

Electronic Copy

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY PO Box 47775 • Olympia, Washington 98504-7775 • 360-407-6300 Call 711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

June 6, 2019

Steve Tucker Trans-System, Inc. 7405 S Hayford Road Cheney, WA 99004

Re: Opinion on Proposed Cleanup of the following Site:

- Site Name: Puget Sound Truck Lines Longview
- Site Address: 146 Industrial Way, Longview, Cowlitz County, WA 98632-1004
- Facility/Site No.: 74481279
- Cleanup Site ID No.: 12165
- VCP Project No.: SW1671

Dear Steve Tucker:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your proposed independent cleanup of the Puget Sound Truck Lines Longview facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the <u>Model</u> <u>Toxics Control Act (MTCA)</u>,¹ chapter 70.105D Revised Code of Washington (RCW).

Issue Presented and Opinion

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

You have requested Ecology concur with a determination of no further action for the Site using a groundwater model remedy approach. You recommended applying conditional points of compliance and an environmental covenant. Ecology concurs that a model remedy approach for the Site may be appropriate. This opinion is the first of two opinions Ecology currently provides without additional charge for no further action requests at applicable model remedy sites. Our expectation is that you will address the comments provided in this opinion sufficiently for Ecology to support the next request for no further action at the Site.

¹ <u>https://fortress.wa.gov/ecy/publications/SummaryPages/9406.html</u>.

In this opinion, Ecology provides the results of a statistical evaluation of the Site data you collected, and has determined that based on the calculated restoration timeframe, establishing conditional points of compliance at this Site is not supported under MTCA. Ecology instead proposes you consider the following alternate, less complex and less time consuming approach to closure using the well network you have already established, standard points of compliance, and an environmental covenant:

- 1. Complete the requirements for establishing an environmental covenant provided in this opinion.
- 2. Develop a long-term groundwater monitoring and contingency plan sufficient for Ecology to evaluate site compliance with cleanup standards at our first regular five year periodic review.
- 3. Evaluate and report how each of Ecology's comments provided in this opinion were addressed.
- 4. Resubmit the request for no further action with necessary components.

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:

• Petroleum and petroleum-related chemicals into the soil and groundwater.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

Basis for the Opinion

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

- 1. 3 Kings Environmental, *Independent Cleanup Action*, *Puget Sound Trucking Facility*, March 15, 2012.
- 2. 3 Kings Environmental, *Independent Cleanup Action Addendum Report, Puget Sound Trucking Facility*, June 27, 2012.
- 3. 3 Kings Environmental, *Remedial Investigation & Cleanup Report, Puget Sound Freight Lines Facility*, December 24, 2012.
- 4. Washington State Department of Ecology, *Initial Investigation Field Report, Puget Sound Freight Lines*, January 17, 2013.

- Floyd|Snider, Puget Sound Truck Lines Longview VCP Application, containing the January 13, 2014, Groundwater Compliance Sampling and Analysis Plan, and Puget Sound Truck Lines Longview Site – Groundwater Compliance Well Installation and Monitoring Results, September 19, 2014.
- 6. Floyd|Snider, Puget Sound Truck Lines Longview Site VCP SW1429, 2014-2015 Groundwater Monitoring Results, October 14, 2015.
- 7. Floyd|Snider, Puget Sound Truck Lines Longview Site SW1429, 2016 Groundwater Monitoring Results and Summary of Soil Compliance, November 30, 2016.
- 8. Ecology, *Re: Further Action at the following Site: Puget Sound Truck Lines Longview,* January 27, 2017.
- 9. Floyd|Snider, Puget Sound Truck Lines Longview Site SW1429, 2017 Groundwater Monitoring Results, December 8, 2017.
- 10. Floyd|Snider, Puget Sound Truck Lines Longview Site SW1429, 2018 Groundwater Monitoring Results, December 14, 2018.

These 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 the documents is materially false or misleading.

Analysis of the Cleanup

Ecology has concluded that, upon completion of your proposed cleanup, **no further remedial action** will likely be necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology has determined your characterization of the Site is sufficient to establish cleanup standards and select a cleanup action. Historical Site characterization is provided in the documents listed above, and is summarized in Ecology's January 27, 2017, opinion for the Site. Since that opinion, groundwater in four Site monitoring wells was monitored six additional times between 2017 and 2018. Hazardous substances in Site groundwater remain occasionally detectable above appropriate cleanup levels during groundwater monitoring.

² https://ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests.

³ https://fortress.wa.gov/ecy/gsp/SiteSearchPage.aspx.

2. Establishment of cleanup standards.

Under MTCA, cleanup standards consist of three primary components; (a.) points of compliance,⁴ (b.) cleanup levels,⁵ and (c.) applicable local, state, and federal laws.⁶ Cleanup standards must be demonstrated as likely to be met within a reasonable restoration timeframe.⁷

a. <u>Points of Compliance</u>: Ecology concurs with the use of the following points of compliance at this Site:

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. ⁸
Soil-Protection of Groundwater	Based on the protection of groundwater, the standard point of compliance is throughout the Site. $^{\rm 9}$
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. ¹⁰
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. ¹¹
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. ¹²
Air Quality	Based on the protection of air quality, the point of compliance is indoor and ambient air throughout the Site. ¹³
Sediment	Based on the protection of sediment quality, compliance with the requirements of 173-204 WAC. ¹⁴

b. <u>Cleanup Levels</u>: MTCA Method A Cleanup levels have been used for the Site's evaluation. For each media and point of compliance above that you determine applicable to the Site, please recommend appropriate cleanup levels for each specific hazardous substance detected in the remedial investigation. Apply the proposed cleanup levels at the appropriate points of compliance. Ecology recommends providing a table of proposed cleanup levels and points of compliance for all hazardous substances detected at the Site.

⁴ WAC 173-340-200 "Point of Compliance."

⁵ WAC 173-340-200 "Cleanup level."

⁶ WAC 173-340-200 "Applicable state and federal laws," WAC 173-340-700(3)(c).

⁷ WAC 173-340-700(7), WAC 173-340-360.

⁸ WAC 173-340-740 (6)(d).

⁹ WAC 173-340-747.

¹⁰ WAC 173-340-7490(4)(b).

¹¹ WAC 173-340-720(8)(b).

¹² WAC 173-340-730(6).

¹³ WAC 173-340-750(6).

¹⁴ WAC 173-340-760.

- **c.** <u>Applicable Laws and Regulations:</u> 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 is currently available to help you evaluate the local requirements that may be necessary.¹⁵
 - i. All cleanup actions conducted under MTCA shall comply with applicable state and federal laws.¹⁶
 - ii. 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.^{17, 18}
 - iii. There are three general groups of applicable local, state, and federal laws that need to be identified and included in cleanup standards:
 - Chemical-Specific Applicable Local, State, and Federal Laws: A chemicalspecific applicable local, state, or federal law is generally a concentration from another rule that would result in lowering proposed cleanup levels. Method A is inclusive of chemical-specific applicable local, state, and federal laws and additional evaluation of Method A chemical-specific applicable local, state, and federal laws is not required. Methods B and C cleanup levels do not include applicable local, state, and federal laws and additional evaluation of chemicalspecific applicable local, state, and federal laws is required.
 - 2) Action-Specific Applicable Local, State, and Federal Laws: An action-specific applicable local, state, and federal law might be for example, the requirement for obtaining local permits to excavate and/or dispose of contaminated soil, or the requirement to notify in case human remains are discovered during excavation. All MTCA cleanups require evaluation of action-specific applicable local, state, and federal laws.
 - Location-Specific Applicable Local, State, and Federal Laws: Examples of location-specific applicable local, state, and federal laws would be specific requirements for working near wetlands or archeologically important areas. All MTCA cleanups require evaluation of location-specific applicable local, state, and federal laws.

¹⁵ Washington State Governors Office for Innovation and Assistance Project Questionnaire, accessible at: https://apps.oria.wa.gov/opas/index.asp.

¹⁶ WAC 173-340-710(1).

¹⁷ WAC 173-340-710(2).

¹⁸ 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 cleanup levels are proposed, also include concentration-based requirements.

d. <u>Reasonable Restoration Timeframe:</u> To determine whether a cleanup action provides for a reasonable restoration time frame, the factors of WAC 173-340-360(4)(b), as appropriate, need to be considered.

After you have selected appropriate applicable local, state, and federal laws, justify in reporting the applicable state and federal laws selections you made and how those laws and regulations impact proposed cleanup levels, points of compliance, or the cleanup, if at all. Ecology will need you to complete an evaluation of cleanup standards before we concur that the cleanup standards you established for the Site meet the substantive requirements of MTCA.

3. Selection of cleanup action.

Discussion:

Concentrations of diesel in groundwater remain above cleanup levels in Site monitoring wells. You conducted remedial excavation as an independent interim action in 2011, and have been monitoring four groundwater monitoring wells since that time. Groundwater concentrations have not definitively decreased to complete an empirical demonstration of compliance with MTCA cleanup standards.

Since Ecology's January 21, 2017, opinion, you conducted groundwater monitoring six additional times at the Site, and have now requested that Ecology concur with closure using groundwater Model Remedy 3, including an environmental covenant for the Site.

You proposed conditional points of compliance on the Property boundary. If Ecology concurred, monitoring wells would have to be advanced at the conditional points of compliance, and the Site would require a long-term groundwater monitoring plan and environmental covenant. Specific conditional points of compliance would be used as sentinel locations during long-term groundwater monitoring to ensure that the remedy is completed and remains effective.

You did not propose the specific monitoring well network at the Property boundaries where cleanup levels are currently met, and where the conditional points of compliance would be established and monitored as part of post-closure long-term confirmation monitoring.

Ecology statistically evaluated the Site monitoring data. The results show that:

- 1. Groundwater is not yet in full compliance with WAC 173-340-720(9)(a).
- 2. Groundwater will likely be cleaned up in a reasonable restoration timeframe.

Because groundwater will likely be cleaned up in a reasonable restoration timeframe, the use of conditional points of compliance is not supported under MTCA. However, Ecology believes that the evaluation provided below is appropriate in this Site-specific instance, and leads us to concur that standard points of compliance can be used for the cleanup using the existing monitoring well network.

The specific circumstances at this Site, combined with the significant record of performance groundwater monitoring post-remedial action, provide sufficient statistical confidence for Ecology to determine that the remedial action conducted is likely protective of human health and the environment.

However, post-closure long-term monitoring of the existing monitoring well network will be needed for two purposes:

- 1. To obtain additional performance samples supporting a statistical analysis confirming that cleanup standards are met.
- 2. To obtain additional confirmation samples ensuring the remedy remains effective sufficient to remove the environmental covenant during Ecology's regular post-closure review.

Proposed Conditional Points of Compliance: Under MTCA, conditional points of compliance are not supported where a site can be cleaned up in a reasonable restoration timeframe.¹⁹ Ecology evaluated restoration time frames for the Site based on Site data trends. Ecology's calculations show that it is likely practicable to meet the cleanup levels throughout the Site within a reasonable restoration time frame. Therefore, conditional points of compliance are not supported at the Site.

At this Site, if conditional points of compliance were appropriate, a monitoring well network would then need to be established for long-term groundwater monitoring where cleanup levels are currently met within the Property boundaries, as close as possible to the locations where contamination remains above cleanup levels. Reviewing this Site's data results, this would likely require installing new monitoring wells outside of the footprint of remaining contamination where cleanup standards are exceeded. You did not propose any additional monitoring wells, or long-term groundwater monitoring.

Ecology has evaluated the Site data, and we do not believe that additional monitoring wells are warranted. We believe the existing monitoring well network is sufficient to complete the cleanup.

Ecology recognizes that some of MTCA's requirements contain flexibility, and require the use of professional judgement in determining how to apply them at particular sites.²⁰ Based on the Site groundwater monitoring data you have reported, Ecology provides an alternate approach to no further action at the Site using a model remedy approach, standard points of compliance, using the existing monitoring well network, and including long-term groundwater monitoring that would be needed under any environmental covenant-based closure scenario at this Site.

The proposed Model Remedy 3 requires a conditional point of compliance.²¹ As a conditional point of compliance is not supported when a reasonable restoration timeframe

¹⁹ WAC 173-340-720(8)(c).

²⁰ WAC 173-340-360(2).

²¹ See p. 21, Ecology Publication No. 16-09-057, *Model Remedies for Sites with Petroleum Impacts to Groundwater*, revised December 2017.

can be achieved (like at your Site, with restoration estimated at 2-4 years), it is typical to show that the costs are disproportionate²² to the environmental benefits where the incremental costs of the alternative over that of a lower cost alternative exceed the incremental degree of benefits achieved by the alternative over that of the other lower cost alternative. However, model remedies do not require a feasibility study or disproportionate cost analysis.

As your Site does not appear to meet strict qualification necessary for Model Remedy 3,²³ Ecology evaluated your current Site conditions under WAC 173-340-360(3)(f). Ecology concurs with a proposal of Site closure with an environmental covenant and long-term compliance monitoring plan because:

• **Protectiveness.** Concentrations of diesel in soil appear to be less than MTCA Method A cleanup levels. Based on the evaluation below, the concentrations of diesel in groundwater appear to be less than the MTCA Method A cleanup levels at MW-1 and MW-3, and greater than the MTCA Method A cleanup level at MW-2 and MW-4.

Cleanup standards are estimated to be met within 2-4 years, and contamination is contained within the property boundaries. Current and future land use is anticipated to be a trucking facility with prohibition of use of shallow groundwater which might expose workers or trespassers to contaminated groundwater.

- **Permanence.** As diesel in groundwater is anticipated to naturally attenuate to below cleanup levels within 2-4 years, the cleanup proposed is anticipated to be permanent. Groundwater compliance monitoring is anticipated to be about as permanent in terms of remedial timeframe as a more active remedial strategy.
- **Cost.** The cost of implementing an environmental covenant and long-term groundwater compliance monitoring is likely much less than implementing a more permanent cleanup alternative (e.g., additional excavation, air sparge/soil vapor extraction, in-situ chemical oxidation, bioremediation). Additionally, active remediation would still require ongoing groundwater monitoring to evaluate and prove the effectiveness of the remedial alternative implemented, adding even more cost.

At your Site, the environmental benefits are a maximum reduction of diesel in groundwater of about 41.6 micrograms/Liter (μ g/L) (the difference between 541.6 μ g/L, the mean concentration in groundwater at MW-4, the more contaminated monitoring well, and 500 μ g/L, the MTCA Method A cleanup level for diesel in groundwater.). The cost of additional active remediation does not appear justified, based on the benefits to be obtained.

²² WAC 173-340-360(3)(e).

²³ See p. 21, Ecology Publication No. 16-09-057, Model Remedies for Sites with Petroleum Impacts to Groundwater, revised December 2017.

- Effectiveness over the Long-Term. As diesel in groundwater is anticipated to achieve cleanup levels within 2-4 years, the proposed remedy of an environmental covenant with a long-term monitoring plan is effective over the long-term.
- **Management of Short-Term Risks.** Human health and the environment are protected in that all purged groundwater will need to be placed in proper containers and disposed. No additional construction would be necessary which might create a new exposure route for workers.
- **Technical and Administrative Implementability.** Groundwater monitoring has already been conducted at the Site, and continued groundwater monitoring under an environmental covenant will be easily implemented. An environmental covenant is a standard administrative option and also straight forward to implement.
- **Consideration of Public Concerns.** Drinking water wells are not present on the Property, and no off-Property drinking water wells are at risk from the release at the Site. Based on the concentrations of diesel in soil and groundwater, vapor intrusion is not a risk to workers or customers at the Property.

Statistical Evaluation: In Ecology's January 17, 2017, opinion, Ecology provided the results of our statistical evaluation of the Site data. In this opinion, Ecology reexamines that statistical analysis in light of the additional data results you obtained in the time period 2017-2018. The additional data and Ecology's analysis supports pursuing closure of the Site with a covenant.

Ecology evaluated compliance monitoring data you provided following the procedures of WAC 173-340-720(9)(a):

 Ecology evaluated the true mean of Site groundwater monitoring analytical results²⁴ for diesel fuel by establishing a 95% upper confidence level on sample mean groundwater concentrations on a monitoring well by monitoring well basis. Ecology believes that it is reasonable and conservatively protective to assume that the true mean concentration is included in this confidence interval.

To determine how to calculate the 95% upper confidence level on sample mean groundwater concentrations, Ecology first determined the distribution of all reported diesel data results that had not received silica gel treatment. The data set included all field duplicate results. Ecology used a Shapiro-Wilk statistical analysis test to evaluate each monitoring well's data set.

Time series groundwater monitoring analytical results from each monitoring well appears normally distributed at a 0.05 significance level. Results of this evaluation indicate that 95% upper confidence levels on the mean based on the Student's t-test are appropriate for use.

²⁴ WAC 173-340-720(9)(c)(v)(B).

Using the Student's t-test approach, the calculated 95% upper confidence levels on the sample mean on a monitoring well by monitoring well basis for the data set described above are:

- MW-1 476.7 µg/L.
- MW-2 503.9 µg/L.
- MW-3 423.9 µg/L.
- MW-4 541.6 µg/L.

The calculated upper 95% confidence levels on the sample mean concentration, representing the interval that the true mean is expected, does not exceed cleanup levels at locations MW-1 and MW-3, but exceeds cleanup levels at locations MW-2 and MW-4.

Ecology reviewed provided laboratory quality assurance data for the project, noting that the levels of cleanup level exceedances reported are within Washington-state accredited laboratory reported error rates provided in reporting.

- Because cleanup levels are exceeded at two of four current monitoring wells, Ecology then evaluated the expected restoration timeframes for all Site monitoring wells. Ecology conducted a Mann-Kendall non-parametric trend test of the same data set on a monitoring well by monitoring well basis, to determine when Site groundwater is expected to meet cleanup levels throughout the Site. Non-parametric statistical analysis does not assume a specific data distribution. The results of that evaluation included:
 - a. Groundwater concentration results from the four monitoring wells displays statistically significant decreasing trends at the following confidence levels:
 - MW-1 85% CL
 - MW-2 95% CL
 - MW-3 95% CL
 - MW-4 85% CL
 - b. Based on the current 95% upper confidence levels on the sample means, and the slope and estimated error of the calculated decreasing trends, Ecology estimates that groundwater cleanup levels throughout the Site will be met at all Site groundwater monitoring wells within 2-4 years. Ecology believes that at this Site, 2-4 years is a reasonable restoration timeframe.

- 3. Ecology also evaluated the following additional MTCA compliance monitoring requirements required for all statistical compliance evaluations:
 - a. <u>More than 10% of sample concentrations exceeded cleanup levels during a representative sampling period.²⁵ For the representative sampling period, Ecology chose to include data obtained in the time period 2017-2018, excluding duplicate samples. Ecology's assumption is that the last two years of data are representative of current conditions. For that time period, excluding duplicates, cleanup levels were exceeded in four samples out of 23 total samples (17% of samples).</u>
 - b. <u>No single groundwater compliance sample reported is more than two times the cleanup level</u>.²⁶ The highest reported groundwater diesel concentration obtained during that same 2017-2018 time period was 670 μg/L, obtained from a field duplicate sample from MW-1 on June 14, 2017. The proposed cleanup level for diesel is 500 μg/L.
- 4. Ecology's review of Site remedial performance sampling data results leads to the following conclusions:
 - a. 95% Upper Confidence Levels on the mean diesel concentration are exceeded in MW-2 and MW-4.
 - b. 17% of sample concentrations exceed cleanup levels during the representative sampling period, exceeding the 10% maximum allowable in the regulation.²⁷
 - c. The Mann-Kendall model provides statistical confidence that remaining contamination at the Site will be cleaned up in 2-4 years. Ecology considers this a site specific reasonable restoration time frame.
 - d. Based on the known lateral and vertical extents of remaining groundwater contamination at the Site, remaining contamination above cleanup levels is generally limited to the area near MW-4.
 - e. Other identified pathways including surface water and terrestrial ecological evaluation appear incomplete. Additional information regarding the 2017 terrestrial ecological evaluation is requested below that may alter our conceptual site model.

²⁵ WAC 173-340-720(9)(e)(ii).

²⁶ WAC 173-340-720(9)(e)(i).

²⁷ WAC 173-340-720(9)(e)(ii).

<u>Terrestrial Ecological Evaluation</u>: Ecology needs additional information prior to concurring with Site closure with an environmental covenant. In the terrestrial ecological evaluation provided as Attachment 3 to the 2017 Groundwater Monitoring report:

- 1. Referring to Table 749-1, please ensure you include a plan view map with your next submittal delineating your estimate of 0.5 acres of contiguous undeveloped land within 500 feet of any area of the Site.
- 2. Referring to Table 749-1, you indicate that all parts of the Site are located on commercial or industrial property. Therefore, with your next submittal ensure you address:
 - a. How all parcels of property impacted by the release meet the definition of commercial or industrial property provided in WAC 173-340-7490(3)(c).
 - b. How the requirements of WAC 173-340-7490(b)(i-ii) are met at the Site.
- 3. If the remedy is based at least in part on future land use assumptions, include the anticipated completion data for future development for Ecology's concurrence (WAC 173-340-7490(d)).

Environmental Covenant Requirements: The recommended cleanup alternative is proposed including an institutional control memorialized by an environmental covenant restricting groundwater use. A draft environmental covenant was submitted to Ecology as Attachment 2 in the March 3, 2019 Report.

Ecology suggests that you Review Toxic Cleanup Program's <u>Procedure 440A: Establishing</u> <u>Environmental Covenants under the Model Toxics Control Act</u>, Revised December 22, 2016,²⁸ and include the following requirements in your next submittal:²⁹

- 1. A revised draft covenant provided separately in word-processing-compatible electronic format, memorializing proposed institutional and engineered controls for all impacted properties.
- Delineated concentration (1) isopleth plan view maps and (2) geologic cross sections showing the extents of remaining contamination at the Site in plan view and cross section. Include the boundaries of the MTCA facility. Indicate where insufficient data are available to delineate to natural background concentrations.
- 3. A complete title search as part of Exhibit A, legal description.
- 4. A land survey of impacted properties and rights-of-way, including platting and dedications. 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 building foundation is needed to reduce human exposure to

²⁸ https://fortress.wa.gov/ecy/publications/documents/1509054.pdf.

²⁹ WAC 173-340-440(4).

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.

- 5. Any needed financial assurance mechanisms and implementation of financial assurances based on the requirements of WAC 173-340-440(11). Financial assurances may not be necessary at this Site; however, if the terms of an environmental covenant were not followed, Ecology may rescind the no further action opinion without prior notification. If no financial assurances are needed, include sufficient explanation for Ecology to concur.
- 6. Document how the local government notification requirements of WAC 173-340-440(10) were completed. Ecology suggests providing the updated 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.
- 7. Ensure any needed grantor or subordination agreements are completed and included with the draft environmental covenant.
- Long-term Monitoring Plan: A long-term groundwater monitoring and reporting plan to verify that groundwater cleanup standards are met that includes contingency planning. Ensure sufficient information will be collected to verify that that the remedy is completed and remains effective.

Ecology suggests proposing a fifteen month confirmation monitoring frequency for the first five years so that four quarters of seasonal groundwater results are obtained over those five years prior to Ecology's first required review, providing sufficient sample results obtained for Ecology to determine whether or not additional monitoring will be necessary.

- 9. Contingency Plan: A long-term groundwater monitoring and reporting contingency plan that describes those actions that will be conducted if long-term monitoring results exceed predetermined levels, or if cap maintenance or other maintenance or repair of the remedy is required, such as repairing monitoring wells.
- 10. A contingency plan is typically triggered by exceedances of cleanup levels at a point of compliance. For this contingency plan, Ecology suggests that you instead propose appropriate levels that would trigger contingency requirements. A simple and adequate contingency plan would include, 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.

Follow-up groundwater sampling would include all required testing for unknown oils at a petroleum release as listed in MTCA Table 830-1. The plan should include proposed analytes for contingency sampling in the contingency plan analytical schedule.

11. Results of performance and confirmation sampling for a contingency plan should 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.

If confirmation sampling reveals the continued presence of contaminants above predetermined levels, 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.

The plan would ensure all environmental data is provided in accordance with WAC 173-340-840(5) and Ecology Toxics Cleanup Program Policy 840 (Data Submittal Requirements).

- Other requirements for the model remedy approach. Please report:
 - a. Whether any groundwater supply well is within 250 feet of any part of the Site.
 - b. How contaminant source removal was conducted to the maximum extent practicable as provided in Ecology's model remedy guidance.³⁰
- Also report how the requirements of WAC 173-340-900 Table 830-1 were completed in soil and groundwater at:
 - a. The location of the former aboveground storage tank.
 - b. The location of the former waste oil tank.

³⁰ Ecology Toxics Cleanup Program, *Model Remedies for Sites with Petroleum Contaminated Soils*, Publication No. 15-09-043, Revised December 2017. Ch. 4.

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 70.105D.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 70.105D.030(1)(i).

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program. 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 <u>Voluntary</u> <u>Cleanup Program web site</u>.³¹ If you have any questions about this opinion, please contact me at (360) 407-6528 or adam.harris@ecy.wa.gov.

Sincerely,

Adam Harris, LHG Toxics Cleanup Program Southwest Regional Office

AH: tm

cc: James Williams, Wil-Hunt I, LLC Brett Beaulieu, Floyd|Snider Nicholas M. Acklam, Ecology Ecology Site File

³¹ <u>https://www.ecy.wa.gov/vcp</u>