PACIFIC groundwater GROUP

EVERETT STEEL SITE
CLEANUP ACTION PLAN
EVERETT, WASHINGTON

July 2019

EVERETT STEEL SITE
CLEANUP ACTION PLAN
EVERETT, WASHINGTON

Prepared for:

Everett Steel, Inc.
3126 Hill Avenue
Everett, Washington 98201

Prepared by:

Pacific Groundwater Group
2377 Eastlake Avenue East, Suite 200
Seattle, Washington 98102
206.329.0141
www.pgwg.com

July 23, 2019
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EverettSteelCAP 07232019 toEcology.docx

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SIGNATURE

This report, and Pacific Groundwater Group's work contributing to this report, were reviewed by the undersigned and approved for release.

Janet N. Knox, LG
Principal Environmental Geochemist
Washington State Geologist No. 413

1.0 EXECUTIVE SUMMARY

This document presents the Cleanup Action Plan (CAP) for:

- Site Name: Everett Steel Scrapyard
- Cleanup Site ID: 3561
- Facility Site ID: 71351
- Voluntary Cleanup Program ID: NW3190
- Address: 33rd St 34th St & Burlington Northern Railroad (BNRR) right of way, Everett, Washington 98201
- Tax Parcel Numbers[1]: 29052900201300, 00984050103100

This CAP was prepared by Pacific Groundwater Group (PGG) to meet the requirements of the Model Toxics Control Act (MTCA) upon review of the Remedial Investigation/Feasibility Study (RI/FS, PGG 2019) and receipt of comments from the Washington Department of Ecology (Ecology). This document includes an additional cross section and the Terrestrial Ecological Exclusion form, in response to Ecology comments. This CAP describes the proposed cleanup action for the Site and sets forth the requirements that the cleanup must meet.

The RI/FS defined the nature and extent of contamination. Soil contamination is limited to the upper feet in some areas of the Site. Soil contaminants include metals (arsenic, cadmium, lead, and mercury), petroleum hydrocarbons, polychlorinated biphenyls (PCBs), and carcinogenic polynuclear aromatic hydrocarbons (cPAHs). The extent of soil contamination is restricted to the upper 2- to 2.5-feet bgs and to 6 feet bgs in two 50 by 50-foot cells. Soil contamination will be addressed by excavation with confirmation sampling. No institutional controls or environmental covenant will be required provided MTCA Industrial Cleanup Levels are met.

The groundwater contamination is limited to arsenic in two of five wells, likely due to local reducing conditions mobilizing arsenic, and diesel (TPH-D) in four wells that exceed the MTCA Method A cleanup level only in one of three sampling quarters. Groundwater contamination will be addressed by excavation. Groundwater contamination is further addressed herein by the following contingency actions: pre and post-soil remediation water quality monitoring at existing monitoring wells. These groundwater sampling rounds are tentatively scheduled for summer 2019 and winter 2019. Further contingency actions may include installing upgradient or downgradient monitoring wells to confirm an offsite source or assess the extent of exceedances. The CAP includes the requisite one year of quarterly groundwater monitoring after completion of the soil excavation.

2.0 INTRODUCTION

This document is the Cleanup Action Plan (CAP) for the Everett Steel Scrapyard site (Site) located in incorporated Everett, Washington (Figures 1 and 2). A CAP is required

[1] Parcel numbers as listed at: *http://gis.snoco.org/maps/property/viewer.htm* on March 4, 2019.

as part of the Site cleanup process under MTCA. The purpose of the CAP is to identify the proposed cleanup action for the Site. This CAP:

- Describes the Site and current Site conditions
- Describes the selected cleanup action for the Site and the rationale for selecting this alternative, listing other cleanup alternatives considered
- Identifies site-specific cleanup levels and points of compliance
- Discusses compliance monitoring and contingency actions
- Presents the schedule for implementing the CAP

3.0 SITE DESCRIPTION AND CURRENT SITE CONDITIONS

The Everett Steel Scrapyard Site occupied a strip of land parallel to the Burlington Northern Santa Fe (BNSF) railroad right of way between Hill Avenue to the east, Pacific Avenue to the North and BNSF tracks to the south and west (Figure 2). The Site is located in an industrial area east of BNSF railroad tracks and west of buildings with commercial and industrial uses. The Site consists of two unpaved parcels. Everett Steel leased the larger Site parcel No. 00984050103100 from BNSF from around 1966 to present (ICF Kaiser 1993) and have not had access or use of the property since sometime between 2005-2008 related to construction of a parking lot for Sound Transit at property north of 33rd St (L. Berman, personal communication, November 1, 2016). In 2016, BNSF used the Site to temporarily stage landslide material before those materials were disposed of off-site. Prior to the temporary storage of this material, BNSF did some clearing and vegetation removal along with debris removal to improve the condition of the Site for soil storage. BNSF removed the temporarily-placed soil and disposed of it off-site by the end of October 2016 but did not remove soil below the pre-existing ground surface. Following landslide soil removal, BNSF placed a layer of quarry spalls across most of the central to north portion of the Site. See Figure 3 for a map of current Site conditions.

Generally, Everett Steel used the portion of the BNSF-lease parcel north and directly south of 34th St; the southern end of the Site was mostly vegetated until recently.

The RI/FS describes the hydrogeologic setting. Figure 4 shows the RI/FS soil and groundwater sampling locations, as well as cross-section alignments A-A' and B-B'. Geologic cross-sections are shown on Figures 5 and 6.

4.0 SELECTED CLEANUP ACTION AND RATIONALE

4.1 REMEDIAL ALTERNATIVES ASSESSED BY THE FEASIBILITY STUDY

The Site's RI/FS assessed three remedial alternatives:

1. No action with institutional controls
2. Excavation
3. Excavation and groundwater fixation

4.2 SELECTED REMEDIAL ALTERNATIVE

The RI/FS described and ranked the three alternatives and selected the Alternative 2, Excavation with oxygen-releasing compound amendment to address both soil and groundwater contamination. This alternative includes:

- Complete site preparation work including removing and stockpiling quarry spalls, removing nuisance brush and vegetation, and mobilizing equipment to the Site.
- Remove impacted soil to 2 or 3 feet below ground surface (bgs), measured from the bottom of the quarry spalls, in all Site grid cells with soil impacts above MTCA industrial cleanup levels. Excavations will extend to 6 feet bgs in grid cells E29 and E30, which may require temporary (and likely limited) groundwater control should there be any seepage from the excavation sidewalls. This includes Site erosion control measures (silt fences, etc.).
- Collect soil confirmation samples. Collect one composite bottom sample per grid cell (each composed of 4 subsamples). At the sidewalls of the 2- or 3-foot excavations, the existing soil samples in adjacent grid cells do not exceed cleanup levels and therefore serve as sidewall confirmation samples. For cells along the property boundaries, one composite sidewall sample will be collected per grid cell (each composed of 4 subsamples).
- In grid cells where soil TPH-D concentrations exceed the cleanup level, mix oxygen-releasing compound into the soil or backfill at the bottom of the excavation once soil confirmation samples are below cleanup levels.
- Dispose of soil at an approved Subtitle D disposal facility. The total estimated disposal volume is approximately 5,000 cubic yards.
- Replace excavated soils with clean backfill and restore Site to level condition including placing quarry spalls as temporary roadways.
- No environmental covenant or institutional controls for soil will be needed, provided MTCA industrial cleanup levels are met.
- Conduct one year of quarterly groundwater monitoring after completion of excavation.
- Prepare a completion report documenting the remedial actions, results of confirmation sampling, and cleanup levels met.

4.2.1.1 Logistical Issues and Schedule

This work will be easiest to complete during the late dry season when there will be fewer issues with erosion control and ponding water. Soil moisture levels will be maintained to control dust. A State Environmental Policy Act checklist has been submitted to the City of Everett and permitting is expected to be complete in six weeks. Excavation work is

expected to take approximately 1 month from mobilization to Site restoration and is planned to begin at the end of September. Pre- and Post-excavation groundwater monitoring with contingencies are planned for September and Winter 2019.

5.0 SELECTED CLEANUP LEVELS AND POINTS OF COMPLIANCE

The soil cleanup levels are based on the use of MTCA Industrial cleanup standards (WAC 173-340-704), which may be from Method A or Method C cleanup levels. PCBs will be cleaned up to MTCA Method A Unrestricted cleanup levels. The Everett Steel lease parcel is zoned C-2ES: Heavy Commercial – Light Industrial - ES 1. This property meets the definition of "Industrial property" per WAC 173-340-200 and 173-340-745. MTCA Method A Industrial or C values for constituents analyzed in this investigation are included in Table 1.

5.1.1 Contaminants of Concern

The following contaminants had more than one exceedance of Method A Industrial cleanup levels:

- Metals – arsenic, cadmium, lead, mercury (soil; for groundwater only arsenic exceeds)
- Petroleum hydrocarbons – TPH-D (gasoline had one soil exceedance that was co-located with TPH-D and therefore is not considered needed for remedy confirmation sampling; gasoline does not exceed in groundwater and TPH-D exceeds in one of three groundwater sampling events)
- Total Polychlorinated biphenyls (PCBs) (soil)
- Carcinogenic PAHs (cPAHs) (as cPAH-TEQ) and BaP (soil)

5.1.2 Extent of Contamination

The extent of soil and groundwater contamination is detailed in the RI/FS and was used to delineate the excavation extent for the selected remedy Figure 7. Overall, 22 grid cells have samples with exceedances for one or more COCs. These 22 grid cells cover approximately 1.1 acres of the 2.97-acre Site (approximately 38 percent).

5.1.2.1 Soil

The soil analytical results consistently show that most exceedances are restricted to the upper 2- to 2.5-feet bgs (RI/FS Figures 2-4 a-f). In two grid cells (E29 and E30), PCBs and metals impacts extend deeper to approximately 6 feet bgs. Figure 8 shows the selected remedy excavation extent, which corresponds to the lateral extent of Site grid cells with impacts above cleanup levels for one or more constituents and the excavation depth. The point of compliance for soil shall be the upper 15 feet.

5.1.2.2 Groundwater

The groundwater extent of contamination includes both elevated arsenic that may be related to Site activities, and TPH-D impacts likely from an off-site source. Figure 8

shows most recent arsenic and TPH-D concentrations in monitoring wells. Dissolved arsenic exceeds cleanup levels at well D31 at the eastern (upgradient) property boundary and at well F29. The point of compliance for groundwater shall be groundwater throughout the Site. See Section 7 Compliance Monitoring and Contingency Actions for further discussion.

6.0 TERRESTRIAL ECOLOGICAL EVALUATION

The Site does not qualify for an exclusion under WAC 173-340-7491. A simplified terrestrial evaluation (TEE) exposure analysis was completed using MTCA Table 749-1. The site score (9) was greater than the area-based score (8). Based on this scoring, the simplified TEE was ended. The simplified TEE worksheet is included in RI/FS (Appendix D).

The remedy includes excavation of soils to industrial land use cleanup levels, which allow an exclusion from the TEE once those conditions were met. Therefore, the TEE Exclusion Form is included as Appendix A.

7.0 COMPLIANCE MONITORING AND CONTINGENCY ACTIONS

7.1.1 Soil

Collect soil confirmation samples. Collect one composite bottom sample per grid cell (each composed of 4 subsamples). At the sidewalls of the 2- and 3-foot excavations, the existing soil samples in adjacent grid cells do not exceed cleanup levels and therefore serve as sidewall confirmation samples. For cells along the property boundaries, one composite sidewall sample will be collected per grid cell (each composed of 4 subsamples).

7.1.2 Groundwater

Arsenic and TPH-D concentrations exceed cleanup levels in two to several wells. As these exceedances may be due to background, turbidity, and/or local groundwater chemistry and as major soil excavation will occur beginning in September, further well installation is not proposed at this time. The soil excavation and addition of amendments in the bottom of the excavation will benefit groundwater. Further, the arsenic and TPH-D exceedances are not confirmed.

Instead, resampling of groundwater is proposed in September before excavation begins to confirm the presence of arsenic and TPH-D. After excavation, compliance monitoring for arsenic will be performed with further contingency actions proposed if exceedances persist.

Arsenic concentrations exceed in two wells, including well D31 located at the upgradient boundary of the Site. At wells D31 and F29, arsenic exceedances may be due to turbidity and locally reduced groundwater chemistry. Therefore, we propose groundwater sampling quarterly after excavation is complete. The estimated groundwater seepage

velocity is approximately 70 feet/year, so it could take months to years to see the effects of excavation.

TPH-D concentrations did not exceed before January 2019 but exceed in four wells in the January sampling round. As discussed in the RI/FS, the source of TPH-D in groundwater may be off-Site, east of the Site. As TPH-D concentrations did not exceed before January 2019, groundwater will be resampled before excavation begins to confirm the exceedances.

The location of a possible offsite petroleum release east of the property is not known. A review of Ecology online databases indicates the current and historic presence of USTs in the area, including documented releases of gasoline-range petroleum in 2012 approximately 2 blocks east at the Glantz Investments Site (Cleanup Site ID 12262[2], Facility Site ID 4790). Diesel USTs are documented to be present at the Everett service center (UST Site ID 5721, Facility Site ID 27491233), and formerly at Washington Trucking (UST Site ID 2459, Facility Site ID 45714937). Adequate information is not currently available to identify the source of diesel-range petroleum and additional USTs or releases may be present that are not included in Ecology databases.

Compliance monitoring for TPH-D (Northwest Total Petroleum Hydrocarbons-Diesel) will be performed quarterly after excavation is complete with further contingency actions proposed if exceedances persist.

7.1.3 Groundwater Contingency Actions

If arsenic and/or TPH-D exceedances persist after excavation is complete, contingency actions include:

- Install one upgradient groundwater monitoring well to assess background concentrations.
- If arsenic and/or TPH-D are found to be upgradient and due to off-Site sources, no further action will be taken.
- If arsenic and/or TPH-D are not found upgradient, install one downgradient monitoring well to assess the extent of arsenic and/or TPH-D in groundwater.
- Prepare a completion report addendum to document the contingency actions and results, recommending no further action or further action. If arsenic and/or TPH-D are found to persist on the property, an environmental covenant may be needed for a property-specific no further action.

8.0 REFERENCES

ICF Kaiser Engineers, Inc.. 1993. Preliminary Old Surplus Yard Investigation and Waste Pile Disposal Characterization Report at Panama Machinery and Equipment D.b.a. Everett Steel Companies, Everett, Washington, Prepared for Panama Machinery, Inc., August 1993.

[2] Ecology Cleanup Site webpage: https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=12262

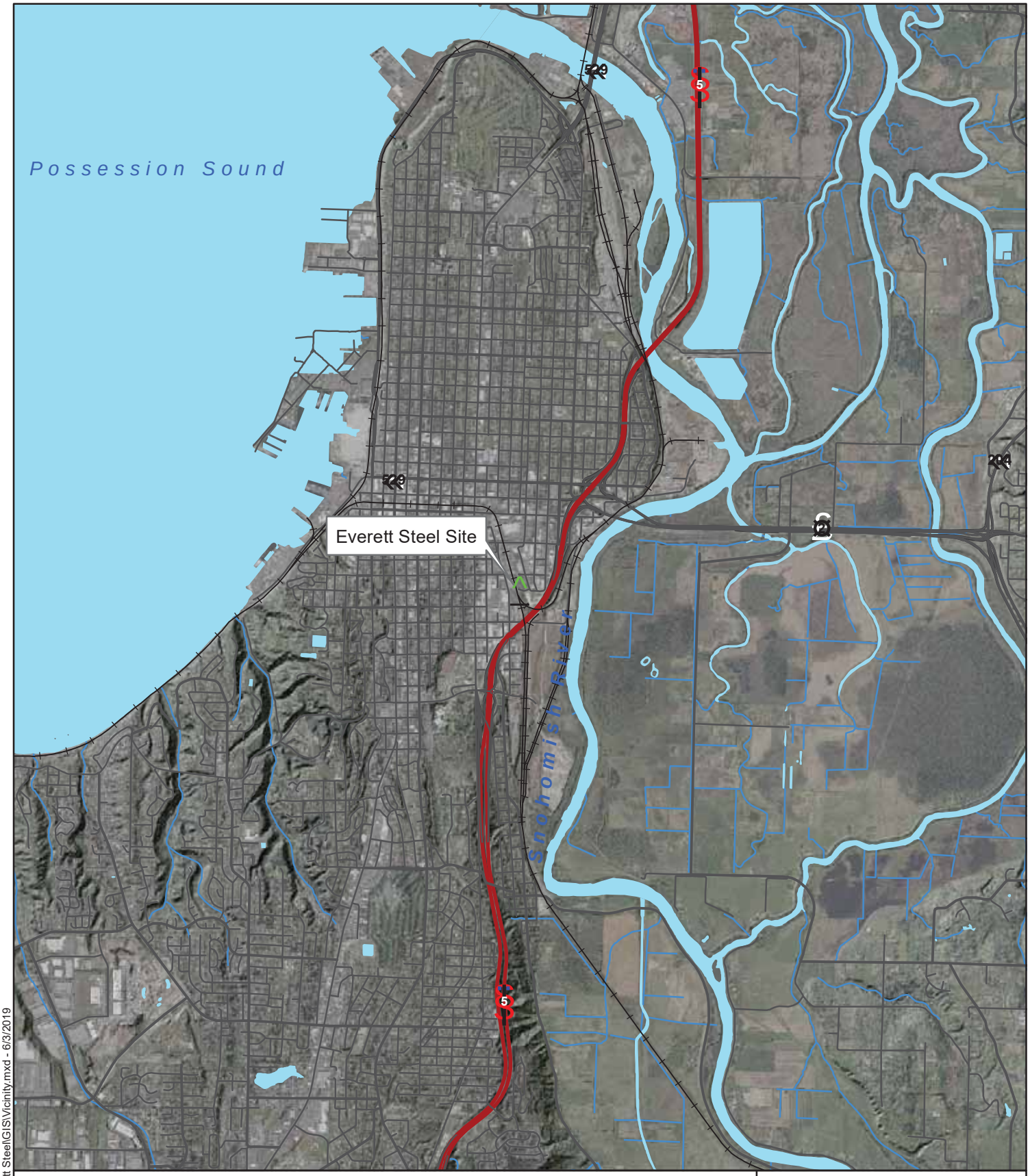
Pacific Groundwater Group, 2019. Everett Steel Site, Remedial Investigation/Feasibility Study, Everett Washington, 2019.

Table 1. Cleanup Levels

Everett Steel, Everett, Washington

COC	Units	CUL
SOIL		
arsenic	mg/kg	20
cadmium	mg/kg	2
lead	mg/kg	1000
mercury	mg/kg	2
PCBs	mg/kg	1
PAHs (BaP TEQ)	mg/kg	2
TPH-D	mg/kg	2000
TPH-O	mg/kg	2000
GROUNDWATER		
arsenic	ug/L	5
TPH-D	ug/L	500

COC denotes contaminant of concern.
PCBs denote polychlorinated biphenyls; the PCB CUL is Method A for Unrestricted Land Uses.
PAHs denote polynuclear aromatic hydrocarbons.
TPH-D and -O denote total petroleum hydrocarbons-diesel and -oil.
mg/kg denotes milligrams per kilogram.
ug/L denotes micrograms per liter.
CUL denotes cleanup level.



Project Location

0 Miles 1

N

Figure 1
Site Vicinity

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Everett Steel CAP

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- BNSF RAILWAY COMPANY
- EVERETT STEEL INC/BUILT INDUSTRIES LLC
- MIKALA 6 LLC (Quantum Woods Site)
- CENTRAL PUGET SOUND REGIONAL TRANSIT
- FRONTIER TTEE B NEWLAND 24-6047
- LEE DAVID; LEE DAVID & NADINE TRUSTEES
- NEWDAY PARTNERS LLC
- QTD INC
- RAIN SHADOW PROPERTIES & INVESTMENTS LLC
- TURN TWO LLC
- Everett Steel Site

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2017 Aerial Photo

0 Feet 300

Figure 2

Site Parcels

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Everett Steel Site
Quarry Spalls (ca. 2005)
Gravel Fill (ca. 2007)
Temporary Landslide Soil Storage (ca. January- October, 2016)
Quarry Spalls (ca. 2017)

Fence
Rail

0 Feet 100

2017 Aerial Photo (Google Earth)

Figure 3
Current Site Conditions

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Everett Steel CAP

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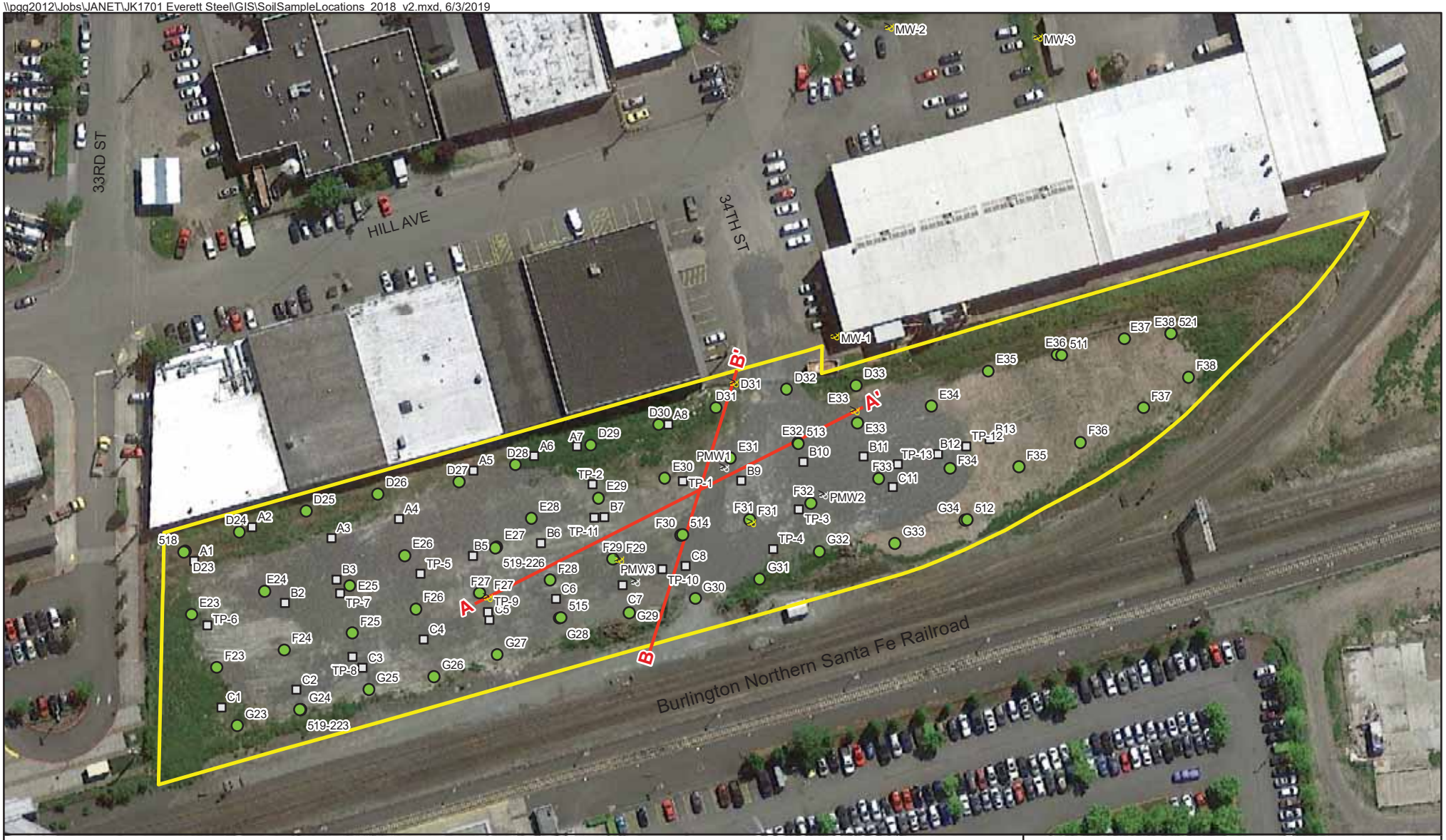

Existing Monitoring Well

Former Monitoring Well

Everett Steel Site

Cross Section Alignment

Soil Sample Locations

February 2018

1999-2000 (DOF, 2000)

0 Feet 100

2017 Aerial Photo (Google Earth)

Figure 4
Soil and Groundwater Sampling Locations

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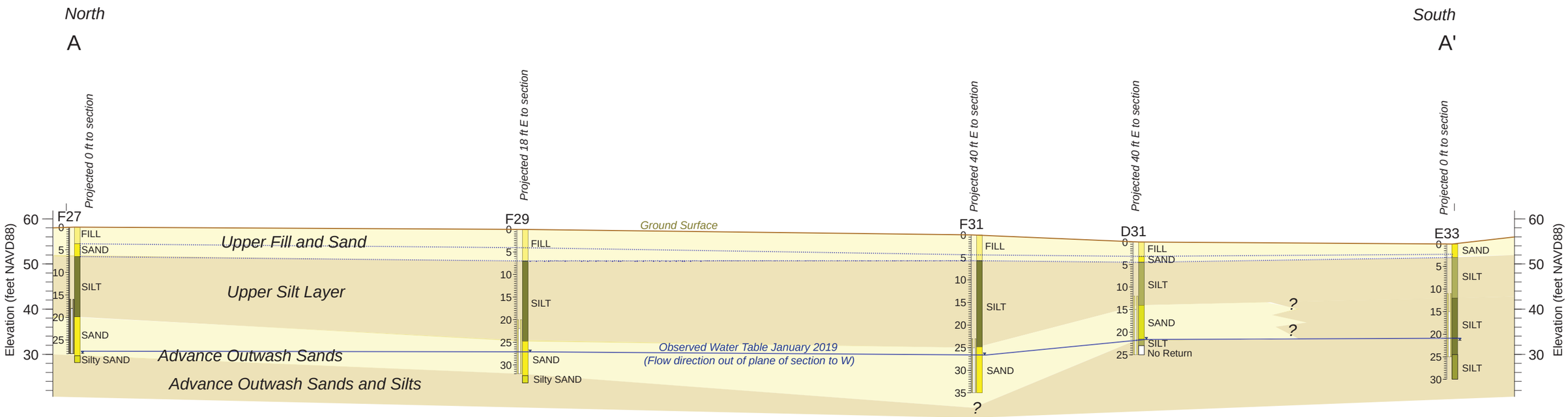
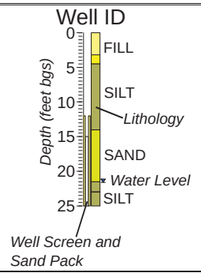
North

A

South

A'





No Vertical Exaggeration
See Figure 4 for Section Location

Figure 5
Geologic Cross Section A-A'

Everett Steel CAP

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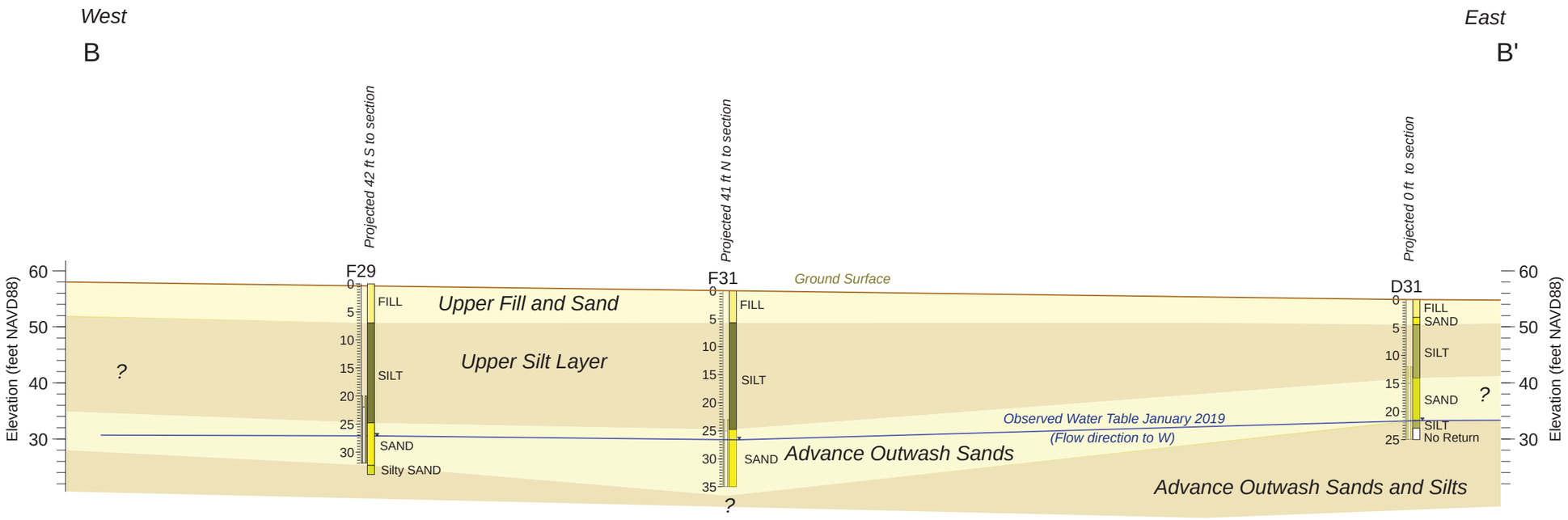

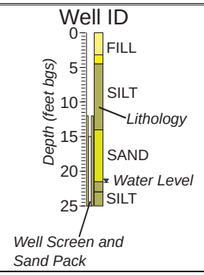

No Vertical Exaggeration
See Figure 4 for Section Location

Figure 6
Geologic Cross Section B-B'

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HILL AVE

34TH ST

Burlington Northern Santa Fe Railroad

MW-1

D31

E33

F31

F29

F27

G

NS

NS

0 Feet 50

2017 Aerial Photo (Google Earth)

Remedial Action[1,2]

- Excavate to 2ft bgs.
- Excavate to 3ft bgs.
- Excavate to 6ft bgs.
- OCR Soil Amendment (Diesel & Oil Exceedance (Soil))

- Soil Sample Location
- Monitoring Well
- Estimated Groundwater Flow Direction
- Maximum Result Greater Than MTCA Method A Unrestricted Cleanup Level for PCBs
- Sample Grid
- Everett Steel Site

[1]ft bgs = feet below ground surface measured from below quarry spall cover.
[2]Excavation extent per MTCA A Industrial Cleanup Levels.

Figure 7
Selected Remedy: Excavation

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HILL AVE

34TH ST

Burlington Northern Santa Fe Railroad

Constituent	Value
TPH-D	770
Arsenic	12

D31

Constituent	Value
TPH-D	1100

E33

Constituent	Value
TPH-D	690

F31

Constituent	Value
TPH-D	710
Arsenic	17
Chromium	140*
Lead	47*
Nickel	160*

F29

F27

MW-1

NS

NS

0 Feet 50

2017 Aerial Photo (Google Earth)

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- Monitoring Well
- Soil Sample Location
- Estimated Groundwater Flow Direction

All Result Values ug/L
See Tables 2-9 and 2-10 in RI/FS (PGG 2019)

* Result/Exceedance due to artificial turbidity

- Maximum Result Greater Than MTCA Method A Unrestricted Cleanup Level for PCBs
- Maximum Soil Result Greater Than MTCA Method A Industrial Cleanup Level
- Diesel & Oil Exceedance (Soil)
- Sample Grid
- Everett Steel Site

Figure 8
Groundwater Exceedance Map

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Everett Steel CAP

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APPENDIX A
TERRESTRIAL ECOLOGICAL EXCLUSION FORM

Voluntary Cleanup Program

Washington State Department of Ecology
Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation.

Step 1: IDENTIFY HAZARDOUS WASTE SITE	
Please identify below the hazardous waste site for which you are documenting an evaluation.	
Facility/Site Name: Everett Steel Scrapyard	
Facility/Site Address: 33rd St 34th St & BNRR ROW, Everett, WA 98201	
Facility/Site No: 71351	VCP Project No.: NW3190

Step 2: IDENTIFY EVALUATOR			
Please identify below the person who conducted the evaluation and their contact information.			
Name: Janet Knox		Title: Principal	
Organization: Pacific Groundwater Group			
Mailing address: 2377 Eastlake Ave E			
City: Seattle	State: WA	Zip code: 98102	
Phone: 206-329-0141	Fax: NA	E-mail: janet@pgwg.com	

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

☒ Yes *If you answered **"YES,"** then answer **Question 2**.*

☐ No or Unknown *If you answered **"NO" or "UNKNOWN,"** then skip to **Step 3B** of this form.*

2. What is the basis for the exclusion? *Check all that apply. Then skip to **Step 4** of this form.*

Point of Compliance: WAC 173-340-7491(1)(a)

☐ All soil contamination is, or will be,* at least 15 feet below the surface.

☐ All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

☐ All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

☐ There is less than 0.25 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.

☐ For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous[#] undeveloped[±] land on or within 500 feet of any area of the Site.

Background Concentrations: WAC 173-340-7491(1)(d)

☐ Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

[±] "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

[#] "Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

☒ Yes — *If you answered **"YES,"** then answer **Question 2** below.*

☐ No or Unknown — *If you answered **"NO"** or **"UNKNOWN,"** then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

☒ Yes — *If you answered **"YES,"** then answer **Question 3** below.*

☐ No — *If you answered **"NO,"** then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

☐ Yes — *If you answered **"YES,"** then answer **Question 4** below.*

☒ No — *If you answered **"NO,"** then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

☐ Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*

☐ Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? *Check all that apply. Then skip to **Step 4** of this form.*

Exposure Analysis: WAC 173-340-7492(2)(a)

☐ Area of soil contamination at the Site is not more than 350 square feet.

☒ Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

☒ No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.

☐ No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. *See* WAC 173-340-7493(1)(c).

1. Was there a problem? *See* WAC 173-340-7493(2).

☐ Yes *If you answered **"YES,"** then answer **Question 2** below.*

☐ No *If you answered **"NO,"** then identify the reason here and then skip to **Question 5** below:*

- ☐ No issues were identified during the problem formulation step.
- ☐ While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? *See* WAC 173-340-7493(3).

- ☐ Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*
- ☐ Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use?
Check all that apply. See WAC 173-340-7493(3).

- ☐ Literature surveys.
- ☐ Soil bioassays.
- ☐ Wildlife exposure model.
- ☐ Biomarkers.
- ☐ Site-specific field studies.
- ☐ Weight of evidence.
- ☐ Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

- ☐ Confirmed there was no problem.
- ☐ Confirmed there was a problem and established site-specific cleanup levels.

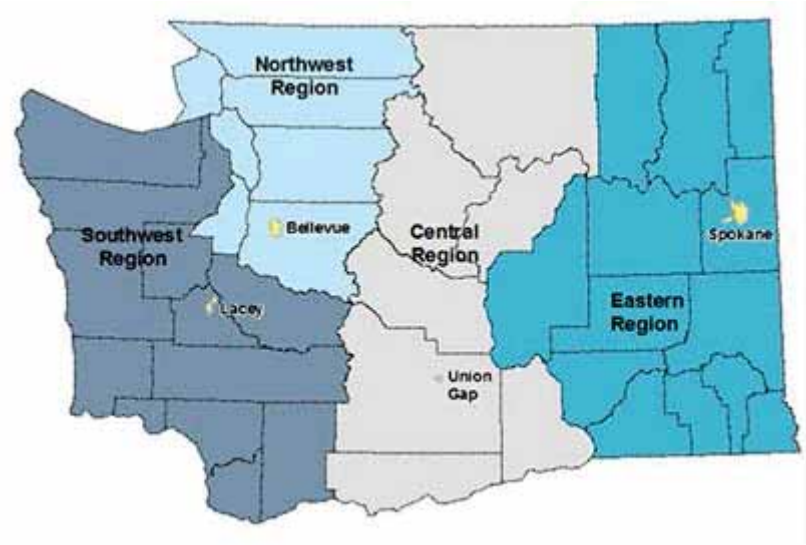
5. Have you already obtained Ecology's approval of both your problem formulation and problem resolution steps?

☐ Yes If so, please identify the Ecology staff who approved those steps:

☐ No

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.



Northwest Region: Attn: VCP Coordinator 3190 160th Ave. SE Bellevue, WA 98008-5452	**Central Region:** Attn: VCP Coordinator 1250 West Alder St. Union Gap, WA 98903-0009
Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775	**Eastern Region:** Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295

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P 206.329.0141 | **F** 206.329.6968

2377 Eastlake Avenue East | Seattle, WA 98102

www.pgwg.com

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