STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

January 28, 2013

Mr. Jeff Sawyer
Washington State Department of Transportation
Olympic Region
5720 Capitol Boulevard
Olympia, Washington 98504-7440

Re: Further Action at a Property associated with a Site:

- **Property Address:** 258010 HWY 101, Port Angeles, Washington 98362
- **Facility/Site No.:** 1671323
- **Cleanup Site ID:** 958
- **VCP Project No.:** SW1202

Dear Mr. Sawyer:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of a Property associated with the Midway Metals facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issues Presented and Opinion

1. Is further remedial action necessary at the Property to clean up contamination associated with the Site?

   YES. Ecology has determined that further remedial action is necessary at the Property to clean up contamination associated with the Site.

2. Is further remedial action also necessary elsewhere at the Site?

   YES. Ecology has determined that further remedial action is also necessary elsewhere at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Property and the Site

This opinion applies only to the Property and the Site described below. This opinion does not apply to any other sites that may affect the Property. Any such sites, if known, are identified separately below.

1. Description of the Property.

The Property includes the Highway (HWY) 101 right-of-way (ROW) associated with the following tax parcel in Clallam County that was affected by the Site and addressed by your cleanup:

- Tax parcel number 043018430100.

The Property does not include the remainder of the parcel outside of the HWY 101 ROW.

Enclosure A includes a legal description of the Property and map of the Property. **Enclosure B** includes a diagram of the Site that illustrates the location of the Property within the Site.

2. Description of the Site.

The Site is defined by the nature and extent of contamination associated with the following releases:

- Total petroleum hydrocarbons in the gasoline range (TPH-G) and TPH in the oil range (TPH-O) into the Soil.
- Metals into the Soil, Groundwater, and Surface Water.
- Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) into the Soil and Sediment.
- Polychlorinated biphenyls (PCBs) into the Surface Water.

There is no indication that those releases have affected more than one parcel of real property other than the parcel identified above.

Enclosure B includes a detailed description and diagram of the Site, as currently known to Ecology.

3. Identification of Other Sites that may affect the Property.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the Property is affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. GeoEngineers, Inc. (GEI), **Site Investigation Report, US 101 Midway Metals, Clallam County, Washington,** dated September 5, 2012.
2. The Washington State Department of Transportation (WSDOT), **US 101 Midway Metals Limited Phase II Environmental Site Assessment,** dated May 6, 2011.
3. Herrera Environmental Consultants, Inc. (Herrera), **Initial Site Assessment, E.T. Enterprises & Recycling,** dated February 4, 2002.

Those documents are kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. You can make an appointment by calling the SWRO resource contact at (360) 407-6365.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Cleanup

Ecology has concluded that **further remedial action** is necessary at the Property to clean up contamination associated with the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology has determined your characterization of the Site is not sufficient to establish cleanup standards for the Site and select a cleanup for the Property. The Site is described above and in **Enclosure B.**

The Site is located approximately 5.5 miles east of Port Angeles, adjacent to the south side of HWY 101 in Clallam County, Washington. The Site slopes from a high point, approximately 350 feet above sea level (asl), in the southwest corner of the parcel to the low point, approximately 315 feet asl, in the northeast corner and encompasses approximately 2.7 acres. Ecology well logs indicated an intermittent perched

groundwater surface to be approximately 36 feet below ground surface (bgs) on the Site. GEI boring logs indicated other perched water tables were discontinuous around the Site, ranging from 3 feet bgs to 12 feet bgs. A domestic water supply well log of a well within 500 feet of the Site indicated groundwater to be 65 feet bgs.

In January 2002, Herrera conducted an Initial Site Assessment. Herrera found information indicating that prior to 1972, the area around the Site was either heavily wooded or used for residential purposes only. From 1972 to 1989, the Site was used as a retail outlet for concrete septic tanks and other concrete products. From 1989 to 1991, the Site was reported as vacant.

Since 1991, scrap metal recycling has been the dominant activity at the Site. Sources of the metal recycled include: automobiles, heavy equipment, and general construction debris. The WSDOT is in negotiations to acquire a ROW on a portion of the tax parcel that is affected by the Site for a highway-widening project of HWY 101.

From 2002 to present day, six environmental investigations or assessments have been conducted at the Site to identify and delineate the constituents of concern (COCs) at the Site.

In August 2006, Clallam County Environmental Health Services (CCEHS), conducted an Initial Investigation (II) of the Site, which resulted in the listing the Site on Ecology's Confirmed and Suspected Contaminated Sites List. Analytical results collected by CCEHS during the II indicated TPH-O, cadmium, and lead at 10,000 milligrams per kilogram (mg/kg), 7.1 mg/kg, and 3,000 mg/kg, respectively, at location *Sample 3 Batteries* (*Sample 3 Battery Shed* on Figure 3). This location was in the south-central portion of the Site and up gradient and outside of WSDOT's acquisition area (ROW). The MTCA Method A Soil Cleanup Levels (CULs) for unrestricted land use for TPH-O, cadmium, and lead are 2,000 mg/kg, 2 mg/kg, and 250 mg/kg, respectively. Also, shallow soil sample results collected from three locations inside the ROW indicated cadmium and mercury were above the applicable MTCA CULs. The highest cadmium level was 4.1 mg/kg (*Sample 1-Lawnmower*) (see Table 1A).

In 2007, and again in 2010, two ERTS complaints were received by Ecology relating to minor spills, poor materials handling practices, and debris burning. In May 2008, CCHES conducted a Site Hazard Assessment and assigned the Site a rank of 1, based on exceedances in MTCA Method A CULs for metals and heavy oil, and the potential for stormwater runoff to impact nearby MacDonald Creek.

In 2009, WSDOT conducted an inventory of hazardous materials stored on the Site. They produced a Hazardous Materials Discipline Report to identify potential sources of contamination that could be encountered during the highway upgrade and widening project.

In March 2011, WSDOT conducted a Phase II ESA and collected 18 soil samples, two of which were shallow (0-2 feet bgs) soil samples, and two groundwater samples from the ROW area. TPH-O, cadmium, and lead impacts above their MTCA Method A Soil CULs were identified at *MM-SC2* and *MM-SC3* (see Figure 3). In addition, analytical results indicated 2.0 mg/kg of mercury (also the MTCA mercury Method A CUL) at *MM-B7-0-4* (see Table 1A).

In December 2011, GEI conducted a Site investigation and advanced 11 direct push probes (*DP-1* through *DP-11*) to a maximum depth of 27 feet bgs. GEI collected and analyzed 21 soil samples, seven drainage ditch sediment samples, two surface water samples, and two groundwater samples from across the Site. Soil analytical results indicated cadmium slightly above its MTCA CUL of 2 mg/kg in three samples. In addition, total cPAHs from boring *DP-9-0.0-2.0* (0.1904 mg/kg) and sediment sample *SED5* (0.3569 mg/kg) were above the MTCA cPAH CUL of 0.1 mg/kg, and TPH in the gasoline range (TPH-G) from *DP-10* (42 mg/kg) was above its MTCA Method A CUL of 30 mg/kg[1] (see Figure 3 and Table 1A). Groundwater analytical results from one temporary monitoring well, *DP1-W*, indicated total lead [18 micrograms per liter (µg/L)] and dissolved lead (21 µg/L) concentrations were above their applicable MTCA Method A Groundwater CUL of 5 µg/L (see Figure 3 and Table 1B). The two surface water samples exceeded the MTCA Method B Surface Water CUL for total lead of 0.54 µg/L[2]; the highest concentration was 7.4 µg/L at *SW1*, the dissolved lead was 1.4 µg/L. The surface water analytical results did not exclude PCBs as a COC.[3]

In February 2012, a follow on investigation conducted by GEI identified additional COC concentrations above their respective MTCA CULs. Analytical results indicated a cadmium soil concentration of 2.7 mg/kg at *HA3-0.0-2.0*, shallow groundwater total lead concentrations at *DP12-W* (12 µg/L) and *DP15-W* (27 µg/L), and a total lead surface water concentration of 8.3 µg/L at *SW9* (see Figure 3 and Tables 1A, 1B, and 1C).

Based on a review of the available information, Ecology has the following comments:

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[1]Benzene was detected in soil sample *DP-10-0-2*; Per MTCA Table 740-1, footnote s, the Method A Soil CUL for TPH-G is set at 30 mg/kg.

[2] Surface Water ARAR – Aquatic Life – Fresh/Chronic – Chapter 173-201A WAC.

[3] No PCBs were detected above the practical quantitation limit; however, the reported values were above the MTCA Method B Surface Water Cleanup Level of 0.014 µg/L.

1. Metals-contaminated soil (MCS) and petroleum-contaminated soil (PCS) remain on the Site above their applicable MTCA CULs. PCS and MCS near *MM-SC2*, *MM-SC3*, *DP-10-0.0-2.0*, and *Sample 3 Batteries* has not been delineated in the full vertical extent and only partially delineated in the horizontal extents. Ecology recommends delineating the PCS and MCS in the full spatial extent. Ecology also recommends removal of source material.

2. cPAHs above their applicable MTCA CULs were identified in the sediment sample collected at *Sed5*. The vertical and horizontal extents of cPAHs at that location have not been delineated. Ecology recommends delineating the cPAHs in the full spatial extent.

3. Metals and PCB contamination above their applicable MTCA Method B CULs has been identified in surface water from the drainage ditch located on the northern boundary of the Site. Ecology recommends continued monitoring of the surface water for these COCs. Further, Ecology suggests using a more sensitive analytical method for PCBs that will resolve analysis results to below the applicable MTCA Method B CULs.

4. Metals contamination above their applicable MTCA CULs was found in the shallow perched water table. Total lead and total arsenic were detected above their respective MTCA Method A CULs. No source for the arsenic has been identified on the property; however, analytical results indicate a lead source (*Sample 3 Batteries*) in the Site soil. Ecology recommends removal of that potential lead source. Ecology also recommends the installation of permanent groundwater monitoring wells for additional groundwater monitoring, Alternately, a demonstration (per WAC 173-340-720) to quantify or qualify the groundwater as a non-potable source may be made and presented to Ecology for approval.

5. Ecology recommends that a work plan for the remedial activities identified above be provided for review and approval to ensure that the proposed activities will likely meet the substantive requirements of MTCA.

6. MTCA requires the submittal of three copies of a plan or report. Please submit two bound hard copies and one electronic copy (portable document format [pdf]) for future plans or reports provided to Ecology for review per WAC 173-340-840 General Submittal Requirements.

7. In accordance with WAC 173-340-7490, a Terrestrial Ecological Evaluation (TEE) will need to be completed for the Site. Please fill out the TEE form and submit it (along with supporting documentation, as appropriate) to Ecology. The form can be found on our website at: http://www.ecy.wa.gov/biblio/ecy090300.html.

8. In accordance with WAC 173-340-840(5) and Ecology Toxics Cleanup Program Policy 840 (Data Submittal Requirements), all data generated for Independent Remedial Actions shall be submitted simultaneously in both a written and electronic format. For additional information regarding electronic format requirements, see the website http://www.ecy.wa.gov/eim. Be advised that according to the policy, any reports containing sampling data that are submitted for Ecology review are considered incomplete until the electronic data has been entered. Please ensure that data generated during on-site activities is submitted pursuant to this policy. **Data must be submitted to Ecology in this format for Ecology to issue a No Further Action determination.** Please be sure to submit all soil and groundwater data collected to date, as well as any future data, in this format. Data collected prior to August 2005 (effective date of this policy) is not required to be submitted; however, you are encouraged to do so if it is available. Be advised that Ecology requires up to two weeks to process the data once it is received.

2. Establishment of cleanup standards for the Site.

Ecology has determined the cleanup levels and points of compliance you established for the Site does not meet the substantive requirements of MTCA.

The Site has not been fully delineated. Applicable MTCA Method A or Method B CULs for sediment, soil, surface water, and groundwater shall be used to characterize the Site. Standard points of compliance are being used for the Site.

Ecology has determined sediment cleanup standards under WAC 173-204 are not applicable to this Site. Soil sample analytical results are of the same magnitude as sediment sample results indicating a contamination source in the up gradient soils. MTCA Method A Soil CULs will apply for sediments on the Site.

The point of compliance for protection of groundwater shall be established in the soils throughout the Site. For soil cleanup levels based on human exposure via direct contact or other exposure pathways where contact with the soil is required to complete the pathway, the point of compliance shall be established in the soils throughout the Site from the ground surface to 15 feet bgs. In addition, the point of compliance for the

groundwater shall be established throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest most depth that could potentially be affected by the Site.

The point of compliance for the surface water cleanup levels shall be the point or points at which hazardous substances are released to surface waters of the state unless the department has authorized a mixing zone in accordance with chapter 173-201A WAC.

3. Selection of cleanup for the Property.

Ecology has determined the cleanup you proposed for the Property does not meet the substantive requirements of MTCA.

No cleanup plan has been proposed and presented to Ecology for review and comment.

Ecology recommends a cleanup plan and soil management plan[4] be developed and provided to Ecology for review and comment.

4. Cleanup of the Property.

Ecology has determined the cleanup you performed does not meet the applicable Site cleanup standards within the Property.

The WSDOT has not submitted a cleanup action plan to Ecology for review and comment. The plan should discuss:

- What actions will be performed to reduce or eliminate hazardous substances at the Site.
- If hazardous substances are to remain at the Site, what engineered controls will be constructed and implemented to prevent or limit movement of, or exposure to, hazardous substances remaining at the Site.

[4] On September 19, 2012, Ecology received a Soil Handling Summary and Erosion Sediment Control Plan as requirement by Ecology's Water Quality (WQ) Section for the highway-widening project to obtain a National Pollution Discharge Elimination System (NPDES) Construction Stormwater Permit. The WQ Section asked the VCP Site manager to review those plans; VCP provided comments to WQ and WSDOT on September 19, 2012. WSDOT incorporated the VCP comments into the plans and WQ authorized the NPDES permitting process to proceed on September 13, 2012.

- If hazardous substances are to remain at the Site, what institutional controls will be executed to prohibit or limit activities that may interfere with the integrity of the engineered controls or result in exposure to hazardous substances remaining at the Site.

- How compliance with Site cleanup standards within the Property will be determined.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Change the boundaries of the Site.
- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

Contact Information

Thank you for choosing to clean up your Property under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion, please contact me by phone at (360) 407-7404 or e-mail at erad461@ecy.wa.gov.

Sincerely,

Eugene Radcliff

Eugene Radcliff, L.G.
SWRO Toxics Cleanup Program

GER/ksc:Midway Metals Property FA 01282013

Enclosures (6):

A – Legal Description of the Property and Map	
B – Description and Diagrams of the Site	
Figure 1	Vicinity Map
Figure 3	Site Investigation Plan
Table 1A	Chemical Analytical Data Summary, Surface Soil and Sediment
Table 1B	Chemical Analytical Data Summary, Groundwater
Table 1C	Chemical Analytical Data Summary, Surface Water

By certified mail: (7012 1010 0003 0195 1368)

cc: Mr. Thomas Lunderville
Mr. Aaron Wagoner, GeoEngineers, Inc.
Ms. Jennifer Garcelon, Clallam County Environmental Health Services
Scott Rose – Ecology
Dolores Mitchell – Ecology (without enclosures)

Enclosure A

Legal Description of the Property

Legal Description of the Property

Lunderville SR 101 Parcel No. 3-07859, fee acquisition:

All that portion of the hereinafter described TRACT "X" lying Northerly of a line described as beginning at a point opposite Highway Engineers Station (hereinafter referred to as HES) 546+00 on the SR 101 line survey of SR 101, BLUE MTN. RD. TO BOYCE RD and 140 feet Southerly therefrom; thence Easterly parallel with said line survey, to a point opposite HES 551+50 thereon; thence Northerly, to a point opposite said HES and 125 feet Southerly therefrom; thence Easterly, parallel with said line survey, to a point opposite HES 552+80± thereon, said point being on the Easterly line of said TRACT "X"; thence Southerly, along said Easterly line, to a point opposite HES 552+83± on said line survey and 140 feet Southerly therefrom; thence Easterly, parallel with said line survey, to a point opposite HES 556+00 thereon, and the terminus of said line description.

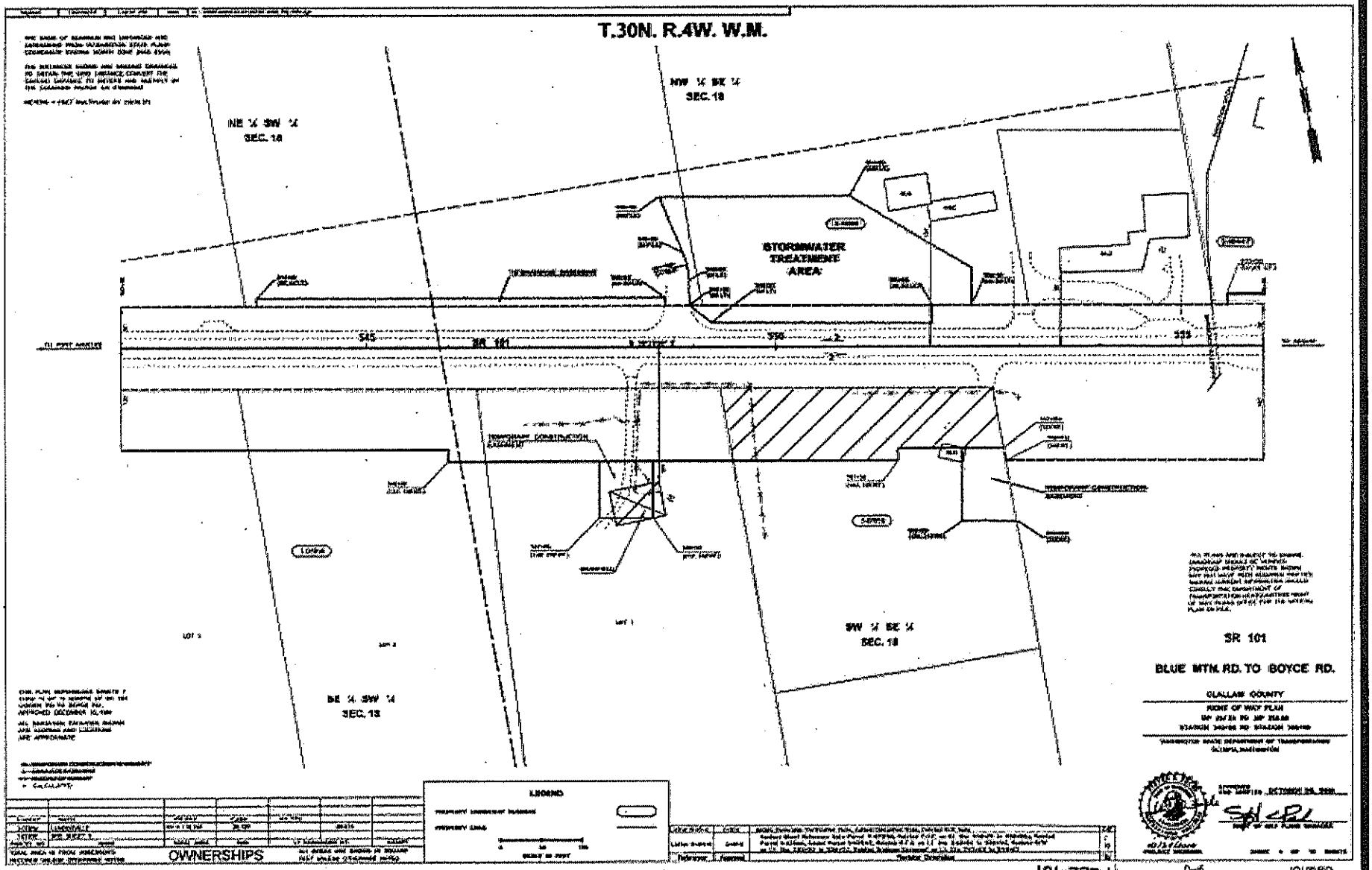
TRACT "X":

That portion of the East half of the West half of the Southwest quarter of the Southeast quarter of Section 18, Township 30 North, Range 4 West, W.M., Clallam County, Washington; lying South of State Highway 9 (now SR 101) as it existed on October 27, 2010;

EXCEPT the South 660 feet thereof.

Situated in Clallam County, State of Washington.

The lands herein described contain an area of 28,127 square feet, more or less, the specific details concerning all of which are to be found on sheet 9 of that certain plan entitled, SR 101, BLUE MTN. RD. TO BOYCE RD. now of record and on file in the office of the Secretary of Transportation at Olympia, and bearing date of approval October 28, 2010 and revised July 21, 2012.



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Enclosure B

Description and Diagrams of the Site (including the Property)

Enclosure B
Site Description, Figures, and Tables

Media of Concern: Soil and Groundwater

The Midway Metals facility (Site) is located at 258010 HWY 101, Port Angeles in Clallam County, Washington (see Figure 1). The Site is comprised of one parcel and has two small structures on the parcel. HWY 101 bounds the Site parcel on the north side; the parcel's east, south, and west borders are bounded by cleared or otherwise undeveloped wooded parcels. Stormwater runoff from the property accumulates in a eastward sloping drainage ditch that runs parallel to HWY 101 and drains into an infiltration pond approximately 300 feet west of MacDonald Creek. The creek is approximately 1000 feet to the east of the Site and is not directly connected to the infiltration pond. The Clallam County Assessor and Treasurer Office[5] (CCATO) webpage notes the 2.69-acre Site as being comprised of one tax parcel. The parcel number is 043018430100.

That parcel tax short description is as follows:

- **043018430100:** "TX #5977 EXC EASE E2W2SWSE SURVEY V23 P94 - 2.68A".

The latitude and longitude coordinates of the Site are 48° 05' 21" North, 123° 14' 29" West.

The CCATO has zoned the Site *Rural Low* (R5). The R5 designation promotes areas of low-density rural setting to be free from commercial, industrial, and moderate density residential developments. The R5 zone allowed uses include agricultural activities, bed and breakfast inns, commercial horse facility, and single-family residences. Prohibited activities in R5 include commercial storage, vehicle repair, and wrecking yards.

The *Water Resources Management Program for the Dungeness Portion of the Elwha-Dungeness Water Resource Inventory Area (WRIA) 18 Rule*, Chapter 173-518 WAC, goes into effect on January 02, 2013. The Site is within WRIA 18, the Agnew Irrigation District, and the Marine Recovery Area including the Sequim-Dungeness Clean Water District. Site borings indicate perched groundwater lenses intermittently scattered across the Site from approximately 5 feet below ground surface (bgs) to at least 36 feet bgs. Ecology well logs in the area indicate the usable aquifer is approximately 65 feet bgs.

The United States Department of Agriculture, Natural Resources Conservation Service (NRCS) website[6] identifies the Site soil as Clallam gravelly sandy loam, typically found on hill slopes with 0 to 15 percent slopes, and of consist of till deposits. The NRCS classifies this soil as *moderately well drained.* Capacity of the most limiting layer to transmit water (Ksat)[7] is typically *very low to moderately low (0.00 to 0.06 in/hr)* and the depth to the water table is typically about 18 inches to 36 inches bgs. The typical soil profile is as follows:

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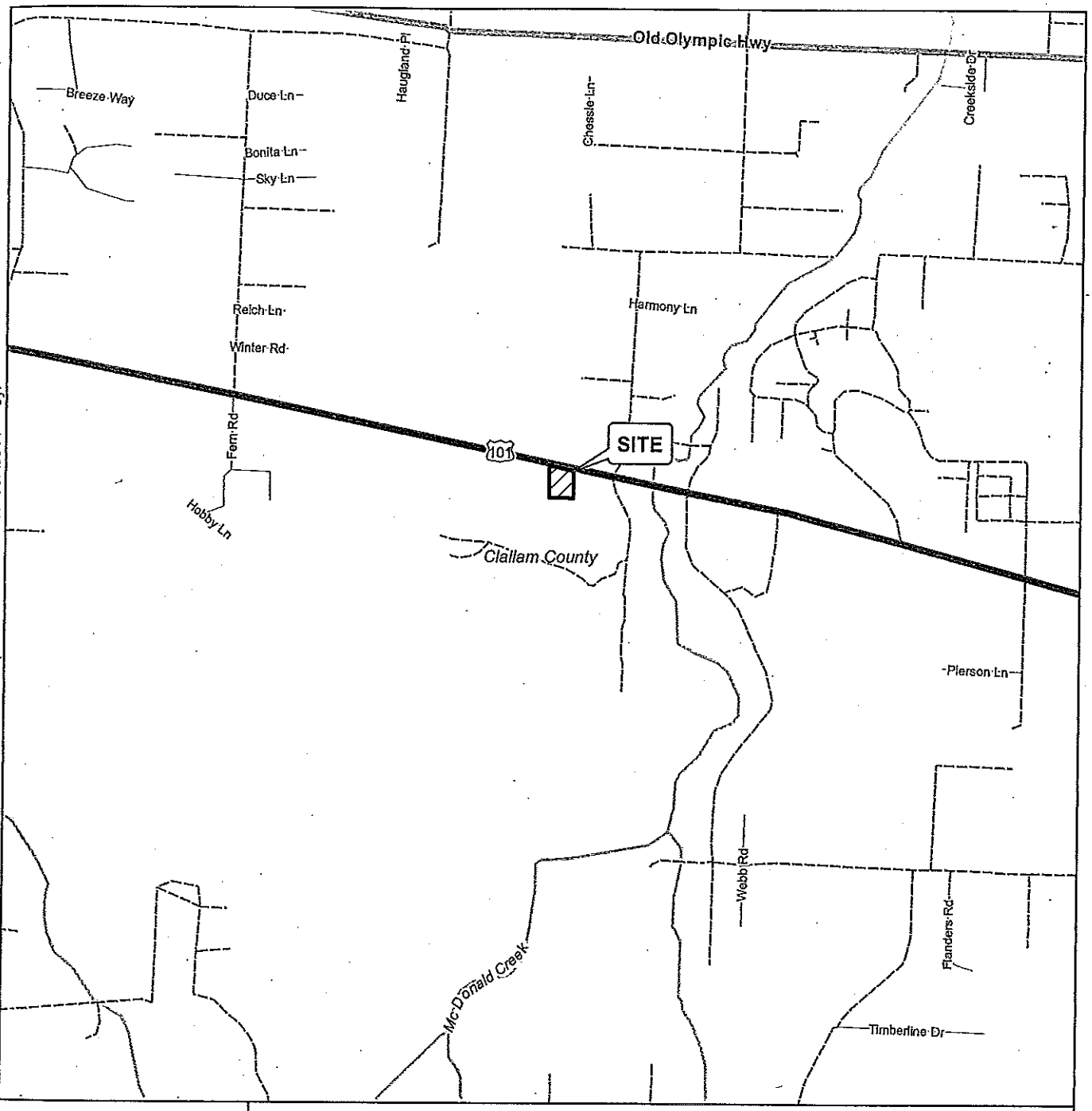
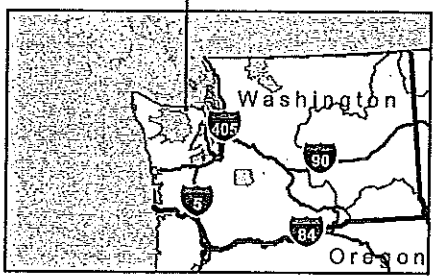
[5] http://www.clallam.net/aimsxwebsite/CA_public_htmlcust/viewer.htm
[6] http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
[7] saturated hydraulic conductivity

- 0 to 10 inches: Gravelly ashy sandy loam
- 10 to 28 inches: Very gravelly ashy sandy loam
- 28 to 60 inches: Very gravelly sandy loam

Locally, the soil is described dark brown fine to medium sand with gravel and organics down to 12 inches to 36 inches bgs grading into a brown to orange fine sandy silt, then grading into brown to gray fine sands to medium sands.





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Feet

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. It is unlawful to copy or reproduce all or any part thereof, whether for personal use or resale, without permission.

Data Sources: ESRI Data & Maps, Street Maps 2005

Transverse Mercator, State Plane South, North American Datum 1983
North arrow oriented to grid north

Vicinity Map

US 101 Midway Metals
Clallam County, Washington

GeoEngineers

Figure 1

Map Revised: 29 November 2011 syi

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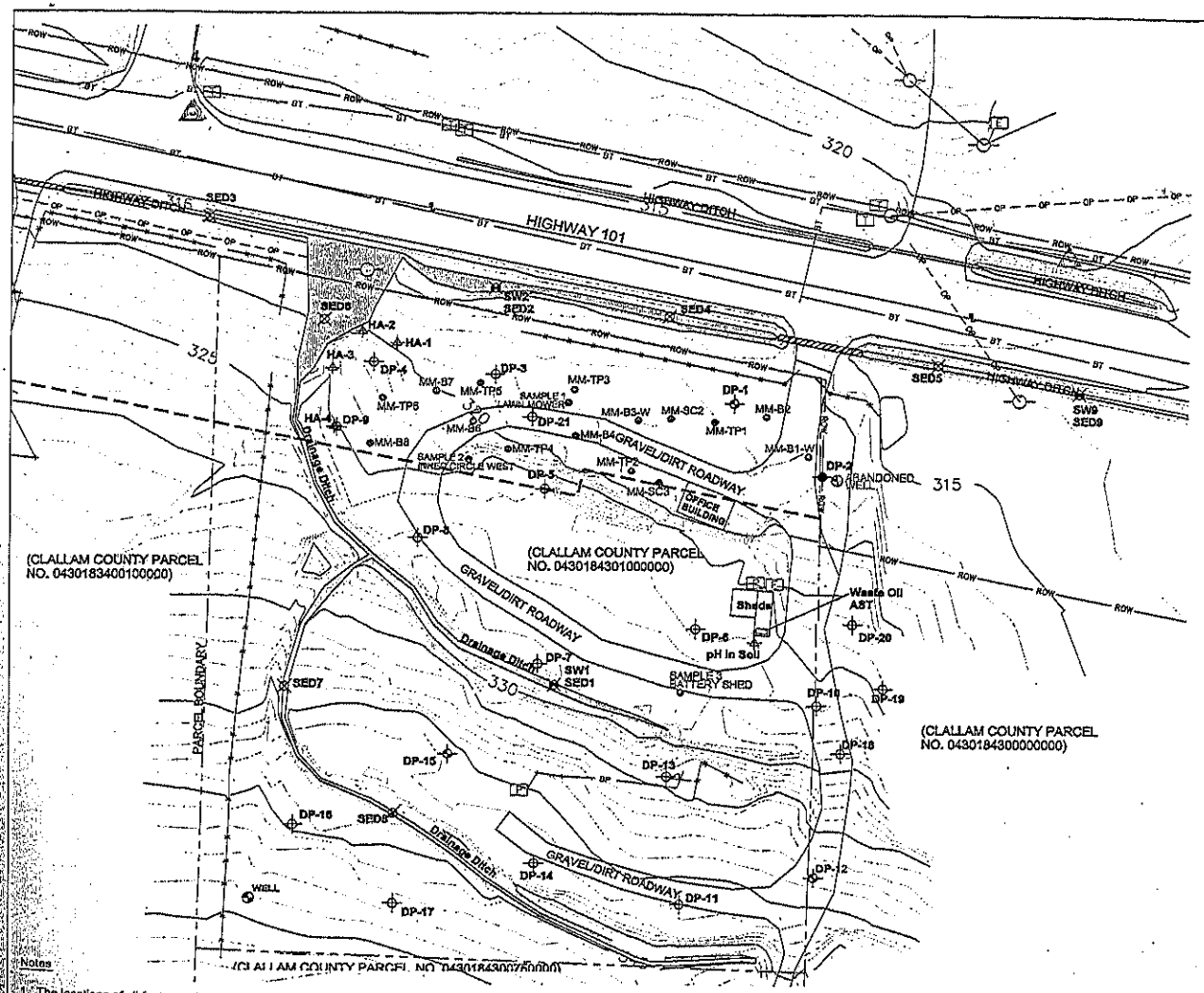

LEGEND

- Approximate Location of Previous Investigations Samples
- Location of GeoEngineers Sediment Sample
- Location of GeoEngineers Sediment/Surface Water Grab Sample
- Location of GeoEngineers Surface Soil Sample (0' to 2')
- Location of GeoEngineers Direct Push Soil Boring
- Location of GeoEngineers Direct Push Soil/Groundwater Boring
- Location of GeoEngineers Direct Push Groundwater Boring
- Location of Existing Groundwater Well
- Location of Abandoned Groundwater Well (Plate Welded On Top of Casing)
- Existing WSDOT Right-of-Way
- Proposed WSDOT Right-of-Way
- Property Boundary
- Fence line
- 213 Elevation Contours (1-foot interval)
- Buried Telephone
- Buried Power
- Overhead Power
- Water Meter
- Power Meter Box
- Utility Pole
- Telephone Vault
- Pad Mount Transformer
- Culvert

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Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Base files provided by WSDOT Survey Support on January 04, 2012.

Site Investigation Plan

US 101 Midway Metals
Clallam County, Washington

GeoEngineers | Figure 3

TABLE 1A

CHEMICAL ANALYTICAL DATA SUMMARY
SURFACE SOIL AND SEDIMENT
WSDOT MIDWAY METALS
CLALLAM COUNTY, WASHINGTON

Sample Identification	Date Collected	Sample Depth Interval (ft)	Analytes - Soil & Sediment											
			Total Petroleum Hydrocarbons by NWTPH-Gx and NWTPH-Dx			EPA6010B/7471A/SW7196A			PCBs by SW8082				cPAHs by SW8270	
			Gasoline-range hydrocarbons (mg/kg)	Diesel-range hydrocarbons (mg/kg)	Lube Oil-range Hydrocarbons (mg/kg)	Cadmium (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	PCB-aroclor 1242 (µg/kg)	PCB-aroclor 1254 (µg/kg)	PCB-aroclor 1260 (µg/kg)	Total Aroclors (µg/kg)	Benzo(a) pyrene (µg/kg)	Total cPAH [B] TTEC (ND=0.5RL) (µg/kg)
Sample 1 Lawn Mower[1]	10/10/2006	0-2	–	120	530	4.1	172	–	–	–	–	–	–	–
Sample 2 Tier 2 West[1]	10/10/2006	0-2	–	280	1,300	3.5	136	–	–	–	–	–	–	–
Sample 3 Batteries[1]	10/10/2006	0-2	–	1,800	10,000	7.1	3,000	–	–	–	–	–	–	–
MM-B7-0-4[2]	3/2011	0-4	–	–	110	–	12	2.0	–	–	–	–	–	–
MM-B8-0-4[2]	3/2011	0-4	–	–	1,900	–	18	–	–	–	–	–	–	–
MM-SC2[2]	3/2011	0-2	24	–	4,900	3.5	150	–	–	–	–	–	–	–
MM-SC3[2]	3/2011	0-2	13	–	4,300	2.7	300	–	–	–	–	–	–	–
DP-3-0.0-2.0[3]	12/13/2011	0-2	6.3 U	180 U	880	0.8	40	0.29 U	59 U	59 U	59 U	59 U	28	38.15
DP-4-0.0-2.0[3]	12/13/2011	0-2	7.8 U	100 U	580	2.5	150	0.67	420	67 U	67 U	420	9.5	12.92
DP-5-0.0-2.0[3]	12/13/2011	0-2	5.7 U	200 U	1,100	2.1	130	0.32	89	140	58 U	229	46	62.72
DP-6-0.0-2.0[3]	12/13/2011	0-2	5.4 U	280	1,100	3.2	160	0.28 U	140	56 U	130	270	33	45.63
DP-7-0.0-2.0[3]	12/14/2011	0-2	7.2 U	34	130	0.81	93	0.32 U	120	63 U	79	199	8.5 U	9.24
DP-8-0.0-2.0[3]	12/14/2011	0-2	18	30 U	150	0.55 U	24	0.27 U	55 U	58	55 U	58	7.3 U	6.06
DP-9-0.0-2.0[3]	12/14/2011	0-2	8.4 U	73 U	380	1.6	85	0.35 U	70 U	70 U	70 U	70 U	140	190.4
DP-10-0.0-2.0[3]	12/14/2011	0-2	42	34 U	120	0.58 U	8.3	0.29 U	58 U	58 U	58 U	58 U	7.8 U	5.89 U
DP-11-0.0-2.0[3]	12/14/2011	0-2	5.8 U	91 U	480	0.89	26	0.29 U	58 U	58 U	58 U	58 U	7.7 U	7.11
DP-12-0.0-2.0[3]	2/8/2012	0-2	5.3 U	28 U	130	0.55 U	19	0.28 U	55 U	55 U	55 U	55 U	21	24.31
DP-21-0.0-2.0[3]	2/8/2012	0-2	–	100	470	0.83	48	0.29 U	–	–	–	–	–	–
HA3-0.0-2.0[3]	2/9/2012	0-2	–	110 U	660	2.7	150	0.30 U	–	–	–	–	–	–
SED5[3]	12/13/2011	–	7.6 U	120 U	950	0.89	120	0.33 U	89 U	160	66 U	160	270	356.9
MTCA Method A Cleanup Level - Unrestricted Land Use			100	2,000	2,000	2.0	250	2.0	NE	NE	NE	1,000	100	100

Bold Type Exceeds MTCA A (Soil - Method A Unrestricted Land Use)

TABLE 1B

CHEMICAL ANALYTICAL DATA SUMMARY
GROUNDWATER
WSDOT MIDWAY METALS
CLALLAM COUNTY, WASHINGTON

Sample Identification	Date Collected	Sample Depth Interval (ft)	Analytes - Groundwater			
			Metals by EPA6010B/7471A/SW7196A			
			Total Arsenic (µg/l)	Dissolved Arsenic (µg/l)	Total Chromium (µg/l)	Total Lead (µg/l)
DP1-W[3]	12/13/2011	–	18	21	26	1.1 U
DP12-W[3]	2/8/2012	–	12	3.0 U	140	12
DP15-W[3]	2/8/2012	–	27	3.0 U	180	16
MTCA Method A Table Value			5.0	5.0	50	15

Bold Type Exceeds MTCA A (Groundwater - Table Value)

TABLE 1C

CHEMICAL ANALYTICAL DATA SUMMARY
SURFACE WATER
WSDOT MIDWAY METALS
SEQUIM, WASHINGTON

Sample Identification	Date Collected	Sample Depth Interval (ft)	Analytes - Surface Water		
			Metals by EPA6010B/7471A/SW7196A		PCBs by SW8082
			Lead (µg/l)	Lead (µg/l)	Aroclors (µg/l)
SW1[3]	12/13/2011	–	7.4	1.4	0.074 T
SW2[3]	12/13/2011	–	4.0	1.4	0.048 UT
SW9[3]	2/8/2012	–	8.3	1.6	0.053 UT
Surface Water ARAR - Aquatic Life - Fresh/Chronic - Ch 173-201A WAC			0.54	0.54	0.014
Surface Water ARAR - Aquatic Life - Fresh/Chronic - Clean Water Act §304			2.5	2.5	0.014
Surface Water ARAR - Aquatic Life - Fresh/Chronic - National Toxics Rule - 40 CFR 131			2.5	2.5	0.014

Bold Type Exceeds One or More ARAR Screening Level

Notes:

[1] Samples collected by Washington State Department of Ecology and Clallam County Environmental Health Department (Initial Investigation Field Report, 2006).
[2] Samples collected by Washington State Department of Transportation (Phase II Environmental Site Assessment, 2011).
[3] Samples collected by GeoEngineers (Site Investigation, 2011 and 2012).
PCBs = Polychlorinated biphenyls
cPAHs = Carcinogenic polycyclic aromatic hydrocarbons
– = Not analyzed

µg/kg = microgram per kilogram
mg/kg = milligram per kilogram
µg/l = microgram per liter
mg/l = milligram per liter
U = The analyte was not detected at a concentration greater than the given RL or MDL.