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April 15, 2020

Jerry Eide
CHS, Inc.
763 Willoughby Lane
Stevensville, MT 59870-6922
Jerry.Eide@chsinc.com

Re: Further Action at the following Site:

- **Site Name:** Cenex Harvest States Coop Parkland
- **Site Address:** 10610 Pacific Ave Tacoma, Pierce County, WA 98444
- **Facility/Site ID:** 28147274
- **Cleanup Site ID:** 5814
- **VCP Project ID:** SW0891

Dear Jerry Eide:

On September 16, 2019, the Washington State Department of Ecology (Ecology) received your request for an opinion on the proposed independent cleanup of the Cenex Harvest States Coop Parkland (Site). On January 14, 2020, your submittal, including upload of electronic data and payment of all invoices was complete and ready for our review. This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), chapter 70.105D Revised Code of Washington (RCW).[1]

Issue Presented and Opinion

Ecology appreciates the extensive work and reporting for this Site cleanup. This is Ecology's fourth opinion on Site cleanup. Since the last opinion, Site cleanup has progressed including the removal of additional contaminated soil and installation and monitoring of new groundwater monitoring wells. **Ecology has determined that further remedial action is necessary to clean up contamination at the Site.** Additional information is needed to determine that no further action is needed.

[1] https://app.leg.wa.gov/RCW/default.aspx?cite=70.105D

The following summarizes additional information requested in this opinion. The additional information is needed to evaluate whether interim actions at the Site have achieved the substantive requirements of MTCA:

- **Additional Contaminant Testing:** Ecology needs additional air, soil, and groundwater characterization information to evaluate the efficacy of interim actions and compliance with MTCA.

- **Draft Environmental Covenant:** An environmental covenant was provided as part of the proposed preferred remedial alternative. To consider a property specific no further action determination, Ecology needs to review the proposed draft environmental covenant and all needed supporting documents.

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, Washington Administrative Code (WAC) chapter 173-340 (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following releases:

- Total Petroleum Hydrocarbons – Gasoline Range Organics (TPH-GRO) into soil, groundwater, and air.

- Total Petroleum Hydrocarbons – Diesel Range Organics (TPH-DRO) into soil, groundwater and air.

- Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) into soil, groundwater, and air.

- Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) into soil.

The parcel of real property associated with this Site is also located within the projected boundaries of the Asarco Tacoma Smelter facility (FSID: # 89267963). At this time, we have no information that the parcel (tax parcel: 4745000760) is actually affected. This opinion does not apply to any contamination associated with the Asarco Tacoma Smelter facility.

Basis for the Opinion

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

1. Farallon Consulting, LLC (Farallon), *Subsurface Investigation Results*, *CHS Tacoma Service Station, Tacoma, Washington*, September 21, 2006.

2. Farallon, *Site Characterization Report, CHS Tacoma Service Station, VCP # SW0891, 10610 Pacific Avenue South, Tacoma, Washington*, May 14, 2008.

3. Farallon, *Cleanup Action Report, CHS Tacoma Service Station, VCP ID No. SW0891, 10610 Pacific Avenue South, Tacoma, Washington*, July 16, 2009.

4. Farallon, *Supplemental Site Characterization Report, CHS Tacoma Service Station, VCP #SW0891, 10610 Pacific Avenue South, Tacoma, Washington,* June 23, 2011.

5. Farallon , *September 2011 and January 2012 Groundwater Monitoring Report, CHS Tacoma Service Station, VCP #SW0891, 10610 Pacific Avenue South, Tacoma, Washington*, September 25, 2012.

6. Farallon, *Phase II Supplemental Site Characterization Report, CHS Tacoma Service Station, 10610 Pacific Avenue South, Tacoma, Washington*, May 28, 2014.

7. Farallon, *Supplemental Cleanup Action Report, CHS Tacoma Service Station, VCP Site Identification No. SW0891, 10610 Pacific Avenue South, Tacoma, Washington*, May 25, 2016.

8. Farallon, *Technical Memorandum Regarding Soil Gas Sampling Results, 10610 Pacific Avenue South, Tacoma, Washington*, May 8, 2017.

9. Farallon, *Technical Memorandum Regarding Vapor Barrier Installation, 10610 Pacific Avenue South, Tacoma, Washington*, October 2, 2017.

10. Farallon, *September through November 2017 Progress Report, Former CHS Tacoma Service Station, VCP Site Identification No. SW0891, 10610 Pacific Avenue South, Tacoma, Washington*, February 7, 2018.

11. Farallon, *February through November 2018 Progress Report, Former CHS Tacoma Service Station, VCP Site Identification No. SW0891, 10610 Pacific Avenue South, Tacoma, Washington*, March 7, 2019.

12. Farallon, *February and May 2019 Progress Report, Former CHS Tacoma Service Station, VCP Site Identification No. SW0891, 10610 Pacific Avenue South, Tacoma, Washington*, August 29, 2019.

Those documents are kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. Information on obtaining those records can be found on Ecology's public records requests web page.[2] Some site documents may be available on Ecology's Cleanup Site Search web page.[3]

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

Analysis of the Cleanup

Ecology has concluded that **further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology's April 4, 2016, opinion for the cleanup includes a detailed description and diagrams of the Site at that time. Additional cleanup work has been conducted since Ecology's last opinion. In March 2016, monitoring well MW-3 was decommissioned prior to additional source removal. In April 2016, the former service station building was demolished and soils excavated for disposal. A reclaimed water sump and a septic tank were removed as part this excavation effort. The excavation was backfilled with imported sand and gravel. In February 2017, monitoring wells MW-1, MW-5, MW-6, and MW-8 were decommissioned.

During the summer of 2017, Site redevelopment began. Soil gas samples collected within the projected footprint of the planned structure detected benzene and aliphatic hydrocarbons at several sample locations. A membrane vapor barrier was installed between the soil and the concrete foundation slab. In September 2017, a petroleum-like odor in soil was observed while excavating soil for a stormwater management infrastructure installation. Additional soil samples were collected from test pits excavated in the area where the odor was noted. Additional petroleum contaminated soil was delineated and removed for disposal. Monitoring wells MW-9 through MW-14 were installed in November 2017.

Ecology has determined your characterization of the Site is not sufficient to establish cleanup standards and select a cleanup action.

a. Soil Characterization and Removal: Please provide data demonstrating how contaminated soil identified during installation of recovery well RW-1 at a depth of 12.75 feet below ground surface (bgs) complies with the proposed MTCA Method A cleanup levels.[4] During the 2008 interim action, four monitoring wells and one recovery well (RW-1) were advanced to provide additional contaminate delineation data.

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[2] https://ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests
[3] https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=5814
[4] Farallon, *Site Characterization Report, CHS Tacoma Service Station, VCP # SW0891, 10610 Pacific Avenue South, Tacoma, Washington*, May 14, 2008.

RW-1 was advanced to a depth of 21.5 feet bgs and a soil sample was collected at a depth of 12.75 feet bgs. The sample (ID: RW1-12.75-020508) indicated TPH-GRO, TPH-DRO, and benzene exceeding MTCA Method A cleanup screening levels. RW-1 was decommissioned during the first interim action excavation. Soils in the vicinity of RW-1 were removed to a depth of 11 feet bgs. Performance samples (EXB-11, EXB-14, EXB-22, and EXB-23) collected in the vicinity of RW-1 at the terminal depth of the excavation indicated non-detect results for TPH-GRO, TPH-DRO, and BTEX.

b. Additional Contaminant Testing: Without complete documentation of the historical use of petroleum products at the Site, site characterization of soil and groundwater must meet the requirements of Table 830-1 for waste oil and unknown oils.[5] Testing for polychlorinated biphenyls (PCBs) in soil has not been reported. Additional borings may be required.

Analytical groundwater data for 1,2-dichloroethane (EDC), 1,2-dibromoethane (EDB), Methyl-Tertiary-Butyl-Ether (MTBE), lead, carcinogenic PAHs, PCBs, and halogenated Volatile Organic Compounds (VOCs) have also not been provided to Ecology. Ecology recommends sampling and analyzing groundwater from MW-10 for these needed analytes.

c. Air Verification Sampling: Prior to construction of the new structure on Site, three soil gas samples were collected within the projected footprint of the building. The soil gas samples were all collected at a depth of 2.5 feet bgs and generally along a north-south line through the center of the building footprint. Analytical data for the soil gas samples indicated benzene at SG-3 and aliphatic hydrocarbons (C5-C8 and C9-C12) at SG-1 exceeded the MTCA Method B screening levels.

A vapor barrier was installed prior to building development. Farallon's 2017 memorandum[6] suggested that further investigation of indoor air quality was not necessary due to the installation of the vapor barrier and calculated screening levels based on a commercial exposure scenario.

i. Indoor Air: For Ecology to concur the vapor intrusion pathway is currently incomplete, indoor air quality samples need to be collected and analyzed from inside the building to verify model assumptions and vapor barrier integrity and function. Indoor air sampling should utilize EPA Method TO-15 using a commercial or residential scenario, as appropriate. If a commercial scenario is used, then update the environmental covenant to ensure commercial site use in perpetuity. EPA Method TO-17 may also be acceptable if laboratory detection limits are greater than the selected cleanup levels.

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[5] WAC 173-340-900 Table 830-1 Required Testing for Petroleum Releases, Waste Oils and Unknown Oil.
[6] Farallon, *Technical Memorandum Regarding Soil Gas Sampling Results*, 10610 Pacific Avenue South, Tacoma, Washington, May 8, 2017.

Air quality samples should be analyzed for:

- Petroleum equivalent carbon fractions
  - EC5-8 (aliphatics)
  - EC9-12 (aliphatics)
  - EC9-10 (aromatics)
- Petroleum VOCs
  - BTEX
  - Naphthalenes

Prior to collecting indoor air samples, Ecology recommends conducting a building survey to identify potential background sources of contaminants. Ecology suggests sampling where subsurface conduits exits through the foundation, such as an indoor bathroom. A sample collection period of 8-hours should be sufficient to eliminate short-term variability, but reduce potential background interference due to extended sampling periods.

Conducting the sampling overnight would further reduce potential background interference due to reduced occupancy and indoor activity and minimize disruption to the business. Refer to Ecology's vapor intrusion guidance[7] for additional information regarding Tier II vapor intrusion assessments. Because subsurface screening levels are currently exceeded at the Site, the vapor barrier will need to be maintained in perpetuity as an engineered control managed by an environmental covenant.

ii. **Off-Property Migration:** Soil gas sample locations SG-1 and SG-3 are located within 100 feet of the residence to the northwest (tax parcel: 4745000731) of the Site. Ecology requests collection of additional soil gas data along the property line in this area to provide sufficient data to concur that a vapor intrusion pathway to the adjacent residence is incomplete. This approach is recommended as it is conservatively protective of human health. Ecology recommends sampling soil gas for the parameters listed in the **Indoor Air** section above as well as oxygen, carbon dioxide, and methane.[8]

Ecology recommends using Ecology's Implementation Memo No. 18[9] for updated guidance on petroleum vapor intrusion screening and cleanup levels. Note that Implementation Memo 18 replaces guidance for calculating vapor intrusion screening and cleanup levels described in the 2009 vapor intrusion guidance.

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[7] Ecology draft 2009 Guidance for Evaluating Soil Vapor in Washington State: Investigation and Remedial Action, Revised February 2016 and April 2018.
[8] Ecology Implementation Memorandum No. 18, Petroleum Vapor Intrusion (PVI): Updated Screening Levels, Cleanup Levels, and Assessing PVI Threats to Future Buildings, Section 6, January 18, 2018.
[9] https://fortress.wa.gov/ecy/publications/documents/1709043.pdf

2. Establishment of Cleanup Standards.

Ecology has determined the cleanup levels and points of compliance you established for the Site do not meet the substantive requirements of MTCA.

a. Points of Compliance. Points of compliance are the specific locations at the Site where cleanup levels must be attained. For clarity, Ecology provides the following table of standard points of compliance:

Media	Points of Compliance
Soil-Direct Contact	Based on human exposure via direct contact, the standard point of compliance is throughout the Site from ground surface to fifteen feet below the ground surface.[10]
Soil- Protection of Groundwater	Based on the protection of groundwater, the standard point of compliance is throughout the Site.[11]
Soil-Protection of Plants, Animals, and Soil Biota	Based on ecological protection, the standard point of compliance is throughout the Site from ground surface to fifteen feet below the ground surface.[12]
Groundwater	Based on the protection of groundwater quality, the standard point of compliance is throughout the site from the uppermost level of the saturated zone extending vertically to the lowest most depth which could potentially be affected by the site.[13]
Groundwater-Surface Water Protection	Based on the protection of surface water, the standard point of compliance is all locations where hazardous substances are released to surface water.[14]
Air Quality	Based on the protection of air quality, the point of compliance is indoor and ambient air throughout the Site.[15]
Sediment	Based on the protection of sediment quality, compliance with the requirements of 173-204 WAC.[16]

Based on MTCA compliance monitoring requirements,[17] data from Site monitoring wells MW-2 and MW-10 indicate that Site groundwater has not achieved cleanup levels at the standard point of compliance. The standard point of compliance for groundwater is throughout the entire site. Contaminated groundwater remaining in the right-of-way and utility corridor of the Site poses a risk for recontamination of clean fill soils on the Property.

To support a property-specific no further action determination, recontamination of the Property from the area of MW-2 and MW-10 will need to be monitored and evaluated. Recontamination would be monitored using conditional points of compliance you may propose. A contingency plan will also need to be developed providing what actions would be taken if contamination exceeding cleanup levels was measured at any conditional point of compliance during necessary long term monitoring.

[10] WAC 173-340-740 (6)(d).
[11] WAC 173-340-747.
[12] WAC 173-340-7490(4)(b).
[13] WAC 173-340-720(8)(b).
[14] WAC 173-340-730(6).
[15] WAC 173-340-750(6).
[16] WAC 173-340-760.
[17] WAC 173-340-720(9).

To support establishment of conditional points of compliance,[18] you must determine through disproportionate cost analysis in a feasibility study that it is not practicable to meet cleanup levels at the standard point of compliance within a reasonable restoration timeframe.[19] Provide that analysis to Ecology for review.

The 2015 feasibility study does not appear to evaluate the preferred remedial alternative's restoration timeframe for contaminated groundwater to meet Site cleanup levels. Provide this analysis to support the use of a proposed conditional point of compliance and demonstrate the necessity of an environmental covenant.

Conditional points of compliance should be positioned as close as practicable to the source of hazardous substances and within the property boundary. For example, you may consider placing an additional monitoring well west of the interpreted extent of the TPH-DRO, TPH-GRO, and benzene plume. An area such as the planter bar between the drive-through lane and the handicap-parking stall at the southwest corner of the building would likely provide a suitable location for conditional point of groundwater compliance.

b. Cleanup Levels. Cleanup levels are the concentrations of a hazardous substance in soil, water, or air that are determined to be protective of human health and the environment. At this Site, MTCA Method A unrestricted cleanup screening levels were used to evaluate TPH-DRO, TPH-GRO, BTEX, and cPAH contamination detected at the Site in soil and groundwater. MTCA Method A cleanup levels may be appropriate depending on the results of the needed terrestrial ecological evaluation and the completion of the remedial investigation.

Air cleanup levels should be determined in accordance with Ecology Implementation Memo 18.[20] The site-specific Method B default variable values may be altered to match the commercial exposure scenario provided in the Farallon's 2017 Technical Memo.[21] If calculating site-specific cleanup levels, Ecology suggests altering your Exposure Frequency factor from 0.23 to 0.30 to reflect a conservative employee exposure estimate of 50-hours per week for 50 weeks per year.

c. Applicable Laws and Regulations. In addition to establishing minimum requirements for cleanup standards, applicable local, state, and federal laws may also impose certain technical and procedural requirements for performing cleanup actions. These requirements are described in WAC 173-340-710. An online tool[22] is currently available to help you evaluate the local requirements that may be necessary.

[18] WAC 173-340-720(8)(c).
[19] WAC 173-340-360(4).
[20] Ecology Implementation Memorandum No. 18, Petroleum Vapor Intrusion (PVI): Updated Screening Levels, Cleanup Levels, and Assessing PVI Threats to Future Buildings, January 18, 2018.
[21] Farallon, *Technical Memorandum Regarding Soil Gas Sampling Results, 10610 Pacific Avenue South, Tacoma, Washington,* May 8, 2017.
[22] https://apps.oria.wa.gov/opas/index.asp

All cleanup actions conducted under MTCA shall comply with applicable state and federal laws.[23] The person conducting a cleanup action shall identify all applicable local, state, and federal laws. The department shall make the final interpretation on whether these requirements have been correctly identified and are legally applicable or relevant and appropriate.[24,25]

There are three general groups of applicable local, state, and federal laws that need to be included:

i. **Chemical-Specific:** Examples of chemical-specific laws include promulgated concentrations from another rule that result in adjusting proposed cleanup levels. Method A is inclusive of these laws. For Methods B or C, additional evaluation of chemical-specific applicable state and federal laws is required.

ii. **Action-Specific:** Examples of action-specific laws include requirements for obtaining local permits to excavate and/or dispose of contaminated soil, stormwater construction permits, or the requirement to notify local law enforcement in case human remains are discovered during excavation. All MTCA cleanups require evaluation of action-specific applicable state and federal laws.

iii. **Location-Specific:** Examples of location-specific laws include specific requirements for working near wetlands or archeologically important areas. All MTCA cleanups require evaluation of location-specific applicable state and federal laws.

After you have identified appropriate applicable local, state, and federal laws, report to Ecology the applicable local, state, and federal laws applicable to this cleanup, and how those laws and regulations specifically effect the proposed cleanup.

3. Selection of Cleanup Action.

Ecology has determined that additional testing is necessary at the Site before selecting a cleanup action. However, unless the results of the additional necessary testing discussed in this opinion provide evidence that additional remedial action is necessary, Ecology will likely concur that the Site's preferred remedial alternative meets the requirements of MTCA, as provided in Ecology's April 4, 2016, opinion.

The preferred remedial alternative includes focused source removal and recording an environmental covenant for contaminated media remaining beneath the Pacific Avenue South right-of-way and associated subsurface utility corridor.

[23] WAC 173-340-710(1).
[24] WAC 173-340-710(2).
[25] Note – MTCA Method A includes ARARs and concentration-based tables (WAC 173-340-700(5)(a)) If MTCA Method A remains in use as proposed Site cleanup levels, identify non-concentration based technical and procedural requirements. If Method B or C cleanup levels are proposed, also include concentration-based requirements.

At this time, additional source removal work has been conducted except areas associated with Pacific Avenue South right-of-way and the utility corridor. Additional focused source removal work may be needed depending on the results of the additional characterization data requested above.

The environmental covenant will memorialize:

- Prohibiting excavation in areas where contamination remains present without prior Ecology notification.
- Prohibiting residential land-use.
- Prohibiting disturbance of the building's vapor barrier and concrete foundation slab.
- Prohibiting use of groundwater at the Site.
- Providing long-term requirements for routine inspections of the building foundation as proxy for the vapor barrier.
- Providing long-term groundwater monitoring requirements and contingency planning in case the remedial action is not effective.

A draft environmental covenant package will be necessary for Ecology to complete our review of the preferred remedial alternative. Ecology suggests that you review Toxic Cleanup Program's *Procedure 440A: Establishing Environmental Covenants under the Model Toxics Control Act*,[26] Revised December 22, 2016, and include the following requirements in your next submittal:[27]

a. Draft Covenant: Ecology will need a draft covenant memorializing proposed institutional and engineered controls for all impacted properties. Also, provide the environmental covenant[28] in electronic word-processing-compatible format. Include the following as enclosures to the draft covenant:

i. Plan View Maps and Geologic Cross Sections: Include delineated concentration (1) isopleth plan view maps and (2) geologic cross sections showing the extents of remaining contamination at the Site. Include the boundaries of the MTCA facility and the Property. Indicate where insufficient data are available to delineate to natural background concentrations. These maps will be used to indicate where contamination remains at the Site after closure. For consistency with other sites in our program, Ecology prefers that data for these maps are provided in units of milligrams per kilogram (mg/kg) for soil, and micrograms per liter (µg/L) for groundwater.

[26] https://fortress.wa.gov/ecy/publications/documents/1509054.pdf.
[27] WAC 173-340-440(4).
[28] See the word processing formatted document at: https://fortress.wa.gov/ecy/publications/SummaryPages/1509054.html

ii. **Title Search:** Provide a complete title search as part of Exhibit A, legal description.

iii. **Land Survey:** Provide a land survey of impacted properties and rights-of-way, including platting and dedications.

iv. **Review the Title Search and Land Survey to determine if existing easements include any area of proposed engineered or institutional controls:**

1) Develop a plan view map or sketch of the locations of existing easements sufficient for Ecology to concur with your evaluation of whether any easements include the areas of proposed engineered or institutional controls.

2) For each easement that intersects proposed controls at the Site, provide either of the following:

   a) A signed subordination agreement.

   b) Sufficient evaluation of specific easement terms for Ecology to concur that the easement will not impact the integrity of the cleanup.

When reviewing easements, Ecology assumes that Property boundaries extend to the centerline of the adjacent Judson Avenue South and Pacific Avenue South rights-of-way.

v. **Financial Assurance Requirements:** Ecology suggests contacting our financial assurance specialist for direction on evaluating financial assurance requirements.[29] Review the financial assurance requirements of WAC 173-340-440(11). Include any needed financial assurance mechanisms and implementation of financial assurances based on the requirements. Ecology notes that while financial assurances may not be necessary at this Site, Ecology may rescind the no further action opinion without prior notification if the terms of an environmental covenant are not followed. If financial assurances are determined to be unnecessary, include sufficient explanation for Ecology to concur.

vi. **Local Government Notification Requirements:** Please document how the local government notification requirements of WAC 173-340-440(10) are completed. Ecology suggests providing the draft covenant and enclosure package to the local land use planning authority for review and comment. If comments are provided, update the draft covenant based on comments, and provide Ecology the correspondence, local government comments, and how those comments were addressed. If no response is received, include sufficient information for Ecology to concur that the correct local government agency was notified, the date they were notified, and that comments were sought. At this Site, Ecology believes that the appropriate local land use planning authority may be the City of Tacoma Planning Department.

[29] https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Dangerous-waste-guidance/Dispose-recycle-or-treat/Financial-assurance

vii. **Long-Term Groundwater Monitoring and Cap Monitoring Plan:** Ecology will need long-term monitoring of the existing groundwater monitoring well network to ensure the remedy is effective. A long-term groundwater and cap monitoring and reporting plan will be needed. That plan also needs to include contingency planning, in the event that the remedy is not effective.

Ecology suggests proposing a fifteen-month confirmation groundwater monitoring frequency for the first five years of post-closure monitoring, so that four quarters of seasonal groundwater results are obtained over the five years prior to Ecology's first required periodic review.

Reporting on the cap condition may be conducted at the same time as long term monitoring, and should be detailed in the monitoring plan. An initial inspection with photographs and description of the cap to be monitored should be included with the plan.

The plan should also include provisions to ensure that all environmental data is provided in accordance with WAC 173-340-840(5) and Ecology Toxics Cleanup Program Policy 840[30] (Data Submittal Requirements).

viii. **Contingency Plan:** A long-term groundwater and soil vapor contingency plan is required. That plan should describe those actions that will be conducted if long-term monitoring results exceed predetermined levels, or if cap maintenance or other maintenance is needed, such as repairing groundwater monitoring wells, or what to do if the cap is damaged.

The contingency plan may be triggered during regular inspection of the cap and monitoring well integrity, or by exceedances of cleanup levels at a point of compliance during long term monitoring. A simple and adequate contingency plan would include and detail, as applicable, that when specific levels are detected during long-term monitoring, additional confirmation sampling would be performed within 30 days of the initial receipt of results. If the cap were damaged, indoor air sampling and analysis would be conducted and the cap repaired.

Additional follow-up groundwater sampling would include all required testing for detected hazardous substances and related compounds. The contingency plan should include proposed analytes for contingency sampling in an analytical schedule. Results of performance and confirmation sampling for a contingency plan would be provided to Ecology within 90 days of the laboratory result date if no exceedances of criteria are detected, or within 30 days of the laboratory report result date if exceedances are detected, or for follow-up confirmation sampling.

[30] https://fortress.wa.gov/ecy/publications/documents/1609050.pdf

If confirmation sampling reveals the continued presence of contaminants above predetermined levels, the contingency plan should include that a work plan to further evaluate conditions beneath the Site would be submitted to Ecology within 60 days of receipt of results of confirmation sampling.

If contamination is proposed to be left in rights-of-way exceeding cleanup standards, or exceeding soil vapor cleanup screening levels where an engineered control such as a sidewalk is needed to reduce human exposure to contaminated soil vapor, a subordination agreement with the right-of-way holder would be required for implementing an environmental covenant. Grantor and/or subordinate agreements may be required with adjacent Property owners or right-of-way holders, determined by the extents of the Site. Alternately, consider a property-specific no further action approach excluding rights of way.

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 performed is 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).

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our Voluntary Cleanup Program web site.[31] If you have any questions about this opinion, please contact me at (360) 407-6266 or joseph.kasperski@ecy.wa.gov.

Sincerely,

Joe Kasperski, LG
Toxics Cleanup Program
Southwest Regional Office

JKK/tam

cc by email: Tracey Mulhern, Farallon, tmulhern@farallonconsulting.com
Rob Olsen, TPCHD, ROlsen@tpchd.org
Nicholas Acklam, Ecology, nicholas.acklam@ecy.wa.gov
Ecology Site File

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