PERIODIC REVIEW
FINAL

1147 Dock Street Tacoma
Facility Site ID#: 1359

1147 Dock Street
Tacoma, Washington 98402

Southwest Region Office

TOXICS CLEANUP PROGRAM

January 2013

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1.0 INTRODUCTION

This document is a review by the Washington State Department of Ecology (Ecology) of post-cleanup conditions and monitoring data to ensure that human health and the environment are being protected at the 1147 Dock Street Property (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA) regulations, Chapter 173-340 Washington Administrative Code (WAC).

A number of independent Site investigations and/or interim actions were conducted at the Site between 1992 through 2005. The final remedial actions were conducted under an Agreed Order Number DE 3373 signed on November 17, 2006 between Federal Asset Recovery Inc. (FAR) and the Department of Ecology (Ecology). In 2008, Ecology issued a notice of satisfaction of Agreed Order. The cleanup actions resulted in concentrations of mercury remaining at the Site in soil/sediment that exceeds MTCA Method A cleanup levels. The MTCA Method A cleanup levels for soil are established under WAC 173-340-740(2). WAC 173-340-420 (2) requires that Ecology conduct a periodic review of a site every five years under the following conditions:

- Whenever the department conducts a cleanup action.
- Whenever the department approves a cleanup action under an order, agreed order or consent decree.
- Or, as resources permit, whenever the department issues a no further action (NFA) opinion.
- And one of the following conditions exists:
    (a) Institutional controls or financial assurance are required as part of the cleanup.
    (b) Where the cleanup level is based on a practical quantitation limit.
    (c) Where, in the department's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

When evaluating whether human health and the environment are being protected, the factors the department shall consider include [WAC 173-340-420(4)]:

(a) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the Site.
(b) New scientific information for individual hazardous substances of mixtures present at the Site.
(c) New applicable state and federal laws for hazardous substances present at the Site.
(d) Current and projected Site use.
(e) Availability and practicability of higher preference technologies.
(f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

The department shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment.

2.0 SUMMARY OF SITE CONDITIONS

2.1 Site History

The 1147 Dock Street property is located in the City of Tacoma in Pierce County, Washington. The Property is situated east of the downtown area of the City of Tacoma on the Thea Foss Waterway, which is a part of the Federal Commencement Bay Nearshore/Tideflats (CBN/T) Superfund site. Dock Street borders the property to the east, a pay parking lot to the north, the Thea Foss Waterway to the east, and an industrial building to the south. A vicinity map is available as Appendix 6.1 and a Site Plan is available as Appendix 6.2.

The Property was occupied by the Consumer Central Heating Plant from 1920 to 1980, which was demolished in 1985. The plant had a 200-foot high smokestack and a conveyor system to accept refuse or hog fuel from barges. The plant used three 750-horsepower boilers to supply heat to Tacoma businesses. The plant burned mill tailings/sawdust from local woodworking mills until 1965 when it began using Bunker C oil. Following demolition of the plant in 1980, the Property remained unused except for parking since 1985.

2.2 Site Investigations and Remedial Actions

2.2.1 1992 UST Removal and Closure

During the period October 20 to 23, 1992, Hart Crowser decommissioned and removed by excavation two 35,000-gallon Bunker C Oil underground storage tanks (USTs).

Visible contamination was noted on the bottom of the southern tank and in the southeast corner of the excavation from a depth of 9 feet below ground surface (bgs) to the groundwater level (approximately 11 feet bgs). Six sidewall soil samples were collected from just above the groundwater table. Additionally, one soil sample was collected from between the former tanks, one soil sample from the former Tank 2 bottom beneath the groundwater, and one soil sample one foot south of the southwest sidewall.

During sampling, Hart Crowser noted that there was approximately 2.5 feet of groundwater (at 11 feet bgs) in the bottom of the excavation hole. A layer of emulsion and sheen was floating on top of the groundwater. The emulsion was removed from the excavation using a vacuum pump truck and absorbent materials. Floating absorbent material was left in the excavation to capture any remaining hydrocarbons. Approximately 850 gallons of emulsion and water were pumped from the excavation and transported to a permitted disposal facility.

Analytical results indicated that total petroleum hydrocarbon (TPH) concentrations exceeded MTCA Method A cleanup levels in four of fourteen samples collected during the tank removal. Contamination was present in the southeast excavation wall [10,000 milligrams per kilogram (mg/Kg)], the north excavation wall (210 mg/Kg), on the floor between the tanks (10,000 mg/Kg), and beneath tank 2 (3,500 mg/Kg).

Additional excavation was conducted on December 11, 1992 to remove soils with TPH concentrations above 200 mg/Kg. Suspected hotspots below the groundwater were also excavated until the remaining soil was visibly clean. Approximately a total of 120 cubic yards of contaminated soils were excavated. The soil was placed in two visqueen-lined areas, bordered with bales and covered with visqueen. According to the Ecology Interim Action, these soils were transported off-Site for disposal during the early stages of the 1997 Interim Action.

Two verification soil samples were collected from the south wall. Analytical results indicated detected concentrations of TPH below 200 mg/Kg.

Prior to the additional excavation, no emulsion or sheen was noted on the groundwater in the excavation. After the excavation, there was a layer of emulsion and sheen floating on the water. The emulsion was removed with adsorbent materials and a vacuum pump truck and the resulting 250 gallons of oily water were taken to a permitted disposal facility.

With the presence of groundwater in the excavation, Hart Crowser recommended drilling one boring beneath the former south tank bottom and installing three monitoring wells. In 1994, Hart Crowser installed four monitoring wells (MW-1, MW-2, MW-3, and MW-4) and one soil boring (B-1) on the Property. Soil samples from each of the wells and the boring were tested for TPH. The samples were obtained from the bottom of the borings 10 to 16 feet bgs. TPH was not detected in soil from the monitoring well borings.

Petroleum hydrocarbons were not detected in any of the monitoring well water samples, but the detection limit was equal to the MTCA Method A groundwater standard of 1 mg/L. However, if groundwater cleanup standards were to be set for the Site, they would likely be for protection of the adjacent surface water, which has typically been set at 10 mg/L for similar sites.

2.2.2 1993 Ecology Area-Wide Investigation

In 1993, during an area-wide investigation as a part of its source control responsibilities for the CBN/T Superfund project, Ecology discovered a man-made fill material along the banks of the Property. Ecology tentatively identified the fill material as consolidated ash and boiler wastes.

No fill was observed beneath the concrete pier, but was found north and south of the pier. Along the north 50 to 60 feet shoreline of the Site (north of the concrete pier), a foundation wall was noted parallel to the shoreline. Clean sandy soils behind the foundation wall were observed through breaks in the wall. Clean sandy soils were also observed beneath the slab in the middle of the shoreline area. Based on these observations, Ecology determined that the contamination did not penetrate into the Site uplands. The fill observed south of the concrete pier appeared to have been dumped over the edge of the bank, resulting in a steep bluff made of fill. The southern third of the shoreline did not contain any visible fill.

Ecology staff obtained samples from the surface by compositing spoonfuls of the material from the top 0 to 2 inches over an approximate four square feet for each sample. Four of the six Ecology samples tested for metals contained mercury above the Commencement Bay Sediment

Quality Objective (SQO) of 0.59 mg/Kg. The highest concentration was 38.3 mg/Kg mercury.

Ecology characterized the material for waste disposal by testing for Toxicity Characteristic Leaching Procedure (TCLP) for metals. There were no exceedances of TCLP metals criteria. One sample was tested for TCLP mercury only and submitted to a 96-hour static acute bioassay using rainbow trout. The bioassay resulted in 100 percent survival. Based on the TCLP and bioassay results, Ecology determined the material was not a hazardous waste.

2.2.3 1996 Limited Subsurface Investigation

In December 1995, Ecology issued Enforcement Order (EO) No. DE 95 TC-S408 to Pacific Trustee, Ltd. (PTL). This EO required PTL to investigate the distribution of fill material at the Site, develop an Interim Action Plan for removal of contaminated fill, implement the activities in the plan, and sample groundwater for at least four consecutive quarters. None of these activities were completed by the PTL.

In May 1996, Ecology issued EO No. DE 96TC-S119 requiring the new property owner, Dock Street Development, Inc. (DSD) to remove contaminated fill material at the Site. DSD was required to conduct further visual observations of the shoreline through the use of hand augers or test pits to determine the distribution of the fill prior to excavation activities. Following the investigation, all contaminated material was to be removed from contact with the Thea Foss Waterway.

JS Jones & Associates (JS Jones) initiated the investigation by excavating five test pits in June 1996. One test pit was located just south of the concrete pier and a second test pit was located just north of the concrete pier. Underneath the surface layer of a gray ashy substance, the soils north of the concrete pier contained a mass of black sludgy sediment mixed with small wood splinters. This material did not have a petroleum odor and contained 14.3 mg/Kg mercury and 2,720 mg/Kg of petroleum hydrocarbons. A composite sample of the ashy matrix (not including the black sediment) was obtained from both test pits. This sample contained 3.64 mg/Kg of mercury and TPH was not detected. A sample of what appeared to be made of sediments in the bottom of the south test pit contained 1.29 mg/Kg mercury. Based on the configuration of the fill, it appeared to have been dumped over the bank after the pier was constructed, which was at least as early as 1930 according to Sanborn Fire Insurance Maps.

JS Jones collected a composite sample from the three upland test pits. Mercury, cadmium, lead and TPH were not detected above laboratory detection limits. Copper, zinc and polycyclic aromatic hydrocarbons (PAHs) were detected at levels below the MTCA cleanup levels.

Ecology collected one soil sample from one of the JS Jones upland test pits located upland of the fill area just south of the concrete slab foundation. The pit contained materials similar in appearance to some of the fill observed on the bank. The sample was collected from a light brown grainy soil that looked as though it could be boiler residue or mixed with boiler residue. Laboratory analyses indicated the soils contained mercury at a concentration of 0.449 mg/Kg,

which is below MTCA Method A soil cleanup criteria (2.0 mg/Kg) and below SQOs for mercury (0.59 mg/Kg).

No excavation or other remedial activities were completed by DSD.

2.2.4 1998 Ecology Interim Action

Ecology determined, based on investigations conducted by JS Jones, Hart Crowser and Ecology, that the north shoreline fill samples consistently contained elevated levels of mercury above both the SQO and MTCA Method A cleanup criteria. Ecology determined that the contaminated fill in the intertidal area was a source of mercury to the Thea Foss Waterway. Ecology's remedial action consisted of removal and disposal of contaminated fill material from along the northern 120 feet of shoreline. The contaminated fill was present from the top of bank to below the mean lower low water level (MLLW).

Ecology determined that it was necessary to move forward with a cleanup using Ecology funds due to the continued lack of cooperation from the Site owners and the need to control the contaminant source prior to the start of Superfund cleanup efforts which were slated to begin in 1999.

The interim action included removing contaminated material to the extent possible working within the constraints of the tides. Work was scheduled during a period of low tides to enable the removal of contaminants to the MLLW level, which is equal to approximately -6.3 feet mean sea level (msl). The exposed surface was covered with a geotextile fabric sufficient to prevent passage of fine sediments and covered with quarry spalls and rip-rap. Treated wood pilings within the construction area were to be cut off at the excavated grade but, due to Site conditions, were broken off with an excavator.

Construction began on August 13, 1997. As the excavation approached the MLLW, the material became very difficult to remove due to saturation and when the approximate +1 foot tidal elevation was reached, Ecology determined it was not possible to continue excavating due to the extreme saturation. In addition to the material being difficult to excavate, the time needed to lay the geotextile and begin backfilling the excavation was limited due to the change in tides.

On August 19, 1997 confirmation samples were collected, the excavation area was covered with geotextile fabric, and backfilling began. Confirmation samples were collected from the bottom and south sidewall of the excavation. As tide conditions allowed, samples from the eastern half and from the western half of the excavated area were taken approximately every 10-15 feet along the shoreline. Only one sample was obtained at each location due to the incoming tide. Two additional confirmation samples were obtained on August 21.

Confirmation samples from the bottom of the excavation (1W through 7EW) contained mercury ranging from 0.35 mg/Kg under the former concrete pier to 29 mg/Kg at sample 4E. One sample, 5W, slightly exceeded the SQO (460 mg/Kg) for zinc. Sample 1W contained 8,340 micrograms per kilogram (µg/Kg) Low Molecular Weight PAHs (LPAH) and 41,045 µg/Kg

High Molecular Weight PAHs (HPAH) compared to the SQO of 5,200 µg/Kg and 17,000 µg/Kg, respectively. No other samples contained total HPAH or LPAH above the SQO. A few individual HPAH exceeded the SQO; however, based on the fact that the initial characterization samples of the fill did not contain PAH above the SQO, Ecology determined that these exceedances in the sample were the result of isolated contamination from removal of the treated wood pilings and were not indicative of PAH contamination in the remaining sediments.

Confirmation samples obtained at the south end of the excavation contained mercury up to 1.1 mg/Kg. At the final lateral and vertical extent of excavation, a composite sample of sediments at the 0-1 foot MLLW level along the final base of the south side wall contained 4.2 mg/Kg of mercury and 410 mg/Kg of zinc. These are above the SQO sediment cleanup standard of 0.59 mg/Kg.

On September 15, 1997, approximately one month after the cleanup was completed; Ecology obtained a seep sample from the Site. This sample was analyzed for mercury and semi-volatile organics. Mercury was not detected above the detection limit of 0.2 µg/L. The shoreline reconstruction, confirmation sampling locations and results are included as Appendix 6.3.

2.2.5 2005 Phase II Environmental Site Assessment

The purpose of the Phase II Environmental Site Assessment (ESA) was to facilitate a property transaction through a better understanding of subsurface conditions. Work on the project included the following tasks:

- Advance eight (8) boreholes using direct-push drilling methods.
- Collect and submit soil and groundwater samples for laboratory analysis for gasoline- and diesel-range petroleum hydrocarbons, benzene, toluene, ethylbenzene and xylenes (BTEX), polychlorinated biphenyls (PCBs), PAHs, semi-volatile organic compounds (SVOCs) and Resource Conservation Recovery Act (RCRA) 8 metals (lead, chromium, cadmium, barium, silver, arsenic, selenium, and mercury).
- Incorporate previous environmental investigation data into a more detailed Site map.

On September 12, 2005, eight boreholes (B-1 through B-8) were advanced by a Washington State licensed driller, ESN, using a direct push drilling unit. The boreholes were drilled in accessible locations in the vicinity of the removed UST, near the corners and center of the Site, and along the edge of the bank overlooking the Thea Foss Waterway. With the exception of boring B-8, groundwater samples were collected from the direct push borings by advancing the sampling probe to the desired depth and the sampling ports opened.

Soils at approximately 7 feet bgs in Boreholes B-4 and B-8 contained mercury in concentrations slightly greater than MTCA Method A Soil Cleanup levels (2.9 mg/Kg and 2.1 mg/Kg respectively). These borings are located on the northeast corner of the Site near the edge of the bank leading down to the Thea Foss Waterway. No other contaminants were detected at concentrations exceeding MTCA Method A cleanup levels.

In groundwater, lead was detected in all samples from the Site. Except for Boring 2 in the southwest corner of the Property, all lead concentrations in groundwater were below the MTCA Method A groundwater cleanup levels of 15 µg/L.

No other analytes were identified at concentrations exceeding MTCA Method A cleanup levels in the soil or groundwater samples from the Site during this investigation.

2.2.6 2005 Site Investigation

On December 5, 2005, V Environmental completed a Supplemental Site Investigation at the Property. The investigation comprised excavating two test pits; collecting and analyzing soil samples suspected to be contaminated with mercury, and evaluation of analytical data.

V Environmental located former Borings B-4 and B-8 and an operator from Environmental Tank Services used a backhoe to excavate two test pits (TP-1 and TP-2) at these locations. A total of 10 soil samples were selected for analysis for mercury. Laboratory analysis indicated that none of the samples contained mercury at concentrations exceeding MTCA Method A cleanup levels.

2.2.7 2006 Agreed Order

In November 2006, the current property owner, Federal Asset Recovery (FAR), entered into Agreed Order (AO) No. DE 3373 with Ecology. This AO required FAR to create a Site summary report to determine whether the interim remedial action completed at the Site met the minimum requirements for cleanup actions under WAC 173-240-360 and whether additional remedial action was necessary for the Site. Additionally, FAR agreed to pay $300,000 to Ecology toward costs incurred during the interim action and project oversight.

If Ecology determined that the interim remedial action did not meet the requirements of a final cleanup action, FAR was required to complete an RI/FS and develop a cleanup action plan. Based on Ecology comments on the draft Site Summary Report, a limited supplemental soil and groundwater investigation was conducted by drilling six borings. Results of all the soil and groundwater samples were all either non-detects or below MTCA Method A or Method B cleanup levels. Boring locations and results are included as Appendix 6.4.

On March 25, 2008, Ecology issued a notice of satisfaction of the Agreed Order. It was determined that the interim action met the sustentative requirements of a final cleanup action under MTCA, Ecology received payment from FAR, a restrictive covenant (RC) was recorded for the property, and no further remedial actions were required at the Site.

2.3 Cleanup Levels and Points of Compliance

2.3.1 Groundwater

The chemical of potential concern for groundwater at this Site was lead. No other constituents, including mercury, were detected in groundwater at levels approaching MTCA groundwater

cleanup levels or water quality criteria for protection of marine waters. The groundwater cleanup levels for lead that apply to this Site are the MTCA, Method A Cleanup Level for Groundwater of 15 µg/L and the Washington State Marine Water Quality Chronic Exposure Criteria for protection of aquatic life of 8.1 µg/L.

The EPA has not promulgated a Water Quality Criteria for lead, for protection of human health. The point of compliance is groundwater throughout the Site. Groundwater results for lead from the 2007 investigation confirmed that elevated lead in initial groundwater samples was due to highly turbid conditions from the sampling method, and that lead in groundwater meets the relevant cleanup levels.

2.3.2 Soils

The chemicals at levels of potential concern that were identified in the soils of this Site include mercury, diesel/heavy oil, and carcinogenic PAHs. The point of compliance for soils is the soils throughout the Site, to a depth of 15 feet bgs.

The MTCA Method A soil cleanup level for mercury is 2.0 mg/Kg. The MTCA Method A soil cleanup level for mercury is based on protection of groundwater from potential leaching of soil contaminants. No mercury was detected in groundwater samples from this Site; therefore it is appropriate to compare the soil mercury concentrations to the human health risk criteria. The MTCA Method B calculated concentration of mercury for protecting human health from ingestion of contaminated soil is 24 mg/Kg.

Cleanup levels applicable for the contaminants of concern for the Site are available in the table below:

Analyte	1991 MTCA Method A Soil Cleanup Level (mg/Kg)	2001 MTCA Method A Soil Cleanup Level (mg/Kg)	1991 MTCA Method A Ground water Cleanup level (µg/L)	2001 MTCA Method A Ground water Cleanup Level (µg/L)
cPAHs	0.1	**0.1**	0.1	**0.1**
Lead	250	**250**	5	**15**
Mercury	2	**2**	2	**2**
TPH-Diesel	200	**2000**	NL	**500**
TPH-Oil	200	**2000**	NL	**500**
NL = None listed				

2.3.3 Sediments

The chemical of potential concern for sediments at this Site is mercury. The cleanup level for mercury in Thea Foss Waterway is 0.59 mg/Kg. The point of compliance for the sediments is within the top 0 - 10 centimeters of surface sediments, and for deeper sediments that could

become exposed through erosion or could cause the surface sediments to become contaminated through leaching.

2.4 Restrictive Covenant

Following remediation activities, a RC was recorded for the Site on October 6, 2006. Only the area along the shoreline shown on the map (Appendix 6.5, page 28) is subject to this RC. The RC imposes the following limitations:

1. Remedial actions undertaken on the Property consist of: a slope cap (i.e., placement of capping material on the slope of the bank).
2. The Grantor shall not conduct, or allow to be conducted any activity on the Property that may result in the release or exposure to the environment of contaminated sediment that is confined by the remedy, or creates a new exposure pathway, unless the proponent of the activity obtains the prior written authorization from EPA and secures all necessary local, state, and federal permits and approvals. Activities prohibited unless otherwise approved include, but are not limited to:
   - Any activity that alters, modifies, or removes remedial actions undertaken on the Property.
   - Piling removal and installation.
   - Dredging and excavation.
3. Any other activity on the Property that may interfere with the Remedial Action, including Operation and Maintenance activities, is prohibited without prior notice to and approval of EPA.
4. The Grantor shall give thirty (30) days advance written notice to EPA of the Grantor's intent to convey any interest in the Property. No conveyance of title, easement, lease or other interest in the Property shall be consummated by the Grantor without adequate and complete provision for the continued compliance with all required institutional controls, including this RC.
5. The Grantor shall notify and obtain approval from EPA, or its successor agency, before any use of the Property that is inconsistent with the terms of the RC, or the Decree. EPA or its successor agency may approve any inconsistent use only after public notice and comment.
6. The Grantor shall allow authorized representatives of EPA or its successor agency and the City of Tacoma the right to enter the Property at reasonable times for the purpose of evaluating compliance with the Consent Decree and other required plans, including the right to undertake Operation and Maintenance activities required under the Consent Decree, which includes gathering samples on the Property, and to confirm compliance with this RC.
7. The Grantor shall restrict leases of the Property to uses and activities consistent with this RC and shall notify all lessees of the restrictions on the use of the Property. The Grantor shall include a copy of this RC in any instrument conveying any interest in any portion of the Property, including conveyance of title, a lease, a license, an easement or other use authorizations.
8. Within ten (10) days of the date this RC is fully executed, the Grantor shall record this RC with the Auditor's Office, Pierce County, State of Washington. Conformed copies of such recordings shall be forwarded to EPA, Region 10, Office of Regional Counsel at 1200 Sixth

Avenue, ORC-1S8, Seattle, Washington 98101. The Grantor shall include a copy of this RC in any instrument conveying any interest in any portion of the Property.

9. If requested by EPA, the Grantor shall allow, at no cost, the placement and maintenance of signs on the Property regarding prohibited activities, vessel size and speed, and Waterway navigational buoys, markers and visual aids, to the extent such activities do not unreasonably interfere with the public's use and enjoyment of the Property.
10. The Grantor reserves the right under WAC 173-340-440 to record an instrument that provides that this RC shall no longer limit the use of the Property or be of any further force or effect. However, such an instrument may be recorded only if EPA, after public notice and opportunity to comment, concurs.
11. The Grantor hereby confirms that this RC is enforceable at law by EPA.
12. The parties that must be notified by the terms of this RC are:

    Environmental Protection Agency
    Office of Environmental Cleanup

    Joyce Mercuri
    Department of Ecology

    If a proposed activity is within state-owned aquatic lands, then the Grantor shall also notify:

    State of Washington
    Department of Natural Resources
    Aquatic Resources Program

The RC is available as Appendix 6.5.

3.0 PERIODIC REVIEW

3.1 Effectiveness of completed cleanup actions

Based upon the Site visit conducted on April 13, 2012, the Site remains vacant as described in the interim action and Site summary reports. It is not used for vehicle parking, as is apparent in some historical aerial photos and reports. The Site surface consists of compacted gravel and concrete slabs. The Site is bordered to the north by a pay parking area, to the south by an industrial building, to the west by Dock Street and to the east by the Thea Foss Waterway. The property use and Site surface continue to eliminate direct exposure pathways (ingestion, contact) to contaminated soils that remain capped beneath the Site. A photo log is available as Appendix 6.6.

Approximately 1000 tons of fill material with elevated mercury was removed from the Site shoreline, which was then covered with geotextile fabric and several feet of quarry spalls and rip-rap. The shoreline remediation is protected from future disturbance by the placement of a RC on this portion of the property. The shoreline sediments meet the cleanup standard at the point of compliance.

After removal of upland soils from the northeast corner of the Site, all soil samples results are below the mercury Method A soil cleanup level of 2 mg/Kg as well as the Method B cleanup level of 24 mg/Kg.

CPAHs were identified in one sample beneath the footprint of the tank excavation in 1994 at a depth of 16 feet. PAHs were not detected in any of the samples from the 2005 and 2006 investigations, and Ecology believes PAHs are not a chemical of concern at the Site.

The RC for the Site was recorded and is in place. This RC prohibits activities that will result in the release of contaminants contained as part of the cleanup without Ecology's approval, and prohibits any use of the property that is inconsistent with the Covenant.

3.2 New scientific information for individual hazardous substances for mixtures present at the Site

Cleanup levels at the Site were based on regulatory standards rather than calculated risk for chemicals and/or media. These standards are sufficient to be protective of Site-specific conditions.

3.3 New applicable state and federal laws for hazardous substances present at the Site

MTCA Method A and Method B Cleanup levels for contaminants of concern at the Site have not changed since Ecology issued a notice of satisfaction for the Agreed Order at the Site and determined that no further remedial action was necessary. .

3.4 Current and projected Site use

The Site is currently vacant and for sale. The City of Tacoma Department of Community and Economic Development have zoned the property Commercial and Thea Foss Waterway Shoreline. Future uses of the property will likely be commercial or industrial, but uses along the shoreline below the top of the bank will be restricted by the conditions of the RC. These futures uses do not have a negative impact on the risk posed by hazardous substances contained at the Site.

3.5 Availability and practicability of higher preference technologies

The remedy implemented included containment of hazardous substances, and it continues to be protective of human health and the environment. While higher preference cleanup technologies may be available, they are still not practicable at this Site.

3.6 Availability of improved analytical techniques to evaluate compliance with cleanup levels

The analytical methods used at the time of the remedial action were capable of detection below MTCA Method A and Method B cleanup levels. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

4.0 CONCLUSIONS

- The sediment cleanup level has not been met for mercury below the MLLW along the shoreline at the standard points of compliance for the Site; however, the cleanup action has been determined to comply with cleanup standards since the long-term integrity of the containment system is ensured, and the requirements of the cleanup action decision under the Sediment Management Standards [WAC 173-204-580(2)] are being met.

- The cleanup actions completed at the Site effectively contain the hazardous materials remaining below the MLLW along the shoreline of the Site. These cleanup actions continue to be protective of human health and the environment.

- The RC for the property is in place and continues to be effective in protecting public health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action.

Based on this periodic review, Ecology has determined that the remedial action at the Site is continues to be protective of human health and the environment. The requirements of the RC are being met satisfactorily and additional remedial actions are not required for the Site at this time. It is the property owner's responsibility to continue to inspect the Site to assure that the integrity of the cap maintained.

4.1 Next Review

The next review for the Site will be scheduled five years from the date of this periodic review. In the event that additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years from the completion of those activities.

5.0 REFERENCES

Hart Crowser. *Bunker C Oil Underground Storage Tank Removal and Closure Assessment.* May 4, 1993.

Ecology. *Interim Action Cleanup Report.* March 30, 1998.

Ecology. *Restrictive Covenant.* October 6, 2006.

Ecology. *Agreed Order No. DE 3373.* November 17, 2006.

V Environmental LLC. *Site Summary Report.* February 14, 2007.

V Environmental LLC. *Subsurface Soil Investigation Report.* October 11, 2007.

V Environmental LLC. *Letter Report of Contaminated Soil.* December 6, 2007.

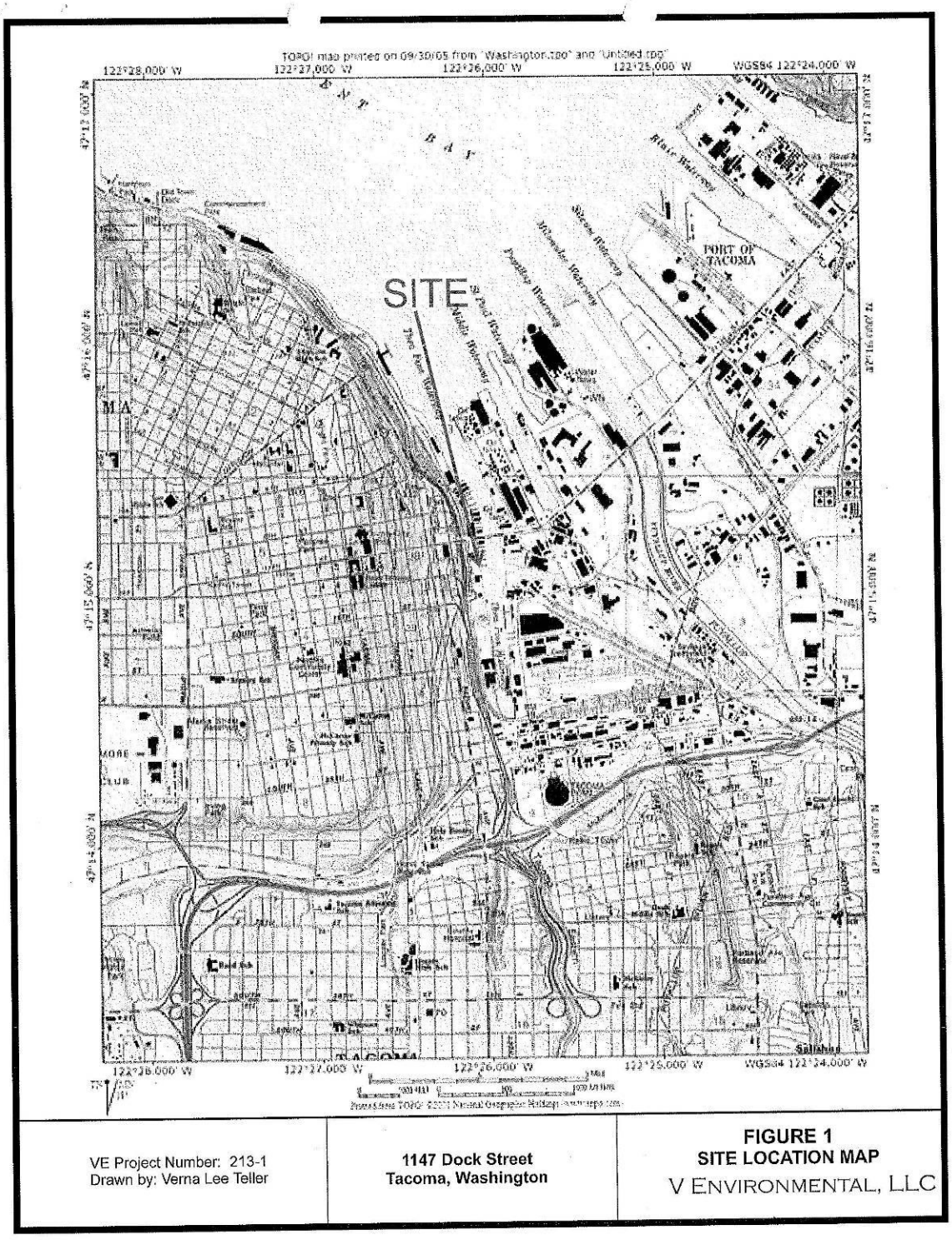
Ecology. *Cleanup Report for Removal From Hazardous Sites List.* December 10, 2007.

Ecology. *Notice of Satisfaction of Agreed Order No. DE 3373.* March 25, 2008.

Ecology. *Site Visit. April 13*, 2012.

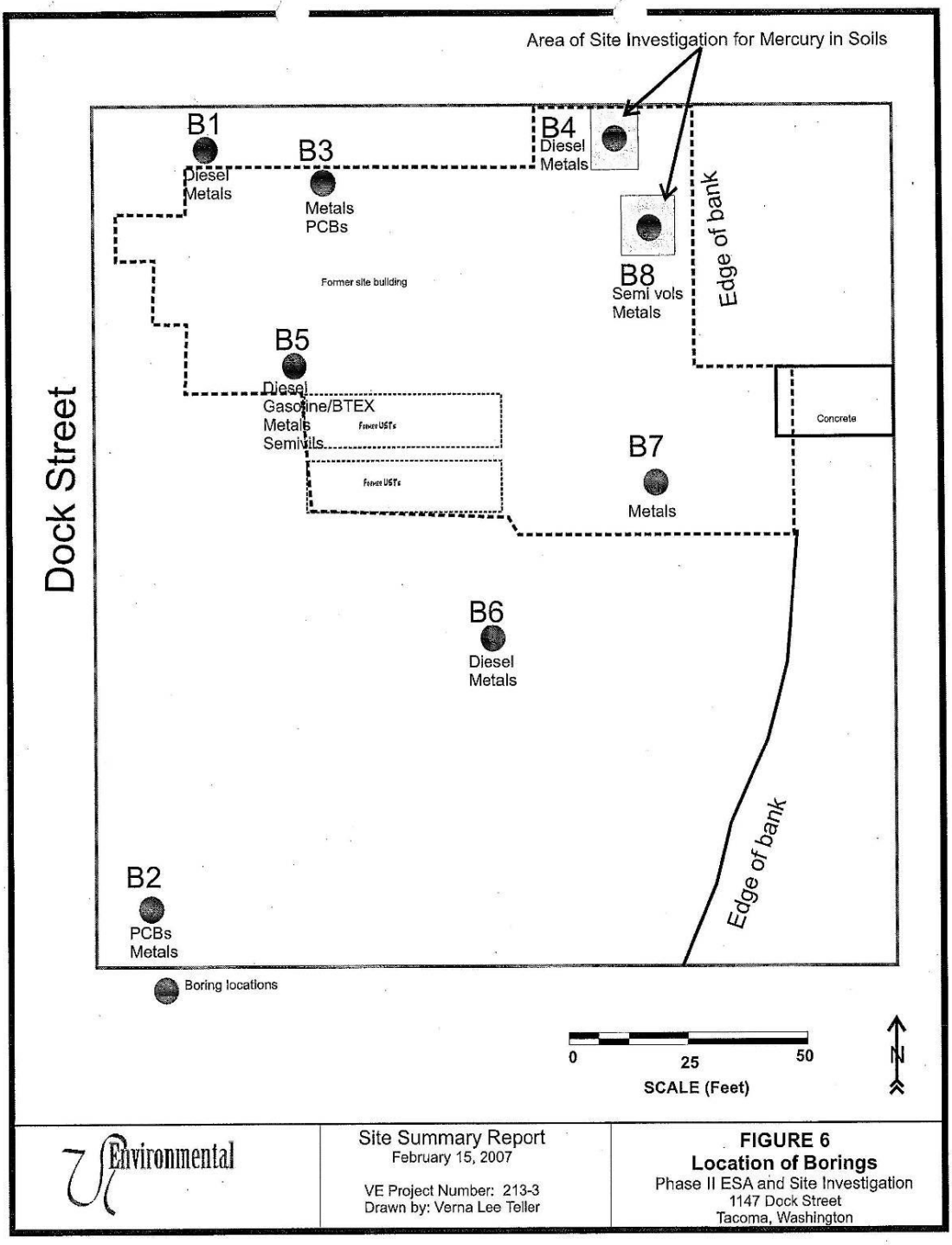
6.0 APPENDICES

6.1 Vicinity Map

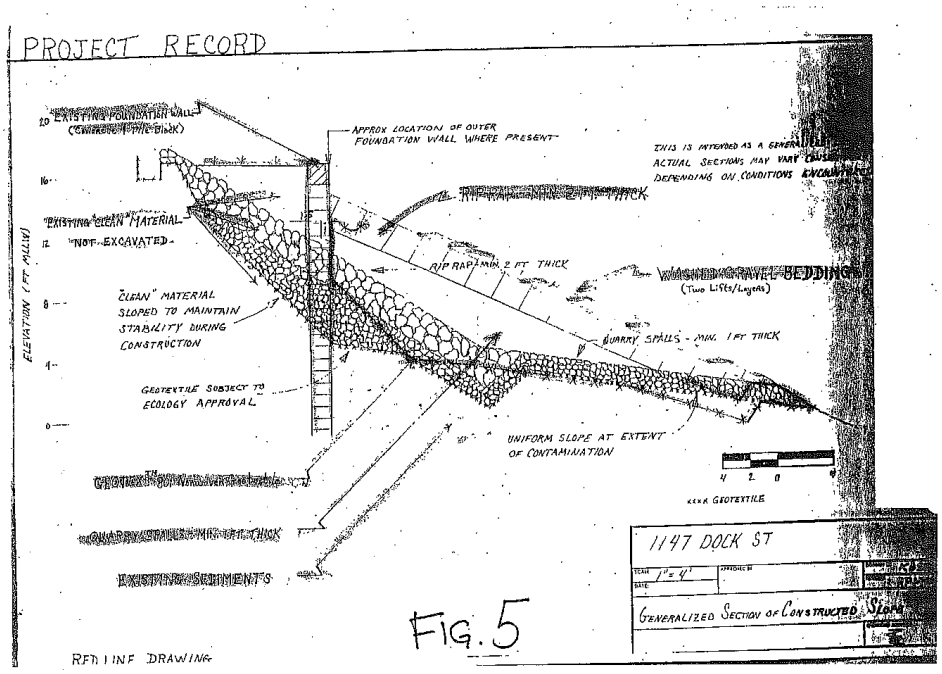


VE Project Number: 213-1 Drawn by: Verna Lee Teller	**1147 Dock Street Tacoma, Washington**	**FIGURE 1 SITE LOCATION MAP** V ENVIRONMENTAL, LLC

6.2 Site Plan


Area of Site Investigation for Mercury in Soils
B1
Diesel
Metals
B3
Metals
PCBs
B4
Diesel
Metals
B8
Semi vols
Metals
Edge of bank
Former site building
B5
Diesel
Gasoline/BTEX
Metals
Semivils
Former UST's
Former UST's
Concrete
B7
Metals
Dock Street
B6
Diesel
Metals
Edge of bank
B2
PCBs
Metals
Boring locations
0
25
50
SCALE (Feet)
N
Environmental
Site Summary Report
February 15, 2007
VE Project Number: 213-3
Drawn by: Verna Lee Teller
FIGURE 6
Location of Borings
Phase II ESA and Site Investigation
1147 Dock Street
Tacoma, Washington

6.3 Shoreline Reconstruction, Sediment Confirmation Sampling Locations and Results



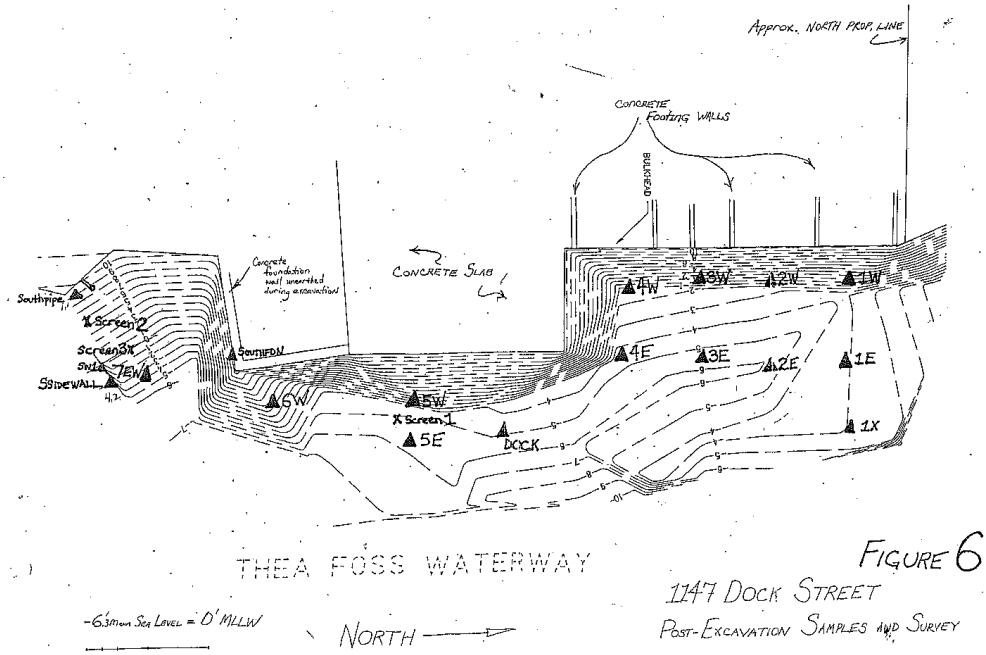
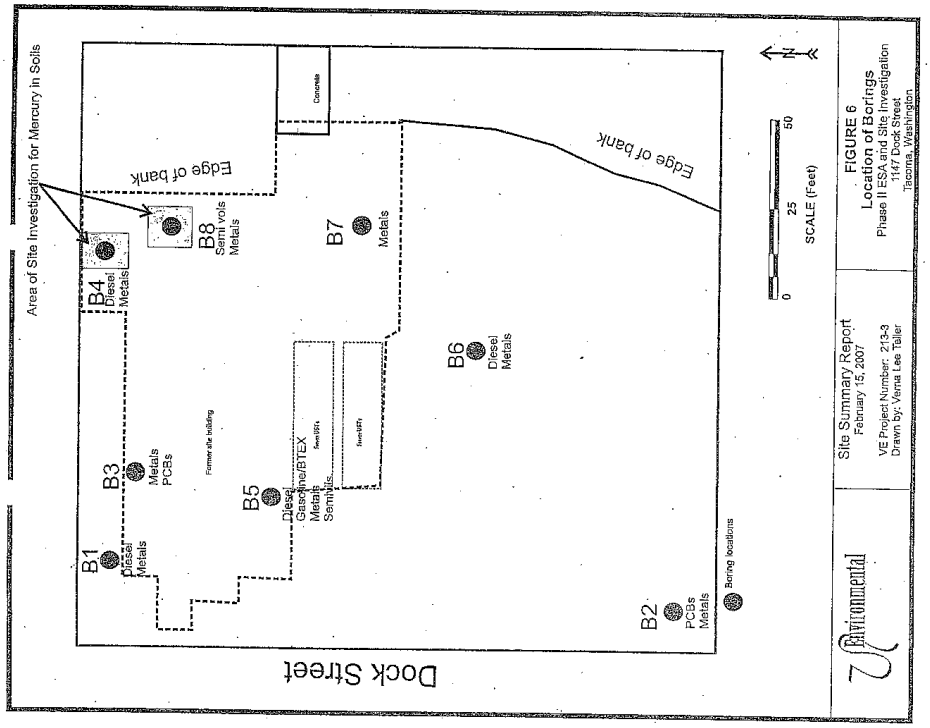


TABLE 11
CONFIRMATION SAMPLES - METALS
1147 DOCK STREET

	1	2	3	4	5	6	7
1	DATE	Sample Name	Sample #	Lead mg/kg	Mercury mg/kg	Zinc mg/kg	Comments
2	**Screening samples**						
3	8/17/97	SS1	66801-01		20		Composited of black silty/woody mud from disposal pile
4	8/17/97	Screen1			0.12		Brown silty sand about 10' from foundation wall edge. later overexcavated.
5	8/17/97	Screen2	66801-03		0.45		From south sidewall of partial excavation, about 4' bgs. Area was later excavated deeper. Sample is representative of upper soils at south wall of excavation.
6	8/17/97	Screen3	66801-04		2.8		From bottom of excavation on 8/17. Later overexcavated & 7EW sample obtained.
7	**Post-excavation confirmation samples**						
8	8/19/97	1W	66842-01	82	0.82	170	
9	8/19/97	1E	66842-02	na	1.2	na	
10	8/19/97	1X	66842-03	na	1.3	na	
11	8/19/97	2W	66842-04	na	2.8	na	
12	8/19/97	2E	66842-05	120	4.4	230	
13	8/19/97	3W	66842-06	37	1.7	78	
14	8/19/97	3E	66842-07	na	8	na	
15	8/19/97	4W	66842-08	na	1.8	na	
16	8/19/97	4E	66842-09	120	29	260	
17	8/19/97	5W	66842-10	170	26	460	
18	8/19/97	5E	66842-11	na	2.5	na	
19	8/19/97	6W	66842-12	92	18	280	
20	8/19/97	7EW	66842-13	330	2.5	380	
21	8/19/97	Dock	66842-14		0.35		below former concrete pier
22	8/19/97	SSidewall	66842-15	290	4.2	410	0-1 foot MLLW on south sidewall
23	8/19/97	SW1	66842-16		0.22		white/tan sand low on south sidewall near SSIDEWALL
24	8/21/97	Southfdn	66992-01		<.16		ash material within concrete box foundation adjacent to south edge of concrete slab
25	8/21/97	Southpipe	66992-02	51	1.1	60	3' below top of bank near metal pipe at south end of excavation.

Table 11, Page 1
1147 Dock Street
Interim Action Cleanup Report

6.4 2007 Upland Soil Sampling Locations and Results



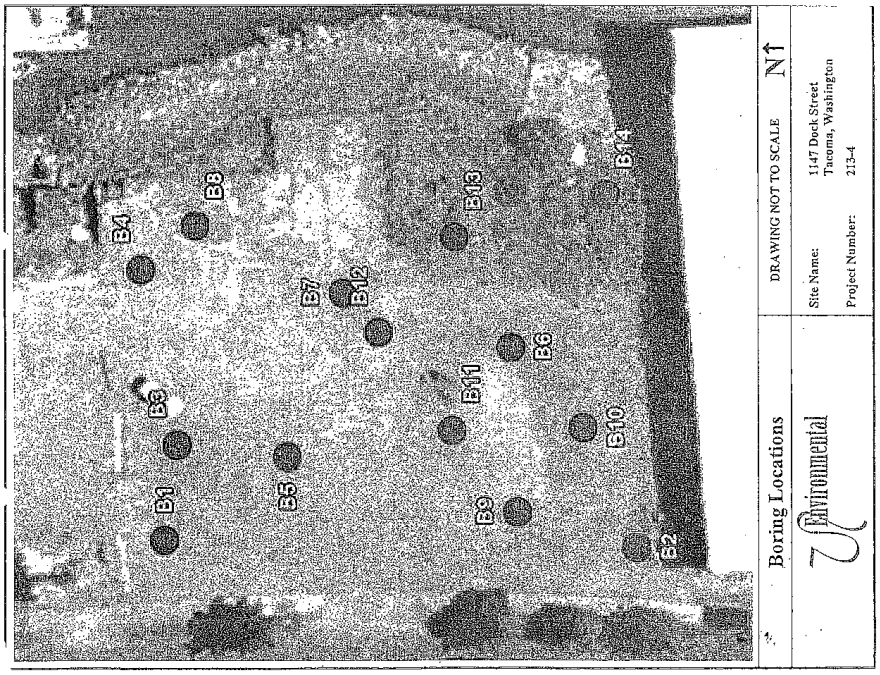


Table 1. Upland Soil Samples from Borings – Metals and TPH

Sample ID	Date Collected	Lead	Mercury	Diesel
B9-8	7/10/07	<5.0	<0,5	
B9-12	7/10/07	<5.0	<0,5	
B9-14	7/10/07	<5.0	<0,5	
B10-8	7/10/07	<5.0	<0,5	
B10-12	7/10/07	<5.0	<0,5	
B10-14	7/10/07	<5.0	<0,5	
B11-8	7/10/07	na	<0,5	<25
B11-10	7/10/07	na	<0,5	<25
B11-14	7/10/07	na	<0,5	151
B12-5	7/10/07	na	<0,5	<25
B12-8	7/10/07	na	<0,5	<25
B12-13	7/10/07	na	<0,5	<25
B13-8	7/10/07	<5.0	<0,5	na
B13-12	7/10/07	na	<0,5	<25
B13-12 dup	7/10/07	na	<0,5	<25
B14-7	7/10/07	<5.0	<0,5	
B14-10	7/10/07	na	<0,5	
MTCA A (mg/kg)		250	2.0	2,000

na: not analyzed; * MTCA Method A standards not available and MTCA Method B standards used.

Table 2. Upland Groundwater Samples – Total and Dissolved Lead

		MTCA A µg/L	Date	B-10	B-13	B-14
Metals	Total Lead	15	7/10/07	<2.5	2.5	9.8
TPH	Dissolved Lead	15	7/10/07	<2.5	<2.5	<2.5

Table 3. Upland Soil Samples - cPAHs (Method 8270C) revised 11/21/0.

Sample Name	Date	Benzo(a) Anthracene	Chrysene	Benzo(b) fluoranthene	Benzo-Fluoranthene	Benzo(a) Pyrene	Indeno (123cd) Pyrene	Dibenzo(ah) Anthracene
B9-8	7/10/07	na	na	na	na	na	na	na
B9-12	7/10/07	na	na	na	na	na	na	na
B9-14	7/10/07	na	na	na	na	na	na	na
B10-8	7/10/07	na	na	na	na	na	na	na
B10-12	7/10/07	na	na	na	na	na	na	na
B10-14	7/10/07	na	na	na	na	na	na	na
B11-8	7/10/07	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
B11-10	7/10/07	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
B11-14	7/10/07	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
B12-5	7/10/07	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
B12-8	7/10/07	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
B12-13	7/10/07	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
B13-8	7/10/07	na	na	na	na	na	na	na
B13-12	7/10/07	na	na	na	na	na	na	na
B14-7	7/10/07	na	na	na	na	na	na	na
B14-10	7/10/07	na	na	na	na	na	na	na
MTCA B (µg/kg)		0.137	0.137	0.137	0.137	0.137	0.137	0.137

6.5 Restrictive Covenant

COPY

When Recorded, Return To:
Kelly Cole
Office of Regional Counsel
U.S. EPA, Region 10
1200 Sixth Ave. ORC-158
Seattle, WA 98101

200610060691 8 PGS
10/06/2006 3:06pm $39.00
PIERCE COUNTY, WASHINGTON

RECEIVED
OCT 18 2006
Washington State
Department of Ecology

Document Title:	**Restrictive Covenant**
Grantor:	**Federal Asset Recovery, Inc.**
Grantee:	**WA DEPARTMENT OF ECOLOGY**
Legal Description:	**S ½ lot 12, all lots 13 and 14, N ½ lot 15, Blk 62 map of Tacoma Tidelands according to plat filed September 14, 1895.**
Additional Legal Description:	**SEE ATTACHMENT 1 FOR FULL LEGAL DESCRIPTION**
Assessor's Tax Parcel Number:	**8950001971**

RESTRICTIVE COVENANT

This Restrictive Covenant is made this 5th day of October, 2006, pursuant to RCW 70.105D.030(1)(f), and WAC 173-340-440(9) by Federal Asset Recovery, Inc and its successors and assigns (hereinafter "Grantor"), and the State of Washington, Department of Ecology ("Ecology"), and its successors and assigns (hereinafter "Grantee") for the benefit of the United States Environmental Protection Agency, its successors and assigns, ("EPA").

A portion of the property referenced above is subject to this Restrictive Covenant because Remedial Actions have been undertaken on the property pursuant to the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9601, et. seq., under a Consent Decree entered on May 9, 2003, titled the *United States v. Atlantic Richfield Company, et al.,* in the United States District Court for the Western District of Washington, Civil Action No. C03-5117 RJB, ("Consent Decree"). The objective of the remedial actions undertaken on the property is to protect human health and the environment.

The Consent Decree is part of an integrated settlement that includes two other consent decrees. One is between the EPA and Puget Sound Energy, Advance Ross Sub Company and PacifiCorp, ("Utilities"), and was entered by the federal District Court on May 9, 2003. The other consent decree is between EPA and the state Department of Natural Resources, which was entered by the federal District Court on December 17, 2003.

The property subject to this Restrictive Covenant is the portion of Tax Parcel 8950001971 that is located at 1147 East Dock Street, Tacoma, WA (hereafter, the "Property"), which is generally depicted as the cross-hatched area in the map attached as Attachment 2. This Restrictive Covenant is required because part of the Remedial Action capped and/or left residual contamination in place. The purpose of this Restrictive Covenant is to reduce potential exposure of marine organisms to contaminated sediments confined by capping, and to reduce potential exposure of marine organisms to contaminated sediments left in place in the Thea Foss and Wheeler Osgood Waterways.

The Grantor holds legal title to certain real property in the County of Pierce, State of Washington that is subject to this Restrictive Covenant. The parcel is legally described in Attachment 1, which is incorporated by reference into this Restrictive Covenant. The Grantor, as holder of legal title, does hereby declare that it has authority to enter into this Restrictive Covenant.

Grantor makes the following declarations as to limitations, restrictions, and uses on the Property. Furthermore, it is the intent of the Grantor that such declarations shall constitute covenants that run with the land, as provided by law, and be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the property.

Section 1. Remedial actions undertaken on the Property consist of: a slope cap (i.e., placement of capping material on the slope of the bank).

Section 2. The Grantor shall not conduct, or allow to be conducted any activity on the Property that may result in the release or exposure to the environment of contaminated sediment that is confined by the remedy, or creates a new exposure pathway, unless the proponent of the activity obtains the prior written authorization from EPA and secures all necessary local, state, and federal permits and approvals. Activities prohibited unless otherwise approved include, but are not limited to:

2.1 Any activity that alters, modifies, or removes remedial actions undertaken on the Property.

2.2 Piling removal and installation.

2.3 Dredging and excavation.

Section 3. Any other activity on the Property that may interfere with the Remedial Action, including Operation and Maintenance activities, is prohibited without prior notice to and approval of EPA.

Section 4. The Grantor shall give thirty (30) days advance written notice to EPA of the Grantor's intent to convey any interest in the Property. No conveyance of title, easement, lease or other interest in the Property shall be consummated by the Grantor without adequate and complete provision for the continued compliance with all required institutional controls, including this Restrictive Covenant.

Section 5. The Grantor shall notify and obtain approval from EPA, or its successor agency, before any use of the Property that is inconsistent with the terms of the Restrictive Covenant, or the Decree. EPA or its successor agency may approve any inconsistent use only after public notice and comment.

Section 6. The Grantor shall allow authorized representatives of EPA or its successor agency and the City of Tacoma the right to enter the Property at reasonable times for the purpose of evaluating compliance with the Consent Decree and other required plans, including the right to undertake Operation and Maintenance activities required under the Consent Decree, which includes gathering samples on the Property, and to confirm compliance with this Restrictive Covenant.

Section 7. The Grantor shall restrict leases of the Property to uses and activities consistent with this Restrictive Covenant and shall notify all lessees of the restrictions on the use of the Property. The Grantor shall include a copy of this Restrictive Covenant in any instrument conveying any interest in any portion of the Property, including conveyance of title, a lease, a license, an easement or other use authorizations.

Section 8. Within ten (10) days of the date this Restrictive Covenant is fully executed, the Grantor shall record this Restrictive Covenant with the Auditor's Office, Pierce County, State of Washington. Conformed copies of such recordings shall be forwarded to EPA, Region 10, Office of Regional Counsel at 1200 Sixth Avenue, ORC-158, Seattle, Washington 98101. The Grantor shall include a copy of this Restrictive Covenant in any instrument conveying any interest in any portion of the Property.

Section 9. If requested by EPA, the Grantor shall allow, at no cost, the placement and maintenance of signs on the Property regarding prohibited activities, vessel size and speed, and Waterway navigational buoys, markers and visual aids, to the extent such activities do not unreasonably interfere with the public's use and enjoyment of the Property.

Section 10. The Grantor reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit the use of the Property or be of any further force or effect. However, such an instrument may be recorded only if EPA, after public notice and opportunity to comment, concurs.

Section 11. The Grantor hereby confirms that this Restrictive Covenant is enforceable at law by EPA.

Section 12. The parties that must be notified by the terms of this Restrictive Covenant are:

Environmental Protection Agency
Office of Environmental Cleanup
1200 Sixth Avenue, ECL-111
Seattle, WA 98101

Joyce Mercuri
Department of Ecology
Southwest Regional Office
Toxics Cleanup Program
300 Desmond Drive
Lacey, WA 98503

If a proposed activity is within state-owned aquatic lands, then the Grantor shall also notify:

State of Washington
Department of Natural Resources
Aquatic Resources Program
1111 Washington St. SE
PO Box 47027
Olympia, WA 98504-7027

This Restrictive Covenant is executed by:

Federal Asset Recovery, Inc

William A. Looney

By: William A. Looney
Its: President

STATE OF WASHINGTON)
)ss
COUNTY OF PIERCE)

On this 5 day of OCTOBER, 2006, personally appeared before me WILLIAM A LOONEY to me known to be the PRESIDENT of the corporation that executed the within and foregoing instrument, and acknowledged said 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 (he/she/~~was~~) ~~they were~~ authorized to execute said instrument for said corporation and that the seal affixed is the corporate seal of the said corporation.

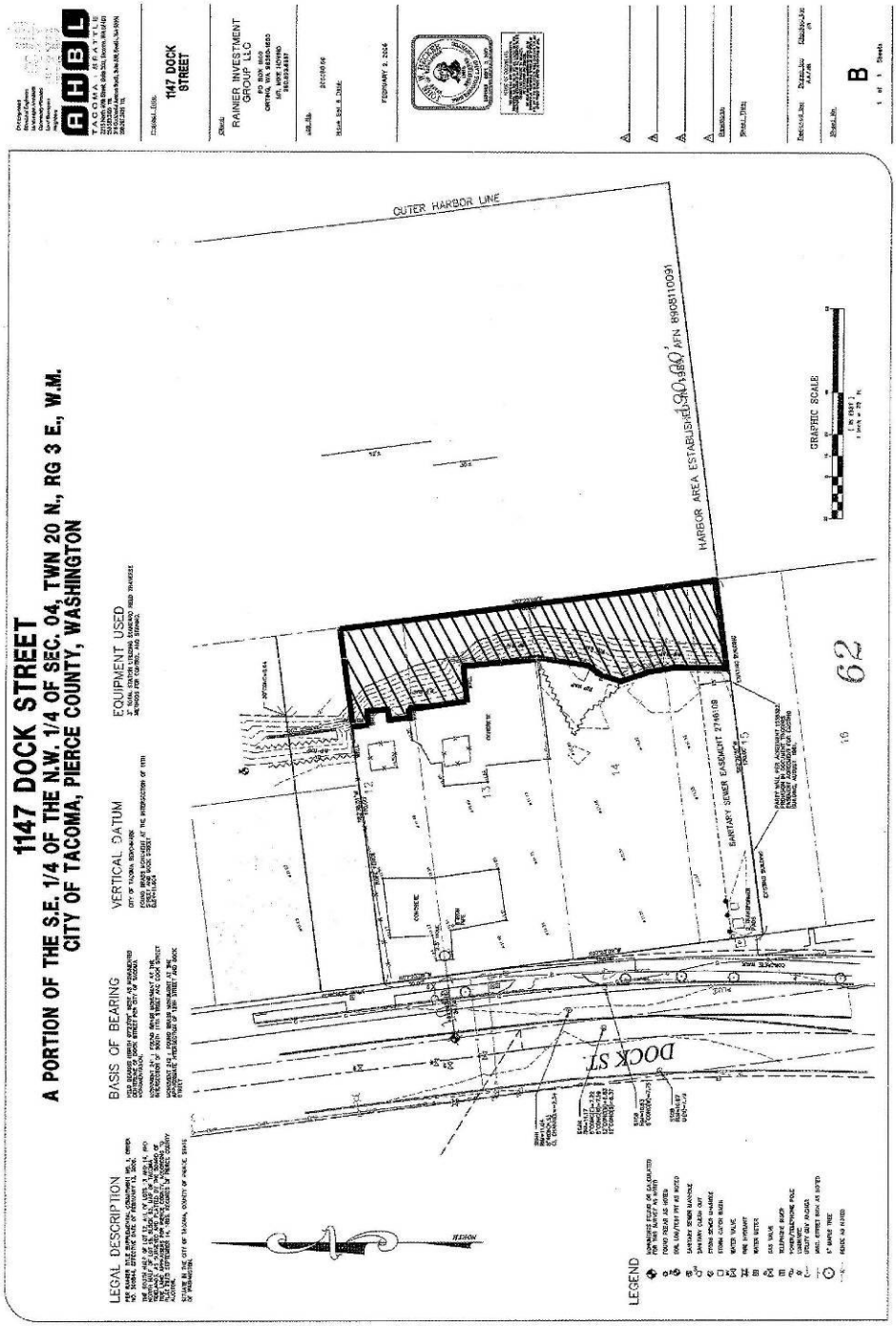
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Lindsay T. Keeton
Notary Public in and for the State of

Washington, residing at University Place
My appointment expires 12/9/2007.

Foss Institutional Controls/RC – No. 8950001971.doc

ATTACHMENT 2: Restrictive Covenant, Federal Asset Recovery, Inc., Parcel Number 8950001971, Pierce County, Washington



6.6 Photo log

Photo 1: Looking South from Concrete Slab on Waterfront – from the north

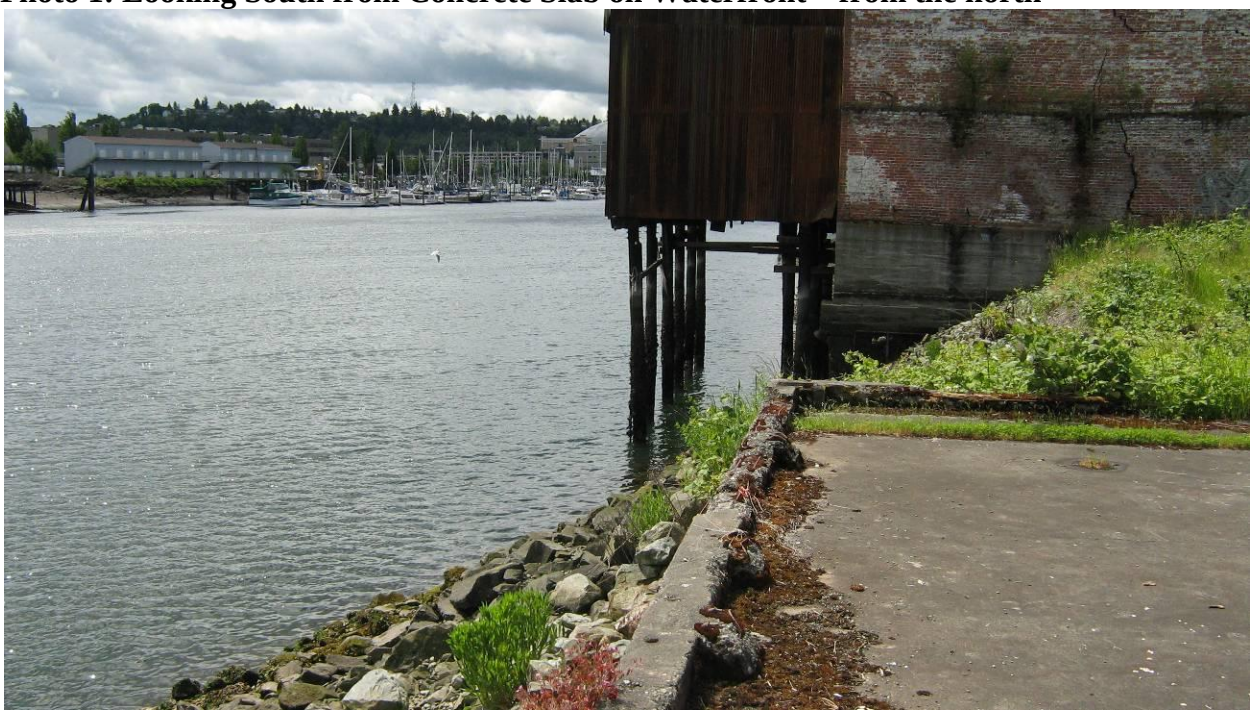


Photo 2: Looking South from Adjacent Property – from the north

Photo 3: Site – from the southwest corner

Photo 4: Site and Dock Street – from the south