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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Southwest Region Office
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February 4, 2025

Michael Fox
8200 NE Highway 99
Vancouver, WA 98665-8817
info@foxcarwash.com

Re: Further Action at the following Contaminated Site:

- **Site Name:** Hazel Dell Car Wash Gasoline Release
- **Site Address:** 8200 NE Hwy 99, Vancouver 98665 Clark
- **Facility/Site ID:** 18315758
- **Cleanup Site ID:** 17137
- **VCP Project ID:** SW1844

Dear Michael Fox:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Hazel Dell Car Wash Gasoline Release facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA),[1] chapter 70A.305 Revised Code of Washington (RCW).[2]

Issue Presented and Opinion

Ecology has determined that further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, chapter 70A.305 RCW, and its implementing regulations, Washington Administrative Code (WAC) chapter 173-340[3] (collectively "substantive requirements of MTCA"). The analysis is provided below.

[1] https://apps.ecology.wa.gov/publications/SummaryPages/9406.html
[2] https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305
[3] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340

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 as gasoline range organics (TPH-GRO) into the soil and groundwater.
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) into the soil and/or groundwater.

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.

This opinion does not alter the May 12, 2011, no further action determination for the Hazel Dell Carwash Site (CSID: 5636). Based on Ecology's current understanding of the Sites, these are two separate releases.

Basis for the Opinion

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

1. AEG Atlas, LLC, *Remedial Investigation / Focused Feasibility Study*, August 26, 2024.
2. Ecology, *No Further Action at the Following Site: Hazel Dell Car Wash*, May 12, 2011.
3. 3 Kings Environmental (3KE), *First Quarter 2011 Groundwater Monitoring Report*, April 7, 2011.
4. 3KE, *Quarterly Monitoring Addendum: Bioremediation at Hazel Dell Car Wash*, July 14, 2010.
5. Bergeson-Boese & Associates, Inc, *Site Assessment Report*, April 19, 1999.

You can request this document by filing a records request.[4] For help making a request, contact the Public Records Officer[5] or call (360) 407-6040. Before making a request, check whether the documents are available on Ecology's Cleanup Site Search webpage.[6]

[4] https://ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests
[5] publicrecordsofficer@ecy.wa.gov
[6] https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=

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.

For the purposes of this opinion, the subject property shall be identified as the four corners of contiguous[7] Clark County tax parcels 145253000 and 145345000 (the Property). The Property is improved with a 2,100 square foot building in the southwest corner, fuel dispensers and canopy near the center of the parcels, and a 2,862 square foot car wash building along the northern Property boundary. Historically the Property was developed for agricultural use until redevelopment as a fuel and car wash business beginning in 1971.

In August 1996, a soil and groundwater investigation was completed at the Site which suggested the underground storage tank (UST) system had released and was impacting soil and groundwater at the Site. As part of this investigation, seven soil borings were converted to permanent monitoring wells which, upon sampling, indicated TPH-GRO and BTEX in groundwater near the UST nest.[8]

In August 1999, the three USTs (2 unleaded gasoline and 1 leaded gasoline) were decommissioned and removed from the Site. Approximately 561.45 tons of TPH-GRO and BTEX impacted soil was excavated for disposal as part of the UST decommissioning effort.[9] Soil excavation sampling indicated multiple areas above the MTCA Method A cleanup level (MTCA-A CUL) for benzene in multiple areas around the UST nest and dispensers.[10] As part of the 1999 UST removal and soil excavation, significant property redevelopment occurred in the form of a renovated carwash building, installation of new USTs (southeast of the removed tanks), a new fuel area canopy, new fuel dispensers (relocated southeast of the removed dispensers), and the detailing shop was constructed. As part of these activities monitoring wells MW-1, MW-2, and MW-4 were decommissioned. On May 10, 2006, Ecology provided a Partial Sufficiency letter describing no further action was necessary for soil but further action was needed to address previously identified groundwater contamination at the Site.[11]

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[7] Ecology, *Guidelines for Property Cleanups under the Voluntary Cleanup Program*, July 2015. Section 3.5.
[8] Bergeson-Boese & Associates, Inc, *Site Assessment Report*, April 19, 1999. Section 3.0.
[9] Bergeson-Boese & Associates, Inc, *Site Assessment Report*, April 19, 1999. Section 5.2
[10] Bergeson-Boese & Associates, Inc, *Site Assessment Report*, April 19, 1999. Table 2.
[11] Ecology, *Partial Sufficiency and Further Action Determination*, May 16, 2006.

Quarterly groundwater monitoring was completed between October 2006 and August 2007. Monitoring wells MW-3 and MW-5 were used to monitor groundwater in addition to observation wells OW-A and OW-B which are constructed within the new UST nest. Monitoring wells MW-6 and MW-7 were apparently covered and unable to be located.[12] Groundwater monitoring indicated continued TPH-G and BTEX impacts near OW-A and OW-B. Groundwater monitoring continued on a semi-annual schedule until January 2010.[13]

On May 14, 2010, 5 gallons of Baclean 5000, a microbial remediation amendment, was gravity injected into OW-A and OW-B. The injection was to reduce persistent TPH-GRO and BTEX observed at the Site, particularly at OW-A and OW-B.[14] Beginning May 14, 2010, quarterly groundwater monitoring was resumed through the end of 2010. On May 12, 2011, Ecology concurred that no further action was required at the Site.

In January 2024, a Phase I environmental site assessment (Phase I ESA) was completed ahead of a planned property transaction. The Phase I ESA identified various recognized environmental conditions associated with the operating businesses on the Property as well as adjacent contaminated sites and the historical on-property contamination. A Phase II ESA was completed between January 31 and February 1, 2024. The Phase II consisted of eight soil borings with groundwater samples collected from each boring. Groundwater was encountered between 7 and 10 feet below ground surface (bgs). TPH-GRO was observed at concentrations exceeding the MTCA-A CUL in soil collected from boring B-5 (10 feet bgs) and in groundwater collected from B-9.[15]

To further characterize previous detections and exceedances, four additional soil borings were advanced and one permanent groundwater well was installed on February 22, 2024. Soil collected from soil boring B-9, adjacent to B-2, bore concentrations of TPH-GRO.[16] Other soil borings did not bear detectable petroleum products in soil or groundwater. As part of the analysis completed, volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH) were also analyzed for calculation of a Site-specific Method B TPH CUL.[17] Groundwater collected from MW-1 had concentrations of benzene exceeding the MTCA-A CUL and detectable concentrations to TPH-GRO and TEX.

On April 8, 2024, four additional soil borings were advanced to investigate the observed groundwater impacts at MW-1. Boring B-16, located on the north adjacent U-Haul Hazel Dell property, indicated concentrations of benzene in soil and TPH-GRO and benzene

[12] 3KE, *Work Plan for Quarterly Groundwater Monitoring*, September 18, 2006.
[13] 3KE, First Quarter 2011 Groundwater Monitoring Report, April 7, 2011. Attachment B.
[14] 3KE, *Quarterly Monitoring Addendum: Bioremediation at Hazel Dell Car Wash*, July 14, 2010
[15] AEG, Remedial Investigation / Focused Feasibility Study, August 26, 2024. Section 2.1.2.
[16] AEG, Remedial Investigation / Focused Feasibility Study, August 26, 2024. Table 1.
[17] AEG, Remedial Investigation / Focused Feasibility Study, August 26, 2024. Appendix C.

groundwater exceeded the MTCA-A CUL. Groundwater collected from B-16 also bore detectable TEX concentrations.[18]

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

A. Contaminant Source Evaluation

MW-1 Area

Ecology suggests further investigation of the Property, particularly in the area along the utility corridor between B-13 and the NE HWY 99 right of way, is needed. Additionally, a permanent monitoring well constructed near B-16 may help determine if the observed temporary grab sample concentrations are accurately representative of groundwater conditions.

Contamination in groundwater near MW-1 and B-16 has been attributed to spills associated with gasoline theft from trucks parked on the north-adjacent property. Ecology acknowledges this is a possibility but needs additional information to concur with this rationale.

In event of a spill (or series of spills), Ecology would expect shallow (0-5 ft bgs) soil contamination to be observed at the nearest down-slope break in asphalt. There appears to be a break in asphalt along the fence line between the Property and the north-adjacent U-Haul property, which is straddled by MW-1 and B-16.[19] Ecology suggests evaluating the area below the fence as it is the most likely vector for a potential release from the adjacent property. Sampling should include all required analyses provided as WAC 173-340-900 Table 830-1 column gasoline range organics, as well ethanol, hexane, ethyl tertiary-butyl ether, and tertiary-butyl alcohol. At a minimum, Ecology suggests resampling MW-1 for the analytes described above and reviewing resulting chromatograms for contributions of volatiles. Ecology further recommends review and submittal of chromatograms for the 2024 water samples with detectable TPH-GRO and/or BTEX.

Ecology acknowledges there is a utility corridor in this area and suggests planning for lower impact exploration methods such as air-knifing past nearby utility line depths. Based on suggested release mechanism and observed magnitudes of concentrations in groundwater at B5-W (TPH-GRO 7,200 µg/L), Ecology is not currently concerned with volatile loss as a potential result of introducing vacuum to facilitate borings in this area.

[18] AEG, Remedial Investigation / Focused Feasibility Study, August 26, 2024. Table 2.
[19] AEG, Remedial Investigation / Focused Feasibility Study, August 26, 2024. Figure 3.

Ecology notes that BTEX concentrations observed in sample B16-W are more expected of a mildly weathered gasoline release than the detections observed at MW-1, however the location is topographically higher and hydraulically upgradient of a potential release point. Provided this physical information, the lack of similar TEX contributions observed in groundwater, as well as the location-to-location ratio of benzene to gasoline, the relationship between detections at B-16, B-5, and MW-1 is currently unknown.

B-2 Area

The soil detections observed at soil boring B-2 and B-9 appear to have likely been collected from a prism of remnant contaminated soil associated with the 1999 UST removal and soil excavation interim action. The recent data, coupled with information documenting the 1999 cleanup work, indicates observed TPH-GRO is more likely than not spatially limited and does not warrant further investigation. Specifically, these values are below the generic Method B TPH cleanup level of 1,500 mg/kg as described in Ecology's Model Remedies for Sites with Petroleum Contaminated Soils.[20]

Consideration of Model Remedies is appropriate for the 1999 release area as it was limited to the property. Despite the recent detections likely associated with that release this opinion does not suggest further interrogation of the closed site file.

B. Focused Feasibility Study Results

Ecology has reviewed the focused feasibility study (FFS) and determined that additional investigation is needed before selecting a remedial alternative.[21]

However, the FFS presented does not achieve the requirements of WAC 173-340-351. Specifically, Ecology does not believe a reasonable number[22] or types of cleanup alternatives have been evaluated. For the two alternatives discussed, neither constitute a permanent cleanup action,[23] and one of which is suggested to be disproportionately costly without completing the disproportionate cost analysis described in WAC 173-340-360(5)(a) through 5(c).

[20] Ecology, *Model Remedies for Sites with Petroleum Contaminated Soils*, December 2017. Chapter 5.
[21] WAC 173-350-350(6)(k)
[22] WAC 173-340-351(5)
[23] WAC 173-340-351(6)(b)(ii)

Furthermore, as groundwater is currently understood to impact greater than the MTCA-A CUL, there is not an approved (or proposed) conditional point of compliance (CPOC). A CPOC is required where it can be demonstrated that it is not practicable to meet the cleanup level throughout the Site at the standard point of compliance within a reasonable restoration timeframe.[24] However, it is unlikely Ecology would concur with establishing a conditional point of compliance as there hasn't been any cleanup implemented at the Site or property related to this release.[25]

Ecology recommends completing the remedial investigation and considering a wider variety of cleanup alternatives with support of a disproportionate cost analysis before selecting a preferred remedial alternative. Refer to Ecology's *Guidelines for Property Cleanups under the Voluntary Cleanup Program*[26] for additional guidance regarding property-specific no further action determinations.

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.

Cleanup Standards: Under MTCA, cleanup standards consist of three primary components; points of compliance,[27] cleanup levels,[28] and applicable state and federal laws.[29]

a. Points of Compliance. Points of compliance are the specific locations at the Site where cleanup levels must be attained. Ecology concurs with your proposed standard points of compliance.[30] For clarity, Ecology provides the following table describing the proposed standard points of compliance:

[24] WAC 173-340-720(8)(c)
[25] Ecology, *Guidelines for Property Cleanups under the Voluntary Cleanup Program*, July 2015. Section 4.4.3.2.
[26] https://apps.ecology.wa.gov/publications/SummaryPages/0809044.html
[27] WAC 173-340-200 "Point of Compliance."
[28] WAC 173-340-200 "Cleanup level."
[29] WAC 173-340-200 "Applicable state and federal laws," WAC 173-340-700(3)(c).
[30] AEG, *Remedial Investigation / Focused Feasibility Study Report*, August 26, 2024.

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. *WAC 173-340-740 (6)(d)*
Soil- Protection of Groundwater	Based on the protection of groundwater, the standard point of compliance is throughout the Site. *WAC 173-340-740(6)(b)*
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. *WAC 173-340-7490(4)(b)* ***Pathway incomplete by exemption.***
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. *WAC 173-340-720(8)(b)*
Air Quality	Based on the protection of air quality, the point of compliance is indoor and ambient air throughout the Site. *WAC 173-340-750(6)*

Terrestrial Ecological Evaluation. Ecology has reviewed the attached TEE form and concurs that the Site qualifies for an exemption on the basis that there is less than 1.5 acres of contiguous undeveloped land on or within 500 feet of the Site.[31] In the future, please demonstrate support of TEE conclusions narratively, or in this case, graphically.

b. Cleanup Levels. Cleanup levels are the concentrations of a hazardous substance in soil, water, air, or sediment that are determined to be protective of human health and the environment. At this Site, MTCA Method A unrestricted cleanup levels were used to TPH-GRO and BTEX contamination detected at the Site.

A Site Specific MTCA Method B TPH soil CUL was incorrectly calculated for the Site. As provided in WAC 173-340-900 Table 830-1 column Gasoline Range Organics, several required compounds were missing from laboratory analysis. Specifically, 1-2,dibromoethane, 1-2,dichloroethane, naphthalenes, and n-hexane are required but missing from analysis and inclusion in the CUL calculation. As discussed earlier in the letter, an alternate CUL of 1,500 mg/kg was identified by Ecology as appropriate for the B-2 area.

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.

[31] WAC 173-340-7491(1)(c)(i)

Please note that other requirements apply to the cleanup action based on the type of the action or location of the Site. Those requirements are specified in the Report.[32]

At this time, Ecology has determined the following additional requirements apply to the cleanup based on the type of the action or the location of the Site:

- Well construction and maintenance requirements: WAC 173-160.

3. Selection of Cleanup Action.

Ecology has determined that additional remedial investigation is necessary at the Site before selecting a cleanup action.

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 70A.305.040(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 70A.305.080(8) 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 70A.305.170(6).

[32] AEG, *Remedial Investigation / Focused Feasibility Study*, August 26, 2024. Section 4.1.

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 webpage.[33] 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 Region Office

JKK/kw

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Ecology Site File

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