STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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March 2, 2022

Eric Pravitz
Director of Real Estate Development
Homestead Community Land Trust
412 Maynard Avenue South, Suite 201
Seattle, WA 981044
eric@homesteadclt.org

Re: Opinion on Proposed Cleanup of a Property associated with a Site:

Site Name:	Homestead Phinney Ridge CLT
Site Address:	6109 Phinney Ave N Seattle, WA 98103
Cleanup Site ID:	15480
Facility/Site ID:	98431
VCP Project ID:	XN0014

Dear Eric Pravitz:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your proposed independent cleanup of the Homestead Phinney Ridge CLT site (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70A.305 RCW.

Issue Presented and Opinion

1. Upon completion of the proposed cleanup, will further remedial action likely be necessary to clean up contamination at the Property?

   NO. Ecology has determined that, upon completion of your proposed cleanup, no further remedial action will likely be necessary to clean up contamination at the Property[1].

[1] Excavation and offsite disposal of contaminated soil is proposed for King County Parcel No. 9523101290.

2. Upon completion of the proposed cleanup, will further remedial action likely still be necessary elsewhere at the Site?

   YES. Ecology has determined that further remedial action will likely be necessary elsewhere at the Site[2].

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, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided as follows.

Summary of Opinion

Releases of lead, mercury, and arsenic to soil occurred at the Site, a former electrical substation located within the Phinney Ridge neighborhood of Seattle. The former electrical substation is located on King County Parcel No. 9523101290, a 0.14 acre "L"-shaped parcel (see Figure 2 in Enclosure A).

The majority of the parcel is within the center of the block bound by Phinney Avenue North to the east, Greenwood Avenue North to the west, North 62nd Street to the North and North 61st Street to the South. The Site is surrounded by commercial business on Phinney Ave North to the east, and residences to the north, west, and south. The former substation is being redeveloped with a five-story multifamily residential structure.

The soil was characterized through the sampling and analysis of 12 composite soil samples; 35 discrete surface soil samples from eight (8) areas; and 12 soil samples from six (6) boring locations. The only contaminants detected in soil samples at concentrations above MTCA cleanup levels were lead (seven samples), arsenic (four samples), and mercury (two samples). All of these exceedances were in surface soil samples collected at a depth of 0.0 to 0.5 feet below ground surface (ft bgs). PCBs were not detected above the respective cleanup levels in any samples collected during characterization activities.

Fill materials are approximately three to four feet thick at the Site. The lack of contamination below 0.0 to 0.5 ft bgs would appear to suggest that the contamination is likely attributable to historical operations on the Site as opposed to from the fill materials themselves.

MTCA cleanup level exceedances were found near the property boundary of Parcel No. 9523101290 at five locations. The following table lists the soil samples with exceedances of MTCA Method A cleanup levels near the Property boundary:

[2] Soil contamination was found near the southern, northwest, and eastern boundaries of Parcel No. 9523101290. Hence, the extent of contamination needs to be determined on these adjacent properties and cleaned up prior to a Site NFA determination being issued by Ecology.

Table 1 – Summary of Exceedances near the Property Boundary

Station, Depth (ft bgs) and Property Boundary	Contaminant	Concentration (mg/kg)	Method A Cleanup Level (mg/kg)
6-SS2, 0.5 [South]	Mercury (Hg)	2.6	2.0
3-SS2, 0.5 [South]	Mercury (Hg)	2.4	2.0
	Lead (Pb)	320	250
3-SS1, 0.5 [South]	Lead (Pb)	270	250
5-SS3, 0.5 [Northwest]	Lead (Pb)	320	250
AHA-06, 0.5 [East]	Arsenic (As)	32.1	20

All of the above shallow soil exceedances near the property boundary were only slightly above their respective MTCA Method A cleanup level. However, these data indicate that contamination exceedances likely extend beyond Parcel No. 9523101290 onto the neighboring properties to the south, northwest, and east (the Phinney Avenue North right-of-way).

The Cleanup Action Plan for the Site proposes excavation and offsite disposal of soils to address the contaminated soil at the Property. Ecology notes that if the excavation work is limited to the Parcel No. 9523101290 property, then a property-specific NFA would be warranted, rather than a Site NFA. In order to achieve a Site NFA, a demonstration that no contamination remains on the adjacent properties would be needed.

The excavation is proposed to extend to a depth of approximately one (1) ft bgs. The sufficiency of the cleanup will be demonstrated through soil confirmation sampling, after completion of the excavation work. The Cleanup Action Plan indicates that confirmation soil sampling will include both excavation floor and sidewall sampling. Ecology requests submittal of a confirmation soil sampling plan, including proposed excavation sidewall and base soil sampling locations.

A Contaminated Media Management Plan (CMMP) should be prepared and submitted to Ecology to address the possibility of additional contaminated soil being encountered at the Site during construction work. This should include field screening of soils during excavation of foundation footers. Samples should be collected of soils with visual or aesthetic indications of potential contamination, and contaminated soils should be appropriately disposed of at a permitted disposal facility.

After completion of cleanup, a remedial action completion report should be submitted to Ecology documenting the cleanup. This report should include an excavation plan map (including pit depth information), confirmation soil sampling locations and results (including both tables and laboratory analytical reports), and waste disposal receipts from a permitted facility for soils that are disposed of offsite.

Description of the Property

The Property includes the following tax parcel in King County, which was affected by the Site and will be addressed by your cleanup:

- Parcel No. 9523101290

Enclosure A includes diagrams of the Site that illustrates the location of the Property within the Site.

Description of the Site

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

- Lead, arsenic, and mercury into the soil.
- Suspected petroleum into the soil[3].

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

Please note a parcel of real property can be affected by multiple sites. At this time, Ecology has no information suggesting that the parcels associated with this Site may be affected by another site.

Basis for the Opinion

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

1. TRC. *Phase I Environmental Site Assessment, Former Phinney Substation and Whaley Duplex Properties*. August 25, 2020.
2. Aspect Consulting. *Remedial Investigation, Feasibility Study and Cleanup Action Plan,*

[3] Diesel and heavy oil range petroleum were detected in soil and soil gas at concentrations less than the MTCA Method A cleanup level and soil gas screening levels. Should soils be encountered at the Site with indications of petroleum contamination, such soils should be sampled and appropriately disposed of.

Former Phinney Substation Site, Seattle, Washington. October 4, 2021.

A number of these documents are accessible in electronic form from the Site webpage https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=15480. The complete records are stored in the Central Files of the Headquarters Office of Ecology, for review by appointment only. Visit our Public Records Request page https://ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests, to submit a public records request or get more information about the process. If you require assistance with this process, you may contact the Public Records Officer at publicrecordsofficer@ecy.wa.gov or 360-407-6040.

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

Analysis of the Proposed Cleanup

Ecology has concluded that, upon completion of your proposed cleanup, no further remedial action will likely be necessary at the Property to clean up contamination associated with the Site. Please note, further remedial actions will likely be necessary on the impacted parcel(s) beyond the Property in order to achieve a Site No further Action determination. That conclusion is based on the following analysis:

1. **Characterization of the Property located within the Site**.

   Ecology has determined your characterization of the Property is sufficient to establish cleanup standards for the Site and select a cleanup for the Property. The Site is described above and in **Enclosure A.**

   Site Contaminants

   Site contaminants found above MTCA cleanup levels in soil are lead, arsenic, and mercury. Diesel and heavy oil-range petroleum hydrocarbons were found in soil and soil gas but at concentrations below the MTCA Method A cleanup levels and soil gas screening levels.

   Soil Characterization

   The extent of soil contamination appears to be sufficiently defined for the selection of cleanup levels and cleanup actions at the Parcel No. 9523101290 property. As discussed above, additional characterization is needed on adjacent properties in order to be eligible for a Site NFA determination.

   The soil was characterized through the sampling and analysis of 12 composite soil samples; 35 discrete surface soil samples from eight (8) areas; and 12 soil samples from six (boring) locations. Analyses of soil samples included metals, diesel range organics, heavy oil range organics, volatile organic compounds (VOCs), pentachlorophenol (PCP), polychlorinated biphenyls (PCBs), chlorinated herbicides, and chlorinated pesticides.

The only contaminants detected in soil samples above MTCA cleanup levels were lead (seven samples), arsenic (four samples), and mercury (two samples). All of these exceedances were within surface soil samples collected at a depth of 0.0 to 0.5 feet below ground surface (ft bgs).

Fill materials are approximately three to four feet thick at the Site. The lack of contamination below 0.0 to 0.5 ft bgs would appear to suggest the contamination likely was attributable to historical operations on the Site as opposed to an association with the fill materials themselves.

Soil Gas Characterization

Soil vapor samples were collected from three locations and analyzed for VOCs and petroleum aliphatic and aromatic hydrocarbons. No VOCs or aromatic petroleum hydrocarbons were detected in the soil vapor samples, although aliphatic hydrocarbons (C5-C12) were detected in all three samples. The highest detection of total petroleum hydrocarbons was 1,400 µg/m3, well below the screening level of 4,700 µg/m3 (see below section on cleanup standards). The source of the petroleum in soil vapors has not been identified; however, no further action regarding these detections appears to be warranted.

Groundwater Characterization

The Site is located at the top of Phinney Ridge at an elevation of 356 feet above mean sea level (ft amsl). The depth to groundwater is estimated within the RI/FS/CAP Report to be at a depth over 100 ft bgs. Based on this depth to groundwater and the relatively low mobility of the Site contaminants, the risk to groundwater from the Site is low. No further action to characterize groundwater at the Site appears to be warranted.

2. **Establishment of cleanup standards and points of compliance**.

Cleanup Standards

Ecology has determined the cleanup levels and points of compliance presented below meet the substantive requirements of MTCA. The following cleanup levels have been selected for the Site:

Contaminant	Method A Soil Cleanup Level (mg/kg)	Soil Gas Screening Level (µg/m3)
Lead	250	NA
Arsenic	20	NA
Mercury	2	NA

Contaminant	Method A Soil Cleanup Level (mg/kg)	Soil Gas Screening Level (µg/m3)
Diesel range petroleum hydrocarbons	2,000	--
Heavy oil range petroleum hydrocarbons	2,000	--
Diesel + Heavy Oil	2,000	--
Total Petroleum Hydrocarbons (TPH)	--	4,700[1]

1-Based on generic TPH indoor air cleanup level of 140 µg/m3 within Ecology's Implementation Memorandum (IM) No. 18.

The selected cleanup levels are for unrestricted land use.

Points of Compliance

The points of compliance are throughout the Site. The Method A cleanup levels for contaminated soil are based on the soil-to-groundwater pathway, and thus apply without consideration to depth.

Terrestrial Ecological Evaluation (TEE)

The Site is located within a highly urbanized setting with little open space other than limited landscaped strips in commercial and multi-family residential areas. Based on completion of MTCA Table 749-1, the TEE process can be ended.

3. **Selection of cleanup action.**

Ecology has determined the cleanup you proposed for the Property meets the substantive requirements of MTCA. Your proposed cleanup meets minimum cleanup requirements and will not exacerbate conditions or preclude reasonable cleanup alternatives elsewhere at the Site.

The Cleanup Action Plan provides for excavation and offsite disposal of contaminated soil on the Parcel No. 9523101290 property. A property-specific NFA determination is contingent on demonstration that all soil contamination above the selected cleanup levels has been removed from the Property and properly disposed of. Note that further characterization and cleanup of contamination outside of the Property would be needed for Ecology to issue a Site NFA determination.

Limitations of the Opinion

1. **Opinion does not settle liability with the state.**

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

   - 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 70A.305.080 and WAC 173-340-545.

3. **Opinion is limited to proposed cleanup.**

   This letter does not provide an opinion on whether further remedial action will actually be necessary at the Site upon completion of your proposed cleanup. To obtain such an opinion, you must submit a report to Ecology upon completion of your cleanup and request an opinion under the Voluntary Cleanup Program (VCP).

4. **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 70A.305.170(6).

Contact Information

Thank you for choosing to clean up the Property under the VCP. As you conduct your cleanup, please do not hesitate to request additional services. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our webpage [4].
If you have any questions about this opinion, please contact me by phone at (509) 454-7835 or e-mail at frank.winslow@ecy.wa.gov.

Sincerely,

Frank P. Winslow, LHG
Toxics Cleanup Program
Headquarter Section

fpw: anf

Enclosures (1):A – Site Description and Diagrams

cc: Dave Cook, Aspect Consulting LLC
Erika Malone, City of Seattle - Office of Housing

[4] https://www.ecy.wa.gov/vcp

Enclosure A

Site Description and Diagrams

Site Description

Site: The Site is defined by lead (Pb), arsenic (As), and mercury (Hg) in soil. The Site is associated with releases apparently due to operations at a former electrical substation located at 6109 Phinney Ave North in the Phinney Ridge neighborhood of Seattle.

Area and Property Description: The former electrical substation was located on King County parcel no. 9523101290, a 0.14 acre "L"-shaped parcel. The majority of the parcel is within the center of the block bound by Phinney Avenue North to the east, Greenwood Avenue North to the west, North 62nd Street to the North and North 61st Street to the South. The Site is surrounded by commercial business on Phinney Ave North to the east and residences to the north, west, and south. The former substation is being redeveloped with a five story multifamily residential structure.

Site History: The electrical substation on the Property was reportedly constructed between 1948 and 1953 and demolished in the in the 1990s. Since that time, the Property has reportedly been vacant. The City of Seattle and/or Seattle City Light may have also used the Property for equipment storage during the period that it was operated as an electrical substation.

No information has been found indicating the historical use or storage of PCB-containing electrical transformers at the Property, and no PCBs were detected in six soil samples analyzed for PCBs.

Sources of Contamination: The heavy metals in soil appear to likely be attributable to the electrical substation operations and/or equipment storage on the Property. The cleanup level exceedances were all in surficial soils collected between 0.0 to 0.5 ft bgs. Hence, the metals appear to be attributable to activities on the Property, as opposed to an original component of fill materials found at the Site to a depth of approximately three to four ft bgs.

Physiographic Setting: The Site is located in Seattle, Washington, approximately 3.7 miles north of downtown Seattle. The Site is in an area of undulating glacial terrain within the Puget Lowland Physiographic Province.

The Site is located near the center of the Phinney Ridge neighborhood of Seattle, at an elevation of approximately 356 ft amsl. The Site is located near the peak of Phinney Ridge, on a north-south oriented ridge that is elevated approximately 200 feet above the surrounding terrain.

Surface/Storm Water: Because the Site is located on the top of Phinney Ridge, stormwater at the Property is expected to generally flow to the west and east, radiating

away from the topographic high area in the center of the block. The slopes to the west and north are slightly steeper than the slopes to the east and south; there is an approximately twelve (12) feet drop to streets to the west and north, and an approximately seven (7) feet drop to the streets to the east and south. The closest surface water body to the Site is Green Lake, a 259 acre freshwater lake located approximately 2,700 feet to the west.

Ecological Setting: The Site is located within a highly urbanized setting with little open space other than residential yards. The Site is over 600 feet north of Woodland Park Zoo. Based on completion of MTCA Table 749-1, no significant open space is located within 500 feet of the Site and the TEE process can be ended.

Geology: Phinney Ridge is reportedly a glacially deposited drumlin. The Site is underlain by glacial till deposits consisting of sand with silt and gravel. These till materials are highly compacted and of relatively low permeability.

Groundwater: Groundwater at the Site is relatively deep; the depth to groundwater is estimated within the RI/FS/CAP report to be over 100 feet deep. Ecology concurs that groundwater is unlikely to be impacted by the contaminated soils at the Site, due to the significant depth to groundwater, the shallow depth of the contaminated soils, and the relatively low mobility of the Site contaminants.

Water Supply: Potable water is provided to the subject property by the City of Seattle. The nearest Group A/B wells is located approximately 6,000 feet west-southwest of the Site. No wellhead protection zones were found in the area. Risk to water supply wells from the Site is low.

Extent of Contamination: The extent of soil contamination has been generally defined through investigations conducted at the Site in 2018 and 2020. The extent of soil contamination has been sufficiently defined to identify cleanup levels and proposed cleanup actions for the Property discussed herein. The cleanup level exceedances were all in surface soils at the 0.0 to 0.5 ft bgs depth and not at deeper depths.

As previously discussed above, contamination likely extends onto adjacent properties to the south, northwest, and east. Additional characterization of soils in these areas as well as cleanup of soils with metals concentrations above the selected cleanup levels is needed.

Site Diagrams

- Test Pit
- Discrete Soil Sample
- Soil Vapor Sample
- Direct Push Boring
- Hand Auger
- Concrete Slab
- Site Parcel
- King County Tax Parcel

N

0 15 30 Feet

1:180
(1 inch equals 15 feet)

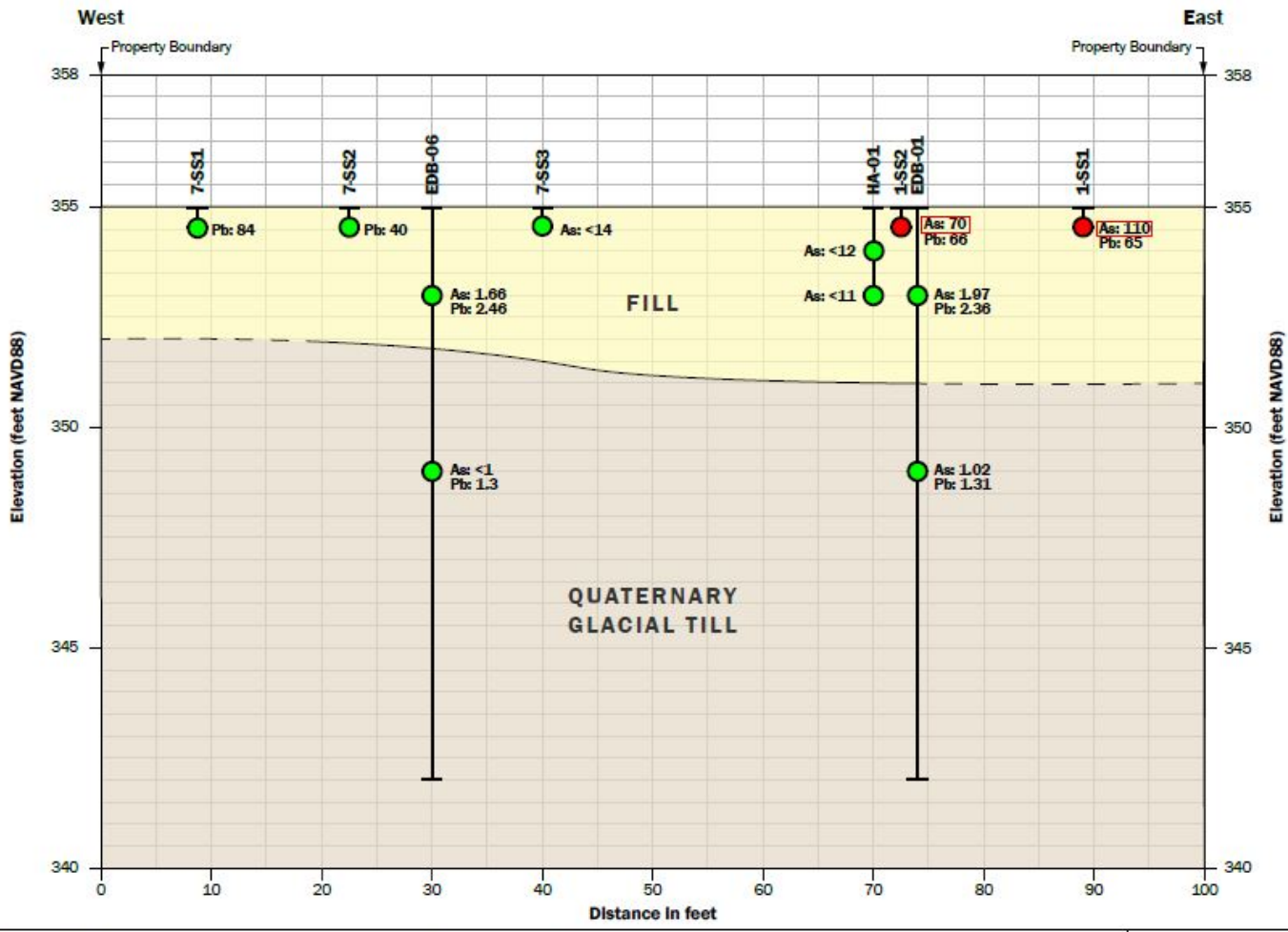
Site Plan

Remedial Investigation and Feasibility Study
Former Phinney Substation
Seattle, Washington

Aspect Consulting	SEP-2021	BY KB / WEG	FIGURE NO. 2
	PROJECT NO. 210143-02	APPROVED ---/---	


5-SS3 (0.5 ft.)
Pb: 320
6-SS5 (0.5 ft.)
Pb: 270
AHA-03 (0.5 ft.)
Pb: 308
4-SS3 (0.5 ft.)
Pb: 340
AHA-06 (0.5 ft.)
As: 32.1
1-SS2 (0.5 ft.)
As: 70
1-SS1 (0.5 ft.)
As: 110
6-SS2 (0.5 ft.)
Hg: 2.6
3-SS2 (0.5 ft.)
Pb: 320
Hg: 2.4
3-SS1 (0.5 ft.)
Pb: 270
PHINNEY AVE N


PHINNEY AVE N



Concentration of contaminant noted exceeds MTCA Method A CUL. Exceedences expressed in mg/kg

All analytes tested detected below MTCA Method A CUL

Fill

Quaternary Glacial Till

Inferred Geologic Contact

Boring Identification EDB-06

Notes:

- MTCA = Model Toxics Control Act
- No groundwater encountered
- Only lead and arsenic results shown: see Tables 2 and 3 for full analytical results

0 10 20
Feet
Vertical Exaggeration = x5

Cross Section

RI/FS/CAP
Former Phinney Substation
Seattle, Washington

Aspect Consulting	JUNE 2021	By KB/RAC	FIGURE NO. 6
	Project no. 210143	Rev by ---	