STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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November 24, 2014

Mr. Chris DeWald
Proctor Investors, LLC
6622 Wollochet Drive NW
Gig Harbor, WA 98335

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

- Name: Proctor Station
- Property Address: North 28th Street and North Proctor Street, Tacoma
- Parcels: 4180000180, 4180000170, 4180000160, 4180000150, 4180000140, 5200000940, 5200000642, and 7475010642.
- Facility/Site No.: 5391
- Cleanup Site ID: 12395
- VCP Project No.: SW1403

Dear Mr. DeWald:

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 (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?

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

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

   YES. Ecology has determined that further remedial action is still 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 following tax parcels in Pierce County that were affected by the Site and addressed by your cleanup:

- 4180000180
- 4180000170
- 4180000160
- 4180000150
- 4180000140
- 5200000940
- 5200000642
- 7475010642

Enclosure A includes a legal description of the Property and details of the Property as currently known to Ecology. This opinion letter covers the following parcels: 4180000180, 4180000170, 4180000160, 4180000150, 4180000140, 5200000940, 5200000642, and 7475010642.

2. Description of the Site.

The 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 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. This Property was also defined by the nature and extent of contamination associated with former gas station and its underground fuel tanks (USTs) located on parcels 5200000642 and 7475010642. Five USTs along with contaminated soil were removed following an assessment of the level of potential contamination with petroleum products. Ecology will issue a separate Opinion Letter on the independent cleanup of the Property associated with the USTs removal under the Voluntary Cleanup Program (VCP) Project No. SW1417.

Basis for the Opinion

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

1) ECO Compliance Corporation, Remediation Report – Proctor Station Tacoma, Washington, dated August 5, 2014.

2) Landau Associated. Draft Report. Phase 1 Environmental Site Assessment. North 28th Street and North Proctor Street Properties. Tacoma, Washington, dated October 21, 2011.

3) ECO Compliance Corporation, Cleanup Action Plan Proctor Station, dated May 21, 2014.

4) Landau Associates. 2720 North Proctor Geophysical Investigation, dated November 15, 2011.

5) Eva Barber (Ecology), e-mail correspondence with Bill Kane regarding the depth of the soil excavation, dated October 27, 2014.

These 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

1. Cleanup of the Property located within the Site.

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

a. Characterization of the Site.

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

For almost 100 years, the Asarco Company operated a copper smelter in Tacoma, Washington. 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. Arsenic, lead, and other heavy metals are still in the soil as a result of this pollution. Ecology has found elevated levels of arsenic and lead as far south as Lacey and as far north as Seattle (West Seattle), and as far west as the Kitsap Peninsula and as far east as Kent and Bellevue.

Proctor Station is classified by the City of Tacoma as Neighborhood Commercial Mixed Use. The existing Property is made up of three single-family residential units, a commercial unit, two asphalt parking areas, and a gravel alleyway. The remaining area of the Property consists of short, well-maintained grass with a few trees and shrubs. The proposed re-development of the Property includes a multi-story mixed use building combining multi-family residential area as well as commercial retail. The proposed structure will also include an underground parking area. See Enclosure A and Figures 1, 2, 3, and 4 for more information about the Property. The Property is approximately 1.52 acres.

To develop and implement the characterization sampling, the Property was divided into five decision units (See Figure 3), based on existing use. The three existing single-family homes were designated as decision units 1, 2, and 3, the empty lot (parcel 4180000170) was designated as 4, and the road frontage along the North Madison Street and North 28th Street was designated as decision unit 5. In January 2014, 10 characterization samples were taken from unpaved, non-garden areas of each decision unit from the top 0 to 6 inches and from 6 to 12 inches of soil depth. Each sample was a composite of three distinct samples taken from three random locations through the decision unit. Samples collected from soil depth of 0 to 6 inches were analyzed for arsenic and lead. If the level of either lead or arsenic was found to be above the MTCA Method A cleanup level for unrestricted land use, the samples collected from the 6 to 12 inches of soil depth were also analyzed for arsenic and lead. Arsenic levels within the 0 to 6-inch soil zone ranged from 10 milligrams per kilogram (mg/kg) to 29 mg/kg, and lead ranged from 15 mg/kg to 268 mg/kg. Of the 10 composite samples taken from the top 0 to 6 inches of soil, two samples contained arsenic concentrations above the cleanup levels and one of those samples also contained lead concentrations above the cleanup levels.

To assess the extent of arsenic contamination in greater detail in the two decision units that had arsenic concentrations above the cleanup levels, additional samples were collected within those units. In February 2014, eight composite samples from randomly selected areas within the front, side, and back yard areas of the single-family decision units were collected. Arsenic concentration was above the cleanup levels in one of the samples: 32 mg/kg. Lead concentration was below cleanup levels in all the samples. See Table 1 for the results of the January and February sampling events.

b. Establishment of cleanup standards for the Site.

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

As part of the Interim Action Plan for the Asarco Tacoma Smelter 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 Tacoma Smelter Site:

- Average arsenic concentration detected in the soil less than 20 mg/kg.
- Average lead concentration detected in the soil less than 250 mg/kg.

OR

- No single soil sample has arsenic concentration above 40 mg/kg.
- No single soil sample has lead concentration above 500 mg/kg.

c. Selection of cleanup for the Property.

In May 2014, ECO Compliance Corporation developed a Cleanup Action Plan (CAP) for the Proctor Station development. The CAP described soil removal and disposal off the Property as a way to remediate Tacoma Smelter Plume contamination, and the number of confirmational samples. The cleanup of the Property occurred before Ecology's issuance of an opinion letter for the CAP. The soil was excavated to depth between 10 and 15 feet below surface to accommodate the construction of a future parking garage on the Property. No confirmational samples were collected from the areas where soil was excavated; however, given the original low arsenic and lead contamination levels and the fact that all the contaminated soil was excavated and disposed off the Property to depth significantly below the contaminated level, 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 Site.

d. Cleanup of the Property.

Ecology has determined the cleanup you performed meets the applicable Site cleanup standards within the Property.

In July 2014, the upper soil layer to an average depth of 8 inches below grade from the unpaved areas within the Decision Unit 3 (3916 North 28th Street) and Decision Unit 4 (an empty lot west of Unit 3) of the Proctor Station Property was excavated and disposed. Following the removal and disposal of the contaminated shallow soil layer, a mass excavation to accommodate the construction of an underground parking garage was done across the entire Property that resulted in the removal of upper 10 to 15 feet of soil. A total of 121 tons of soil disposal was conducted under Waste Disposal Authorization number 1788 by the Tacoma-Pierce County Health Department.

Final confirmational sampling: No confirmational samples were collected from the area that was excavated. Soil sampling before the cleanup at the Property performed at soil depth from 6 to 12 inches did not indicate arsenic or lead levels above the MTCA Method A cleanup level of 20 mg/kg and 250 mg/kg, respectively. The removal and the disposal of the upper 8 inches of contaminated soil and then the mass excavation of 10 to 15 feet of upper soil level eliminated the need for confirmational sampling, as soil contamination from the Asarco smelter is typically found in the upper 12 inches of soil.

2. **Cleanup of the Site as a whole.**

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

Listing of the Site

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

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 (#SW1403).

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 or the termination of the Agreement, please contact me by phone at 360-407-7094 or by e-mail at Eva.Barber@ecy.wa.gov.

Sincerely,

E L. Barber

Eva L. Barber
SWRO Toxics Cleanup Program

ELB/ksc: NFA Proctor Station

Enclosures: Enclosure A: Legal Description, addresses, and general description of the Property
Enclosure B: Site description of Asarco Tacoma Smelter Site
Figure 1: Vicinity Map of Proctor Station
Figure 2: Subject Property with Parcel Numbers
Figure 3: Decision Units – Proctor Station
Figure 4: Soil Excavation Area – Decision Unit 3
Table 1: Characterization Sampling Results – Proctor Station

91 7199 9991 7031 7908 4849

cc: Bill Kane, Eco Compliance Corporation
Elliott Barnett, Associate Planner, City of Tacoma, Planning & Development Services
Sharon Bell, Tacoma-Pierce County Health Department
Marian Abbett - Ecology
Scott Rose – Ecology
Dolores Mitchell – Ecology w/o enclosures

Enclosure A
Legal Description of the Property

PARCEL A
LOTS 1 TO 8, INCLUSIVE, BLOCK 5, GRANDIN ADDITION TO TACOMA, ACCORDING TO THE PLAT THEREOF, RECORDER IN VOLUMA 8 OF PLATS, PAGE 97, RECORDS OF PIERCE COUNTY AUDITOR. SITUATED IN THE CITY OF TACOMA, COUNTY O F PIERCE, STATE OF WASHINGTON

PARCEL B
LOSTS 1, 2, AND 3, BLOCK 22, LAWRENCE ADDITION TO THE CITY OF TACOMA, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 3 OF PLANTS, PAGE 40, RECORDS OF PIERCE COUNTY AUDITOR. TOGETHER WITH THE WEST 10 FEET OF VACATED PROCTOR STREET BY OPERATION OF LAW, AS VACATED BY CITY OF TACOMA ORDINANCE NO. 10191 AND RECORDED UNDER RECORDING NUMBER 987829. SITUATE IN THE CITY OF TACOMA, COUNTY OF PIERCE, STATE OF WASHINGTON.

PARCEL C
THE NORTH 65.47 FEET OF THE EAST 75 OF BLOCK 11, AMENDED MAP OF SECON D SCHOOL LAND ADDITION, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 7 OF PLATS, 79A, RECORDS OF PIERCE COUNTY AUDITOR. SITUATE IN THE CITY OF TACOMA, COUNTY OF PIERCE, STATE OF WASHINGTON.

Property Description

Proctor Station (Property) (parcels #4180000180, 4180000170, 4180000160, 4180000150, 4180000140, 5200000940, 5200000642, and 7475010642) is a part of a predominantly commercial and residential area in the Proctor neighborhood in Tacoma. The 1.52-acre Property is located within the northeast quarter of Section 25, Township 21 North, Range 2 East in Tacoma, Washington. It is located on a broad plateau situated about 350 feet above Commencement Bay. The Property consists of a tract of land slated for residential single- and multi-family housing development.

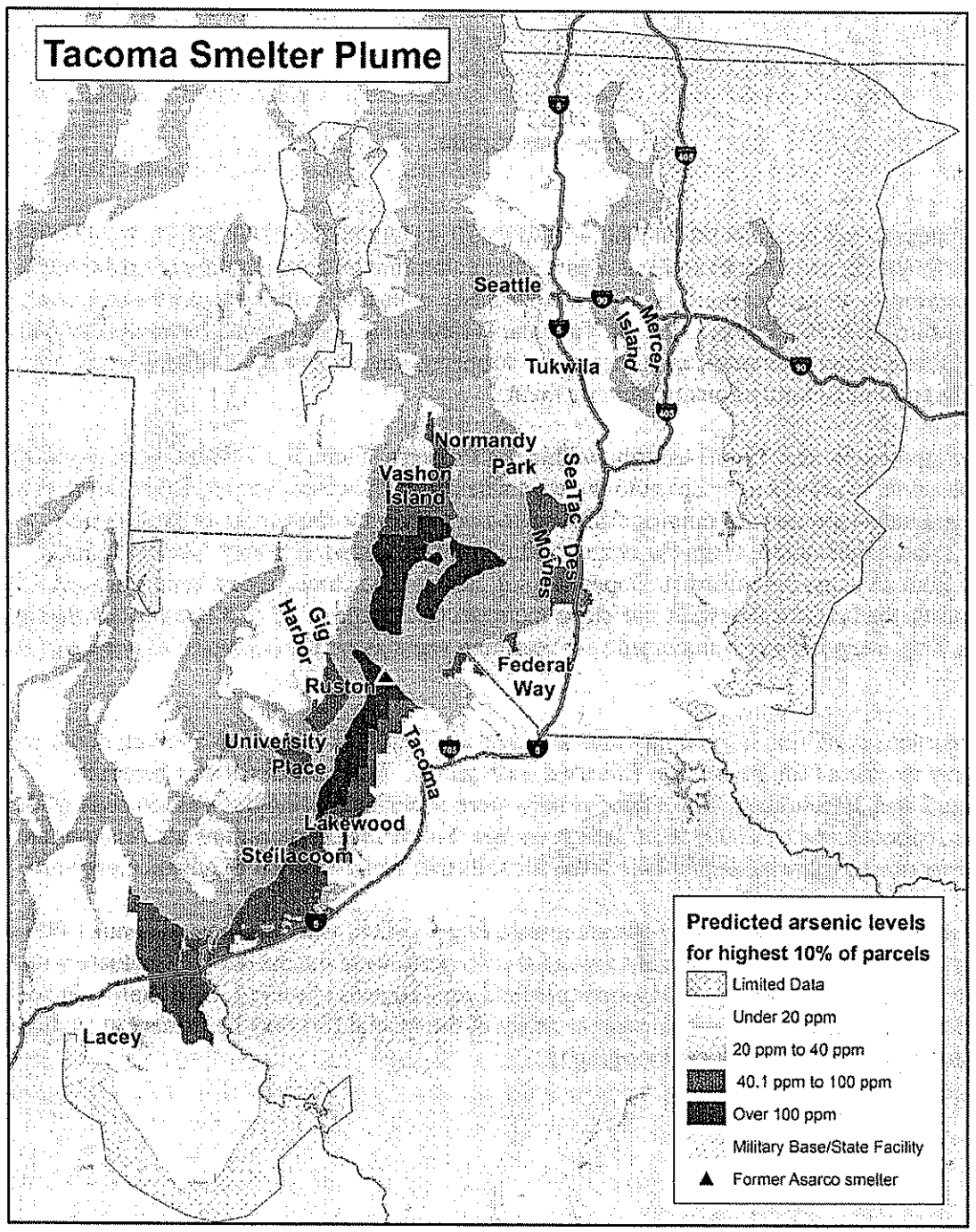
The existing site topography has minor variation within the Property. There is a 3-foot loss in elevation from the east side of the North Proctor Street to the west side (North Madison Street). From North Proctor Street there is a gradual slope upward ranging from one to two percent to the center of the Property gaining roughly 3 feet in elevation. From the center of the Property eastward toward North Madison Street, there is a gradual slope downward at slopes ranging from one to three percent losing around 2 feet in elevation. Near the back of the sidewalk, the slope increases to a range of 25 to 50 percent dropping 4 feet in elevation. This steeper slope is managed with retaining walls along the northerly boundary of the site.

The existing subsurface condition is generally characterized as fill material, loose to medium dense sand with silt, underlain by glacial till, dense silty fine sand with gravel. This glacial till was generally observed between 3 and 10 feet deep. These glacial soils were deposited during the Vashon state of the Fraser Glaciation, approximately 12,000 to 15,000 years ago. Subsurface explorations also encountered dense to very dense sand at varying depths below the till soils that was classified as advance outwash.

Groundwater is anticipated to flow to the northeast toward Puget Gulch, which is located about 1,000 feet from the Property. The groundwater elevations around the Property were determined to fluctuate with seasonal weather patterns and evidence of seasonal perched aquifers was observed. Seasonally perched groundwater (above the glacial till or within sandier zones of the glacial till) may be present at shallower depths and it is anticipated to follow local topography.

Enclosure B

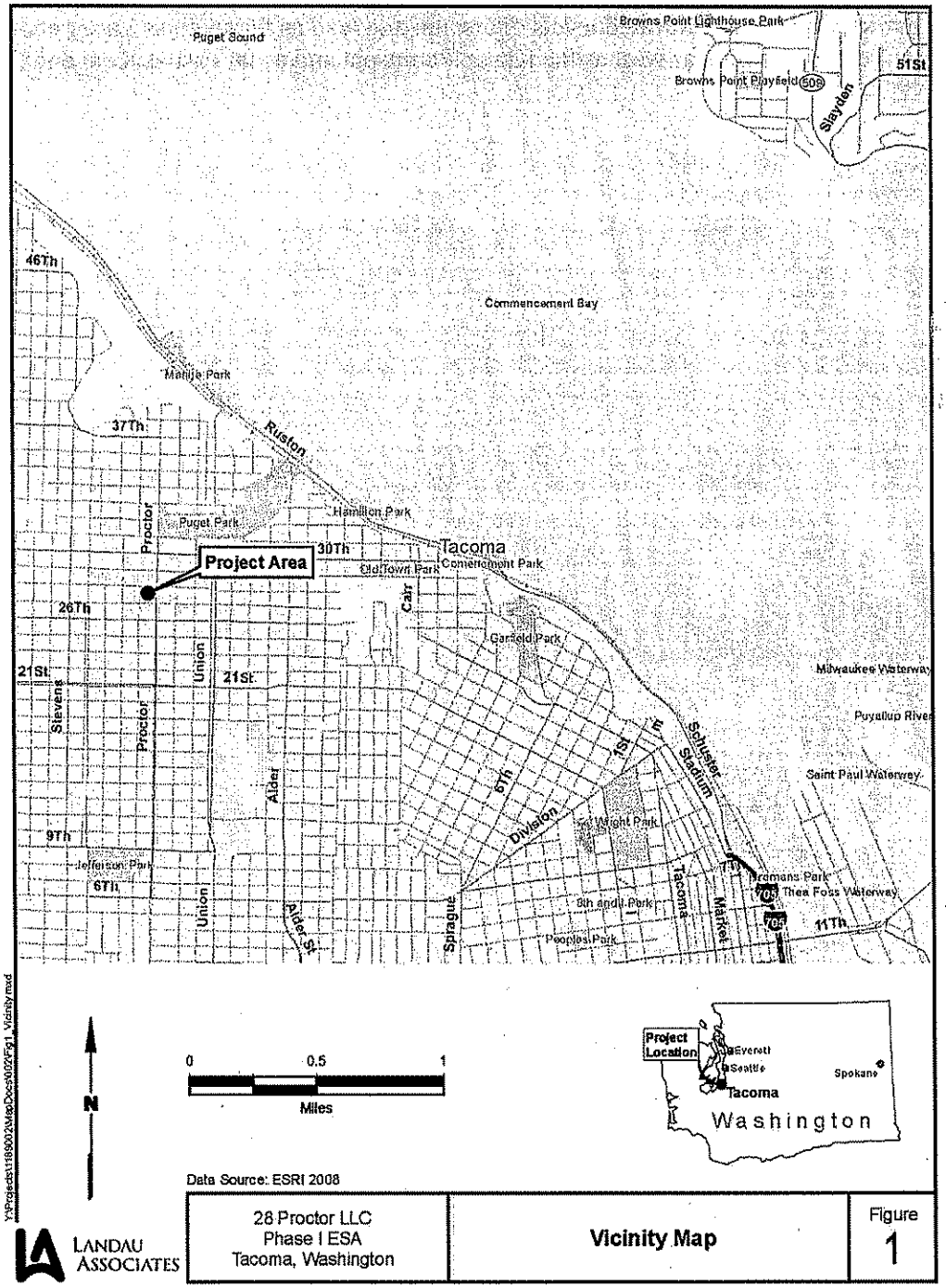
Asarco Tacoma Smelter Site



An interactive color map can be found at https://fortress.wa.gov/ecy/smeltersearch/

For almost 100 years the Asarco Company operated a copper smelter in Tacoma, Washington. 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. Arsenic, lead, and other heavy metals are still in the soil as a result of this pollution. Ecology has found elevated levels of arsenic and lead as far south as Lacey and as far north as Seattle (West Seattle), and as far west as the Kitsap Peninsula and as far east as Kent and Bellevue.

Figure 1. Vicinity Map



LANDAU ASSOCIATES

28 Proctor LLC Phase I ESA Tacoma, Washington	Vicinity Map	Figure 1

Figure 2. Subject Property with Parcel Numbers

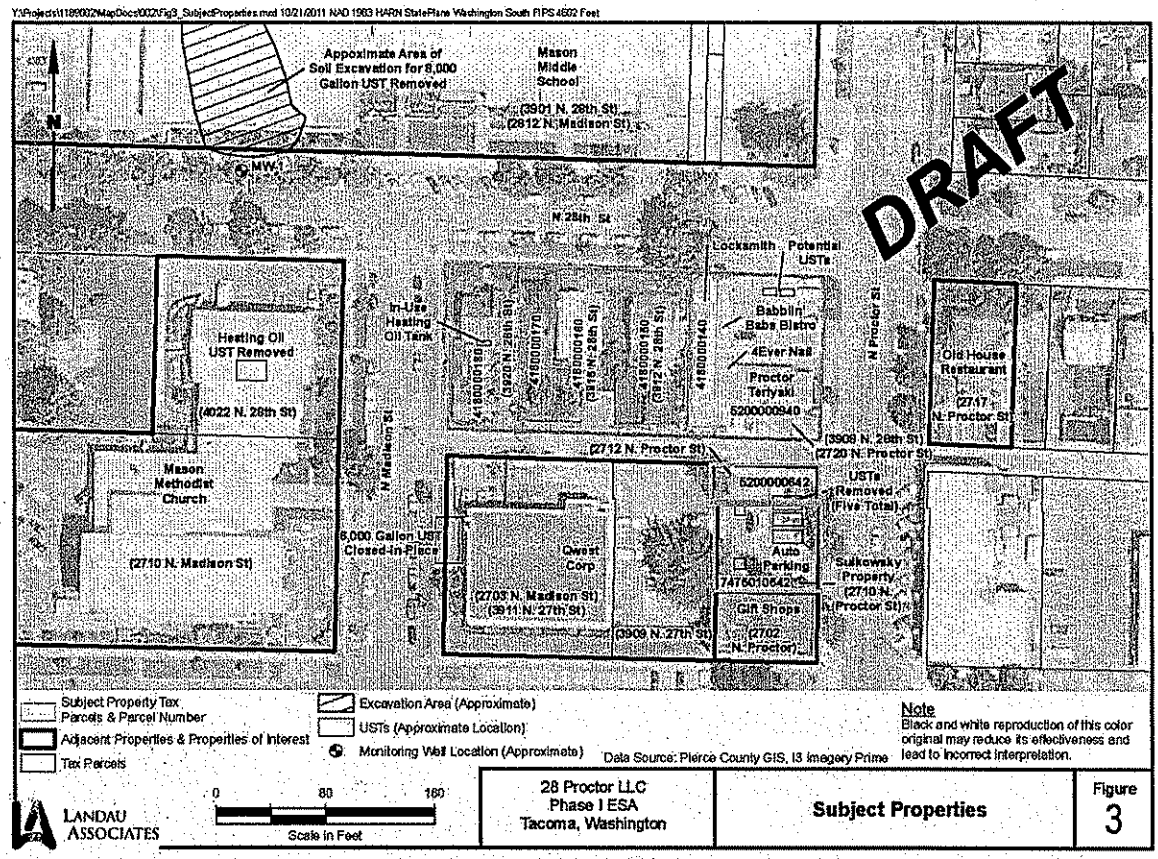


Figure 3. Decision Units – Proctor Station

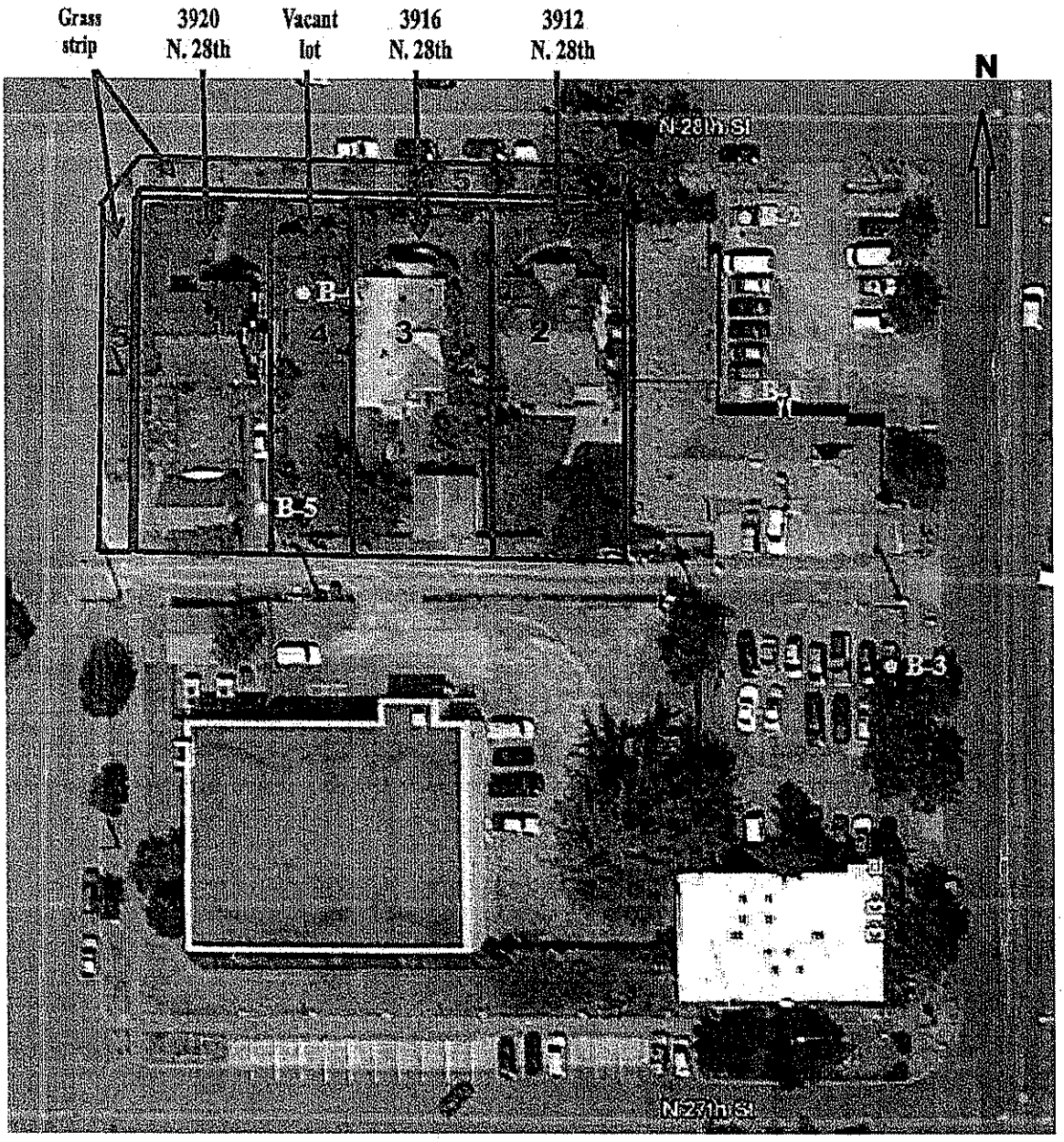


Figure 4. Soil Excavation Area – Decision Unit 3

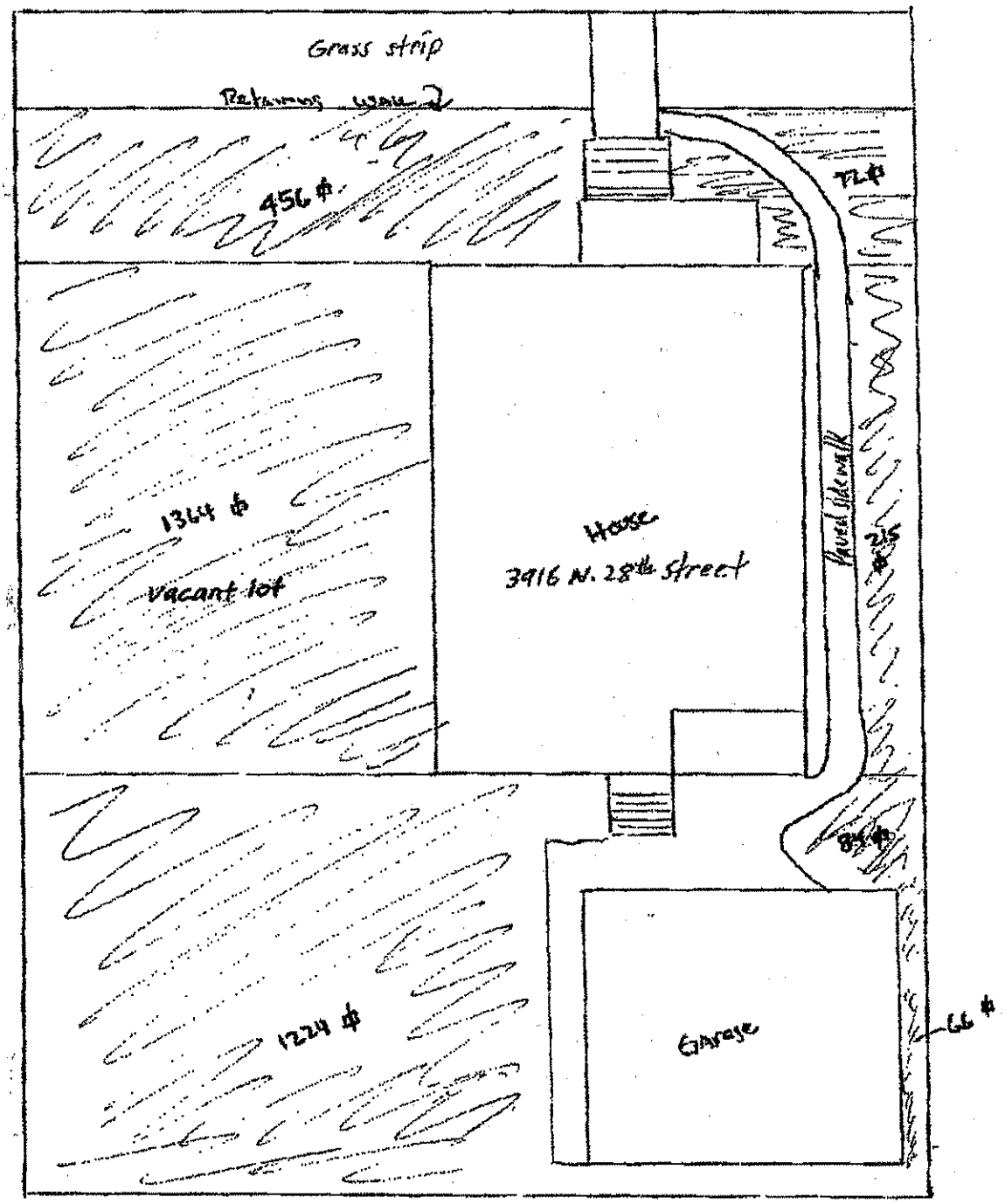


Table 1. Characterization Sampling Results

Sample Number /Decision Unit	Date Sample Taken	Sample Location/Description	Analytical Result (mg/kg)	Cleanup Standard (mg/kg)
1/1	1/17/2014	3920 North 28th Street. Composite of soil from 0 – 6 inches below grade from 3 random locations within the front, side and back yards. Sandy clayey soil with some gravel.	11 arsenic 27 lead	20 arsenic 250 lead
1A/1	1/17/2014	3920 North 28th Street. Composite of soil from 6 – 12 inches below grade from 3 random locations within the front, side and back yards. Sandy clayey soil with some gravel.	Not analyzed	Not applicable
2/2	1/17/2014	Vacant lot between 3916 and 3920 North 28th Street. Composite of soil from 0 – 6 inches below grade from 3 random locations within the grass areas. Sandy clayey soil with some gravel.	18 arsenic 125 lead	20 arsenic 250 lead
2A/2	1/17/2014	Vacant lot between 3916 and 3920 North 28th Street. Composite of soil from 6 – 12 inches below grade from 3 random locations within the grass areas. Sandy clayey soil with some gravel.	Not analyzed	Not applicable
3/3	1/17/2014	3916 North 28th Street. Composite of soil from 0 – 6 inches below grade from 3 random locations within the front, side and back yards. Sandy soil with some gravel.	**29 arsenic 268 lead**	**20 arsenic 250 lead**
3A/3	1/17/2014	3916 North 28th Street. Composite of soil from 6 – 12 inches below grade from 3 random locations within the front, side and back yards. Sandy clayey soil with some gravel.	20 arsenic 143 lead	20 arsenic 250 lead
3-1/3	2/14/2014	3916 North 28th Street. Composite of soil from 0 – 6 inches below grade from 8 random locations within the front, side and back yards. Sandy soil with some gravel.	**32 arsenic** 235 lead	**20 arsenic** 250 lead
4/4	1/17/2014	3912 North 28th Street. Composite of soil from 0 – 6 inches below grade from 3 random locations within the front and side yards. Sandy clayey soil with some gravel.	**22 arsenic** 94 lead	**20 arsenic** 250 lead
4A/4	1/17/2014	3912 North 28th Street. Composite of soil from 6 – 12 inches below grade from 3 random locations within the front and side yards. Clayey sandy soil with some gravel.	14 arsenic 43 lead	20 arsenic 250 lead

Sample Number /Decision Unit	Date Sample Taken	Sample Location/Description	Analytical Result (mg/kg)	Cleanup Standard (mg/kg)
4-1/4	2/14/2014	3912 North 28th Street. Composite of soil from 0 – 6 inches below grade from 8 random locations within the front, side and back yards. Sandy clayey soil with some gravel.	10 arsenic 75 lead	20 arsenic 250 lead
5/5	1/17/2014	Grass strip along the side and the front of the subject parcels, along North Madison Street and North 28th Street. Composite of soil from 0 – 6 inches below grade from 3 random locations. Gravelly soil with some clay.	10 arsenic 15 lead	20 arsenic 250 lead
5A/5	1/17/2014	Grass strip along the side and the front of the subject parcels, along North Madison Street and North 28th Street. Composite of soil from 6 – 12 inches below grade from 3 random locations. Sandy soil with some gravel.	Not analyzed	Not applicable