



**STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY**

PO Box 47600, Olympia, WA 98504-7600 • 360-407-6000

December 30, 2025

Alex Peterson
DUCKTACO, LLC
1000 2nd Avenue, Suite 1770
Seattle, WA 98104-1046
alex@wiw.llc

Re: No further action likely opinion for the planned cleanup of the following contaminated Property associated with a contaminated Site

Site name: Quick Quack Tacoma 6th Avenue
Site address: 6602 6th Avenue, Tacoma, WA 98406
Facility/Site ID: 100005070
Cleanup Site ID: 17371
VCP Project ID: SW1873

Dear Alex Peterson:

On November 21, 2025, the [Washington State Department of Ecology](#)^a (Ecology) received your request for an opinion on the sufficiency of the planned independent cleanup of the Property associated with the Asarco Tacoma Smelter Site (Asarco Site) under the [Voluntary Cleanup Program](#)^b (VCP). To provide an opinion, we requested additional information in writing from you on December 8, 2025. On December 9, 2025, we received the additional requested information. This letter provides our opinion and analysis under the authority of the Model Toxics Control Act (MTCA), chapter [70A.305](#)^c RCW.

Opinion summary

Ecology has determined that, upon completion of the planned cleanup, **no further remedial action will likely be necessary** at the Property to clean up contamination associated with the Asarco Site.

However, further remedial action remains necessary at other areas at the Asarco Site to clean up contamination. Ecology’s opinion applies to the Property and is based on whether the remedial action meets the substantive requirements of MTCA and its regulations under chapter 70A.305 RCW and chapter [173-340](#)^d WAC (together called “MTCA”).

Difference between Site and Property

For this opinion, it’s important to understand the distinction between the “Site” and the “Property.” Under MTCA, a “site” refers to the area where a hazardous substance released to the environment has come to be located. A site can impact multiple parcels of real property, and a parcel may be affected by more than one site. The “Site” related to the planned cleanup affects multiple parcels of real property.

The planned cleanup targets specific parcels defined as the “Property”. This opinion addresses only those parcels included in the cleanup. Both the “Property” and the larger “Site” are described here. See our [Guidelines for Property Cleanups Under the Voluntary Cleanup Program](#)^e for additional background information.

Property description

This opinion applies to only the Property described in this section, which consists of the following parcels of real property in Pierce County.

- 0220022095.
- 0220022102.

Appendix A includes a legal description of the Property. Appendix B describes the Asarco Site and its history and includes a diagram that shows the Property location within the Asarco Site.

Asarco Site description

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

- Arsenic in soil.
- Lead in soil.

Appendix B includes an Asarco Site description, history, and diagrams.

Ecology has no information that other sites affect the Property.

Basis for the opinion

Ecology bases this opinion on the information contained in the following documents:

- Krazan & Associates, Inc., Soil Management Plan, November 25, 2025.
- Krazan & Associates, Inc., Operations and Maintenance Plan for Management of Arsenic & Lead Contaminated Soils, October 29, 2025.
- Apex Laboratories, LLC, Analytical Report, March 6, 2024.

Each of these documents are available electronically on the [Quick Quack Tacoma 6th Avenue webpage](#).^f You can request any documents not found online by filing a [records request](#).^g For assistance, contact the Public Records Officer at recordsofficer@ecy.wa.gov or call (360) 407-6040. Please check the Quick Quack Tacoma 6th Avenue webpage before making a request.

This opinion is void if any information submitted to Ecology is materially false or misleading.

Analysis of the cleanup

Ecology has determined that, after completion of the cleanup, no further remedial action will likely be necessary to clean up Property contamination associated with the Asarco Site. However, further remedial action will still be necessary at other areas of the Asarco Site. Ecology bases this opinion on the following analysis.

Characterizing the Site

The Asarco Site is described in Appendix B. The Quick Quack Tacoma 6th Avenue property is located within the Asarco Site. Ecology has determined the results of the Site characterization are sufficient for selecting a cleanup action for the Property.

The Property is located west of Interstate 5, and south of Highway 16 in Tacoma, Washington. The Property is situated on two Pierce County parcels that encompass approximately 1.4- acres of land. The northern portion of the Property is currently occupied

by a used tire dealer, Jojo's Tire Center, while the central and southern portions of the subject site consist of vacant grassland. The Property is bordered by 6th Avenue and various commercial properties to the north, North Tacoma Kinder Care to the south, Chase Bank to the west, and Global Credit Union to the east. For more information about the Property, refer to Appendix A.

The developer, DUCKTACO, LLC (DUCKTACO), plans to redevelop the Property into a new Quick Quack Car Wash facility including asphalt parking, concrete walkways, landscaping, and other associated site improvements.

As part of the planned development, DUCKTACO contracted Succeed Environmental Consulting (SEC) to characterize the Tacoma Smelter Plume contamination on the Property. On February 14, 2024, SEC collected 23 discrete soil samples from 18 locations on the Property (Figure 1). They collected 18 soil samples from 0 to 6 inches below ground surface (bgs) and five soil samples from 6 to 12 inches bgs. Soil characterization was conducted in accordance with Ecology's [Tacoma Smelter Plume Model Remedies Guidance](#) (Guidance).^h

SEC submitted the samples to Apex Laboratories LLC in Tigard, Oregon for arsenic and lead analysis with Environmental Protection Agency (EPA) Method 6020B.

The Property also operated as a self-serve automotive fueling station between 1973 and 2009. The former fuel dispensers were removed from the Property, but three USTs (one containing diesel and two containing gasoline) were left in place and are no longer in use.

This opinion letter does not include our review of the underground storage tanks (USTs) on the Property. This opinion letter includes our review of the shallow soil contamination as a result of the Tacoma Smelter Plume (TSP) only.



Figure 1. Soil characterization sample locations

Results of Soil Sampling

Table 1 displays the summary of the characterization sampling for TSP contamination on the Property. Appendix 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 eight samples. Six of those samples also 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 2.63 mg/kg to 315 mg/kg. The average arsenic concentration was 43.6 mg/kg. One sample exceeded the MTCA Method A cleanup level of 250 mg/kg for lead but did not exceed the maximum allowable concentration for a single soil sample or twice the cleanup level for lead (500 mg/kg). Lead concentrations ranged from 3.01 mg/kg to 346 mg/kg. The average lead concentration was 66.2 mg/kg. At sample location SS-3, where the highest concentration of arsenic (315 mg/kg) and lead (346 mg/kg) were detected, a TCLP analysis was also conducted. Arsenic and lead were not detected at concentrations exceeding 5 milligrams per liter (mg/L), which indicates suitability for disposal as non-hazardous waste.

Samples collected from 6 to 12 inches bgs: Arsenic exceeded the MTCA Method A cleanup level of 20 milligrams per kilogram (mg/kg) in two samples. Those two samples also 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 3.17 mg/kg to 67.6 mg/kg. The average arsenic concentration was 30.5 mg/kg. None of the samples exceeded the MTCA Method A cleanup level of 250 mg/kg for lead. Lead concentrations ranged from 4.31 mg/kg to 126 mg/kg. The average lead concentration was 48.2 mg/kg.

Table 1. Summary of characterization soil sampling for TSP contamination on the Property.

Depth (inches)	Arsenic Minimum (mg/kg)	Arsenic Maximum (mg/kg)	Arsenic Average (mg/kg)	Lead Minimum (mg/kg)	Lead Maximum (mg/kg)	Lead Average (mg/kg)
0-6	2.63	315	43.6	3.01	346	66.2
6-12	3.17	67.6	30.5	4.31	126	48.2
MTCA Method A Cleanup		40	20		500	250

Bold values represent concentrations above the MTCA Method A Cleanup level. **Bold red** values represent concentrations twice the MTCA Method A cleanup level for unrestricted land use.

This opinion letter does not provide an opinion on any potential soil contamination associated with existing underground storage tanks (USTs) on the Property. However, SEC's Phase I Environmental Site Assessment Report dated April 24, 2024, provides a summary of sampling for petroleum hydrocarbons in the location of the former fueling station. The analytical results indicate there was no widespread release of petroleum products associated with the former fueling station, but petroleum hydrocarbons may have been released from one or more of the USTs.

Setting cleanup standards for the Asarco Site

Cleanup standards include cleanup levels, points of compliance, and other regulatory requirements applicable to the cleanup action. The cleanup levels and points of compliance set for the Asarco 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 that the soil and duff cleanup levels are protective of human health and the environment for properties within the Asarco Tacoma Smelter Site are the following:

- Average arsenic detected in the soil is less than 20 mg/kg.
- Average lead detected in the soil is less than 250 mg/kg.
- Duff composite sample is less than 20 mg/kg for arsenic.
- Duff composite sample is less than 250 mg/kg for lead.
- No single soil sample has arsenic above 40 mg/kg.
- No single soil sample has lead above 500 mg/kg.

Selecting the cleanup action for the Property

Ecology has determined the cleanup action selected for the Property meets the substantive requirements of MTCA.

Ecology proposed four model remedies in the IAP:

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

The Property developer, DUCKTACO, LLC (DUCKTACO), decided to use capping in place to address the elevated levels of arsenic and lead on the Property.

Implementing the cleanup action for the Property

The planned Property cleanup actions will likely meet minimum requirements and should not make conditions worse or limit other reasonable cleanup alternatives elsewhere at the Asarco Site. However, additional cleanup will still be needed at other areas of the Asarco Site after the planned property cleanup is completed. This cleanup is an interim action for the overall Asarco Site cleanup.

DUCKTACO, decided to use capping in place for portions of the property with arsenic or lead-containing soils designated over MTCA Method A CULs. The largest portion of arsenic or lead contaminated soils will be covered with an impermeable hard cap of asphalt or concrete underlain by compacted gravel. The next largest portion of the arsenic or lead contaminated soils will be covered with permeable surfaces, consisting of geotextile fabric with a minimum of 12 inches of clean soil on top of the fabric. Up to six inches of the soil cap can be materials other than soil, such as wood chips, bark, mulch, sand, or gravel.

Soil caps and hard caps must meet the specifications identified in our Guidance, when used to cap in place soil contamination from the former Asarco Tacoma smelter. Type 1 soil caps must have at least 12 inches of clean soil on top of the geotextile fabric. At least six inches must be clean soil but may include up to six inches other landscaping materials, as indicated in our Guidance. A Type 2 hard cap may be concrete, asphalt, paving blocks or buildings, and must be at least three inches thick.

A soil or hard cap prevents exposure to the remaining contaminated soil on the Property, but will also require an environmental covenant.

An environmental covenant is a legal mechanism that warns future property owners that contamination remains on the property. It also restricts uses that would damage the cap and requires an annual cap inspection and maintenance instructions.

Arsenic and lead contaminated soil is planned to remain on the Property. To acknowledge the contamination remaining on the Property, DUCKTACO will file an environmental covenant with the appropriate local jurisdiction before Ecology can issue a No Further Action determination for this Property.

- Draft an environmental covenant for Ecology to review. Follow [Ecology Procedure 440A](#)ⁱ, which provides guidance and templates for developing institutional controls and preparing environmental covenants under MTCA (refer to WAC 173-340-440).

An environmental covenant template is provided in the Procedure 440A document as Attachment C (Environmental Covenant for MTCA Sites: Instructions for Use and Covenant Template).

- The covenant will include restrictions on the intrusive activities where arsenic or lead concentrations remain above their respective MTCA cleanup levels. Ecology will review the draft covenant. Ecology will not approve the covenant unless the local jurisdiction has been consulted.
- Upon Ecology's approval, obtain signatures of all grantors of the covenant.
- Submit the signed covenant to Ecology for signature as the grantee.
- The final signed environmental covenant should be filed with the appropriate local jurisdiction. For detailed recording instructions, please refer to chapter [65.40.RCW](#)^j
- Return the original signed and recorded covenant to Ecology, prior to receiving an NFA determination.

A soil capping inspection plan will be developed for Ecology's review and approval for all capped areas of the property where contamination remains. The plan will identify details for inspection and maintenance of any capped areas with restrictions, as identified in the environmental covenant.

Environmental Information Management Database

In accordance with WAC 173-340-840(5) and [Ecology Toxics Cleanup Program Policy 840](#)¹ (Data Submittal Requirements), data generated for Independent Remedial Actions will need to be confirmed as uploaded, accepted, and approved in Ecology's Environmental Information Management (EIM) database prior to issuing a no further action (NFA) determination. For additional information regarding electronic format requirements, see the website <http://www.ecy.wa.gov/eim>.

Be advised that according to the policy, any reports containing sampling data that are submitted for Ecology review are considered incomplete until the electronic data has been

¹ <https://apps.ecology.wa.gov/publications/SummaryPages/1609050.html>

entered. Please ensure that data generated during on-site activities is submitted pursuant to this policy.

Data must be submitted to Ecology in this format for Ecology to issue an NFA determination. Please be sure to submit all soil data collected to date, as well as any future data, in this format.

Cleanup of the Asarco Site as a Whole

Ecology has determined your planned Property cleanup will likely meet cleanup standards of the Asarco Site. While your proposed cleanup may constitute the final action for the Property, it will constitute only an **“interim action”** for the Asarco Site as a whole.

Cleanup of the Asarco Site as a Whole

The planned Property cleanup constitutes an interim action for the Asarco Site. As such, the Asarco Site will remain on the [Contaminated Sites List](#)^k after the Property cleanup is completed. The Property cleanup will not change the Asarco Site’s boundaries.

Limitations of the opinion

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 doesn’t resolve or alter a person’s liability to the state or 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 [70A.305.040](#)^l(4).

Opinion does not constitute a determination of substantial equivalence

To recover remedial action costs from other liable persons under MTCA, one must demonstrate the action is the substantial equivalent of an Ecology -conducted or Ecology -supervised action. This opinion does not determine whether the action performed is substantially equivalent. Courts make that determination. See RCW [70A.305.080](#)^m and WAC [173-340-545](#).ⁿ

Opinion is limited to the planned cleanup

This letter does not provide an opinion on whether further remedial action will actually be necessary at the Property upon completion of the planned cleanup. To obtain such an opinion, a report must be submitted to Ecology upon completion of the cleanup and an opinion requested under the VCP.

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).

Questions

Thank you for choosing to clean up the Property under the VCP. Please feel free to reach out to me with any questions at (360) 999-9593 or diana.ison@ecy.wa.gov.

Sincerely,



Diana Ison
Toxics Cleanup Program
Southwest Region Office

DI/kw

Appendices (3): A – Property description
 B – Asarco Site description, history, and diagrams
 C – Soil Characterization Results

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Ecology Site file

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- ^a <https://ecology.wa.gov/>
^b <https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Voluntary-Cleanup-Program>
^c <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305>
^d <https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340>
^e <https://apps.ecology.wa.gov/publications/summarypages/0809044.html>
^f <https://apps.ecology.wa.gov/cleanupsearch/site/17371>
^g <https://ecology.wa.gov/footer-pages/public-records-requests>
^h <https://apps.ecology.wa.gov/publications/SummaryPages/1909101.html>
ⁱ <https://apps.ecology.wa.gov/publications/SummaryPages/1509054.html>
^j <https://app.leg.wa.gov/rcw/default.aspx?cite=65.04>
^k <https://apps.ecology.wa.gov/cleanupsearch/reports/cleanup/contaminated>
^l <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.040>
^m <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.080>
ⁿ <https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-545>
^o <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.170>

Appendix A

Property description

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Property Legal Description

Pierce County Tax Parcel: 0220022095:

Section 02 Township 20 Range 02 Quarter 22 : E 1/2 OF FOLL DESC PROP BEG 994.17 FT S OF NW COR GOVT LOT 4 IN NW OF SEC TH E 256.6 FT TH S 405.81 FT TH W 254.81 FT TO A PT ON W LI OF LOT 4 TH N ALG W LI 410.39 FT TO BEG EXC POR CYD FOR ST TOG/W EASE SEG F 2565

Pierce County Tax Parcel: 0220022102:

Section 02 Township 20 Range 02 Quarter 22 : COM 994.17 FT S OF NW COR OF LOT 4 TH ELY 256.6 FT TO POB BEING NW COR OF A TR OF LD ON CONTRACT TO WILLIAM R KELLY UNDER AUD FEE # 2196812 TH ON W LI OF SD TR S 308.91 FT TH E 27 FT TH N 308.64 FT TH W 27 FT TO POB EXC POR CYD FOR ST SEG F 5611

Property General Description

Geology and Hydrogeology:

The Property lies within the Puget Lowland geologic province, underlain by Pleistocene glacial drift deposits mainly consisting of tills and sandy gravelly soils. The Puget Lowland region is a wide low-lying area between the Cascade Range to the east and the Olympic Mountains to the west. The region extends from the San Juan Islands in the north to past the southern end of the Puget Sound. The Tacoma location is bordered in all directions by the Pleistocene glacial deposits.

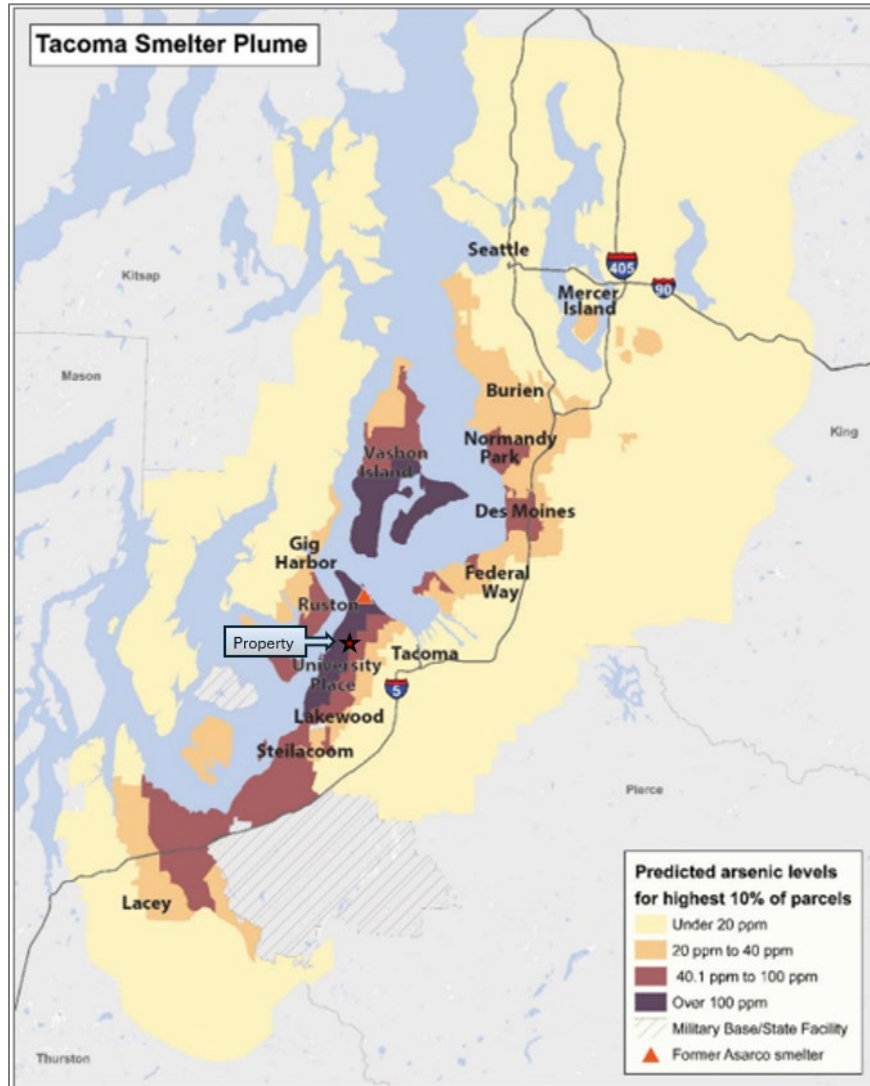
The United States Department of Agriculture (USDA) soil survey maps indicate surface soils at the Property are primarily designated as Urban soils, consisting mainly of fill material and characterized by grading. The surface soils on the Property also show a small amount in the Alderwood Series in the western section of the site, consisting of sandy loams transitioning into purely sandy loams at deeper depths. These sandy loamy soils are range from unknown drainage characteristics in the case of the Urban soils to moderately well drained in the Alderwood Series.

Appendix B

Site description, history, and diagrams

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Asarco Tacoma Smelter Site Description



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.

Appendix C

TSP Soil Characterization Results

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Total Metals (EPA 6020B)					TCLP Metals (6020B)	
Sample ID	Sample Date	Depth (feet)	Arsenic (mg/kg)	Lead (mg/kg)	Arsenic (mg/L)	Lead (mg/L)
SS-1	2/14/2024	0.0 – 0.5	60.7	84.3		
SS-2	2/14/2024	0.0 – 0.5	38.1	51.2		
SS-3	2/14/2024	0.0 – 0.5	315	346	0.100U	0.0627
SS-3D	2/14/2024	0.5 – 1.0	67.6	80.2		
SS-4	2/14/2024	0.0 – 0.5	80.4	146		
SS-4D	2/14/2024	0.5 – 1.0	60.8	126		
SS-5	2/14/2024	0.0 – 0.5	22.7	43.0		
SS-6	2/14/2024	0.0 – 0.5	76.9	92.2		
SS-7	2/14/2024	0.0 – 0.5	50.8	91.3		
SS-8	2/14/2024	0.0 – 0.5	2.63	3.01		
SS-8D	2/14/2024	0.5 – 1.0	3.17	4.31		
SS-9	2/14/2024	0.0 – 0.5	42.6	37.8		
SS-10	2/14/2024	0.0 – 0.5	8.98	21.9		
SS-11	2/14/2024	0.0 – 0.5	8.1	11.9		
SS-12	2/14/2024	0.0 – 0.5	19.9	28.4		
SS-12D	2/14/2024	0.5 – 1.0	15.6	20		
SS-13	2/14/2024	0.0 – 0.5	5.77	19.7		
SS-13D	2/14/2024	0.5 – 1.0	5.14	10.7		
SS-14	2/14/2024	0.0 – 0.5	8.49	32.5		
SS-15	2/14/2024	0.0 – 0.5	14.8	47.5		
SS-16	2/14/2024	0.0 – 0.5	3.18	4.26		
SS-17	2/14/2024	0.0 – 0.5	8.46	32.5		
SS-18	2/14/2024	0.0 – 0.5	17.1	97.8		

Bold values represent concentrations above the MTCA Method A Cleanup level. **Bold red** values represent concentrations twice the MTCA Method A cleanup level for unrestricted land use.