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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Southwest Region Office

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April 25, 2023

Matt Chantry
Shelter Resources Inc.
2223 112th Ave NE Ste 102
Bellevue, WA 98004
mattc@shelterresourcesinc.com

Re: No Further Action at a Property associated with the Asarco Tacoma Smelter Site:

- **Name:** Redondo Heights
- **Property Address:** South 276th St, 600 feet east of Pacific Highway South, Federal Way, King County, WA 98003
- **Facility/Site ID:** 96556
- **Cleanup Site ID:** 15499
- **VCP Project No.:** NW3331

Dear Matt Chantry:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of a Property associated with the Asarco Tacoma Smelter Site (**Asarco Site**). This letter provides our opinion. We are providing this opinion under the authority of the [Model Toxics Control Act \(MTCA\)](#),¹ [chapter 70A.305 Revised Code of Washington \(RCW\)](#).²

Issues Presented and Opinion

Ecology has determined that no further remedial action is necessary at the Property to clean up contamination associated with the Asarco Site.

Ecology has determined that further remedial action is still necessary elsewhere at the Asarco Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, chapter 70A.305 RCW, and its implementing regulations, [Washington](#)

¹ <https://apps.ecology.wa.gov/publications/SummaryPages/9406.html>

² <https://app.leg.wa.gov/rcw/default.aspx?cite=70A.305>

[Administrative Code \(WAC\) chapter 173-340](#)³ (collectively “substantive requirements of MTCA”). The analysis is provided below.

Property and Asarco Site Descriptions

This opinion applies only to the Property and the Asarco 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 following tax parcels in King County that were affected by the Asarco Site and addressed by your cleanup:

- 7204800172 (3.45 acres).
- 7204800174 (1.56 acres).

Enclosure A includes a legal description of the Property and details of the Property as currently known to Ecology.

2. Description of the Asarco Site.

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

- Arsenic into the Soil.
- Lead into the Soil.

Those releases have affected more than one parcel of real property, including the parcels identified above.

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

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

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.

³ <https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340>

Basis for the Opinion

This opinion is based on the information in the documents listed below. You can request these documents by filing a [records request](#).⁴ For help making a request, contact the [Public Records Officer](#)⁵ at or call 360-407-6040. Before making a request, check whether the documents are available on [Ecology's Cleanup Site Search web page](#).⁶

1. GeoEngineers, *Remedial Action Report, Redondo Heights Apartments Project Federal Way, Washington*, February 9, 2023.
2. City of Federal Way, *State Environmental Policy Act (SEPA) Determination of Nonsignificance Redondo Heights TOD, File No:20-104353-00-SE*. November 9, 2021.
3. GeoEngineers, *Soil Sampling and Analytical Results Summary, Tacoma Smelter Plume Sampling, Redondo Heights Apartments, Federal Way, Washington*. June 16, 2021.

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

Analysis of the Cleanup

1. Cleanup of the Property located within the Asarco Site.

Ecology has concluded that **no further remedial action** is necessary at the Property to clean up contamination associated with the Asarco Site. That conclusion is based on the following analysis:

a. Characterization of the Asarco Site.

The Site is described in **Enclosure B**.

Redondo Heights property (Property) is located west of Interstate 5 in a mixed use (residential and light industrial) area of Federal Way, Washington (Figure 1). The Property is situated on two King County parcels that add up to 5.01 acres of land. The Property is bordered to the north by South 276th Street and the King County Transit Redondo Park and Ride, residential properties to the east, Silver Shadows

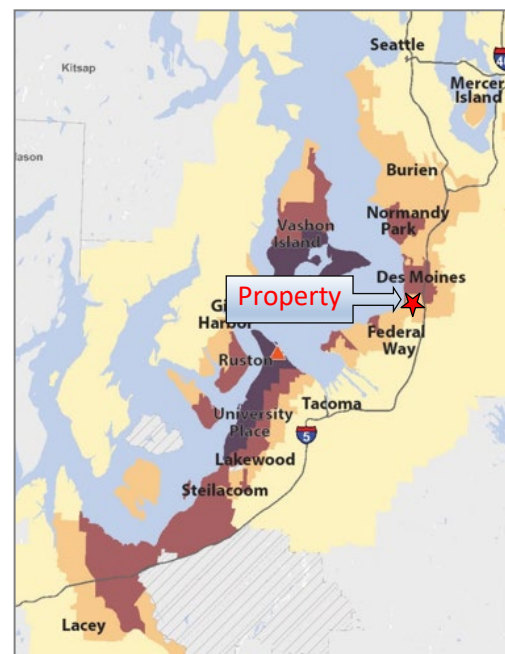


Figure 1. Vicinity Map

⁴ <https://ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests>

⁵ publicrecordsofficer@ecy.wa.gov

⁶ <https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=15499>

housing development to the west, and undeveloped land to the south. Most of the Property is currently undeveloped and forested. For more information about the Property refer to **Enclosure A**.

Shelter Resources Inc. (Shelter) plans to develop this Property into six apartment buildings with associated parking, landscaping, and utilities.

As part of the planned development, Shelter contracted GeoEngineers to characterize the Tacoma Smelter Plume (TSP) contamination on the Property. In February 2021, GeoEngineers collected 40 discrete soil samples from 32 sampling locations on the Property (Figure 2). They collected 32 soil samples from 0 to 6 inches below ground surface (bgs) and 8 soil samples from 6 to 12 inches bgs. GeoEngineers also collected eight, six-point composite duff samples.

GeoEngineers submitted the samples to OnSite Environmental Inc. laboratory in Redmond, Washington for arsenic and lead analysis with Environmental Protection Agency (EPA) Method 6010D.

Results of Soil Sampling

Table 1 displays the summary of the characterization sampling on the Property. **Enclosure C** contains the comprehensive results of the characterization sampling on the Property.

Samples collected from 0 to 6 inches bgs: Arsenic exceeded the MTCA Method A cleanup level of 20 milligrams per kilogram (mg/kg) in seven samples. One sample exceeded the maximum allowable concentration for a single soil sample or twice the cleanup level for arsenic (40 mg/kg). The arsenic concentrations ranged from 2.9 mg/kg to 57 mg/kg. The average arsenic concentration was 16 mg/kg. None of the samples exceeded the MTCA Method A cleanup level of 250 mg/kg for lead. Lead concentrations ranged from 6 mg/kg to 180 mg/kg. The average lead concentration was 38 mg/kg.

Samples collected from 6 to 12 inches bgs: None of the soil samples exceeded the cleanup level of 20 mg/kg for arsenic. The arsenic concentrations ranged from 3 mg/kg to 17 mg/kg. The average arsenic concentration was 9 mg/kg. None of the lead concentrations exceeded the cleanup level of 250 mg/kg. Lead concentrations ranged from 6.4 mg/kg to 30 mg/kg. The average lead concentration was 19.4 mg/kg.

Duff: One of the samples exceeded the cleanup level of 20 mg/kg for arsenic. The arsenic concentrations ranged from 5.2 mg/kg to 36 mg/kg. None of the lead concentrations exceeded the cleanup level of 250 mg/kg. Lead concentrations ranged from 23 mg/kg to 78 mg/kg.

Table 1. Summary of the Characterization Sampling on the Property

Depth (inches)	Arsenic (mg/kg)			Lead (mg/kg)		
	Minimum	Maximum	Average	Minimum	Maximum	Average
0-6	2.9	57	16	6	180	38
6-12	3	17	9	6.4	30	19.4
Duff	5.2	36	12.7	23	78	41
MTCA Cleanup Level		40	20		500	250

Values in **bold** represent concentrations above the MTCA Method A cleanup level for unrestricted land use. Values in **bold red** represent values twice the cleanup level.

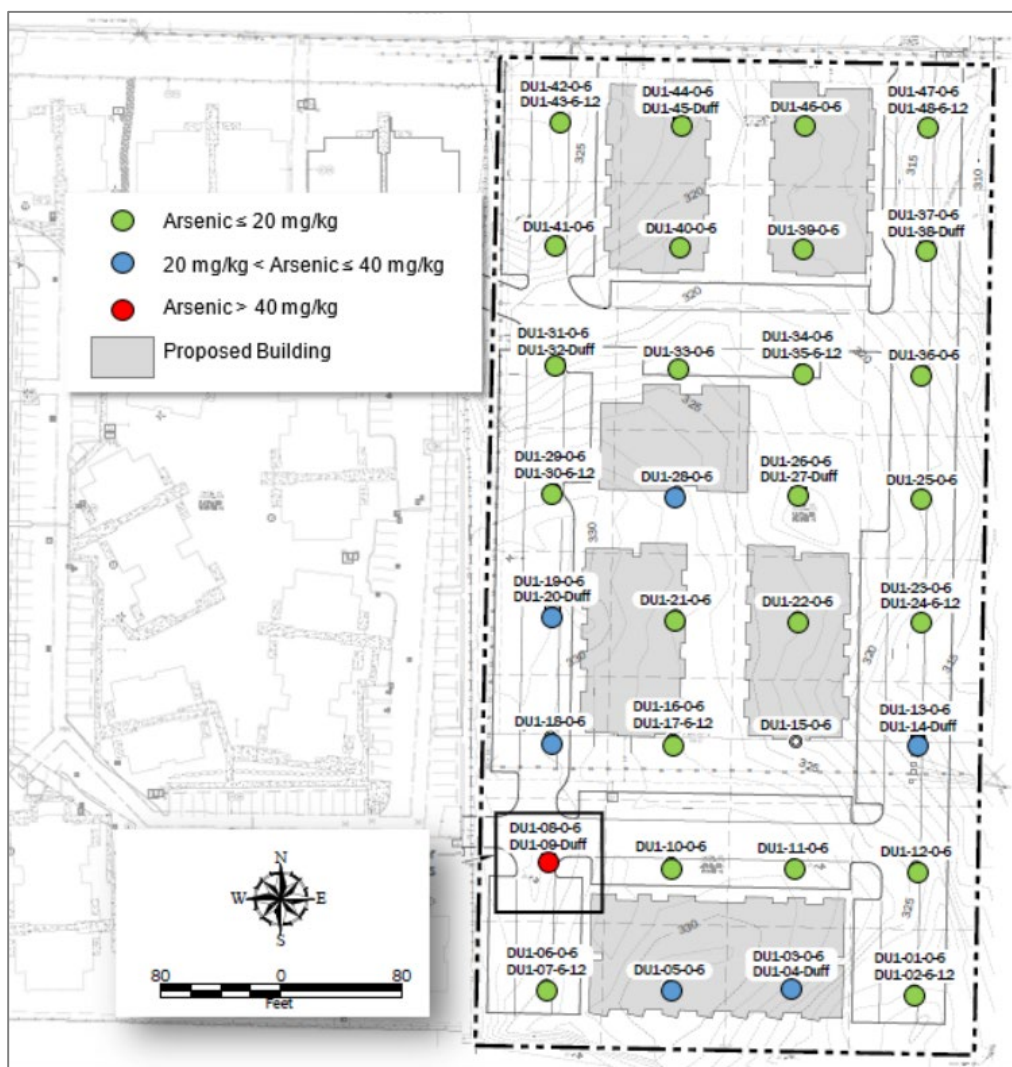


Figure 2. Approximate Locations of Characterization Samples

GeoEngineers conducted additional soil sampling to delineate the vertical and horizontal extent of the contamination in the area where arsenic exceeded twice the MTCA Method A cleanup level of 20 mg/kg (sample location DU1-08-0-6). On March 12, 2021,

GeoEngineers collected seven discrete soil samples from 0 to 6 inches bgs and two samples from 6 to 12 inches bgs (Figure 3). GeoEngineers submitted the soil and duff samples to OnSite Environmental Inc. laboratory in Redmond, Washington for arsenic analysis with EPA Method 6010D. GeoEngineers did not analyze any of the additional samples for lead because all the lead concentrations were below the cleanup Level of 250 mg/kg. Table 2 shows the summary of additional sampling results. For the comprehensive results of the additional sampling on the Property, refer to Enclosure C.

Table 2. Summary of Additional Sampling

Depth (inches)	Arsenic (mg/kg)		
	Minimum	Maximum	Average
0-6	6.1	50	24
6-12	10	20	15

Bold values represent concentrations above the MTCA Method A cleanup level; **Bold red** values represent concentrations twice the MTCA Method A cleanup level

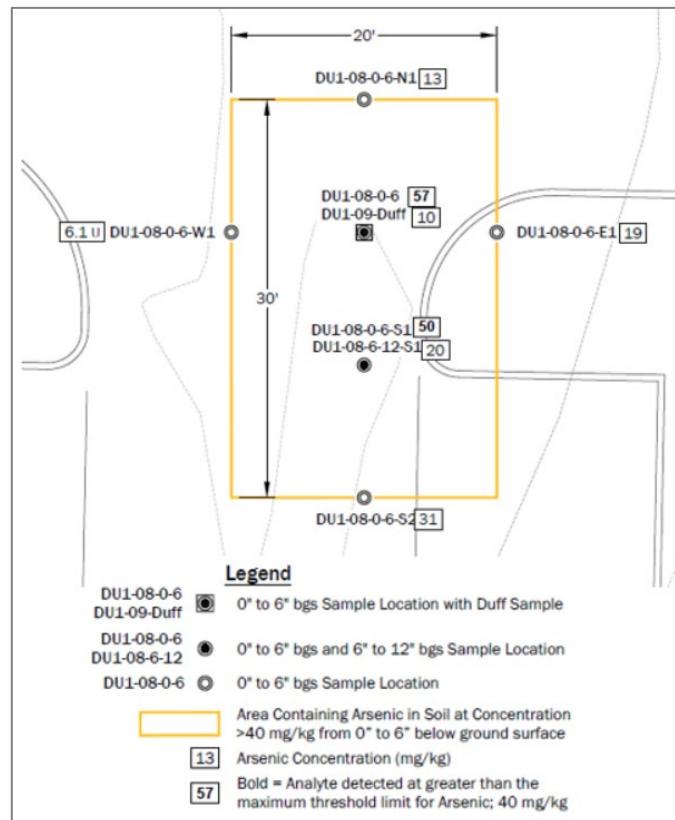


Figure 3. Approximate Locations of Additional Samples

Results of the additional sampling

Samples collected at 0 to 6 inches bgs: Two of the samples exceeded the MTCA Method A cleanup level of 20 mg/kg for arsenic. One sample exceeded the maximum allowable concentration for a single sample (40 mg/kg). Arsenic concentrations ranged from 6.1 mg/kg to 50 mg/kg. The average arsenic concentration was 24 mg/kg.

Samples collected at 6 to 12 inches bgs: None of the samples exceeded the cleanup level of 20 mg/kg for arsenic. The arsenic concentrations ranged from 10 mg/kg to 20 mg/kg. The average arsenic concentration was 15 mg/kg.

Establishment of Cleanup Standards for the Asarco Site

Ecology has determined the cleanup levels and points of compliance established for the Asarco Site meet the substantive requirements of MTCA.

As part of the Interim Action Plan for the Asarco Site (June 2012) (IAP), Ecology completed a terrestrial ecological evaluation for properties with only Tacoma Smelter Plume contamination. Ecology determined the MTCA Method A cleanup levels for both arsenic and lead were protective of both human health and the environment. The MTCA Method A cleanup levels for soil are as follows:

- Arsenic is 20 mg/kg.
- Lead is 250 mg/kg.

The IAP determined the following cleanup levels were protective of human health and the environment for properties within the Asarco Site:

- Average arsenic concentration detected in the soil and duff less than 20 mg/kg.
- Average lead concentration detected in the soil and duff less than 250 mg/kg.
- No single soil sample has arsenic concentration above 40 mg/kg.
- No single soil sample has lead concentration above 500 mg/kg.

b. Selection of Cleanup for the Property

Ecology has determined the cleanup selected for the Property meets the substantive requirements of MTCA and the IAP. The cleanup meets the minimum cleanup requirements and does not exacerbate conditions or preclude reasonable cleanup alternatives elsewhere at the Asarco Site.

Ecology proposed four model remedies in the IAP:

- Excavation and removal.
- Mixing.
- Capping in place.
- Consolidation and capping.

Shelter decided to use duff excavation and removal and soil mixing to remediate the TSP contamination on the Property.

c. Cleanup of the Property

Shelter conducted the soil cleanup on the Property in conjunction with its development. On August 19, 2021, on behalf of Shelter, GeoEngineers developed a Cleanup Action Plan (CAP) for the Property. The CAP described the use of the selected model remedies: soil mixing in one area and excavation and removal of duff in two areas. Ecology based this opinion letter on the information provided in this CAP.

Based on the results of the characterization soil sampling, GeoEngineers identified one remedial area where arsenic exceeded twice the cleanup level of 20 mg/kg in the soil (sample location DU1-08-06). They also identified two locations, where the composite duff samples were at or above the cleanup level of 20 mg/kg for arsenic (DU1-32-Duff and DU1-14-Duff).

The approximate size of the soil remedial area based on the characterization and additional sampling was 20 feet wide by 30 feet long (Figure 4). The contractor imported approximately 11 cubic yards of clean soil and placed it in a 5-inch-thick layer over the remedial area. The contractor mixed the clean imported soil with the original soil. The approximate volume of mixed soil was 33 cubic yards.

GeoEngineers submitted the import soil sample for chemical analysis of gasoline-range petroleum hydrocarbons by Ecology-approved method NWTPH-Gx, diesel- and lube-oil-range petroleum hydrocarbons by Ecology approved method NWTPH-Dx, benzene,

toluene, ethylbenzene and total xylenes (BTEX) by EPA method 8260 D, carcinogenic polycyclic aromatic hydrocarbons (cPAHs) by EPA Method 8270E/SIM, polychlorinated biphenyls (PCBs) by EPA method 8082, pesticides (DDT, DDD, DDE) by EPA method 8081, and total metals (arsenic, cadmium, chromium, copper, mercury, lead and zinc) by EPA Method 6000/7000 series.

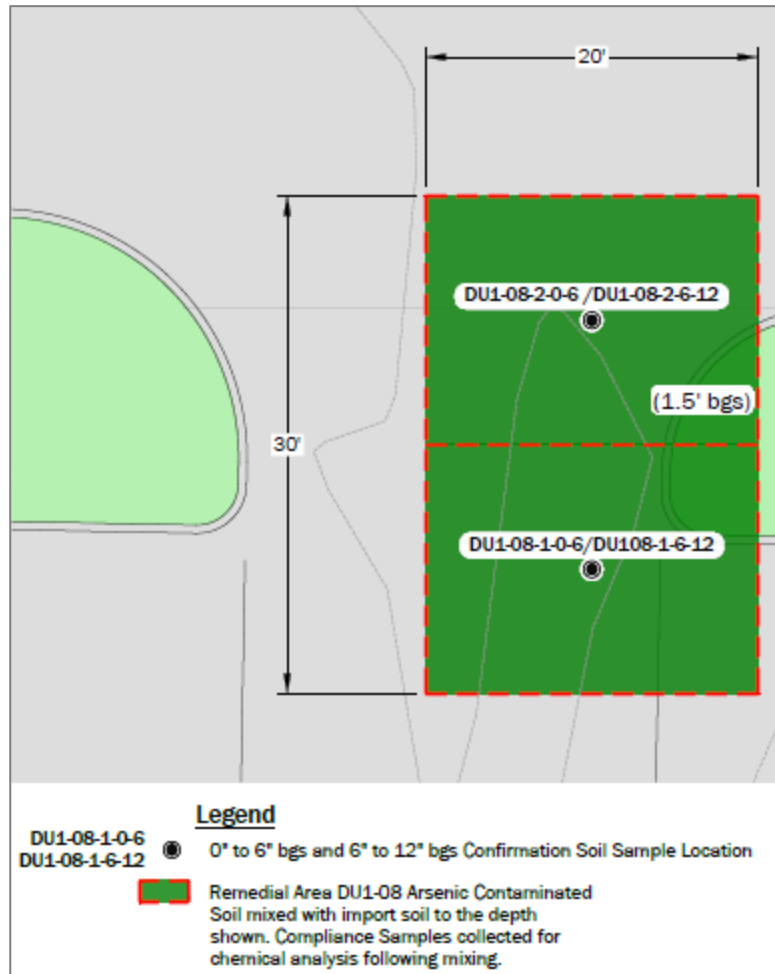


Figure 4. Remedial Area Centering Around Sample DU1-08-1-06

Gasoline-, diesel- and lube-oil-range petroleum hydrocarbons, BTEX, cPAHs, PCBs, pesticides (DDT, DDD, DDE), arsenic, cadmium, lead and mercury were not detected in the analyzed import soil sample. Chromium, copper, and zinc were detected at concentrations less than their respective MTCA Method A CULs or Method B criteria (Enclosure C).

The contractor scraped the duff from the two areas where arsenic concentrations exceeded 20 mg/kg. The approximate dimensions of the two areas were 80 feet by 80 feet, each (Figure 5). The contractor covered the contaminated duff on trucks and transported it off to a qualified disposal facility. The receipts of the duff disposal are included in **Enclosure D**.

Confirmational Sampling

GeoEngineers collected confirmational samples following soil mixing in the soil remedial area. They collected four discrete soil samples in the mixed area (two from 0 to 6 inches bgs and two from 6 to 12 inches bgs). GeoEngineers submitted the samples to OnSite Environmental laboratory in Redmond, Washington for arsenic analysis. They did not analyze the soil for lead, since all the lead samples were below the cleanup level of 250 mg/kg for lead.

Arsenic concentrations were below the cleanup level of 20 mg/kg in all the confirmational samples collected from the soil mixing area. Table 3 shows the confirmational sampling results.

The results of the confirmational soil sampling showed that no further cleanup actions for the TSP contamination were needed for the Property.

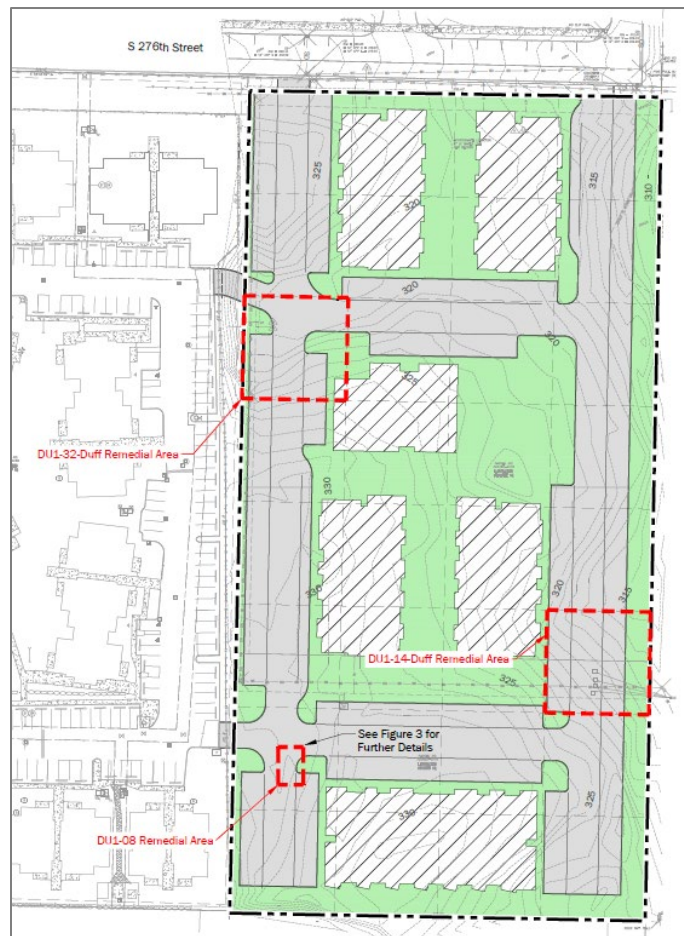


Figure 4. Duff and Soil Remediation Areas Outlined in Red Dashed Lines

Table 3. Results of the Confirmational Sampling

Sample ID	Sample Date	Soil Depth (inches bgs)	Corresponding Sample ID	Arsenic (mg/kg)	Average Arsenic (mg/kg)
1	12/21/2022	0 to 6	DU1-08-1-0-6	9.9	8.6
2	12/21/2022	0 to 6	DU1-08-2-0-6	7.3	
1	12/21/2022	6 to 12	DU1-08-1-6-12	9	8.2
2	12/21/2022	6 to 12	DU1-08-2-6-12	7.3	

2. Cleanup of the Asarco Site as a Whole.

Ecology has concluded that **further remedial action** under MTCA is still necessary elsewhere at the **Asarco Site**. In other words, while your cleanup constitutes the final action for the Property, it is only an **“interim action”** for the Asarco Site as a whole.

Listing of the Asarco Site

Based on this opinion, Ecology will update the status of remedial action at the Asarco Site on our database of hazardous waste sites. However, because further remedial action is still necessary elsewhere at the Asarco Site, we will not remove the Asarco Site from our lists of hazardous waste sites. Furthermore, the Property will remain listed as part of the Asarco Site because the cleanup of the Property does not change the boundaries of the Asarco Site.

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 Property. This opinion **does not**:

- Change the boundaries of the Asarco 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 70A.305.040(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 70A.305.080 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 705.305.170(6).

Termination of Agreement

Thank you for cleaning up your Property under the Voluntary Cleanup Program (VCP). This opinion terminates the VCP Agreement governing this project (NW3331).

For more information about the VCP and the cleanup process, please visit our [Voluntary Cleanup Program web page](#).⁷ If you have any questions about this opinion, please contact me at 360-999-9593 or eva.barber@ecy.wa.gov.

Sincerely,



Eva L. Barber
Technical Assistance Coordinator
Southwest Region Office
Toxics Cleanup Program

EB/js

Enclosures: A – Legal and General Property Descriptions
 B – Asarco Tacoma Smelter Site Description
 C – Soil Characterization, Confirmational and Import Soil Sampling Results
 D – Duff Disposal Receipts

cc by email: Aaron Waggoner, GeoEngineers, awaggoner@geoengineers.com
 Becky Chapin, City of Federal Way, becky.chapin@cityoffederalway.com
 Marian Abbett, Ecology, marian.abbett@ecy.wa.gov
 Jerome Lambiotte, jerome.lambiotte@ecy.wa.gov
 Ecology Site File

⁷ <https://www.ecy.wa.gov/vcp>

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Enclosure A

Legal and General Property Descriptions

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Legal Property Description

Parcel 7204800172: REDONDO HEIGHTS UNREC VALUE OF UNDEEDED STS & ALLEYS INCL IN ADJ LOT VAL POR LOT 24 & ADJ UNDEEDED ST DAF- E 1/2 OF NE 1/4 OF SW 1/4 OF NW 1/4 LESS POR SLY OF LN RNG W FR E LN 207 FT N FR SE COR TAP ON W LN 205 FT N OF SW COR STR 33-22-04

Parcel 7204800174: REDONDO HEIGHTS UNREC POR E 1/2 OF NE 1/4 OF SE 1/4 OF NW 1/4 STR 33-22-04 DAF: BEG SE COR THOF TH N ALG E LN 207 FT TH W TO PT 205 FT N OF SW COR TH S 205 FT TH E TO POB

Property Description

The Property is located south of South 276th Street and the King County Transit Redondo Park and Ride to the north, a vacant tract of land to the east, the Silver Shadow Apartment complex to the west, and undeveloped private land to the south.

The topography is generally level with a low area crossing from west to east approximately in the middle of the northern half of the Property. The City of Federal Way zoning for the Property and the surrounding area to the south and east is designated as residential with single-family dwellings (Federal Way Zoning Designation RS7.2), the area to the west is designated as residential with multi-family dwellings (Federal Way Zoning Designation RM2400), area to the north is designated as community business (Federal Way Zoning Designation BC).

The Property consists of 5.01 acres and has never been developed. It will be developed into multi-family housing consisting of six buildings. The development plans include approximately 2.1 acres of paved parking and roadways and approximately 1.7 acres of landscaping.

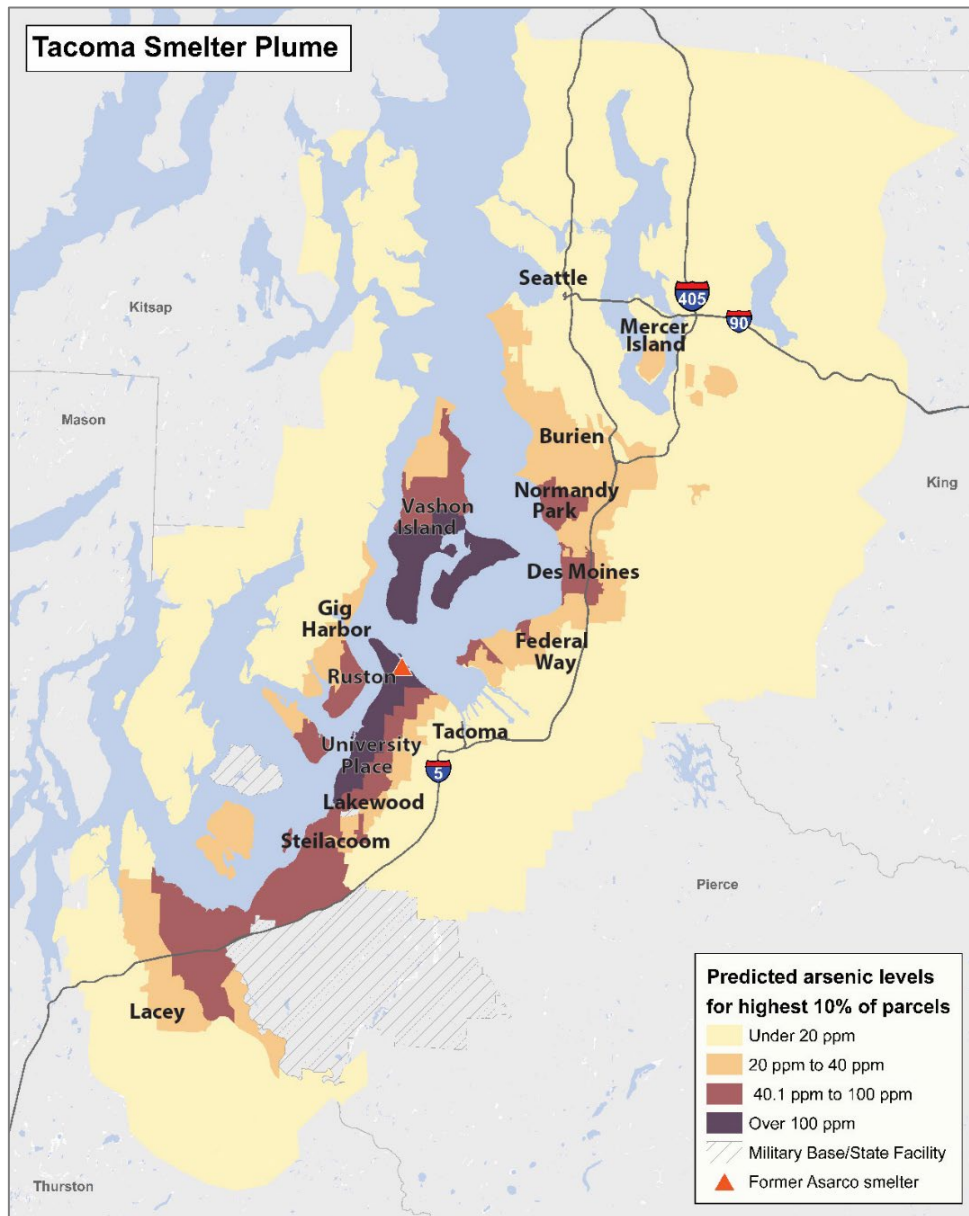
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Enclosure B

Asarco Tacoma Smelter Site Description

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Asarco Tacoma Smelter Site



An interactive color map can be found at: <https://dirtalert.info/>.

For almost 100 years, the Asarco Company operated a copper smelter in Tacoma. Air pollution from the smelter settled on the surface soil over a vast region—more than 1,000 square miles of the Puget Sound basin. Elevated levels of contamination are found as far south as the Nisqually Ridge and as far north as Seattle (West Seattle). Additionally, elevated levels of contamination are found as far west as the Kitsap Peninsula and as far east as Kent and Bellevue. Arsenic, lead, cadmium, and other heavy metals are still in the soil as a result of this pollution. The area has elevated levels of arsenic, lead, and cadmium in the soil due to air emissions from the Asarco smelter.

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Enclosure C

Soil Characterization and Confirmational Sampling Results

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Soil Characterization Sampling Results

Sample ID	Sample Date	Sample Depth (inches)	Arsenic (mg/kg)	Lead (mg/kg)
DU1-44-0-6	2/24/2021	0-6	2.9	11
DU1-42-0-6	2/24/2021	0-6	3	6
DU1-10-0-6	2/24/2021	0-6	3.1	7.7
DU1-41-0-6	2/24/2021	0-6	3.5	7
DU1-29-0-6	2/24/2021	0-6	5.8	13
DU1-12-0-6	2/24/2021	0-6	6.2	16
DU1-25-0-6	2/24/2021	0-6	6.7	15
DU1-11-0-6	2/24/2021	0-6	9.1	27
DU1-22-0-6	2/24/2021	0-6	9.4	19
DU1-46-0-6	2/24/2021	0-6	9.7	28
DU1-23-0-6	2/24/2021	0-6	10	22
DU1-01-0-6	2/24/2021	0-6	11	27
DU1-36-0-6	2/24/2021	0-6	11	28
DU1-47-0-6	2/24/2021	0-6	12	24
DU1-31-0-6	2/24/2021	0-6	13	24
DU1-40-0-6	2/24/2021	0-6	13	24
DU1-16-0-6	2/24/2021	0-6	13	29
DU1-15-0-6	2/24/2021	0-6	13	32
DU1-21-0-6	2/24/2021	0-6	16	37
DU1-34-0-6	2/24/2021	0-6	16	40
DU1-06-0-6	2/24/2021	0-6	18	27
DU1-33-0-6	2/24/2021	0-6	18	40
DU1-37-0-6	2/24/2021	0-6	18	42
DU1-26-0-6	2/24/2021	0-6	18	53
DU1-39-0-6	2/24/2021	0-6	19	38
DU1-13-0-6	2/24/2021	0-6	22	33
DU1-18-0-6	2/24/2021	0-6	22	53
DU1-28-0-6	2/24/2021	0-6	26	75
DU1-19-0-6	2/24/2021	0-6	34	59
DU1-03-0-6	2/24/2021	0-6	36	86
DU1-05-0-6	2/24/2021	0-6	37	100
DU1-08-0-6	2/24/2021	0-6	57	180
DU1-43-6-12	2/24/2021	6-12	3	6.4
DU1-30-6-12	2/24/2021	6-12	3.2	9.0

Sample ID	Sample Date	Sample Depth (inches)	Arsenic (mg/kg)	Lead (mg/kg)
DU1-02-6-12	2/24/2021	6-12	7.6	17
DU1-07-6-12	2/24/2021	6-12	8.4	19
DU1-35-6-12	2/24/2021	6-12	9.1	22
DU1-17-6-12	2/24/2021	6-12	11	24
DU1-24-6-12	2/24/2021	6-12	12	28
DU1-45-6-12	2/24/2021	6-12	17	30
DU1-09-DUFF	2/24/2021	Duff	5.2	23
DU1-45-DUFF	2/24/2021	Duff	6.1	23
DU1-27-DUFF	2/24/2021	Duff	7.5	24
DU1-04-DUFF	2/24/2021	Duff	4.8	25
DU1-38-DUFF	2/24/2021	Duff	9.2	27
DU1-14-DUFF	2/24/2021	Duff	20	55
DU1-32-DUFF	2/24/2021	Duff	36	74
DU1-20-DUFF	2/24/2021	Duff	13	78
Additional Sampling				
DU1-08-0-6-W1	3/12/2021	0-6	6.1	Not analyzed
DU1-08-0-6-N1	3/12/2021	0-6	13	
DU1-08-0-6-E1	3/12/2021	0-6	19	
DU1-08-0-6-S2	3/12/2021	0-6	31	
DU1-08-0-6-S1	3/12/2021	0-6	50	
DU1-08-6-12-S1	3/12/2021	6-12	20	
DU1-08-6-12	3/12/2021	6-12	10	

NA – not analyzed. Values in **bold** represent concentrations above the MTCA Method A cleanup level. Values in **bold red** represent concentrations above twice the MTCA Method A cleanup level.

Soil Confirmational Sampling Results

Sample ID	Soil Depth (inches bgs)	Corresponding Sample ID	Arsenic (mg/kg)	Average Arsenic (mg/kg)
1	0 to 6	DU1-08-1-0-6	9.9	8.6
2		DU1-08-2-0-6	7.3	
1	6 to 12	DU1-08-1-6-12	9	8.2
2		DU1-08-2-6-12	7.3	

Imported Soil Sampling Results

Import Sample Identification	IMPORT-22-12-21	MTCA Method A Cleanup Level ¹²	Naturally Occurring Background Metals in Puget Sound Soils ¹⁶
NWTPH-Gx ² (mg/kg)			
Gasoline-range hydrocarbons	3 U	30/100 ¹³	N/A
NWTPH-Dx ³ (mg/kg)			
Diesel-range hydrocarbons	26 U	2,000 ¹⁴	N/A
Lube oil-range hydrocarbons	52 U		
Metals ⁴ (mg/kg)			
Arsenic	10 U	20	7
Cadmium	.52 U	2.0	1
Chromium	13	2,000 ¹⁵	48
Copper	15	320012	36
Lead	.2 U	250	24
Mercury	0.26	2.0	0.07
Zinc	12	24,000 ¹²	85
PCB Aroclors ⁵ (mg/kg)			
PCB-Aroclor 1016	052 U	MTCA ULU cleanup level for the sum of all PCBs is 1 mg/kg	N/A
PCB-Aroclor 1221	052 U		
PCB-Aroclor 1232	052 U		
PCB-Aroclor 1242	052 U		
PCB-Aroclor 1248	052 U		
PCB-Aroclor 1254	052 U		
PCB-Aroclor 1260	.052 U		
Total PCB Aroclors ⁶	.052 U		
Organochlorine Pesticides ⁷ (µg/kg)			
4,4'-DDE	10 U	2.912	N/A
4,4'-DDD	10 U	4.212	

Import Sample Identification	IMPORT-22-12-21	MTCA Method A Cleanup Level ¹²	Naturally Occurring Background Metals in Puget Sound Soils ¹⁶
4,4'-DDT	10 U	3.0	
VOCs ⁸ (mg/kg)			
Benzene	0.00099 U	0.03	N/A
Ethylbenzene	0.0049 U	6.0	
Toluene	0.00099 U	7.0	
Total Xylenes ⁹	0.00299 U	9.0	
PAHs ¹⁰ (mg/kg)			
Benzo(a)anthracene	0.0070 U	MTCA ULU cleanup level for the sum of all cPAHs is 0.1 mg/kg	N/A
Benzo(a)pyrene	0.0070 U		
Benzo(b)fluoranthene	0.0070 U		
Benzo(j,k)fluoranthene	0.0070 U		
Chrysene	0.0070 U		
Dibenzo(a,h)anthracene	0.0070 U		
Indeno(1,2,3-c,d)pyrene	0.0070 U		
cPAHs (benzo(a)pyrene toxicity equivalent concentration) ¹¹	0.0053 U	0.1	

Notes:

1 Chemical analysis performed by OnSite Environmental, Inc., of Redmond, Washington.

2 Gasoline-range petroleum hydrocarbons by Northwest Method NWTPH-Gx.

3 Diesel- and lube oil-range petroleum hydrocarbons by Northwest Method NWTPH-Dx.

5 Polychlorinated biphenyls (PCBs) analyzed by EPA Method 8082A.

6 Total PCB Aroclors consists of PCB Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260.

7 Organochlorine Pesticides analyzed by EPA Method 8081B.

8 Volatile organic compounds (VOCs) analyzed by United States Environmental Protection Agency (EPA) Method 8260C.

9 Total xylenes consists of m,p- and o- xylenes. The higher detection limit is used for non-detects.

10 Polycyclic aromatic hydrocarbons (PAHs) and carcinogenic PAHs (cPAHs) analyzed by EPA Method 8270D/SIM.

14 MTCA Method A cleanup level is the sum of diesel- and lube oil-range petroleum hydrocarbons.

15 MTCA Method A cleanup level for Trivalent Chromium.

mg/kg = milligram per kilogram ULU = Unrestricted Land Use EPA = United States Environmental Protection Agency

µg/kg = microgram per kilogram PCBs = Polychlorinated biphenyls Ecology = Washington State Department of Ecology

MTCA = Model Toxics Control Act VOCs = Volatile organic compounds PAHs = Polycyclic aromatic hydrocarbons

N/A = Not applicable cPAHs = carcinogenic PAHs RCRA = Resource Conservation Recovery Act

U = Analyte was not detected at or greater than the listed reporting limit

TEF = Toxicity Equivalency Factor as defined in WAC 173-340-900 Table 708-2

Bold font type indicates that the analyte was detected at a concentration greater than the respective laboratory reporting limit.

16 90th percentile for natural background soil metals concentrations in Puget Sound region, Ecology, publication #94-115, dated October 1994.

11 Results for cPAHs are shown as the sum of the benzo[a]pyrene toxicity equivalent concentrations, calculated by multiplying each individual cPAH concentration by its corresponding TEF. In this sum, non-detects are represented as ½ of the corresponding analyte reporting limit multiplied by the TEF.

12 Method B cleanup level shown if no Method A cleanup level is established. The MTCA Method B cleanup level shown is the lowest for either carcinogen or non-carcinogen, based on direct contact.

13 Model Toxics Control Act (MTCA) Method A cleanup level for gasoline is 30 mg/kg if benzene is detected or if the sum of toluene, ethylbenzene and xylenes are greater than or equal to 1% of the total gasoline detection.

4 Total metals analyzed by United States Environmental Protection Agency (EPA) 6000/7000 series method


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Enclosure D

Soil Disposal Receipts

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Soil Disposal Receipts

		Republic Services 18500 N. Allied Way, Phoenix, AZ 85054	
SPECIAL WASTE DEPARTMENT DECISION			
Waste Profile # 4178230430		Expiration Date 1/9/2024	
I. Decision Request:		<input checked="" type="checkbox"/> Initial <input type="checkbox"/> Recertification <input type="checkbox"/> Change	
Disposal Facility: 4178 - Roosevelt LF			
Generator Name: Shelter Resources Inc			
Generator Site Address: Hwy 99 Redondo S 276th St			
City: Federal Way	County: _____	State: WA	Zip: _____
Name of Waste: Contaminated Soil			
Estimated Annual Volume: 350 Cubic Yards			
II. Special Waste Department Decision: <input checked="" type="radio"/> Approved <input type="radio"/> Rejected			
Management Method(s): <input checked="" type="checkbox"/> Landfill <input type="checkbox"/> Solidification <input type="checkbox"/> Bioremediation <input type="checkbox"/> Deep Well <input type="checkbox"/> Transfer Facility			
Problematic Special Waste according to Republic? <input type="radio"/> Yes <input checked="" type="radio"/> No			
If yes, which one? _____			
Approved by Special Waste Review Committee? <input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> Not Applicable			
Precautions, Conditions or Limitations on Approval			
Special Waste Analyst Signature: <u>Holly M Wilson</u>		Name (Printed): <u>Holly Wilson</u>	
Date: 1/10/2023			
III. Facility Decision: <input checked="" type="radio"/> Approved <input type="radio"/> Rejected			
Precautions, Conditions or Limitations on Approval			
By signing below, the General Manager or Designee agrees that a fully executed Special Waste Service Agreement is on file for this profile and that the special waste file is complete.			
General Manager or Designee: <u>Jeff Barcnas</u>		Name (Printed): <u>Jeff Barcnas</u>	
Date: 1/10/2023			

Reminder
No side dumps

Drivers must have copy bill of lading

Certification No. Tb-0430
Billing Acct. No. 333776
Product Code VG

BILL OF LADING

Contaminated Soil

REGIONAL DISPOSAL COMPANY

54 S. Dawson Street
Seattle, WA 98134
Telephone: (206) 332-7700 / Fax: (206) 332-7600

Redondo Heights dba

This Bill of Lading augments the Master Service Agreement ("Agreement") entered into by Shelter Resources (Generator/Agent) and Regional Disposal Company ("RDC") on 1/18/2023 (date). The terms herein are made a part of the Agreement. In the event of conflict between this Bill of Lading and the Agreement, the terms of the Agreement prevail.

RDC hereby authorizes the Wastes ("Waste") described in Certification No. Tb-0430 signed by Generator/Agent on 1/18/2023 (date), for disposal at Roosevelt Regional Landfill. Contractor shall present a copy of this Bill of Lading with each shipment delivered.

Location of Waste: Hwy 99 Redondo S 276th St. Federal Way

Method of Shipment: _____

Additional Fees (e.g., laboratory fees, transportation fees, special handling fees, etc. If none, so state):

PERFORMANCE DATE

FOR RDC TRANSPORTATION: Generator shall make the Waste available for shipment no later than _____ (date). RDC shall transport the Waste no later than _____ (date), unless RDC notifies the Generator in writing that Waste transport shall be suspended or canceled due to RDC's exercise of its right to inspect or analyze the Waste (as provided in the Agreement).

FOR GENERATOR TRANSPORTATION: Agent shall begin delivery of the Waste at [check one]:

- Roosevelt Regional Landfill. Seattle Transfer Station located at Third and Lander.

Waste delivery shall begin no later than 1/18/2023 (date), and shall complete delivery of the Waste no later than 1/9/2024 (date), unless RDC notifies Generator/Agent in writing to suspend or cancel the waste delivery due to RDC's exercise of its right to inspect or analyze the Waste (As provided in the Agreement).

GENERATOR / AGENT

REGIONAL DISPOSAL COMPANY

Mark Fitzgerald
Signature

Teresa Dillashaw
Signature

Mark Fitzgerald CFO
Printed Name and Title

Teresa Dillashaw, SW Sales
Printed Name and Title

1/18/2023
Date

1/19/2023
Date



SPECIAL WASTE DISPOSAL SERVICES AGREEMENT FOR NON-HAZARDOUS WASTES

Special Waste Profile No: 4178 23 0430

INVOICE TO (Generator Billing Information)	
GENERATOR NAME (the "Generator") Redondo Heights new Construction LLP c/o Shelter Resources	
ATTN: Mark Fitzpatrick	
ADDRESS: 2223 112th Ave NE Suite 102	
CITY, STATE	ZIP CODE
Bellevue WA	98004
TEL. NO.	FAX NO.
425-454-8205	

LEGAL ENTITY NAME	
4178 Roosevelt Regional MSW Landfill / Regional Disposal Co.	
ADDRESS	
500 Roosevelt Grade Road	
CITY, STATE	ZIP CODE
Roosevelt, WA	99356
TEL. NO.	FAX NO.
509.384.5641	
AUTHORIZED BY:	TITLE
CONTACT	TITLE

1. **Special Waste Services.** Subject to the terms and conditions contained in this Agreement (as defined in Section 4), Company agrees to accept, at the Facility designated above, Acceptable Waste (as defined in Section 6).

2. **Rates:**

A. Rates for Disposal:

Waste	Disposal Method	Disposal Rate:	Fees / Taxes / Misc.	Transportation
Contaminated soil	3 rd and loader via Landfill	\$68.00 per ton	NA	N/A

Additional information: *** The profile will expire on January 9, 2024

Cannot Exceed Daily Volume of N/A Without Prior Approval of Company.

B. Incorporation by Reference. In addition to Special Waste Profile(s), the following documents are incorporated by reference into this Agreement as if fully set forth herein.

- 1) TB-0430
- 2)

C. Taxes, Fees & Other Charges. Generator shall also be liable for all taxes, fees, or other charges imposed by federal, state, local or provincial laws, ordinances and regulations, and all charges set forth in Section 9, including, without limitation, site specific fees, host fees, fuel recovery fees, environmental recovery fees and administrative fees.

3. **Term of Agreement.** This Agreement is effective for 12 months beginning on January 18, 2023 (the "Initial Term") and shall automatically renew for successive 0-month periods (each, a "Renewal Term"), unless written notice of non-renewal is delivered in accordance with Section 19 by one party to the other party at least 30 days before the expiration of the Initial Term or any Renewal Term.

Except for requests for bids that Generator must send to multiple parties under any Applicable Laws, Generator grants to Company the right to bid and/or compete for any future services sought by Generator, whether by means of competitive bids or otherwise, that are for services comparable to those provided under this Agreement.


COMPANY AND GENERATOR, IN CONSIDERATION OF THE MUTUAL OBLIGATIONS CONTAINED IN THIS AGREEMENT, AGREE THAT THIS IS A LEGALLY BINDING AGREEMENT WHICH IS SUBJECT TO THE TERMS AND CONDITIONS SET FORTH ON THIS PAGE, AND ON THE REVERSE SIDE OF THIS PAGE. IN ADDITION, GENERATOR IS CERTIFYING THE TERMS AND CONDITIONS ON THE REVERSE SIDE OF THIS PAGE HAVE BEEN REVIEWED AND INITIALLED AT THE BOTTOM OF THE PAGE.

GENERATOR


SIGNATURE (AUTHORIZED REPRESENTATIVE)
Mark Fitzpatrick, CFO
NAME AND TITLE (PLEASE PRINT)

DATE: 1/18/23

COMPANY


SIGNATURE (AUTHORIZED REPRESENTATIVE)
Teresa Dillashaw, SW Sales
NAME AND TITLE (PLEASE PRINT)

DATE: 1/19/23

Special Waste Profile



Disposal Facility:

Waste Profile #:

Sales Rep #:

I. Generator Information

Generator Name:

Generator Site Address:

City: County: State: Zip:

State ID/Reg No: State Approval/Waste Code: NAICS:

Generator Mailing Address:

City: County: State: Zip:

Generator Contact Name: Email:

Phone Number: Ext: Fax Number:

II. Billing Information

Bill To: Contact Name:

Billing Address: Email:

City: State: Zip: Phone:

III. Waste Stream Information

Name of Waste:

Process Generating Waste:

Type of Waste: Physical State: Method of Shipment:

Estimated Volume: Volume Type:

Frequency: Disposal Consideration:

IV. Representative Sample Certification

No Sample Taken Sample Taken Type of Sample:

Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent? Yes No

Sample Date:	<input type="text" value="Dec 21, 2022, Dec 21, 2022, Dec 21, 2022"/>	Sample ID Numbers or SDS:	<input type="text" value="DP1-22-12-21, DP2-22-12-21, DP3-22-12-21,"/>
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Special Waste Profile



V. Physical Characteristics of Waste

Characteristic Components (must equal 100%): % By Weight (out of 100% - ranges acceptable):

1. Soil typical/actual: 100%

V. Physical Characteristics of Waste cont.

Color: Brown ()

Odor (describe): Does Waste Contain Free Liquids? % Solids: pH: Flash Point:
none Yes No 100% N/A N/A °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) including Chain of Custody and required parameters provided for this profile.

RCRA Regulatory Questions

- Does this waste or generating process contain regulated concentrations of the following Pesticides and/ or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33? Yes No
- Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 [reference 40 CFR 261.23(a)(5)])? Yes No
- Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761? Yes No
- Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents? Yes No
- Has this waste been delisted under 40 CFR 260.20 and 260.22? If yes, attach the final decision to delist the waste as published in the Federal Register. Yes No
- Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations? Yes No
- Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCDD), or any other dioxin as defined in 40 CFR 261.31? Yes No
- Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations? Yes No
- Is this a regulated Radioactive Waste as defined by Federal and/or State regulations? Yes No
- Is this a solid waste that is not a hazardous waste in accordance with 40 CFR 261.4(b)? If yes, please provide the corresponding regulatory citation. Yes No

Republic Services Waste Handling Questions

- Does this waste generate heat or react when contacted with water/moisture? Yes No
- Does the waste contain sulfur or sulfur by-products? Yes No
- Is this waste generated at a State or Federal Superfund cleanup site subject to regulation under CERCLA? Yes No
- Is this waste from a TSD facility, TSD-like facility or consolidator (i.e. multiple wastes/multiple generators)? If yes, please provide clarification. Yes No

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PCRCO, LLC dba LRI-304th
304TH LANDFILL
17925 Meridian St E
Puyallup, WA 98375

Weighed: Dana

Deposit: Dana

BILL TO: 2232
T. BARGER DIRTWORKS WDA 2629
PO BOX 1561
BUCKLEY WA 98321

Vehicle ID:
Reference: 43
PO #: WDA 2629

NOTES: T BARGER 43

Origin: OTHER

DATE IN: 07/29/2022 TIME IN: 10:38:48
DATE OUT: 07/29/2022 TIME OUT: 10:50:56

INBOUND TICKET Number: 03-00743564

SCALE 1 GROSS WT.	81360 LB
SCALE 2 TARE WT.	42060 LB
NET WEIGHT	39280 LB

Qty	Description	Amount
19.640	SPECIAL WASTE-IN CO	

X _____

PCRCO, LLC dba LRI-304th
304TH LANDFILL
17925 Meridian St E
Puyallup, WA 98375

Weighed: BREANN

Deposit: BREANN

BILL TO: 2232
T. BARGER DIRTWORKS WDA 2629
PO BOX 1561
BUCKLEY WA 98321

Vehicle ID: WDA2629
Reference: DIRTWORK37
PO #: WDA 2629

Origin: OTHER

DATE IN: 06/23/2022 TIME IN: 13:27:15
DATE OUT: 06/23/2022 TIME OUT: 13:45:41

INBOUND TICKET Number: 03-00738638

SCALE 1 GROSS WT.	107180 LB
SCALE 2 TARE WT.	42480 LB
NET WEIGHT	64700 LB

Qty	Description	Amount
32.350	SPECIAL WASTE-IN CO	

X _____

PCRCO, LLC dba LRI-304th
304TH LANDFILL
17925 Meridian St E
Puyallup, WA 98375

Weighed: BREANN

Deposit: BREANN

BILL TO: 2232
T. BARGER DIRTWORKS WDA 2629
PO BOX 1561
BUCKLEY WA 98321

Vehicle ID:
Reference: DIRTWORK27
PO #: WDA 2629

NOTES: DIRTWORKS TRK 27

Origin: OTHER

DATE IN: 06/23/2022 TIME IN: 13:23:34
DATE OUT: 06/23/2022 TIME OUT: 13:41:14

INBOUND TICKET Number: 03-00738637

MANUAL GROSS WT.	104700 LB
SCALE 2 TARE WT.	39780 LB
NET WEIGHT	64920 LB

Qty	Description	Amount
32.460	SPECIAL WASTE-IN CO	

X _____