic (1,600 mg/kg), copper (1,800 mg/kg), and lead (1,400 mg/kg), as indicated in Table 1. The other surface soil sample did not exceed any of the cleanup criteria.

3.1.1.7 *Independent Cleanup Action Report, Area West of MSRC* (Kleinfelder 1993b)

In 1993, a buried concrete structure was discovered during the construction of a drainage swale associated with the partially built MSRC building. The buried concrete structure, located outside the west wall of the southern half of the MSRC building, was filled with wood waste, soil, and what appeared to have been drums containing oil. Free product was found inside the structure. Representative samples of the contaminated soil were collected for laboratory analysis and later used for waste profiling (KFI-WP01 through KFI-WP04 and KFI-WP-COMP). The composite sample, KF-WP-COMP, was tested for diesel-range petroleum hydrocarbons, PCBs, TCLP Metals, SVOCs, and VOCs. PCBs, TCLP metals, SVOCs, and VOCs were either not detected or were present at concentrations well below the cleanup levels. All of the waste profile samples exhibited elevated concentrations of diesel-range petroleum hydrocarbons, and two of the samples collected from the excavation (KFI-SS11 and KFI-SS17) also had elevated concentrations of oil-range petroleum hydrocarbons, as discussed further in Section 3.4.1.3. Diesel-range petroleum hydrocarbon exceedance of the cleanup screening level ranged from 3,700 to 63,000 mg/kg, and oil-range organics exceedances ranged from 10,060 to 52,000 mg/kg. Free product and the highest petroleum-contaminated soil concentrations were found inside the concrete structure, while outside the structure concentrations were several orders-of-magnitude lower. The interim action conducted to address the petroleum hydrocarbon contamination in this area is discussed further in Sections 4.2 and 5.2.

3.1.1.8 Marine Sediment Investigations

Three sediment quality investigations were conducted in the 12th Street Channel in advance of it being redeveloped into the 12th Street Yacht Basin to evaluate the sediment quality for open water disposal under the Puget Sound Dredge Disposal Analysis (PSDDA) program. These investigations were:

- *Subsurface Exploration and Engineering Report, William Hulbert Marina Site. Everett, Washington.* RZA for William Hulbert (February 1988)
- *Sampling and Analysis Report for Characterization, Proposed 12th Street Marina, Everett, Washington*. Prepared by Rittenhouse-Zeman & Associates (RZA) for the Hulbert Mill Company (March 1991)
- *Puget Sound Dredged Disposal Analysis, Full Characterization for the 12th Street Marina.* Prepared by Pentec Environmental for the Port of Everett (February 1, 2001).

Additionally, a sediment quality sample was collected in the 12th Street Yacht Basin to evaluate sediment quality as part of the evaluation of Port Gardner Bay under the Puget Sound Initiative (PSI; SAIC 2009).

With the exception of the recent sample collected under the PSI, the sediment quality data were not collected using the methods and procedures specified under the SMS. However, the data are still of value in assessing general sediment quality and are summarized below, discussed in the context of the PSDDA evaluation. Because PSDDA chemical criteria are not directly applicable to SMS/MTCA evaluations, the data associated with these investigations are presented and discussed in Section 3.4 relative to SMS cleanup standards.

In preparation for the planning and construction of the 12th Street Yacht Basin, several characterization studies of the tidelands were performed. In 1988, Layton and Sell, Inc., P.S. (LSI) collected 15 surface core samples to evaluate the top 2 ft of sediment over the area that was being considered for development of a new marina by the Hulbert Mill Company (LSI 1988). From the most visually affected cores, two composite samples (LS-Comp-A and LS-Comp-B) were prepared and analyzed according to the PSDDA testing procedures at that the time. The shallow core locations (LS-1 through LS-15) and the composite samples are shown on Figure 9. The nickel concentrations in sample LS-COMP-A and sample LS-COMP-B slightly exceeded the PSDDA screening level for nickel. The lead concentration in sample LS-COMP-B also slightly exceeded the PSDDA screening level for lead. No other analytes exceeded the PSDDA screening levels.

The PSDDA characterization was continued by RZA in 1990. Eight composite samples were collected from 13 borings: four composites derivedfrom the top 4 ft of the sediment cores, and four derived from the interval from 4 ft to the bottom of the planned dredge prisms. Eight discrete samples were selected for sampling to account for volatile loss in the composite samples. The discrete samples

yielded no detections for VOCs. In the composite samples, some PSDDA screening level exceedances occurred for cadmium, mercury, silver, and phthalates, and, because of these exceedances, bioassay testing was also performed. Several samples had high mortality rates for the amphipod bioassay test. The 13 boring locations (RZA-B-1 through RZA-B-13) and the locations from which the composite samples were derived (RZA-C-1 through RZA-C-8) are shown on Figures 10 and 11.

In 2001, Pentec Environmental completed a full characterization of the dredge footprint for the planned 12th Street Yacht Basin (Pentec 2001). For the study, Pentec subdivided the sediment in the 12th Street Channel into eight Dredged Material Management Units (DMMUs). Fourteen sediment cores were taken over the area, and the core subsections were composited into eight samples, one to represent each DMMU. Three of the composite samples (CM-1, CM-2, and CM-3) derived from the upper portions of the cores represent the surface DMMUs, while the other five (CM-4 through CM-8) derived from the deeper portions of the cores represent the subsurface DMMUs. According to the Pentec report for the 12th Street Marina, there were no exceedances of the PSDDA screening levels, bioaccumulation triggers, or maximum levels for sediments collected from the proposed Port 12th Street marina dredging project. The sediment core locations and the composite sample origins are illustrated on Figure 12. Analytical results for the composite samples are presented in Table 10.

One surface sediment sample (A2-13) was collected from near the center of the 12th Street Yacht Basin during the Port Gardner Bay bay-wide study conducted under the PSI (SAIC 2009). The sample was tested for a number of chemical parameters, consisting of SMS parameters (SVOCs, metals, and PCBs); tributyl tin (TBT); and conventional parameters. The sample was also submitted for bioassay analysis. None of chemical parameters exceeded applicable criteria. The sample passed three of the four bioassay analyses, but failed the larval development bioassay. However, a number of problems occurred during the performance of the failed bioassay test, and the data do not appear to be indicative of a sediment quality issue.

3.1.2 INVESTIGATIONS BY LANDAU ASSOCIATES

Landau Associates conducted a number of environmental investigations in support of redevelopment of the North Marina Area, which includes the Site. Because of its large size (65 acres), the North Marina Area was subdivided into investigation areas A through M, as described in Section 1.1 and shown on Figure 4. The Site includes Investigation Areas G, I, and M, and most of Area J.

The site investigation work began with a Phase 1 ESA for the North Marina Redevelopment Project (Landau Associates 2001). That work identified high, moderate, and low risk issues associated with the parcels comprising the entire North Marina Redevelopment Project. This Site represents only a

portion (approximately one-third) of the entire redevelopment project area addressed for the North Marina project.

The only high risk issues, those which indicated a confirmed environmental impact, identified for the Site included the potential for impact to groundwater in the vicinity of removed USTs including the Ameron and MSRC USTs; the 1989 PSM report presenting soil and groundwater quality data related to the Ameron UST removal was not available at the time of Landau Associates' investigations). Moderate risk issues identified included:

- Incomplete records for the final disposition of soil excavated during UST removal being treated on the Port Property (Area I)
- Assessment of groundwater in the area adjacent the MSRC where the 1993 independent cleanup action, the removal of the buried concrete structure, had been completed
- Small areas of surface staining.

All other identified risks were considered low.

Following the Phase I ESA, Landau Associates conducted a number of investigations to characterize environmental conditions within the North Marina Area, including the Site, to evaluate the nature and extent of contamination, develop the interim action design, and to document the nature of contaminated media encountered during the interim action. The following sections summarize the sampling nomenclature and procedures, and summarize the results for these investigation and characterization activities, presented in chronological order. The analytical results are presented compared to the interim action cleanup levels and the Site screening levels in Section 3.4. The referenced documents should be reviewed for a more comprehensive presentation of the investigation results.

3.1.2.1 Sampling Nomenclature and Procedures

In general, sampling locations conducted as part of the Landau Associates investigations were assigned prefixes that matched the investigation area in which they were located. For the Phase II ESA, sample locations were labeled sequentially within each area; for example, location G-3 was the third exploration completed in Investigation Area G. Exploration locations completed as part of the subsequent DGI were labeled with additional modifiers to indicate whether the exploration was conducted for general characterization purposes (GC) or as part of a focus area investigation (FA) associated with a release identified during the Phase II ESA. For instance, the 3rd general characterization boring completed in Investigation Area I was labeled I-GC-3. Soil samples collected from DGI borings were labeled with the boring designation followed by the depth interval in parentheses, for instance, I-FA-1 (0.5-1.5) for a soil sample collected from 0.5 to 1.5 ft BGS from boring I-FA-1. Sample designations were further refined

during additional characterization conducted during interim action design, as described in applicable sections below.

Monitoring wells were labeled sequentially starting with P-1. Monitoring Wells P-10, P-11 and P-12 are the only monitoring wells installed within the Site boundary as part of Landau Associates investigation activities.

All investigations were conducted under sampling and analysis plans (SAPs). All SAPs prepared subsequent to completion of the Phase II ESA were reviewed by Ecology under its VCP, beginning with the DGI Work Plan (Landau Associates 2005c). Site soil and groundwater sampling locations are shown on Figures 5 and 6. Note that some sampling locations that lie outside of the Site boundary are included because they help bound Site environmental conditions.

Selected laboratory analytical testing was conducted on Site soil and groundwater samples. Samples were tested using one or more of the following laboratory analytical methods:

- **Soil:** EPA Method Series 6000/7000 and Method 200.8 for total metals; EPA Method 6010B for TCLP metals; EPA Method 8270 for 9 carcinogenic polycyclic aromatic hydrocarbons (cPAHs) and SVOCs; EPA Method 8082 for PCBs; Method Krone 1988 SIM for TBT; petroleum hydrocarbons by NWHCID, NWTPH-Dx, and NWTPH-Gx, and; EPA Method 8260 for VOCs.
- **Groundwater:** EPA Method Series 6000/7000 and Method 200.8 for total and dissolved metals; EPA Method 8270-SIM for cPAHs; EPA Method 8270 for SVOCs; method NWHCID for hydrocarbon identification; NWTPH-Dx for diesel- and oil-range petroleum hydrocarbons; NWTPH-Gx for gasoline-range petroleum hydrocarbons; EPA Method 8260/8021 for BTEX; and EPA Method 8260 for VOCs.

Landau Associates determined that analytical results from these investigations were acceptable based on data validation completed for each data set, which consisted of reviewing data for holding times, method blank results, surrogate spike recovery results, matrix spike/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), laboratory duplicate sample comparisons, and reporting limits.

A summary of these investigations relevant to the Site are presented in the following sections. A detailed description of sampling methods employed during these investigations is presented in Appendix B and should be reviewed to obtain a more complete understanding of sampling methods.

3.1.2.2 Phase II ESA

The Phase II ESA (Landau Associates 2004) was conducted in 2003 and early 2004 to provide initial characterization of the environmental conditions across the North Marina Area. The intent of the investigation was to evaluate locations where hazardous substances may have been released based on the understanding of present and historical potential sources of contamination. Sample locations and testing

parameters were selected to determine whether soil or groundwater contamination had resulted from potential sources and activities identified as "high risk issues" in the Phase I ESA (Landau Associates 2001). A total of 30 soil and 45 groundwater samples were collected and tested during the Phase II ESA. Of these samples, 6 soil and 8 groundwater samples were collected within the Site boundaries.

The soil samples were collected using surface sampling methods and direct-push drilling techniques. Groundwater samples were collected from direct-push borings and newly constructed monitoring wells using low-flow groundwater sampling techniques (see Appendix B for sampling methods). Sampling locations and analyses were selected based on former Site uses and features, and field screening results. Samples were tested for the following parameters:

- **Soil samples**: TPH (NWTPH-Dx, NWTPH-Gx); metals (arsenic, cadmium, chromium, copper, lead, mercury, silver, zinc); PCBs; cPAHs; and/or BTEX.
- **Groundwater Samples**: TPH; dissolved metals (arsenic, cadmium, chromium, copper, lead, mercury, silver, zinc); BTEX; cPAHs; SVOCs and/or VOCs.

Sampling locations and analysis were selected during the Phase II ESA based on locations of high or moderate risk Site uses identified during the Phase I ESA. The areas of concern identified at the Site included:

- Area "g" - comprised on the Ameron leasehold where an UST was reportedly removed and chemical products (some of which include waste oil, diesel, concrete-release agents, flammable liquids, and spray sealant) were used and stored. This area was also the location of a historical fire that destroyed the former Hulbert wood products mill.
- Area "i" - which was the location of soil landfarming for remediation of petroleum-impacted soil removed for Site UST closures conducted in the early 1990s. This area also contained a soil stockpile near the northeast corner, and the area was generally elevated above surrounding grades, indicating that significant filling had occurred in this area..
- Area "j" - which included the MSRC building, where an independent cleanup action had been conducted to address a buried concrete structure containing petroleum wastes. This area also contained a UST previously used by the Port for fueling and waste oil storage that was removed from the approximate location of the buried concrete structure prior to the independent cleanup action conducted at this location.

In general, less investigation activity was focused on Area G and the northern portion of Area M because these areas were under long-term lease and not subject to redevelopment as soon as other portions of the North Marina Area.

The six soil and eight groundwater samples taken at the Site included one sample each from locations G-3 and G-2. The other four soil samples were taken at locations I-3, and composite samples I-X, I-Y, and I-Z. The other six groundwater samples were taken at locations G-1, P-10, P11, P12, J-1, and J-2; note that the monitoring well P-10 was installed in boring G-2. G-3 was sampled to investigate previous mill activities and test for residual cPAHs from the mill fire. Soil sample PZ-10 and water

sample G-2 were taken while installing well P10, which was placed to investigate possible releases from a previously removed UST, and from chemical storage and use in the area. The UST location was unknown at the time and the exploration was placed about 250 ft south of the actual UST location. A water sample from boring G-1 was taken for the same purpose.

Sample I-X was a composite sample taken to characterize a discolored (multicolored) material encountered in Area I, and sample I-Y was taken underneath the discolored soil. Nineteen borings were subsequently completed to delineate the extent of the multi-colored material (SS-1 through SS-19), although no samples were collected from these borings for chemical analyses. Samples I-3 and I-Z were taken as composites of the area reportedly used historically for soil stockpiling. The boring locations for each composite sample are shown on Figure 5.

Monitoring Wells P11 and P12 were installed in the west-central portion of Area I to investigate the area used historically for soil stockpiling, petroleum hydrocarbon-contaminated soil landfarming, and filling downgradient of the former saw mill, as shown on Figure 5. Groundwater sampling locations J-1 and J-2 were located to test groundwater downgradient (west) of the former concrete vault encountered during construction of the MSRC building in 1993 and the reported location of a 1980s UST removal, respectively; it was subsequently determined that the former concrete vault was located about 80 ft south of J-1, in the vicinity of J-2. Locations are shown on Figure 6.

For a list of the analyses for each Phase II ESA sample, see Table 6 (soil) and Table 11 (groundwater). Data are presented in Tables 1 through 5, Tables 8 and 9, and Tables 12 through 19 along with analytical data for other Site investigations.

Based on the results of the Phase II ESA and historical Site uses, concentrations of several metals (arsenic, chromium, lead, and zinc); cPAHs; and TPH in soil and/or groundwater were identified as constituents of concern (COCs) for the North Marina Area, including the Site. As such, analytical testing of soil and groundwater during subsequent North Marina Area investigations focused primarily on these analytical parameters. Other data groups such as SVOCs and VOCs were also tested during subsequent investigations, but to a lesser degree. The consolidated results of this and other investigations are presented in Section 3.4.

3.1.2.3 Data Gaps Investigation (DGI)

The DGI was conducted in late 2004 and early 2005 to fill the data gaps in Site characterization data that remained following the Phase II ESA (Landau Associates 2005a). The DGI scope was subdivided into two broad elements: 1) general characterization to provide sufficient data to delineate the extent of contamination throughout Site areas that were not evaluated during the Phase II ESA and did not have identified environmental concerns, and 2) focused investigation to better delineate contamination in

affected areas identified during the Phase II ESA. As previously indicated, boring locations were labeled with the investigation area designation first, followed by "GC" or "FA" to designate the boring as a general characterization or focus area location, followed by a unique sequential number (e.g., J-FA-2).

A total of 21 direct-push borings were completed at the Site during the DGI conducted in late 2004 through early 2005, and 25 soil samples and 8 groundwater samples were collected for analysis. The soil samples were collected using direct-push drilling techniques. Groundwater samples were collected from direct-push borings and monitoring wells using low-flow groundwater sampling techniques (see Appendix B for a description of sampling methods).

A total of 13 general characterization soil sample locations were tested within or just outside the Site boundary. The uppermost sample interval from each general characterization location was tested for constituents detected above the interim action cleanup levels during the Phase II ESA, including selected metals (arsenic, cadmium, copper, lead, mercury, and zinc); cPAHs; and petroleum hydrocarbons (i.e., NWTPH-Dx and NWTPH-Gx). Petroleum hydrocarbon testing was conducted by initially analyzing the sample for hydrocarbon identification (HCID) with follow-up testing for specific hydrocarbon ranges detected by the HCID analysis. The vertical extent of soil contamination was evaluated at each location by testing the deeper samples if the uppermost sample exceeded the interim action cleanup screening level established for each constituent.

Two Site locations were subjected to a focused investigation during the DGI; former USTs located in Areas J and M (Figure 3). Two borings (J-FA-1 and J-FA-2) were advanced in the immediate vicinity of the reported location of the former Port used oil UST near the southwest corner of the MSRC building to verify previous investigation results. Two borings (M-FA-1 and M-FA-2) were also advanced in the southwest corner of Area M to evaluate environmental conditions in the vicinity of three former gasoline and diesel USTs removed from this area (see Section 4.1). The borings in both areas were advanced to a total depth of 12 ft BGS and the capillary fringe soil and groundwater samples were tested for TPH-HCID. Field screening and observations during boring advancement did not indicate the presence of petroleum hydrocarbon contamination in any boring samples. Diesel- and oil-range petroleum hydrocarbons were detected in J-FA-1 in the vicinity of the former Port used oil UST at concentrations of 46 mg/kg and 540 mg/kg, respectively. No petroleum detections were indicated in samples from the 1991 UST removal location (Table 2).

Area I was not further characterized during the DGI because it was anticipated to be used as an area to contain contaminated soil from other areas as part of the Craftsman District development (Landau Associates 2005a). Investigation Area G and the northern portion of Area M were not further evaluated due to their long-term lease status, although three borings (G-GC-1, G-GC-2 and G-GC-3) were completed in the southern portion of Area G in anticipation of an Ameron lease boundary modification.

3.1.2.4 Supplemental Data Gaps Investigation

The supplemental DGI was conducted in late 2005 to better delineate the extent of contamination identified during the previous Phase II ESA and DGI. Three specific areas within the Site boundary were investigated as part of the supplemental DGI, as discussed below.

Area I

Investigation Area I had not been fully characterized during the DGI because soil contamination in this area was originally planned for consolidation and containment of contaminated soil as part of the Craftsman District redevelopment. Previous investigations in Area I had been focused on the delineation of 1) a soil stockpile located in the northeast corner of the property containing elevated arsenic and lead, and 2) a discrete layer of discolored, odorous material encountered near the center of the property containing elevated arsenic. When it was determined that planned finished grades within the Craftsman District were too low to allow containment of contaminated soil in this area, a supplemental characterization was conducted to provide a similar level of environmental characterization as that accomplished for other portions of the North Marina Area.

A total of 30 soil explorations (I-GC-1 through I-GC-26 and I-GC-1a through I-GC-1c, were completed in Investigation Area I as part of additional characterization for the Craftsman District redevelopment area (Figures 5 and 6). All soil samples were tested for metals, most samples were tested for cPAHs and petroleum hydrocarbons, and a number of samples were tested for SVOCs. Similar to previous Landau Associates investigations, analytical testing was initiated by testing the surface soil sample (0 to 0.5 ft) and samples were tested progressively deeper if an interim action cleanup level was exceeded. The results of these are reported in Section 3.4 in conjunction with other investigations results.

The additional delineation confirmed the presence of elevated cPAHs, arsenic, and copper concentrations in shallow soil in the eastern and western portions of Area I, and elevated lead along the eastern side. Shallow soil in the central portion of Area I generally did not exhibit elevated concentrations of metals or cPAHs. The maximum concentration of petroleum hydrocarbons detected in any of the Area I samples tested was 1,200 mg/kg and 960 mg/kg for diesel- and oil-range petroleum hydrocarbons, respectively, in the sample collected from I-GC-24 in the northeast corner of Area I.

The elevated arsenic, copper, and cPAHs present in the eastern and western portions of Area I were primarily encountered in the upper 0.5 ft, which generally consisted of a road base trafficking layer. Contamination extended below the trafficking layer, to a depth of up to 2 ft, at about 30 percent of these exceedance locations. The trafficking layer did not exhibit elevated metals or cPAHs concentrations in the 13 surface soil samples collected from the central portion of Area I.

Borings advanced within the central and northeastern portion of Area I encountered the discolored, odiferous material identified during the Phase II ESA. The material was assumed to be contaminated based on the results of the Phase II ESA, so testing during the supplemental DGI was primarily focused on testing the material above and below the discolored material. However, a composite sample of the discolored material was collected from 1.2 ft to 6.0 ft at I-GC-24 and exhibited elevated concentrations of arsenic and lead. The discolored material was described as green, pink, red, orange, gray, and white silt with clay with a strong odor on the I-GC-24 boring log. The boring logs for explorations in the central portion of the site (I-GC-5, I-GC-6, I-GC-8, and I-GC-9) described the material as a sandy silt with gravel, but exhibiting similar colors to those present at I-GC-24.

Area J

During the DGI, motor-oil range petroleum hydrocarbons were detected in J-GC-1 and arsenic was detected in J-GC-4 at elevated concentrations. As with Area I, the area had not been fully characterized because of an earlier plan to consolidate and contain contaminated soil in this area. With the change to commercial development, additional investigation was deemed needed to provide a similar level of characterization as that accomplished for other portions of the site.

Within the northeast portion of Investigation Area J, 10 explorations were conducted: J-GC-5 through J-GC-10 and J-GC -6b through J-GC-6e. The GC-5 through GC-10 series was conducted to evaluate deeper soil conditions and the presence of debris and/or contamination. The J-GC-6 series were installed to better delineate an area of construction debris encountered in J-GC-6. The explorations were used to visually identify the limits of the debris and samples were not collected for chemical analyses. The construction debris was encountered from approximately 2 to 17 ft BGS. The approximately lateral extent of the debris is shown on Figure 5.

Supplemental explorations J-GC-4b and J-GC-4c were conducted to better delineate the extent of elevated arsenic concentrations in the vicinity of location J-GC-4 encountered in the uppermost sample (30 mg/kg) during the DGI. Arsenic was not detected at elevated concentrations in samples collected from either of the supplemental explorations.

The results for these explorations are presented in Section 3.4 in conjunction with other investigations results.

Area M-2

During the DGI, the soil sample collected from the 0 to 0.5 ft depth interval at location M-2 contained a total cPAHs concentration above the interim action cleanup level of 140 µg/kg. Two additional explorations (M-2B and M-2C) were completed to better delineate the extent of elevated

cPAHs concentrations in this area. No cPAHs were detected above the laboratory reporting limits in either AC sample. The analytical results for these explorations are reported in Section 3.4 in conjunction with other investigations results.

3.1.2.5 Early Action Design Characterization

Additional characterization was conducted for the uplands at the head of the 12th Street Channel in August 2005 to support the planned development of the 12th Street Yacht Basin (Landau Associates 2005d). Yacht Basin construction was to include an esplanade (a paved walkway) along the shoreline and new travel lift piers at the southwest corner of the channel to support the planned Craftsman District development. Construction was limited to within 50 ft of the shoreline and soil samples were collected from nine locations (I-GC-15 through I-GC-23) to evaluate soil quality within the planned work area and to provide the data needed to design an interim action for any contamination encountered during the investigation. Sampling locations are shown on Figure 5.

Similar to previous investigations, the surface soil sample from each location was initially tested and progressively deeper samples were tested at locations that exhibited concentrations of COCs above the interim action cleanup levels. Initial samples at each location were tested for metals, cPAHs, petroleum hydrocarbons, and SVOCs. Arsenic concentrations exceeded the interim action cleanup levels in shallow soil at six locations and cPAHs exceeded the interim action cleanup level at two locations, all fronting on the head of the channel to the north of the existing pier.

The analytical results for these explorations are reported in Section 3.4 in conjunction with other investigations results.

3.1.2.6 Interim Action Design Characterization

Additional characterization was performed at multiple Site areas in Spring 2006 to provide additional delineation for design of the interim action. A total of 30 soil samples were collected within the Site from affected areas encountered during previous investigations. The additional delineation samples were tested only for the constituent(s) that exceeded their respective interim action cleanup levels (discussed in Section 3.3) within the identified cleanup area. In general, additional delineation samples were labeled to indicate the location being delineated and the direction from the subject locations where the sample was collected. For example, Sample M-2.1S was the first (and only) additional delineation sample collected to the south of Location M-2. Similarly, Sample I-GC-2.3W was the third sample collected to the west of Location I-GC-2. Samples were collected from the following areas:

- **Investigation Area M - M-2 vicinity:** In early March 2006, two borings (M-2.1W and M-2.1S) were sampled and analyzed for cPAHs in the vicinity of M-2. The results showed no detections of cPAHs above the laboratory reporting limits.

- **Investigation Area I, surface samples:** In March 2006, 30 surface soil samples from the locations listed below were collected to further delineate the extent of either arsenic or cPAHs contamination in Investigation Area I. The explorations followed the naming convention described above, and included the following exploration locations:

I-GC-11.1E	I-GC-12.2S	I-GC-1A.1W	I-GC-2.4W
I-GC-11.1N	I-GC-12.3S	I-GC-1B.1S	I-GC-24.1W
I-GC-11.1S	I-GC-12.4S	I-GC-1B.1W	I-GC-24.2W
I-GC-11.1W	I-GC-12.4S.1E	I-GC-2.1N	I-GC-24.3W
I-GC-11.2N	I-GC-12.4S.2E	I-GC-2.1S	I-GC-24.4W
I-GC-12.1E	I-GC-12.5S	I-GC-2.1SW	I-GC-24.2W.1S
I-GC-12.1S	I-GC-12.6S	I-GC-2.1W	I-GC-24.4W
I-GC-12.1W	I-GC-12.6S.1E	I-GC-2.2W	I-GC-24.3W.1S
I-GC-12.2E	I-GC-12.6S.1W	I-GC-2.3W	

  Soil samples were collected and analyzed from most locations for metals, and to a lesser extent for cPAHs and petroleum hydrocarbons. Soil samples were not collected from a number of the explorations in the vicinity of the I-GC-24 because the area was primarily delineated based on the visual observation of multi-colored silt-size material with a strong odor. The analytical results for these explorations are reported in Section 3.4 in conjunction with other investigations results.

- **Investigation Area I, northeast corner:** In late April 2006, a series of eight test pits (I-TP-1 through I-TP-8) were completed within an area previously characterized as a soil stockpile (Landau Associates 2006c) and sampled during the Phase II ESA (composite sample I-Z). Samples collected from these test pits were analyzed for metals and diesel- and oil-range petroleum hydrocarbons. Elevated concentrations of arsenic up to 122 mg/kg were present in samples collected from test pits I-TP-1, I-TP-5, I-TP-6, and I-TP-8. The detected concentrations of petroleum hydrocarbons were all well below the interim action cleanup levels.

- **Investigation Area I, central area:** In early May 2006, another series of borings (I2-1 through I2-10) were completed in the central part of Area I. The samples were analyzed for metals, cPAHs, and petroleum hydrocarbons to further delineate the nature and extent of contamination associated with the discolored material present in this area. The material was characterized in the field as exhibiting multiple colors and a concrete odor was noted in seven of these samples; one sample, I2-2, was characterized as looking like concrete waste. The analytical results showed that none of the samples had levels of cPAHs or petroleum hydrocarbons above the interim action cleanup levels, although petroleum hydrocarbon concentrations as high as 1,800 mg/kg were detected. Arsenic concentrations exceeded the interim action cleanup level in all ten test pits.

- **Investigation Area G, northwest corner:** This area was investigated when it became apparent that the construction of the planned Bayside Marine building immediately to the west would require construction activities in this portion of the Ameron leasehold. In late April 2006, eight test pits were completed within an area of elevated grades in the northwest corner of Area G. One soil sample was collected from each test pit (G1-TP-1 through G1-TP-8) and analyzed for metals and diesel- and motor oil- range petroleum hydrocarbons.

Concentrations in all but one sample (G-TP-3) exceeded the interim action cleanup level for arsenic, and the concentration in the sample from test pit G-TP-5 also exceeded the interim action cleanup level for lead. There were no exceedances of the cleanup screening levels for total petroleum hydrocarbons and extractable organic halides (EOX) were not detected in any sample.

- **Investigation Area J, northeast corner:** Five soil samples from four additional locations in the vicinity of J-GC-6 (J-GC-6f through J-GC-6i) were collected to better characterize soil quality in the area characterized as buried construction debris (Laudau Associates 2006c). The samples were tested for metals and cPAHs. One of the samples (J-GC-6h) exhibited an elevated arsenic concentration (34 mg/kg) and J-GC-6i exhibited an elevated concentration of cPAHs (0.56 mg/kg). Note that documentation of the specific locations for these supplemental explorations is not available, but the general location of these samples is provided on the applicable figures.

The results of these investigations have not previously been reported, but are reported in Section 3.4 in conjunction with other investigation results.

3.1.2.7 Additional Characterization During Interim Action Implementation

Twenty-four soil samples were collected from Areas I-1, I-2, I-3, I-4, I-5, and G-1 during interim action implementation to characterize materials being removed as part of the interim action and to evaluate whether materials observed at the excavation limits that exhibited unusual characteristics (odor, color, and/or consistency) exceeded the interim action cleanup levels (Landau Associates 2008b). Additional characterization (AC) samples collected during interim action implementation were labeled with the interim action cleanup area designation, followed by the ”AC” identifier and a sequential number. For example, sample I5-AC-5 was the 5th AC sample collected during interim action implementation from Area I-5. All AC samples were tested for heavy metals, and most samples were also tested for TBT and pH. A limited number of samples were also tested for cPAHs, petroleum hydrocarbons, VOCs, and/or SVOCs.

In most cases, these AC samples exhibited unusual odors, colors, and/or consistency. Many of the samples exhibited unusual colors (red, green, brown or white) and, in some cases, had a concrete-like odor. Although this multi-colored concrete-like material exhibited cohesive strength markedly greater than soil, it was not as strong as concrete. Three samples (G1-AC-3, G1-AC-4, and G1-AC-5) of a soft, grey clay-type material that exhibited a concrete odor were collected from an area exhibiting desiccation cracks. Some samples consisted of black sand that appeared to be sandblast grit. Because two samples were inadvertently labeled I2-AC-1 in the field, the first of these samples collected was re-labeled I2-AC-1A so that each sample had a unique identifier.

The analytical results for most AC samples, along with observations made during the interim action, were previously reported (Landau Associates 2008b). Almost all “AC” samples exhibited

elevated concentrations of arsenic. Samples of the multi-colored concrete waste material and the grey clay-type material exhibited moderately to highly elevated pH. Only one sample (I1-AC-1), a composite sample of the stockpiled material in Area I-1, detected TBT (Table 15). The lack of detectable concentrations of TBT in the remainder of these samples suggests that the concrete-like waste materials and sandblasting waste may not be related to marine maintenance activities. The high pH of the apparent concrete waste material supports the conclusion that it is a concrete-related material.

The analytical results for these characterization samples are presented in Tables 1, 2, 8, 9, 14, 15, and 16 in conjunction with other Site characterization data and a description of each AC sample is provided in Table 20.

3.1.2.8 Craftsman District Sewer System Excavation

On May 23, 2007, petroleum hydrocarbon product was observed floating on the water surface in an excavation trench for the sanitary sewer line being installed as part of the Craftsman District construction. The observed floating product was located to the north of the covered work area at the north end of the MSRC building. Steel cable, concrete, and brick were observed in the excavation, similar to the materials previously observed in the vicinity of exploration J-6 to the east of the MSRC covered work area.

A product sample (J-MSRC) was obtained from the excavation and submitted for analytical testing for TPH-Dx, TPH-HCID, SVOCs, and PCBs on a 24-hour turnaround. Although the product was a liquid collected from the water surface, it is reported in solid units (mg/kg) as is common practice for free product samples and, as a result, the product data are reported with soil data in applicable tables of this report. The product sample exhibited highly elevated concentrations of diesel-range petroleum hydrocarbons (390,000 mg/kg) and oil-range petroleum hydrocarbons (410,000 mg/kg), and a moderate concentration of cPAHs (0.69 mg/kg) (Table 7). No other constituents were reported above the laboratory reporting limits.

Based on the product analytical results, the excavation was continued and excavated material was stockpiled for additional testing. Additional product was observed as the excavation continued, and appeared to emanate from beneath a buried pile cap that presumably supported a historic structure at the Site. All visual evidence of product was removed from the excavation water surface with absorbent pads. A total of eight soil samples (J-MSRC-E, J-MSRC-W, J-MSRC-S, J-MSRC-N, J-MSRC-B, J-MSRC-M052907, J-MSRC-N052907, and J-MSRC-S052907) were collected from various sidewalls and the excavation bottom during excavation over the next 5 days and were tested for TPH-HCID, with follow up testing for TPH-Dx. All samples exhibited concentrations below 1,000 mg/kg for each petroleum hydrocarbon range.

Three samples of the excavated stockpile material (J-MSRC-SP1, J-MSRC-SP2, and J-MSRC-SP3) were also analyzed for NWTPH-HCID and NWTPH-Dx. Similar to the excavation samples, the stockpile samples also exhibited TPH concentrations below 1,000 mg/kg and the material was transported to the Waste Management solid waste landfill in Arlington, Oregon for disposal.

The results of these investigations have not previously been reported, but are reported in Section 3.4 in conjunction with other investigation results.

3.1.2.9 Ameron Oil-Affected Area Investigation

Limited characterization activities were conducted at a location on the north fenceline of the Ameron leasehold after Ameron encountered apparent petroleum hydrocarbon contamination during repair of the storm drain trunk line in 2004 (Landau Associates 2005b). The trunk line conveys stormwater from the Ameron leasehold and the adjacent properties to the north to an outfall in the northeast corner of the 12th Street Yacht Basin.

One soil sample was collected in November 2004 from a soil stockpile created from affected soil excavated during the storm line repair, and was analyzed for NWTPH-HCID with follow-up NWTPH-Dx, VOCs, SVOCs, and PCBs analyses. Eight borings (G-FA-1 through G-FA-8) were completed during a subsequent Geoprobe™ investigation conducted in January 2005 in the vicinity of the excavation to delineate the extent of petroleum-affected soil and groundwater associated with the conditions observed in November 2004. The borings were installed at depths ranging from 8 to 12 ft BGS, and soil samples collected from three of the borings (G-FA-4, G-FA-5, and G-FA-8) were analyzed for metals, VOCs, SVOCs and/or petroleum hydrocarbons. Groundwater samples were collected from borings G-FA-4 and G-FA-7, and were analyzed for VOCs, SVOCs, and dissolved metals.

The soil stockpile sample exhibited concentrations of cPAHs above cleanup screening levels identified as part of the Ameron Oil-Affected Area Investigation, but concentrations of petroleum hydrocarbons in the diesel and oil ranges below cleanup screening levels. Moderate concentrations of copper and zinc exceeded MTCA cleanup levels based on protection of surface water, but metals cleanup levels based on direct contact were not exceeded. The stockpiled soil was used by Ameron to backfill the excavation.

The two groundwater samples had concentrations of dissolved arsenic up to 10 ug/L, in slight exceedance of cleanup screening levels, and one of the groundwater samples (G-FA-7) exhibited a concentration above cleanup screening levels of bis(2-ethylhexyl) phthalate (BEHP), which is a common laboratory contaminant. One soil sample identified as green sand with crushed concrete and a petroleum/concrete odor (G-FA-4) exhibited elevated concentrations of arsenic (80 mg/kg), detectable concentrations of several petroleum hydrocarbon-related VOCs, and trace concentrations of

tetrachloroethylene (PCE) and 1,1,1-TCA. The other soil samples analyzed from this location did not contain elevated levels of arsenic, but did contain copper at concentrations of 37 to 47 mg/kg (samples G-FA-4 and G-FA-5, respectively).

The investigation results indicated that the apparent petroleum hydrocarbon contamination was either very localized around the stormwater line break or originated on the property to the north and only extended a short distance onto the Ameron leasehold. It was also noted that the discolored material encountered at a number of locations and characterized as an apparent concrete waste material was not bounded during the investigation.

3.2 PHYSICAL AND HYDROGEOLOGIC SETTING

The ground surface of the Site prior to interim action was relatively flat, although the northern portion of Investigation Area I and the northwest portion of Area G were elevated about 2 to 3 ft higher than adjacent Areas J and G, and the property to the north of the Site. A soil/debris stockpile area exhibiting elevations 3 to 4 ft higher than adjacent grades was present in the northeast sector of Area I overlying this more broadly elevated area. Elevations throughout the majority of the Site ranged from about elevation 15 ft to 18 ft above MLLW. Elevations in the northern portion of Areas I and the northwest corner of Area G extended up to Elevation 20 ft MLLW, indicating that more filling occurred in these areas than elsewhere on the Site. The stockpile near the northeast corner of Area I extended up to about elevation 23 ft MLLW. A 2004 topographic survey of the Site is provided in Appendix C.

Site geologic conditions encountered within the depth range of environmental explorations consisted primarily of a pavement section or a granular fill trafficking layer overlying hydraulic fill. In portions of Area I, a multi-colored concrete-like material and/or layers of black sand material were encountered below the trafficking layer and above the hydraulic fill layer. An area of construction debris that extended to depths greater than the hydraulic fill upper surface was encountered in the northeast portion of Area J.

Hydraulic fill is typically a loose to medium dense, poorly graded fine to medium sand with silt or silty fine to medium sand. Based on available geologic information from geotechnical borings, native marine sediment consisting of about a 10-ft thick layer of soft to loose silt to silty sand directly underlies the hydraulic fill and is first encountered at about 10 ft to 30 ft BGS, with the depth of the contact increasing from east to west. Glacial soil, consisting of dense soil of variable composition, underlies the marine sediment and slopes downward from east to west. An east-west geologic cross section (A-A') through the Site is presented on Figure 13 and the alignment of line A-A' is shown on Figure 3.

The uppermost hydrostratigraphic unit at the Site consists of the fill unit that overlies the finer-grained marine sediment unit. The marine sediment unit appears to form the uppermost aquitard

throughout the Site, although the interpretation of geologic conditions below the hydraulic fill unit is based on limited data. The depth to groundwater ranges from about 4 to 6 ft BGS in Site monitoring wells. Although sufficient groundwater data are not available to plot groundwater isopleths and quantitatively determine the direction of groundwater flow, data collected elsewhere in the North Marina Area indicates that shallow groundwater flows toward surface water. Therefore, groundwater is expected to flow generally westward, with a northerly component to groundwater flow in the southern portion of the Site.

3.3 SITE INTERIM ACTION CLEANUP LEVELS AND SCREENING LEVELS

The Agreed Order Scope of Work (SOW) requires that Site data be compared against screening levels developed based on the most protective applicable cleanup levels based on an unrestricted Site use scenario. However, it is also necessary to present the cleanup levels used to develop and implement the interim actions conducted for the Site and, in particular, the interim actions conducted between 2005 and 2007 in support of redevelopment of the North Marina Area. In general, the interim action cleanup levels and the cleanup screening levels specified by the agreed order are consistent because the interim action was based on cleanup to unrestricted site use. However, a difference related to the copper and petroleum hydrocarbon soil cleanup levels exists between these cleanup criteria, which are discussed below in Section 3.3.4.

Site interim action cleanup levels were used to develop the Site interim actions associated with redevelopment of the North Marina Area. However, Site data will be discussed primarily in terms of the Site screening levels, since these will be the criteria used during the RI for evaluation of environmental data. Where applicable and relevant to the information being presented, the data will be discussed in terms of the interim action cleanup levels. Additionally, soil data presented on figures will illustrate the locations where the interim action soil cleanup level for copper was achieved, but the copper soil cleanup screening level was exceeded. Final cleanup levels will be determined by Ecology and presented in the final Site CAP.

As allowed under WAC 173-340-703, proposed indicator hazardous substances (IHS) were also developed to separate those constituents at the Site that contribute the greatest threat to human health and the environment from those that contribute little or no threat. The IHS are described in Section 3.3.7.

3.3.1 CLEANUP SCREENING LEVELS

Cleanup screening levels for Site soil protective of human health and the environment were developed in accordance with MTCA requirements, and are presented in Table 12. Cleanup screening

levels for Site groundwater protective of marine surface water were developed in accordance with MTCA requirements and are presented in Table 13. Exposure pathways and receptors based on current and likely future Site uses were identified as part of cleanup screening level development.

3.3.2 CURRENT AND LIKELY FUTURE LAND USE

The Site is currently zoned as waterfront commercial, which allows for commercial, residential, and limited industrial use. Industrial use is limited to research/testing labs (zoning does not allow for mass production or manufacturing of goods). Long-term Site use is anticipated to be commercial and retail, with the majority of the Site either currently or planned for use as the Craftsman District and Port offices. It is unlikely that residential housing will be constructed within the Site boundary, although hospitality services (hotel or restaurant use) could occur within the southern portion of the Site. As a result, cleanup screening levels were developed based on unrestricted use to maintain flexibility for a broad range of potential future Site uses.

3.3.3 EXPOSURE PATHWAYS

Potential exposure pathways were identified for human and environmental impacts based on the planned land use. The potential exposure pathways are presented by medium below.

3.3.3.1 Soil

The potential exposure pathways for Site soil are:

- Human contact (dermal, incidental ingestion, or inhalation) with constituents in Site soil
- Leaching to groundwater and subsequent exposure of humans or aquatic organisms to affected groundwater at the point of discharge to marine surface water
- Uptake of constituents in Site soil by terrestrial plants
- Contact by terrestrial wildlife (dermal, incidental ingestion, or inhalation) with constituents in the soil.

Sites that contain less than 1.5 acres of contiguous undeveloped area are excluded from having to conduct a terrestrial ecological evaluation in accordance with WAC 173-340-7491(1)(c)(i). The Site is currently almost entirely covered with buildings and pavement, and will remain similarly covered under anticipated future Site uses. Most Site landscaping will be contained in planters or otherwise isolated from the underlying existing soil surface. As a result, the Site meets the exclusion for a terrestrial ecological evaluation. Ecology's Terrestrial Ecological Exclusion form is included as Appendix D.

3.3.3.2 Groundwater

Groundwater at, or potentially affected by, the Site is not currently used for drinking water and has an extremely low probability that it will be used as a future source of drinking water due to its proximity to marine surface water and the availability of a municipal water supply. If groundwater were pumped for drinking water use, saltwater intrusion would likely occur due to the proximity of the Site to marine surface water. It should also be noted that the City of Everett requires that all residences and businesses within the city limits connect to city water, so the potential for shallow Site groundwater to be used as a potable supply is extremely low. Based on these considerations, groundwater is considered nonpotable under the provisions of WAC 173-340-720(2)(d).

As observed during investigation activities, groundwater levels in the North Marina Area fluctuate with changing tides, indicating that the groundwater and surface water are connected hydraulically (i.e., shallow groundwater discharges to the adjacent marine surface water at low tide and marine surface water intrudes into the groundwater system during high tide). Exposure pathways associated with marine sediment and surface water are discussed in Sections 3.3.3.3 and 3.3.3.4, respectively. Groundwater cleanup criteria developed based on protection of marine surface water and sediment must be adequately protective of aquatic organisms and of humans that ingest these marine organisms.

3.3.3.3 Sediment

The potential exposure pathways for sediment include:

- Exposure of benthic organisms, which may result in acute or chronic effects, to hazardous substances released from the Site (e.g., groundwater to surface water discharge, storm runoff, etc.) in the biologically active zone of sediment [the upper 10 centimeters (cm) below the mudline]. This may result in the uptake and bioaccumulation of contaminants in these organisms.
- Ingestion of contaminated benthic organisms as prey by higher trophic level organisms in the food chain (e.g., foraging fish, aquatic birds, marine mammals, etc.).
- Human ingestion of marine organisms contaminated by Site hazardous substances that have migrated to sediment.

3.3.3.4 Surface Water

The potential exposure pathways for surface water include:

- Exposure of aquatic organisms, which may result in acute or chronic effects, to hazardous substances released from the Site to surface water. This may result in the uptake and bioaccumulation of contaminants in these organisms.
- Ingestion of contaminated aquatic organisms as prey by higher trophic level organisms in the food chain (e.g., foraging fish, aquatic birds, marine mammals, etc.).

- Human ingestion of contaminated marine organisms contaminated by Site hazardous substances that have migrated to surface water.

3.3.4 SOIL CLEANUP SCREENING LEVELS

Soil cleanup screening levels for unrestricted land use were developed for constituents detected in soil within the Site boundary in accordance with WAC-173-340-740 using the exposure pathways identified above. Under MTCA, Method B soil cleanup levels for unrestricted site use must be as stringent as:

- Concentrations established under applicable state and federal laws
- Concentrations protective of direct human contact with soil
- Concentrations protective of groundwater.

These criteria were considered during development of soil cleanup screening levels.

Other than MTCA cleanup levels, the federal cleanup level for total PCBs under the Toxic Substances Cleanup Act (TSCA; 40 CFR Part 761.61) was the only applicable criteria established under applicable state or federal laws. Standard MTCA Method B soil cleanup levels protective of direct human contact were determined in accordance with WAC 173-340-740(3) using Ecology's on-line Cleanup Levels and Risk Calculations (CLARC) database (https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx). These cleanup levels are shown in Table 12. The Method B cleanup level for benzo(a)pyrene was used for the sum of cPAHs, using toxicity equivalency factors (TEFs) to calculate a toxicity equivalency quotient (TEQ) for total cPAHs in accordance with WAC 173-340-708(8)(e).

Soil cleanup screening levels protective of groundwater were determined using the fixed parameter three-phase partitioning model in accordance with WAC 173-340-747(4). The three-phase model provides a conservative estimate of the concentration of a contaminant in soil that is protective of groundwater. Because groundwater is not a current or likely future source of drinking water, and because it discharges to marine surface water, groundwater cleanup screening levels were developed based on marine surface water cleanup screening levels protective of human health and aquatic organisms in accordance with WAC 173-340-730. However, in accordance with WAC 173-340-720(6)(b)(i) and for the purposes of screening the data, if an applicable marine surface water cleanup level was not identified to calculate a soil cleanup level protective of groundwater, the groundwater cleanup screening level used in the three-phase model was then based on the standard Method B potable water cleanup level [in accordance with WAC 173-340-720(4)(b)]. Soil cleanup screening levels protective of groundwater are shown in Table 12.

For constituents present in soil at concentrations greater than the calculated soil cleanup screening levels protective of groundwater as marine surface water, an empirical demonstration that concentrations present in soil are not causing groundwater cleanup screening levels (based on marine surface water criteria) to be exceeded may be made. The Site may meet the requirements for an empirical demonstration listed in WAC 173-340-747(9)(b) for all hazardous substances tested in soil. Evaluation of whether the Site meets the requirements for an empirical demonstration will be performed as part of the RI/FS. The empirical demonstration requires that:

- Measured groundwater concentrations in proposed point of compliance wells are less than the groundwater cleanup levels
- Any hazardous substances in soil have been present for many years, allowing sufficient time for migration to the shallow groundwater
- Future site use following redevelopment will reduce the potential for leaching from soil to groundwater due to an increase of low-permeability cover resulting from additional buildings and paved areas.

Based on these criteria, cPAHs, PCE, and all heavy metals except for arsenic and copper are considered to meet the empirical demonstration that Site soil concentrations for these constituents were adequately protective of groundwater and that soil cleanup levels for these constituents could be based on direct contact rather than protection of groundwater as discharge to surface water. It is noted that arsenic and copper are the only heavy metals that had dissolved groundwater concentrations in excess of the preliminary groundwater cleanup levels. At the time that the interim actions were conducted in 2006, Landau Associates did not have access to the prior due diligence work conducted on the property or the associated data. These older data indicate that copper was detected in groundwater during a number of these earlier investigations, as well as at one location (J-1) sampled during the 2004 Phase II ESA (Landau Associates 2004). As a result, the soil cleanup screening level for copper (36 mg/kg) is based on protection of groundwater while the copper interim action cleanup level used for 2006 cleanup (2,960 mg/kg) was based on direct contact.

The diesel- and oil-range petroleum hydrocarbon soil cleanup levels used for the 1993 MSRC interim action were the 200 mg/kg MTCA Method A cleanup levels in effect at that time. These cleanup levels are significantly lower than the 2,000 mg/kg MTCA Method A soil cleanup levels currently in effect. The current MTCA Method A cleanup levels for petroleum hydrocarbons are used for both evaluating the effectiveness of the interim actions and as the cleanup screening levels.

3.3.5 GROUNDWATER CLEANUP SCREENING LEVELS

As noted in Section 2.3.3.2, human ingestion of constituents in groundwater is not a potential exposure pathway. Instead, groundwater cleanup screening levels protective of marine surface water

were developed because Site groundwater discharges directly to the 12th Street Yacht Basin, which, in turn, discharges to the lower reaches of the Snohomish River that are subject to salt water intrusion. However, in accordance with WAC 173-340-720(6)(b)(i) and for the purposes of screening the data, if an applicable marine surface water cleanup level was not identified, the groundwater cleanup screening level was based on the standard Method B potable water cleanup level [in accordance with WAC 173-340-720(4)(b)]. MTCA Method B groundwater cleanup screening levels protective of marine surface water were developed in accordance with WAC 173-340-730(3) for the detected constituents in groundwater. Cleanup screening levels were adjusted to be no less than the practical quantitation limit (PQL) in accordance with WAC 173-340-730(5)(c). Groundwater cleanup screening levels for those constituents detected in groundwater are shown in Table 13, and these values also represent Site groundwater cleanup screening levels.

3.3.6 SEDIMENT CLEANUP SCREENING LEVELS

Sediment cleanup screening levels were developed according to MTCA and SMS requirements. Two SMS criteria are promulgated by Ecology as follows:

- The marine sediment quality standard (SQS; WAC 173-204-320), the concentration below which effects to biological resources and human health are unlikely.
- The sediment cleanup screening level criteria (CSL; WAC 173-204-520), the concentration above which more than minor adverse biological effects may be expected.

The SQS and CSL values have been developed for a suite of analytes that includes metals, polycyclic aromatic hydrocarbons (PAHs), and other SVOCs, PCBs, and ionizable organic compounds. The SQS are the most stringent SMS numeric criteria and represent the goal for sediment cleanups.

3.3.6 INDICATOR HAZARDOUS SUBSTANCES

As allowed under WAC 173-340-703, IHS were identified to separate those constituents at the Site that contribute the greatest threat to human health from those that contribute little or no threat. IHS were selected by applying the factors identified in WAC 173-340-703(2) and by comparing detected constituent concentrations in soil and groundwater to applicable soil and groundwater quality criteria developed in Tables 12 and 13. Results from the previous Site investigations described in Section 3.0 were used to identify Site soil and groundwater IHS. All characterization data, presented in Tables 1 through 5, Table 8, and Tables 14 through 19, were used to develop the IHS in Tables 21and 22. Compliance monitoring sample results were not used to develop the IHS. IHS were identified based on the cleanup screening levels developed under the agreed order, rather than the cleanup screening levels, to provide a comprehensive evaluation of IHS appropriate for use in subsequent Site investigation activities.

However, some portions of the Site have not been fully characterized, so IHS will be re-evaluated based on additional data collected during the RI.

Tables 21 and 22 summarize the analytical testing and cleanup screening level exceedances for Site soil and groundwater, respectively. The tables include the analytical parameters that were tested, the number of detections, and the number of samples that exceeded the cleanup screening levels. The tables also summarize the constituent frequency of detection, minimum and maximum reporting limits and detected concentrations, and rationale for either including or excluding the constituents as IHS. The bases for identifying IHS are described in the following sections, and the identified IHS and their associated cleanup screening levels are presented in Tables 12 and 13.

3.3.6.1 Soil

As shown in Table 21, 79 of the constituents analyzed for in soil were detected above the laboratory reporting limits. As indicated in Table 21, 7 constituents were reported above their respective cleanup screening levels; note that the exceedance of criteria for individual cPAHs and exceedance of the cPAHs TEQ criteria are not considered separate exceedances.

Constituents that did not exceed the cleanup screening levels do not pose an unacceptable threat to human health or the environment and, as a result, were not identified as IHS. The remaining seven constituents were detected at least once at a concentration exceeding the cleanup screening level. These constituents are antimony, arsenic, copper, lead, total cPAHs, diesel-range petroleum hydrocarbons, and oil-range petroleum hydrocarbons.

Four of these constituents, arsenic, copper, lead, and cPAHs, were detected at concentrations exceeding the cleanup screening levels in more than one area of the Site; their known extent, prior to implementation of any interim actions, in each area of the Site is further explained below. Figures 14 and 15 show which constituents exceed soil cleanup screening levels at each location where a soil sample was collected. As shown on the figures, locations where only copper exceeded the cleanup screening level, and the interim action cleanup level was not exceeded, are shown in green. The distribution of IHS that was detected in multiple areas is summarized as follows:

- **Arsenic** was tested for in 204 samples collected across the Site. Of these 204 samples, 84 of the samples (41 percent) exceeded the soil cleanup screening level for arsenic. The 84 samples that exceeded the cleanup screening level were located throughout much of Area I, in the northern portion of Area J, and in the northeast corner of Area G that was subjected to a significant level of characterization as part of the North Marina interim action. There was also a single exceedance of arsenic located in the west-central portion of Area G.
- **Lead** was tested for in 177 samples collected across the Site. Of these, 24 of the samples (14 percent) exceeded the soil cleanup screening level for lead. Of the 24 samples that exceeded the cleanup screening level, 17 were located in the eastern portion of Area I, 6 were located in the western portion of Area G, and 1 was located in the northeast corner of Area J.

- **Copper** was tested for in 135 samples collected across the Site. Of these, 57 (42 percent) of the samples exceeded the soil cleanup screening level for copper; 3 of these samples also exceeded the interim action cleanup level based on direct contact. The 57 samples that exceeded the cleanup screening level were located throughout much of Site, which is likely the result of the copper soil cleanup screening level being based on State of Washington natural background concentrations for the Puget Sound Region (36 mg/kg). Of the 3 samples that exceeded the interim action soil cleanup level for copper (2,960 mg/kg), 2 were located in northeast corner of Area I and one sample was located in the northwest portion of Area G.
- **cPAHs** were tested for in 115 samples collected across the Site. Of these 115 samples, 15 of the samples (13 percent) exceeded the soil cleanup screening level for cPAHs. Of the 15 samples that exceeded the cleanup screening level, 12 were located in the western and eastern portions of Area I, 2 were located in the northeast portion of Area J, and one exceedance occurred in Area M.

Because of the broader geographic distribution, these constituents are considered to contribute the greatest threat to human health or the environment and, therefore, have been identified as soil IHS throughout the Site.

The remaining constituents that exceeded soil cleanup screening levels were antimony, diesel-range petroleum hydrocarbons, and oil-range petroleum hydrocarbons. The distribution of these constituents was limited to certain areas of the Site and, therefore, they were designated as IHS for those specific areas, and not throughout the Site, as described below.

Antimony was analyzed for in a total of 22 samples. Three of the samples exceeded the soil cleanup screening level. One sample was collected from the surface soil located in the parking area northeast of the MSRC building (SS-01), one sample was located west of the Ameron pole finishing and dry storage building (ECI-K-1), and the third sample was located in the northeast portion of Area I (ECI-Q-6).

Diesel-range petroleum hydrocarbons and oil-range petroleum hydrocarbons were analyzed for in a total of 134 samples. Of these 134 samples, 91 samples (67.9 percent) exhibited concentrations of diesel-range petroleum hydrocarbons above the laboratory reporting limit and seven of those samples exceeded the soil cleanup level for diesel. Five of those samples were from stockpiles associated with the concrete vault excavation southwest of the MSRC building. Another exceedance was a surface soil sample taken by ECI in 1991 from a 2-inch by 3-ft wide strip of stained soil in a former drum storage area in Area M (ECI-B-1). The seventh exceedance was associated with the product sample taken from the groundwater surface during the Craftsman District sewer line excavation north of the MSRC building (See Section 3.1.2.7).

Four of the samples also exceeded the soil cleanup screening level for oil-range petroleum hydrocarbons. Two of those samples were also associated with the concrete vault excavation southwest of the MSRC building, one was limited to a surface soil sample taken by ECI in 1987 (located in the eastern

portion of Area I; see Section 3.1.1.1), and the fourth was also from the product sample taken from the Craftsman District sewer line excavation north of the MSRC building (See Section 3.1.2.7).

3.3.6.2 Groundwater

As shown in Table 22, all but three of the constituents analyzed for in groundwater were either not detected or the detected concentrations were below the cleanup screening levels. The constituents that did not exceed the cleanup screening levels do not pose an unacceptable threat to human health or the environment and, as a result, were not identified as IHS. The five constituents that were detected at least once at a concentration exceeding the cleanup screening level are bis(2-ethylhexyl)phthalate, vinyl chloride, arsenic, petroleum hydrocarbons, and copper, as discussed below. Figures 16 and 17 depict their specific location.

- **Dissolved arsenic** was analyzed for in 19 samples. Of these, 5 samples exceeded the cleanup screening level of 5µg/L. Dissolved arsenic groundwater screening level exceedances were present in Areas G (7.5 to 10 µg/L), J (6 µg/L) and M (14 µg/L).
- **Dissolved copper** was analyzed for in 19 groundwater samples. Of these, 5 samples exceeded the groundwater cleanup screening level for copper (2.4 µg/L). The exceedances occurred in Areas I (12 and 38 µg/L), J (4 and12 µg/L), and in a pond surface water sample located in Area G (10 µg/L).
- **Vinyl chloride** was analyzed for in 21 groundwater samples. Only one sample (4.8 percent) exhibited concentrations of vinyl chloride above the laboratory reporting limit, and the same sample exceeded the cleanup screening level. The groundwater sample was located in Area M (M-3). Because the exceedance is limited to cleanup Area M, vinyl chloride was identified as an IHS for this area only.
- **Bis(2-ethylhexyl)phthalate (BEHP)** was analyzed for in seven groundwater samples. Only one sample (14.3 percent) exhibited concentrations of BEHP above the laboratory reporting limit, and the same sample exceeded the cleanup screening level. The groundwater sample was located in Area G (G-FA-7). The source of the BEHP is not known, but BEPH is a common laboratory contaminant so it is not known if its presence is representative of groundwater quality or the result of laboratory contamination. Because the exceedance is limited to cleanup Area G, BEHP was identified as an IHS for this area only and will be further evaluated during preparation of the RI/FS work plan.
- **Petroleum hydrocarbons, as free product** on the water table, were encountered in an excavation trench for the sanitary sewer line being installed as part of the Craftsman District construction in 2007 (Section 3.1.2.7). A sample of the product indicated diesel at 390,000 mg/kg and oil at 410,000 mg/kg. Although the eight soil samples collected from the excavation and the three soil samples collected from the stockpiled material did not exceed the TPH cleanup screening levels, a groundwater quality sample was not collected from the area. As a result, petroleum hydrocarbons in the diesel and oil ranges are retained as an IHS for this area.

It should be noted that evaluation of heavy metals concentrations in Site groundwater was conducted using dissolved metals analytical results. Based on the 5 groundwater samples tested for both

total and dissolved metals during the environmental investigations conducted in support of the North Marina redevelopment, total metals concentrations were consistently higher than dissolved metals concentrations (Table 4). Based on these results, it was concluded that groundwater samples tested for total metals were affected by the presence of particulates, even though the monitoring wells were reportedly developed prior to sampling and low flow sampling techniques were used during more recent sampling to minimize the entrainment of particulates in groundwater samples. It is difficult to design, construct, and develop a monitoring well in silty soil given the fine particle size and the well opening size necessary for adequate hydraulic connection with the water-bearing zone. As a result, it is common to entrain fine particles in the water samples from wells screened in silty soil, biasing the results toward higher total metals concentrations due to the metals levels that naturally occur in the soil. Thus, due to the nature of the aquifer, analytical results for total metals are not considered representative of Site groundwater conditions, consistent with WAC 173-340-720(9)(b).

3.4 ENVIRONMENTAL CONDITIONS

In general, environmental conditions were evaluated, and cleanup areas were designated for the interim actions conducted in support of the North Marina Area redevelopment, based on comparison of the analytical results for Site soil and groundwater to the interim action cleanup levels developed in Section 3.3. Several earlier cleanup actions, such as the USTs removals in 1989 and around 1991 and the removal of the concrete structure in the MSRC area in 1993, were developed based on the MTCA cleanup levels applicable at that time. In general, cleanup levels in the early 1990s were consistent with current criteria. However, the cleanup levels for diesel- and oil-range petroleum hydrocarbons were significantly lower (200 mg/kg) than the current cleanup levels (2,000 mg/kg), which may have led to more conservative petroleum hydrocarbon cleanups.

For the purposes of this report, the environmental data collected from the Site are compared to current cleanup screening levels and not the criteria applicable at the time the interim actions were implemented. The following sections present a discussion of the environmental conditions with respect to soil, groundwater, and sediment quality that existed at the Site prior to the implementation of any interim actions.

3.4.1 SOIL QUALITY

Soil sample locations and cleanup screening level exceedances are presented on Figures 14 and 15. Tables 1, 2, 8, 9, 14, 15, 16, and 17 present the laboratory analytical data for the soil characterization samples. Soil quality is discussed by Investigation Area below.

3.4.1.1 Investigation Area G

The primary soil contaminant in investigation Area G is arsenic, which exceeded the cleanup screening level in 13 (56 percent) of the samples tested in this area. The majority of the locations where arsenic exceeds the cleanup screening level are in the northwest corner. There are also some scattered exceedances of copper and lead, primarily in soil samples that exhibited highly elevated concentrations of arsenic. Metals exceedances primarily occurred in samples collected from soil, multi-colored concrete-like material, and black sand (potential sandblast grit). The contaminated media was mostly present in soil elevated above adjacent grades in Area G to the east, although some of the exceedances occurred in samples at or below general Area G grades.

Other than the northwest corner of Area G, contamination is found in isolated locations, recognizing that the remainder of Area G has not been fully characterized. Soil contaminants in these locations include arsenic, lead, and copper. .

3.4.1.2 Investigation Area I

Arsenic exceeded its cleanup screening level throughout Area I and was the primary driver for the interim action conducted in this area. The arsenic cleanup screening level was exceeded in 83 samples, which represents 41 percent of the samples tested. The contaminated soil was generally found within 3 ft of the ground surface, except for a deeper area in the northeast corner of the area and in a soil stockpile present in the northeast corner of the area. Other metals that exceeded the cleanup screening levels were copper, lead and antimony; these exceedances were generally co-located with arsenic, except that, in some instances, copper exceedances were co-located with cPAH exceedances where an arsenic exceedance did not occur. The lead and antimony exceedances within Area I were found in the eastern portion and at locations with highly elevated arsenic concentrations.

Metals exceedances were found in shallow soil that appeared to be the surface trafficking layer for previous operational activities, and multi-colored concrete-like material and black sand (potential sandblast grit) materials encountered below the trafficking layer. Metals exceedances also occurred in the soil stockpile present in the northeast corner of the area.

3.4.1.3 Investigation Area J

Arsenic, lead, copper, cPAHs, and petroleum hydrocarbons were detected above the soil cleanup screening levels in various locations in Investigation Area J. Arsenic was detected above the screening level in four locations, which represents 15 percent of the samples tested. The arsenic exceedances occurred in the northern portion of the area, primarily in the northeast corner (Table 1 and Figures 14 and 15). CPAHs were detected above its cleanup screening level at two locations in the northeast portion of

the area, and lead and antimony were found at one location each. Sample location J-GC-6, and follow up samples J-GC-6h and J-GC-6i, exhibited arsenic and/or cPAH exceedances in an area of construction debris containing evidence of burn residue.

The most common contaminant found in Area J was copper. Copper exceeds the screening level of 36 mg/kg in almost half of the samples collected in Area J. At the time of the interim action conducted in support of the North Marina Area redevelopment, the interim action cleanup level for copper was 2,960 mg/kg.

Two soil samples (KFI-SS12 and KFI-SS17) collected from the location of the concrete vault structure that was removed in 1993 (Section 3.1.1.7) exceeded the cleanup screening level for oil-range petroleum hydrocarbon. Only low-level diesel and oil detections were indicated in one of two samples subsequently collected by Landau Associates (2005a) in this area.

A product sample (J-MSRC) collected from the water surface of an excavation for a sewer line constructed in 2007 exhibited concentrations of petroleum hydrocarbons well above the cleanup screening levels, as shown in Table 2. The excavation also contained construction debris similar in appearance to the material encountered in the vicinity of location J-GC-6. As indicated in Section 3, the product was removed from the water surface during excavation. Soil analytical results for both the excavation perimeter and the stockpiled soil exhibited concentrations below the soil cleanup screening levels. No groundwater samples were collected following removal of the product from the excavation or following completion of excavation activities in this area.

3.4.1.4 Investigation Area M

Few exceedances of cleanup screening levels were found in Area M, although sampling has been limited compared to other areas of the site (Figures 14 and 15). An exceedance of cPAHs was found in the middle of the eastern stretch of Area M at location M-2 and, as discussed in Section 2.1.2.4, the surrounding soil was further characterized and no further exceedances were found. An exceedance of diesel-range petroleum hydrocarbons was found in a surface sample taken from a former drum storage area (ECI-B-1). Earth Consultants describes the affected soil as being "limited to a strip two inches wide and about three feet long" (ECI 1991). The only other contaminant found to be present at a level of concern was at M-3, where the copper concentration exceeded the cleanup screening level, but did not exceed the interim action cleanup level.

3.4.2 MARINE SEDIMENT

As previously indicated, Site sediment quality data were primarily collected in support of PSDDA characterization and, as such, are not directly applicable to evaluation of sediment quality under SMS.

The exceptions to this are the sediment sample collected near the outfall in the northeast corner of the 12th Street Channel (Area R) by ECI (1991) and the surface sediment sample collected by SAIC for the Port Gardner Bay bay-wide sediment investigation under the PSI (SAIC 2009). Although PSSDA data are not directly applicable for sediment characterization under SMS, the data are qualitatively indicative of sediment quality when compared to SMS cleanup standards. An exceedance of SMS criteria in a PSDDA sample would typically be indicative of a SMS sediment quality issue because PSDDA samples are generally collected over much greater intervals than commonly used for SMS characterization, and the samples are often composited over multiple locations.

Marine sediment cleanup screening levels were developed based on SMS cleanup standards, except for TBT for which there is no SMS standard. The SMS cleanup standards can range from the sediment quality standard (SQS; the level expected to cause no adverse effects to biological resources and do not pose a significant health threat to humans) to the cleanup screening level (CSL; the level expected to cause only minor adverse effects to biological resources). The SQS concentrations were selected as the cleanup screening levels for Site marine sediment. For TBT, we used the PSDDA evaluation criteria for open water disposal, which identifies a "no effects" TBT marine sediment porewater criteria of 0.05 μg/L, and a potential adverse affects marine sediment porewater criteria of 0.15 μg/L. These PSDDA criteria provide a reasonable basis for assessing the potential affects of TBT on marine biota and, for the purposes of this document, a TBT porewater concentration of 0.05 μg/L is considered analogous to the SQS and a TBT porewater concentration of 0.15 μg/L is considered analogous to the CSL. Ecology has also established a TBT bulk screening level of 73 μg/kg that is conceptually equivalent to the SQS; this value was used for evaluating the available bulk TBT data.

A limited number of SMS exceedances occurred in the available data. The SQS was exceeded for mercury in the composite samples C-2 and C-6, the SQS for benzyl butyl phthalate was exceeded in composite sample C-2, and the SQS for Di-n-butylphthalate was exceeded in composite sample C-7 collected by RZA in 1990, as shown in Table 10 and on Figures 10 and 11 (RZA 1991). Composite sample C-2 was composited from the upper 4 ft of sediment. Composite samples C-6 and C-7 were collected from samples deeper than the upper 4 ft, and included material from as deep as Elevation -15 ft MLLW.

The zinc SQS was exceeded and the arsenic SQS was equaled in sediment surface sample ECI-Area-R collected by ECI in 1991 (ECI 1992). Diesel-range petroleum hydrocarbons were detected in this sample at a concentration of 2,100 mg/kg, although TPH criteria have not been promulgated under the SMS.

Because a sediment interim action was not conducted, these data are not discussed further in this report. However, it should be noted that the 12th Street Channel was dredged during construction of the

12th Street Yacht Basin and most, if not all, of the sediment previously characterized in this area was removed. Sediment quality will be discussed further in the RI/FS work plan.

3.4.3 GROUNDWATER

Figures 16 and 17 present groundwater sampling locations and identify wells that exhibited exceedances of the groundwater cleanup screening levels. Tables 3, 4, 5, 18, and 19 present the analytical data for all the Site groundwater characterization samples. As shown on the figures, exceedances of the groundwater cleanup screening levels were observed in a limited number of locations, and a review of the data in Tables 3, 4, 5, 18, and 19 indicate that groundwater cleanup screening level exceedances are not significantly above the applicable cleanup levels.

Groundwater IHS include heavy metals (arsenic and copper), vinyl chloride, and BEHP. Petroleum hydrocarbons are also considered an IHS in the area where free product was detected during the Craftsman District construction and groundwater was not tested

Groundwater was not addressed during previous interim actions because of the relatively small degree of cleanup level exceedances, and the limited aerial extent of the exceedances. As a result, groundwater is not discussed further in this report, but will be further evaluated during development of the RI/FS work plan.

3.4.4 STORMWATER SYSTEM (WATER AND SEDIMENT)

The stormwater system water and sediment sample locations are shown on Figure 7. The water and sediments data can be found in Tables 7 and 23, respectively. The catch basin sediment analytical results were compared to SMS SQS and CSL cleanup standards as the most applicable criteria for these data because stormwater discharges to Puget Sound. Exceedances of SQS and CSL criteria for heavy metals (arsenic, cadmium, copper, chromium, lead, and zinc) were found in the sediment at CB-3, as shown on Figure 7. It is also noted that diesel-range petroleum hydrocarbons were detected at 1,800 mg/kg and lube oil petroleum hydrocarbons were detected at 3,000 mg/kg in this sample.

The stormwater data were compared to Ecology Industrial Permit general permit criteria. Catch basin stormwater samples exceed only the zinc criterion in the water sampled from CB-1 and CB-3. Dissolved arsenic was present at concentrations up to 11 µg/L, although there are no general permit criteria for arsenic.

4.0 DEVELOPMENT OF THE INTERIM ACTIONS

MTCA distinguishes an interim action from a cleanup action in that an interim action only partially addresses the cleanup of a Site and achieves one of the following purposes [WAC 173-340-430(1)]:

- Reduces the threat to human health and the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance [WAC 173-340-430(1)(a)].
- Corrects a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed [WAC 173-340-430(1)(b)].
- Completes a site hazard assessment, RI/FS, or designs a cleanup action [WAC 173-340-430(1)(c)].

An interim action must also meet one of the following general requirements [WAC 173-340-430(2)]:

- Achieve cleanup standards for a portion of the site
- Provide a partial cleanup (clean up hazardous substances from all or part of the site, but not achieve cleanup standards)
- Provide a partial cleanup and not achieve cleanup standards, but provide information on how to achieve cleanup standards.

Three interim actions were conducted at the Site by the Port of Everett. The most extensive was conducted by the Port between 2005 and 2007 in conjunction with the North Marina Redevelopment project. In 1993, an interim action was conducted in conjunction with construction of the MSRC facility in the southwest portion of the Site, and in 1991 the Port conducted an interim action to address petroleum hydrocarbon contamination encountered during decommissioning of three USTs at the south end of Site. Another UST was decommissioned in Investigation Area G in 1988 during the purchase of the Centrecon assets by Ameron. This 1988 tank removal is not addressed as an interim action in this report because releases from the UST were not observed, and soil and groundwater sampling conducted post-removal did not indicate contamination (PSM 1989 and Sweet/Edwards-EMCON 1989). Figures 18 and 19 present the locations of the interim actions.

The purpose of the three Site interim actions was to reduce the threat to human health and the environment by eliminating one or more pathways for exposure to a hazardous substance. The intent of the interim actions was to achieve the cleanup standards developed under the VCP for large portions of the Site. The development, evaluation, and selection of each interim action are presented in the following sections.

4.1 1991 UST INTERIM ACTION

The 1991 interim action was conducted based on visual evidence of petroleum hydrocarbon contamination observed during decommissioning of three USTs. The Ecology files indicate the tanks consisted of one 300-gallon tank used to store diesel, a 500-gallon tank used to store gasoline, and a 1,000-gallon tank used to store gasoline (Landau Associates 2001). A slight sheen was observed on the water table resulting in an excavation of approximately 50 cubic yards ($yd^{3)}$ of material that was placed in a berm for landfarming. The soil was placed on the north side of Site (Area I) following treatment.

The interim action was conducted at the time of UST decommissioning, and the basis for selecting the interim action is not well documented. As a result, the process for development, evaluation and selection of the interim action cannot be described. However, it was common practice at the time of the UST interim action to excavate petroleum hydrocarbon-contaminated soil encountered during UST removal and either send it offsite for disposal, or treat it onsite through landfarming. Based on the information obtained from Ecology's files, excavation and onsite treatment was apparently selected for the UST interim action. The implementation and results of the 1991 UST interim action are presented in Section 5.0.

4.2 1993 MSRC INTERIM ACTION

As described in Section 3.1.1.6, a buried concrete structure of an unknown original use was discovered during construction of the MSRC building in 1993. The structure was filled with wood waste, soil, and what appeared to be drums containing oil. Some free product was found within the structure (Kleinfelder 1993a). Testing of soil and waste materials within the concrete vault exhibited petroleum hydrocarbon contamination. The Port retained Kleinfelder to develop an independent cleanup action to address the contamination; the development of the cleanup action is documented in the work plan for removal of the contaminated soil (Kleinfelder 1993b) and the results of the interim action are documented in the subsequent independent cleanup action report (Kleinfelder 1993a).

Kleinfelder reviewed a number of cleanup action alternatives, including excavation and offsite disposal, and thermal desorption. Excavation and offsite disposal at a licensed solid waste facility was selected for the interim action because of the small volume of contaminated soil requiring treatment, the presence of wood and metal debris inside the structure, and the oil-range contamination (Kleinfelder 1993a). The locations of the concrete structure and excavation are not sufficiently referenced to other Site features to present their locations in this report. Additional discussion on the implementation and results of the MSRC interim action are presented in Section 5.2.

4.3 NORTH MARINA REDEVELOPMENT INTERIM ACTIONS

An extensive interim action was conducted at the Site between October 2005 and October 2007 as part of an area-wide interim action conducted in support of redevelopment of the North Marina area. The interim action was developed and implemented as a independent cleanup action conducted as part of redevelopment of the North Marina Area, as described in Section 1.0. The interim action was developed in detail in the CAP prepared for the North Marina Redevelopment site under the VCP (Landau Associates 2006a). Subsequent to the CAP development, it was determined that the planned development activities would require construction access through the Ameron leasehold, necessitating environmental characterization and cleanup within the northwest corner of the leasehold. A CAP addendum was prepared for "Area G1", which is located in the northwest corner of the Ameron leasehold (Landau Associates 2006b).

The interim action selected for the Site was based on achieving the interim action cleanup levels in a manner that was compatible with redevelopment plans. Although a focused approach was used to select the interim action, the process was similar to that applied during the FS for a final cleanup action, and included the following steps:

1. Establish cleanup action objectives (CAOs) for the site.
2. Evaluate cleanup action technologies to determine those technologies that are capable of achieving the various CAOs.
3. Assemble the cleanup technologies into interim action alternatives that achieve all CAOs.
4. Compare the interim action alternatives against criteria established under MTCA to select the most practicable interim action for the Site.

The following sections establish the CAOs (Section 3.1); identify applicable or relevant and appropriate requirements (ARARs; Section 3.2); present the response actions, cleanup technologies, and alternatives considered for the interim action (Section 3.3); and compare the selected alternative to MTCA requirements (Section 3.4).

4.3.1 INTERIM ACTION OBJECTIVES

Based on the IHS established for Site soil (Section 3.3.6) as part of the interim action, the interim action cleanup standards, and the additional regulatory requirements, the CAOs for the Site interim action were established as follows:

- Prevent human contact (dermal, incidental ingestion, or inhalation) with Site soil containing IHS above the soil interim action cleanup levels developed in Section 3.3.4.
- Prevent the release from soil to groundwater of soil IHS at levels not adequately protective of groundwater quality. Note that groundwater quality was based on protection of marine surface water.

The CAOs are of primary importance to the evaluation of cleanup action technologies, as discussed in the following section.

4.3.2 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

In accordance with MTCA, all interim actions shall comply with applicable state and federal laws [WAC 173-340-710(1)] that bear directly on remedial actions being performed. MTCA defines applicable state and federal laws to include legally applicable requirements and those requirements that are relevant and appropriate. Collectively, these requirements are referred to as ARARs. This section provides a brief overview of ARARs identified for the interim action. The primary ARARs that were applicable to the interim action included the following:

- MTCA (Chapter 173.105D RCW), and MTCA Regulation (Chapter 173-340 WAC).
- EPA National Recommended Water Quality Criteria (Section 304 Clean Water Act): These standards were used to develop soil and groundwater interim action cleanup levels for the Site, as discussed in Section 2.3.
- Washington Water Pollution Control Act and the following implementing regulation: Water Quality Standards for Surface Waters (WAC 173-201A). These regulations establish water quality standards for surface waters of the State of Washington consistent with public health and the propagation and protection of fish, shellfish, and wildlife.
- EPA Water Quality Standards (National Toxics Rule; 40 CFR 131).
- Federal and State Maximum Contaminant Levels (MCLs) and Federal Maximum Contaminant Level Goals (MCLGs): these standards were used to establish groundwater interim action cleanup levels in the absence of marine surface water cleanup levels.
- Washington Clean Area Act (Chapter 70.94 WAC).
- Occupational Industrial Safety and Health Act (WISHA).
- Washington Hazardous Waste Management Act (Chapter 70.105 RCW) and the following implementing regulation: Dangerous Waste Regulations (WAC 173-303). These regulations establish a comprehensive statewide framework for the planning, regulation, control, and management of dangerous waste. The regulation designates those solid wastes that are dangerous or extremely hazardous to the public health and environment. The management of excavated contaminated soil from the Site was conducted in accordance with these regulations to the extent that any dangerous wastes were discovered or generated during the cleanup action.
- Washington Solid Waste Management Act (Chapter 70.95 RCW) and the following implementing regulations: Solid Waste Handling Standards (WAC 173-350) and Criteria for Municipal Solid Waste Landfills (WAC173-351). These regulations establish a comprehensive statewide program for solid waste management, including proper handling and disposal. The management of excavated contaminated soil from the Site was conducted in accordance with these regulations to the extent that the soil could be managed as inert or solid waste instead of dangerous waste.
- Shoreline Management Act (SMA; Chapter 90.58 RCW). Establishes permitting and other requirements for substantial development occurring within waters of the U.S. or within 200 ft

of a shoreline, and requires that the activities in coastal zones be consistent with local regulations. MTCA exempts cleanup projects being conducted under an enforceable order or consent decree from the requirement of obtaining the shoreline permit; however, the cleanup must be conducted in accordance with the substantive requirements of the regulation. Site interim cleanup was addressed in the shoreline permit for Site redevelopment, so additional action relative to the SMA was not required.

- Hazardous Waste Operations (WAC 296-843). Establishes safety requirements for workers providing investigation and cleanup operations at sites containing hazardous materials. These requirements are applicable to onsite cleanup activities and were addressed in Site health and safety plans prepared specifically for these activities.

4.3.3 EVALUATION AND SELECTION OF THE INTERIM ACTION

Soil response actions and cleanup technologies were screened for possible use in developing alternatives for interim action of the North Marina site, including the Site. Because groundwater cleanup level exceedances were minor and localized, groundwater was not addressed as part of the interim action, and groundwater response actions and cleanup technologies were not evaluated. Each alternative must be compatible with redevelopment plans and address the CAOs presented in Section 4.3.1. Applicable interim actions and remediation technologies evaluated for potential use as part of the interim action are described below.

Two interim actions were considered for cleanup of contaminated soil within the interim action area: 1) removal and 2) containment. The remediation technology considered for removal of contaminated soil consisted of excavation with offsite disposal. Soil excavated for offsite disposal would either be disposed of at a solid waste landfill or at an inert waste landfill, depending on the nature of contamination and the chemical concentrations. The Snohomish Health District, in consultation with Ecology, established Site-specific criteria for disposal of affected Site soil at the Rinker Materials (Rinker) inert waste landfill in Everett, Washington. Site soil could not be disposed of at the Rinker inert waste landfill if it exhibited any of the following characteristics on a bulk testing basis:

- Both arsenic and lead exceed their respective interim action cleanup levels.
- Arsenic exceeds 65 mg/kg, or 100 mg/kg with acceptable leachability test results.
- TPH exceeds 200 mg/kg.

Soil exceeding these criteria was transported to the Waste Management solid waste transfer station in Seattle, Washington.

The remedial technology considered for containment was consolidation of contaminated soil and onsite capping in one or more areas that integrate satisfactorily with redevelopment (i.e., large parking lots or beneath Port-owned buildings). The contaminated soil would be placed a minimum of 2 ft above maximum groundwater elevations to avoid contact with groundwater and would be capped with low-permeability surfaces to minimize surface water infiltration through affected soil. Capping would consist

of asphalt or concrete pavement and/or buildings. Containment through capping would also include institutional controls, such as restrictive covenants (e.g., deed restrictions); cap maintenance; and long-term groundwater monitoring. Containment in-place (without consolidation) was not considered practicable because it would be difficult to ensure the long-term integrity of numerous contaminated soil containment areas that were not aligned with the post-redevelopment site configuration.

Containment was determined to not be a viable Site-wide remedial alternative because of existing Site grades. However, containment was used on a limited basis to address contaminated soil that was not practicable to address using other remedial alternatives (see Section 4.3.4.3, Area J-3) for the Site. The Site is being redeveloped into the Craftsman District as part of the North Marina Redevelopment. The Craftsman District will house a number of businesses that service commercial and recreational marine activities, including the new Port-operated travel lift and boat wash facility. Because of the nature of use, the pavement in the Craftsman District is subjected to heavy wheel loads and, as a result, requires a thicker pavement section than typical parking lots and roadways. The combination of the thicker pavement section, the elevated surface elevations present at the Site at the time of interim action alternatives analysis (particularly in Investigation Area I), and the need to conform finish elevations to the existing grades in the southern and other portions of the Site, precluded consolidation and containment of contaminated soil. As a result, excavation/offsite disposal was the selected interim action for Site soil containing the IHS (i.e., arsenic, copper, lead, and/or cPAHs) above the interim action cleanup levels at that time.

4.3.4 INTERIM ACTION DESIGN

A detailed description of the interim action design for the Site is presented in the CAP developed for the North Marina Redevelopment site under the VCP (Landau Associates 2006a) and construction plans and specifications for the interim action are presented as Appendix E to this report. This section summarizes the design of the interim action, but the North Marina Redevelopment CAP and the construction plans and specifications should be reviewed for a more complete understanding of the basis for design and the design details.

The interim action design was developed based on the environmental data collected during the previously described investigations conducted by Landau Associates. Although a limited number of the reports prepared by others prior to the Landau Associates investigations were available, these reports were primarily used in scoping subsequent investigations conducted by Landau Associates and not to delineate the interim action areas.

The interim action areas were designated using the same area designations used for previous Landau Associates investigations, and were numbered sequentially within each area. A total of 11

interim action areas, I-1 through I-11, were developed for Investigation Area I. Three interim action areas were developed for Investigation Area J, although only two of these areas, J-1 and J-3, fall within the Site boundary. One interim action area, M-1, was identified for Investigation Area M. One interim action area, Area G-1, located immediately east of the northeast portion of Area I, was identified in Investigation Area G following completion of the CAP, and was addressed in a CAP Addendum (Landau Associates 2006b). The interim action areas developed for the Site are shown on Figures 18 and 19 in conjunction with the environmental data that was the basis for their development. Each of these areas is discussed in the following sections.

4.3.4.1 Investigation Area G

Interim Action Area G-1, located on the Ameron leasehold, was added to the cleanup action when it was realized this area would need to be accessed for construction of the new Bayside Marine building in Area I (Figure 2). The boundary between Investigation Areas I and G was based on the western Ameron leasehold fenceline. However, the actual lease boundary was determined to be located about 10 ft east of the fenceline, and the new Bayside Marine building was to extend eastward to the lease line with no setback. As a result, it was necessary to clean up a sufficient portion of Area G in the northwest corner to provide a clean building footprint and about 10 to 20 ft farther east to accommodate associated construction activities and access.

The Area G-1 cleanup action was addressed in a CAP Addendum (Landau Associates 2006b). Detailed design for Area G-1 was integrated into the construction plans and specifications for the interim action (Appendix E).

The area planned for excavation was defined as the stockpiled soil above the adjacent Site grades to the east that contained metals (arsenic and lead) above the interim action cleanup levels. Soil associated with a sample collected during the interim action that exceeded the interim action cleanup level for copper (G1-AC-9) was also removed during the excavation. This area was generally up to about 4 ft above the adjacent grade to the east and was at approximately the same elevation as the ground surface to the west. The interim action design called for the area to be excavated to Elevation 15 ft (MLLW), approximately 1 ft below the elevation of the pavement to the east. The planned excavation limits for Area G-1 are shown on Figure 19. The excavated soil was designated for disposal at a solid waste landfill, the same as that identified in the CAP for interim action Areas I and J.

4.3.4.2 Investigation Area I

A total of 11 interim action cleanup areas, Areas I-1 through I-11, were developed for Investigation Area I. In general, contaminated soil as identified by the previous investigations was limited to shallow soil extending from the surface to no greater than about 3 ft BGS throughout much of

the area, with a maximum depth of about 6 ft BGS in the northeast corner. The interim action also included removal of the soil pile located in the northeast portion of the area. The planned interim action areas for Investigation Area I are shown on Figure 19. The following section summarizes the bases for design of each interim action area.

Area I-1

Cleanup Action Area I-1 encompasses a soil stockpile located near the northeast corner of Investigation Area I. Results for a composite sample collected from the soil stockpile, I-Z, during the Phase II ESA (Landau Associates 2004), indicated the presence of arsenic and lead at concentrations exceeding the interim action cleanup level. Subsequent sampling during remedial design (I-TP-1 through I-TP-8) confirmed the presence of arsenic concentrations above the interim action cleanup level, although the cleanup level was only exceeded in four of the eight samples tested. Based on Phase I interviews, aerial photographs, anecdotal information, and observed conditions, Area I-1 appears to have been an area where soil and debris were historically stockpiled.

The entire soil stockpile was designated for removal. To maximize the potential that all contaminated soil was removed during initial excavation, the excavation was designed to extend 0.5 ft below the base of the soil stockpile. The estimated volume to be removed was 200 yd^3. The estimated excavation volume, area, depth of excavation, and waste disposal designation for Area I-1 are presented in Table 24.

Area I-2

Cleanup Action Area I-2 consisted of an unpaved area in the central portion of Investigation Area I where a discrete layer of multi-colored soil was present at a depth of up to 3.0 ft BGS, at a depth of approximately 1 ft below clean overburden soil. Analytical results for a composite sample of this material, I-X, indicated that the material contained arsenic at a concentration exceeding the interim action cleanup level. Subsequent delineation sampling conducted for interim action design in May 2006 (I2-1 through I2-10) confirmed the presence of arsenic above the interim action cleanup level, with arsenic concentrations ranging from 44 to 197 mg/kg. The specific source of contamination in this area was not identified during design. The contaminated material was multi-colored (bright green, red, orange, as well as gray) with a concrete-like odor suggesting that the material might be related to a concrete product. Although the material exhibited cohesive strength markedly greater than soil, it was not as strong as concrete. The layer of the multi-colored concrete-like material and the soil 0.5 ft above and below this material was designated for removal during the interim action. The estimated volume of soil to be removed within Area I-2 was about 3,900 yd^3. The estimated excavation volume, area, depth of excavation, and waste disposal designation for Area I-2 are presented in Table 24.

Areas I-3a, I-3b and I-4

Cleanup Action Areas I-3a, I-3b, and I-4 contained soil contaminated with arsenic, with a more limited number of lead and cPAH exceedances. The area was unpaved and contaminated soil was limited to between 0 to 0.5 and 0 to 2.0 ft BGS. The specific source of contamination in these areas was not identified during design, although sandblast grit was observed during additional characterization activities conducted for remedial design, and surficial evidence of sandblasting waste, paint chips, drum storage, and soil staining were observed in these areas during previous investigations conducted by others (Kleinfelder 1991, ECI 1992). Additionally, multi-colored concrete-like waste material similar in appearance to that described above for Area I-2 was observed in the western portion of Area I-4 during a previous investigation (ECI 1992).

To maximize the potential that all contaminated soil would be removed during initial excavation, the excavation limits were extended to 0.5 ft below the maximum extent of identified contamination (i.e., to between 1.0 and 2.5 ft BGS). The estimated volume to be removed from Area I-3 was 1,200 yd^3, and from I-4 was 300 yd^3. The estimated excavation volumes, area, depths of excavation, and waste disposal designations for Areas I-3a, I-3b, and I-4 are presented in Table 24.

Area I-5

Cleanup Action Area I-5 is located in the northeast corner of Investigation Area I and contained soil contaminated with arsenic, copper, and lead above the interim action cleanup levels. The area was unpaved, and contamination extended to a depth of 6.5 ft BGS. The excavation limits were delineated based on the extent of multi-colored concrete-like waste material present in this area, similar in appearance to that observed in Area I-2. Petroleum hydrocarbon-contaminated soil landfarming also occurred in this area, although petroleum hydrocarbon constituents were not detected above the cleanup screening levels. Area I-5 was bounded on the south by a boring that did not encounter any of the multi-colored material (I-GC-24A) and was bounded on the east by the Ameron leasehold. The area was bounded on the west and southwest by additional delineation borings conducted during design (I-GC-24.2W and I-GC-24.2W.1S), based on visual observation.

The excavation plan for Area I-5 specified that soil be removed to a depth of 7.0 ft BGS, 0.5 ft below the maximum extent of identified contamination, to maximize the potential that all contaminated soil would be removed during initial excavation. The estimated volume to be excavated was 2,500 yd^3. The excavation volume, area, depth of excavation, and waste disposal designation for Area I-5 are presented in Table 24.

Areas I-6 and I-7

Cleanup Action Areas I-6 and I-7 were located in the western portion of Investigation Area I (Figure 19) and were designated based on arsenic and cPAH contamination. The areas were unpaved and the depth of contamination ranged between 0 to 0.5 ft and 0 to 2.0 ft BGS. Although a specific source of contamination in these areas was not identified during design, observations made during Site environmental investigations indicated the presence of sandblast grit throughout Investigation Area I and its former use for steel building fabrication. As shown on Figure 19, the southeast corner of Area I-6 overlaps with the northwest corner of Area I-2. The cPAH contamination associated with Area I-6 overlies the arsenic contamination associated with Area I-2.

To maximize the potential that all contaminated soil would be removed during initial excavation, the excavation limits for both areas were planned to extend to 0.5 ft below the maximum extent of identified contamination (i.e., to between 1.0 and 2.5 ft BGS). The estimated excavation volumes for Areas I-6 and I-7 were 1,050 yd^3 and 300 yd^3, respectively. The estimated volumes, areas, depths of excavation, and waste disposal designations for Areas I-6 and I-7 are presented in Table 24.

Areas I-8 through I-11

Cleanup Action Areas I-8 through I-11 were located along the shoreline on the west side of Investigation Area I (Figure 19). Similar to Areas I-6 and I-7, these areas were unpaved, were designated based on arsenic and cPAH contamination, and the depth of contamination ranged between 0 to 0.5 ft and 0 to 2.0 ft BGS. The interim action for Areas I-8 through I-11 was implemented in October 2005, in advance of the interim action for the remainder of the Site, to support construction of the upland portion of the 12th Street Yacht Basin. As a result, a separate set of plans and specifications (Appendix E) and compliance monitoring plan (Landau Associates 2005d) were developed for these cleanup action areas.

The lateral limits for these areas were defined by the shoreline to the west, the property line to the north, the extent of contamination to the south, and the upland limits of the 12th Street Yacht Basin (50 ft from the shoreline) to the east. Similar to Areas I-6 and I-7, a specific source of contamination in these areas was not identified during design, although the Areas were similarly potentially affected by sandblast grit from the former use of Area I for steel building fabrication.

To maximize the potential that all contaminated soil would be removed during initial excavation, the excavation limits for these areas were planned to extend to 0.5 ft below the maximum extent of identified contamination (i.e., to between 1.0 and 2.5 ft BGS). The estimated excavation volumes for Areas I-8 through I-11 were 250 yd^3, 460 yd^3, 340 yd^3 and 790 yd^3, respectively. The estimated volumes, areas, depths of excavation, and waste disposal designations for Areas I-6 and I-7 are presented in Table 24.

4.3.4.3 Investigation Area J

Cleanup Action Areas J-1, J-2, and J-3 were defined for Investigation Area J (Figure 18). Only Areas J-1 and J-3 were located within the estimated Site boundary. Area J-2 was cleaned up and reported as part of the North Marina Phase I VCP site (Landau Associates 2008c), and Ecology has issued a no further action determination for this site. As a result, only Cleanup Action Area J-1 and J-3 are discussed in this report.

Area J-1

Cleanup Action Area J-1 was located to the west of the MSRC building. Area J-1 encompassed soil sample location J-GC-4, where arsenic was detected in the soil at a concentration exceeding the interim action cleanup level. Cleanup Action Area J-1 was paved and the depth interval for affected soil was 1.5 to 2.0 ft BGS. Soil above this depth interval consisted of clean overburden material (i.e., pavement and crushed gravel). No specific source of contamination for this area was identified during previous environmental investigations.

Analytical results for soil samples collected below this depth interval were well below the arsenic interim action cleanup level. A concrete chamber containing wood and debris was encountered in the southern portion of the planned excavation during interim action implementation, which was also removed during the interim action, as is discussed in Section 5.3.4.6.

To maximize the potential that all contaminated soil was removed as part of initial excavation, the excavation design was extended to 2.5 ft BGS, with the upper 1 ft designated as clean overburden soil. The estimated excavation volume, area, depth of excavation, and waste disposal designation for Area J-1 are presented in Table 24.

Area J-3

Cleanup Action Area J-3 was immediately east of, and partially beneath, a covered work area attached to the north end of the MSRC building. The affected area was defined by the presence of buried construction debris that contained burned materials, possibly from the former Hulbert Mill that burned down in the 1960s. The affected soil area encompasses soil sample location J-GC-6 and additional delineation samples collected during design from four additional locations within the affected material (J-GC-6f through J-GC-6i). Samples from different depths at J-GC-6 exceeded the interim action cleanup levels for arsenic and cPAHs. One of the additional delineation samples (J-GC-6h) exceeded the interim action cleanup level for arsenic, and one of the samples (J-GC-6i) exceeded the interim action cleanup level for cPAHs. Cleanup level exceedances within the affected material, which extends up to 17 ft BGS, were erratic and could not be discerned through visual observation or common field screening techniques.

The affected area was paved, and contaminated soil was first encountered at 1 ft BGS. Soil above this depth interval consisted of a pavement section (i.e., pavement and crushed gravel). Because potentially contaminated soil extended to a depth of 17 ft BGS, and the affected area extends beneath foundations supporting the roof for the covered work area, it was not practicable or safe to remove all potentially contaminated soil as part of the interim action. Instead, the interim action for this area was designed to remove the affected material to the east of the covered work area to a depth of 6 ft BGS, which was a sufficient depth to allow the installation of utilities for Site redevelopment without workers contacting potentially contaminated soil.

The excavation was designed to extend to the target excavation depth and to the limits of the affected material in the north-south direction, but to terminate at the footings of the covered work area to the west to avoid undermining or destabilizing the roof support foundations. The excavation was also designed to terminate to the east at the Ameron fenceline if the limits of the affected material were not reached prior to reaching the fence. Following excavation, a non-woven geotextile fabric was to be placed on the base of the excavation as a marker layer, and the excavation was to be backfilled with clean granular fill. The surface was to be paved with asphalt as part of the redevelopment activities. Additional design details regarding the J-3 excavation and relevant Site features are provided in Appendix E (Drawing CS1.7)

It was intended that institutional controls, in the form of deed restrictions, would be placed on the area as part of final design to ensure that any future contact with affected soil is properly managed. However, the area is heavily transected by utilities (e.g., electric, gas, water, sewer) and it is unlikely that future excavations will extend to the depth of remaining contamination. About 700 yd^3 of contaminated soil and debris remains in Area J-3 based on the extent of construction debris observed during Site characterization activities.

The estimated excavation volume, area, depth of excavation, and waste disposal designation for Area J-1 are presented in Table 24.

4.3.4.4 Investigation Area M

Investigation Area M was not fully characterized during various investigations conducted in support of the North Marina redevelopment because the area is part of the Ameron leasehold that was not anticipated to be vacated until at least 2012. However, an east-west utility corridor from West Marine View Drive to the Craftsman District was planned, which necessitated cleanup of cPAH contamination associated with sample M-2 collected near the entrance to the Ameron facility. AC samples were collected from borings M-2B, M-2C, M-2.1W and M-2.1S to better delineate the extent of contamination

in the M-2 area during interim action design. None of the AC samples exhibited cPAH concentrations above the interim action cleanup levels.

Cleanup Action Area M-1 was developed based on the data described above. Area M-1 was paved with about a 1 ft pavement section consisting of asphalt and crushed rock base course. Contaminated soil was present from about 1 to 1.5 ft BGS, and the excavation plan for Area M-1 specified that soil between 0.5 ft and 2 ft BGS be removed as contaminated soil to maximize the potential that all contaminated soil would be removed during initial excavation. The estimated excavation volume, area, depth of excavation, and waste disposal designation for Area M-1 are presented in Table 24.

5.0 INTERIM ACTION IMPLEMENTATION

As previously discussed in Section 3.0, three interim actions were implemented at the Site in 1991, 1993, and between 2005 and 2007. The following sections describe implementation of the interim actions and present the results of interim action compliance monitoring.

5.1 1991 UST INTERIM ACTION

The petroleum hydrocarbon-contaminated soil associated with the three USTs removed to the southeast of the MSRC building was reportedly removed on June 19, 1991. According to the site assessment report filed by A-1 Pump Service, the UST decommissioning contractor, 50 yd^3 of contaminated soil was excavated from the UST excavation based on visual inspection and the presence of a slight sheen on the water table. Groundwater was also reportedly removed from the excavation and disposed of at an offsite facility, although the amount and quality of water removed was not documented.

Four sidewall soil samples (PofE West Wall, PofE North Wall, PofE East Wall, and PofE South Wall) and three bottom soil samples (PofE Center of Tank, PofE Center Bottom, and PofE Bottom of Hole) were collected from the tank excavation. All soil compliance monitoring samples were tested for NWTPH-D and BTEX. The analytical results for all samples were below the laboratory reporting limits (Table 25 and on Figure 20)

The A-1 Pump Service report also indicated that groundwater samples were collected from the excavation and tested, although no water quality data were available for review. However, groundwater samples collected in October 1991 (ECI-MW-1) and in January 2005 (M-FA-1 and M-FA-2) in the vicinity of the UST removal were tested for gasoline-range, diesel-range, and lube oil-range petroleum hydrocarbons, and BTEX; no detections occurred above the laboratory reporting limits for any of these constituents. Post-interim action groundwater quality data for these samples are presented in Table 3 and illustrated on Figure 17.

The excavated soil was reportedly placed in a “berm yard”, aerated, and placed on Port property to the north of the UST location following treatment. The exact location of the treatment area and the post-treatment placement location are not documented in available information, although historical evidence indicates Area I as the most likely location.

No specific post-treatment analytical data are available to evaluate the effectiveness of soil treatment associated with the interim action. However, the A-1 Pump Service report indicates that the treated soil was field-screened using an organic vapor meter (OVM) and the highest OVM reading was reported to be 0.025 parts per million (ppm). Residual petroleum hydrocarbon contamination associated with the interim action is not likely present at the Site based on the volume of soil that was removed throughout Investigation Area I, the low OVM readings obtained from the treated soil, the lack of any

petroleum hydrocarbon contamination in the Area I analytical data, and because shallow soil was removed throughout Investigation Area I.

Based on the Area I soil compliance monitoring results, the description of interim action activities provided in the A-1 Pump report, and the post-interim action groundwater monitoring results, the 1991 interim action conducted in association with the UST removal was effective and further action at this location is not needed.

5.2 1993 MSRC INTERIM ACTION

As described in Section 3.2, the 1993 interim action was conducted to remediate petroleum hydrocarbon-contaminated soil and associated wood debris and apparent oil-containing drums found in a buried concrete vault encountered during construction of the MSRC building. The implementation of the interim action is summarized in this section, but the independent cleanup action report (Kleinfelder 1993b) should be reviewed for a more detailed discussion.

The interim action consisted of removal and offsite disposal of contaminated soil, as well as the concrete structure. Samples of contaminated soil were submitted for waste characterization, consisting of analysis for VOCs, SVOCs, PCBs, TCLP metals, and petroleum hydrocarbons. However, petroleum hydrocarbons in the diesel and oil ranges were the only constituents that exceeded MTCA soil cleanup levels. The analytical results for waste characterization samples are provided in the soil characterization data tables (Tables 1, 2, 8, 14, 16, and 17).

The contents of the vault were excavated on October 1, 1993 and stockpiled in a plastic-lined containment area constructed using ecology blocks. The concrete structure was demolished and placed in a separate stockpile on October 19, 1993. Contaminated soil was excavated from beneath the vault to a maximum depth of 19 ft BGS. A total of about 600 yd^3 (966 tons) of contaminated soil was removed from the excavation, including the volume that was removed from within the vault. The contaminated soil was transported to the nearby Rabanco transfer station and shipped by rail to its Roosevelt, Washington solid waste landfill.

A total of 17 soil compliance monitoring samples were collected to confirm that cleanup levels were achieved. The compliance monitoring results for MSRC interim action are presented in Table 25 and analytical results are summarized on Figure 20. Of the 17 compliance monitoring samples collected following excavation, the highest residual concentrations of petroleum hydrocarbons were 160 mg/kg and 110 mg/kg for diesel-range petroleum hydrocarbons and oil-range petroleum hydrocarbons, respectively. The MTCA Method A cleanup level for unrestricted site use for diesel- and oil-range petroleum hydrocarbons was 200 mg/kg in 1993, rather than the current 2,000 mg/kg cleanup level, resulting in a lower action level for the 1993 interim action.

No groundwater compliance monitoring was conducted as part of the interim action. However, groundwater samples were collected from the immediate vicinity of the interim action during Landau Associates' 2004 Phase II ESA (J-2) and during the 2005 Data Gaps Investigation (J-FA-1 and J-FA-2). Sample J-2 was tested for VOCs, SVOCs, metals, TPH-G, TPH-Dx, and BTEX, and samples J-FA-1 and J-FA-2 were tested for TPH-HCID. All analytical constituents were either undetected or well below the cleanup screening levels, except that dissolved arsenic was detected at 6 µg/L in sample J-2, which slightly exceeds the arsenic groundwater screening level of 5 µg/L. Post-interim action groundwater quality data for these samples are presented in Tables 3, 4, 5, and 19, and illustrated on Figure 17.

Based on the soil compliance monitoring results and the available groundwater quality data collected from the vicinity of the interim action, the MSRC interim action appears to have been effective and further remedial action at this location does not appear needed.

5.3 NORTH MARINA REDEVELOPMENT INTERIM ACTION

The North Marina Redevelopment interim action was conducted between October 2005 and October 2007. The interim action was conducted consistent with methods, procedures, and standards identified in the North Marina Redevelopment site CAP previously developed for the North Marina Area (Landau Associates 2006a) and the supplemental CAP (Landau Associates 2006b). Although conducted in advance of completing the North Marina Redevelopment CAP (see Section 4.3.4.2), interim action for Areas I-8 through I-11 was integrated into the CAP and was conducted using consistent methods and procedures.

A total of 15 specific interim action areas were identified based on Site characterization activities, and addressed as part of the planned interim action for the Site (Landau Associates 2006a). These included:

- Areas I-1 through I-11
- Areas J-1 and J-3
- Areas G-1
- Area M-1.

In addition to the planned cleanup areas, another interim action area was identified and addressed subsequent to the planned interim action. Area G-1a, which was partly located in Area I, was identified during construction of the Craftsman District following completion of the planned interim action. Area G-1a is discussed is Section 5.3.4.9 below.

A brief description of compliance monitoring procedures, the cleanup actions conducted in these areas, and compliance monitoring results are presented in this section.

5.3.1 COMPLIANCE MONITORING PROCEDURES

This section describes the soil compliance monitoring procedures implemented for the Site interim action. Confirmation soil samples were collected at the base and along the excavation sidewalls within each cleanup action area following excavation and prior to backfilling. Compliance monitoring was conducted in conformance with the two compliance monitoring plans (CMPs) developed for the Site, which were submitted for Ecology review in 2006 (Landau Associates 2005a; Landau Associates 2006b Appendix B). Confirmation soil samples were analyzed for the IHS that exceeded the interim action cleanup levels in each cleanup action area. Soil removal and compliance monitoring were conducted iteratively until residual soil concentrations in all cleanup action areas achieved the soil interim action cleanup levels for all IHS, except as described below for specific interim action areas.

The following sections describe how compliance monitoring samples were located and collected, and present the compliance monitoring results.

5.3.2 SAMPLE LOCATIONS

To collect data representative of the soil remaining at the base of the excavation in each cleanup action area, the base of each excavation was divided into approximately equal-sized grids and one sample was collected from the center of each grid and submitted for laboratory analysis. In general, the base of the excavation in larger cleanup action areas (e.g., Area I-2) was divided into 11 or more grids. By dividing the base of the excavations into 11 or more grids, a sufficient number of samples were collected to support the calculation of an upper confidence interval for the mean contaminant concentrations remaining at the base of the excavation, if necessary. In smaller cleanup action areas, the base of the excavation was divided into fewer than 11 grids, with a maximum grid size of about 500 square feet (ft^2), consistent with the CMPs.

Confirmation soil samples from the base of each excavation were collected as described in Section 5.3.3. If field observations of the soil at the base of an excavation indicated evidence of potential contamination either through visual observation (e.g., soil discoloration, presence of debris, or sheen) or through the use of field instrumentation (e.g., photoionization detector), the confirmation sample within a particular grid was moved from the center of the grid to the area of potential contamination.

At each excavation, one sidewall sample was collected for every 50 linear ft of sidewall with a minimum of one sample per sidewall. However, if the 50-ft spacing would result in more than 10 sidewall samples for a given cleanup action area, the linear spacing was increased to 75 ft. Sidewall samples were collected from the depth interval identified as contaminated for that excavation. If field observations of the soil along an excavation sidewall indicated evidence of contamination either through visual observation or through the use of field instrumentation, additional excavation of the sidewall was

performed in this area to remove the potentially contaminated soil, or an additional confirmation sidewall sample was collected within the area of potential contamination to confirm that additional excavation was not required. As discussed in subsequent sections of this report, many of the cleanup action areas in Investigation Area I extended further laterally than estimated during design and the cleanup action areas merged together, resulting in the elimination or reduction of the sidewalls (and associated compliance samples) for many of the cleanup areas.

A consistent sample labeling protocol was used for most compliance monitoring samples. Samples were labeled with the cleanup area, followed by a "B" or an "S" to identify bottom and sidewall samples, followed by a sequential number. For example, Sample I2-B8 was the eighth bottom sample collected within Cleanup Action Area I2. If a compliance monitoring sample exceeded the interim action cleanup levels and the area was re-excavated, the subsequent compliance monitoring sample was given the same label with a lower case letter appended to the end of the label (e.g., D11-B8a); sequential appended letters, starting with "a", were used for locations where multiple iterations of excavation and compliance monitoring were conducted.

Compliance monitoring soil sample locations and the final excavation lateral limits for the northern and southern portions of the Site are shown on Figures 20 and 21, respectively.

5.3.3 SOIL SAMPLE COLLECTION

Compliance monitoring samples representative of the soil remaining at the base of the excavation were collected from the base and sidewalls of the excavation. A shallow hole was hand dug at each base sample location using decontaminated or disposable hand implements, including stainless-steel spoons and steel shovels, picks, and similar equipment. The sidewall surface of the hand-dug hole was scraped to expose a fresh surface for sample collection. In general, the upper 6 inches of the sample location sidewall was sampled using a decontaminated stainless-steel spoon, placed in a decontaminated stainless-steel bowl, homogenized, and transferred to the appropriate sample container, or were homogenized directly in the appropriate sample container. Material greater than about ¼ inch was removed from the sample volume. Equipment decontamination procedures are discussed in Appendix B.

Confirmation samples collected from the excavation sidewalls were collected from a depth interval extending the full thickness of the contaminated soil zone. For excavations in unpaved areas, the sample was collected from the ground surface to the base of the excavation. For excavations in paved areas, the sample was collected from the base of the pavement/subgrade section to the base of the excavation. The surface of the sidewall was scraped using a decontaminated hand implement to expose a fresh surface for sample collection. Equal amounts of soil from the full thickness of the sidewall, or sampling interval, were collected using a decontaminated stainless-steel spoon, placed in a

decontaminated stainless-steel bowl, homogenized, and transferred to the appropriate sample container, or were homogenized directly in the appropriate sample container.

5.3.4 INTERIM ACTION IMPLEMENTATION

Interim action implementation included the excavation and offsite disposal of affected soil identified during previous Site investigation activities, and the collection and analysis of compliance monitoring samples to verify that interim action cleanup levels were achieved. Cleanup activities were conducted in conformance with the applicable plans and specifications for the cleanup action areas (Appendix E) except;

- Repeated excavation was conducted in most areas where compliance monitoring samples exceeded the interim action cleanup levels. The general areas of additional excavation can be seen on Figures 20 and 21 by gray dots, which represent the locations where additional soil was removed following a compliance sample cleanup level exceedance.
- An unplanned interim action was conducted in 2007 when metals-contaminated soil was encountered in a utility construction trench south of the new Bayside Marine building development of the Craftsman District following implementation of the planned interim action (Area G1a on Figure 21). The interim action for this area is discussed in Section 5.3.4.2.

The following sections describe cleanup activities for each of the 16 North Marina Redevelopment interim action areas, including observations about the nature of contamination, the extent of excavation, the disposal location and volume of contaminated soil, and the results of compliance monitoring. Figures 20 and 21 show the boundaries of the cleanup excavations with the compliance monitoring results. Compliance monitoring results are shown in Table 25 (soil remaining) and Table 26 (failed compliance monitoring data representing soil subsequently removed). Appendix C, Figures C-1 through C-3, provide post-interim action survey maps showing the planned and actual excavation boundaries. Figure 22 presents a depiction of the areas with residual contamination following the interim actions.

5.3.4.1 Cleanup Action Area G-1

Cleanup Action Area G-1 was remediated to facilitate construction of the new Bayside Marine building. The G-1 Area was excavated between June and September 2006 to approximately Elevation 15 ft MLLW, 0.5 ft below the adjacent pavement grade to the east on the Ameron leasehold. Cleanup was not completed in the G-1 area because work was suspended when it was determined that the Port did not obtain access permission from Ameron for the excavation activities.

Eight compliance bottom samples (G1-B1 and G1-B3 through G1B-9) were collected on June 30, 2006 following excavation to the planned limits. Of these, four samples (G1-B3, G1-B4, G1-B8, and

G1-B9) exceeded the interim action cleanup levels. Two of these were on the west side of G-1 (G1-B4 and G1-B9) in the authorized work area for construction of the Bayside Marine building. Additional excavation was conducted in September 2006 to remove the remaining contaminated material from the G1-B4 and G1-B9 area. Compliance monitoring bottom samples G1-B10 and G1-B11 were also collected at this time. Samples G1-B1 and G1-B3 through G1-B8 were tested for NWTPH-Dx, metals, and cPAHs, and samples G1-B8 through G1-B11 were tested for metals (arsenic, lead, and copper were the only constituents that exceeded their interim action cleanup levels in Area G-1 characterization samples). All of the compliance monitoring samples collected following the re-excavation of the west side of Area G-1 were below the interim action cleanup levels. A total of 2,700 tons (about 1,800 yd^3) of contaminated soil was excavated and disposed of from Area G-1.

No sidewall compliance monitoring samples were collected from Area G-1. Sidewalls did not exist to the north and east because adjacent grades were essentially equal to the post-excavation Area G-1 surface. A sidewall was not collected from the south end of Area G-1 because the exposed face exhibited deposits of sandblast grit that were contiguous with sandblast grit removed from Area G-1.

Residual contamination remains in the G-1 area in the vicinity of bottom samples G1-B3 and G1-B8 (Figure 22), in northeast corner of Area G-1 (surface samples G1-AC 3 through AC-5), and beyond the southern excavation boundary. Observations made during implementation of the Area G-1 interim action indicated black, sand-sized material (apparent sandblast grit) in pockets and layers throughout much most of Area G1, except for the extreme northeast portion of the area. The apparent sandblast grit was most prevalent in the southern portion of Area G-1 and extends farther south beyond the excavation limits. Photographs taken during interim action implementation of the sandblast grit observed at the south end of Area G-1 are presented in Appendix F.

Pieces of multi-colored concrete-like waste material ranging from gravel to large boulder size were present within the soil removed during the Area G-1 interim action. Wasted concrete products were also observed including several concrete poles and metal pole stands. The soft, gray clay-like material with a concrete odor observed in the northeast portion of Area G-1 exhibited arsenic concentrations between 80 and 120 mg/kg, but was not removed during the interim action.

During cleanup activities in Area G-1 on June 22, 2006, Landau Associates' personnel observed freshly placed material within Area G-1 that was not present during previous Site activities. This material had the odor and appearance of a concrete waste material, and appeared similar to the material observed elsewhere in Area G-1. The material exhibited arsenic and copper concentrations above the cleanup screening levels and a pH of 8.06, as indicated in Table 27.

A total of 2,700 tons (about 1,800 yd^3) of contaminated soil was excavated and disposed of from Area G-1.

5.3.4.2 Cleanup Action Area I-1

Cleanup Action Area I-1 encompassed a soil stockpile in the northeast portion of Area I (Figure 19). The stockpile reportedly originated from the placement of soil and debris from other Port leaseholds, although the specific source is not known (Landau Associates 2004). The interim action for Area I-1 was conducted in July 2006. The excavation depth for Area I-1 extended to approximately 1.5 ft below adjacent grades in the western portion of Area I-1 and to approximately 0.5 ft in the eastern portion, as described below. The eastern portion of Area I-1 was included as part of excavation in Cleanup Action Area I-3b.

Two bottom and two sidewall compliance monitoring soil samples (I1-B1, I1-B2, I1-S1 and I1-S2) were collected from the western half of Area I-1 and were tested for metals. Compliance sampling for the east half of Area I-1 was conducted as part of Area I-3b.

Both bottom samples exceeded the interim action cleanup levels for arsenic. Based on these data, an additional 1 ft of soil was excavated from the western half of Area I-1, and two additional compliance monitoring bottom samples (I1-B1a and -B2a) were collected and tested; both samples achieved the interim action cleanup levels.

One AC sample (I1-AC-1) was collected from the affected Area I-1 soil and tested for metals, TBT, and pH. The AC sample did not exceed any of the interim action cleanup levels, exhibited a normal soil pH (7.2), and a low TBT concentration (0.95 mg/kg TBT ion).

A total of 560 tons (370 yd^3) of contaminated soil were removed from Area I-1 and was disposed of at the Waste Management solid waste landfill in Arlington, Oregon.

5.3.4.3 Cleanup Action Areas I-2 through I-5

Cleanup Action Areas I-2 through I-5 exhibited similar types of contamination and largely merged into each other. They all addressed fill soil that had been placed in the area over hydraulic fill. Because the excavation merged together, they are discussed together in this section. Figure 19 shows the original cleanup design Areas I-2 through I-5.

Interim action for Areas I-2 through I-5 was conducted from July through November 2006. Initial excavation for all of these areas occurred between June 29 and July 28, 2006, but the combination of iterative compliance monitoring and re-excavation in some areas and delayed access to the south portion of Area I-2 extended the interim action to mid-November 2006. As shown on Figure 21, the Area I excavation areas merged together and only two small areas in the northwest and southwest-central were not excavated during the interim action. The depth of excavation ranged from about 1 to 7 ft below the existing grades. At the completion of excavation, the merged excavation was relatively flat, with a bottom elevation of between about 16 ft and 18ft (MLLW), with sidewalls greater than 1 ft in elevation

limited to the south end of Area I-2, Area I-5, and adjacent to the perimeter of the unexcavated area in the southwestern portion of Area I.

The locations of compliance monitoring samples collected for Areas I-2 through I-5 are shown on Figure 21. Compliance monitoring samples for Areas I-2 and I-5 were tested for metals and Areas I-3 and I-4 were tested for metals and cPAHs. Analytical results for failed compliance monitoring samples from re-excavated areas are provided in Table 26 and final compliance monitoring results (representing current conditions) are provided in Table 25.

At least one iteration of re-excavation due to compliance monitoring samples exceeding the interim action cleanup levels occurred in each of these cleanup areas. The most iterations of compliance monitoring testing and re-excavation occurred in Area I-5, which was extended a significant distance farther to the south and east than planned. Area I-5 was also the deepest excavation conducted during the interim action, extending up to about 7 ft BGS. Area I-5 is also the only interim action area for which the interim action cleanup levels were not met, with residual contamination remaining along the north sidewall because the excavation could not be extended beyond the north property line. The adjacent property to the north is owned by Norton Industries, Inc.

A number of observations were made during the interim action implementation in Areas I-2 through I-5 that were indicative of potential sources of the releases in these areas. Black apparent sandblast grit was present in pockets and layers in all areas, with the most significant deposits present in Areas I-3a, I-3b, I-4, and I-5. Multi-colored concrete-like waste was also observed in much of the area, with the largest and most continuous deposits observed in Areas I-2 and I-5. Sandblast grit was observed interbedded with a pink to gray concrete-like waste in much of Areas I-2 and I-5, including along the north sidewall of Area I-5 at the north property boundary (samples I5-AC-NWall a, and I5-AC-NWall b). Appendix F presents a number of photographs of observed conditions during interim action implementation in Areas I-2 through I-5.

A localized area of wood debris with a creosote odor was observed in Area I-2 during interim action implementation. A sample of the material (I2-AC-1A) exhibited cPAH concentrations above the cleanup screening level and the affected material was excavated and disposed of at a solid waste facility.

A total of about 16,200 tons (about 10,800 yd^3) of contaminated soil were removed from Areas I-2 through I-5 during the interim action; breakdown by area as follows:

- Area I-2: 7,965 tons
- Area I-3: (a and b) 3,650 tons
- Area I-4: 780 tons
- Area I-5: 3,810 tons.

The majority of the material was disposed of at the Waste Management solid waste landfill in Arlington, Oregon, although a portion of the soil from Area I-4 was sent to the Rinker Materials inert waste landfill in Everett.

5.3.4.4 Cleanup Action Areas I-6 and I-7

Interim action implementation for Interim Action Areas I-6 and I-7 are discussed together because the nature of contamination and conditions observed for these areas during implementation of the interim action are similar. The primary IHS driving the interim action was heavy metals (arsenic) in Area 7, and cPAHs in Area 6. Area I-6 compliance monitoring samples were tested for metals and cPAHs and Area I-7 compliance monitoring samples were tested for metals.

Interim action for Areas I-6 and I-7 was implemented between late July and mid-September 2006. The excavation was extended deeper than the planned 2.5 ft excavation in the vicinity of bottom sample I6-B6, where the excavation was extended to 3.5 ft BGS. However, both Areas I-6 and I-7 were extended laterally beyond the planned excavation boundaries. Area I-6 was significantly expanded to the north and the south. Area I-7 was expanded a limited distance to the south and east. Following completion of the excavations, the interim action cleanup levels were achieved throughout Areas I-6 and I-7, and the current cleanup screening levels were achieved, except for exceedance of the copper screening level at four locations. A general characterization sample, I-GC-12.6S, was used as the sidewall compliance monitoring sample at the south end of Area I-7 following expansion of the excavation in this area.

A total of about 3,240 tons (2,200 yd^3) of soil were removed from Area I-6 and 2,500 tons (1,700 yd^3) from Area I-7.

5.3.4.5 Cleanup Action Areas I-8 through I-11

The interim action for Areas I-8 through I-11 was implemented in October 2005, in advance of the interim action for the remainder of the Site, to support construction of the upland portion of the 12th Street Yacht Basin. As a result, a separate set of plans and specifications (Appendix E) and compliance monitoring plan (Landau Associates 2005d) were developed for these cleanup action areas. As discussed in Section 3.3.4.2 and shown in Table 24, the planned excavation depth for Areas I-8 through I-11 ranged from 1.5 to 2.5 ft BGS. The depth of excavation in portions of Areas I-9 and I-11, which were planned to extend 1.5 ft BGS, was extended to 2.5 ft BGS due to exceedance of the interim action cleanup levels in some bottom compliance monitoring samples. However, the depth of excavation was not extended deeper than 2.5 ft BGS in any of these interim action areas. Post-interim action survey data are not available for these areas.

The excavation was extended from the top of slope at the shoreline to about 50 ft eastward to accommodate construction for the yacht basin, but sidewall samples were not collected because additional

excavation to the east was planned as part of the Site-wide interim action. Compliance monitoring samples were tested for metals and cPAHs. The interim action cleanup levels were achieved throughout Areas I-8 through I-11, and the cleanup screening levels were also achieved except for an exceedance of the copper screening level at location I-10b.

Contaminated soil from Areas I-8 through I-11 was temporarily stockpiled in a vacant building on Port property until waste characterization was completed during design for the Site-wide interim action. The stockpiled soil was disposed of at the Rinker Materials inert waste landfill following waste characterization and approval by the Snohomish Health District.

Crushed base course material imported as subgrade support for the esplanade at the head of the 12th Street channel was determined to contain arsenic concentrations in exceedance of the interim action cleanup level. This condition was discovered when Area I-7 sidewall sample I7-S6 was inadvertently collected from the base course material. The Area I-7 excavation was extended farther west in two iterations, but subsequent testing (I7-S6a and I7-S6b) confirmed the elevated arsenic concentrations in the crushed rock.

Additional testing of the base course material was conducted to evaluate soil quality of the base course material through the excavation and sampling of test pits BF-TP-1 through BF-TP-5, as shown on Figure 5. As indicated in Table 28, the arsenic concentrations in BF-TP-3 through BF-TP-5 exceeded the interim action cleanup level, exhibiting concentrations ranging from 55 mg/kg to 126 mg/kg. Based on these data, the Port decided to remove the accessible portion of the base course material and contain it in the eastern portion of Interim Action Cleanup Area J-3, where long-term containment was already planned for arsenic and cPAH-affected soil and construction debris. Containment of the base course material is further discussed in Section 5.3.4.6 on J-3.

The base course material was placed in a uniform layer about 8 inches thick from the shoreline about 60 ft inland, and from the north property line to about 100 ft north of the south boundary of Area I, which constitutes about 700 yd^3. About the western 20 ft of the affected base course material was already covered by the concrete esplanade constructed for public access along the shoreline, and as a result, the affected base course beneath the esplanade was left in place and is contained by this structure. As a result, the volume of affected base course removed from Area I and contained in Area J-3 is about 470 yd^3. The affected esplanade area will be discussed further in Section 6.0 of this report.

A total of 3,260 tons (2,200) from Areas I-8 through I-11. The individual volumes/masses removed from Areas I-8 through I-11 were not individually determined.

5.3.4.6 Cleanup Action Area J-1

Cleanup Action Area J-1 was excavated to remove contaminated soil containing arsenic above the soil interim action cleanup level. The excavated soil was disposed of at the Rinker Materials Everett Washington inert waste landfill. The limits of excavation are shown on Figure 20. The planned depth of excavation for Area J-1 was 2.5 ft, including 1 ft of clean overburden soil.

Area J-1 was excavated to its planned excavation depth in late July and compliance monitoring samples were collected on August 1, 2006. Compliance monitoring samples were tested for metals and all compliance monitoring samples achieved the arsenic interim action cleanup level. However, wood and metal debris was observed in the southern portion of Area J-1 and the Port decided to conduct additional excavation in this area because the debris would not be suitable as foundation subgrade for future buildings. Further excavation of this area revealed extensive wood and metal debris, including a crushed 55-gallon drum and sections of rigid metal pipe located inside a concrete vault or chamber that was subdivided into a series of compartments. The original purpose of the concrete chamber is not known, but it may be related to the concrete vault encountered during the 1993 MSRC building construction and interim action described in Section 4.2. Photographs of the concrete chambers and the excavated debris present in the chambers are presented in Appendix F.

Characterization samples Chamber-1 through Chamber-4 were collected from the soil matrix present in the chambers. The samples were tested for NWTPH-Dx, BTEX, heavy metals, TCLP metals, cPAHs, and PCBs. The analytical results are presented in Tables 1, 2, 9, 14, and 17, and all analytical parameters were either not detected above the reporting limits or were well below the interim action cleanup levels. Based on these results, the contents of the chambers were excavated, the metal was segregated from the soil matrix and recycled, and the soil and wood debris was disposed of at the Waste Management solid waste landfill in Arlington, Oregon.

The concrete vault was demolished following removal of the contents and recycled in conjunction with other concrete debris generated during building demolition for the North Marina redevelopment. Two additional compliance monitoring bottom samples (J1-TB1 and J1-TB2), and three additional sidewall samples (J1-TS1 through J1-TS3), were collected from the former chamber area. The additional compliance monitoring samples were tested for heavy metals and cPAHs, and none of the samples exceeded the interim action cleanup levels or the cleanup screening levels. Final compliance monitoring data for samples J1-TB1 through J1-TS3 are provided in Tables 25 and 28.

A total of about 550 tons (370 yd^3) of soil was removed from Area J-1, including the material removed from the concrete chamber.

5.3.4.7 Cleanup Action Area J-3

Cleanup Action Area J-3 was excavated to remove arsenic and cPAH-contaminated soil and apparent construction debris. As indicated in Section 4.3.4.3, the affected material extends up to 17 ft BGS, but the proximity of the foundation for the covered work area at the north end of the MSRC building precluded complete removal of the material. As a result, the interim action excavation was limited to 6 ft BGS to provide sufficient depth for the installation of planned utilities above the affected media, while avoiding undermining of the adjacent foundations for the covered work area. The intent of the interim action was to contain the remainder of the affected soil *in situ* as part of the final cleanup action.

Interim action for Area J-3 was implemented in September 2006. The excavation was extended to its planned limits and six sidewall compliance monitoring samples (J1-S1 through J1-S6) were collected and analyzed for heavy metals and cPAHs. A sidewall sample was not collected from beneath the MSRC canopy area because the excavation was terminated adjacent to the foundations prior to reaching the limits of the affected material. Bottom compliance monitoring samples were not collected because the excavation was not extended vertically to the limits of the affected material. It is anticipated that the affected material below the base of the excavation is contaminated with arsenic and/or cPAHs, but additional soil quality monitoring is needed to determine whether the residual material below the base of the excavation is contaminated. Photographs illustrating the conditions observed during interim action implementation in Area J-3 are presented in Appendix F.

Compliance monitoring results for Area J-3 are presented in Table 25 and shown on Figure 21. The sidewall compliance monitoring samples achieved the interim action cleanup levels, except for sample J3-S1, which exceeded the interim action cleanup level for arsenic. The excavation was not extended farther east to address the J3-S1 exceedance because the sample was collected adjacent to the fenceline for the Ameron leasehold.

A total of about 2,560 tons (1,700 yd^3) of soil and debris were removed from Area J-3 and disposed of at the Waste Management solid waste landfill in Arlington, Oregon.

As indicated in Section 5.3.4.5, arsenic-containing crushed rock used for esplanade and pavement subgrade along the western side of Area I was excavated and placed in Area J-3 for long-term containment. Area J-3 was selected as the location for containing this material because cleanup of Area J-3 included containment of suspected arsenic- and cPAH-contaminated soil and construction debris that was left in place below the excavation depth for new utilities. The arsenic-containing crushed rock was placed in the eastern portion of Area J-3, away from the planned utility alignment for the new Craftsman District development, at the approximate location shown on Figure 22.

5.3.4.8 Cleanup Action Area M-1

Cleanup Action Area M-1 was excavated to remove contaminated soil containing cPAHs above the soil interim action cleanup level. Area M-1 was excavated to a depth of 2 ft BGS, with the upper 0.5 ft consisting of an asphalt pavement section. The Area M-1 interim action was implemented in August 2006.

A total of four bottom samples and seven sidewall samples were collected from the excavation, and the analytical results for the compliance monitoring samples are presented in Table 25 and shown on Figure 21. All samples were tested for cPAH, and sidewall sample M1-S1 was the only sample that exceeded the cPAH interim action cleanup level; the other samples did not exhibit detectable concentrations of cPAHs.

Sample M1-S1 was collected from the south side of the Ameron entrance. The excavation was not extended farther north to avoid interference with Ameron's operations. Additionally, it was recognized that additional characterization would be needed in the future to complete characterization activities on the Ameron leasehold, so the M-1 area could be further delineated and remediated in conjunction with these future activities.

A total of about 400 tons (270 yd^3) of soil was removed from Area M-1 and disposed of at the Rinker Materials inert waste landfill in Everett, Washington.

5.3.4.9 Cleanup Action Area G-1A (Areas I and G)

During construction of underground utilities south of the new Bayside Marine building in October 2007, multi-colored concrete-like waste material and apparent sandblast grit were encountered. Additionally, a heavy oil sheen was encountered in the southeast corner of the subsequent interim action excavation. The multi-colored concrete waste encountered in the excavation included a 4-inch diameter cylinder of green concrete-like material and a brittle, multi-colored varved (thinly layered) material that appeared to be accumulated settling pond sediment, as well as multi-colored concrete-like material similar to that encountered elsewhere during the interim action.

Soil from the utility vault excavation was stockpiled and construction was halted to allow remediation of the contaminated material prior to resuming further construction activities. The area was located south of the southeast corner of the new Bayside Marine building and portions of the area were in both Areas G and I. The extent north-south appeared to be limited to about a 50-ft zone based on other utility vault excavation locations. In the field, there was uncertainty about whether the excavation area was within Area G or Area I because the original fence had been removed and the excavation appeared to fall within the 10-ft zone between the former fenceline and the actual leasehold boundary (Section 3.4.4.2). The compliance monitoring samples were labeled G1a, but survey data subsequently

indicated the excavation was in both areas (See Figure 21). The occurrence of the material straddling the fenceline suggested the contamination originated prior to construction of the fenceline that separates the two areas.

Area G-1A was excavated on October 5, 2007 to about 5 ft BGS. Excavation was terminated to the east on the Ameron leasehold boundary where apparent sandblast grit and concrete-like waste were observed, so east sidewall compliance samples were not collected. The excavation to the west encountered an electric utility conduit so could not be extended any farther in that direction. Multi-colored concrete-like waste material was present in the west excavation sidewall (see Appendix F), but three west sidewall compliance monitoring samples (G1A-100507-S1, -S2 and -S3) were collected since the excavation extended into Cleanup Action Area I-4, which had been previously remediated. Two compliance monitoring bottom samples (G1A-100507-B1 and G1A-100507-B2) were also obtained. Due to the constraints on any further excavation, the interim action was terminated and the excavation backfilled with clean structural fill. Compliance monitoring samples were tested for metals and cPAHs.

The compliance monitoring data are shown on Figure 21. The data indicate the bottom and sidewall samples at the north end of the excavation achieved the cleanup screening levels; however, the bottom sample collected in the southwest portion of the excavation and the western two sidewall samples exceeded the cleanup screening levels for arsenic, lead, and/or copper, with arsenic and copper exceeding the cleanup screening levels in all three samples. The compliance data and field observations indicate the sandblast waste continues to the east, west, and southwest, and multi-colored concrete-like waste continues to the west.

A total of about 170 tons of soil was removed from Area G-1A. Two soil samples collected from the stockpile material were tested for waste profiling (G1A-100907-STK-1 and G1A-101607-STK-2) and, based on the analytical results (Tables 1, 9, and 14), the material was disposed of as solid waste. One sample of green sandblast waste observed in the excavation (G1A-100907-AC-1) was obtained and analyzed for total metals. These data indicated no exceedances of the cleanup screening levels.

6.0 CONCLUSIONS

The interim action conducted for the Site achieved the interim action soil cleanup levels throughout most of the planned interim action areas and, with the exception of a few copper exceedances, the current soil screening levels developed for the Site were also achieved. The results of interim action compliance monitoring and observations, combined with the results of previous environmental investigations, support the following conclusions regarding Site environmental conditions:

- Soil contamination is not present in the hydraulic fill used to create much of the Site uplands, unless impacted by releases that occurred subsequent to its placement as upland fill.
- Soil contamination is generally limited to shallow soil located above the hydraulic fill
- Site groundwater generally achieves groundwater screening levels, with only localized areas of low level groundwater contamination indicated by available groundwater quality data.

Although soil screening levels were achieved in most areas, a limited amount of soil contamination associated with the interim actions remains that will need to be addressed during the RI/FS in conjunction with further characterization of portions of the Site not fully characterized or cleaned up as part of the interim actions. Specifically, the following issues associated with the interim actions will need to be addressed during the upcoming scoping for the RI/FS:

- Residual soil contamination remains in Area G-1 due to the interim action being terminated prior to completion in this area.
- Residual soil contamination remains in Area G-1a because utilities prevented further excavation to the west and excavation was terminated to the east because contamination extended into an area beyond the limits of the planned interim action.
- Residual soil contamination remains at the North sidewall of Area I-5, indicating that the release is also present on the adjacent property to the north.
- Arsenic-containing crushed rock base course material occurs beneath the esplanade and adjacent pavement at the head of the 12th Street Yacht Basin, and will require further evaluation during scoping for the RI/FS work plan.
- Soil and debris, and recently placed arsenic-containing crushed rock base course material, contained beneath asphalt pavement in Area J-3 will require further evaluation to determine whether it is contaminated with arsenic or cPAHs, similar to the material removed during the Area J-3 interim action.
- The arsenic and copper groundwater screening levels have been slightly exceeded in samples collected from locations within some of the 2005 to 2007 interim action areas and will require further evaluation during scoping for the RI/FS work plan.
- Groundwater quality was not evaluated in the area to the north of the MSRC building where petroleum hydrocarbon-affected soil and free product were encountered during construction of utilities for the Craftsman District.

- Because the aquatic portion of the Site was dredged during development of the 12th Street Marina, it is not anticipated that Site sediment is affected by previous Site activities. However, sediment characterization will be required to evaluate current sediment quality conditions.

These issues will be addressed within the RI/FS work plan that will be prepared for the Site. The RI/FS work plan will also address Site areas not previously subject to interim action or thorough environmental characterization, and will include a more extensive historical review than was conducted during previous investigations.

7.0 LIMITATIONS

This document has been prepared for the exclusive use of the Port of Everett for the North Marina Ameron/Hulbert Site. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of the Port of Everett and Landau Associates. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by Landau Associates, shall be at the user's sole risk. Landau Associates warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. We make no other warranty, either express or implied.

LANDAU ASSOCIATES, INC.

Lawrence D. Beard, P.E., L.G.
Principal

Alyssa B. Johnson
Staff Scientist

ABJ/LDB/tam

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APPENDIX P

AGREED ORDER

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action by: Norton Industries, Inc., and TC Systems, Inc.	AGREED ORDER **Remedial Investigation/Feasibility Study and Draft Cleanup Action Plan – TC Systems Inc Site** No. DE 7818

TO: Norton Industries, Inc.
James B. Schack – President
24415 142nd Ave SE
Kent, Washington 98042

and

TC Systems, Inc.
Mary Utick, President
1032 West Marine View Drive
Everett, Washington 98201-1557

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I. INTRODUCTION

The mutual objective of the State of Washington, Department of Ecology (Ecology), Norton Industries, Inc. (Norton), and TC Systems, Inc. (TC Systems), under this Agreed Order (Order) is to provide for remedial action at a facility where there has been a release or threatened release of hazardous substances. This Order requires Norton and TC Systems (collectively the potentially liable persons [PLPs]) to conduct a Remedial Investigation and Feasibility Study (RI/FS) per WAC 173-340-350 and develop a draft Cleanup Action Plan per WAC 173-340-350 through 173-340-380 addressing both potential upland and in-water (i.e., nearby marine environment) contamination for the Site. Ecology believes the actions required by this Order are in the public interest.

II. JURISDICTION

This Agreed Order is issued pursuant to the Model Toxics Control Act (MTCA), RCW 70.105D.050(1).

III. PARTIES BOUND

This Agreed Order shall apply to and be binding upon the Parties to this Order, their successors and assigns. The undersigned representative of each party hereby certifies that he or she is fully authorized to enter into this Order and to execute and legally bind such party to comply with this Order. The PLPs agree to undertake all actions required by the terms and conditions of this Order. No change in ownership or corporate status shall alter PLPs' responsibility under this Order. The PLPs shall provide a copy of this Order to all agents, contractors, and subcontractors retained to perform work required by this Order, and shall ensure that all work undertaken by such agents, contractors, and subcontractors complies with this Order.

IV. DEFINITIONS

Unless otherwise specified herein, the definitions set forth in Chapter 70.105D RCW and Chapter 173-340 WAC shall control the meanings of the terms in this Order.

A. Site: The Site is referred to as TC Systems Inc (the Site) and is generally located between 10th and 11th Streets off West Marine View Drive, Everett, Snohomish County,

Washington. The Site is owned by Norton and includes approximately 2.6 acres of upland area. The final limits of the Site will be determined in the RI/FS. The Site is defined by the extent of contamination caused by the release of hazardous substances at the Site and is not limited by property boundaries. The Site includes areas where hazardous substances have been deposited, stored, disposed of, placed, or otherwise come to be located. Based upon factors currently known to Ecology, the Site is more particularly described in **Exhibit A** to this Order, which includes site and tax parcel maps, a site location description, and property information from the Snohomish County Assessor's Office. The Site includes both upland and potential in-water areas as defined below. The Site constitutes a Facility under RCW 70.105D.020(5).

B. Parties: Refers to the State of Washington, Department of Ecology, Norton and TC Systems.

C. Potentially Liable Person (PLP): Refers to Norton and TC Systems.

D. Agreed Order or Order: Refers to this Order and each of the exhibits to this Order. All exhibits are integral and enforceable parts of this Order. The terms "Agreed Order" or "Order" shall include all exhibits to this Order.

E. Upland Area: Refers to areas of the Site that fall outside the In-Water Area, as generally depicted in **Exhibit A**, Figures 2 and 3.

F. In-Water Area: Refers to nearby intertidal (areas exposed to air at low tide) and subtidal (areas always covered by water) areas located just north and west of the Site that could potentially be impacted from contaminant migration pathways (e.g., groundwater to surface water flow, stormwater discharge, etc.), as generally depicted in **Exhibit A**, Figure 4.

V. FINDINGS OF FACT

Ecology makes the following findings of fact, without any express or implied admissions of such facts by the PLPs:

A. The Site is generally located between 10th and 11th Streets off West Marine View Drive, Everett, Snohomish County, Washington. The Site location is depicted in the diagrams

attached to this Agreed Order as **Exhibit A**. The facility is depicted in Figures 2 through 4 of **Exhibit A**. **Exhibit A** also contains a legal description of the property.

B. The Site was formerly occupied by an historic Shingle Mill (i.e., Jamison Shingle Mill) that was built on pilings and operated for over 40 years. Early Sanborn Fire Insurance Maps (Sanborn Maps) show that the Jamison Shingle Mill was in operation at least as far back as 1914. Sanborn Maps also show that the mill was in operation in 1957. Available historic aerial photos show that the mill was present at the site in 1966, but not in 1979.

C. The current buildings located on the Site (i.e., Buildings B and C) were constructed in 1978 (Building B) and 1980 (Building C) according to Snohomish County Assessor's Office records (*see* **Exhibit A**).

D. Norton is the current owner of the Site, and has owned the Site since December 8, 1983 when it purchased it from William E. Boeing Jr. of Seattle, Washington.

E. TC Systems is the current Site operator and has operated at the Site, along with its predecessors (MARPAC Products, Inc. and Tri Coatings, Inc.), since about 1979. TC Systems supports the aviation and boating industries by chemically treating and painting metal parts using their chemical line and paint booths. TC Systems applies various surface treatments and coatings to prefabricated metal parts, and conducts non-destructive testing of metal parts using a penetrant oil as well as sand blasting for surface preparation.

F. As reported in a 1991 Phase I Environmental Site Assessment (ESA) performed by Kleinfelder, Inc., Tri Coatings, Inc. operated a maintenance and mechanics shop in the northeast portion of the North Marina Ameron/Hulbert Site (located adjacent to and south of the Site) to support their main facility located on the adjacent property to the north (i.e., TC Systems current location).

G. The Snohomish County tax assessor records identify Cruise-A-Home Inc. to be associated with Building C (*see* last page of **Appendix A**). According to the May 2009 Phase I ESA performed by TC Systems, Inc, Cruise-A-Home Inc. was identified as being present at 1028 W. Marine View Drive, Everett, Washington in 1975 and 1980 (based on historical city

directories). Cruise-A-Home Inc. engineered, designed, and tooled fiberglass mobile houseboats and other surface craft.

H. Ecology's Hazardous Waste and Toxics Reduction Program has conducted numerous inspections at TC Systems (mainly between 1997 and 2008). During that period, Ecology cited TC Systems with over fifty violations of state hazardous waste regulations (173-303 WAC). Ecology found violations of Dangerous Waste Regulations in all but one of the inspections (between 1997 and 2008). Some of the violations included illegal disposal (failure to respond to a release of spilled compressor oil), failure to designate its dangerous waste, and improper waste management. Ecology inspectors noted that spilled compressor oil was allowed to migrate into the nearby storm drain. In addition, Ecology noted in its inspection reports that it appeared that oil from the leaking compressor was migrating into the soil. The location of the compressor shed and nearby storm drain are depicted on **Exhibit A**, Figures 2 and 3. Ecology inspectors also noted that the secondary containment wall in the alley between TC Systems' Buildings B and C contains cracks and does not provide adequate containment of rainwater or other liquids.

I. In the spring of 2009, Ecology fined TC Systems $24,000 for its repeated failures to properly manage its hazardous waste. Ecology also issued an Order (DE 6459) on March 25, 2009, directing the company to take a series of steps to correct the problems and provide better protection of public safety, health and the environment.

J. Ecology's Hazardous Waste and Toxics Reduction Program conducted a Dangerous Waste compliance inspection at TC Systems in September 2009. As a result of the inspection, TC Systems was cited for eight violations including failure to provide notification of a spill, failure to fully mitigate the spill, and failure to reseal the containment floor underneath the process tank line and keep it dry.

K. TC Systems has an industrial stormwater permit (Permit No. S03-000762D) issued by Ecology. The permit indicates that industrial stormwater from the site discharges to Port Gardner (i.e., the 12th Street Marina; *see* **Exhibit A**, Figure 2). Ecology has cited TC Systems with multiple violations including failure to write and implement a Stormwater

Pollution Prevention Plan (SWPPP), failure to perform quarterly sampling and visual monitoring of the facility's discharge, and allowing an oily sheen to be discharged from the compressor to a nearby storm drain.

L. Ecology's most recent stormwater inspection at the Site was conducted in September 2009. Ecology noted violations of their stormwater permit during the inspection and provided TC Systems with a letter documenting *Water Quality Program Corrections Required*. One of the violations Ecology observed during its inspection was TC Systems' failure to perform stormwater monitoring in accordance with the permit. Stormwater monitoring has not been conducted since 2004. During the stormwater inspection, Ecology collected a sediment sample (named TC-CB-01) from the stormwater catch basin located between Buildings A and B and just north of the compressor shed (*see* the red circled stormwater catch basin in **Exhibit A**, Figure 2). Analytical results of the catch basin sediment sample were compared against the Sediment Management Standards (SMS) (Chapter 173-204 WAC), Sediment Quality Standards (SQS), and Cleanup Screening Levels (CSL). Sample results on a dry weight basis revealed that the measured concentrations for cadmium (8.72 milligrams/kilogram [mg/kg]), chromium (3,270 mg/kg), copper (1,360 mg/kg), lead (693 mg/kg), and zinc (2,270 mg/kg) exceeded dry weight equivalent CSL and SQS levels. In addition, the results from sample TC-CB-01 show that polychlorinated biphenyl (PCB) levels associated with Aroclor-1248 (120 µg/kg) and -1254 (420 µg/kg) exceeded the dry weight equivalent SQS level for PCBs. Also, the sample results for total petroleum hydrocarbons (TPH), as lube oil, were measured at 3,800 mg/kg (dry weight) in sample TC-CB-01; this result raises a concern for TPH contamination in sediments at or near the Site. Finally, analytical results associated with semi-volatile organic compounds (SVOCs) including polycyclic aromatic hydrocarbons (PAHs) in sample TC-CB-1 revealed that benzoic acid (22,000 µg/kg) and bis(2-ethylhexyl)phthalate (96,000 µg/kg) exceeded dry weight equivalent CSL and SQS levels. It is also noted that sample TC-CB-1 had to be diluted by a factor of 200 times because it contained a large amount of oil. This resulted in elevated reporting limits (i.e., reporting limits that exceeded CSL and SQS levels) for the majority of SVOCs and PAHs analyzed in the sample.

M. TC Systems operates a wastewater pretreatment system at its facility that provides wastewater treatment before the wastewater is discharged to the sanitary sewer. The facility has an Industrial Pretreatment Discharge Permit with the City of Everett Public Works and has received over 25 Notices of Violation from the city based on available Ecology files from 1990 to 1998. TC Systems has also received numerous notices of significant non-compliance of its industrial wastewater permit from the City of Everett. In 1999, TC Systems had a spill (reportedly 200 gallons of diluted chromic conversion coating) to its wastewater treatment plant as reported in Ecology's Environmental Report Tracking System (ERTS).

N. TC Systems performed a Phase I ESA in April 2009. The results of the Phase I ESA indicated three recognized environmental conditions (REC) as follows:

a. REC – Multiple above ground storage tanks (ASTs) observed on the property.
b. REC – Compressor Oil Leak.
c. REC – Dye penetrant in direct contact with the concrete.

O. As a result of the Phase I ESA, TC Systems performed a limited Phase II ESA in August 2009 that included soil and groundwater sampling. Soil samples were collected from five boring locations (*see* **Exhibit B**, Figure 2) at the TC Systems' facility and analyzed for TPH-diesel and -oil including total chromium. In addition, groundwater samples were collected and analyzed for TPH-diesel and -oil. The groundwater sample collected at location SB-4 had TPH-diesel and -oil at concentrations of 1,200 µg/L and 860 µg/L, respectively. These concentrations exceed Ecology's MTCA Method A groundwater cleanup level for diesel and oil range organics.

P. The TC Systems Site is located north and adjacent to the North Marina Ameron/Hulbert state cleanup site (*see* **Exhibit A**, Figures 2 through 4). Ameron International discovered petroleum-impacted soil and groundwater while excavating a damaged stormwater line in 2004 at the boundary between the TC Systems Site and the North Marina Ameron/Hulbert Site (*see* **Exhibit A**, Figures 2 and 3). The stormwater line extends to the 12th Street Marina (point of discharge), about 500-feet west of the excavation. The Port of Everett performed an

investigation on January 20, 2005 in the vicinity of the excavation. Soil sampling results yielded concentrations of PAHs, PCBs, and arsenic above Ecology's MTCA Method A soil cleanup levels. Petroleum odors and sheens were noted in several borings. Visual contamination was not sampled. Arsenic was the only chemical in groundwater that exceeded Ecology's MTCA Method A groundwater cleanup level.

VI. ECOLOGY DETERMINATIONS

A. Norton and TC Systems are "owners or operators" as defined in RCW 70.105D.020(17) of a "facility" as defined in RCW 70.105D.020(5).

B. Based upon all factors known to Ecology, a "release" or "threatened release" of "hazardous substance(s)" as defined in RCW 70.105D.020(25) and RCW 70.105D.020(10), respectively, has occurred at the Site.

C. Based upon credible evidence, Ecology issued a PLP status letter to Norton and TC Systems dated November 20, 2009, pursuant to RCW 70.105D.040, RCW 70.105D.020(21), and WAC 173-340-500. After providing for notice and opportunity for comment, reviewing any comments submitted, and concluding that credible evidence supported a finding of potential liability, Ecology issued a determination that Norton and TC Systems are PLPs under RCW 70.105D.040. Ecology notified Norton and TC Systems of this determination by letters dated February 26, 2010.

D. Pursuant to RCW 70.105D.030(1) and -.050(1), Ecology may require PLPs to investigate or conduct other remedial actions with respect to any release or threatened release of hazardous substances, whenever it believes such action to be in the public interest. Based on the foregoing facts, Ecology believes the remedial actions required by this Order are in the public interest.

VII. WORK TO BE PERFORMED

Based on the Findings of Fact and Ecology Determinations, it is hereby ordered that the PLPs take the following remedial actions at the Site, as more fully described in the Scope of Work & Schedule attached to this Order as **Exhibit B**, and that these actions be conducted in

accordance with Chapters 173-340 and 173-204 WAC unless otherwise specifically provided for herein:

A. The PLPs shall conduct the remedial actions fully described in **Exhibit B** to this Order. Generally, the PLPs shall perform the following:

a. Develop a work plan for an RI/FS in accordance with the Scope of Work provided in **Exhibit B**.
b. Perform an RI/FS study.
c. Prepare an RI/FS report.
d. Develop a draft cleanup action plan (CAP) for the Site.

B. The PLPs shall perform the remedial actions required by this Order according to the work schedule set forth in **Exhibit B**.

C. If at any time after the first exchange of comments on drafts, Ecology determines that insufficient progress is being made in the preparation of any of the deliverables required under the Scope of Work & Schedule (**Exhibit B**), Ecology may complete and issue the final deliverable.

VIII. TERMS AND CONDITIONS OF ORDER

A. Public Notice

RCW 70.105D.030(2)(a) requires that, at a minimum, this Order be subject to concurrent public notice. Ecology shall be responsible for providing such public notice and reserves the right to modify or withdraw any provisions of this Order should public comment disclose facts or considerations which indicate to Ecology that this Order is inadequate or improper in any respect.

B. Remedial Action Costs

The PLPs shall pay to Ecology costs incurred by Ecology pursuant to this Order and consistent with WAC 173-340-550(2). These costs shall include work performed by Ecology or its contractors for, or on, the Site under Chapter 70.105D RCW, including remedial actions and Order preparation, negotiation, oversight, and administration. These costs shall include work performed both prior to and subsequent to the issuance of this Order. Ecology's costs shall

include costs of direct activities and support costs of direct activities as defined in WAC 173-340-550(2). The PLPs shall pay the required amount within thirty (30) days of receiving from Ecology an itemized statement of costs that includes a summary of costs incurred, an identification of involved staff, and the amount of time spent by involved staff members on the project. A general statement of work performed will be provided upon request. Itemized statements shall be prepared quarterly. Pursuant to WAC 173-340-550(4), failure to pay Ecology's costs within ninety (90) days of receipt of the itemized statement of costs will result in interest charges at the rate of twelve percent (12%) per annum, compounded monthly.

In addition to other available relief, pursuant to RCW 19.16.500, Ecology may utilize a collection agency and/or, pursuant to RCW 70.105D.055, file a lien against real property subject to the remedial actions to recover unreimbursed remedial action costs.

C. Implementation of Remedial Action

If Ecology determines that the PLPs has failed without good cause to implement the remedial action, in whole or in part, Ecology may, after notice to the PLPs, perform any or all portions of the remedial action that remain incomplete. If Ecology performs all or portions of the remedial action because of the PLPs' failure to comply with its obligations under this Order, the PLPs shall reimburse Ecology for the costs of doing such work in accordance with Section VIII.B (Remedial Action Costs), provided that the PLPs are not obligated under this Section to reimburse Ecology for costs incurred for work inconsistent with or beyond the scope of this Order.

Except where necessary to abate an emergency situation, the PLPs shall not perform any remedial actions at the Site outside those remedial actions required by this Order, unless Ecology concurs, in writing, with such additional remedial actions.

D. Designated Project Coordinators

The project coordinator for Ecology is:

Andy Kallus
Toxics Cleanup Program
PO Box 47600, Olympia, WA 98504
Phone: 360-407-7259
E-Mail: akal461@ecy.wa.gov

The project coordinator for TC Systems, Inc. and Norton Industries is:

Jason Souza, CHMM
3831 Stone Way North
Seattle, Washington 98103
(206) 947-6372
E-Mail: jsouza@kane-environmental.com

Each project coordinator shall be responsible for overseeing the implementation of this Order. Ecology's project coordinator will be Ecology's designated representative for the Site. To the maximum extent possible, communications between Ecology and the PLPs, and all documents, including reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order shall be directed through the project coordinators. The project coordinators may designate, in writing, working level staff contacts for all or portions of the implementation of the work to be performed required by this Order.

Any party may change its respective project coordinator. Written notification shall be given to the other party at least ten (10) calendar days prior to the change.

E. Performance

All geologic and hydrogeologic work performed pursuant to this Order shall be under the supervision and direction of a geologist licensed in the State of Washington or under the direct supervision of an engineer registered in the State of Washington, except as otherwise provided for by Chapters 18.220 and 18.43 RCW.

All engineering work performed pursuant to this Order shall be under the direct supervision of a professional engineer registered in the State of Washington, except as otherwise provided for by RCW 18.43.130.

All construction work performed pursuant to this Order shall be under the direct supervision of a professional engineer or a qualified technician under the direct supervision of a professional engineer. The professional engineer must be registered in the State of Washington, except as otherwise provided for by RCW 18.43.130.

Any documents submitted containing geologic, hydrologic or engineering work shall be under the seal of an appropriately licensed professional as required by Chapter 18.220 RCW or RCW 18.43.130.

The PLPs shall notify Ecology in writing of the identity of any engineer(s) and geologist(s), contractor(s) and subcontractor(s), and others to be used in carrying out the terms of this Order, in advance of their involvement at the Site.

F. Access

Ecology or any Ecology authorized representative shall have the full authority to enter and freely move about all property at the Site that the PLPs either owns, controls, or has access rights to at all reasonable times for the purposes of, *inter alia*: inspecting records, operation logs, and contracts related to the work being performed pursuant to this Order; reviewing the PLPs' progress in carrying out the terms of this Order; conducting such tests or collecting such samples as Ecology may deem necessary; using a camera, sound recording, or other documentary type equipment to record work done pursuant to this Order; and verifying the data submitted to Ecology by the PLPs. The PLPs shall make all reasonable efforts to secure access rights for those properties within the Site not owned or controlled by the PLPs where remedial activities or investigations will be performed pursuant to this Order. Ecology or any Ecology authorized representative shall give reasonable notice via email to Jim Schack (jschack245@comcast.net) and Steve Parkinson (sparkinson@groffmurphy.com) at least 48 hours before entering any Site property owned or controlled by the PLPs unless an emergency prevents such notice. All persons who access the Site pursuant to this Section shall comply with any applicable Health and Safety Plan(s). Ecology employees and their representatives shall not be required to sign any liability release or waiver as a condition of Site property access.

G. Sampling, Data Submittal, and Availability

With respect to the implementation of this Order, the PLPs shall make the results of all sampling, laboratory reports, and/or test results generated by it or on its behalf available to Ecology. Pursuant to WAC 173-340-840(5), all sampling data shall be submitted to Ecology in both printed and electronic formats in accordance with Section VII (Work to be Performed), Ecology's Toxics Cleanup Program Policy 840 (Data Submittal Requirements), and/or any subsequent procedures specified by Ecology for data submittal. Attached as **Exhibit C** is Ecology Policy 840, Data submittal Requirements.

If requested by Ecology, the PLPs shall allow Ecology and/or its authorized representative to take split or duplicate samples of any samples collected by the PLPs pursuant to implementation of this Order. The PLPs shall notify Ecology seven (7) days in advance of any sample collection or work activity at the Site. Ecology shall, upon request, allow the PLPs and/or its authorized representative to take split or duplicate samples of any samples collected by Ecology pursuant to the implementation of this Order, provided that doing so does not interfere with Ecology's sampling. Without limitation on Ecology's rights under Section VIII.F (Access), Ecology shall notify the PLPs prior to any sample collection activity unless an emergency prevents such notice.

In accordance with WAC 173-340-830(2)(a), all hazardous substance analyses shall be conducted by a laboratory accredited under Chapter 173-50 WAC for the specific analyses to be conducted, unless otherwise approved by Ecology.

H. Public Participation

A Public Participation Plan (*see* WAC 173-340-600) that is required for this Site, has been developed and is included as **Exhibit D**. Ecology shall maintain the responsibility for public participation at the Site. However, the PLPs shall cooperate with Ecology, and shall:

1. If agreed to by Ecology, develop appropriate mailing list, prepare drafts of public notices and fact sheets at important stages of the remedial action, such as the submission of work plans, remedial investigation/feasibility study reports, cleanup action plans, and engineering design reports. As appropriate, Ecology will edit, finalize, and distribute such fact sheets and prepare and distribute public notices of Ecology's presentations and meetings.

2. Notify Ecology's project coordinator prior to the preparation of all press releases and fact sheets, and before major meetings with the interested public and local governments. Likewise, Ecology shall notify the PLPs prior to the issuance of all press releases and fact sheets, and before major meetings with the interested public and local governments. For all press releases, fact sheets, meetings, and other outreach efforts by the PLPs that do not receive prior Ecology approval, the PLPs shall clearly indicate to its audience that the press release, fact sheet, meeting, or other outreach effort was not sponsored or endorsed by Ecology.

3. When requested by Ecology, participate in public presentations on the progress of the remedial action at the Site. Participation may be through attendance at public meetings to assist in answering questions or as a presenter.

4. When requested by Ecology, arrange and/or continue information repositories to be located at the following locations:

a. Everett Public Library
2702 Hoyt Avenue
Everett, WA 98201

b. Department of Ecology
Toxics Cleanup Program
Headquarters Office
300 Desmond Drive SE
Olympia, Washington 98504-7600

At a minimum, copies of all public notices, fact sheets, and press releases; all quality assured monitoring data; remedial action plans and reports, supplemental remedial planning documents, and all other similar documents relating to performance of the remedial action required by this Order shall be promptly placed in these repositories.

I. Retention of Records

During the pendency of this Order, and for ten (10) years from the date of completion of work performed pursuant to this Order, the PLPs shall preserve all records, reports, documents, and underlying data in its possession relevant to the implementation of this Order and shall insert a similar record retention requirement into all contracts with project contractors and subcontractors. Upon request of Ecology, the PLPs shall make all records available to Ecology and allow access for review within a reasonable time.

J. Resolution of Disputes

1. In the event a dispute arises as to an approval, disapproval, proposed change, or other decision or action by Ecology's project coordinator, or an itemized billing statement under Section VIII.B (Remedial Action Costs), the Parties shall utilize the dispute resolution procedure set forth below.

a. Upon receipt of Ecology's project coordinator's written decision or the itemized billing statement, the PLPs have fourteen (14) days within which to notify Ecology's project coordinator in writing of its objection to the decision or itemized statement.

b. The Parties' project coordinators shall then confer in an effort to resolve the dispute. If the project coordinators cannot resolve the dispute within fourteen (14) days, Ecology's project coordinator shall issue a written decision.

c. The PLPs may then request regional management review of the decision. This request shall be submitted in writing to the Headquarters Land and Aquatic Lands Cleanup Section Manager within seven (7) days of receipt of Ecology's project coordinator's written decision.

d. The Section Manager shall conduct a review of the dispute and shall endeavor to issue a written decision regarding the dispute within thirty (30) days of the PLPs' request for review. The Section Manager's decision shall be Ecology's final decision on the disputed matter.

2. The Parties agree to only utilize the dispute resolution process in good faith and agree to expedite, to the extent possible, the dispute resolution process whenever it is used.

3. Implementation of these dispute resolution procedures shall not provide a basis for delay of any activities required in this Order, unless Ecology agrees in writing to a schedule extension.

K. Extension of Schedule

1. An extension of schedule shall be granted only when a request for an extension is submitted in a timely fashion, generally at least thirty (30) days prior to expiration of the deadline for which the extension is requested, and good cause exists for granting the extension. All extensions shall be requested in writing. The request shall specify:

a. The deadline that is sought to be extended;

b. The length of the extension sought;

c. The reason(s) for the extension; and

d. Any related deadline or schedule that would be affected if the extension were granted.

2. The burden shall be on the PLPs to demonstrate to the satisfaction of Ecology that the request for such extension has been submitted in a timely fashion and that good cause exists for granting the extension. Good cause may include, but may not be limited to:

a. Circumstances beyond the reasonable control and despite the due diligence of the PLPs including delays caused by unrelated third parties or Ecology, such as (but not limited to) delays by Ecology in reviewing, approving, or modifying documents submitted by the PLPs;

b. Acts of God, including fire, flood, blizzard, extreme temperatures, storm, or other unavoidable casualty; or

c. Endangerment as described in Section VIII.M (Endangerment).

However, neither increased costs of performance of the terms of this Order nor changed economic circumstances shall be considered circumstances beyond the reasonable control of the PLPs.

3. Ecology shall act upon any written request for extension in a timely fashion. Ecology shall give the PLPs written notification of any extensions granted pursuant to this Order. A requested extension shall not be effective until approved by Ecology. Unless the extension is a substantial change, it shall not be necessary to amend this Order pursuant to Section VIII.L (Amendment of Order) when a schedule extension is granted.

4. An extension shall only be granted for such period of time as Ecology determines is reasonable under the circumstances. Ecology may grant schedule extensions exceeding ninety (90) days only as a result of:

a. Delays in the issuance of a necessary permit which was applied for in a timely manner;

b. Other circumstances deemed exceptional or extraordinary by Ecology; or

c. Endangerment as described in Section VIII.M (Endangerment).

L. Amendment of Order

The project coordinators may verbally agree to minor changes to the work to be performed without formally amending this Order. Minor changes will be documented in writing by Ecology within seven (7) days of verbal agreement.

Except as provided in Section VIII.N (Reservation of Rights), substantial changes to the work to be performed shall require formal amendment of this Order. This Order may only be formally amended by the written consent of both Ecology and the PLPs. The PLPs shall submit a written request for amendment to Ecology for approval. Ecology shall indicate its approval or disapproval in writing and in a timely manner after the written request for amendment is received. If the amendment to this Order represents a substantial change, Ecology will provide public notice and opportunity to comment. Reasons for the disapproval of a proposed amendment to this Order shall be stated in writing. If Ecology does not agree to a proposed amendment, the disagreement may be addressed through the dispute resolution procedures described in Section VIII.J (Resolution of Disputes).

M. Endangerment

In the event Ecology determines that any activity being performed at the Site is creating or has the potential to create a danger to human health or the environment on or surrounding the Site, Ecology may direct the PLPs to cease such activities for such period of time as it deems necessary to abate the danger. The PLPs shall immediately comply with such direction.

In the event the PLPs determine that any activity being performed at the Site is creating or has the potential to create a danger to human health or the environment, the PLPs may cease such activities. The PLPs shall notify Ecology's project coordinator as soon as possible, but no later than twenty-four (24) hours after making such determination or ceasing such activities. Upon Ecology's direction the PLPs shall provide Ecology with documentation of the basis for the determination or cessation of such activities. If Ecology disagrees with the PLPs' cessation of activities, it may direct the PLPs to resume such activities.

If Ecology concurs with or orders a work stoppage pursuant to Section VIII.M (Endangerment), the PLPs' obligations with respect to the ceased activities shall be suspended

until Ecology determines the danger is abated, and the time for performance of such activities, as well as the time for any other work dependent upon such activities, shall be extended in accordance with Section VIII.K (Extension of Schedule) for such period of time as Ecology determines is reasonable under the circumstances.

Nothing in this Order shall limit the authority of Ecology, its employees, agents, or contractors to take or require appropriate action in the event of an emergency.

N. Reservation of Rights

This Order is not a settlement under Chapter 70.105D RCW. Ecology's signature on this Order in no way constitutes a covenant not to sue or a compromise of any of Ecology's rights or authority. Ecology will not, however, bring an action against the PLPs to recover remedial action costs paid to and received by Ecology under this Order. In addition, Ecology will not take additional enforcement actions against the PLPs regarding remedial actions required by this Order, provided the PLPs comply with this Order.

Ecology nevertheless reserves its rights under Chapter 70.105D RCW, including the right to require additional or different remedial actions at the Site should it deem such actions necessary to protect human health and the environment, and to issue orders requiring such remedial actions. Ecology also reserves all rights regarding the injury to, destruction of, or loss of natural resources resulting from the release or threatened release of hazardous substances at the Site.

O. Transfer of Interest in Property

No voluntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Site shall be consummated by the PLPs without provision for continued implementation of all requirements of this Order and implementation of any remedial actions found to be necessary as a result of this Order.

Prior to the PLPs' transfer of any interest in all or any portion of the Site, and during the effective period of this Order, the PLPs shall provide a copy of this Order to any prospective purchaser, lessee, transferee, assignee, or other successor in said interest; and, at least thirty (30) days prior to any transfer, the PLPs shall notify Ecology of said transfer. Upon transfer of any

interest, the PLPs shall restrict uses and activities to those consistent with this Order and notify all transferees of the restrictions on the use of the property.

P. Compliance with Applicable Laws

1. All actions carried out by the PLPs pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits, except as provided in RCW 70.105D.090. At this time, no federal, state or local requirements have been identified as being applicable to the actions required by this Order. Note that federal, state or local requirements that are applicable to the actions required by this Order will be identified as part of the development of the RI/FS Work Plan.

2. Pursuant to RCW 70.105D.090(1), the PLPs are exempt from the procedural requirements of Chapters 70.94, 70.95, 70.105, 77.55, 90.48, and 90.58 RCW and of any laws requiring or authorizing local government permits or approvals. However, the PLPs shall comply with the substantive requirements of such permits or approvals. At this time, no state or local permits or approvals have been identified as being applicable but procedurally exempt under this Section.

Each PLP has a continuing obligation to determine whether additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order. In the event either Ecology or the PLPs determines that additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order, it shall promptly notify the other party of its determination. Ecology shall determine whether Ecology or the PLPs shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, the PLPs shall promptly consult with the appropriate state and/or local agencies and provide Ecology with written documentation from those agencies of the substantive requirements those agencies believe are applicable to the remedial action. Ecology shall make the final determination on the additional substantive requirements that must be met by the PLPs and on how the PLPs must meet those requirements. Ecology shall inform the PLPs in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. The PLPs shall not

begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

3. Pursuant to RCW 70.105D.090(2), in the event Ecology determines that the exemption from complying with the procedural requirements of the laws referenced in RCW 70.105D.090(1) would result in the loss of approval from a federal agency that is necessary for the State to administer any federal law, the exemption shall not apply and the PLPs shall comply with both the procedural and substantive requirements of the laws referenced in RCW 70.105D.090(1), including any requirements to obtain permits.

Q. Indemnification

The PLPs agrees to indemnify and save and hold the State of Washington, its employees, and agents harmless from any and all claims or causes of action for death or injuries to persons or for loss or damage to property to the extent arising from or on account of acts or omissions of the PLPs, its officers, employees, agents, or contractors in entering into and implementing this Order. However, the PLPs shall not indemnify the State of Washington nor save nor hold its employees and agents harmless from any claims or causes of action to the extent arising out of the reckless, willful, or negligent acts or omissions of the State of Washington, or the employees or agents of the State, in entering into or implementing this Order.

IX. SATISFACTION OF ORDER

The provisions of this Order shall be deemed satisfied upon the PLPs' receipt of written notification from Ecology that the PLPs have completed the remedial activity required by this Order, as amended by any modifications, and that the PLPs have complied with all other provisions of this Agreed Order.

X. ENFORCEMENT

Pursuant to RCW 70.105D.050, this Order may be enforced as follows:

A. The Attorney General may bring an action to enforce this Order in a state or federal court.

B. The Attorney General may seek, by filing an action, if necessary, to recover amounts spent by Ecology for investigative and remedial actions and orders related to the Site.

C. In the event the PLPs refuse, without sufficient cause, to comply with any term of this Order, the PLPs will be liable for:

a. Up to three (3) times the amount of any costs incurred by the State of Washington as a result of its refusal to comply; and

b. Civil penalties of up to twenty-five thousand dollars ($25,000) per day for each day it refuses to comply.

D. This Order is not appealable to the Washington Pollution Control Hearings Board. This Order may be reviewed only as provided under RCW 70.105D.060.

Effective date of this Order: _____

NORTON INDUSTRIES, INC.

James B Schack
President
24415 142nd Avenue SE
Renton, Washington 98042-5155
(253) 631-3905

STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY

Tim L. Nord, Manager
Land and Aquatic Lands Cleanup Section
Toxics Cleanup Program
Headquarters Office
300 Desmond Drive Southeast
Lacey, Washington 98503
(360) 407-7226

TC SYSTEMS, INC.

Mary Utick
President
11541 Skyline Drive
Santa Ana, California 92705
(714) 544-4481

EXHIBIT A
SITE LOCATION AND PROPERTY LOCATION INFORMATION

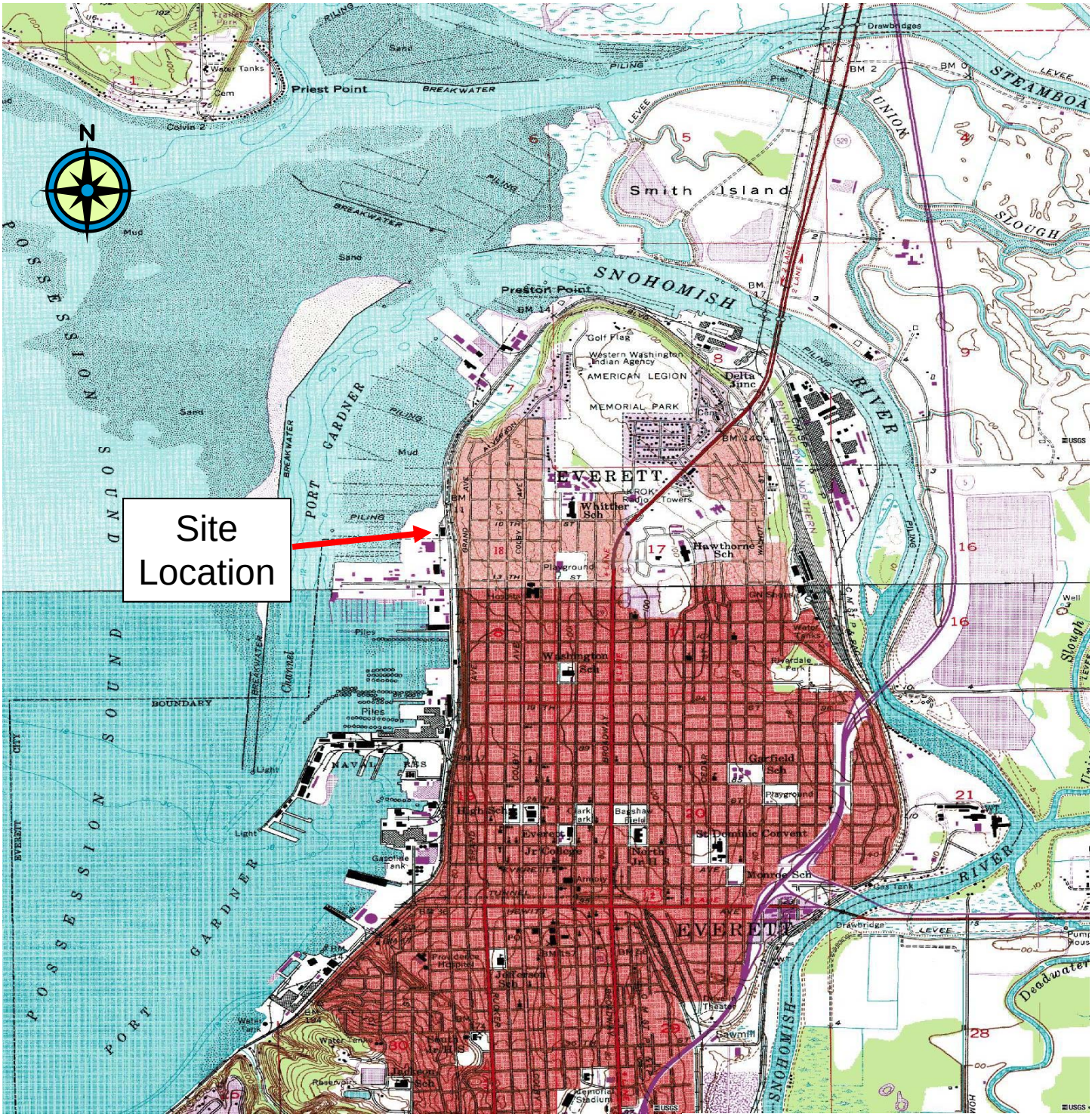


Exhibit A – Figure 1
Site Location Map

Source: USGS 7.5 Minute Quadrangle Maps (Everett and Marysville Quadrangle Maps; Photo Revised – 1968 and 1973)

QUADRANGLE LOCATION

N

Building – O And W Glass

Building C

Building B

Compressor Shed

TC Systems Inc

Building – Dunlap Industrial Hardware

Parcel: 29051800201300

Parcel: 29051800200700

MARINE VIEW

(ABANDONED)

Storm Drain to 12th ST Marina

Oil Affected Area

Excavation Area From Damaged Stormwater Line

12th Street Marina

North Marina Ameron/Hulbert Site

Exhibit A – Figure 2
Site Area Map

Storm Drain Piping

Stormwater Catch Basin

TC Systems Operations Boundary

Stormwater Catch Basin – Sediments from this stormwater catch basin were sampled by Ecology on 9/16/09.

Note: All site features are approximate.

Sources for Site Features –1996 North Marina Utility Map; TC Systems 1998 O&M Manual; Landau's 6-2-05 report on the "Oil Affect Area" at Ameron.

Source for Base Map – 2009 Snohomish County Online Property Information.

Building B Chemical Line (Metal Finishing)

Building C Painting and Hazardous Waste Storage

Key[1]

A – Process Plating Tankline
B – Sludge Press Filter Cake Storage
C – Chemical Storage
D – Penetrant Test Area
E – Boiler Shed
F – Paint Booth/Paint Areas
G – Waste
H – Compressor Shed
I – Wastewater Treatment Area
J – Oven
K – Office
L – Maintenance
M – Shot Peen
N – Powder Coat

Legend[1]

Approximate extent of Oil Affected Area.

Building B Chemical Line (Metal Finishing)
Building C Painting and Hazardous Waste Storage

Storm Drain Piping
Sanitary Sewer Piping
TC Systems Operations Boundary
Storm Drain Catch Basin

[1]All site features are approximate.

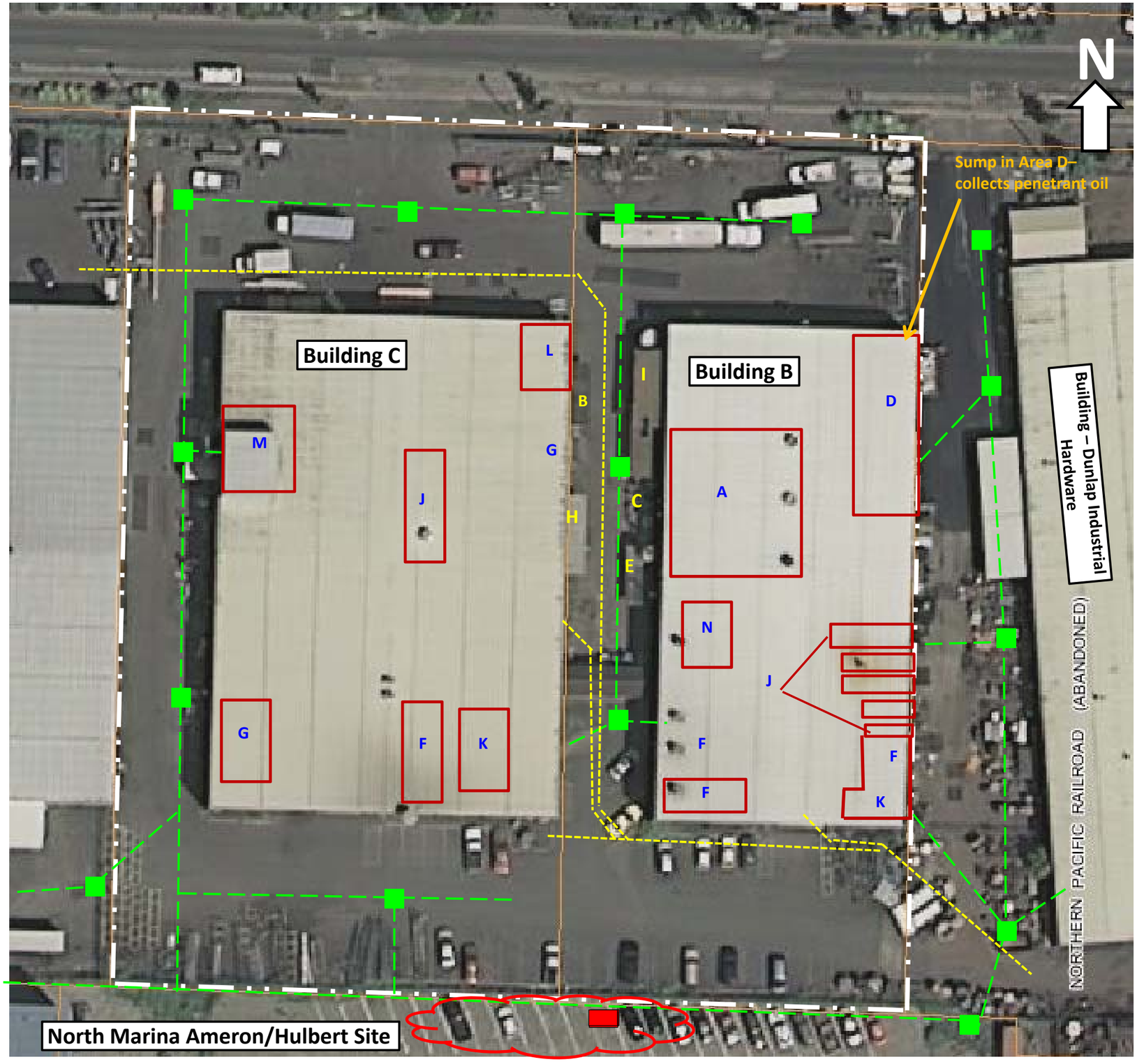


Exhibit A – Figure 3
Facility Features Map

Sources for Site Features – 1996 North Marina Utility Map; TC Systems 1998 O&M Manual; Information from Ecology Inspection Reports; Landau's 6-2-05 report on the "Oil Affect Area" at Ameron.

Exhibit A – Figure 4
Nearby In-Water Areas

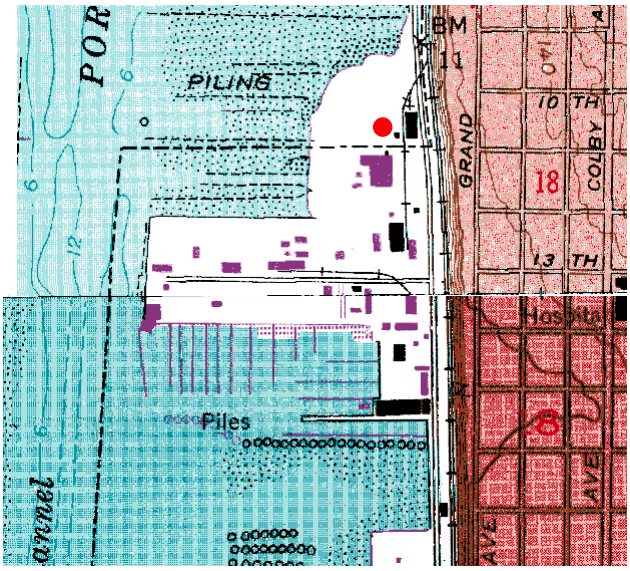
TC SYSTEMS INC SITE

SITE/PROPERTY LOCATION INFORMATION

The TC Systems Inc property is generally located between 10th and 11th Streets off West Marine View Drive, Everett, Washington. Site coordinates, a legal description, and county assessor's parcel numbers are provided below. Additional property information from the Snohomish County Tax Assessor's Office is attached.

Coordinates: Latitude: 48°00'13.37" North; Longitude: 122°12'54.64" West.

Latitude/Longitude Reference Point: Center of the TC Systems, Inc. Building B (see red circle on the figure below for approximate location).



Legal Description: Section 18, Township 29 North, Range 5 East.

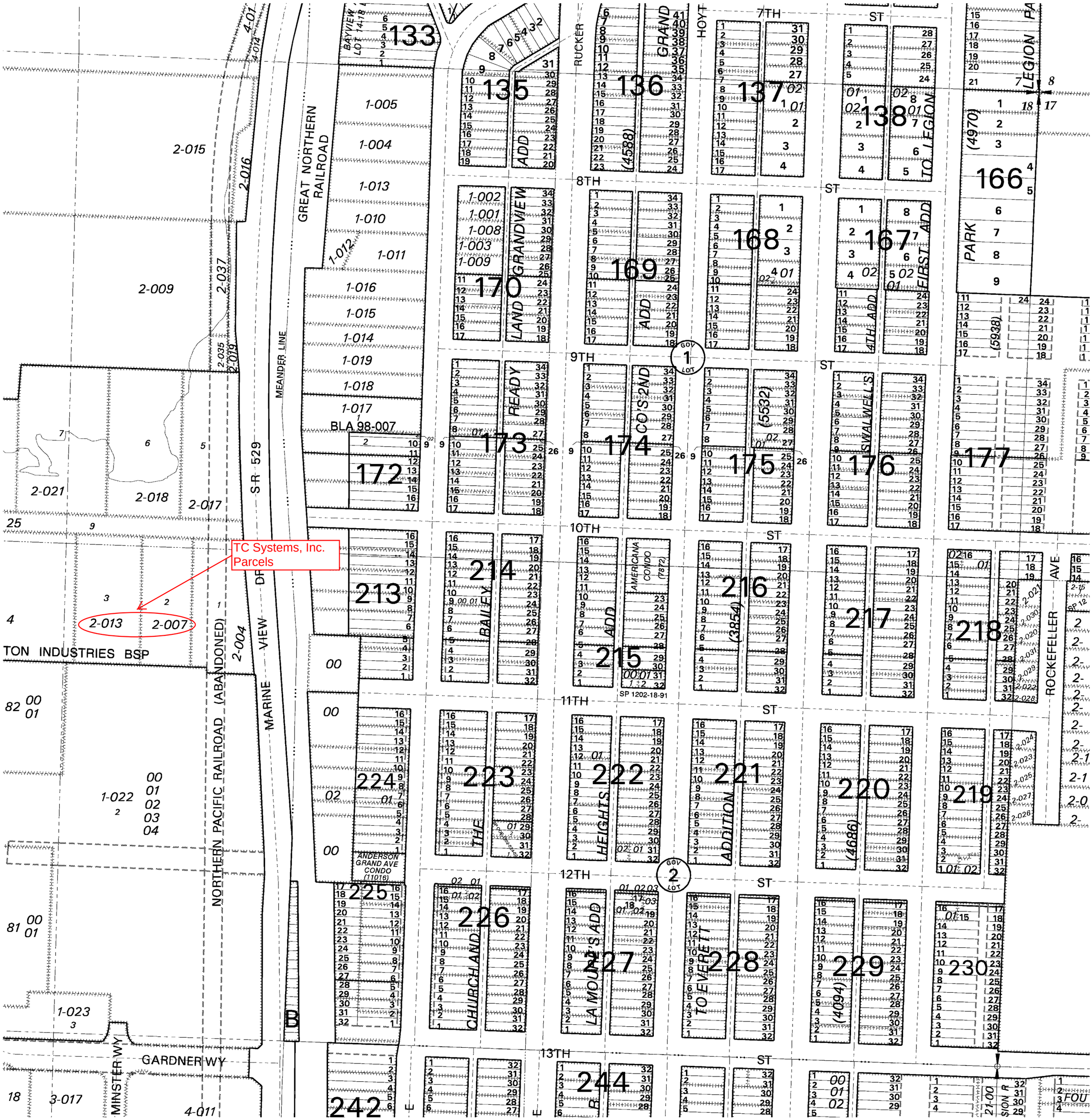
County Assessor's Parcel Numbers (Port of Everett Property): Tax account numbers corresponding to the TC Systems Inc Site include 29051800200700 and 29051800201300.

QUARTER	SECTION	TOWNSHIP N.W.B.L.	RANGE E.W.M.
NE	18	29	5

0 200 400 Feet

A product of the Snohomish County Assessor's Office
Map produced on August 05, 2009

SE-7-29-5



SE-18-29-5

Snohomish County Washington Online Government Information & Services

* R E A L * Property Information

County Home Assessor Home Treasurer Home Information on which Department to contact

Please view Disclaimer **If you have questions, comments or suggestions, please Contact Us.**

Date/Time:7/7/2009 4:54:26 PM Answers to Frequently Asked Questions about Parcel Data (opens as new window)

Return to Property Information Entry page

Parcel Number **29051800200700** Prev Parcel Reference **18290520070001**

View Map of this parcel (opens as new window)

General Information

Taxpayer Name || Address (contact the Treasurer if you have questions)

NORTON INDUSTRIES || PO BOX 1188 - - - EVERETT, WA 98206

If the above mailing address is incorrect and you want to make a change, see the information on Name and Address Changes

Owner Name || Address (contact the Assessor if you have questions)

NORTON INDUSTRIES || P O BOX 1188 - - - EVERETT, WA 98206

If the above name and address is incorrect due to a recent sale, please see the information on Name and Address Changes After a Sale

Street (Situs) Address (contact the Assessor if you have questions)

1104 10TH ST - - - EVERETT, WA 98201-1581

Parcel Legal Description

SEC 18 TWP 29 RGE 05 LOT 2 OF NORTON INDUSTRIES BSP REC VOL 2894 BSP'S PG 0177 AF NO 940401424 & AF NOS 9404015002 & 9405185001 BEING A PTN OF N1/2 SEC 18

Go to top of page

Treasurer's Tax Information

Taxes **For answers to questions about Taxes, please contact the** Treasurer's office (opens as new window)

2009 Taxes for this parcel $10,474.76

Payments: Receipt No.	5117752	5/4/2009	$5,237.38

(Taxes may include Surface Water Management and/or State Forest Fire Patrol fees and any fees related to late payments. LID charges, if any, are not included.)

To obtain a duplicate tax statement, either download our Tax Statement Request form or call 425-388-3366 to request it by phone.

Go to top of page

Assessor's Property Data

Characteristics and Value Data below are for 2009 tax year.

Please contact the Treasurer's office for answers to questions about Taxes (opens as new window)

For questions ONLY about property characteristics or property values (NOT taxes), please contact the Assessor's Office

Property Values

Values do not reflect adjustments made due to an exemption, such as a senior or disabled persons exemption. Reductions for exemptions are made on the property tax bill.

Tax Year	2009	Market Land	$284,500	Market Improvement	$815,500	Market Total	$1,100,000

Pending Property Values

Tax Year	2010	Market Land	$284,500	Market Improvement	$815,500	Market Total	$1,100,000

Go to top of page

Valuation, Payment, and Property Tax History

View History (opens as new window)

Go to top of page

Property Characteristics

Tax Code Area (TCA) **00010** View Taxing Districts for this Parcel (opens as new window)

Use Code **349 Other Fabricated Metal Products NEC**

Size Basis **ACRE** Size **1.12** (Size may include undivided interest in common tracts and road parcels)

Go to top of page

Property Structures

Type	Yr.Built	Structure Description	
Commercial	**1978**	**TC SYSTEMS INC**	View Structure Data (opens as new window)

Go to top of page

Property Sales since 7/31/1999

Explanation of Sales Information (opens as new window)

Sales data is based solely upon excise affidavits processed by the Assessor.

No sales for this parcel have been recorded since 7/31/1999

Go to top of page

Property Maps Township/Range/Section/Quarter, links to maps

Neighborhood **5306000** Explanation of Neighborhood Code (opens as new window)

Township **29** Range **05** Section **18** Quarter **NW** Find parcel maps for this Township/Range/Section

View Map of this parcel (opens as new window)

Snohomish County Washington Online Government Information & Services

* R E A L * Property Information

County Home Assessor Home Treasurer Home Information on which Department to contact

Please view Disclaimer **If you have questions, comments or suggestions, please Contact Us.**

Date/Time:7/7/2009 4:59:51 PM Answers to Frequently Asked Questions about Parcel Data (opens as new window)

Return to Property Information Entry page

Parcel Number **29051800201300** Prev Parcel Reference **18290520130003**

View Map of this parcel (opens as new window)

General Information

Taxpayer Name || Address (contact the Treasurer if you have questions)

NORTON INDUSTRIES || PO BOX 1188 - - - EVERETT, WA 98206

If the above mailing address is incorrect and you want to make a change, see the information on Name and Address Changes

Owner Name || Address (contact the Assessor if you have questions)

NORTON INDUSTRIES || P O BOX 1188 - - - EVERETT, WA 98206

If the above name and address is incorrect due to a recent sale, please see the information on Name and Address Changes After a Sale

Street (Situs) Address (contact the Assessor if you have questions)

1032 10TH ST - - - EVERETT, WA 98201-1580

Parcel Legal Description

SEC 18 TWP 29 RGE 05 LOT 3 OF NORTON INDUSTRIES BSP REC VOL 2894 BSP'S PG 0177 AF NO 9404010424 & AF NOS 9404015002 & 9405185001 BEING A PTN OF N1/2 SEC 18

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Treasurer's Tax Information

Taxes **For answers to questions about Taxes, please contact the** Treasurer's office (opens as new window)

2009 Taxes for this parcel $14,664.67

Payments: Receipt No.	5117753	5/4/2009	$7,332.33

(Taxes may include Surface Water Management and/or State Forest Fire Patrol fees and any fees related to late payments. LID charges, if any, are not included.)

To obtain a duplicate tax statement, either download our Tax Statement Request form or call 425-388-3366 to request it by phone.

Go to top of page

Assessor's Property Data

Characteristics and Value Data below are for 2009 tax year.

Please contact the Treasurer's office for answers to questions about Taxes (opens as new window)

For questions ONLY about property characteristics or property values (NOT taxes), please contact the Assessor's Office

Property Values

Values do not reflect adjustments made due to an exemption, such as a senior or disabled persons exemption. Reductions for exemptions are made on the property tax bill.

Tax Year	2009	Market Land	$368,300	Market Improvement	$1,171,700	Market Total	$1,540,000

Pending Property Values

Tax Year	2010	Market Land	$368,300	Market Improvement	$1,171,700	Market Total	$1,540,000

Go to top of page

Valuation, Payment, and Property Tax History

View History (opens as new window)

Go to top of page

Property Characteristics

Tax Code Area (TCA) **00010** View Taxing Districts for this Parcel (opens as new window)

Use Code **349 Other Fabricated Metal Products NEC**

Size Basis **ACRE** Size **1.45** (Size may include undivided interest in common tracts and road parcels)

Go to top of page

Property Structures

Type	Yr.Built	Structure Description	
Commercial	**1980**	**CRUISE A HOME INC TC SYSTEMS**	View Structure Data (opens as new window)

Go to top of page

Property Sales since 7/31/1999

Explanation of Sales Information (opens as new window)

Sales data is based solely upon excise affidavits processed by the Assessor.

No sales for this parcel have been recorded since 7/31/1999

Go to top of page

Property Maps Township/Range/Section/Quarter, links to maps

Neighborhood **5306000** Explanation of Neighborhood Code (opens as new window)

Township **29** Range **05** Section **18** Quarter **NW** Find parcel maps for this Township/Range/Section

View Map of this parcel (opens as new window)

EXHIBIT B
SCOPE OF WORK & SCHEDULE

EXHIBIT B

SCOPE OF WORK & SCHEDULE

Pursuant to the Agreed Order to which this Scope of Work & Schedule is attached, TC Systems Inc. (TC Systems) and Norton Industries, Inc. (collectively the Potentially Liable Persons [PLPs]) shall take the following remedial actions at the TC Systems Inc Site (Site), and these actions shall be conducted in accordance with Chapters 173-340 and 173-204 WAC unless otherwise specifically provided for herein:

A. Remedial Actions To Be Performed

The PLPs shall conduct the remedial actions generally described below.

- Remedial Investigation/Feasibility Study (RI/FS) Work Plan – Prepare a work plan for RI/FS Study in accordance with the specifications described in Section A.1 of this Exhibit. The PLPs shall submit the RI/FS Work Plan to Ecology for review and approval.
- RI/FS Study – The PLPs shall conduct field data collection (as part of the RI) as described in the approved RI/FS Work Plan. The PLPs shall conduct a FS based on the results of the field RI.
- RI/FS Report – Prepare an RI/FS report. The PLPs shall submit the draft RI/FS Report (combined as a single document) to Ecology for review and approval.
- Draft Cleanup Action Plan (CAP) – Upon Ecology approval of the draft final RI/FS report, the PLPs shall prepare a draft CAP. The PLPs shall submit the draft CAP to Ecology for review and approval.

Additional details regarding the remedial actions to be performed by the PLPs are provided below.

1. Preparation Of An RI/FS Work Plan

The RI/FS shall delineate and quantify (i.e., identify the levels of contamination) the potential contaminants in all media of concern. The PLPs shall develop an RI/FS Work Plan (including draft, draft final, and final versions) that includes a scope of work to implement the sampling program identified in Section A.2, and any additional sampling that may be identified during the development of the RI/FS Work Plan. The work plan shall also address the proper handling of all wastes generated from the site during the

RI/FS (e.g., soil cuttings, groundwater development and purge water, free-product, etc.). Note that all draft documents for Ecology review may be submitted in redline strike-out format (preferably in Microsoft® WORD format) to facilitate the review. The RI/FS Work Plan shall be conducted meeting the requirements of WAC 173-350 and should include the elements listed below.

a. Development of a Site-Specific Health and Safety Plan (HSP) and Sampling and Analysis Plan (SAP)

A site-specific HSP describing worker safety during the project will be developed in accordance with WAC 173-340-810 and included in the RI/FS Work Plan. A site-specific SAP, which includes quality assurance/quality control requirements, will be included in the RI/FS Work Plan. The SAP shall provide the details on the sampling program identified in Section A.2 including numbers and locations of samples for each media and the analytical requirements. The SAP shall also provide the details on any additional sampling that may be identified (beyond the sampling identified in Section A.2) during the development of the RI/FS Work Plan. The SAP shall conform to the requirements specified in WAC 173-340-820 and shall be based on the type, quality, and quantity of data necessary to support selection of a cleanup action.

b. Investigation of Site Background and Setting

This section will include detailed descriptions of the following:

(i) The property and site operational/industrial history (including current and previous ownership).

(ii) Regulatory Compliance History (include a discussion of the compliance history associated with all of the facilities permits including state hazardous waste regulations [173-303 WAC]).

(iii) All previous investigations and past remedial actions if any. Note that any prior remedial actions are considered to be interim and not a final cleanup action.

(ii) Historical sources and releases of contamination (include a review of historical photos, Sanborn Maps, and available information on Site fill).

(iii) Current site conditions (including descriptions of surface features, geology, soil and the vadose zone, surface water hydrology, hydrogeology, and meteorology).

(iv) Current and future land and water use (including descriptions of human populations).

(v) The terrestrial/aquatic ecological setting including a description of ecological receptors and potentially threatened/endangered species.

c. Evaluation of Existing Data

The existing analytical data should be plotted (as accurately as possible) on a base map (using geo-referencing techniques) that depicts identified sources and areas where suspected releases occurred. Sample locations should be reviewed with respect to identified sources and areas where suspected releases (e.g., outfalls, spills, dumping, leaks, etc.) have occurred. All of the existing analytical data collected at the Site should be evaluated in terms of data usability (analytical methods used to evaluate the effectiveness of a cleanup action shall comply with the requirements in WAC 173-340-830) and be screened against the most protective applicable screening levels identified under an unrestricted land use scenario. Both non-detect and detected data should be included in the screening. Identify sampling points containing exceedances on a map, and also discuss the adequateness of the reporting limits (i.e., Method Detection and Practical Quantitation Limits) in terms of achieving the screening levels for the Site. Constituents exceeding the screening levels should be identified as preliminary indicator hazardous substances for the Site.

d. Development of Preliminary CSM

The CSM should describe release mechanisms from the potential primary sources of hazardous substances to secondary and tertiary sources, the exposure media and routes, and the potential human and ecological receptors. The CSM should reflect both current conditions and potential future development in assessing exposure pathways.

e. Establishment of Screening Levels

Based on the CSM, identify appropriate screening levels (e.g., levels established under the Model Toxics Control Act [MTCA; see WAC 173-340-700 through 173-340-760], Chapter 173-204 WAC, SMS for Puget Sound Marine sediments, and applicable state and federal laws) under a residential (unrestricted) land use scenario. Note that the screening levels must consider all applicable pathways including direct contact (including inhalation); media transfer pathways (e.g., leaching to groundwater, groundwater migration to surface water, and sediment, etc.); and exposure to terrestrial and/or aquatic ecological and human receptors.

f. RI Study Approach

This section of the RI/FS Work Plan shall provide an overview of the methods that will be used in conducting the RI for the Site and implementing the sampling program identified in Section A.2 (including any additional samples that may be identified during the development of the RI/FS Work Plan). Note that the Site may include, depending on where contamination has been deposited, stored, disposed of, placed, or otherwise come to be located, areas outside the preliminary Site boundaries shown in **Exhibits A and B**. Based on the background information gathered, past interim remedial actions at the Site if any, and the evaluation of existing data, discuss by media (e.g., soil, groundwater, etc.) the data required to complete an RI for the Site. The RI approach shall be consistent with WAC 173-340-350. Identify data gaps and the overall approach for conducting the RI. The SAP will provide the details on numbers and locations of samples for each media and the analytical requirements.

The RI field investigation will be designed to identify the nature and extent of contamination and toxic effects in upland and in-water areas. The PLPs shall provide Ecology with the results of the investigation (in the form of a technical memo) so that a determination can be made with regard to whether additional investigation is required to define the full nature and extent of contamination. The information provided to Ecology should describe the analytical results of the

field activities including the identification of indicator hazardous substances, the affected media, preliminary cleanup levels, the extent of contamination (plotted on maps), and any data gaps that need to be filled to define the nature and extent of contamination and toxic effects. Note that the preliminary cleanup levels may be different than the screening levels used in the RI/FS Work Plan based on a better understanding of the CSM (e.g., contaminants in soil may not be impacting Site groundwater) for the Site. Additional field investigation (if necessary based on initial results) will be conducted to further define the nature and extent of contamination and toxic effects based on findings during the initial investigation.

g. FS Approach

This section of the RI/FS Work Plan shall provide an overview of the methods that will be used in conducting the FS for the Site which may include, depending on where contamination has been deposited, stored, disposed of, placed, or otherwise come to be located, areas outside the preliminary Site boundaries shown in **Exhibit A and B**. The FS approach shall be consistent with WAC 173-340-350 and should consist of the following sections:

(i) **Establishment of Cleanup Levels, Points of Compliance, and Remediation Levels**. Unless otherwise specified under this Order, cleanup levels and points of compliance should be established for each hazardous substance in each medium and for each exposure pathway. The PLPs may also consider establishing potential remediation levels as defined per WAC 173-340-355.

(ii) **Applicable or Relevant and Appropriate Requirements**. The FS should include additional information or analyses to comply with the State Environmental Policy Act (SEPA) or other applicable laws to make a threshold determination per WAC 197-11-335(1) or to integrate the RI/FS with an environmental impact statement per WAC 197-11-262.

(iii) **Delineation of Media Requiring Remedial Action**. Based on the results of the RI, determine areas and/or volumes of affected media to which remedial action objectives might be applied.

(iv) **Development of Remedial Action Objectives**. Remedial Action Objectives should provide general descriptions of what the Site cleanup is designed to accomplish, which is media-specific. Remedial action objectives are established on the basis of extent and

magnitude of the contamination, the resources that are currently and potentially threatened, and the potential for human and ecological (both terrestrial and aquatic) exposures at the Site. Clearly define a basis and rationale for Remedial Action Objectives for each media at the Site.

(v) **Screening and Evaluation of Cleanup Action Alternatives**. A reasonable number and type of cleanup action alternatives should be evaluated, taking into account the characteristics and complexity of the Site, including current site conditions and physical constraints. Evaluation of cleanup action alternatives and the selection of preferred cleanup alternative must meet the requirements of WAC 173-340-360.

(vi) **Habitat Restoration**. Evaluate opportunities to perform remedial actions in a fashion that coincidentally enhances habitat. Elements of the remedial action will be evaluated for restoration opportunities in consultation with Ecology as plans for cleanup are developed[1].

h. Public Involvement

This section of the RI/FS Work Plan shall present the general process for public involvement (in accordance with WAC 173-340-600) along with a reference to the Public Participation Plan presented in this Order as **Exhibit D**.

i. Project Management

This section of the RI/FS work plan will discuss project staffing and coordination associated with the RI/FS activities for the TC Systems Site. The organizational structure and responsibilities are designed to provide project control and quality assurance for the duration of the project.

j. Schedule & Reporting

This section should contain the schedule and reporting requirements for the RI/FS project as defined in this Order.

[1] The Site is being overseen by Ecology and work is being done in an expedited manner under the Governor's Puget Sound Initiative. The Initiative focuses on cleaning up contamination as well as restoring Puget Sound. Ecology recognizes that many cleanups can be designed and implemented in a manner that improves habitat values and provides for shoreline restoration in conjunction with remedial actions. While planning the cleanup, and making cleanup decisions, Ecology and the PLPs will evaluate opportunities to perform remedial actions in a fashion that coincidentally enhances habitat. Elements of the remedial action will be evaluated for restoration opportunities in consultation with Ecology as plans for cleanup are developed.

2. RI Sampling Program

This section presents information on the sampling program that will be implemented as part of the RI/FS. Note, additional samples may be added to the sampling program based on information gathered during the development of the RI/FS Work Plan.

The RI investigation will focus on identifying potential contamination in on-site soil and groundwater. The potential need for sampling nearby in-water areas (see **Appendix A**, Figure 4) will be assessed based on the results of the initial RI soil and groundwater data. The stormwater catch basins were cleaned out in late summer/early fall 2009 prior to Ecology's stormwater inspection conducted in September 2009. As part of the stormwater inspection, Ecology collected a sediment sample (named TC-CB-01) from the stormwater catch basin located between Buildings A and B and just north of the compressor shed (see **Exhibit B**, Figure 1). Sample TC-CB-01 contained concentrations of heavy metals, semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and total petroleum hydrocarbons (TPH) that exceeded Ecology's Sediment Management Standards (SMS) (Chapter 173-204 WAC). No additional sampling and analysis of the accumulated solids within the catch basins is recommended at this time. Sampling and analysis of these materials may be completed during any cleanup action for disposal characterization.

a. Sample Rationale

Based on the waste streams identified at TC Systems (see paragraph below), contamination identified in the aforementioned stormwater catch basin, wastes identified at the property boundary between the North Marina Ameron/Hulbert Site and TC Systems (see main Agreed Order, Section V.P), contamination identified in the 2009 Phase II Environmental Site Assessment (ESA), and potential legacy wastes from the former Jamison Mill operation, sample analyses will include priority pollutant metals including hexavalent chromium, SVOCs, volatile organic compounds (VOCs), TPH, PCBs, and organotins (if soil cores show the presence of blasting grit).

General waste streams associated with TC Systems are summarized below.

- Filter press sludge from the treatment of waste water contains chromium and is the largest waste stream generated at this facility.
- Metals such as zinc and copper can be present in the rinsewater streams.
- Batch pretreatment of process wastes – Hexavalent chromium may be present.
- Liquid paint and solvents including paint thinners/strippers (including methyl ethyl ketone [MEK] and acetone) are the second largest waste stream.
- Cleaning solutions to remove inks, light oil, grease and grime residues left on metal parts, etc.
- Waste acids and bases.
- Powder coatings.
- General Paint Waste: paint booth filters (managed as dangerous waste for heavy metals) and paint solids.
- Waste Flammable Liquids – Toluene, xylenes, methylene chloride, and methanol were identified as being present in waste flammable liquids based on a Tri-Coatings, Inc. 1990 waste profile.
- Hazardous Waste Liquids – According to a Tri Coatings, Inc. 1989 waste manifest, hazardous waste liquids containing 1,1,1-Trichloroethane were shipped as waste.
- Used oil from compressors, oil filters, and facility equipment as well as spent antifreeze.
- Sand blasting material.
- Penetrant oil and associated rinsewater captured in a sump.

RI sampling locations are shown on **Exhibit B**, Figure 2. The locations should be considered approximate. Actual locations should be confirmed in the field based on site conditions including locations of underground and overhead utilities. It is understood that boring locations will be limited based upon the restrictions of surface features, utilities, or other similar impediments. Also, sampling locations should be surveyed to facilitate accurate placement of these features on project figures and drawings. Two soil boring locations and fourteen co-located soil boring/groundwater sampling locations have been identified for the initial RI investigation. The sampling rationale for each location is summarized below.

- **Borings TC-SB-1 to TC-SB-5** – Five boring locations between Buildings B and C. These locations were selected to characterize conditions near the wastewater treatment/chemical storage areas (TC-SB-1 and TC-SB-2), the compressor shed

(TC-SB-3), in an unpaved area adjacent to Building C (TC-SB-4), and in the vicinity of a paint booth area (TC-SB-5).

- **Borings TC-SB-6 to TC-SB-8** – Three boring locations along southern property boundary between the North Marina Ameron/Hulbert Site and the TC Systems property. These locations were selected to characterize conditions adjacent to the Ameron/Hulbert Site and in the vicinity of the oil affected area.
- **Boring TC-SB-9** – One boring at the southwest corner of the property. This location was identified to characterize conditions near the downstream end of the property's stormwater drainage system
- **Borings TC-SB-10 and TC-SB-11** – Two borings located west of Building C. These locations were selected to characterize conditions downgradient and in the vicinity of Building C which is used for painting, storage of hazard waste, and sand blasting. This building also formerly housed operations from Cruise-A-Home Inc.
- **Borings TC-SB-12 and TC-SB-13** – Two borings located north of Buildings B and C. These locations were selected to characterize conditions north of these buildings. The groundwater flow direction at the site has not been characterized. Tidal action can make the flow pattern change at different times of the tide cycle. Therefore, a tidal study which would evaluate overall groundwater gradient trends (scope to be determined by PLPs) may be necessary to determine the actual gradient at the property.
- **Boring TC-SB-14** – One boring located inside Building B in the penetrant testing area. This boring was selected to characterize conditions where penetrant oils have been used inside the building and near a sump. The penetrant oil was in regular contact with the floor of the facility during operations.
- **Boring TC-SB-15** – One boring located inside Building B in the containment area underneath the process tank lines. This boring was selected to characterize conditions underneath the containment floor which was observed to be pitted and in need of resealing based on observations made by Ecology during a September 14, 2009 Dangerous Waste Compliance Inspection at the facility.
- **Boring TC-MW-1** – One soil boring/monitoring well located in the northeast portion of the Site and just north of Building B. This boring/well location was selected to characterize conditions where groundwater contamination was identified during the 2009 Phase II ESA. A groundwater sample collected at this location (see **Exhibit B**, Figure 1) had TPH-diesel and -oil at concentrations of 1,200 µg/L and 860 µg/L, respectively. These concentrations exceed Ecology's MTCA Method A groundwater cleanup level for diesel and oil range organics.

b. Sample Collection and Analysis

Sample collection and analysis methods are described below.

Direct Push Soil Samples

Soil samples for lithologic logging will be collected continuously during drilling with either a direct push drilling rig or hollow-stem auger. Upon collection of each soil sample, field screening of the soil sample will be conducted, first by scanning a freshly cut surface of the recovered soil along the length of the sample with a photoionization detector (PID) or similar equipment, then by visually observing the full length of the sample for obvious signs of contamination. Observations (e.g., presence of odors, petroleum sheens, soil discoloration, etc.) from the field screening will be recorded and the soil profile logged.

Samples collected from direct-push or hollow-stem auger borings will be collected at the following approximate depth intervals:

- 0.5 to 1 feet below ground surface (bgs)
- 1.0 to 2.0 feet bgs
- 2.0 to 3.0 feet bgs

If asphalt or concrete pavement is present at the sampling location, then the samples depths will be modified so that the first sample is collected directly beneath the pavement and underlying base course and the samples depths for deeper samples will be adjusted downward consistent with the intervals specified above.

The shallow sample in each boring will be analyzed for priority pollutant metals, SVOCs, VOCs, and TPH-Dx. Additionally, soil samples from locations TC-SB-1 through TC-SB-4 including TC-SB-15 will be analyzed for hexavalent chromium. Samples for VOCs will be collected compliant with EPA Method 5035A (i.e., Closed-System Purge-and-Trap Extraction for VOCs). The following additional analyses will be performed based on the initial sampling results:

- If the TPH-Dx analytical (with gas chromatogram) results indicate detections in the oil-range, then PCBs will be included in the follow-on analytical analyses for that soil interval. In addition, if the gas chromatogram indicates that the sample has detections in the gasoline-range, TPH-Gx will be added to the analysis list for that interval. .

- Soil samples will be submitted for organotin analysis if soil cores show evidence of any blasting material (e.g., abrasive grit).

If contaminants are detected above the screening levels in the shallow sample, then within the allowable soil sample holding time, the next deeper sample will be analyzed for the compounds that exceeded the screening level.

Soil samples will also be collected and analyzed at depth intervals other than those described above if field screening (e.g., visual observations such as staining or the presence of abrasive grit, olfactory evidence or elevated PID readings) shows signs of contamination at different depth intervals (e.g., dark stained soil at one depth, abrasive grit red staining at another depth). Samples will be collected where field screening indicates that the soil interval contains elevated levels of contaminants.

Groundwater Samples

Groundwater samples will be collected at each of the boring locations with the exception of TC-SB-2 and TC-SB-4. The groundwater sample from location TC-MW-1 will be from a completed monitoring well. All other samples will either be groundwater grab samples using direct push techniques or monitoring wells installed and developed in accordance with technical standards outlined in applicable regulatory guidance documents. To minimize potential tidal influences on groundwater samples, sampling will be conducted at a time that corresponds to low tide conditions. Also, groundwater samples will be collected using low flow techniques (i.e., using a peristaltic pump the groundwater will be pumped at a rate such that there is little or no water level drawdown or at such a rate that the water column remains stable and field parameters stabilize.

All groundwater samples will be analyzed for priority pollutant metals, SVOCs, VOCs, and TPH. Additionally, groundwater samples from locations TC-SB-1 through TC-SB-4 including TC-SB-15 will be analyzed for hexavalent chromium. The groundwater sample from location TC-MW-1 will also be analyzed for PCBs. Groundwater samples collected using direct push techniques for metals analysis (including hexavalent chromium) will be filtered in the field using a 0.45-μm in-line filter prior to submittal to the laboratory. However, both total and filtered groundwater samples will be collected

from location TC-MW-1. Additional groundwater sampling requirements are described below.

With the exception of location TC-MW-1, groundwater samples will be submitted for NWTPH-HCID analysis with follow-up analysis for TPH-Dx and/or TPH-Gx if the HCID results reveal the presence of this range of hydrocarbons in the sample. Five groundwater samples exhibiting the highest concentrations of TPH diesel and/or oil based on the NWTPH-HCID analysis will additionally be analyzed for PCBs. The groundwater sample collected at location TC-MW-1 will not be analyzed using NWTPH-HCID analysis, but rather will be analyzed using TPH-Dx and TPH-Gx analysis.

Note, additional analyses beyond those listed for soil and groundwater in this exhibit may be incorporated during the development of the RI/FS work plan.

Quality Assurance Samples

The field sampling program will include the collection of field and laboratory quality assurance samples (e.g., field duplicates, blank samples, etc.).

3. Prepare Draft RI/FS Report

A draft, draft final, and final RI/FS report that meets the requirements of WAC 173-340-350 shall be prepared. The RI/FS report shall contain the results of the RI and will provide information regarding the full extent and magnitude of soil, groundwater, surface water, and/or adjacent marine sediment contamination including toxic effects. The FS portion of the report will present and evaluate cleanup action alternatives to address the identified contamination at the Site. Based on the evaluation of alternatives (WAC 173 340-350(8)), the FS will identify a preferred cleanup action alternative for the Site in compliance with WAC 173-340-360.

4. Develop A Draft Cleanup Action Plan (CAP)

Upon Ecology approval of the draft final RI/FS report, the PLPs shall prepare a draft and draft final CAP in accordance with WAC 173-340-380 and 173-204-580 that provides proposed cleanup action alternatives to address potential contamination at all impacted

media at the Site based on the results of the RI/FS. The draft CAP shall include a general description of the proposed cleanup actions along with the following sections:

- A general description of the proposed cleanup action alternatives and rationale for selection including results of any remedial technology pilot studies, if necessary.
- A summary of other cleanup action alternatives evaluated in the RI/FS.
- A summary of applicable local, state, and federal laws pertinent to the proposed cleanup actions.
- Cleanup standards and rationale regarding their selection for each hazardous substance and for each medium of concern at the Site based on the results of the RI/FS.
- Descriptions of any institutional/engineering controls, if proposed.
- A schedule for implementation of field construction work.

B. Schedule

The PLPs shall perform the actions required by this Order according to the schedule below. The PLPs shall address Ecology comments on all deliverables through written responses. Note, when Ecology provides comments in red-line strikeout format (i.e., comments made directly within the electronic version of the document), the PLPs may respond to those comments directly within the electronic document.

1. RI/FS Work Plan Submittal

- Draft Document – The draft RI/FS Work Plan shall be due 75 calendar days after finalization of this Agreed Order. The draft Work Plan will then undergo a 30-day review period by Ecology.
- Draft Final Document – The draft final RI/FS Work Plan shall address any comments/suggestions submitted by Ecology. The draft final RI/FS Work Plan shall be due 45 days after Ecology provides its comments. The draft final version will undergo a 20-day review period by Ecology.
- Final Document – The final RI/FS Work Plan shall address comments/suggestions submitted by Ecology. The final RI/FS Work Plan shall be due 20 days after Ecology provides its comments.

2. Field RI/FS

- Field RI/FS – RI/FS field activities shall be commenced within 30 days of submittal of the final RI/FS work plan to Ecology. The field RI results, as described in Section A.1.f, shall be provided to Ecology 30 calendar days after the validation of all RI/FS analytical data.
- Additional field RI/FS activities (if needed) – Additional field RI/FS activities may be required to adequately delineate the extent and magnitude of contamination at the Site, and/or to conduct pilot testing of a remedial alternative. The scope, schedule, and submittal requirements for additional field RI/FS activities shall be developed by the PLPs, and shall be submitted to Ecology for review and concurrence.

- Environmental Data Submittals – All sampling data (including all historic soil and groundwater data) shall be submitted to Ecology in both printed and electronic formats in accordance with Ecology's Toxics Cleanup Program Policy 840 (Data Submittal Requirements) and/or any subsequent procedures specified by Ecology for data submittal. Policy 840 is presented in **Exhibit C** of this Agreed Order. Historic data, in addition to new data collected as part of the initial or first phase of the RI/FS, shall be supplied to Ecology in electronic format (i.e., EIM) 45 days after the new data has been validated. Data collected as part of additional RI/FS activities shall also be supplied to Ecology in electronic format (i.e., EIM) 45 days after the data has been validated.

3. RI/FS Report Submittal

- Draft RI/FS Report – The draft RI/FS report shall be due to Ecology 120 calendar days after receipt by the PLPs Project Manager of all final analytical data collected during the RI/FS. This draft will then undergo a 30-day review period by Ecology.
- Draft Final RI/FS Report – The draft final RI/FS report shall be due 60 days after receipt of Ecology comments on the draft RI/FS report. This draft final RI/FS report will then go to a 30-day public comment period.
- Final RI/FS Report – The final RI/FS report shall be submitted to Ecology 30 days after Ecology's completion of the responsiveness summary to public comment on the draft final RI/FS report.

4. Cleanup Action Plan (CAP) Submittal

- Draft CAP – The draft CAP shall be submitted to Ecology 45 days after the draft final RI/FS Report is finalized and ready for public comment. This draft CAP will then undergo a 30-day review period by Ecology.

- Draft Final CAP – The draft final CAP shall address comments/suggestions submitted by Ecology on the draft CAP. This draft final CAP shall be due 30 days after submittal of Ecology comments of the draft CAP.

Based on the work schedule presented above, the PLPs shall develop an overall cleanup schedule for the Site starting from the development of the RI/FS Work Plan to final cleanup construction and long-term compliance monitoring. Ecology recognizes that elements of the overall cleanup schedule that project beyond the submittal of the Draft Final CAP are not enforceable under this Agreed Order. However, it is important that Ecology maintains updated cleanup schedules for project planning, and for periodically updating the public, tribes, and resources/permitting agencies. The PLPs shall provide Ecology with an updated cleanup schedule on an as needed basis, or at a minimum, at the end of each quarter (i.e., March, June, September, and December). It is understood that updates may not be needed each quarter. In that case, the PLPs will notify Ecology that there are no changes to the overall cleanup schedule.

Legend[1]

- Approximate extent of Oil Affected Area
- TC Systems Operations Boundary
- Storm Drain Piping
- Sanitary Sewer Piping
- Storm Drain Catch Basin
- 2009 Phase II ESA Sample Location
- TC-CB-01 – 2009 Ecology Sediment Catch Basin Sample
- Excavation Area From Damaged Stormwater Line

Building B Chemical Line (Metal Finishing)

Building C Painting and Hazardous Waste Storage

[1]All sample locations and site features are approximate.

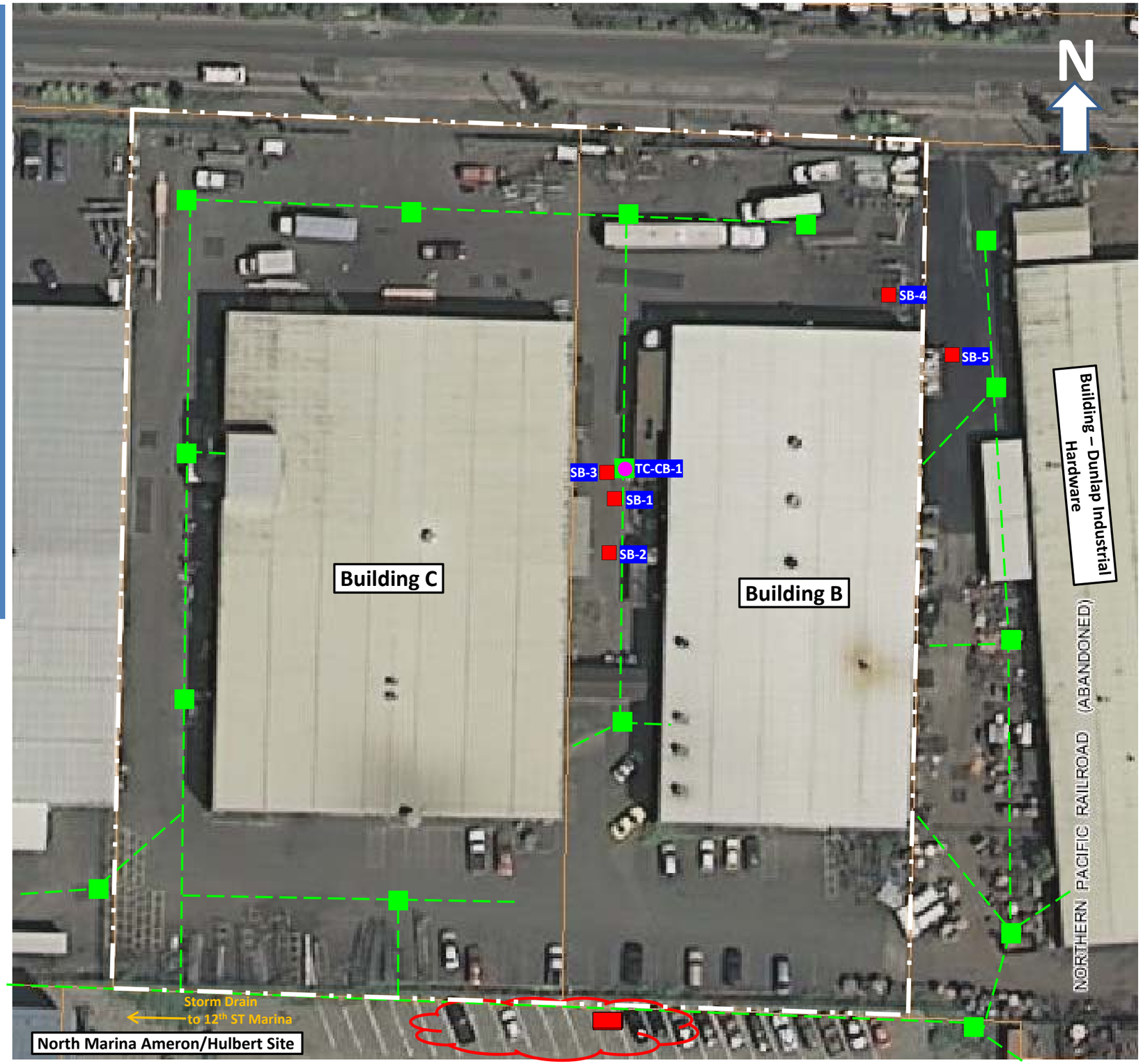

Exhibit B – Figure 1
Historical Sample Map

Sources for Site Features – 1996 North Marina Utility Map; TC Systems 1998 O&M Manual; Information from Ecology Inspection Reports; Landau's 6-2-05 report on the "Oil Affect Area" at Ameron.

Legend[1]

Approximate extent of Oil Affected Area.

- Storm Drain Piping
- Sanitary Sewer Piping
- Storm Drain Catch Basin
- Soil Boring/Groundwater Sample Location[2]
- Soil Boring Location (no groundwater sample)
- Monitoring Well Location
- Excavation Area From Damaged Stormwater Line
- TC Systems Operations Boundary

Building B Chemical Line (Metal Finishing)
Building C Painting and Hazardous Waste Storage

[1]All sample locations and site features are approximate. Sample locations will be finalized as part of the development of the RI/FS work plan.

[2]Direct push groundwater sample or permanent well sample. The type of groundwater sample will be determined as part of the RI/FS work plan.

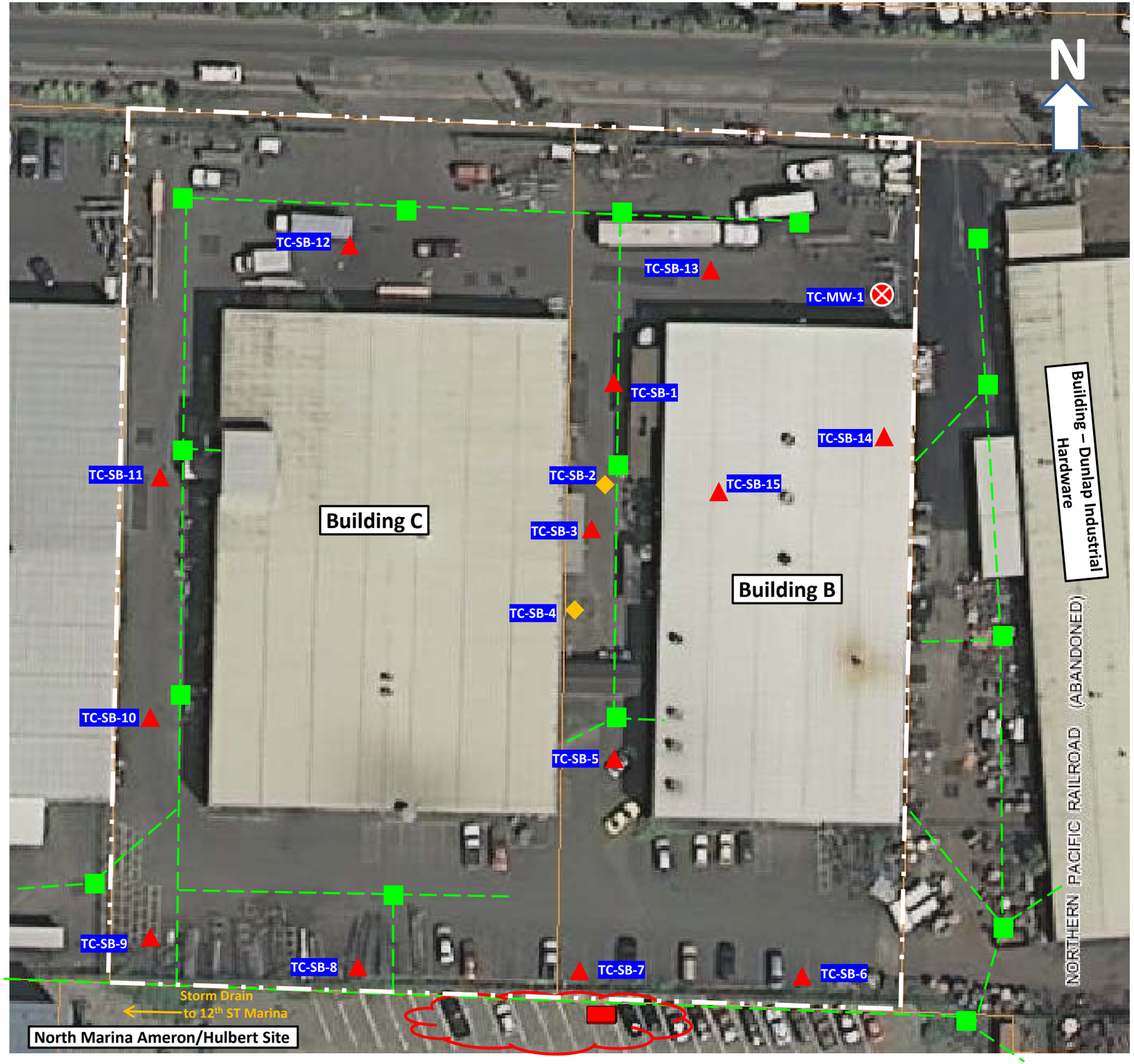

Exhibit B – Figure 2
RI Sample Location Map

Sources for Site Features – 1996 North Marina Utility Map; TC Systems 1998 O&M Manual; Information from Ecology Inspection Reports; Landau's 6-2-05 report on the "Oil Affect Area" at Ameron.

EXHIBIT C
ECOLOGY POLICY 840 – DATA SUBMITTAL REQUIREMENTS

Resource Contact: Policy and Technical Support Staff *Effective:* *August 1, 2005*
References: *WAC 173-340-840(5)* *Revised:* *September 9, 2005*
http://www.ecy.wa.gov/eim/
http://www.ecy.wa.gov/programs/tcp/smu/sedqualfirst.htm
http://www.ecy.wa.gov/biblio/0309043.html
Replaces: *Procedure 840*

Policy 840: Data Submittal Requirements

Purpose: Contaminated site investigations and cleanups generate a large volume of environmental monitoring data that need to be properly managed to facilitate regulatory decisions and access to this data by site owners, consultants, and the general public. The purpose of this policy is to describe the requirements for submitting environmental monitoring data generated/collected during the investigation and cleanup of contaminated sites under the Model Toxics Control Act (MTCA) and the Sediment Management Standards.

Application: This policy applies to Ecology staff, potentially liable parties, prospective purchasers, state and local agencies, and Ecology contractors that investigate or manage the cleanup of contaminated sites.

1. Unless Otherwise Specified by Ecology, all Environmental Monitoring Data Generated during Contaminated Site Investigations and Cleanups shall be Required to be Submitted to Ecology in both a Written and Electronic Format.

Environmental monitoring data include biological, chemical, physical, and radiological data generated during site investigations and cleanups under the Model Toxics Control Act Cleanup Regulation (WAC 173-340) and the Sediment Management Standards (WAC 173-204).

Data generated/collected during site investigations and cleanups conducted under an order, agreed order or consent decree, permit, grant, loan, contract, interagency agreement, memorandum of understanding or during an independent remedial action, are considered environmental monitoring data under this policy.

Data generated/collected for non site-specific studies, site hazard assessments that result in no further action and initial site investigations are not considered environmental monitoring data under this policy.

2. Orders, Agreed Orders, Consent Decrees, or Permits Issued After the Effective Date of this Policy Shall Include a Condition that Site-Specific Data be Submitted in Compliance with this Policy.

Reports on such work that do not include documentation that the data have been submitted in compliance with this policy shall be deemed incomplete and a notice of such provided to the

submitter. These reports generally should not be reviewed until that information is provided. The assistant attorney general assigned to the site should be consulted in these situations.

3. Reports on Independent Remedial Actions Submitted for Review After October 1, 2005, Under Ecology's Voluntary Cleanup Program Shall Not be Reviewed Until the Data Have Been Submitted in Compliance with this Policy.

Such reports shall be deemed incomplete, and a notice to this effect provided to the submitter.

4. Grants, Contracts, Interagency Agreements or Memoranda of Understanding Issued After the Effective Date of this Policy Shall Include a Condition that Site-Specific Data be Submitted in Compliance with this Policy.

Reports on such work shall not be accepted as complete until the data have been submitted in compliance with this policy. If a payment or transfer of funds is involved in the transaction, the relevant payment or transfer shall be withheld until this requirement has been met.

Example language to include in these documents is attached in Appendix A.

5. Data Generated During Upland Investigations and Cleanups Shall be Submitted Electronically Using Ecology's Environmental Information Management System (EIM).

EIM is Ecology's main database for environmental monitoring data. Proper submission of data through this system meets the requirement of submitting such data in an electronic format. Electronic data shall be submitted to Ecology simultaneously with the accompanying printed report.

Additional information on EIM, including instructions for data submittal, can be found on Ecology's EIM web site at http://www.ecy.wa.gov/eim/. TCP's EIM Coordinator also is available for technical assistance to site managers and consultants using EIM.

6. Data Submitted Electronically Using EIM Shall be Checked by the Toxics Cleanup Program's EIM Coordinator Prior to Loading the Data into EIM.

Normally, notice that data have been submitted through EIM will come to TCP's EIM Coordinator. Upon receipt of such a notice the EIM Coordinator should notify the site manager. Similarly, if the Ecology site manager receives a notice of an EIM submittal, they should notify TCP's EIM Coordinator. Upon receipt of the data, TCP's EIM Coordinator reviews the submittal for quality control and officially loads the data into the system.

7. Data Generated During Sediment Investigations and Cleanups shall be Submitted Electronically Using Ecology's Sediment Quality Information System (SEDQUAL).

SEDQUAL is Ecology's data management system for sediment-related data. Proper submission of data through this system meets the requirement of submitting such data in an electronic format. Electronic data shall be submitted to Ecology simultaneously with the accompanying printed report.

8. Sediment Sampling Data Shall be Submitted to Ecology Using the SEDQUAL Data Entry Templates.

At a minimum, the following SEDQUAL data entry templates must be completed:

1. **Reference & Bibliography:** Describes lab reports and publications that relate to the data being entered;
2. **Survey:** Sample number;
3. **Station:** Specifies geographic location of the sediment sample. Sample latitude/longitude coordinates must be entered using the North American Datum of 1983 in U.S. Survey feet (NAD 83, U.S. feet);
4. **Sample:** Describes sample characteristics such as depth; and
5. **Sediment Chemistry:** Reports chemical concentration data in dry weight units.

The following additional templates must also be completed where these measurements/observations have been made:

1. **Bioassay:** Bioassay test results;
2. **Bioassay Control:** Bioassay control test results;
3. **Benthic Infauna:** Species abundance & diversity;
4. **Tissue:** Describes the organism collected;
5. **Bioaccumulation:** Reports tissue chemical concentrations; and
6. **Histopathology:** Reports tissue pathology such as tumors or lesions.

9. Electronic Data Formats Shall be Verified to be Compatible with SEDQUAL Prior to Submittal.

Because SEDQUAL uses ASCII protocol and comma delimited text files, data format verification shall be conducted prior to submittal to Ecology. Data shall be verified by downloading the SEDQUAL database, importing the data into the database, correcting errors, and then exporting the corrected templates.

For additional information on sediment sampling and analysis plan requirements, see Ecology publication 03-09-043 "Sediment Sampling and Analysis Plan Appendix", April, 2003. A copy of this document can be obtained from Ecology's publication office or downloaded from the following web site: http://www.ecy.wa.gov/biblio/0309043.html
Additional information on SEDQUAL can be found at:
http://www.ecy.wa.gov/programs/tcp/smu/sedqualfirst.htm. TCP's SEDQUAL Coordinator is also available for technical assistance to site managers and consultants using SEDQUAL.

10. Sediment Sampling Data Shall Also be Submitted to Ecology in a Printed Report.

Printed reports shall present the data in both dry weight and total organic carbon normalized units in data tables that compare the results to applicable state regulatory criteria.

11. Data Submitted Electronically Using SEDQUAL Shall be Checked by the Toxics Cleanup Program's SEDQUAL Coordinator Prior to Loading the Data into SEDQUAL.

Normally, SEDQUAL data submittals will come to TCP's SEDQUAL Coordinator. Upon receipt of a submittal, the Coordinator should notify the site manager. Similarly, if the Ecology site manager receives a SEDQUAL submittal, they should notify TCP's SEDQUAL Coordinator. Upon receipt of the data, TCP's SEDQUAL Coordinator reviews the submittal for quality control and officially loads the data into the system.

Approved

James J. Pendowski, Program Manager
Toxics Cleanup Program

Policy Disclaimer: This policy is intended solely for the guidance of Ecology staff. It is not intended, and cannot be relied on, to create rights, substantive or procedural, enforceable by any party in litigation with the state of Washington. Ecology may act at variance with this policy depending on site-specific circumstances, or modify or withdraw this policy at any time.

APPENDIX A: MODEL GRANT AND PERMIT CONDITION

The following condition is to be inserted in permits, grants, loans, contracts, interagency agreements, memorandum of understandings where site-specific environmental monitoring data is expected to be generated:

All sampling data shall be submitted to Ecology in both printed and electronic formats in accordance with WAC 173-340-840(5) and Ecology Toxics Cleanup Program Policy 840: Data Submittal Requirements. Electronic submittal of data is not required for site hazard assessments that result in no further action and initial site investigations. (FOR GRANTS & CONTRACTS ADD: Failure to properly submit sampling data will result in Ecology withholding payment and could jeopardize future grant funding.)

EXHIBIT D
PUBLIC PARTICIPATION PLAN

Site Cleanup:

TC Systems, Inc. Site

Between 10th and 11th Streets off of West Marine View Drive
Everett, Washington

DRAFT PUBLIC PARTICIPATION PLAN

Prepared by:
Washington State Department of Ecology

WASHINGTON STATE
DEPARTMENT OF
ECOLOGY

June 2010

This plan is for you!

This Public Participation Plan is prepared for the TC Systems, Inc. Site cleanup as part of the requirement of the Model Toxics Control Act (MTCA). The plan provides information about MTCA cleanup actions and requirements for public involvement, and identifies how Ecology, and Norton Industries, Inc. and TC Systems, Inc. support public involvement throughout the cleanup. The plan is intended to encourage coordinated and effective public involvement tailored to the community's needs at the TC Systems, Inc. Site.

For additional copies of this document, please contact:

Washington State Department of Ecology
Andy Kallus, Site Manager
Toxics Cleanup Program
PO Box 47600
Olympia, WA 98504-7600
(360) 407-7259
Email: akal461@ecy.wa.gov

If you need this publication in an alternate format, please call the Toxics Cleanup Program at (360) 407-7170. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call (877) 833-6341 (TTY).

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Appendix A: Fact Sheet for Agreed Order and Public Participation Plan

1.0: Introduction and Overview of the Public Participation Plan

This Public Participation Plan explains how you can become involved in improving the health of your community. It describes public participation opportunities that will be conducted during cleanup of a site on the Everett waterfront - the TC Systems, Inc. Site (Site). These opportunities are part of a cooperative agreement between the Washington State Department of Ecology (Ecology) and some of the owners and operators of the Site, which include Norton Industries, Inc., and TC Systems, Inc. These two companies are Potentially Liable Persons, or PLPs at the Site. The current agreement, called an Agreed Order (Order), is a legal document in which the PLPs and Ecology agree to decide on cleanup actions for the TC Systems, Inc. Site. TC Systems, Inc. is generally located between 10th and 11th Streets, off of West Marine View Drive, on Port Gardner Bay, Everett, Washington.

Cleanup actions and the public participation process that helps guide them are established in Washington's Model Toxics Control Act (MTCA).[1] Under MTCA, Ecology is responsible for providing timely information and meaningful chances for the public to learn about and comment on important cleanup decisions before they are made. The goals of the public participation process are:

- To promote understanding of the cleanup process so that the public has the necessary information to participate.
- To encourage involvement through a variety of public participation opportunities.

This Public Participation Plan provides a framework for open dialogue about the cleanup among community members, Ecology, cleanup site owners, and other interested parties. It outlines basic MTCA requirements for community involvement activities that will help ensure that this exchange of information takes place during the investigation and cleanup, which include:

- Notifying the public about available reports and studies about the site.
- Notifying the public about review and comment opportunities during specific phases of the cleanup investigation.
- Providing appropriate public participation opportunities such as fact sheets to learn about cleanup documents, and if community interest exists, holding meetings to solicit input and identify community concerns.

[1] The Model Toxics Control Act (MTCA) is the hazardous waste cleanup law for the State of Washington. The full text of the law can be found in Revised Code of Washington (RCW), Chapter 70.105D. The legal requirements and criteria for public notice and participation during MTCA cleanup investigations can be found in Washington Administrative Code (WAC), Section 173-340-600.

- Considering public comments received during public comment periods.

In addition to these basic requirements, the plan may include additional site-specific activities to meet the needs of your community. Based upon the type of the proposed cleanup action, the level of public concern, and the risks posed by the site, Ecology may decide that additional public involvement opportunities are appropriate.

These opportunities form the basis for the public participation process. The intent of this plan is to:

- Provide complete and current information to all interested parties.
- Let you know when there are opportunities to provide input.
- Listen to concerns.
- Address those concerns.

Part of the Puget Sound Initiative

TC Systems, Inc. is one of several sites in the Everett area and is part of a larger cleanup effort called the Puget Sound Initiative (PSI). Governor Chris Gregoire and the Washington State Legislature authorized the PSI as a regional approach to protect and restore Puget Sound. The PSI includes cleaning up 50-60 contaminated sites within one-half mile of the Sound. These sites are grouped in several bays around the Sound for "baywide" cleanup efforts. As other sites in the Everett baywide area move forward into investigation and cleanup, information about them will be provided to the community as well as to interested people and groups.

Roles and Responsibilities

Ecology will lead public involvement activities, with support from the PLPs. Ecology maintains overall responsibility and approval authority for the activities outlined in this plan. The PLPs are responsible for cleanup at this Site. Ecology will ultimately oversee all cleanup activities, and ensure that contamination on this Site is cleaned up to concentrations that are established in state regulations and that protect human health and the environment.

Organization of this Public Participation Plan

The sections that follow in this plan provide:

- Section 2: Background information about the TC Systems, Inc. Site.

- Section 3: An overview of the local community that this plan is intended to engage.
- Section 4: Public involvement opportunities in this cleanup.

This Public Participation Plan addresses current conditions at the Site, but it is intended to be a dynamic working document that will be reviewed at each phase of the cleanup, and updated as needed. Ecology and the PLPs urge the public to become involved in the cleanup process.

2.0: Site Background

Site Description and Location

The TC Systems, Inc. Site is generally located between 10th and 11th Streets off of West Marine View Drive, in Everett, Snohomish County, Washington (see Figure 1). The Site includes approximately 2.6 acres of upland area, as well as the adjacent intertidal in-water area. The TC Systems, Inc. Site is bounded by the Dunlap Industrial Hardware building to the east, and the O&W Glass building to the west; North Marina Ameron/Hulbert Site to the south, and is separated from the in-water area by 10th Street to the north. Port Gardner Bay is to the west of the Port property. The Site is currently two industrial buildings within the larger Port building complex (Figure 2).

The City of Everett Comprehensive Plan land use map[2] indicates that the Site is zoned maritime services (M-S). Zoning to the north of the Site is maritime services, zoning to the east of the Site is residential, and zoning to the west of the Site includes open water and parks (Jetty Island).

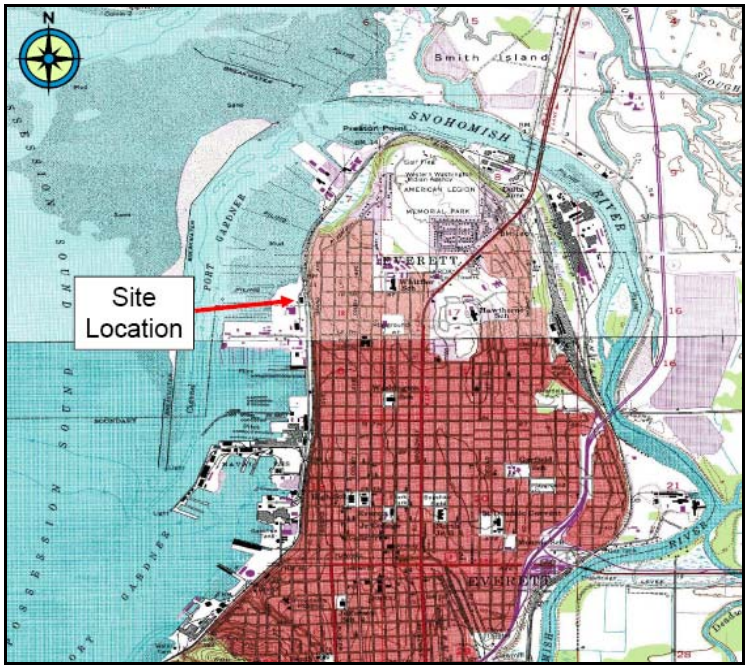


Figure 1: The TC Systems, Inc. Site, shown in the above map with an arrow, is generally located between 10th and 11th Streets off of West Marine View Drive, near Port Gardner Bay, Everett, WA. (Photo Source: USGS 7.5 Minute Quadrangle Maps (Everett and Marysville Quadrangle Maps; Photo Revised – 1968 and 1973)

[2] Planning and Community Development, City of Everett, WA http://www.everettwa.org/Get_PDF.aspx?pdfID=3362 (Accessed February 13, 2009)

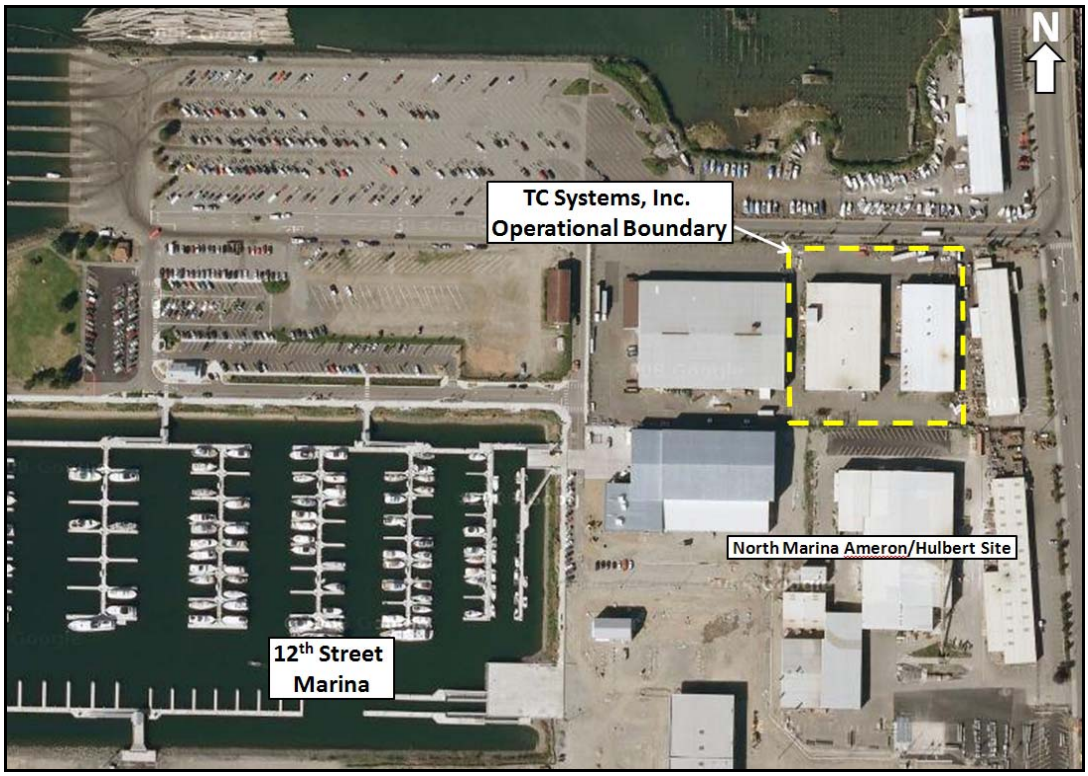


Figure 2: A current view of the TC Systems, Inc. Site. (Photo Source: 2010 Google Imagery)

General Site History and Contaminants

Historically, Jamison Shingle Mill operated on this Site from about 1914 until about the late 1950s. The building was built on pilings over Port Gardner Bay. This enabled the mill to float logs right up to the facility. Also historically, Cruise-A-Home, Inc. operated on the site in the 1970s/early 80s. Cruise-A-Home engineered, designed and built fiberglass boats.

Currently, the Site is owned by Norton Industries, Inc., and operated since about 1979 by TC Systems, Inc. and its predecessors (MARPAC Products, Inc. and Tri Coatings, Inc.). TC Systems chemically treats and paints metal parts in support of the aviation and boating industries, and is known to use acids, bases, paints, solvents, thinners and oils. It also prepares the metal parts by sandblasting.

In 2005, the Port of Everett sampled visible soil contamination that was found while repairing a stormwater pipeline located near the North Marina Ameron/Hulbert and TC Systems property line. Test results showed that the concentrations of polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and arsenic in soil were greater than state Model Toxics Cleanup Act (MTCA) cleanup levels. Concentrations of arsenic in groundwater were also greater than MTCA cleanup levels. The North Marina

Ameron/Hulbert site is currently being investigated under a separate Agreed Order with Ecology.

A sample of the settled material (i.e., sediment) in a stormwater catchbasin on the Site was collected in 2009. Test results showed that the concentrations of five metals (cadmium, chromium, copper, lead, and zinc) and two different PCBs were greater than state sediment management standards for these pollutants.

TC Systems conducted Phase I and Phase II site investigations of soil and groundwater on the Site in 2009. The test results of one groundwater sample showed that total petroleum hydrocarbons (TPH), specifically diesel and oil, were greater than MTCA cleanup levels for groundwater.

More study is needed to fully characterize the contamination at the TC Systems, Inc. Site.

The Cleanup Process

Washington State's cleanup process and key opportunities for you to provide input are outlined in Figure 3. The general cleanup process includes the following steps:

- Remedial Investigation (RI) - investigates the site for types, locations, and amounts of contaminants.
- Feasibility Study (FS) - identifies cleanup options for those contaminants.
- Cleanup Action Plan (CAP) - selects the preferred cleanup option and explains how cleanup will be conducted.

Each of these steps is generally documented in reports and plans that will be available for public review. Public comment periods of at least 30 calendar days are usually conducted for the following documents:

- Draft RI report
- Draft FS report
- Draft CAP

These cleanup steps and documents are described in greater detail in the following subsections.

Interim Actions

Interim actions may be conducted during the cleanup if required by Ecology. An interim action partially addresses the cleanup of a site, and may be required if:

- It is technically necessary to reduce a significant threat to human health or the environment.

- It corrects a problem that may become substantially worse or cost substantially more to fix if delayed.
- It is needed to complete another cleanup activity, such as design of a cleanup plan.

Future interim actions are not currently anticipated on the TC Systems, Inc. Site.

Remedial Investigation/Feasibility Study Report

The PLPs have agreed to conduct an RI/FS on the Site. The RI determines which contaminants are on the Site, where they are located, and whether there is a significant threat to human health or the environment. The draft RI report provides baseline data about environmental conditions that will be used to develop cleanup options. The FS and report then identify and evaluate cleanup options, in preparation for the next step in the process.

The RI and FS processes typically include several phases:

- Scoping
- Site characterization
- Development and screening of cleanup alternatives
- Treatability investigations (if necessary to support decisions)
- Detailed analysis

The RI and FS reports are expected to be combined into a draft TC Systems, Inc. Site RI/FS report. The draft report is anticipated to be completed sometime in 2011 and will be made available for public review and comment.

Cleanup Action Plan

The PLPs and Ecology have agreed to develop a draft CAP for the Site. After public comment on the draft RI/FS report, a preferred cleanup alternative will be selected. The draft CAP explains the cleanup standards that will be applied at the Site, selects the preferred cleanup alternative(s), and outlines the work to be performed during the actual Site remediation. The CAP may also evaluate the completeness and effectiveness of any interim actions that were performed on the Site. The draft CAP will be available for public review and comment. Once public comments are reviewed and any changes are made, Ecology provides final approval and Site cleanup can begin.

3.0: Community Profile

Community Profile

Everett is Snohomish County's largest city and the sixth largest city in the State of Washington. The current population of Everett is approximately 98,000[3] situated within 47.7 square miles. Located on Port Gardner Bay, Everett hosts the West Coast's largest marina, U.S. Navy Homeport Naval Station Everett, and The Boeing Company's assembly plant. The city's 2006 labor workforce was more than 80,000, employed predominantly in technology, aerospace, and service-based industries.[4]

Key Community Concerns

An important part of the Public Participation Plan is to identify key community concerns for each cleanup site. Many factors are likely to raise community questions, such as the amount of contamination, how the contamination will be cleaned up, or future use of the Site. Community concerns often change over time, as new information is learned and questions are answered. Identifying site-specific community concerns at each stage of the cleanup process is helpful to ensure that they are adequately addressed. On-going key community concerns will be identified for the TC Systems, Inc. Site through public comments and other opportunities as detailed in Section 4.

[3] US Census Bureau, City & Towns Estimates Data for July 1, 2006. http://www.census.gov/popest/estimates.php (Accessed September 12, 2007)
[4] City of Everett. http://www.everettwa.org/default.aspx?ID=314 (Accessed September 12, 2007)

4.0: Public Participation Opportunities

Ecology and the PLPs invite you to share your comments and participate in the cleanup in your community. As we work to meet our goals, we will evaluate whether this public participation process is successful. This section describes the public participation opportunities for this Site.

Measuring Success

We want this public participation process to succeed. Success can be measured, at least in part, in the following ways:

- Number of written comments submitted that reflect understanding of the cleanup process and the site.
- Direct "in-person" feedback about the site cleanup or public participation processes, if public meetings are held.
- Periodic updates to this plan to reflect community concerns and responses.

If we are successful, this process will increase:

- Community awareness about plans for cleanup and opportunities for public involvement.
- Public participation throughout the cleanup.
- Community understanding regarding how their input will be considered in the decision-making process.

Activities and Information Sources

Ecology Contacts

Ecology is the lead contact for questions about the cleanup in your community. The Ecology staff person identified in this section is familiar with the cleanup process and activities at the Site. For more information about public involvement or the technical aspects of the cleanup, please contact:

Andy Kallus
Ecology Site Manager
WA State Dept. of Ecology
Toxics Cleanup Program
P.O. Box 47600
Olympia, WA 98504-7600
Phone: (360) 407-7259

E-mail: andrew.kallus@ecy.wa.gov

Ecology's Webpage

Ecology has created a webpage to provide convenient access to information. Documents such as the Agreed Order, draft reports, and cleanup plans, are posted as they are issued during the investigation and cleanup process. Visitors to the webpage can find out about public comment periods and meetings; download, print, and read information; and submit comments via e- mail. The webpage also provides links to detailed information about the MTCA cleanup process. The TC Systems, Inc. Site webpage is available at the following address:
http://www.ecy.wa.gov/programs/tcp/sites/TCSystems/TCSystems_hp.html.

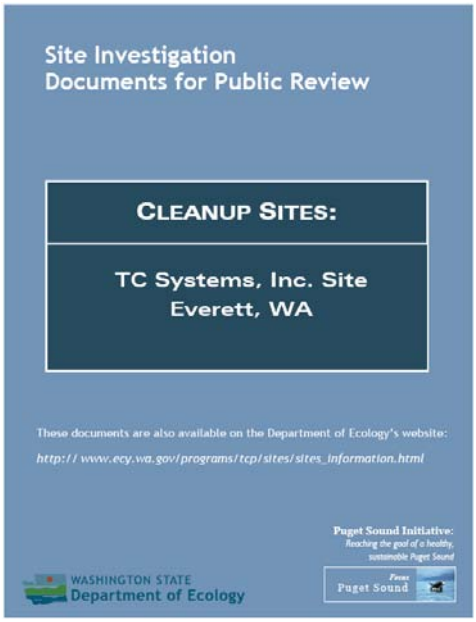
Information Centers/Document Repositories

The most comprehensive source of information about the TC Systems, Inc. Site is the information center, or document repository. Two repositories provide access to the complete list of site-related documents. All TC Systems, Inc. investigation and cleanup activity reports will be kept in print at those two locations and will be available for your review. They can be requested on compact disk (CD) as well. Document repositories are updated before public comment periods to include the relevant documents for review. Documents remain at the repositories throughout the investigation and cleanup. For this Site, the document repositories and their hours are:

- **Everett Public Library**
  2702 Hoyt Ave.
  Phone: (425) 257-8010
  Hours: Mon.-Wed. 10 a.m.-9 p.m.,
  Thurs.-Sat. 10 a.m.-6 p.m., Sun. 1-5 p.m.

- **WA Department of Ecology Headquarters**
  300 Desmond Drive SE
  Lacey, WA 98503
  By appointment. Please contact Carol Dorn at (360) 407-7224 or cesg461@ecy.wa.gov.

Look for document covers such as the illustration on the right.



Public Comment Periods

Public comment periods provide opportunities for you to review and comment on major documents, such as the Agreed Order, draft Public Participation Plan, and the draft RI/FS report. The typical public comment period is 30 calendar days.

Notice of Public Comment Periods

Notices for each public comment period will be provided by local newspaper and by mail. These notices indicate the timeframe and subject of the comment period, and explain how you can submit your comments. For the TC Systems, Inc. Site, newspaper notices will be posted in The Daily Herald.

Notices are also sent by regular mail to the local community and interested parties. The community typically includes all residential and business addresses within one-quarter mile of the site, as well as potentially interested parties such as public health entities, environmental groups, and business associations.

Fact Sheets

One common format for public comment notification is the fact sheet. Like the newspaper notice, fact sheets explain the timeframe and purpose of the comment period, but also provide background and a summary of the document under review. A fact sheet has been prepared for the TC Systems, Inc. Site explaining the Agreed Order and this Public Participation Plan (See Appendix A). Future fact sheets will be prepared at key milestones in the cleanup process.

MTCA Site Register

Ecology produces an electronic newsletter called the MTCA Site Register. This semi-monthly publication provides updates of the cleanup activities occurring throughout the state, including public meeting dates, public comment periods, and cleanup-related reports. Individuals who would like to receive the MTCA Site Register can sign up three ways:

- Call (360) 407-6069
- Send an email request to ltho461@ecy.wa.gov or
- Register on-line at http://www.ecy.wa.gov/programs/tcp/pub_inv/pub_inv2.html

Mailing Lists

Ecology maintains both an e-mail and regular mail distribution list throughout the cleanup process. The list is created from carrier route delineations for addresses within one-quarter mile of the site, potentially interested parties, public meeting sign-in sheets, and requests made in person, or by regular mail or e-email. You may request to be on the mailing list by contacting the Ecology staff person listed earlier in this section.

Optional Public Meetings

A public meeting will be held during a comment period if requested by ten or more people, or if Ecology decides it would be useful. Public meetings provide additional opportunity to learn about the investigation or cleanup, and to enhance informed comment. If you are interested in a public meeting about the TC Systems, Inc. Site, please contact the Ecology staff person listed earlier in this section.

Submitting Comments

You may submit comments by regular mail or e-mail during public comment periods to the Ecology project manager listed earlier in this section.

Response to Comments

Ecology will review all comments submitted during public comment periods, and will modify documents as necessary. You will receive notice by regular mail or e-mail that Ecology has received your comments, along with an explanation about how the comments were addressed.

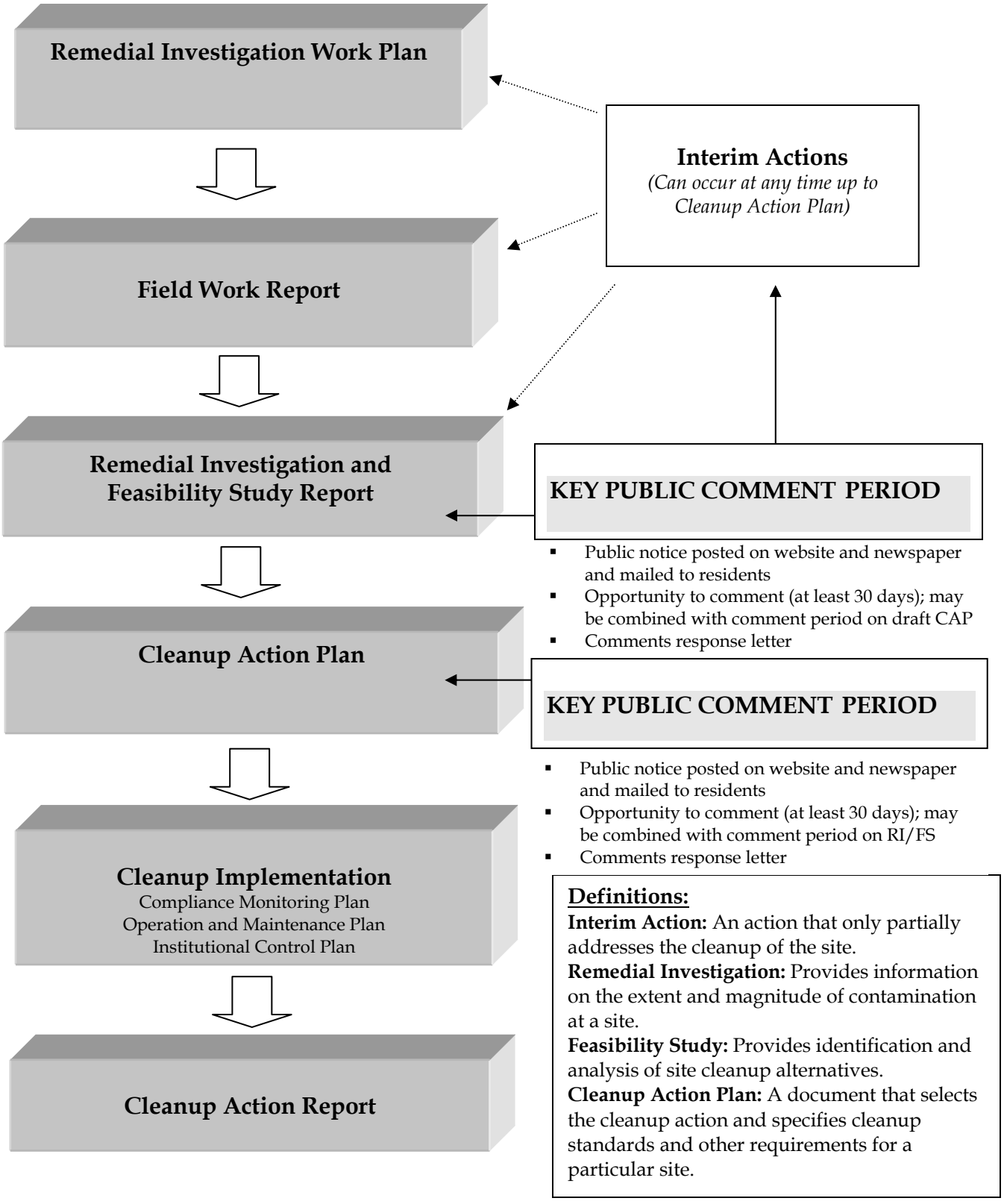
Other

Ecology and the PLPs are committed to the public participation process and will consider additional means for delivering information and receiving comments, including combining public comment periods for other actions (such as those associated with the State Environmental Policy Act).

Public Participation Grants

You may be eligible to apply for a Public Participation Grant from Ecology to provide additional public participation activities. Those additional activities will not reduce the scope of the activities defined by this plan. Activities conducted under this plan would coordinate with the additional activities defined under the grant.

Figure 3: Washington State Cleanup Process



Glossary

Cleanup: The implementation of a cleanup action or interim action.

Cleanup Action: Any remedial action except interim actions, taken at a site to eliminate, render less toxic, stabilize, contain, immobilize, isolate, treat, destroy, or remove a hazardous substance that complies with MTCA cleanup requirements, including but not limited to: complying with cleanup standards, utilizing permanent solutions to the maximum extent practicable, and including adequate monitoring to ensure the effectiveness of the cleanup action.

Cleanup Action Plan: A document that selects the cleanup action and specifies cleanup standards and other requirements for a particular site. The cleanup action plan, which follows the remedial investigation/feasibility study report, is subject to a public comment period. After completion of a comment period on the cleanup action plan, Ecology finalizes the cleanup action plan.

Cleanup Level: The concentration (or amount) of a hazardous substance in soil, water, air, or sediment that protects human health and the environment under specified exposure conditions. Cleanup levels are part of a uniform standard established in state regulations, such as MTCA.

Cleanup Process: The process for identifying, investigating, and cleaning up hazardous waste sites.

Contaminant: Any hazardous substance that does not occur naturally or occurs at greater than natural background levels.

Feasibility Study: Provides identification and analysis of site cleanup alternatives and is usually completed within a year. Evaluates sufficient site information to enable the selection of a cleanup action. The entire Remedial Investigation/Feasibility Study (RI/FS) process takes about two years and is followed by the cleanup action plan.

Hazardous Site List: A list of ranked sites that require further remedial action. These sites are published in the Site Register.

Interim Action: Any remedial action that partially addresses the cleanup of a site. It is an action that is technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance at a facility; an action that corrects a problem that may become substantially worse or cost substantially more to address if the action is delayed; an action needed to provide for completion of a site hazard assessment, state remedial investigation/feasibility study, or design of a cleanup action.

Model Toxics Control Act: Refers to Chapter 70.105D RCW. Voters approved it in November 1988. The implementing regulation is found in Chapter 173-340 WAC.

Public Notice: At a minimum, adequate notice mailed to all persons who have made a timely request of Ecology and to persons residing in the potentially affected vicinity of the proposed action; mailed to appropriate news media; published in the local (city or county) newspaper of largest circulation; and the opportunity for interested persons to comment.

Public Participation Plan: A plan prepared under the authority of WAC 173-340-600 to encourage coordinated and effective public involvement tailored to the public's needs at a particular site.

Release: Any intentional or unintentional entry of any hazardous substance into the environment, including, but not limited to, the abandonment or disposal of containers of hazardous substances.

Remedial Action: Any action or expenditure consistent with MTCA to identify, eliminate, or minimize any threat posed by hazardous substances to human health or the environment, including any investigative and monitoring activities of any release or threatened release of a hazardous substance, and any health assessments or health effects studies conducted in order to determine the risk or potential risk to human health.

Remedial Investigation: Any remedial action that provides information on the extent and magnitude of contamination at a site. This usually takes 12 to 18 months and is followed by the feasibility study. The purpose of the Remedial Investigation/Feasibility Study is to collect and develop sufficient site information to enable the selection of a cleanup action.

APPENDIX A
FACT SHEET

Site Investigation Documents Available for Public Review and Comment

A PUGET SOUND INITIATIVE site

Reaching the goal of a healthy, sustainable Puget Sound

Ecology Wants Your Input!

The Department of Ecology is asking for your comments on a new proposed agreement to study a site on Puget Sound for cleanup. This Site, TC Systems, Inc., is one of several located on the waterfront that will be studied for cleanup under the state's Puget Sound Initiative.

TC Systems, Inc. is generally located between 10th and 11th Streets off of West Marine View Drive on Port Gardner Bay, in Everett, Snohomish County, WA.

You are invited to:

- **Review** the Agreed Order and Public Participation Plan.
- **Send** your comments to Ecology for consideration. Comments will be accepted *June 30 through July 30, 2010.*

See the box on the right for details about where to review documents and submit comments.

Site Background

Historically, Jamison Shingle Mill operated on this Site from about 1914 until about the late 1950s. The building was built on pilings over Port Gardner Bay. This enabled the mill to float logs right up to the facility. Also historically, Cruise-A-Home, Inc. operated on the site in the 1970s/early 80s. Cruise-A-Home engineered, designed and built fiberglass boats.

Comments Accepted

June 30 to July 30, 2010

Submit Comments and Technical Questions to:

Andy Kallus - Site Manager
WA Department of Ecology
Toxics Cleanup Program
P.O. Box 47600
Olympia, WA 98504-7600
Phone: (360) 407-7259
E-mail: andrew.kallus@ecy.wa.gov

DOCUMENT REVIEW LOCATIONS

Everett Public Library
2702 Hoyt Ave
Everett, WA 98201
Phone: (425) 257-8010

Hours: Mon.-Wed. 10 a.m.-9 p.m., Thurs.-Sat. 10 a.m.-6 p.m., Sun. 1-5 p.m.

WA Department of Ecology Headquarters
300 Desmond Drive SE
Lacey, WA 98503

By appointment only:
Contact Carol Dorn,
cesg461@ecy.wa.gov or
(360) 407-7224

Ecology's Toxics Cleanup Website
http://www.ecy.wa.gov/programs/tcp/sites/

Facility Site ID #: 10587741

Currently, the Site is owned by Norton Industries, Inc., and operated since about 1979 by TC Systems, Inc. and its predecessors (MARPAC Products, Inc. and Tri Coatings, Inc.). TC Systems chemically treats and paints metal parts in support of the aviation and boating industries, and is known to use acids, bases, paints, solvents, thinners and oils. It also prepares the metal parts by sandblasting.

In 2005, the Port of Everett sampled visible soil contamination that was found while repairing a stormwater pipeline located near the North Marina Ameron/Hulbert and TC Systems property line. Test results showed that the concentrations of polycyclic aromatic hydrocarbons (PAHs), poly-chlorinated biphenyls (PCBs), and arsenic in soil were greater than state Model Toxics Cleanup Act (MTCA) cleanup levels. Concentrations of arsenic in groundwater were also greater than MTCA cleanup levels. The North Marina Ameron/Hulbert site is currently being investigated under a separate Agreed Order with Ecology.

A sample of the settled material (i.e., sediment) in a stormwater catchbasin on the Site was collected in 2009. Test results showed that the concentrations of five metals (cadmium, chromium, copper, lead, and zinc) and two different PCBs were greater than state sediment management standards for these pollutants.

TC Systems conducted Phase I and Phase II site investigations of soil and groundwater on the Site in 2009. The test results of one groundwater sample showed that total petroleum hydrocarbons (TPH), specifically diesel and oil, were greater than MTCA cleanup levels for groundwater.

More study is needed to fully characterize the contamination at the TC Systems, Inc. Site.

Overview of the Agreed Order

The proposed agreement, called an Agreed Order, is a legal document between Ecology, and Norton Industries and TC Systems. These two companies are Potentially Liable Persons, or PLPs, at the Site. The Agreed Order describes the studies that the PLPs agree to perform on the Site.

The Agreed Order covers the following studies and documents:

- Remedial Investigation and Feasibility Study (RI/FS). It explains the work needed to look for and analyze contamination in Site media (e.g., soil and groundwater).
- RI/FS report. It presents the results of the study and proposes alternatives for cleanup actions.
- Draft Cleanup Action Plan (CAP). It uses RI/FS information to identify a preferred cleanup action and a schedule to remediate the contamination.

The purpose of the Agreed Order is to protect human health and the environment by ensuring that remedial actions will be conducted at a site where a release of hazardous substances has occurred. It also ensures that cleanup happens in a timely manner and according to Washington State's MTCA cleanup law.

Overview of the draft Public Participation Plan

Ecology and the PLPs are committed to providing the public with timely information and meaningful opportunities to participate in the cleanup process. As part of this commitment, Ecology and the PLPs

agreed to provide a public participation plan. This plan outlines how citizens and interested parties can learn about and provide input on the cleanup.

Your comments and ideas are needed to improve the cleanup. The public participation plan explains how Ecology will do the following:

- Notify the public when and where documents are available for review and comment.
- Notify the public about how they can become involved.
- Provide public participation opportunities.
- Consider public comments in cleanup decisions.

Why This Cleanup Matters

Protecting and restoring Puget Sound

Governor Chris Gregoire and the Washington State Legislature approved the Puget Sound Initiative. One of the objectives of the Initiative is to protect and restore Puget Sound, cleaning up 50-60 sites within one-half mile of the Sound. One of these is the TC Systems, Inc. Site. These cleanup actions will help to reduce pollution and restore habitat and shorelines in Puget Sound.

Several baywide areas in the Sound have been identified as high priority cleanup areas as part of this Initiative, including: Port Gamble, Dumas Bay, Padilla and Fidalgo Bays, Port Angeles, and Budd Inlet.

Other Port Gardner Puget Sound Initiative sites that are currently under Agreed Orders for cleanup include:

- JELD-WEN Site: A former wooden door plant, located at 300 West Marine View Drive.
- Everett Shipyard Site: A ship repair facility, located at 1016 14th Street.
- North Marina West End Site: A former marine services and general industrial site, located between 11th and 14th Streets at West Marine View Drive.
- North Marina Ameron/Hulbert: A former sawmill and current concrete pole manufacturing facility, located between 11th and 13th Streets at West Marine View Drive.
- Bay Wood Products: A former sawmill and log storage facility, located at 200 West Marine View Drive.
- ExxonMobil ADC: A former petroleum storage and distribution facility, located at 2717 and 2731 Federal Avenue.

For more information about the sites in Port Gardner Bay, contact Andy Kallus at (360) 407-7259 or andrew.kallus@ecy.wa.gov, or go to: http://www.ecy.wa.gov/programs/tcp/sites/psi/everett/psi_everett.html.

What Happens Next?

Once the public comment period ends, Ecology will review and consider all comments that have been received. The documents may be modified based upon your comments.

As future documents on the Site are developed, you will be notified of additional public comment periods.

TC Systems, Inc. Site

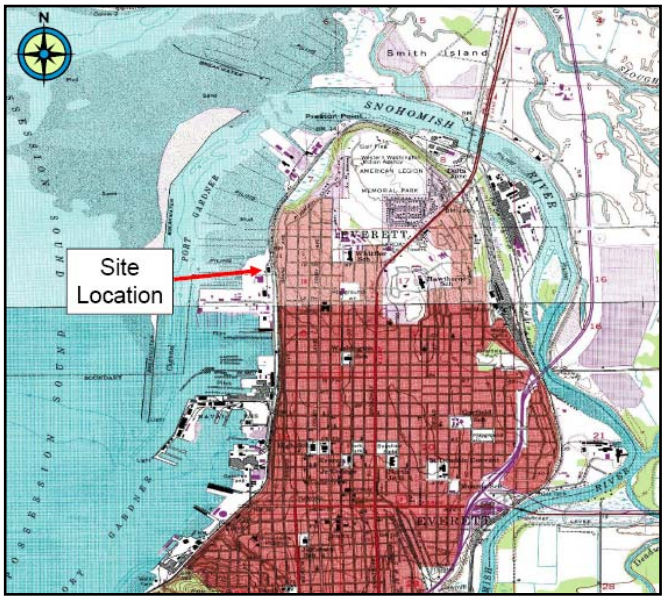
For information about other Ecology public comment periods, meetings, workshops, hearings, and open houses, please visit Ecology's public events calendar at: http://apps.ecy.wa.gov/pubcalendar/calendar.asp

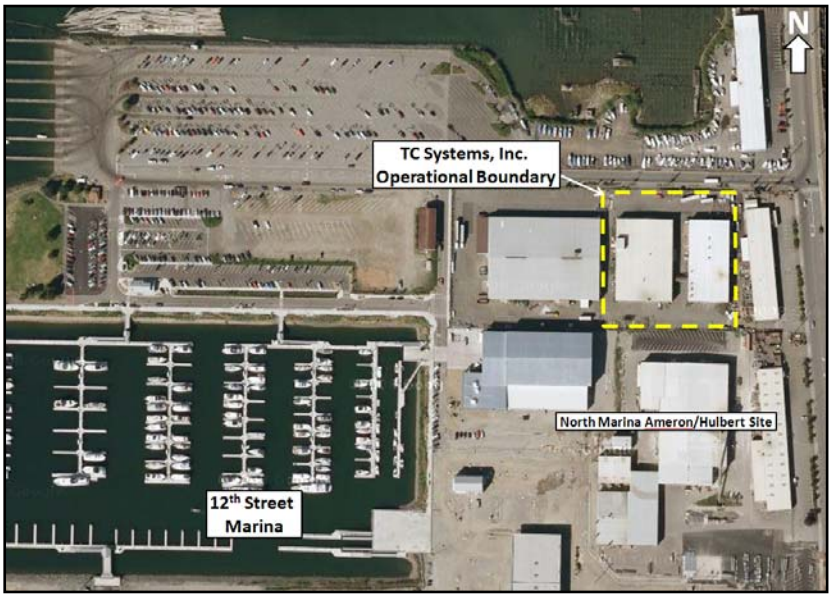
The TC Systems, Inc. Site is generally located between 10th and 11th Streets off West Marine View Drive, on Port Gardner Bay, Everett, WA. (Map Sources: USGS 7.5 Minute Quadrangle Maps, Everett and Marysville Quadrangles, Photo Revised, 1968 and 1973; and 2009 Google Imagery)

What can you do?

1. Read about the cleanup in this handout.
2. Get more detailed information by reviewing the supporting documents at the locations listed on the first page.
3. Write down your comments and questions. Send them to the Department of Ecology at the address shown on the back page.

We appreciate your comments and concerns. *Thank you.*





WASHINGTON STATE DEPARTMENT OF ECOLOGY

Toxics Cleanup Program
PO Box 47600
Olympia, WA 98504-7600

TC Systems, Inc., Everett
Snohomish County, WA

Ecology Seeks Public Comment on Draft Site Investigation Documents

Public Comment Period:
June 30 through July 30, 2010

Facility Site ID #: 10587741

Help with other languages and formats?

If you need this publication in an alternate format, please call the Toxics Cleanup Program at (360) 407-7170. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call (877) 833-6341.

Stantec Consulting Corporation
12034 134th Court NE, Suite 102
Redmond, WA 98052
Tel: (425) 298-1000
Fax: (425) 298-1020

Appendix Q to the RI/FS Work Plan

Sampling and Analysis Plan – Final
1032 West Marine View Drive
Everett, Washington

Stantec Project No.:
212302667

Submitted to:

TC Systems, Inc.
Mary Utick, President
1032 West Marine View Drive
Everett, WA 98201

&

Norton Industries, Inc.
James B. Schack, President
24415 142nd Avenue SE
Kent, Washington 98042

January 31, 2011

1032 WEST MARINE VIEW DRIVE – RI/FS WORK PLAN
RECORD OF REVIEW AND AMENDMENTS

Amendments to this Sampling and Analysis Plan and/or Quality Assurance Project Plan are summarized below, in accordance with Section 7.0 of the plan.

DATE	REVISION NUMBER	SUMMARY OF AMENDMENTS	REPRESENTATIVE'S INITIALS

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1.0 Introduction

This Sampling and Analysis Plan[1] (SAP) outlines procedures that will be followed during the Remedial Investigation and Feasibility Study (RI/FS) conducted at the TC Systems site located at 1032 West Marginal Way, Everett, Washington. The RI/FS is being conducted in accordance with Washington State Department of Ecology (Ecology) Agreed Order (Order) No. DE 7818. The purpose of this plan is to define the steps that will be used for the proper field investigation, sampling, and analysis conducted during upland activities associated with the project. In addition, this SAP will include a Quality Assurance Project Plan as well as closeout documentation requirements for the project. The Order identifies TC Systems, Inc. and Norton Industries, Inc. both as Potentially Liable Parties (PLPs).

Historic site information indicates the contaminants likely to be encountered during construction activities may include, but may not be limited to gasoline- and diesel-range petroleum hydrocarbons, polychlorinated biphenyls (PCBs), and arsenic.

This document is intended to serve as Appendix Q to the RI/FS Work Plan and is not intended to serve as a stand-alone document. The reader should reference the Figures and Appendices listed in the Table of Contents for the RI/FS Work Plan, as needed.

[1] The Sampling and Analysis Plan was originally drafted by Kane Environmental, Inc. (Kane Environmental). The finalized version is being edited and printed by Stantec Consulting Corporation at client request.

2.0 REMDIAL INVESTIGATION STUDY

At the TC Systems site, an RI/FS is being conducted in accordance with the Order as well as this Work Plan. The RI portion of the work will involve the collection and analysis of samples of various media. This SAP serves as the Project manual, specifying proper protocol and performance benchmarks for all field-work activities.

2.1 BACKGROUND

The TC Systems property (the Property) consists of two tax parcels (Parcel Numbers 29051800200700 and 29051800201300), located at 1032 West Marine View Drive in Everett, Washington. The Property is alternately addressed as 1032 and 1104 10th Street. The Property is located in an industrial and residential area in northwest Everett near Port Gardner Bay. According to historical records, the Property has been in use since approximately 1910. Until approximately 1973, the Property lay beneath the waters of Port Gardner Bay. A portion of the Jamison Shingle Mill occupied the Property from approximately 1910 until the 1960s, and appeared to contain the mill's steam dry kilns. In the mid-1960s the Port of Everett began a dredge and fill operation that eventually filled the Property and surrounding properties with soil. Cruise-A-Home purchased the Property in the mid-1970s and constructed the buildings (i.e., Buildings B and C) that currently occupy the Property between 1978 and 1980. Buildings B and C were occupied by Marpac Products Inc. and Tri-Coatings (known as TC Systems beginning in 1992). The businesses reportedly painted and coated metals. The Property went through a series of ownership changes in the early 1980s and was purchased by Norton Properties in 1983. In 1989, TC Systems leased both buildings and occupied the buildings until 2010.

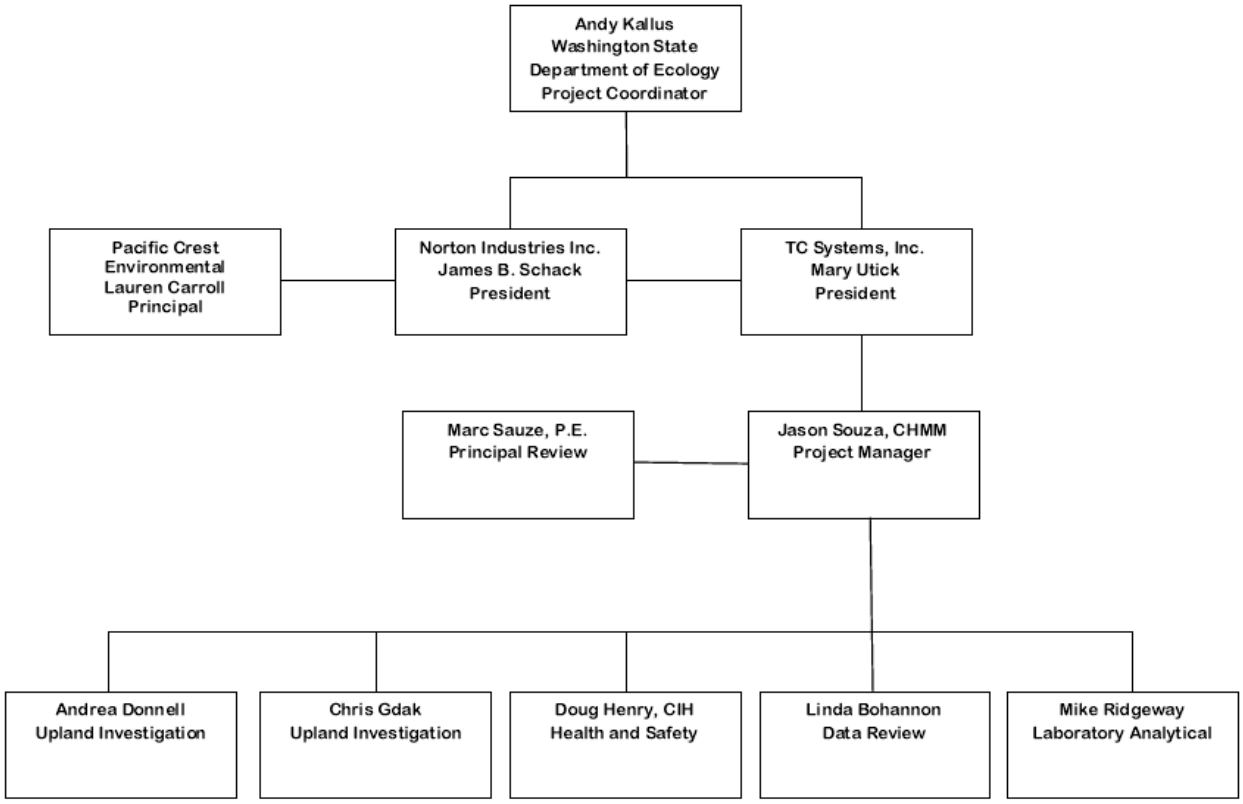
2.2 PROJECT PERSONNEL

The names, organization, and telephone numbers for key personnel on this project are listed below:

Name	Organization	Phone	Purpose
Andy Kallus	Ecology	(360) 407-7259	Site Manager
Jason Souza	Stantec Consulting Corporation	(206) 947-6372	Project Manager - RI/FS
Marc Sauze, P.E.	Stantec Consulting Corporation	(425) 298-1059	Principal Review
Chris Gdak	Stantec Consulting Corporation	(425) 298-1023	Field Operations Manager
Linda Bohannon	EcoChem, Inc.	(206) 233-9332	Analytical QA & Data Validation

Name	Organization	Phone	Purpose
Jim Schack	Norton Industries, Inc.	(714) 544-4481	Property Owner
Mark Utick	TC Systems, Inc.	(253) 631-3905	Former Operator

The organization chart for key project personnel is below:



2.3 PROJECT SCHEDULE

The Order was in public comment period from June 30 until July 30, 2010. The following schedule is based upon the requirements of the finalized Agreed Order. Table 1, presented after the narrative description of the schedule, summarizes that anticipated long-term schedule of the RI/FS.

RI/FS Work Plan – The RI/FS Work Plan submittal is due in draft to Ecology 75 calendar days after finalization. Ecology has 20 days to provide comments and subsequently the PLPs have 45 days to revise the draft to Ecology and make the Draft Final RI/FS Work Plan. Ecology then reviews the Draft Final RI/FS Work Plan, after which the PLPs have 20 days to make any final revisions to the Finalized RI/FS Work Plan.

Field RI/FS – Field activities will begin within 30 days of submittal of the final RI/FS Work Plan to Ecology; results within 30 days of completion of the field work (preliminary first in the form of a technical memorandum, followed by a formal report). If supplemental field investigation activities are required to delineate the extent and magnitude of contamination (if present) at the Site and/or to conduct pilot tests for treatment/remedial activities, the scope and schedule will be submitted to Ecology at this time. Due to the variability presented by additional sampling requirements (if any), the schedule enters a stage of unpredictability. However, data collected as part of any additional RI/FS activities will be supplied to Ecology in electronic format within 45 days of having been validated.

RI/FS Report Submittal – The draft RI/FS report is due to Ecology 120 days after Jason Souza (Project Manager) receives finalized analytical data from the field activities; Ecology will have 30 days to review the draft. The Draft-Final RI/FS will be submitted to Ecology 60 days thereafter, starting a 30-day comment period. Upon receipt of the feedback from the public-comment period, a Finalized RI/FS report will be submitted to Ecology.

Cleanup Action Plan (CAP) – The Draft CAP will be submitted to Ecology 45 days after the Final RI/FS goes into public comment. Upon submittal, the Draft CAP will undergo a 30-day review process and a subsequent 30-day revision period by the PLP Project Manager.

The overall anticipated deadlines are summarized in Table 1, below:

Table 1 – TC Systems RI/FS Schedule

Reference No.	Document Submittal / Review	No. of Days to Complete	Date of Completion
#1	**RI/FS Work Plan Submittal**		
1a	Draft RI/FS Work Plan	(75 days from end of public comment for Agreed Order)	10/13/10
1b	Ecology Review - Draft RI/FS Work Plan	(30 days)	11/12/10
1c	Draft Final RI/FS Work Plan - addressing comments/suggestions from Ecology	(45 days after Ecology provides comments[1b])	12/27/10
1d	Ecology Review - Draft Final RI/FS Work Plan	(20 days)	01/16/11
1e	Final Document: RI/FS Work Plan	(20 days after Ecology provides comments [1d])	02/05/11
#2	**Field RI/FS**		
2a	RI/FS Field Activities Commence	(within 30 days of submittal of the final RI/FS work plan [1e])	03/07/11

Reference No.	Document Submittal / Review	No. of Days to Complete	Date of Completion
2a-1	Timeline Estimated Field Work	15 days	03/22/11
2a-2	Timeline Estimated Analytical - Labs	21 days	04/12/11
2a-3	Timeline Estimated Data Validation	15 days	04/27/11
2b	Field RI Results to Ecology	(30 days after validation of all RI/FS analytical data [2a-3])	05/27/11
2c	Supplemental RI/FS Field Activities	Not Applicable	Not Applicable
2d	Environmental Data Submittals	(45 days after new data has been validated [2a-3])	06/11/11
#3	**RI/FS Report Submittal**		
3a	Draft RI/FS Report	(120 days after receipt of all final analytical data collected [2d])	10/09/11
3b	Ecology Review - Draft RI/FS Report	(30 days)	11/08/11
3c	Draft Final RI/FS Report	(60 days after receipt of Ecology comments)	01/07/12
3d	Public Comment Period	(30 days)	02/06/12
3e	Final RI/FS Report	(30 days after Ecology's response to public comment [3d])	03/07/12
#4	**Cleanup Action Plan (CAP) Submittal**		
4a	Draft CAP	(45 days after the draft final RI/FS Report is finalized and ready for public comment [3c])	02/21/12
4b	Ecology Review - Draft CAP	(30 days)	03/22/12
4c	Draft Final CAP	(30 days after submittal of Ecology's comments [4b])	04/21/12

The schedule for the actual cleanup action is not included in the proposed schedule. In accordance with Ecology's request, the schedule will be updated at the completion of the RI/FS work plan and prior to field work commencing. The aspects covered in the pending schedule will include:

- Consent Decree (CD) Negotiations
- Draft Final CAP and CD Public Review & Comment

- Ecology completes responsiveness summary
- Finalize CAP, and enter Consent Decree
- Prepare 1st Draft Engineering Design Report (EDR)
- Ecology Review of 1st Draft EDR
- Prepare Draft Final EDR
- Ecology Review of Draft Final EDR
- Prepare Final EDR
- Remedial Design & Permitting
- Procurement
- Cleanup Construction
- Upland
- In-Water (if necessary)
- Long Term Compliance Monitoring

3.0 REMEDIAL INVESTIGATION – FIELD SAMPLING PROTOCOL

The following portions of the Sampling and Analysis Plan document the approach to the field methodologies to be used in accordance with the Order.

3.1 OBJECTIVES

The SAP is being prepared as part of the Remedial Investigation of the former TC Systems property (1032 West Marine View Drive, Everett, Washington), as previously discussed. The SAP is intended to be a stand-alone document within the RI/FS Work Plan which documents the means and methods by which the remedial investigation field work is performed and the analytical procedures are to be conducted. In addition, the SAP documents the quality control and assurance benchmarks by which the information collected is to be scrutinized. Finally, the SAP is intended to satisfy requirements promulgated by the aforementioned Order.

If any archaeological resources are discovered during RI field activities including any excavations (although none are anticipated), work will be stopped immediately and Ecology, the Department of Archaeology and Historic Preservation (DAHP), the City of Everett Planning and Community Development Department, and the Tulalip Tribes Cultural Resources Department will be notified in a timely manner (current day if possible) and no later than the next business day. An archeologist will be retained for an onsite inspection and the parties mentioned above will also be invited to participate. The archaeologist will document the discovery and provide a professionally documented site form and report to the above-listed parties. In the event of any discovery of human remains, work will be immediately halted in the discovery area, the remains will be covered and secured against further disturbance, and the Everett Police Department and Snohomish County Medical Examiner will be immediately contacted, along with the DAHP Physical Anthropologist and authorized Tribal representatives. A treatment plan by the archaeologist will be developed in consultation with the above-listed parties consistent with RCW 27.44 and RCW 27.53 and implemented according to WAC 25-48.

3.2 SAMPLE LOCATIONS AND RATIONALE

Preliminarily, Appendix B of the Order presents the areas of investigation as initially requested by Ecology. The following field investigation locations are presented as they are listed in the Order.

Please note that the Order labels some of the locations with the designation of 'SB' in reference to strata-probe. Per the Order, either direct push or hollow-stem auger may be used for advancing the borings. If hollow-stem auger borings are selected, the designation in the RI may be changed to avoid confusion.

Borings TC-SB-1 to TC-SB-5 – Five boring locations between Buildings B and C. These locations were selected to characterize conditions near the wastewater treatment/chemical

storage areas (TC-SB-1 and TC-SB-2), the compressor shed (TC-SB-3), in an unpaved area adjacent to Building C (TC-SB-4), and in the vicinity of a paint booth area (TC-SB-5).

Borings TC-SB-6 to TC-SB-8 – Three borings located along the southern property boundary between the North Marina Ameron/Hulbert Site and the TC Systems property. These locations were selected to characterize conditions adjacent to the Ameron/Hulbert Site and in the vicinity of the oil affected area.

Boring TC-SB-9 – One boring at the southwest corner of the property. This location was identified to characterize conditions near the downstream end of the property's stormwater drainage system.

Borings TC-SB-10 and TC-SB-11 – Two borings located west of Building C. These locations were selected to characterize conditions down-gradient and in the vicinity of Building C which is used for painting, storage of hazardous waste, and sand blasting. This building also formerly housed operations from Cruise-A-Home Inc.

Borings TC-SB-12 and TC-SB-13 – Two borings located north of Buildings B and C. These locations were selected to characterize conditions north of these buildings. The groundwater flow direction at the site has not been characterized. Tidal action can make the flow pattern change at different times of the tide cycle. Therefore, a tidal study which would evaluate overall groundwater gradient trends (scope to be determined by PLPs) may be necessary to determine the actual gradient at the property.

Boring TC-SB-14 – One boring located inside Building B in the penetrant testing area. This boring was selected to characterize conditions where penetrant oils have been used inside the building and near a sump. The penetrant oil was in regular contact with the floor of the facility during operations.

Boring TC-SB-15 – One boring located inside Building B in the containment area underneath the process tank lines. This boring was selected to characterize conditions underneath the containment floor which was observed to be pitted and in need of resealing based on observations made by Ecology during a September 14, 2009 Dangerous Waste Compliance Inspection at the facility.

Boring TC-MW-1 – One soil boring/monitoring well located in the northeast portion of the Site and just north of Building B. This boring/well location was selected to characterize conditions where groundwater contamination was identified during the 2009 Phase II ESA. A groundwater sample collected at this location (see Exhibit B, Figure 1 of the Order) had TPH-diesel and -oil at concentrations of 1,200 µg/L and 860 µg/L, respectively. These concentrations exceed Ecology's MTCA Method A groundwater cleanup level for diesel and oil range organics.

3.3 BORING METHODOLOGY

Prior to advancing any borings, utilities are located by both public locating services (e.g. Call Before You Dig), as well as by private locating service provider under contract. Each proposed

boring location will be clearly marked and cleared of obstruction by both public and private locates. After the locates are performed, the areas will be photographed and reviewed with the drilling contractors prior to advancing borings. If utilities should require that the boring location be relocated a distance greater than 20 feet from the proposed location, the field staff will discuss the relocation with the project manager. Relocation of proposed borings will always occur in a direction which will not interfere with the overall objectives of the investigation. For the purposes of this investigation, two boring methodologies may be used: direct-push and hollow-stem auger.

Direct push borings will be advanced by using a truck-mounted, percussion-driven, direct-push split-spoon to advance the boring to selected depths. Each split spoon is fitted with a disposable low-density polyethylene liner and decontaminated with Alconox® and rinsed with de-ionized water between borings to prevent cross-contamination. Soil from each sample will be logged by an environmental scientist in accordance with United Soil Classification System (USCS).

Hollow-stem auger boring methods involve using a truck-mounted hollow-stem auger to advance the soil borings to selected depths. Samples will be collected at selected depths by driving a 2.5-foot, hollow split-spoon sampler into the soil by dropping a 140-pound weight, 30 inches. The dropping action of the weight to drive the spoon is referred to as a 'blow'. The number of time the weight is dropped is referred to as a 'blow count'. Blow counts will be recorded by depth during sample collection. The spoon will be removed from the boring, the plastic liner containing the soil core will be cut open, and physical characteristics of the soil will be recorded. A visual examination for discoloration of soil including the presence of sheens or non-aqueous phase liquid (NAPL) will then be made. The presence of any odor will also be documented. All auger flights and split spoons will be properly decontaminated using Alconox® and / or high-pressure, jetted steam to reduce the potential for cross contamination.

3.4 SOIL SCREENING METHODOLOGY

Field technicians will be wearing clean, disposable Nitrile gloves. The glove will be changed each time a new sample is handled and/or when the gloves become soiled, in order to prevent cross-contamination of samples. Soil samples will be placed in a clean, clear plastic bag with a stainless-steel spoon or equivalent. The bagged soil will be sealed, briefly shaken, and then allowed to equilibrate to allow vaporous head accumulations to become representative. The field personnel will then measure head space in a manner sufficient to not allow vaporous head concentration to escape (puncturing the bag as the PID tip is inserted will be the preferred method). All instrumentation and tools will be decontaminated by using either wipes or a water-alconox mixture and fresh-water rinse.

3.5 GROUNDWATER SAMPLING METHODOLOGY

Groundwater samples will be collected through a completed and developed groundwater monitoring well. The procedures for sampling groundwater require the proper installation, development, and purging of the well as described below.

Installation - Groundwater monitoring wells will be constructed in accordance with requirements contained in Washington State Minimum Standards for Construction and Maintenance of Wells (WAC 173-160). Monitoring well construction will incorporate two-inch, schedule 40 PVC sleeves installed to a depth of up to 10 feet below static groundwater elevation. The monitoring wells will be screened (0.020-inch slotted) sufficient to allow for tidal elevation change encountered at the site with a two-inch sump at the base of the well sleeve. An eight to ten inch diameter monitoring well filter pack of #10 sand surrounding the well casing is standard. Each well will be capped with a nine-inch diameter, flush-mounted monument casing secured by three 9/16" bolts. Inside each monument, the top of the monitoring well is further secured by a thread-tightened compression cap. The Ecology-issued unique well identification number tag will be fastened to the interior of the well monument.

Development - The monitoring wells will be developed after construction to remove formation material from the well borehole and the filter pack prior to groundwater level measurement and sampling. Development will be achieved by repeatedly surging the well with a surge block and purging the well until the water runs clear, but no less than five well casing volumes. During development, the purged groundwater will be monitored for the following field parameters:

- pH
- Conductivity
- Temperature
- Turbidity
- ORP
- DO

The wells will be developed until the turbidity of the purged groundwater decreases to 5 Nephelometric turbidity units (NTUs), if practicable. If the well dewaters during the initial surging and purging effort, one final well casing volume will be removed after the well has fully recharged, if practicable. Well development activities will be recorded on a Well Development form.

Sampling - After developing and prior to each sampling event, each well will be purged of groundwater using a centrifugal pump and disposable tubing. To minimize potential tidal influences on groundwater samples, sampling will be conducted at a time that corresponds to low-tide conditions. Also, groundwater samples will be collected using low flow techniques. Using a peristaltic pump, the groundwater will be pumped at a rate such that there is little or no water level drawdown or at such a rate that the water column remains stable and field parameters stabilize. The groundwater 'purge' water shall be collected and temporarily stored in properly-labeled 55-gallon drums and sealed for future disposal. The drums will be properly characterized and disposed of by a licensed soil and groundwater disposal contractor as described in Section 4.0.

3.6 SAMPLE TRANSPORT AND DOCUMENTATION PROTOCOL

All samples will be placed into laboratory-prepared glassware and transported in a cooler under chain-of-custody protocol to the laboratory. The cooler will be chilled to approximately four

degrees Celsius. Each cooler will include a trip blank to be analyzed for volatile organic compounds as well as a temperature blank to ensure accurate temperature measurement upon receipt.

All samples will be driven directly to Fremont Analytical Laboratories in Seattle, Washington (an Ecology accredited laboratory) while under the control of Stantec staff scientist who collected them. In the event that samples need to be couriered by someone other than the person initially in control of the samples, the cooler will be sealed with a custody seal. Custody seals will also be used in the event that the cooler is left overnight in Stantec's office at the end of a field day. In addition, the custody of the cooler will be released and received as appropriate during the transport. At no time will samples be delivered to the laboratory more than 24 hours after the time of collection.

3.7 BORING ABANDONMENT

When required; boring abandonment will proceed in accordance with applicable regulation (WAC 173-160-560). The original drill logs will be provided to the driller, as required. Surface features will be removed (e.g. well boxes). The boring will be filled with bentonite chips and allowed to hydrate with the groundwater. The upper foot of the boring will be capped with concrete. The very surface of the former boring will be finished to match the existing surrounding surface. All boring closure paperwork will be submitted to Ecology by the drilling subcontractor in accordance with applicable regulations.

3.8 SAMPLE DUPLICATES AND SPLIT SAMPLES

During the course of the investigation field duplicate samples will be collected at a rate of one duplicate sample in every 20 samples collected (5%). Both soil and groundwater samples should be collected in accordance with the procedures outlined previously. The collection of duplicate and/or split samples should only occur when and where sufficient and representative media is available for collection. If insufficient media is present for splitting from a given split spoon or boring, it is recommended that another location or interval be selected for such sampling to occur in a representative manner.

3.9 DECONTAMINATION, RINSATE AND EQUIPMENT SAMPLES

The drilling contractor will be equipped with a steam cleaning trailer for decontaminating all down-boring equipment used at the site. All auger flights and split spoons will be steam cleaned prior to and between each boring in order to prevent cross contamination. All hand tools such as trowels, bowls, and other equipment which contacts sample media will be decontaminated prior to and between each sample handling in the following manner:

- Loose media will be wiped or brushed away with a disposable paper towel;
- An alcohol rinse will be used if gross decontamination if visible product is observed;
- A secondary wipe with disposable paper towel (if alcohol is used);
- A tap-water rinse with scrub-brush;

- Alconox scrub;
- Tap water rinse, and;
- Deionized-water rinse.

One rinsate sample per day will be collected by pouring and collecting deionized water over properly decontaminated down-boring equipment each day field investigation activities (which use down-boring equipment) proceeds. All sampling equipment used for the collection of groundwater will be chemically-inert, disposable, and designed for the intended use. One equipment blank of deionized water pumped through unused disposable sampling equipment will be collected per sampling event.

4.0 INVESTIGATION DERIVED WASTE (IDW)

During the course of field activities, Investigation Derived Waste (IDW) will be generated. IDW includes all soil, water, sludges, gloves, bags, jars, or other waste material and debris, which are generated as a result of the remedial investigation.

Soil and water will be placed into steel 16- or 55-gallon waste drums as the material is collected. The exterior of each drum will be clearly labeled with a completed 'Non Classified Waste Material, Laboratory Analysis in Progress' label. The label will identify the type of material, site address, accumulation date, generator, generator's contact and phone number, as well as the contractor's contact and phone number. After each drum is filled, representative samples of the soil and water waste streams will be collected and analyzed for the target analytes in accordance with applicable waste regulations. After sample collection, the drum will be sealed and placed into a designated temporary holding area as necessary until shipped off site. Within 30-days of the receipt of finalized analytical data, the soil shall be transported and disposed of off-site by a third-party, licensed waste handling contractor in accordance with the applicable regulations (based upon the analytical data received for the soil and/or water in question). No IDW soil and/or water drum shall be left on-site for a period extending beyond 90-days, regardless of how full the container has become. A detailed drum inventory will be maintained both in the project file and at an on-site location. The drums will be kept either in an interior location and/or be kept free of dirt and debris in order to prevent turbid runoff from entering the stormwater system.

Used disposable clothing (including gloves, Tyvek®, or other protective clothing) as well as paper towels, containers, and other disposable equipment will be handled and disposed of as solid waste.

5.0 LABORATORY ANALYSIS

Soil samples will be delivered to Fremont Analytical Laboratories in Seattle, Washington under chain-of-custody protocol and logged for analysis on a standard turn-around schedule. Samples will be logged for one or more of the following analyses:

- Hexavalent Chromium by EPA Method 7196;
- Semi-volatile organic compounds by EPA Method 8270;
- Volatile organic compounds by EPA Method 8260;
- Hydrocarbon identification by NWTPH-HCID;
- Gasoline range petroleum hydrocarbons by NWTPH-Gx;
- Diesel range petroleum hydrocarbons by NWTPH-Dx;
- Polychlorinated biphenyls (PCBs) by EPA Method 8082;
- Priority Pollutant Metals in soil by EPA Method 6020;
- Priority Pollutant Metals in water by EPA Method 6020 and 200.8, and;
- Butyl Tin Species - EPA Methods SW846 8270D - SIM[2]

Samples will analyzed in accordance with the Quality Control / Quality Assuredness standards outlined in Fremont Analytical Laboratory's Standard Operating Procedures, included in Appendix B of this document as well as in accordance with the information presented in the project QAPP.

5.1 SOIL SAMPLE SCREENING AND ANALYSIS

During the advancement of borings, soil samples will be screened on a continuous basis from the split spoon. Screening will involve the use of a photoionization detector as well as visual and passive olfactory observations (as described in Section 3.4). If obvious signs of contamination are observed, a discrete sample will be collected from the area with the greatest level of observed contamination. Samples will be collected from each boring split spoon at the following depth intervals:

- 0.5 to 1.0 foot below ground surface (bgs);
- to 2.0 feet bgs, and;
- to 3.0 feet bgs.

The core (collected from the split spoon) will be divided into the identified sample intervals and the sample intervals will be individually homogenized using decontaminated stainless-steel bowls and spoons. The homogenized sample volumes will then be placed into the appropriate laboratory supplied sample containers. However, volatile organic compound (VOC) soil samples, including samples for hydrocarbon testing, will be collected from the *undisturbed* soil sample *prior* to homogenization, as described below.

[2] This method is comparable to Krone/PSEP (1988) GC/MS - SIM

If the soil consists primarily of course sand or finer grained material, the U.S. Environmental Protection Agency (EPA) method described below will be used. If soil containing significant gravel content is encountered, the EPA method is not effective and the previously accepted method of placing larger sample volume in a larger sample container will be used

EPA 5035A soil sampling procedures will be used to collect soil samples planned for VOCs or gasoline-range petroleum hydrocarbons (TPH-G) analyses, consistent with recent Ecology guidance. The EPA 5035A soil sampling method is intended to reduce volatilization and biodegradation of samples. The EPA 5035A procedure for soil sample collection is as follows:

- Collect soil "cores" using coring devices (i.e., EnCore® sampler, EasyDraw Syringe®, or a Terra CoreTM sampling device).
- Each "core" will consist of approximately 5 grams of soil.
- Collect three discrete "cores" from each sampling location.
- One EasyDraw Syringe® or TerraCoreTM device will be used to collect the three discrete "cores"; however, if the EnCore® samplers are used, three sampling devices are required.
- Remove excess soil from coring device.
- If EasyDraw Syringe® or Terra CoreTM sampling device are used for sample collection, place the "cored" soil directly into unpreserved 40 milliliter (ml) vials with a stirbar. If the EnCore® sampler is used, close the sampler for transport to the laboratory.
- Collect one 2-ounce (oz) soil jar of representative soil for moisture content and laboratory screening purposes. Fill the jar to minimize headspace.

Soil samples will also be collected and analyzed at depth intervals other than those described above if field screening (e.g., visual observations such as staining or the presence of abrasive grit, olfactory evidence or elevated PID readings) shows signs of contamination at different depth intervals (e.g., dark stained soil at one depth, abrasive grit red staining at another depth). Samples will be collected where field screening indicates that the soil interval contains elevated levels of contaminants.

If asphalt or concrete pavement is observed at the sampling location, sample depths will be modified so that the first sample depth interval is directly beneath the surface pavement (or concrete) and underlying base-course material. The adjustment to the depths will be noted in the field notes. Subsequent intervals will be adjusted respectively.

The most shallow sample interval at each boring location will be analyzed for priority pollutant metals, SVOCs, VOCs, and TPH-Dx. Additionally, soil samples from locations TC-SB-1 through TC-SB-4 and TC-SB-15 will be analyzed for hexavalent chromium. Sample collection protocol for VOC samples will be consistent with EPA 5035 methods (see above). Any sample which displays visual evidence of abrasive grit (e.g. blasting material) will be submitted for organotin analysis.

If the TPH-Dx analytical (with gas chromatogram or GC) results indicate detections in the oil-range, the PCBs will be added to the follow-on analyses for that soil interval. In addition, if the

GC indicates that the shallow samples have detections in the gasoline range, TPH-Gx will be added to the analyses for that interval.

If contaminants are detected in the shallow sample interval, then within the allowable soil sample holding time, the next deeper sample will be analyzed for the compounds which were reported in concentrations in excess of the analytical Method Reporting Limit (MRL, see Tables 13 through 19).

Each sample will be placed into the appropriate laboratory-prepared glassware and labeled in indelible marker with the following information before being placed into a cooler with an interior temperature not to exceed four degrees Celsius:

- Date and time that the material was collected;
- Unique sample identification number;
- Analysis required for that sample;
- Preservatives used in that glassware, and;
- Client and project reference information.

After filling the sample containers with the soil and placing them into a chilled cooler, the soil characteristics will be logged on a Boring Log (see Appendix C for an example) and/or Daily Field Report (Appendix D). Dual-phase product (if any) will be collected in a separate container for additional analytical consideration. The following information will be recorded on Borings Logs and/or Daily Field Reports.

- The location (lateral and vertical) of the sample collection point;
- Physical soil characteristics (USCS or equivalent);
- Person collecting material;
- PID or other reading as applicable, and;
- Any unusual characteristics of the sample observed by the field technician.

5.2 GROUNDWATER SAMPLE AND ANALYSIS

Groundwater samples will be collected at each of the boring locations with the exception of TC-SB-2 and TC-SB-4. The groundwater sample from location TC-MW-1 will be from a completed monitoring well. All other samples will either be groundwater grab samples using direct push techniques or monitoring wells installed and developed in accordance with technical standards outlined in applicable regulatory guidance documents. To minimize potential tidal influences on groundwater samples, sampling will be conducted at a time that corresponds to low tide conditions. Also, groundwater samples will be collected using low-flow techniques (i.e., using a peristaltic pump, the groundwater will be pumped at a rate such that there is little or no water-level drawdown or at such a rate that the water column remains stable and field parameters stabilize).

During the purging of the groundwater monitoring well, the purge water will pass through a flow-through cell equipped with groundwater parameter probe (Horiba U-22 or equivalent, calibrated daily in accordance with Section 6.2.8). Groundwater parameters will be logged on five-minute

intervals as the constituents stabilize. The goal will be to continue purging the groundwater sample until the turbidity decreases below a concentration of 5 NTUs. Purging will continue until all of the parameters have stabilized to within five percent of three consecutive readings (collected on five-minute intervals). However, if all other parameters have stabilized and turbidity remains in excess of 10 NTUs (based on average turbidity recorded for at least four replicates collected prior to sample collection), an aliquot of the sample may be logged to be centrifuged prior to analysis of non-volatile organic compounds. This measure will be implemented in order to reduce the potential for false positive results as the result of chemical compounds which can adhere to suspended particulate in the groundwater.

All groundwater samples will be analyzed for priority pollutant metals, SVOCs, VOCs and TPH. Additionally, groundwater samples from locations TC-SB-1 through TC-SB-4 including TC-SB-15 will be analyzed for hexavalent chromium. The groundwater sample from location TC-MW-1 will also be analyzed for PCBs. Groundwater samples collected using direct push techniques for metals analysis (including hexavalent chromium) will be filtered in the field using a 0.45 µm in-line filter prior to submittal to the laboratory. However, both total and filtered groundwater samples will be collected from location TC-MW-1.

With the exception of location TC-MW-1, groundwater samples will be submitted for NWTPH-HCID analysis with follow-up analysis for TPH-Dx and/or TPH-Gx if the HCID laboratory analytical data confirm the detections of hydrocarbons in the sample. Five groundwater samples exhibiting the highest concentrations of TPH in the diesel and/or oil based on the NWTPH-HCID analysis will be additionally analyzed for PCBs. The groundwater sample collected at location TC-MW-1 will be analyzed by TPH-Dx and TPH-Gx.

5.3 PRELIMINARY SCREENING LEVELS

Tables 13 through 19 summarize the laboratory method detection limits (MDLs), method reporting limits (MRLs) and Preliminary Screening Levels (PSLs) for the analytes included in the analyses listed in Section 5.0.

6.0 QUALITY ASSURANCE PROJECT PLAN (QAPP)

6.1 INTRODUCTION

The Quality Assurance Project Plan (QAPP) documents the quality assurance and control criteria for the SAP for the uplands characterization at TC Systems, Inc., Everett, Washington as part of the Order. The media included in this QAPP include soil and groundwater.

6.2 DATA QUALITY OBJECTIVES AND ASSURANCE

This section of the QAPP will discuss the control and standards by which Data Quality Objectives (DQOs) are measured as part of the RI/FS process. The RI/FS is being conducted in order to determine the extent to which, if any, hazardous materials have been released which may have deleterious effects on human health and the environment as a result of historic operations at the Site. This QAPP addresses soil and groundwater DQOs, specifically. The parameters for determining whether any given set of data is considered representative for addressing the objectives of the RI/FS are discussed in the following text.

6.2.1 Precision

When reviewing analytical data performance standards, precision is commonly defined as the degree of mutual agreement among independent measurements as the result of repeated application of the same processes under similar conditions. Precision describes how the output of a repeated analytical procedure is likely to vary based upon the exact same input parameters and is expressed in terms of the standard deviation or relative percent differences (RPDs). If the RPD is within control limits, then the precision of the measured function is within acceptable parameters.

The RPD can be used to determine the precision of known standards introduced during analyses, such as surrogate recoveries. This would measure the precision of the analytical equipment being used during the analysis. For the purposes of this QAPP, laboratory analytical procedures are considered within acceptable tolerances is the Laboratory Control Sample (LCS) are within their respective limits.

The precision of duplicate sampling can be measured by analyzing duplicate, or split samples. As part of this study, duplicate samples will be collected at a frequency of 5% and their respective values compared to each other. The acceptable levels of RPD for a duplicate sample vary based upon media, analytical method, and the Method Reporting Limit (or MRL).

6.2.2 Accuracy

Accuracy is the statistical measurement of the difference between a reported value and the true value. The difference between an analytically-generated value and the true value can be

reported as either a subtractive difference or as a ratio between the two numbers. A portion of accuracy includes the precision (or imprecision) of the sampling and analytical methods being evaluated, as well as systematic bias inherent to the prescribed sampling and analytical methods used. The accuracy of the analysis depends heavily upon the magnitude of the imprecision due to random imprecision as well as methodological bias.

Analytical accuracy will be measured by evaluating the recovered surrogate spikes into an LCS to a control limit. The goal of effective sampling and analysis is to quantify the accuracy and precision for each batch of samples evaluated. Control limits as of the publication date of this document for accuracy of the analytical methods anticipated for this project are summarized on Table 2.[3]

Table 2 – Summary of Method Quality Objectives for

Polychlorinated Biphenyls (PCBs) by EPA Method 8082

Quality Control Element	Frequency of Implementation	Acceptance Criteria
Initial Calibration (IC)	After CCV, LCS failure or after any machine maintenance.	% Recovery: 75%-125%
Continuing Calibration Verification (CCV)	At the beginning and end of analytical sequence, and after every 10 samples	% Recovery: 75%-125%
Method Blank (MB)	1 per extraction batch (<20 samples)	Method Reporting Limit (MRL)
Laboratory Control Sample (LCS)	1 per extraction batch (<20 samples)	% Recovery: 65%-135%
Matrix Spike (MS)	1 per extraction batch (<20 samples)	% Recovery: 65%-135%
Matrix Spike Duplicate (MSD)	1 per extraction batch (<20 samples) or Sample Duplicate	• % Recovery: 65%-135% • Relative Percent Difference (RPD%) = 30%
Sample Duplicate	1 per extraction batch (<20 samples) or MSD	• MRL • RPD% = 30%
Surrogate	Every sample	% Recovery: 65%-135%

[3] Subject to periodic updating due to control chart updating at the laboratory.

Table 3 – Summary of Method Quality Objectives for Hydrocarbon Identification (NWTPH-HCID)

Quality Control Element	Frequency of Implementation	Acceptance Criteria
Stock Standards	Every 20 samples	% Recovery: 65%-135%
Method Blank (MB)	1 per extraction batch (<20 samples)	Method Reporting Limit (MRL)
Laboratory Control Sample (LCS) - Diesel	1 per extraction batch (<20 samples)	% Recovery: 65%-135%
Sample Duplicate	1 per extraction batch (<20 samples) or MSD	• MRL
Surrogate	Every sample	% Recovery: 65%-135%

Table 4 – Summary of Method Quality Objectives for Gasoline Range Organics (NWTPH-Gx)

Quality Control Element	Frequency of Implementation	Acceptance Criteria
Stock Surrogate Standard / Continuing Calibration Verification (CCV)	At the beginning and end of analytical sequence, and after every 20 samples	% Recovery: 75%-125%
Initial Calibration (IC)	After CCV, LCS failure or after any machine maintenance.	% Recovery: 75%-125%
Method Blank (MB)	1 per extraction batch (<20 samples)	Method Reporting Limit (MRL)
Laboratory Control Sample (LCS)	1 per extraction batch (<20 samples)	% Recovery: 65%-135%

Quality Control Element	Frequency of Implementation	Acceptance Criteria
Sample Duplicate	1 per extraction batch (<20 samples)	• MRL • RPD% = 30%
Surrogate	Every sample	% Recovery: 65%-135%

Table 5 – Summary of Method Quality Objectives for Diesel Range Organics (NWTPH-Dx)

Quality Control Element	Frequency of Implementation	Acceptance Criteria
Stock Surrogate Standard / Continuing Calibration Verification (CCV)	At the beginning and end of analytical sequence, and after every 20 samples	% Recovery: 75%-125%
Initial Calibration (IC)	After CCV, LCS failure or after any machine maintenance.	% Recovery: 75%-125%
Method Blank (MB)	1 per extraction batch (<20 samples)	Method Reporting Limit (MRL)
Laboratory Control Sample (LCS)	1 per extraction batch (<20 samples)	% Recovery: 65%-135%
Sample Duplicate	1 per extraction batch (<20 samples)	• MRL • RPD% = 30%
Surrogate	Every sample	% Recovery: 65%-135%

Table 6 – Summary of Method Quality Objectives for Semi-Volatile Organic Compounds by EPA Method 8270

Quality Control Element	Frequency of Implementation	Acceptance Criteria
Initial Calibration (IC)	After CCV, LCS failure or after any machine maintenance.	• % Recovery: 50%-130% BN • % Recovery: 40%-140% A

Quality Control Element	Frequency of Implementation	Acceptance Criteria
Continuing Calibration Verification (CCV)	At the beginning and end of analytical sequence, and after every 10 samples	• % Recovery: 50%-130% BN • % Recovery: 40%-140% A
Method Blank (MB)	1 per extraction batch (<20 samples)	Method Reporting Limit (MRL)
Laboratory Control Sample (LCS)	1 per extraction batch (<20 samples)	• % Recovery: 50%-130% BN • % Recovery: 40%-140% A
Matrix Spike (MS)	1 per extraction batch (<20 samples)	• % Recovery: 50%-130% BN (with limited matrix interference) • % Recovery: 40%-140% A (with limited matrix interference)
Matrix Spike Duplicate (MSD)	1 per extraction batch (<20 samples) or Sample Duplicate	• % Recovery: 50%-130% BN (with limited matrix interference) • % Recovery: 40%-140% A (with limited matrix interference)
Sample Duplicate	1 per extraction batch (<20 samples) or MSD	• MRL • RPD% = 50%
Surrogate	Every sample	• % Recovery: 50%-130% BN (with limited matrix interference) • % Recovery: 40%-140% A (with limited matrix interference)

BN – Base Neutral
A - Acid

Table 7 – Summary of Method Quality Objectives for

Volatile Organic Compounds by EPA Method 8260

Quality Control Element	Frequency of Implementation	Acceptance Criteria
Initial Calibration (IC)	After CCV, LCS failure or after any machine maintenance.	% Recovery: 65%-135%

Quality Control Element	Frequency of Implementation	Acceptance Criteria
Continuing Calibration Verification (CCV)	At the beginning and end of analytical sequence, and after every 10 samples	% Recovery: 65%-135%
Method Blank (MB)	1 per extraction batch (<20 samples)	Method Reporting Limit (MRL)
Laboratory Control Sample (LCS)	1 per extraction batch (<20 samples)	% Recovery: 65%-135%
Matrix Spike (MS)	1 per extraction batch (<20 samples)	% Recovery: 65%-135%
Matrix Spike Duplicate (MSD)	1 per extraction batch (<20 samples) or Sample Duplicate	• 65%-135% • Relative Percent Difference (RPD%) = 30%
Sample Duplicate	1 per extraction batch (<20 samples) or MSD	• MRL • RPD% = 30%
Surrogate	Every sample	% Recovery: 65%-135%

Table 8 – Summary of Method Quality Objectives for Metals by EPA Method 6020

Quality Control Element	Frequency of Implementation	Acceptance Criteria
Initial Calibration (IC)	Daily and/or every machine run	Low-Level Check Standard ± 1
Initial Calibration Verification (ICV) – 2nd Source	After Initial Calibration	% Recovery: 90%-110%
Continuing Calibration Verification (CCV)	At the beginning and end of analytical sequence, and after every 10 samples	% Recovery: 90%-110%
Continuing Calibration Blank (CCB)	Every 10 samples	Method Reporting Limit (MRL)
Method Blank (MB)	1 per extraction batch (<20 samples)	Method Reporting Limit (MRL)
Laboratory Control Sample (LCS)	1 per extraction batch (<20 samples)	% Recovery: 65%-135%
Matrix Spike (MS)	1 per extraction batch (<20 samples)	• % Recovery: 65%-135% (with limited matrix interference) • % Recovery: 50%-150% (with limited matrix interference) for Al, Ca, Fe, Mg, K & Na
Matrix Spike Duplicate (MSD)	1 per extraction batch (<20 samples) or Sample Duplicate	• % Recovery: 65%-135% (with limited matrix interference) • % Recovery: 50%-150% (with limited matrix interference) for Al, Ca, Fe, Mg, K & Na • Relative Percent Difference (RPD%) = 30%
Sample Duplicate	1 per extraction batch (<20 samples) or MSD	• MRL • RPD% = 30% (50% for Al, Ca, Fe, Mg, K & Na with limit matrix interference)

Quality Control Element	Frequency of Implementation	Acceptance Criteria
Post Digestion Spike	As needed with Matrix Interference	• % Recovery: 65%-135% (with limited matrix interference) • % Recovery: 65%-135% (with limited matrix interference) for Al, Ca, Fe, Mg, K & Na

Table 9 – Summary of Method Quality Objectives for Metals by EPA Method 200.8

Quality Control Element	Frequency of Implementation	Acceptance Criteria
Initial Calibration (IC)	Daily	
Initial Calibration Verification (ICV) – 2nd Source	After Initial Calibration	% Recovery: 90%-110%
Continuing Calibration Blank (CCB)	Every 10 samples	Method Reporting Limit (MRL)
Continuing Calibration Verification (CCV)	At the beginning and end of analytical sequence, and after every 10 samples	% Recovery: 90%-110%
Method Blank (MB)	1 per extraction batch (<20 samples)	Method Reporting Limit (MRL)
Laboratory Control Sample (LCS)	1 per extraction batch (<20 samples)	% Recovery: 85%-115%
Matrix Spike (MS)	1 per extraction batch (<20 samples)	• % Recovery: 70%-130% for regulated metals • % Recovery: 65%-135% for secondary/non-regulated metals • % Recovery: 50%-150% (with limited matrix interference) for Al, Ca, Fe, Mg, K & Na

Quality Control Element	Frequency of Implementation	Acceptance Criteria
Matrix Spike Duplicate (MSD)	1 per extraction batch (<20 samples) or Sample Duplicate	• % Recovery: 70%-130% for regulated metals • % Recovery: 65%-135% for secondary/non-regulated metals • % Recovery: 50%-150% (with limited matrix interference) for Al, Ca, Fe, Mg, K & Na • Relative Percent Difference (RPD%) = 30%
Sample Duplicate	1 per extraction batch (<20 samples) or MSD	• MRL • RPD% = 30% (50% for Al, Ca, Fe, Mg, K & Na with limit matrix interference)
Post Digestion Spike	As needed with Matrix Interference	• % Recovery: 70%-130% (with limited matrix interference) • % Recovery: 65%-135% (with limited matrix interference) for Al, Ca, Fe, Mg, K & Na

Table 10 – Summary of Method Quality Objectives for Hexavalent Chromium by EPA Method EPA 7196A

Quality Control Element	Frequency of Implementation	Acceptance Criteria
Calibration Verification (CV)	At the beginning and end of analytical sequence, and after every 20 samples	% Recovery: 65%-135%
Method Blank (MB)	1 per extraction batch (<20 samples)	Method Reporting Limit (MRL)
Check Standard – 2nd source	1 per 15 samples	% Recovery: 65%-135%
Laboratory Control Sample (LCS)	1 per extraction batch (<20 samples)	% Recovery: 65%-135%
Surrogate	Every sample	% Recovery: 65%-135%

Quality Control Element	Frequency of Implementation	Acceptance Criteria
Matrix Spike (MS)	1 per extraction batch (<10 samples)	% Recovery: 65%-135%
Matrix Spike Duplicate (MSD)	1 per extraction batch (<10 samples) or Sample Duplicate	• 65%-135% • Relative Percent Difference (RPD%) = 30%
Sample Duplicate	1 per extraction batch (<20 samples) or MSD	• MRL • RPD% = 30%

Table 11 - Data Quality Objectives for Butyl Tins in Soil

Parameter	Precision (duplicates)	Laboratory Control Spike Recoveries [a]	Matrix Spike Recoveries	Completeness
Butyl Tins	+/- 4-% RPD	10-144	10-144*	90%

[a] varies with each compound
* Advisory

6.2.3 Representativeness

Any given analytical results can be considered representative if the reported concentration accurately reflects the actual concentration in the field conditions. In order to ensure that data is representative, several factors need to be carefully considered prior to conducting an investigation. The overall sampling plan, which includes where each sample is to be collected, which media is included in the sampling, and that rationale for the sample collection (based upon current and historic site conditions) is summarized in Section 3.2. Proper sample methodologies (such as sample collection, splitting, labeling, transport and other factors), as discussed in Sections 3.3 through 3.9, can also impact the level to which a sample is considered representative. Finally, laboratory analytical practices can also impact the level to which a sample is considered representative, as discussed in throughout this QAPP.

6.2.4 Comparability

Comparability is a measure of the confidence with which one set of data can be compared to another data set. Comparability is increased by eliminating the number of variables during a sampling and analysis exercise. Variability is reduced by documenting and following standardized field and analytical practices, recognized as industry standards and/or regulations. Standardized field practices (including documentation) are presented throughout the SAP. Laboratory analytical data will be reported in the standard units and measurements used for the

applicable regulatory threshold against which the sample is being compared. In addition, analytical data will be presented in a standardized, comparable format.

The purpose of the SAP and QAPP is to document the standardized practices for the sampling in order to produce accurate and comparable data which is representative of the Site. It should be noted that when comparing data, actual field and sample condition encountered may greatly limit the comparability of analytical data.

6.2.5 Completeness

For the purposes of this RI/FS, completeness is a comparison between the collected, valid data and the total amount of data required in order to accurately characterize the Site in a representative manner. The completeness of the characterization of the project is a subjective determination established through internal and regulatory review of the characterization data collected to-date. Measures to re-evaluate the level of completeness of the characterization are built into the RI/FS. Section 3.2 summarizes the locations and media to be sampled at the Site as part of the field investigation portion of the project. However, subsequent evaluation of the data obtained during the investigation may require addition sampling be conducted in order to obtain a characterization of the Site which can be considered complete.

6.3 FIELD QUALITY ASSURANCE PRACTICES

Throughout the course of the field-work portion of the project, accurate execution of field quality control practices will be conducted to ensure a complete characterization of the Site. The following sections detail the practices to be used by field and management personnel to ensure quality control procedures are followed during the course of the RI/FS.

6.3.1 Field Documentation

Field staff will be familiar with the historic conditions of the site and have access to all site documentation prior to the field work being conducted. During field operations, data will be directly recorded in a paginated and bound field note book (raw field notes). The field technician will record in waterproof ink, on waterproof paper. Edits to recorded information on raw field notes will be conducted by means of drawing a single line through the errant information, with the initials of the technician. Raw field notes will include information such as:

- The name of the technician performing the work;
- The date and time of observations;
- Subcontractors performing work;
- Distance and depth measurements with reference points;
- Field instrument information including calibration, errors, and readings displayed;
- Unusual sample observations including visual and olfactory observations, if any;
- Soil characterization observations;
- Overall site conditions which may have an impact on representativeness of data;
- The number and containers of any samples collected;

- Comments referring to any photographs taken during the field work, and;
- Any information which the qualified field technician deems important to the overall conditions of the Site during operations conducted on that day.

At the conclusion of each operational day, the field notes and photographs will be transcribed into a Daily Field Report (see Appendix D for an example) for the review of the Project Manager (with copies of the raw field notes included). Discrepancies, if any, will be corrected in the finalized copy of the Daily Field Report.

6.3.1.1 Record Retention and Retrievability

In order to ensure that none of the information collected on raw field notes is lost, a copy of the notes will be made at the conclusion of each field day. The copy will be included as part of the finalized Daily Field Report, along with any photographs collected during that day.

The finalized Daily Field Report (and all of the components discussed herein) will be saved to an on-site server at Stantec Consulting Corporation, Inc.'s (Stantec) office in Redmond, Washington. The server is backed up on a daily basis, to ensure record retention in the event of a computer error. The information will be collated by project number, task, and date to ensure future retrievability.

6.3.2 Decontamination / Cross Contamination

During field activities, Stantec field technician will exercise due diligence to eliminate cross contamination from being introduced into samples collected in the field. Nitrile gloves will be worn during all field activities where samples are being handled. New gloves will be donned prior to each sample being handled.

Samples collected into bottles will be placed into individual sealed plastic bags to prevent gross contamination from transferring onto other sample containers. All equipment that contacts multiple samples will be decontaminated in accordance with the procedures listed in Section 3.9. Finally, rinsate samples will be collected throughout the project on an established schedule to document proper decontamination procedures.

6.3.3 Field Instrument Calibration

During the course of the field investigation activities, field instruments are schedule for use to assist in documenting on-site sample and media conditions at the time of collection. These instruments include:

- A Horiba U-22 equipped with a flow-through cell used to measure groundwater field parameters such as pH, turbidity, total dissolved solids, temperature, dissolved oxygen, and conductivity;
- A RAE Systems Mini-RAE 2000 equipped with a 10.6eV lamp used to evaluate sample head space for volatile organic compounds, and;

- A RAE Systems Multi-RAE used to evaluate ambient air conditions against lower explosion limits, oxygen limits, time-weighted and short-term exposure limits.

All equipment will be maintained in proper working order and calibrated in accordance with the manufacturer's requirements and specifications each day prior to initiating field activities. Should equipment display operational errors during use, the field technician will document the error in the raw field notes, consult the manual, and correct the issue according to the operational instructions for the instrument in question. If the error cannot be corrected, the field technician will contact the Project Manager immediately and a replacement instrument will be immediately brought to the site.

6.3.4 Sample Handling Procedures

During the course of the field work portion of the RI/FS, documented and established field-work practices will be followed in order to ensure that the data obtained is accurate and defensible. Those practices are outlined specifically throughout Sections 3.3 through 3.9. Any additions, deletion, or variations to those work practices should be documented accurately in the raw field notes, discussed with the Project Manager, and an explanation documented in the Daily Field Reports.

The sample container sizes, number of containers per sample, preservative, and holding times for each schedule analysis are summarized in the table below.

Table 12 – Sample Container and Preservation Summary

Analysis	Media	Containers	Number and Size	Preservation / Handling	Holding Time
NWTPH-HCID	Soil	4oz jar	1(1) – 40z jar	None	Extract within 14 Days / Analyze within 40 Days of Extraction
NWTPH-Gx		4oz jar with field preservation kit	(1) – 40z jar (2) – 40mL VOA with MeOH	MeOH	Extract within 14 Days / Analyze within 40 Days of Extraction
NWTPH-Dx		4oz jar	(1) – 40z jar	None	Extract within 14 Days / Analyze within 40 Days of Extraction
Semi-volatiles		4oz jar	(1) – 40z jar	None	Extract within 14 Days / Analyze within 40 Days of Extraction

Analysis	Media	Containers	Number and Size	Preservation / Handling	Holding Time
Volatile organic compounds		4oz jar with field preservation kit	(1) – 40z jar (2) – 40mL VOA with Sodium Bisulfate	Sodium Bisulfate	Extract within 14 Days / Analyze within 40 Days of Extraction
PCBs		4oz jar	(1) – 40z jar	None	Extract within 14 Days / Analyze within 40 Days of Extraction
Hexavalent Chromium		4oz jar	(1) – 40z jar	None	Analyze within 28 Days
Metals		4oz jar	(1) – 40z jar	None	Analyze within 6 Months / Mercury within 28 days
Butyl Tins		8 oz. Glass	(1) – 150 g	Cool <6°C Freeze -18°C Cool <6°C	14 days until extraction 1 year until extraction 40 days after extraction
NWTPH-HCID	Water	Glass Amber	(1) – L	HCL	Extract within 7 Days / Analyze within 40 Days of Extraction
NWTPH-Gx		40mL Glass VOA	(3) – 40mL	HCL	Analyze within 14 Days
NWTPH-Dx		Glass Amber	(1) – L	HCL	Extract within 7 Days / Analyze within 40 Days of Extraction
Semi-volatiles		Glass Amber	(1) – L	None	Extract within 7 Days / Analyze within 40 Days of Extraction
Volatile organic compounds		40mL Glass VOA	(3) – 40 mL	HCL	Analyze within 14 Days
PCBs	Water	Glass Amber	(1) – L	None	Extract within 7 Days / Analyze within 40 Days of Extraction
Hexavalent		HDPE Bottle	(1) – 500mL	None	Analyze within 24 Hours

Analysis	Media	Containers	Number and Size	Preservation / Handling	Holding Time
Chromium					
Metals[4]		HDPE Bottle	(1) – 500mL	HNO^3	Analyze within 6 Months / Mercury within 28 days

6.3.5 Quality Control Sampling

During the course of sample collection, additional samples will be submitted to the laboratory as part of the overall quality control program. The following sections describe the types and quantities of samples to be collected and submitted to the laboratory, as well as their intended purposes.

6.3.5.1 Temperature Blanks

As detailed in Section 3.6, the temperature of each cooler will be confirmed with a temperature blank. One temperature blank per cooler will be included. The temperature blank will be documented on the chain-of-custody. The cooler temperature will be verified upon receipt at the laboratory and the results will be included in the analytical data report narrative.

6.3.5.2 Volatile Organic Compound Blanks

Each cooler containing samples to be analyzed for volatile organic compounds will include a set of trip blanks. The trip blanks are filled with deionized water at the laboratory and will be logged onto the chain-of-custody for analysis of volatile organic compounds by EPA Method 8260. The trip blanks assist in documenting whether the glassware, samples and/or cooler were exposed to volatile organic compounds which could bias the data (resulting in elevated and erroneous concentrations). The trip blank will accompany VOC and TPH-G groundwater sample containers during transportation to and from the field, and then will be returned to the laboratory with each shipment of VOC and TPH-G samples.

6.3.5.3 Duplicate Samples

Blind field duplicate samples for both soil and water media will be collected during the course of the field sampling activities at a frequency of 5% (i.e., one per 20 samples). Field duplicates for all media will be submitted “blind” to the laboratory as discrete samples (i.e., given unique sample identifiers to keep the duplicate identity unknown to the laboratory), but will be clearly

[4] Bottles preserved with nitric acid should only be used in the field for total metals and for field-filtered dissolved metals samples. If filtering is required to be performed at the laboratory, the field technician should use a non-nitric preserved 500mL poly bottle.

identified in the field log. In addition, duplicate analysis of one sample (selected by the laboratory) will be conducted at a frequency of one per batch. The results will be presented in terms of RPD. During the course of the data validation, the RPD for duplicate field and laboratory duplicate samples will be evaluated and discussed in the course of the finalized reporting process.

6.3.5.4 Rinsate Samples

Field rinsate blanks will consist of deionized water passed over decontaminated sampling equipment and transferred to sample containers for analysis at the laboratory. Field rinsate blanks are used to identify potential cross contamination between the sampling equipment and the sample. Proper decontamination of equipment will be conducted in accordance with Section 3.9. Deviations from the prescribed practices will not occur without the consent of the Project Manager; any deviations from the prescribed practices will be clearly documented in the project records.

During down-boring activities, one rinsate sample will be collected per day to verify that the boring equipment has been properly decontaminated. The results will be presented in the finalized report.

6.3.5.5 Method Blanks

A minimum of one laboratory method blank will be analyzed for each batch of twenty samples with a minimum of one method blank per batch to assess possible laboratory contamination. Method blanks will contain all reagents and undergo all requisite steps for analysis.

6.3.5.6 Control Samples

Control samples will be analyzed at a frequency of one per analytical batch and no less than one per batch of twenty samples. The control sample will be at a concentration within the range of the calibrated instrument, but at a different concentration that the standards used to establish the calibration curve.

6.3.5.7 Matrix Spikes

Matrix spike samples will be analyzed at a frequency of one sample for each batch and no less than one matrix spike sample per batch of twenty. The matrix spike helps document interference due to matrices and assures that extraction and concentration levels are within acceptable QA/QC tolerances. The matrix spike sample will be prepared by introducing concentrations of verified spike standard into an aliquot of sample collected in the field.

6.4 DATA MANAGEMENT PRACTICES

The section of the QAPP documents the procedures which will be used for managing the quality and integrity of the data generated during the course of the RI/FS project.

6.4.1 Field-Recorded Data Management

The procedures for the recording of field data and Daily Field Reports are discussed in Section 6.3.1.

6.4.2 Laboratory Analytical Data Management

Laboratory analytical data will be presented in accordance with the discussion presented in Section 5.0. In addition, Fremont Analytical will prepare both written and electronic data deliverables (EDD) in standardized program formats (e.g. Excel or database formats). For the purposes of this project, the analytical data will be requested in Excel format, for ease of entry into Ecology's Environmental Information Management System (EIM) database. In order to reduce errors, the format will be the same as Ecology's EIM database.

6.4.3 Data Review, Verification, and Validation

Field and laboratory data generated during the project will be reviewed, verified, and validated. Field data entered into the database will be verified. Errors identified during the verification of data will be corrected prior to release of the final data.

The laboratory is responsible for verifying analytical results prior to the submittal of the data to the Data Manager. Initially, all analytical data generated by the laboratory are verified by the laboratory. During the analysis process, the analyst and the Laboratory QA Manager verify the results have met various performance-based control limits (e.g., surrogate recoveries and continuing calibration). Non-conformance of various method QC requirements and control limits warrants the re-analysis and/or re-extraction of a sample.

Once the laboratory has released the data, the data will be reviewed by the Project Manager. The Project Manager will review the data package to verify that all samples are accounted for. Finally, the third-party QA/Validation consultant, EcoChem, will verify and validate the data based on the quality objectives specified in this QAPP and performance-based criteria specified in the analytical methods in accordance with EPA's *Contract Laboratory Program National Functional Guidelines for Organic and Inorganic Data Review* (EPA 1999; 2004). If data do not meet required criteria, they will be qualified as specified under the action portion of each requirement of the functional guidelines (EPA 1999; 2004).

For analytical data where no validation guidelines exists (e.g., nitrate), the same objectives, criteria, validation procedures, and actions will be used.

6.4.3.1 Verification and Validation Procedures

During implementation of the project, the Site Manager will be responsible for overseeing field measurements and data recording. The laboratory will forward chain-of-custody forms to the Project Manager upon receipt of samples. The Project Manager will review the chain-of-custody forms to verify correct sampling analyses are being performed and all samples specified are collected.

In addition, data verification and validation will be conducted to assess the laboratory's performance in meeting the qualify objectives identified in the QAPP (e.g., detection limits and control limits) and performance-based criteria specified in the analytical methods. Data validation is a process in which data are reviewed and evaluated by supervisory personnel within the laboratory, third-party data validation specialists, and the Project Manager.

The laboratory is responsible for ensuring that the analytical data are correct and complete, that appropriate procedures have been followed, and that QC results are within the acceptable limits. The Project Manager, supported by EcoChem, Inc., is responsible for ensuring that all analyses performed by the laboratories are correct, properly documented, and complete, and that they satisfy the project DQOs specified in this QAPP.

Independent third-party data review and validation of the analytical chemistry data will be conducted by EcoChem, Inc. A minimum of 10% or a single sample delivery group will undergo full (Stage 3 or 4) data validation using *EPA's Contract Laboratory Program National Functional Guidelines for Organic and Inorganic Data Review* (EPA 1999; 2004).

Two (2) levels of data validation will be applied during this project: Full (EPA Stage 3 or 4, depending on method type), and Summary (EPA Stage 2B). Stage 4 validation includes review of the data package for compliance with documentation and quality control criteria for all the following items, plus recalculations of instrument calibration curves, sample and QC results. Stage 2B validation includes a review of all the following items, but without recalculation, transcription or compound identification checks. The QC elements that will be evaluated during data validation include:

- Package completeness
- Verification of electronic data deliverable (EDD) against hardcopy (10% verification)
- Holding times from extraction to analysis
- Blank results (method, field, instrument)
- Spike recoveries
- Reference material recoveries (SRM®, CRM and laboratory generated) – if analyzed
- Laboratory duplicate results
- Reported detection limits
- Compound identification (from raw data)

At the onset of the project, packages will be chosen for full (Stage 3 or 4) validation. As the project proceeds and the quality of the data is verified and documented, the level of validation will decrease. At a minimum, all data packages will receive summary (Stage 2B) validation.

Additional packages for full (Stage 3 or 4) validation will then be chosen based on sample or data priorities, potential quality issues, revised laboratory methods, or at the request of the agency or data users. Over the course of the project, it is expected that a minimum of 10% of the packages will receive full (Stage 4) validation.

Validation qualifiers and reason codes will be assigned to individual data points as a result of the validation. These validation qualifiers will not replace laboratory flags or footnotes, but will be added to the EDD that is submitted to Stantec and ultimately uploaded to Ecology EIM database. Validation qualifiers inform the data user whether or not the data meet all Project Measurement Quality Objectives (MQOs). Both laboratory flags and validation qualifiers are maintained in the EIM database.

All discrepancies and requests for additional, corrected data will be discussed with the laboratories prior to issuing the final data validation report. All contacts with the laboratories will be documented in communication records. EcoChem Data Validation Worksheets will be used to document all levels of validation; and internal quality control forms will be utilized to document internal QC checks of the validation and database process.

If data do not meet the project quality objectives and required criteria, they will be flagged with data qualifiers as specified under the action portion of each requirement of the functional guidelines (EPA 1999; 2004). Upon completion of the data validation, a validation report will be prepared summarizing the findings and addressing whether the QC requirements for each analysis have been met. Any limitations to the usability of the data will also be discussed in these reports. These validation reports will be submitted to the Project Manager and included with the sampling report.

6.4.4 Reconciliation with User Requirements

Data quality assessment will be conducted by the Project Manager in consultation with EPA guidelines. The results of the third-party independent review and validation will be reviewed and cases where the projects DQOs were not met will be identified. The usability of the data will be determined in terms of the magnitude of the DQO exceedance, as well as the importance of the data with respect to other historical data sets.

Data will be presented in the database with the appropriate data qualifier(s) and validation label which indicates the level of review. The data users will consider the effect of any inaccuracy or imprecision of the qualified data in their evaluations of the data.

6.4.5 Figures and Locations Data Management

Throughout the course of the RI/FS project, proper management of geographic data will occur through several methods. All measurements collected in the field will be measured to established features and confirmed prior to submitting the information on raw field notes. All field-documented features will be plotted onto a scaled drawing of the site. Groundwater monitoring wells will be surveyed to accurately establish their locations and elevations relative to

mean sea level. Finally, during the review process, the features will be proof-checked to verify that the plotted locations match the field conditions prior to publishing the finalized document.

6.4.6 Ecology Analytical Data Management

Upon receipt and validation of the data, Stantec will upload the data into Ecology's EIM database. The uploaded data will also be proof-checked to ensure that all components were copied into the database correctly and that the units correspond accurately.

7.0 PLAN AMENDMENTS

This Site Work Plan may be amended or revised at any time, in response to changes in site conditions. Plan amendments and revisions are the responsibility of the project management team. Amendments and revisions will be distributed to affected groups by the oversight consultant. A Stantec representative will retain a copy of all amendments at the site. Each amendment will include a signature line for the responsible contractor and oversight consultant.

APPENDIX A
ABBREVIATIONS AND DEFINITIONS

This section of the SAP for the TC Systems RI/FS Work Plan provides definitions of key terms used commonly in RI/FS reporting. The purpose of this section is to assist personnel in the implementation of this plan. The sources of these definitions are for the most part 40 CFR 260, WAC 173-303: these sources should be consulted both for the complete definitions of the terms below and for the definitions of other terms not included here.

Abbreviations

ASTM	American Society for Testing and Materials
BGS	Below Ground Surface
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
DNAPL	Dense non-aqueous phase liquid
DOT	Department of Transportation
DRO	Diesel- and/or Oil-range organics (e.g. diesel- or extended-range petroleum hydrocarbons)
Dx	Diesel- and Diesel-range extended petroleum hydrocarbons
ECOLOGY	Washington State Department of Ecology
EIM	Environmental Information Management
EPA	Environmental Protection Agency
FS	Feasibility Study
HASP	Health and Safety Plan
HSWA	Hazardous and Solid Waste Amendments
GRO	Gasoline-range organics (e.g. gasoline-range petroleum hydrocarbons)
GWMW	Groundwater Monitoring Well
Gx	Gasoline- and gasoline-extended range petroleum hydrocarbons
LNAPL	Light Non-aqueous phase liquid
mg/kg	Milligrams per kilogram (e.g. parts per million in solid)
mg/L	Milligrams per liter (e.g. parts per million in liquid)
µg/kg	Micrograms per kilogram (e.g. parts per billion in solid)
µg/L	Micrograms per liter (e.g. parts per billion in liquid)
MRL	Method Reporting Limits
MTCA	Model Toxics Control Act
MW	Monitoring Well
NAPL	Non-aqueous phase liquid
PCB	Polychlorinated biphenyl
QA/QC	Quality assurance/quality control
PPE	Personal Protective Equipment
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
SAP	Sampling and Analysis Plan
SVOC	Semi-volatile organic compounds
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
TSS	Total Suspended Solids
TOC	Total organic carbon
TSD	Treatment, Storage, and Disposal Facility
UST	Underground Storage Tank
VOC	Volatile organic compounds
WAC	Washington Administrative Code

Definitions

Accumulation Area: An area used to collect dangerous waste for less than 90 days.

Calibration: The act of adjusting the range and sensitivity of any direct-reading instrument used for field screening

Contaminated Soil: Soil, determined by analytical testing to contain contaminant concentrations in quantities which require special handling and disposal practices by personnel.

Container: A portable device, in which a material is stored, transported, treated, disposed of or otherwise handled.

Debris: Combustible and noncombustible wastes such as ashes and waste materials resulting from construction and repair work, leaves, and tree trimmings.

Decontamination: The process of removing contaminants from individuals and equipment.

Decontamination Area: Area delineated where personnel may effectively remove contaminants prior to leaving the exclusion zone.

Direct Reading Instrument: Instrumentation used by the oversight consultant to provide quantitative information regarding the potential concentrations of any given contaminant for field screening purposes.

Discharge or Hazardous Waste Discharge: The accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying or dumping of hazardous or dangerous waste into or on land or water.

Exclusion Zone: Any area clearly delineated by flagging or signage as containing suspect soils.

Flammable Liquid: A liquid with a flash point of less than 100°F.

Flammable Solid: Any solid material that is liable to cause fires through friction or retained heat, or which can be readily ignited and when ignited burns vigorously and persistently.

Four-Gas Monitor: A direct reading instrument which is able to detect the concentrations of oxygen, carbon dioxide, hydrogen sulfide, and lower explosion limit of any given contaminant in ambient air. Commonly used in confined-space entry and UST removal.

Hazardous Material: Any material that, due to its quantity, concentration, or physical, chemical, toxic or infectious characteristics, may pose a substantial hazard to human health or the environment if released.

Hazardous Substance: A hazardous material or hazardous waste that is designated as a hazardous substance under Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

Hazardous substances that are regulated by the EPA are listed at 40 CFR 302.

Hazardous Waste: A solid waste that meets the definition of a hazardous waste under 40 CFR 261.3. Hazardous materials with an expired shelf life are not considered hazardous waste until designated as a waste.

Head Space: The vapor contained in any container which holds soil or suspect soils.

Hot: Term commonly used to describe soils which contain or are considered likely to contain elevated concentrations of contaminants.

Hot Spot: Any area where evidence (as provided by historic, visual, olfactory, direct reading instruments, or analytical data) suggests a concentrated location of contaminated soils.

Incompatible Waste: Waste which may cause corrosion or decay of a particular container; or waste which may produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases on mixing with another waste or substance under uncontrolled conditions.

Lab Pack: A container used for packaging smaller containers of compatible waste for disposal.

LUST: Leaking UST, usually used historically to hold petroleum or other regulated materials.

Manifest: The EPA hazardous waste shipping record, consisting of EPA Form 8700-22, Uniform Hazardous Waste Manifest, and the Continuation Sheet 8700-22A, where needed. Instructions for initiating, completing and retaining the manifest are included in 40 CFR 262, Subpart B, and in the Appendix to 40 CFR 262.

Oily Waste: Petroleum products and bituminous materials.

Overburden: Non-petroleum contaminated soils which need to be removed to gain access to petroleum-contaminated soils.

PID: Photoionization Detector; a direct-reading instrument which can quantitatively screen for organic vapor concentrations.

Product: Term commonly used to describe any variety of petroleum products.

Problem Waste: Non-hazardous waste such as oily debris or contaminated soil which can be disposed of only after special requirements are met.

Release:	The intentional or accidental loss of a hazardous substance into the environment through spillage, leakage, pumping, pouring, emitting, emptying, discharge, injection, escape, leaching, or disposal.
Screening:	The process of using qualitative and quantitative information to determine whether soils are considered suspect.
Spill:	Any accidental or un-permitted discharge of a hazardous substance into or upon surrounding lands or waters.
Solid Waste:	A waste that meets the definition of a solid waste under 40 CFR 261.2.
Stockpile:	Area where confirmed-contaminated soils will be located until such time as they are disposed of.
Storage:	The temporary retention of a hazardous or dangerous waste prior to treatment, storage or disposal elsewhere.
Superfund Site:	Also known as EPA Superfund Site, as dictated by the Comprehensive Environmental Response, Compensation, and Liability Act.
Suspect Soil:	Soil which has been determined by the oversight consultant as likely to contain elevated concentrations of contaminants.
Tank:	A stationary device constructed of non-earthen materials and used to contain or accumulate dangerous waste. In general, secondary containment structures meet the definition of a tank.
UST:	Underground storage tank; a subsurface holding tank commonly used for petroleum and other regulated materials.

APPENDIX B
FREMONT ANALYTICAL STANDARD OPERATING PROCEDURE

Fremont Analytical

Statement of Qualification

2009

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STATEMENT OF QUALIFICATION

INTRODUCTION

Fremont Analytical Inc. (FAI) is full service environmental laboratory that occupies office and laboratory space in the Fremont neighborhood of Seattle, Washington. FAI provides analytical services for regional, private and public organizations. Fremont Analytical is a small business as defined by the United States Small Business Administration.

From the opening of the laboratory in May 2007, FAI's charter was to be different:

Fremont Analytical Inc., is a service company that offers full-service environmental testing.

Our belief is that the interaction between the laboratory and the client should be collaborative and educational. Clients should have a direct rapport with the individuals that test their samples and that laboratory programs be customizable to fit the need of the client. Our aim is to be as community focused as possible.

Fremont Analytical, a Washington corporation, was formed by two industry professionals who oversee all operations to ensure quality and maintenance of its' original standards. In addition, they have carefully chosen a professional staff with the same dedication to the original mission. These staff members are well trained professional whose analytical knowledge is reinforced by their overall experience within the environmental industry. This experience adds value for clients and adds to Fremont Analytical's overall commitment to customer satisfaction.

The laboratory has grown to a 10 member team consisting or chemists, project managers and other support functions (IT, Marketing, Accounting). We have a advisory council that offers a range of support, from legal, accounting to business and community development. Laboratory operations are organized into two main divisions: Organics and Inorganics, with support from project managers, IT and finance.

The Washington State Dept. of Ecology has endorsed Fremont Analytical with certified accreditation for organic and inorganic non potable water, drinking water and soil analyses. Our Laboratory is certified by reciprocal agreement for one or more of the above in several western states, including California. Our laboratory services support regulatory provisions established under programs such as the Resource Conservation and Recovery Act (RCRA), Clean Water Act (CWA), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Toxic Substance Control Act (TSCA) and Model Toxics Control Act (MTCA).

OUR SERVICES

VOLATILE ORGANICS

Laboratory services include volatile and semi-volatile organic (BNA, PAH) analysis by Gas Chromatography / Mass Spectrometry (GCMS) for sample matrices that include: Soil, Water, Vapor and Sediment.

INORGANICS & TRACE METAL ANALYSIS (ICP-MS)

Analysis of soil, ground & drinking water for trace metals and selected non-metals. Fremont Analytical offers reporting at sub parts per billion (ppb) levels.

SPECIALITY ORGANICS (PCBS, PESTICIDES, HERBICIDES & PENTACHLOROPHENOL)

Providing low-level detection and rapid turnaround for specialty organics for all sample matrices.

STORM WATER

In accordance with The Washington State Department of Ecology's storm water permitting process, Fremont Analytical, Inc. provides complete and timely analyses of surface/storm water samples.

DRINKING WATER

Analysis of organic and inorganic drinking water analytes required by the Safe Drinking Water Act (SDWA). Fremont Analytical offers customized solutions, facilitating permit compliance.

SAMPLE RECEIVING

Sample receiving hours are between 8:00am to 6:00pm – Monday through Friday. We can accommodate delivery after hours on weekends and on holidays, if scheduled in advance.

SAMPLE HOLDING TIMES

Samples should be received by Fremont Analytical as soon as possible. All samples are logged in and measured against the holding times designated by the respective method (preserved, non-preserved etc.). Additionally, project tracking procedures require extraction and analysis of samples within 3 days. Notification and alerts are provided to project management and laboratory managers if the three day clock has been exceeded. Please refer to *Container Requirements* (available a www.fremontanalytical.com) for sample holding times, preservatives and sample collection requirements.

TURNAROUND TIMES

Standard turnaround (TAT) is 5 days from the date and time of sample receipt for most sample analysis. We also offer expedited turnaround on many types of analysis, including:

- 48 hour
- 24 hour
- Same Day Service

Expedited turnaround should be coordinated in advance.

Fremont Analytical makes every attempt to exceed the client requested TAT. Our laboratory is over 95% compliant with all TAT requests. Our ability to meet/exceed the expedited TAT is well known in the community and many firms and other laboratories use FAI because of our rapid TAT. In the 3rd Quarter 2009, 25% of our projects had an expedited request (48hrs. or less).

CONTAINERS

Fremont Analytical can provide you with sample containers, labels, coolers and chain of custody forms for specific analytical methods. Please contact us with your bottle order.

SAMPLE PICK UP

Fremont Analytical offers sample pick-up and/or delivery of supplies at your office and/or field locations. Please contact us for your specific requirements. Sample picks can be request via the Fremont Analytical Website, phone, and after hours (contact can be provided).

SAMPLE MANAGEMENT

When the samples are received at the laboratory, the employee checks to ensure that all samples listed on the Chain of Custody are, in fact, present and in satisfactory condition and are properly preserved.

After checking the samples (see sample receipt form in the Appendix), the bottles are labeled and stored appropriately in a refrigerated area (4°C). Access to the refrigerator is restricted to Fremont

Problems with sample integrity or paperwork inconsistencies are reported to the Project Manager or field sampling person who will take corrective action.

The Chemist is responsible for determining:

- If there is sufficient sample to do the analyses requested
- That holding times have not been violated
- That proper sampling requirements have been met (preservatives, headspace, etc.)

Sample information is recorded upon receipt. Information in the receipt includes:

- Date received
- Job number
- The Job number will be in the following format: CHM-yymmdd-1
- Client
- Project Name
- Project Manager
- Analyses
- Client Sample ID (provided by the client)
- Lab Sample (sequence) ID number

The movement of a sample through the laboratory, as well as every task performed affecting the sample, is documented. All records, forms, and logs associated with sample analysis are maintained.

The Laboratory Analysis Tracking is used to record progress in the analysis of sample sets. The following information is also recorded:

- Job number
- Date received
- Receiving chemist/Chemist
- Client name and site
- Project manager, field manager
- Person delivering samples
- Turn around requirements

- Report due date
- Initials of person logging samples
- Lab sequence number
- Result file name
- Analysis and re-analysis requests
- Sample matrix type
- Detection limit requirement
- Extract/preparation date
- Holding time check-off
- Analysis date
- Chromatogram hardcopy date
- Spreadsheet entry date
- Draft results delivery date; and
- Turnaround time check-off
- Date and person delivering report to Lab Manager

QUALITY ASSURANCE

Our Quality Assurance Program is organized so that data produced from Fremont Analytical is traceable, transparent and of the utmost quality. The program functions at the management level working through written standard operating procedures (SOPS) with multi-stage laboratory quality control.

The Quality Assurance Program provides a means by which the integrity of data can be verified. The precision, accuracy, comparability, and completeness criteria are all aspects of a data package that verify the integrity of the analysis.

Fremont Analytical follows published, approved methods from EPA, Standard Methods, American Society for Testing and Materials (ASTM) and Washington State Department of Ecology Methods. Fremont Analytical also provides documentation alongside each step of the analytical process. We make this documentation available to clients and State/Federal Regulators.

STAFFING AND FACILITIES MANAGEMENT

At FAI, each project is staffed by personnel who have the technical expertise necessary to address and successfully complete the task. FAI's chemist and technicians possess a detailed knowledge of current laboratory procedures as well as a complete understanding of the applicable regulatory requirements governing the analysis.

FAI is proud of its highly qualified and diversified professional staff. FAI facility is under the supervision of Laboratory Managers that are responsible for the day-to-day operations of the laboratory. In addition, a Quality Assurance Manager is responsible for developing and overseeing the QA program implementations of the laboratory.

INSTRUMENT CONTROL

The analytical procedures utilized by FAI conform to methodologies published under the USEPA, or other widely-accepted industry standard protocols (Standard Methods, ASTM, etc.). FAI continuously seeks to improve methodologies and may make enhancements founded upon a working knowledge of scientific principles. Such modifications improve the accuracy and reliability of an analysis. All modifications are documented in FAI's SOPs and made available to the appropriate accrediting authorities.

FAI stresses the importance of frequent inspection of instrumentation. Reliability of instrument results is maximized through frequent maintenance and by providing optimal running conditions for each instrument. Method Detection Limit (MDL) studies are conducted on a regular basis to determine instrument performance and reporting limits for a particular analysis. Analytical reference standards used in analyses are purchased from certified vendors with proper documentation. Calibration of analytical instruments is carried out in accordance with method requirements. FAI verifies that all calibrations pass strict acceptance criteria as outlined by each individual method.

METHOD CONTROLS

FAI's experienced and knowledgeable personnel monitor every aspect of sample handling, analysis, data production, and documentation in accordance with the test method(s). When required, each analysis includes a Method Blank (MB), Laboratory Control Sample (LCS), Laboratory Duplicate, Matrix Spike (MS), Matrix Spike Duplicate (MSD), Continuing Calibration Verification (CCV) and Internal Calibration Verification (ICV). Calibrations are verified by using calibration check samples and low concentration standards. Precision is demonstrated by analyzing duplicate client samples. Sample and reagent contamination are checked through the use of method and trip blanks. Accuracy is monitored using the data generated from the laboratory control sample (LCS) and matrix spike (MS), matrix spike duplicates (MSD) and surrogates.

If a situation were to occur by which the specific QC requirements were not achieved, the analyst would investigate the source of the concern. Corrective actions will be in place which may include re-analyzing the QC standard, re-tuning and/or recalibration of the instrument, or re-analysis of the samples (or batch) in question.

DATA REVIEW

Prior to any data submittal to the client, the analytical data is subjected to an in-depth, independent review by the analyst, departmental lead, project manager and quality assurance manager. Selected analytical data are also independently verified by the staff to ensure that both the data and deliverable reports are in accord with the method/project specific criteria.

LABORATORY AUDITS

As a course of standard procedure Fremont Analytical conducts internal laboratory audits for each of its departments. All department managers are required to demonstrate equipment and method capability. Managers are required to check continuing documentation and reagent/instrument parameters. Any necessary modifications are checked with the laboratory director, then subsequent instrumentation and written procedures are modified.

In addition to internal audits, all major accrediting authorities (such as WA DOE, EPA, USGS) evaluate the laboratory's performance on a regular basis. Any deficiencies are promptly addressed with follow up documentation. Double blind performance evaluations are performed and checked semi-annually for each department.

Copies of FAI's Quality Assurance Plan and SOPs are available upon request.

ACCREDITATION

Fremont Analytical, Inc. is currently certified to perform environmental analysis of soil, water and drinking water by the State of Washington Department of Ecology. FAI conducts Performance Evaluation samples semi-annually for the, EPA Water Pollution (WP) and Water Supply (WS) series and solid matrices.

FACILITIES

Fremont Analytical Laboratory occupies approximately 3,000 square feet of space in cental Seattle, Washington. The facility is a combination of office and laboratory space designed for maximum efficiency. Entrance to the laboratory is granted only through the reception area. After normal business hours, entrance is locked and accessible to only management personnel.

The laboratory exhaust ventilation system has been designed to effectively control contaminants generated during the performance of all environmental analysis and to minimize make-up air requirements. Whenever possible, all of the lab hood openings are kept to a minimum, thereby maximizing the capture effectiveness of the hoods for contaminant control. The room air supply distribution system is located in such a manner to minimize room air currents, which would have an adverse effect upon the performance of the lab hoods. Routine performance tests are conducted on the ventilation system, in addition to tests conducted due to a modification in the laboratory's design. All of the laboratories in our building are equipped with separate ventilation systems ensuring that solvent contamination is eliminated for volatile organic analysis.

Gases used for analytical purposes are segregated from the instrumental areas. The distribution systems deliver pressurized air, argon, helium, hydrogen, and nitrogen to the laboratory areas from a separate location.

The lab is divided into the following areas:

- Offices and break room
- Sample Check and Log In Area
- Volatiles Area
- Sample Prep Area
- General Chemistry Area
- Metals Analysis area
- Organics Analysis Area
- Sample Storage Area

INSTRUMENTATION

All instrumentation purchased by Fremont Analytical Laboratory conforms to the requirements of the analytical methods being used. Documentation of the specifications for each instrument is kept with the instrument or in the quality assurance office. An instrument list is maintained at the laboratory. This list includes the following information about each instrument:

- Descriptive name of instrument
- Manufacturer
- Model number
- Year of purchase
- Any accessories, modifications, updates or upgrades

This list is reviewed is updated yearly, and copies are maintained. The manufacturer's instruction manuals or a Fremont Analytical Laboratory SOP describing routine adjustment, operation and maintenance, are available in the vicinity of the instrument. Prior to each use, each instrument is adjusted according to the manufacturer's instructions. When proper adjustment has been achieved, the instrument is calibrated according to the analytical methods, and the calibration is verified by an independently prepared standard. Validation of proper adjustment, calibration, and verification is recorded or referenced in the analyst's notes. For each instrument on the instrument list, a maintenance log is maintained. Maintenance schedule include the manufacturers recommended maintenance procedures as well as those found necessary or desirable by the instrument operators. All maintenance performed on the instrument, whether scheduled or not, is recorded in the maintenance log with date, maintenance performed, name of person performing maintenance, and downtime.

GC-MS: GAS CHROMATOGRAPHY – MASS SPECTROMETER

(GC-A) Hewlett Packard Gas Chromatograph 5890 Series II with programmable pressure

- **Sample Introduction**: Tekmar LSC 2000 Purge & Trap with EST Analytical Soil / Water 40ml VOA vial autosampler
- **Detector**: Mass Spectrometer, Hewlett Packard 5972 with Cal-Tech Scientific Hyperbolic Metal Quad Analyzer
- **Data Acquisition**: Microsoft Windows 2000 with Agilent Chemstation G1701-DA version B.01.00

(GC-E) Hewlett Packard Gas Chromatograph 5890 Series II with programmable pressure

- **Sample Introduction**: Tekmar LSC 2000 Purge & Trap with Tekmar 2016 autosampler
- **Detector**: Mass Spectrometer, Hewlett Packard 5972
- **Data Acquisition**: Microsoft Windows 2000 with Agilent Chemstation G1701-DA version B.01.00

(GC-G) Hewlett Packard Gas Chromatograph 5890 Series II with programmable pressure

- **Sample Introduction**: Hewlett Packard 7673 100 position Liquid autosampler
- **Detector**: Mass Spectrometer, Hewlett Packard 5972 with Cal-Tech Scientific Hyperbolic Metal Quad Analyzer
- **Data Acquisition**: Microsoft Windows 2000 with Agilent Chemstation G1701-DA version B.01.00

(GC-B) Hewlett Packard Gas Chromatograph 5890 Series II

- **Sample Introduction**: Tekmar LSC 2000 Purge & Trap with Tekmar 2016 autosampler
- **Detector**: OI Analytical Tandem Photo Ionization – Flame Ionization
- **Data Acquisition**: Microsoft Windows 2000 with Agilent Chemstation G1701-DA version B.01.00

GC: GAS CHROMATOGRAPHY

(GC-C) Hewlett Packard Gas Chromatograph 5890 Series II with programmable pressure

- **Sample Introduction**: Hewlett Packard 7673 100 position Liquid autosampler
- **Detector**: Hewlett Packard Dual ECD
- **Data Acquisition**: Microsoft Windows 2000 with Agilent Chemstation G1701-DA version B.01.00

(GC-D) Hewlett Packard Gas Chromatograph 5890 Series II with programmable pressure

- **Sample Introduction**: Hewlett Packard 7673 100 position Liquid autosampler
- **Detector**: Flame ionization
- **Data Acquisition**: Microsoft Windows 2000 with Agilent Chemstation G1701-DA version B.01.00

(GC-F) Hewlett Packard Gas Chromatograph 5890 Series II

- **Sample Introduction**: Hewlett Packard 7673 100 position Liquid autosampler
- **Detector**: Flame ionization
- **Data Acquisition**: Microsoft Windows 2000 with Agilent Chemstation G1701-DA version B.01.00

(GC-H) Hewlett Packard Gas Chromatograph 5890 Series II

- **Sample Introduction**: Hewlett Packard 7673 100 position Liquid autosampler
- **Detector**: Flame Photometric (FPD) / Nitrogen-Phosphorus (NPD)
- **Data Acquisition**: Microsoft Windows 2000 with Agilent Chemstation G1701-DA version B.01.00

INORGANIC INSTRUMENTATION

Hewlett Packard Ion Coupled Plasma Mass Spectrometer (ICP-MS) 4500

- **Sample Introduction**: Cetac autosampler
- **Data Acquisition**: Microsoft Windows NT with Agilent Chemstation

Cetac Instruments Trace Mercury Analyzer (CVAA)

- **Sample Introduction**: Cetac autosampler
- **Data Acquisition**: Microsoft Windows XP with Cetac Quick Trace Data management

Dionex IC2000 Ion Chromatograph

- **Sample introduction**: Dionex AS40 Autosampler
- **Data Acquisition**: Microsoft Windows XP with Chromelion Software version 5.0

Shimadzu TOC Vwp Total Organic Carbon analyzer

- **Sample Introduction**: Shimadzu ASI-V Vial autosampler.
- **Data Acquisition**: Microsoft windows XP with TOC Control V

GENERAL/PHYISCAL CHEMISTRY

- **Thermo Spectrophotometer 20+**
- **Data Acquision: Windows XP with Spectro Pro 1.0**
- **Extech II Conductivity / TDS / Salinity**
- **Oakton ORP Tester 10**
- **Mettler Toledo AG 204 Analytical Balance**
- **Thermo Scientific Easy Pure Rodi Ultra pure water deionizer**
- **2 - Fisher IsoTemp 500 drying oven**
- **Kontes Midi-Vap Cyanide Distillation**
- **Oakton Ammonia Ion selective electrode**
- **Koehler manual flash point tester with stirrer motor**
- **Accumnet AB20 pH Meter**
- **Hach 2100nTurbidity Meter**

EXTRACTION EQUIPMENT

- **VWR Hot block Digestion unit for metals / COD**
- **Organomation Nitrogen solvent evaporation system N-EVAP 111**
- **Hamiltion Bell V6500 multiposition centrifuges**
- **VWR Brand ultrasonic extraction system.**
- **Fremont Analytical TCLP Extract Rotator**
- **Zero Headspace Extractors TCLP Equipment Inc. Model C102**

NETWORK INFRASTRUCTURE

Fremont Analytical's central laboratory computer is a Dell 2700 Server running Windows Server 2003 with both a MS SQL 2003 and MS Access 2003 database. The central server receives, delivers and stores data from all functions and laboratory instrumentation (Chromatographic, spectroscopic, etc.).

FAI recently purchased a new comprehensive Laboratory Information Management System (LIMS) called Omega 11, which was developed by Khemia Corporation. LIMS has been optimized for use in sample tracking, data generation and maintenance, and production of electronic deliverables in numerous formats. The system allows our clients to access information and data results via a web portal.

The LIMS currently has the following modules:

- Quoting
- Client - Project
- Sample Login
- Pricing – Invoicing
- Data Acquisition
- Scheduling
- Result Entry
- Deliverables – Electronic Deliverables
- Reporting

The LIMS can electronically transfer ICP, AA Furnace, GC, and GC/MS data using a modular data acquisition system that filters, parses, and loads the data into LIMS whereby increasing productivity and reducing transcription errors. The central server all laboratory computers are backed up routinely to prevent any data loss. The data is stored off the laboratory premises. This system provides catastrophe recovery with loss of data ranging from the previous day

Electronic data deliverables (EDD) are available in multiple formats including Comma Separated Value (CSV) files suited (compatible) to be imported into major software products by the client. Fremont Analytical has many standard (EQUIS, EIM, etc.) and custom EDD files.

CONFLICT OF INTEREST POLICY

All Fremont Analytical management and personnel are committed to provide the highest quality data for analysis with the utmost of integrity. Each employee has an overriding obligation to act in the best interest of the laboratory and must not let outside activities or interests interfere with that obligation. It is also the policy of Fremont Analytical to increase the awareness of employees to the potential for conflicts of interest and to avoid potential conflicts that may adversely affect the activities or operations. All employees are required to sign conflict of interest and confidentiality agreements.

LABORATORY SAFETY

Fremont Analytical places priority on the health and safety of all personnel. A Laboratory Health and Safety Plan has been established and made available to all in the laboratory. The safety plan includes reference to Fremont Analytical's Chemical Hygiene Plan. FAI is dedicated to actively practicing all safety procedures detailed in the Laboratory Health and Safety Plan which include:

1. Chemical Hygiene
2. General Safety and Housekeeping
3. Chemical Handling Procedures
4. Utilization of Material Safety Data Sheets (MSDS)
5. Fire protection and Prevention
6. Handling and Storing Compressed Gases
7. Emergency Safety Equipment
8. General Laboratory Procedures
9. Notifying the Lab Safety Officer

A detailed reading of each topic can be found in the Laboratory Health and Safety Plan in the appendix along with the cover page and Table of Content of the complete laboratory safety and chemical hygiene plan.

FAI's safety plan is administered by the Laboratory Managers. Through training, various members of the laboratory staff are able to perform routine safety checks throughout the laboratory and respond appropriately to chemical spills or accidents. Additionally, FAI has published contact information available to all in the laboratory. FAI employees are aware that calling 911 and the immediate safety of personnel are the highest priorities in an emergency situation. After handling these immediate concerns, the Lab Safety Officer may be contacted (if not already present) to assist in securing and neutralizing a dangerous situation.

CONTACT

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APPENDIX C
BORING LOG

Project:	Job No.		Date:
	Boring No.		Dwn.By:
Driller:	Drill Type:		
Geo/Eng:	Hole Dia.		Fluid:

Sample Interva	Depth	Penetration Blows/6"	Penetration Blow/ft.	Strata	Soil Description & Classification	Notes
	5					5
	10					10
	15					15
	20					20
	25					25
	30					30

Notes:

Stantec

Stantec Consulting Corporation
12034 134th Court NE, Suite 102
Redmond, WA 98052

Test Boring Log

APPENDIX D
DAILY FIELD REPORT

Stantec Consulting Corporation
12034 134th Court NE, Suite 102
Redmond, WA 98052
Tel: (425) 298-1000
Fax: (425) 298-1019

Daily Field Report

Project Name: _____
Project Address: _____
_____
Project Number: _____
Permit Number: _____

Date: _____
Time: _____
Weather: _____
Temperature: _____

TABLES

Table 13, Laboratory MRLs and MDLs Volatile Organic Compounds - EPA Method 8260				
Analyte	Soil MRL	Water MRL	Soil MDL	Water MDL
	mg/kg	µg/L	mg/kg	µg/L
Dichlorodifluoromethane (CFC-12)	0.06	1.0	0.0017	0.833
Chloromethane	0.06	1.0	0.0016	0.816
Vinyl chloride *	0.002	0.2	0.0013	0.670
Bromomethane	0.09	1.0	0.0011	0.550
Chloroethane	0.06	1.0	0.0002	0.101
Trichlorofluoromethane (CFC-11)	0.05	1.0	0.0004	0.209
1,1-Dichloroethene	0.05	1.0	0.0003	0.130
Methylene chloride	0.02	1.0	0.0000	0.015
trans-1,2-Dichloroethene	0.02	1.0	0.0002	0.113
1,1-Dichloroethane	0.02	1.0	0.0002	0.120
2,2-Dichloropropane	0.05	2.0	0.0005	0.255
cis-1,2-Dichloroethene	0.02	1.0	0.0006	0.294
Chloroform	0.02	1.0	0.0022	1.106
1,1-Dichloropropene	0.02	1.0	0.0038	1.896
Carbon tetrachloride	0.02	1.0	0.0038	1.896
1,1,1-Trichloroethane (TCA)	0.02	1.0	0.0002	0.080
Benzene	0.02	1.0	0.0002	0.125
1,2-Dichloroethane (EDC)	0.03	1.0	0.0002	0.084
Trichloroethene (TCE)	0.03	1.0	0.0003	0.172
1,2-Dichloropropane	0.02	1.0	0.0001	0.073
Dibromomethane	0.04	1.0	0.0003	0.134
Bromodichloromethane	0.02	1.0	0.0003	0.137
cis-1,3-Dichloropropene	0.02	1.0	0.0002	0.095
Toluene	0.02	1.0	0.0008	0.415
Trans-1,3-Dichloropropene	0.03	1.0	0.0001	0.059
1,1,2-Trichloroethane	0.03	1.0	0.0003	0.154
Tetrachloroethene (PCE)	0.02	1.0	0.0003	0.140
1,3-Dichloropropane	0.05	1.0	0.0001	0.072
Dibromochloromethane	0.03	1.0	0.0002	0.119
1,2-Dibromoethane (EDB) *	0.005	0.01	0.0002	0.122
Chlorobenzene	0.02	1.0	0.0002	0.112
1,1,1,2-Tetrachloroethane	0.03	1.0	0.0002	0.122
Ethylbenzene	0.03	1.0	0.0003	0.170
Total Xylenes	0.03	1.0	0.0003	0.162
Styrenes	0.02	1.0	0.0003	0.126
Bromoform	0.02	1.0	0.0009	0.432
Isopropylbenzene	0.08	2.0	0.0003	0.169
1,2,3-Trichloropropane	0.02	1.0	0.0005	0.225
Bromobenzene	0.03	1.0	0.0002	0.104
1,1,2,2-Tetrachloroethane	0.02	1.0	0.0003	0.162
n-Propylbenzene	0.02	1.0	0.0003	0.162
2-Chlorotoluene	0.02	1.0	0.0004	0.209
4-Chlorotoluene	0.02	1.0	0.0003	0.166
1,3,5-Trimethylbenzene	0.02	1.0	0.0004	0.199
tert-Butylbenzene	0.02	1.0	0.0003	0.173
1,2,4-Trimethylbenzene	0.02	1.0	0.0004	0.194
sec-Butylbenzene	0.02	1.0	0.0004	0.194
1,3-Dichlorobenzene	0.02	1.0	0.0002	0.121
4-Isopropyltoluene	0.02	1.0	0.0004	0.179
1,4-Dichlorobenzene	0.02	1.0	0.0002	0.121
1,2-Dichlorobenzene	0.02	1.0	0.0003	0.142
n-Butylbenzene	0.02	1.0	0.0004	0.210
1,2-Dibromo-3-Chloropropane	0.03	1.0	0.0002	0.085
1,2,4-Trichlorobenzene	0.05	2.0	0.0004	0.198
Hexachloro-1,3-butadiene	0.10	4.0	0.0003	0.130
Naphthalene	0.03	4.0	0.0003	0.160
1,2,3-Trichlorobenzene	1.0	4.0	0.0002	0.105

Table 14, Laboratory MRLs and MDLs Polychlorinated biphenyls (PCBs) by EPA Method 8082				
Analyte	**Soil MRL**	**Water MRL**	**Soil MDL**	**Water MDL**
	mg/kg	**µg/L**	**mg/kg**	**µg/L**
Aroclor 1016	0.1	0.1	0.051	0.051
Aroclor 1221	0.1	0.1	0.043	0.043
Aroclor 1232	0.1	0.1	0.008	0.008
Aroclor 1242	0.1	0.1	0.067	0.067
Aroclor 1248	0.1	0.1	0.044	0.044
Aroclor 1254	0.1	0.1	0.088	0.088
Aroclor 1260	0.1	0.1	0.051	0.051
Polychlorinated biphenyls	0.1	0.1	0.88	0.067

Table 15, Laboratory MRLs and MDLs Butyl Tin Species - EPA Methods SW-846-8270D				
Analyte	**Soil MRL**	**Water MRL**	**Soil MDL**	**Water MDL**
	µg/kg	**µg/L**	**µg/kg**	**µg/L**
Tributyl Tin Ion (as Tributyl Tin Oxide)	4.0	0.2	1.773	0.103

Table 16, Laboratory MRLs and MDLs Semi-volatile organic compounds by EPA Method 8270					
Analyte	Soil MRL	Water MRL	RAW MDL	SOIL MDL	Water MDL
	mg/kg	µg/L	µg/L	mg/kg	µg/L
Aniline	0.2	2.0	3.56	0.004	0.014
Phenol	0.2	2.0	4.22	0.004	0.017
Bis(2-chloroethyl)ether	0.2	2.0	5.35	0.005	0.021
2-Chlorophenol	0.1	1.0	4.60	0.005	0.018
1,3-Dichlorobenzene	0.1	1.0	3.49	0.003	0.014
1,4-Dichlorobenzene	0.1	1.0	3.49	0.003	0.014
1,2-Dichlorobenzene	0.1	1.0	3.49	0.003	0.014
Benzyl alcohol	0.1	1.0	5.26	0.005	0.021
Bis(2-chloroisopropyl)ether	0.1	1.0	18.12	0.018	0.072
2-Methylphenol (o-cresol)	0.1	1.0	4.94	0.005	0.020
Hexachloroethane	0.1	1.0	4.00	0.004	0.016
N-Nitroso-di-n-propylamine	0.1	1.0	2.99	0.003	0.012
4-Methylphenol (p-cresol)	0.1	1.0	4.70	0.005	0.019
3-Methylphenol (p-cresol)	0.1	1.0	4.70	0.005	0.019
Nitrobenzene	0.2	2.0	4.39	0.004	0.018
Isophorone	0.1	1.0	2.47	0.002	0.010
2-Nitrophenol	0.2	2.0	5.97	0.006	0.024
2,4-Dimehtylphenol	0.1	1.0	3.49	0.003	0.014
Bis(2-chloroethoxy)methane	0.1	1.0	4.39	0.004	0.018
2,4-Dichlorophenol	0.2	2.0	4.00	0.004	0.016
1,2,4-Trichlorobenzene	0.1	1.0	5.35	0.005	0.021
Naphthalene	0.1	0.5	4.22	0.004	0.017
4-Chloroaniline	0.5	5.0	4.70	0.005	0.019
Hexachlorobutadiene	0.1	1.0	5.40	0.005	0.022
4-Chloro-3-methylphenol	0.5	5.0	3.82	0.004	0.015
2-Methylnaphthalene	0.1	0.5	5.73	0.006	0.023
1-Methylnaphthalene	0.1	0.5	4.75	0.005	0.019
Hexachlorocyclopentadiene	0.1	1.0	7.63	0.008	0.031
2,4,6-Trichlorophenol	0.2	2.0	10.16	0.010	0.041
2,4,5-Trichlorophenol	0.2	2.0	11.15	0.011	0.045
2-Chloronaphthalene	0.1	1.0	3.94	0.004	0.016
2-Nitroaniline	0.5	5.0	4.00	0.004	0.016
1,4-Dinitrobenzene	0.5	5.0	9.49	0.009	0.038
Acenaphthylene	0.1	0.5	4.22	0.004	0.017
1,3-Dinitrobenzene	0.5	5.0	8.64	0.009	0.035
Dimethylphthalate	0.1	1.0	5.13	0.005	0.021
2,6-Dinitrotoluene	0.1	1.0	4.60	0.005	0.018
1,2-Dinitrobenzene	0.1	1.0	5.35	0.005	0.021
Acenaphthene	0.1	0.5	5.93	0.006	0.024
3-Nitroaniline	0.5	5.0	6.13	0.006	0.025
2,4-Dinitrophenol	0.2	2.0	8.90	0.009	0.036
Dibenzofuran	0.1	1.0	3.49	0.003	0.014
2,4-Dinitrotoluene	0.1	1.0	5.08	0.005	0.020
4-Nitrophenol	0.5	5.0	4.71	0.005	0.019
2,3,4,6-Tetrachlorophenol	0.1	1.0	5.03	0.005	0.020
2,3,5,6-Tetrachlorophenol	0.1	1.0	6.13	0.006	0.025
Fluorene	0.1	0.5	4.00	0.004	0.016
4-Chlorophenyl phenyl ether	0.1	1.0	6.50	0.007	0.026
Diethylphthalate	0.1	1.0	4.00	0.004	0.016
4,6-Dinitro-2-methylphenol	0.2	2.0	11.52	0.012	0.046
Diphenylamine	0.5	5.0	3.06	0.003	0.012
Azobenzene	0.1	1.0	2.47	0.002	0.010
4-Bromo phenyl phenyl ether	0.1	1.0	6.95	0.007	0.028
Hexachlorobenzene	0.1	1.0	4.05	0.004	0.016
Pentachlorophenol	0.2	2.0	3.14	0.003	0.013
Phenanthrene	0.1	0.5	4.00	0.004	0.016
Anthracene	0.1	0.5	6.39	0.006	0.026

Table 17, Laboratory MRLs and MDLs Various Hydrocarbon Identification and Quantification Methods				
Diesel Range Petroleum Hydrocarbons by NWTPH-Dx				
Analyte	**Soil MRL**	**Water MRL**	**Soil MDL**	**Water MDL**
	mg/kg	**µg/L**	**mg/kg**	**µg/L**
Diesel (Fuel Oil)	20	50	9.6	38.4
Heavy Oil	50	100	16	64.0
Gasoline Range Petroleum Hydrocarbons by NWTPH-Gx				
Analyte	**Soil MRL**	**Water MRL**	**MDL**	**Water MDL**
	mg/kg	**µg/L**	**mg/kg**	**µg/L**
Gasoline	5.0	50	0.405	8.1
Hydrocarbon Identification by NWTPH-HCID				
Analyte	**Soil MRL**	**Water MRL**	**MDL**	**Water MDL**
	mg/kg	**µg/L**	**mg/kg**	**µg/L**
Gasoline	20	400	N/A	N/A
Mineral Spirts	30	500	N/A	N/A
Kerosene	50	500	N/A	N/A
Diesel (Fuel Oil)	50	500	N/A	N/A
Mineral Oil	100	800	N/A	N/A
Heavy Oil	100	800	N/A	N/A

Table 18, Laboratory MRLs and MDLs Metals in Soil by EPA Method 6020/200.8			
Analyte	**Soil MRL**	**Water MRL**	**Soil MDL**
	mg/kg	**µg/L**	**mg/kg**
Antimony	0.2	0.2	4.10
Arsenic	0.1	1.0	93.70
Beryllium	0.2	0.2	21.40
Cadmium	0.2	0.2	21.70
Chromium III	0.1	0.2	57.00
Chromium VI*	1	1	0.20
Copper	0.2	0.5	36.00
Lead	0.2	1.0	19.40
Mercury	0.2	0.3	5.20
Nickel	0.1	0.5	37.90
Selenium	0.5	1.0	370.50
Silver	0.1	0.2	3.60
Thallium	0.2	0.2	2.90
Zinc	0.4	1.5	114.20

*Chromium VI in water is analyzed by EPA Method 7196

Table 19, Laboratory MRLs and MDLs Semi-volatile organic compounds by EPA Method 8270					
Analyte	**Soil MRL**	**Water MRL**	**RAW MDL**	**SOIL MDL**	**Water MDL**
	mg/kg	**µg/L**	**µg/L**	**mg/kg**	**µg/L**
Carbazole	0.5	5	3.82	0.004	0.015
Di-n-butylphthalate	0.1	1	3.82	0.004	0.015
Fluoranthene	0.1	0.5	5.4	0.005	0.022
Pyrene	0.1	0.5	1.53	0.002	0.006
Benzyl Butyl phthalate	0.1	1	3.94	0.004	0.016
bis (2-Ethylhexyl) adipate	0.1	1	6.99	0.007	0.028
Benzo [a] anthracene	0.08	0.1	6.64	0.007	0.027
Chrysene	0.08	0.1	3.25	0.003	0.013
bis (2-Ethylhexyl) phthalate	0.1	1	4.94	0.005	0.02
Di-n-octyl phthalate	0.1	0.1	3.56	0.004	0.014
benzo [b] fluoranthene	0.08	0.1	5.26	0.005	0.021
benzo [k] fluoranthene	0.08	0.1	6.39	0.006	0.026
benzo [a] pyrene	0.08	0.1	3.94	0.004	0.016
Indeno [1,2,3-cd] pyrene	0.08	0.1	3.63	0.004	0.015
Dibenz [a,h] anthracene	0.08	0.1	3.36	0.003	0.013
Benzo [g,h,i] perylene	0.08	0.5	3.63	0.004	0.015
Benzoic Acid	0.2	2	12.56	0.013	0.05

Table 20, Laboratory MRLs and MDLs Hexavalent Chromium by EPA Method 7196			
Analyte	**Soil MRL**	**Water MRL**	**MDL**
	mg/kg	**mg/L**	**mg/kg**
Cr VI	1.0	1.0	0.24

Terrestrial Ecological Evaluation Process- Simplified or Site-Specific Evaluation?

Documentation Form

	Terrestrial Concern	Response (Circle One)
*1	Is the site is located on or directly adjacent to an area where management or land use plans will maintain or restore native or semi-native vegetation?	Yes / No
*2a	Is the site used by a threatened or endangered species?	Yes / No
*2b	Is the site used by a wildlife species classified by the state department of fish and wildlife as a "priority species" or "species of concern" under Title 77 RCW?	Yes / No
*2c	Is the site used by a plant species classified by the Washington state department of Natural Resources natural heritage program as "endangered," "threatened," or "sensitive" under Title 79 RCW.	Yes / No
*3	Is the site (area where the contamination is located) located on a property that contains at least ten acres of native vegetation within 500 feet of the area where the contamination is located?	Yes / No
4	Has the department determined that the site may present a risk to significant wildlife populations?	Yes / No

*1 This includes for example, green-belts, protected wetlands, forestlands, locally designated environmentally sensitive areas, open space areas managed for wildlife, and some parks or outdoor recreation areas. This does not include park areas used for intensive sport activities such as baseball or football.

*2a What are the threatened or endangered species in Washington state?

*2b Which plant species are classified as threatened, endangered, or sensitive? Where can I find out more information about this topic?

*2c For plants, "used" means that a plant species grows at the site or has been found growing at the site. For animals, "used" means that individuals of a species have been observed to live, feed or breed at the site.

*3 For this analysis, do not include native vegetation beyond the property boundary.

The following sources shall be used in making this determination: Natural Vegetation of Oregon and Washington, J.F. Franklin and C.T. Dyrness, Oregon State University Press, 1988, and L.C. Hitchcock, C.L. Hitchcock, J.W. Thompson and A. Cronquist, 1955-1969, Vascular Plants of the Pacific Northwest(5 volumes). Areas planted with native species for ornamental or landscaping purposes shall not be considered to be native vegetation. [WAC 173-340-7491(2)(c)(i)]

(Here's a link to the Seattle Public Library and the Washington State Library to borrow a copy of Natural Vegetation of Oregon and Washington, J.F. Franklin and C.T. Dyrness, Oregon State University Press, 1988, or you may purchase it through your favorite bookseller. Here's an additional link to a useful online Field Guide to Selected Rare Plants of Washington developed by the Washington State Department of Natural Resources' Natural Heritage Program (WNHP) and the Spokane District of the U.S.D.I. Bureau of Land Management (BLM) which contains fact sheets for 139 vascular plant species and one lichen species.

Here is an aid to calculating area and an aerial photo depicting a site, its 500 foot boundary and several labeled circles identifying various areas for reference in judging the area of native vegetation within the 500 foot radius.

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