

# SITE HAZARD ASSESSMENT

## WORKSHEET 1

### Summary Score Sheet

12/23/13

#### **SITE INFORMATION:**

Kimberly-Clark Worldwide, Inc.  
2600 Federal Ave  
Everett 98201

Section/Township/Range: 19/29N/5E

Latitude: 47.98274

Longitude: -122.21579

Facility Site ID: 9

*Site scored/ranked by Mike Young, Snohomish Health District for the February 2014 update of the Hazardous Sites List.*

#### **SITE DESCRIPTION:**

The subject site, currently owned by Kimberly-Clark Worldwide, Inc. (KC), includes a recently demolished paper mill that once occupied nearly 70 acres of shoreline property, located at a deep water port close to downtown Everett. This area is "Currently designated heavy industrial under the City of Everett comprehensive plan and zoning code."<sup>16</sup> The site includes 12 parcels (see figure 1) that are located between the Puget Sound and the railroad, which runs alongside West Marine View Drive (from the 22<sup>nd</sup> block to the 27<sup>th</sup> block).

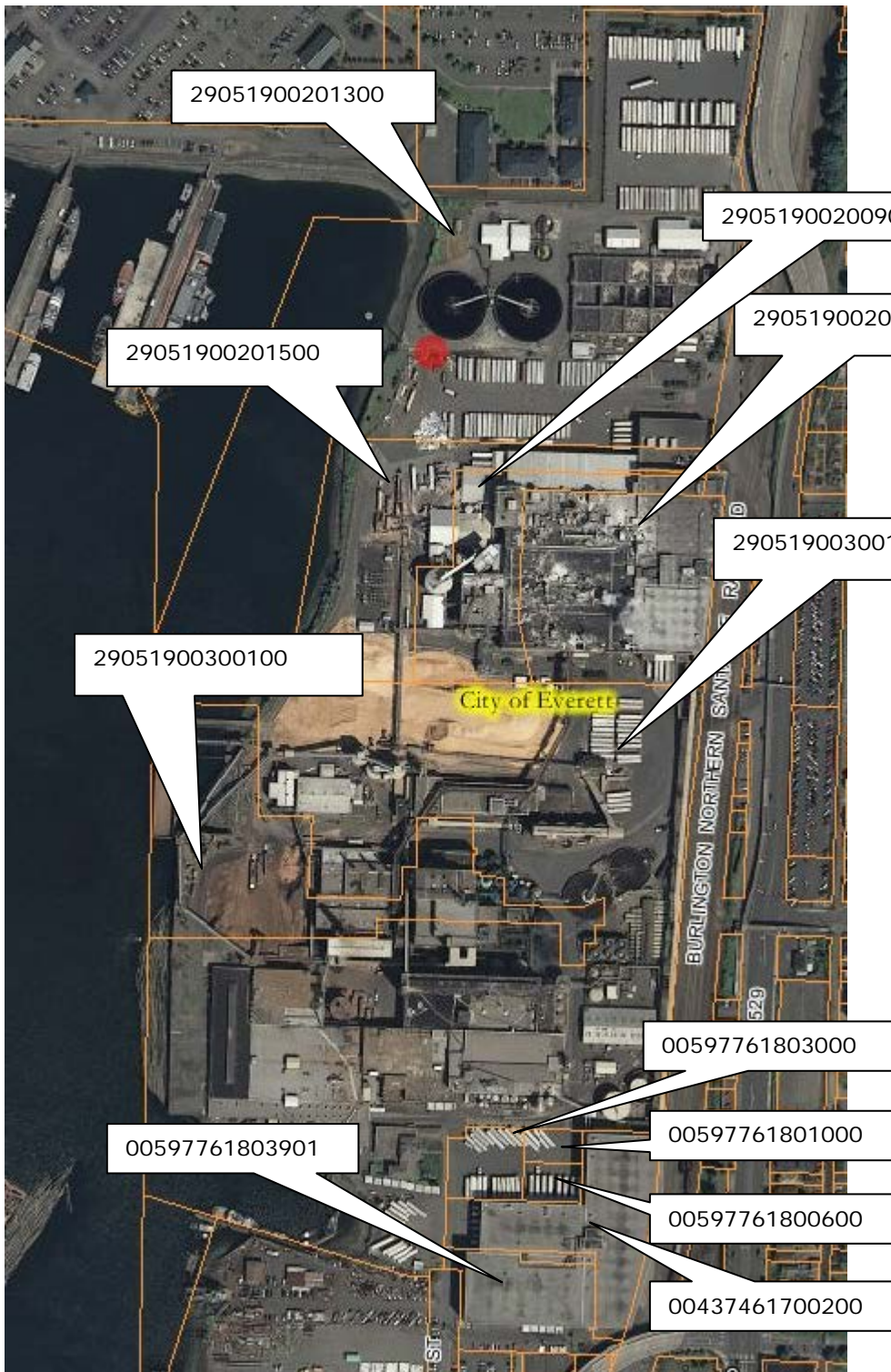
Alternative names for this site include the following:

Kimberly Clark CORP, Kimberly Clark Corporation, Kimberly Clark Tissue Co Everett, Kimberly Clark Worldwide, Kimberly Clark Worldwide Inc, Kimberly-Clark Worldwide, Scott Paper Co, Scott Paper Co Everett, Scott Paper Co UST 5351, Puget Sound Pulp and Timber Company, Soundview Pulp Company

The neighboring properties are described as follows:

- The property north of the site is the US Everett Naval Station.
- South of this site are several private industrial properties owned by the Port of Everett that include Dunlap Towing properties and Exxon/Mobil American Distribution Company (ADC). Exxon/Mobil ADC is a Washington State Department of Ecology toxics cleanup site FS# 2728
- West of this site is the East Waterway that is part of the Port Gardner Bay and the Puget Sound. The East Waterway is a Washington State Department of Ecology toxics cleanup site FS# 2733 and was ranked 6/30/1991.
- East of the site is the Burlington Northern Santa Fe Railroad and West Marine View Drive

Figure 1, Map of site taken from Snohomish County aerial photos collection, June 2007. Tax parcel numbers and acreage are shown in the table below.



Tax Parcel Number	Acreage
29051900201500	4
29051900201300	19
29051900201100	0.04
29051900201000	4.2
29051900200900	2.4
29051900200200	5.47
29051900200100	26.7
597761803000	0.34
597761801000	0.22
597761800600	0.27
437461700200	2.41
597761803901	1.57

Currently, the only structures on the site include the Distribution/warehouse constructed in 1959 on parcel 00437461700200 and the sewer treatment system at the north end of the site located on parcel 29051900201300. There are also unused, paved parking areas and other remnants of infrastructure related to pulp and paper manufacturing surrounding the demolition site. The panoramic photo below was taken from the pedestrian overpass along Marine View Drive looking east on 11/6/2013.



Note: Additional photos from site visit and historic aerials are attached.

## **BACKGROUND**

Prior to 1890, the subject site was an undeveloped tidal flat of the Puget Sound. In the early 1900's the subject site was filled in and the surrounding properties were developed with a railroad track to the east and several industrial buildings.<sup>16</sup> Past uses also included bulk petroleum storage operations by several oil companies and sawmilling. However, "this site was primarily used for pulp and paper manufacturing from 1931 to 2012."<sup>18</sup>

In 1931 the Soundview Pulp Company began operation with five digesters and two pulp drying machines. Soundview Pulp Company then merged with Scott Paper Company in 1951 and four Scott tissue machines were added to the facility from 1953 to 1955. "The current distribution/warehouse facility located on the south end of the site was constructed in 1959. Initially, logs were rafted to the Everett Mill, where they were chipped on-site. Approximately 40 years ago, rafting and chipping were discontinued."<sup>16</sup> The log pond was filled in during the late 1970's. The fill area is located where the chip pile and hog fuel storage area was located.

In 1964 Scott Paper Company built two primary clarifiers. Secondary clarifiers with the current wastewater treatment plant were constructed in the late 1970's.<sup>16</sup> Scott was permitted to discharge primary and secondary treatment water to the East Waterway and to an offshore deep water discharge site 2000' away into Port Gardner Bay.<sup>22</sup> In 1974, recovery Boiler No. 10 was constructed, which provided evaporation and burning of spent sulfur liquor from the pulp mill. Five original Dutch oven wood waste boilers were replaced by a new boiler (No. 14) in 1995, a.k.a. the bio-mass boiler. Boiler No. 14 was owned by Snohomish County Public Utility District (PUD) because it generated electricity for the community.<sup>16</sup>

Kimberly-Clark Corporation and Scott Paper Company merged in 1995 and KCWW was later registered as owner of the Everett Mill Facility. Before the site was closed and demolished in 2012, the facility had five tissue machines, a tissue converting operation, a distribution warehouse, a sulfite pulp mill, two pulp dryers, a wastewater treatment facility, a bio-mass boiler, a chemical recovery boiler and three natural gas boilers. Support facilities include a water filtration plant for treatment of water received from the City of Everett, railroad spur tracks, office/engineering facilities, storage facilities for wood chips and hog fuel, and semi-truck parking.<sup>16</sup>

All manufacturing operations at the facility ceased in April 2012 and the Site is currently being prepared for future use through a demolition process permitted by the City of Everett. Demolition activities at the Site were completed in summer 2013 which resulted in the removal of most of the structures associated with the former mill. Ecology and Kimberly-Clark Worldwide, Inc. (KC) entered into an agreement for cleanup of the upland area, on December 20, 2012. The Agreed Order covers the Remedial Investigation and Feasibility Study (RI/FS) and the draft Cleanup Action Plan (DCAP) for the upland area.<sup>24</sup> In addition, interim actions have started at the site removing highly contaminated soil identified in the independent site investigation (Phase 2 Environmental Site Assessment) conducted by K-C in 2012.<sup>18</sup>

## **HISTORICAL ANALYTICAL DATA**

AMEC Earth & Environmental, Inc. conducted a Phase I Environmental Site Assessment of the site in 2011 for the current site owner, Kimberly-Clark Worldwide, Inc. Their goal was to identify historic and current Recognized Environmental Conditions, or areas with environmental issues, labeled HREC or REC. After research and site inspections, 9 different areas with historic and current issues were noted in their Phase I report.

After completion of site sampling and chemical analysis during the Phase II Environmental Site Assessment by Aspect Consulting in 2013, eleven additional environmental issue areas were added to the site. For this Site Hazard Assessment we will summarize 20 different issue areas found at this site and then review where the highest level of contaminants were found. Note that this assessment doesn't include the East Waterway because it is considered a separate site. However, much of the contamination may have originated from the KC site, where "...samples collected in the marine sediments were found to contain wood waste, as well as contaminants including metals, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), semi volatile organic compounds (SVOCs), and dioxins/furans" likely generated from this site.<sup>18</sup>

### **1. Underground Storage Tanks (UST) removals** – Based on review of Washington Department of Ecology (Ecology) records, ten underground storage tanks (USTs) were operated on the property at various times.

In November 1989, eight USTs (Nos. 29, 67, 68, 69, 70, 71, 72, and 73) were removed from the property and Ecology was notified of fuel releases from UST Nos. 29, 68, 70, 71, 72, and 73 in December 1989. Additional USTs were removed in 1995 (70R) and in 1999 (68R a 500-gallon unleaded gasoline tank located east of the South Office Building).<sup>16</sup>

In 2002, the Facilities LUST I.D. No. 1627 was classified as inactive. The releases associated with the USTs are considered a Historic Recognized Environmental Conditions (HREC1) to the Subject Property due to the inactive LUST I.D. number and the resulting No Further Action review by Ecology. During the 2012 Phase 2 investigation the following work was performed to assess contamination with UST's:

- UST No. 29 was assessed with the Latex Spill Area, see discussion below, environmental issue area #12.
- USTs 68, 69 and 68R area has wells monitoring the area around the South Office Building. No exceedances were found in soil or groundwater samples collected from wells immediately downgradient of former UST's.
- UST 70 was a 1,000-gallon diesel storage tank removed in 1989 and UST 70R was a 2,000-gallon diesel UST installed in the same location was removed in 1995. A Total TPH concentration (12,300

mg/kg) was detected in the 3 to 4-foot soil sample from boring UST70-B-1. Field screening information indicates diesel contamination extending between depths of about 3 and 12 feet in the boring. Concentrations of arsenic, nickel and zinc were detected greater than the screening level in groundwater, with nickel found at 308 ug/L in one sample.

- USTs No. 71, 72, and 73 were reportedly railroad cars used as Bunker C oil USTs (approximately 12,000-gallon capacity each), which were removed in 1989. Bunker C oil-saturated soil was encountered at a depth of 12 to 13 feet in boring Boiler-MW-1 (24,000 mg/kg), and in shallow soil at hand-augered Boiler-B-3(108,000 mg/kg). Soil cPAH concentrations exceeding unrestricted and industrial soil screening levels occur in association with elevated Total TPH concentrations.
2. **Naval Reserve Property** – Kimberly-Clark Worldwide, Inc. owned property located north of the current north end semi-truck parking area for a Navy owned parcel (Naval Reserve Center Property) located just south of the secondary clarifier and aeration basins with the Navy in the mid-1990's. The US Navy remediated the site to below MTCA soil and groundwater cleanup levels, making the site historical with regard to cleanup, but is still considered an issue to the subject site. However, during the Phase 2 investigation, contaminated soil was found near the former UST in this area. "Within the apparent footprint of the former USTs' excavation, boring NRP-B-22 contained gasoline-range TPH (230 mg/kg) and Total TPH (21,500 mg/kg) at concentrations greater than the respective screening levels in the soil..."<sup>17</sup> Soil sampling was performed at the former Firing Range area on the Naval Reserve Property, since at the time there was no information available regarding removal of shallow metals-contaminated soil in that area. Two of 16 shallow soil samples had low-level arsenic exceedances (35 and 22 mg/kg). No other metal concentrations exceeded soil screening levels.<sup>17</sup>
  3. **Bleaching Tower area** –In 1999 there was a soil analysis report showing that petroleum-contamination was encountered during construction of a new bleach tower near an abandoned pipeline. Although the soil contamination was thought to be localized and some soil was removed, the detected release is still considered an issue with regard to the subject site.<sup>16</sup>
  4. **PCB Transformer** - PCB sampling at transformer stations 3/4 and 5/6 exceeded EPA PCB clean up levels (10µg per 100 cu.cm.) for concrete, and concrete removal was recommended by Safety-Kleen. The release of PCBs is considered a historic environmental issue because confirmation sampling indicate residual soils at substation 5/6 were between 1.4 and 3.4 mg/kg PCBs, below MTCA cleanup levels (10.0 mg/kg). In addition, the concrete below substation 3/4 was also cleaned to EPA PCB clean up levels for concrete.<sup>16</sup>
  5. **Former Paint Shop** – A Scott Paper Memorandum dated August 3, 1994, indicated that contamination described as paint thinner, gasoline or xylene was encountered during the excavation of a utility line in the area of a former Paint Shop. A site investigation indicated the release is localized and additional remedial measures are not warranted. Based on the results of the site investigation, the contamination encountered in the area of the former Paint Shop is only considered a historic environmental issue for the site.<sup>16</sup>
  6. **Rail Car Dumper Containment Vault Valve** – A valve failure resulted in the release of two gallons of hydraulic fluid to the East Waterway in 1995. The spill was contained, cleaned up, and inspected by Ecology, and the matter was closed (ERST No. 547098). Consequently, the Rail Car Dumper Containment Vault is considered a historic environmental issue.<sup>16</sup>
  7. **ExxonMobil ADC Site** – Petroleum product and sheen was observed on water seeping through cracks in the asphalt area adjacent to the south side of the distribution/warehouse building on the Subject Property. The ExxonMobil/American Distribution Company independent cleanup work was done in advance of the City of Everett replacing a sewer line in that area, which is an ongoing MTCA cleanup site (Facility Site ID No. 2728). Because petroleum contamination from the ExxonMobil ADC Site has been found on the



subject site, the Exxon Mobil ADC Site is considered a current environmental issue for this site. The cleanup was limited and the northern limit of excavation maintained a 12-foot separation from the south edge of K-C's Distribution Warehouse. Approximately 725 tons of soil and debris were reportedly removed from K-C property for off-site disposal. Although total TPH soil concentrations were found as high as 10,100 mg/kg, the groundwater data did not identify concentrations of TPH, PAHs or VOCs greater than the screening levels in any of the nine monitoring wells installed during the Phase 2 investigation.<sup>17</sup>

- 8. Former Oil House and Former Gasoline/Bunker C Aboveground Storage Tanks (ASTs)** – A 1950's map depicted an oil house in this area. TPH-Oil was detected above MTCA Method A groundwater cleanup levels in the area of the former oil house and former gasoline/Bunker C fuel oil AST farm and associated underground piping, and the absence of documented completed remediation, the release is considered a current environmental issue for the site.<sup>16</sup> During the Phase 2 investigation, analytical results for TPH, naphthalene (a mobile PAH commonly associated with Bunker C oil) and total cPAH data were found elevated. The Phase 2 ESA groundwater data from REC 2 monitoring wells MW-1 through MW-4 indicate concentrations of TPH less than screening levels, with the exception of well MW-3, located on the downgradient edge of a former fuel tank. At MW-3, Total TPH (consisting predominantly of diesel-range TPH) was detected above the 500 µg/L screening level during the Round 2 and Round 3 sampling events (625 µg/L and 995 µg/L, respectively). Lead, arsenic, copper, nickel, and ammonia was also detected in groundwater with concentrations exceeding the screening levels.<sup>17</sup>
- 9. Heavy Duty Shop Sump** – “Petroleum staining was visible around and in a catch basin located in the Heavy Duty Shop. Water and petroleum product was observed in the catch basin along with a sump pump. Staining was observed on the outside of the building below the former discharge point of the sump pump. This sump was connected to the WWTP in 2008.”<sup>16</sup> During the Phase 2 investigation, several dissolved metals were detected in the groundwater samples collected from REC3-MW-1, but only dissolved nickel was detected during the next round of samples at a concentration that exceeded the screening level.<sup>17</sup> Based on the petroleum staining and metals contamination, the Heavy Duty Shop sump is considered a current environmental issue for the site.
- 10. Railcar Dumper Hydraulic System Building** (south side) – Hydraulic fluids were observed on the ground surface of the Rail Car Dumper hydraulic system building next to the south side of the building. Due to the hydraulic fluid staining and knowledge of a pipe that could historically have discharged to the ground surface from inside the building, the area adjacent to the south side of the Rail Car hydraulic system building is considered an current environmental issue for the site.<sup>16</sup>
- 11. Dutch Ovens 1 through 5** – Soils were excavated for the foundation for Sand Filter 1, which was constructed within a building in the area of the Dutch Ovens 1 through 5. Some of the excavated material was identified as potentially consisting of spent sulfite liquor. The soils were characterized for proper landfill disposal. Results of the profiling detected arsenic (35.4 mg/kg) and cadmium (5.21 mg/kg), which is above MTCA Method A soil cleanup levels, but also found acceptable for landfill disposal. Following the excavation, the area within the building was restored with an impervious surface. However, further soil investigation was not performed to determine if the impacts were fully removed.<sup>16</sup> During the Phase 2 investigation dissolved metals were detected in the groundwater samples The greater dissolved or total concentrations in the Round 2 sample are: 218 µg/L arsenic, 226 µg/L copper, 234 µg/L lead, 0.57 µg/L mercury, 14.8 µg/L nickel, and 274 µg/L zinc.<sup>17</sup> The detected metal concentrations, particularly arsenic, copper, and lead, are well above those detected elsewhere on the Site. Therefore, this area is considered a current environmental issue for the site.

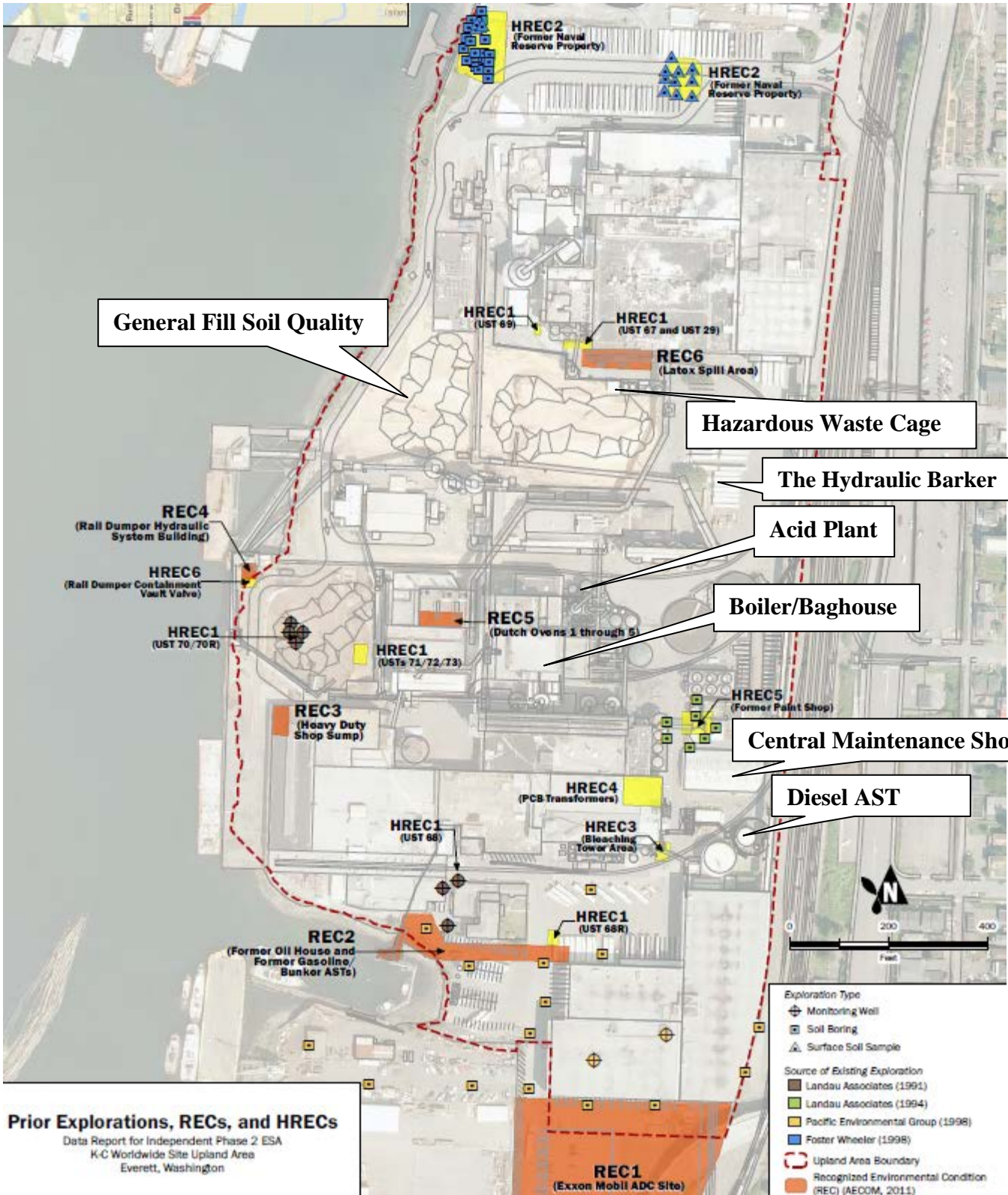
- 12. Latex Spill Area** – In 2008, approximately 28,000-gallons of latex were released due to an undetected break in a railroad car off-loading line. Latex used as a binder in paper products is considered non-toxic, however, formaldehyde, a component of latex, is considered a hazardous substance.<sup>16</sup> The Phase 2 ESA data confirm that high concentrations of xylene remain in soil and groundwater within the former UST No. 29 excavation footprint (REC6-MW-1) where a soil sample contained 9,700 mg/kg gasoline-range TPH, 2,250 mg/kg total xylenes, 630 mg/kg ethylbenzene. Formaldehyde was also detected in the well, but was less than the groundwater screening level. Therefore, the largest impact to groundwater and soil in the Latex Spill Area may be the leaking UST No. 29.<sup>17</sup> The 2008 spill and UST No. 29 area is considered a current environmental issue for the site.
- 13. East Waterway Shoreline** – Although the East Waterway is not considered part of this Site Hazard Assessment, the groundwater below shoreline is considered a current environmental issue for the site. The paper mill discharged untreated effluent to the East Waterway from 1929 to 1964.<sup>16</sup> The results of the Phase 2 ESA identified concentrations of arsenic, copper, nickel and/or zinc greater than the screening levels in 12 of the 15 monitoring wells sampled along the upland shoreline during one or more of the groundwater sampling rounds. Additionally, ammonia was detected above the conservative 0.035 mg/L screening level in 12 of the 15 wells. The highest ammonia concentrations were detected at well MW-6 and NPR MW-3 (15 to 16 mg/L). Metals concentrations in groundwater along the upgradient (eastern) edge of the site were measured to assess background groundwater quality in the fill. Detected, dissolved and total metal concentrations in the upgradient wells were less than respective groundwater screening levels, or not detected during either sampling round.<sup>17</sup>
- 14. Acid Plant** – Potential acidic releases from the Acid Plant can leach metals from equipment and piping, and/or potentially leach naturally occurring metals from soil. The Phase 2 investigation evaluated groundwater pH and metals within the Acid Plant as an indicator of potential acidic releases. During the Phase 2 investigation one well was installed near the acid plant. The soil and groundwater sampling from AP-MW-1 provides no indication for acidic release. Soil pH and groundwater pH were both near neutral (soil pH of 7.4 to 7.5; groundwater pH of 7.2 in both rounds). Metal concentrations detected in the soil and groundwater samples were less than respective screening levels, except dissolved copper in groundwater, which was detected during the Round 3 sampling event at a concentration of 7.1 ug/L.<sup>17</sup>
- 15. Central Maintenance Shop/Old Auto Shop** – A variety of hazardous materials may have historically been used in the Central Maintenance Shop/Old Auto Shop; therefore, assessment of soil and groundwater quality at the existing shop was conducted as part of the assessment. Total PCB concentrations were found greater than the 1 mg/kg unrestricted soil screening level, but less than the 10 mg/kg industrial level. The groundwater samples collected during both sampling rounds from well CMS-MW-1 contained concentrations of Total TPH, naphthalene, and total cPAH (TEQ) greater than respective screening levels.<sup>17</sup>
- 16. Boiler/Baghouse Area** – Biomass including wood chips and hog fuel, and reportedly other materials including scrap rubber and solvents, were historically burned in the boilers; therefore, the assessment included soil sampling and analysis for dioxins/furans, metals, SVOCs, and VOCs. Soil lead concentration of 1,870 mg/kg exceeded the 1,000 mg/kg industrial screening level (and 250 mg/kg unrestricted screening level). The detected dioxins/furans concentration, expressed as Total 2,3,7,8-TCDD (TEQ) (hereafter termed TCDD [TEQ]), in the 1- to 2-foot soil sample from Boiler-B-2 was  $2.7 \times 10^{-5}$  mg/kg (27 ng/kg), which is greater than the  $1.1 \times 10^{-5}$  mg/kg (11 ng/kg) unrestricted soil screening level and less than the  $1.5 \times 10^{-3}$  mg/kg (1,500 ng/kg) industrial soil screening level. The detected total cPAH concentrations in the shallowest soil samples from borings Boiler-B-2, Boiler-HA-2B, and Boiler-HA-2C (0.28 to 0.50 mg/kg) were greater than the 0.14 mg/kg unrestricted screening level but less than the 2 mg/kg industrial screening level.<sup>17</sup>

- 17. Hazardous Waste Cage** – The hazardous waste cage is a 90-day hazardous waste accumulation area used to store wastes prior to off-site disposal; it is not a Treatment, Storage, Disposal Facility permitted under RCRA. Lead was detected in the 3- to 4-foot soil sample from HW-MW-1 at a concentration (303 mg/kg).<sup>17</sup>
- 18. Diesel AST Area** – Diesel, used as an emergency fuel for the boilers from 1996 until mill closure, was stored in a 250,000-gallon AST located within a secondary containment structure immediately northeast of the Distribution Warehouse. West of the Diesel AST is the Diesel Pump House (Figure 3-18A). Total TPH was detected at 5,030 mg/kg (predominantly oil range TPH) in the upper 2 feet of soil at REC2-MW-5.<sup>17</sup>
- 19. The Hydraulic Barker Building** – This area located on the east side of the Log Pond Fill was used before 1947 until sometime after 1992. High-pressure water was used to remove bark from logs at the building. TPH, PAH and a hit of benzene was found in soil samples.
- 20. General Fill Soil Quality** – The source of the fill upon which the mill facility was constructed is unknown, so a general assessment of the fill soil quality was performed using 15 soil borings (GF-B-1 through GF-B-15A) in accessible locations spread across the site.
- TPH was detected in saturated soil, but not in soil above the water table. Total cPAH concentrations exceeded the industrial screening level.
  - Concentrations of noncarcinogenic PAHs (e.g., naphthalene, anthracene, fluorene, fluoranthene, phenanthrene, pyrene) found suggest a creosote may be in the fill.
  - Lead was detected at a concentration (659 mg/kg) greater than the unrestricted soil screening level, but less than the industrial screening level in the 1- to 2.5-foot sample from boring GF-B-11.
  - Methylene chloride was detected in the 7.5- to 9-foot sample from GF-B-12 at a concentration of 0.5 mg/kg, equal to the analytical reporting limit.
  - Dioxins/furans (TCDD [TEQ]) were detected at a concentration greater than the  $1.1 \times 10^{-5}$  mg/kg unrestricted soil screening level in one of the 15 General Fill borings:  $1.48 \times 10^{-5}$  mg/kg at GF-B-5.<sup>17</sup>

The mill's wood chip storage area was historically a log pond that, by the late 1970s, was filled to create upland used for materials storage. The composition and source of the fill material is uncertain. Soil and groundwater quality data were collected to assess the chemical quality of the fill underlying the wood chips, and of groundwater along the shoreline downgradient of the fill to assess the Log Pond area as a potential source of contaminants to the East Waterway.

- Low-level arsenic and copper exceedances (up to 7.8 and 5.3  $\mu\text{g/L}$  respectively) were detected in groundwater samples collected during each of the three rounds of sampling at well MW-6.
- Nickel was detected at a concentration (10.5  $\mu\text{g/L}$ ) exceeding the screening level in the Round 3 groundwater sample collected from well MW-6.<sup>17</sup>





**Table 1: Summary of Maximum Level Groundwater Data**

Chemical Of Concern	Max Result	Screen level	Max Result General Location	Max Sample Site	Max Date	# Tests	# Detects
<b><u>TOTAL METALS</u></b>	<b>ug/L</b>	<b>ug/L</b>					
Total Arsenic	236	5	Dutch Ovens 1-5	REC5 MW-01 FD	6/8/2012	21	11
Total Copper	225	3.1	Dutch Ovens 1-5	REC5 MW-01	6/8/2012	21	10
Total Lead	242	8.1	Dutch Ovens 1-5	REC5 MW-01 FD	6/8/2012	25	10
Total Mercury	0.55	0.15	Dutch Ovens 1-5	REC5 MW-01	6/8/2012	21	2
Total Nickel	308	8.2	East Waterway Shoreline Wells	UST70 MW-2	8/29/2012	21	21
Total Zinc	274	81	Dutch Ovens 1-5	REC5 MW-01	6/8/2012	21	20
<b><u>PETROLEUM HYDROCARBONS</u></b>	<b>ug/L</b>	<b>ug/L</b>					
Gasoline Range Hydrocarbons	25000	1000	Latex Spill	REC6 MW-01	6/12/2012	58	13
Diesel Range Hydrocarbons	1200	500	UST's 71,72,73	UST71 MW01	8/29/2012	57	17
Total TPHs	1580	500	UST's 71,72,73	UST71 MW01	8/29/2012	57	17
<b><u>VOLATILES</u></b>	<b>ug/L</b>	<b>ug/L</b>					
m,p-Xylenes	6900	310	Latex Spill	REC6 MW-01	7/2/2012	71	4
o-Xylene	1600	440	Latex Spill	REC6 MW-01	7/2/2012	71	5
Total Xylenes	8500	310	Latex Spill	REC6 MW-01	7/2/2012	70	4
<b><u>PAHs</u></b>	<b>ug/L</b>	<b>ug/L</b>					
Naphthalene	200	170	Central Maintenance Shop	CMS-MW-1	7/2/2012	64	18
Benz(a)anthracene	1.5	0.018	USTs No. 71, 72, and 73	USTs 71 MW-01	8/29/2012	66	14
Benzo(a)pyrene	0.67	0.018	USTs No. 71, 72, and 73	USTs 71 MW-01	8/29/2012	66	9
Benzo(b)fluoranthene	0.28	0.018	USTs No. 71, 72, and 73	USTs 71 MW-01	8/29/2012	66	8
Chrysene	2.6	0.018	USTs No. 71, 72, and 73	USTs 71 MW-01	8/29/2012	66	14
Dibenzo(a,h)anthracene	0.033	0.018	USTs No. 71, 72, and 73	USTs 71 MW-01	8/29/2012	66	1
Indeno(1,2,3-cd)pyrene	0.052	0.018	USTs No. 71, 72, and 73	USTs 71 MW-01	8/29/2012	66	1
Total cPAHs TEQ	0.854	0.018	USTs No. 71, 72, and 73	USTs 71 MW-01	8/29/2012	65	15
<b><u>OTHER</u></b>	<b>ug/L</b>	<b>ug/L</b>					
Ammonia as Nitrogen	15700	35	East Waterway Shoreline	NPR MW-3	8/30/2012	30	23

**Table 2: Summary of Maximum Soil Contamination Data**

Chemical Of Concern	Max Result	Screen level Method B	Industrial land use level Method C	# Tests	# Detects	Max Result General Location	Max Sample Site	Max Date
<b>DIOXINS/FURANS</b>	mg/kg	mg/kg	mg/kg					
Total 2,3,7,8 TCDD (TEF)	2.69E-05	1.1E-05	1.50E-03	23	23	Boiler Baghouse	Boiler B-2 (1-2 ft)	7/5/2012
<b>TOTAL METALS</b>	mg/kg	mg/kg	mg/kg					
Arsenic	74.4	20	20	136	135	Boiler Baghouse	Boiler B-3 (1-2 ft)	9/5/2012
Cadmium	7.85	2	2	125	3	Boiler Baghouse	Boiler B-3A (1-2 ft)	9/5/2012
Lead	1870	250	1000	149	149	Boiler Baghouse	Boiler B-2 (1-2 ft)	7/5/2012
<b>PETROLEUM HYDROCARBONS</b>	mg/kg	mg/kg	mg/kg					
Gas Range Hydrocarbons	9700	100	100	142	32	Latex Spill	REC6 MW-1 (6FT)	6/28/2012
Diesel Range Hydrocarbons	62000	2000	2000	228	68	Boiler Baghouse	Boiler B-3 (1-2 ft)	7/5/2012
Oil Range Hydrocarbons	46000	2000	2000	228	49	Boiler Baghouse	Boiler B-3 (1-2 ft)	7/5/2012
Total TPHs	108000	2000	2000	228	69	Boiler Baghouse	Boiler B-3 (1-2 ft)	7/5/2012
<b>VOLATILES</b>	mg/kg	mg/kg	mg/kg					
Benzene	0.055	0.03	0.03	183	2	Former Oil House	DP 3 (4-5 FT)	2/14/2012
Ethylbenzene	660	6	6	183	9	Latex Spill	REC6 MW-1 FD (6FT)	6/28/2012
Methylene chloride	0.5	0.02	0.02	146	1			
Total Xylenes	2800	9	9	146	6	Latex Spill	REC6 MW-1 FD (6FT)	6/28/2012
<b>PAHs</b>	mg/kg	mg/kg	mg/kg					
Naphthalene	79	5	5	211	80	General Fill	GF9 MW-1	9/6/2012
Benz(a)anthracene	32	1.4	180	214	111	Boiler Baghouse	Boiler B-3 (1-2 ft)	7/5/2012
Benzo(a)pyrene	26	0.14	2	213	107	Boiler Baghouse	Boiler B-3 (1-2 ft)	7/5/2012
Benzo(b)fluoranthene	30	1.4	180	213	113	Latex Spill	UST29 MW-1 FD (8FT)	6/27/2012
Dibenzo(a,h)anthracene	4.5	0.4	18	213	29	Boiler Baghouse	Boiler B-3 (1-2 ft)	7/5/2012
Indeno(1,2,3-cd)pyrene	15	1.4	180	213	94	Latex Spill	UST29 MW-1 (8FT)	6/27/2012
Total cPAHs TEQ	33.5	0.14	2	212	127	Latex Spill	UST29 MW-1 FD (8FT)	6/27/2012
<b>PCB's</b>	mg/kg	mg/kg	mg/kg					
Aroclor 1254	1.9	0.5	66	63	7	Old Maintenance Shop	OMS-B-3	7/6/2012
Aroclor 1260	1	0.5	66	63	6	Central Maintenance Shop	CMS-B-3	7/6/2012
Total PCBs	2.55	0.5	10	63	9	Central Maintenance Shop	CMS-B-3	7/6/2012

## **Soils and Ground water**

Soils in this area are reported to be gravelly sand and silty sand with urban fill material. About half of the site is now a level surface covered with crushed demolition waste concrete and brick along with soil where the main paper mill was located. Groundwater is tidally influenced with groundwater found at 15.74' below ground (UG-MW-1) to 3.27' below ground (oms-MW-1) at -4.5 foot tide.<sup>17</sup>

## **Surface Water Features**

Surface water is collected on site and drained to the wastewater treatment lagoons on the north end of the site. However, some water may escape the system and discharge to the East Waterway, which is part of the Port Gardner Bay and the Puget Sound. The water of Port Gardner Bay includes a mixture of salt water flowing on tides from Pacific Ocean and fresh water coming from the mouth of the Snohomish River north of the site. "The East Waterway channel is about 700 to 900 feet in width, and 30 feet deep. It has multiple sources of sediment contamination resulting from historical and current industrial and municipal discharges, as well as log rafting, which contributed to high levels of wood debris. Primary uses of the waterway have included shipping and processing facilities for timber, pulp, and alumina, deep water shipping operations by the Port of Everett, and naval activities. Historical sediment data shows a variety of contaminants such as polycyclic aromatic hydrocarbons (PAHs), semivolatile organic compounds (SVOCs) including phenols, polychlorinated biphenyls (PCBs), dioxin/furans, and some metals."<sup>23</sup> According to Everett Harbor Action Program the East Waterway, "particularly along the eastern shoreline, is the most highly contaminated in the entire Everett Harbor project area."<sup>22</sup>

## **Groundwater Uses**

This community is serviced by Everett Public Water, there is no groundwater used within 2 miles of the site. There were records of wells installed in the area for construction dewatering and the following monitoring well installed by the USGS:

USGS 475858122123001 29N/05E-19K04 47°59'03" -122°12'49"  
The depth of the well is 109 feet below land surface 1967-05-19

USGS 475906122123301 29N/05E-19K02  
Latitude 47°59'05", Longitude 122°13'04" NAD27 Land-surface elevation 10 feet above NGVD29 The depth of the well is 73.8 feet below land surface. The depth of the hole is 100 feet below land surface. 1944-11-18

## **Summary/Recommendations**

This shoreline property has been filled and developed for heavy industrial use for over 100 years. The soil has been contaminated from many different sources. Source contamination came from on-site and off-site of the current properties owned by KC. Although contaminated soils have been removed on several occasions historically, there is still considerable groundwater and soil contamination not fully resolved as evidenced by the Phase 2 investigation.

Currently interim actions are being performed to remove contaminated soil and treat groundwater in some areas found to be above the industrial cleanup standards. Nonetheless given the extent of the problem, contaminated soil and contaminated groundwater will likely remain at this site. It appears that most of the contamination concentrations remaining on the site will be above Method A cleanup levels, but in some cases contamination may also be above Method C (industrial land use) levels. It would take extensive sampling over time to prove current efforts meet the cleanup standards. Therefore, we recommend this site be ranked at this time.

**SPECIAL CONSIDERATIONS:**

According to a KC representative, the entire area will be paved over by the next land owner, who we understand to be Foss Marine. Pavement will provide a good mitigation for soil contamination and groundwater plume stabilization. However, it was noted that the most recent demolition of the mill has left behind a fill of about 100,000 cubic yards of crushed demolition debris on the site. The demolition debris consists mostly of concrete, brick and asphalt and is about 3 to 4 feet deep, thinning as you move to the shoreline.

Snohomish Health District may need to address the demolition debris issue under the solid waste regulations, if the demolition debris fill was not included in the Agreed Order between Washington State Department of Ecology and KC, which covers the Remedial Investigation/Feasibility Study (RI/FS) and the draft Cleanup Action Plan (DCAP). This could involve issuing an inert waste landfill permit that would allow Snohomish Health District to monitor the site under the requirements of WAC 173-350-410(8).

The surface water route was scored because the pavement has not been installed.

**ROUTE SCORES:**

Surface Water/Human Health:	12.1	Surface Water/Environmental.:	29.9
Air/Human Health:	0	Air/Environmental:	0
Groundwater/Human Health:	44.8		

**OVERALL RANK: 4**

## Worksheet 2

### Route Documentation

#### 1. Surface Water Route

- a. List those substances to be considered for scoring: Source: 1

The substances listed in tables 1 and 2 above will all be considered for this SHA.

- b. Explain basis for choice of substance(s) to be used in scoring:

- Data from the Phase 2 investigation shows that arsenic and lead were found in soil above the MTCA Method A cleanup level in 2 to 5% of the sample tested. Only the soil samples at the Boiler/Baghouse exceeded the industrial cleanup levels for metal. Copper has no MTCA Method A cleanup level, but was found in groundwater above the screening level.<sup>17</sup>
- Non-carcinogenic PAH pyrene was detected in 65% of soil samples analyzed and cPAHs were detected in 60% of soil samples analyzed. Naphthalene was also detected in 38% of the PAH analyses. Naphthalene was the only non-carcinogenic PAH compound to exceed screening levels.<sup>17</sup>
- Xylene exceedances were detected in groundwater and soil at the former UST No. 29 xylene release area.<sup>17</sup>
- PCB's were tested in soil and concentrations were found to exceed unrestricted soil screening levels. However, the levels were less than industrial soil screening levels.<sup>17</sup>
- Dioxins/furan will not be used in the surface water route, but we understand additional testing may be done in the future.<sup>17</sup>

- c. List those management units to be considered for scoring: Source 1

The majority of the surface water is collected on-site and diverted to primary treatment tanks on the north end of the property through the stormwater collection system. Although there are surface water run-off barriers installed on the parameter of the site, it was noted that there are some areas where surface water may overflow to the sound, see photos attached. In addition, it was noted that the existing surface material on most of the site consists of crushed and graded demolition debris that is very porous. Much of the site's surface water may percolate to groundwater. There is a direct connection between groundwater and the Puget Sound under this site, as evidence from hydraulic gradient and tidally influenced wells.

- d. Explain basis for choice of unit to be used in scoring:

Given the evidence of groundwater contamination impacts shown in the monitoring wells, surface water run-off control systems and barriers are considered compromised until an asphalt cap is installed to control surface water.



## 2. Air Route

- a. List those substances to be considered for scoring: Source: 1

The substances listed in tables 1 and 2 above will all be considered for this SHA.

- b. Explain basis for choice of substance(s) to be used in scoring:

Volatile Organic Compounds were not found above the MTCA Method A cleanup levels in most of the areas of the site. The exceptions are ethylbenzene and xylene that were found in the Latex Spill Area, in 9 of 183 samples and 6 of 146 samples respectively. There are two detections of benzene in soil out of 183 samples. One benzene result was above the cleanup standard at the Hydraulic Barker Building location and one hit of Benzene in soil above the cleanup standard was found at the Former Oil House location.

The well in the Latex Spill Area UST29 MW-1 has 3.5 feet of unsaturated sandy silt with gravel soil above the groundwater and a layer of remnant asphalt buried by demolition debris above that. The one well located at the Hydraulic Barker Building has 5 feet of unsaturated soil above the groundwater and also a layer of remnant asphalt buried by demolition debris. Other studies have shown that unsaturated soil above the contaminated volatile organic contamination will strip the contamination before it reaches the air pathway. Therefore, the air pathway will not be scored for this assessment.

- c. List those management units to be considered for scoring: Source: 1

There is a layer of existing pavement on the site which was not removed during demolition. There is another layer of pavement cap planned over demolition debris left from the crushing of demolition debris.

- d. Explain basis for choice of unit to be used in scoring:

There is likely enough unsaturated soil above the contaminated volatile organic contamination considering very little volatile organic contamination reported.

### 3. Groundwater Route

- a. List those substances to be considered for scoring: Source: 1

The substances listed in tables 1 and 2 above will all be considered for this SHA.

- b. Explain basis for choice of substance(s) to be used in scoring:

- More than one sample has dissolved arsenic, copper, lead, and nickel that exceeded the MTCA Method A cleanup level. Un-filter samples were similar with the addition mercury.<sup>17</sup>
- Non-carcinogenic PAH pyrene was detected in 65% of soil samples analyzed and cPAHs were detected in 60% of soil samples analyzed. Naphthalene was also detected in 38% of the PAH analyses. Naphthalene was the only non-carcinogenic PAH compound to exceed screening levels.<sup>17</sup>
- Xylene exceedances were detected groundwater at the former UST No. 29 xylene release area.<sup>17</sup>
- Ammonia (as nitrogen) was detected in 77% of the groundwater samples collected and exceeded the conservative screening level at a frequency of 70%.<sup>17</sup>
- Dioxins/furan and PCB were only tested in soil and found at concentrations in soil that were greater than unrestricted soil screening levels, but less than industrial soil screening levels. Dioxins/furan and PCB will not be used in the groundwater route, but we understand additional testing may be done in the future.<sup>17</sup>

- c. List those management units to be considered for scoring: Source: 1

There is a plume of groundwater contamination below the site that is under tidal influence and it can be assumed that this plume is impacting the East Waterway. Contaminant movement could be mitigated when the site is covered by an asphalt cap. However, the area still has crushed concrete and brick demolition material for cover material.

- d. Explain basis for choice of unit to be used in scoring:

The cap management unit could have been used in the scoring had an asphalt cover been installed and there was enough samples taken from each well that demonstrated the plume was stabilized. However, we must use a containment value of 10 as per the WARM scoring manual.

Worksheet 4  
Surface Water Route

**1.0 Substance Characteristics**

<b>1.1 Human Toxicity</b>										
Substance	Drinking Water Standard (µg/L)	Value	Acute Toxicity (mg/kg-bw)	Value	Chronic Toxicity (mg/kg/day)	Value	Carcinogenicity		Value	
							WOE	PF*		
1	arsenic	10	8	763	5	.001	5	A	1.75	7
2	copper	1300	2	X	ND	.037	1	X	X	ND
3	lead	5	8	X	ND	X	ND	B2	X	ND
4	pyrene	0.2	10	2700	3	0.03	1	X	X	ND
5	naphthalene	20	6	490	5	0.004	3	X	X	ND
6	xylenes	10000	2	50	10	2	1	X	X	ND
7	PCB	0.5	10	1315	3	X	ND	B2	7.7	6

*\*Potency Factor*

Source: 1, 2, 3  
**Highest Value: 10**  
(Max = 10)  
**Plus 2 Bonus Points? 2 Final**  
**Toxicity Value: 12**  
(Max = 12)

<b>1.2 Environmental Toxicity</b> ( ) Freshwater (x) Marine					
Substance	Acute Water Quality Criteria		Non-Human Mammalian Acute Toxicity		
	(µg/L)	Value	(mg/kg)	Value	
arsenic	69	6	763	5	
copper	2.9	8	X	ND	
PCB	10	8	1315	3	

Source: 1, 2, 3  
**Highest Value: 8**  
(Max = 10)

<b>1.3 Substance Quantity</b>		Source	Value
<b>Explain Basis:</b> Quantity scores based on extent of surface soil contamination >10 Acres (aerial extent).		1,2,3	<b><u>10</u></b> <small>(Max = 10)</small>

## 2.0 Migration Potential

### Source Value

2.1	<b>Containment:</b> Contaminated soil with ineffective runoff control. <b>Explain basis:</b> Although there is a surface water collection and treatment system, contamination is moving to surface water through porous fill used on site.	1-3	<b>4</b> (Max = 10)
2.2	<b>Surface Soil Permeability:</b> gravelly sand, crushed concrete and brick demolition waste used as fill.	17	<b>1</b> (Max =7)
2.3	<b>Total Annual Precipitation:</b> Average annual precipitation for 34.7 inches / year	15	<b>3</b> (Max = 5)
2.4	<b>Max 2yr/24hr Precipitation:</b> 1.5 inches  Precipitation Frequency Data Output NOAA Atlas2 Washington 47.99815°N 122.05624°W	16	<b>2</b> (Max = 5)
2.5	<b>Flood Plain:</b> Area determined to be outside the 0.2% annual chance floodplain.	20	<b>0</b> (Max = 2)
2.6	<b>Terrain Slope:</b> approximately <2%	12	<b>1</b> (Max = 5)

## 3.0 Targets

### Source Value

3.1	<b>Distance to Surface Water:</b> Site is adjacent to Puget Sound, 0 feet.	19	<b>10</b> (Max = 10)
3.2	<b>Population Served within 2 miles (see WARM Scoring Manual Regarding Direction): Surface water privately or publicly down gradient of the site</b> $\sqrt{0} = 0$ DOH reports no public water systems that use surface water within 2 miles.	17	<b>0</b> (Max = 75)
3.3	<b>Area Irrigated by surface water within 2 miles : <math>(0)*\sqrt{\# \text{ acres}} = 0*\sqrt{0}=0</math></b> WRIS shows only one irrigation point for surface water.	5,8	<b>0</b> (Max = 30)
3.4	<b>Distance to Nearest Fishery Resource:</b> Fishery resources are adjacent to the site.	24	<b>12</b> (Max = 12)
3.5	<b>Distance to, and Name(s) of, Nearest Sensitive Environment(s):</b> Number 9 Everett Harbor has a Specific Use Designations for Marine Water (WAC 173-201A-130) Class B.	21	<b>12</b> (Max = 12)

## 4.0 Release

4.0	<b>Explain Basis:</b> There is visual evidence of contamination in holes where interim cleanup actions are taking place, see photo attached. There is some analytical evidence of impact to groundwater.	21	<b>5</b> (Max = 5)
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Worksheet 6  
Groundwater Route

**1.0 Substance Characteristics**

<b>1.2 Human Toxicity</b>										
Substance	Drinking Water Standard (µg/L)	Value	Acute Toxicity (mg/ kg-bw)	Value	Chronic Toxicity (mg/kg/day)	Value	Carcinogenicity		Value	
							WOE	PF*		
1	Arsenic	10	8	763	5	.001	5	A	7	X
2	copper	1300	2	X	ND	.037	1	X	X	ND
3	lead	5	8	X	ND	X	ND	B2	X	ND
4	mercury	2	8	X	ND	.0003	5	X	X	ND
5	pyrene	0.2	10	2700	3	0.03	1	X	X	ND
6	Naphthalene	20	6	490	5	0.004	3	X	X	ND
7	Xylenes	10000	2	50	10	2	1	X	X	ND
8	Ammonia	30000	2	350	5	0.97	1	X	X	ND

\* Potency Factor

Source: 5

**Highest Value: 10**

(Max = 10)

**Plus 2 Bonus Points? 2**

**Final Toxicity Value: 12**

(Max = 12)

<b>1.2 Mobility (use numbers to refer to above listed substances)</b>	
Cations/Anions [Coefficient of Aqueous Migration (K)]	OR Solubility (mg/L)
mercury	>1 K value of 3

Source: 2

**Value: 3**

(Max = 3)

<b>1.3 Substance Quantity (volume):</b>	
<p><b>Explain basis:</b> 66.2 Acres of land was developed mill site and about 50% of the site has contaminated soil at least 12" deep. This is equivalent to about 52,000 cubic yards, which gives the site a value of 6.</p>	<p>Source: <u>17</u> <b>Value: <u>6</u></b> (Max=10)</p>

## 2.0 MIGRATION POTENTIAL

		Source	Value
2.1	<b>Containment (explain basis):</b> All spills, discharges and contaminated soil assign a containment value of 10.	16-17	<b>10</b> (Max = 10)
2.2	<b>Net precipitation:</b> 22.8"	7	<b>3</b> (Max = 5)
2.3	<b>Subsurface hydraulic conductivity:</b> Soils reported to be gravelly sand and silty sand with urban fill material and dredge sand fill.	16-17	<b>4</b> (Max = 4)
2.4	<b>Vertical depth to groundwater:</b> Groundwater is tidally influenced with groundwater found at 15.74' below ground (UG-MW-1) to 3.27' below ground (OMS-MW-1) at -4.5 foot tide.	17	<b>8</b> (Max = 8)

## 3.0 TARGETS

		Source	Value
3.1	<b>Groundwater usage:</b> not used, but usable	21	<b>2</b> (Max = 10)
3.2	<b>Distance to nearest drinking water well:</b> <u>HOME ACRES WATER DISTRICT</u> 11900 feet away from this site.	4, 6	<b>0</b> (Max = 5)
3.3	<b>Population served within 2 miles:</b> Total population serviced $\sim\sqrt{0} = 0$	8	<b>0</b> (Max = 100)
3.4	<b>Area irrigated by (groundwater) wells within 2 miles:</b> (wells)* $\sqrt{\#}$ acres = $\underline{10 * \sqrt{0} =}$	5	<b>0</b> (Max = 50)

## 4.0 RELEASE

		Source	Value
4.0	<b>Explain basis for scoring a release to groundwater:</b> Documented impacts to groundwater.	1,2	<b>5</b> (Max = 5)



## SOURCES USED IN SCORING

1. Washington State Department of Ecology, Toxicology Database for Use in Washington Ranking Method Scoring, January 1992.
2. Washington State Department of Ecology, WARM Scoring Manual, April 1992.
3. Washington Climate – Net Rainfall Table.
4. Washington State Department of Ecology, Online Water Well Log database.
5. Washington State Department of Ecology, Water Rights Tracking System (WRTS).
6. Washington State Department of Health, Office of Drinking Water Sentry website printout for public water supplies.
7. Western Regional Climate Center's Historical Climate Information.
8. Thomas Guide, Snohomish County, 2010.
9. Department Of The Interior, US Geologic Survey, Geologic Map 7.5 Minute Quad, James P. Minard, 1973.
10. Soil Conservation Service, Soil Survey of Snohomish County Area, July 1983.
11. Snohomish County Assessors/Treasurers On-line information page.
12. Snohomish County GIS mapping information.
13. Washington State Department of Ecology Online Environmental Information Management mapping tool.
14. Google Earth, 1994-2011 Aerial Photographs of the Site.
15. EPA Frequent Questions Hazardous Waste, What do we mean by stabilized plume?  
<http://waste.supportportal.com/link/portal/23002/23023/Article/21682/What-do-we-mean-by-a-stabilized-plume>
16. Phase I Environmental Site Assessment Everett Pulp and Paper Mill Kimberly-Clark Worldwide Inc Everett, Washington, April 2011. AECOM Project No. 60197578AMEC Earth & Environmental, Inc., 11810 North Creek Parkway North, Bothell, Washington
17. Phase II Environmental Site Assessment Everett Pulp and Paper Mill Kimberly-Clark Worldwide Inc Everett, Washington, March 2013. AECOM Project No. 60197578 AMEC Earth & Environmental, Inc., 11810 North Creek Parkway North, Bothell, Washington
18. Kimberly-Clark Worldwide A Puget Sound Initiative site - Reaching the goal of a healthy, sustainable Puget Sound. <https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=2569>
19. Washington State Department of Ecology, Puget Sound Initiative site - Reaching the goal of a healthy, sustainable Puget Sound. <https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=4297>
20. <http://map1.msc.fema.gov/idms/>
21. Water Quality Standards for Marine Waters  
[http://www.ecy.wa.gov/programs/wq/swqs/reference\\_files/MarineWQSMMap.pdf](http://www.ecy.wa.gov/programs/wq/swqs/reference_files/MarineWQSMMap.pdf)
22. Everett Harbor Action Program: Evaluation of Potential Contamination Sources TC-3338-26 Final Report September 1988.
23. Washington State Department of Ecology toxics cleanup web site The East Waterway FS# 2733.
24. Washington State Department of Ecology toxics cleanup web site Kimberly Clark Worldwide FS# 9.

# KIMBERLY-CLARK WORLD WIDE

by myoung

Soundview Pulp  
Company merged  
with Scott Paper  
Company in 1951



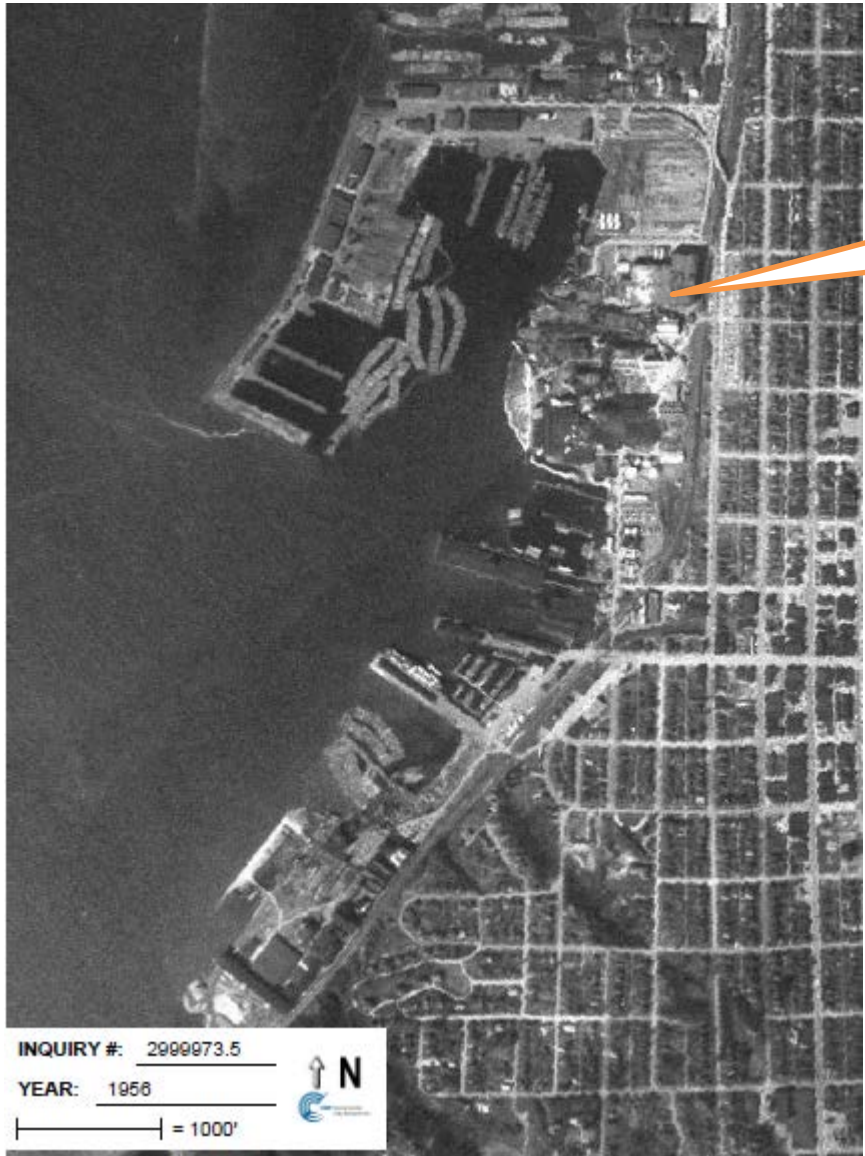
INQUIRY #: 2999973.5

YEAR: 1952

— = 500'

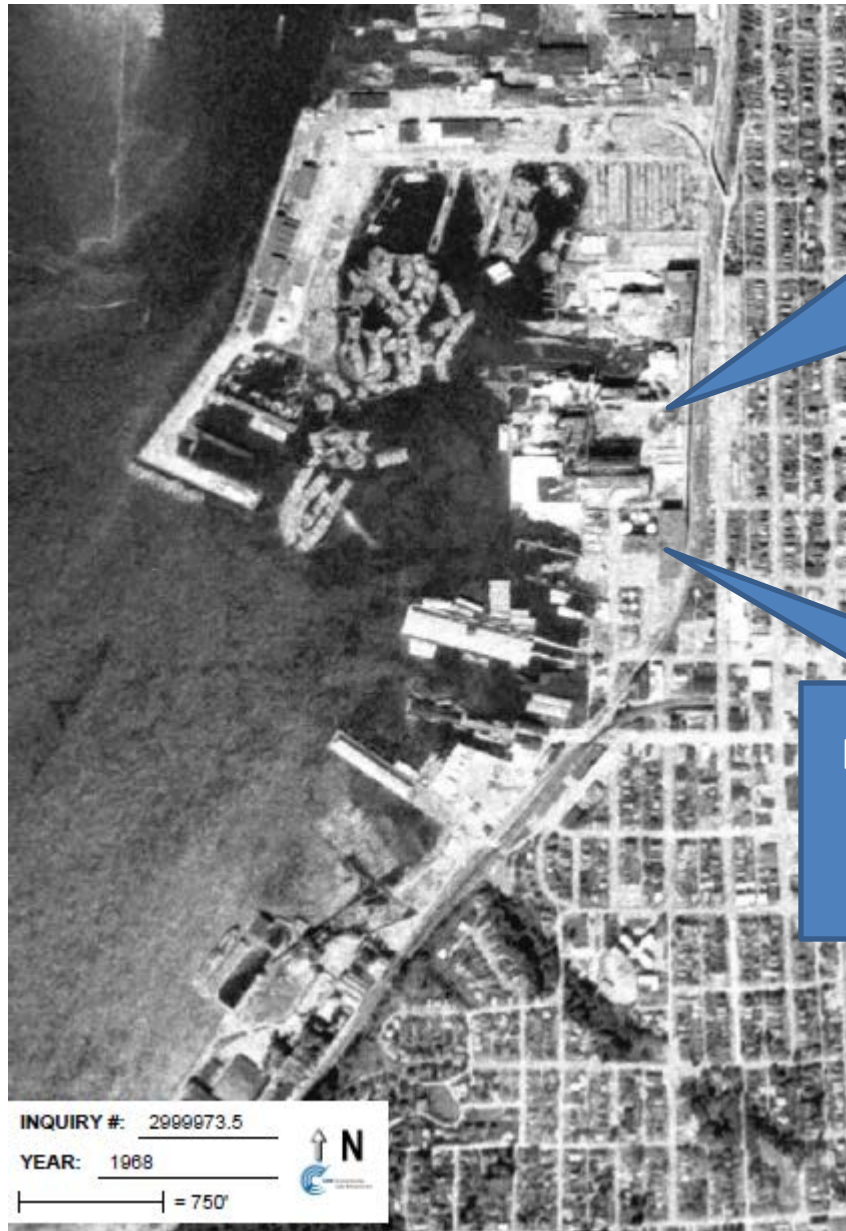


Four Scott tissue machines were added to the facility from 1953 to 1955.



Expansion

INQUIRY #: 2989973.5  
YEAR: 1956  
= 1000'  
N



Two primary clarifiers were constructed in 1964

Distribution/warehouse Still on the site was constructed in 1959

INQUIRY #: 2999973.5  
YEAR: 1968  
↑ N  
= 750'



**SCOTT PAPER MILL**  
2600 FEDERAL AVE  
EVERETT, WASHINGTON

ExxonMobil  
American  
Distribution  
Company  
Site

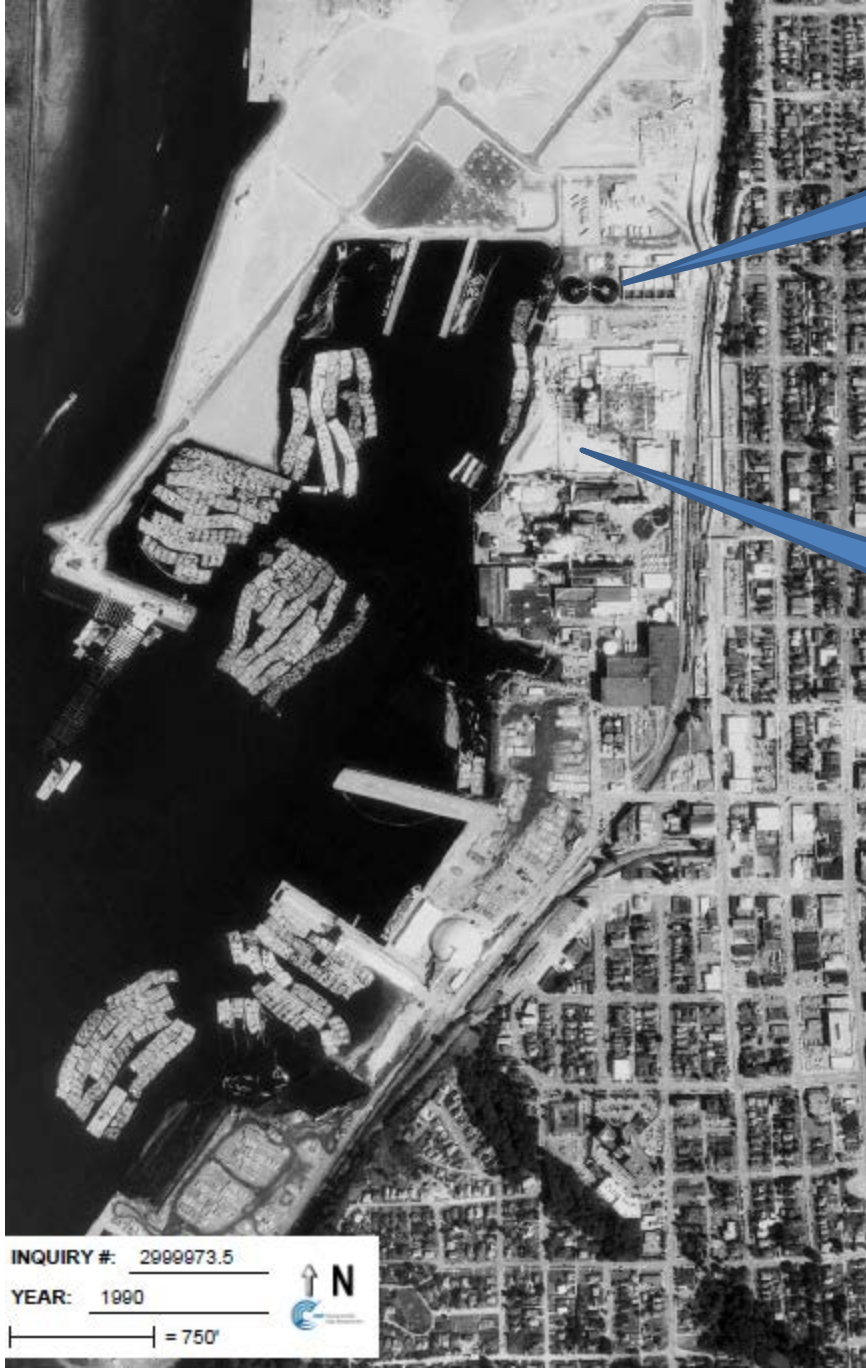
Naval  
Reserve  
Center  
Property

**East Waterway**

PHOTO FROM 1977








Secondary clarifier and aeration basins

Log Pond Fill Area


INQUIRY #: 2999973.5  
YEAR: 1990  
= 750'





Five original Dutch oven wood waste boilers were replaced by a new boiler (No. 14) in 1995

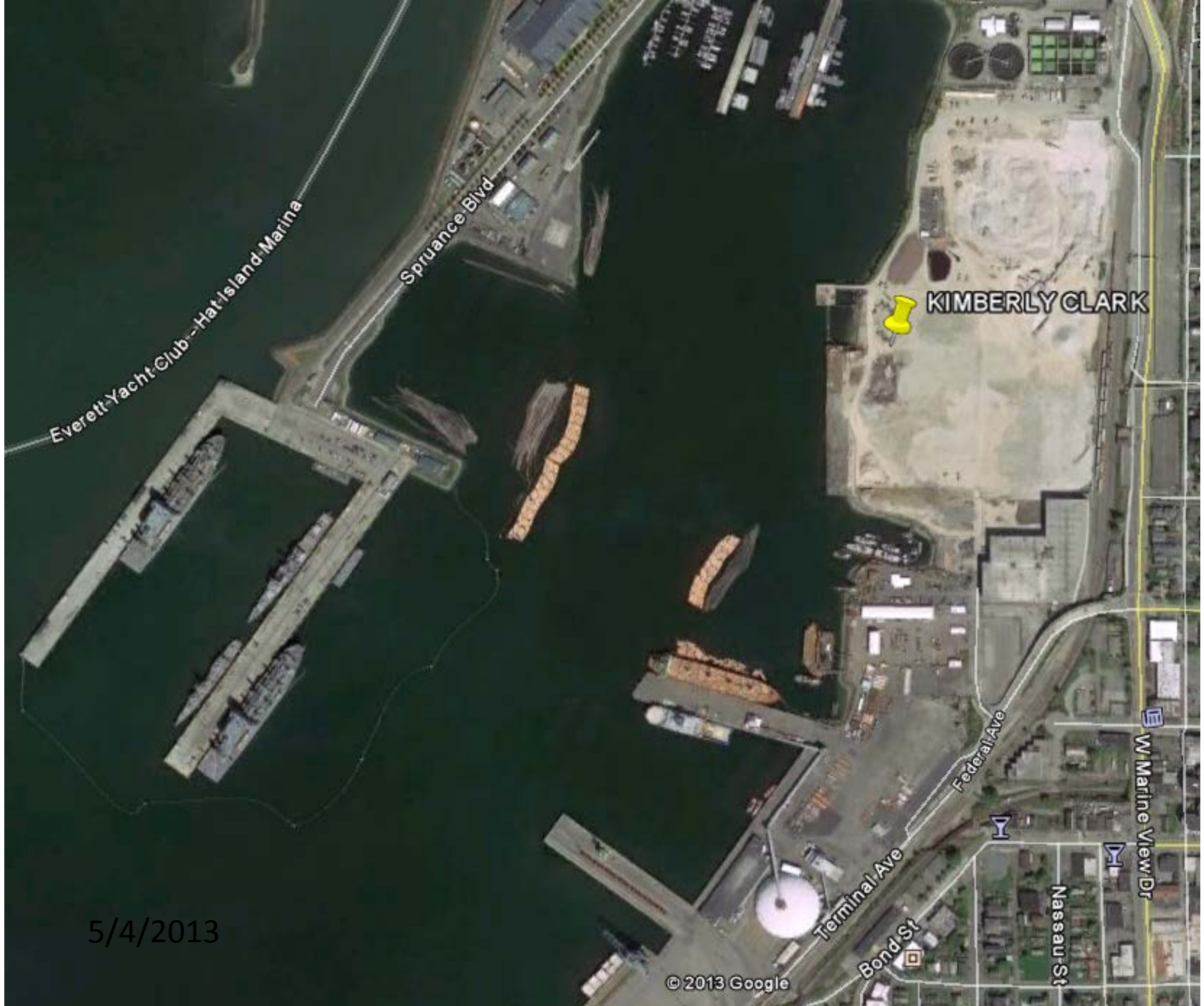
INQUIRY #: 2999973.5  
YEAR: 2008  
|-----| = 604'







7/5/2012



5/4/2013



SITE DEMOLISHED IN 2013





View south PUD substation on right.



11/14/2013



Demolition waste used as fill.

11/14/2013



View north east waste water treatment facility in background.



11/14/2013



View north waste Naval Base in background.



11/14/2013



Demolition waste used as fill.

11/14/2013



Demolition waste used as fill.

11/14/2013



Demolition waste used as fill.

11/14/2013





View south west, Easter Waterway in background.

Pavement surface before demolition

11/14/2013





View south, Distribution/warehouse in background.



Pavement surface before demolition

11/14/2013



View east, Marine View Drive in background.




11/14/2013





11/14/2013



A photograph of a well head surface on a gravelly ground. The well head is a circular metal cover with a red and white pattern. A blue callout box with a pointer indicates the well head. A brown metal box is lying on the ground next to the well head. Yellow caution tape is strung across the area, and an orange traffic cone is visible in the upper right corner. The ground is covered in grey and reddish-brown gravel and dirt.

Well head surface before  
demolition

11/14/2013



Demolition waste used as fill.

11/14/2013





Demolition waste used as fill.

Well head surface before  
demolition

11/14/2013



Contaminated Soil Storage

11/14/2013



View south, excavation of contaminated soil.



11/14/2013



View west, excavation of contaminated soil in background, fill area in foreground.



11/14/2013



View south west, excavation of contaminated soil.



11/14/2013



Soil fill area, Distribution/warehouse in background.



11/14/2013

Soil fill area, Distribution/warehouse in background.





Excavation site next to Distribution/warehouse



11/14/2013



Excavation site next to Distribution/warehouse



11/14/2013



Excavation site next to Distribution/warehouse



11/14/2013



Excavation site next to Distribution/warehouse



11/14/2013



Excavation site next to Distribution/warehouse



11/14/2013



Excavation site north west of Distribution/warehouse, showing old fill under pavement.



11/14/2013





11/14/2013



Surface water is collected on site and drained to the wastewater treatment lagoons on the north end of the site. Ecology blocks and soil protect run-off, to Port Gardner.



11/14/2013




View west, ecology blocks and soil protect run-off, to Port Gardner.



11/14/2013





Holes where surface water  
could flow directly to bay.

11/14/2013



View west, ecology blocks and soil protect run-off, to Port Gardner.



11/14/2013



COMPACT PARKING

Holes where surface water could flow directly to bay.

11/14/2013



Remnants of dock infrastructure



11/14/2013



Excavation site at UST 70, view south east



11/14/2013



Excavation site at UST 70, view north



11/14/2013





Oil treatment system

11/14/2013