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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Southwest Region Office
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December 20, 2023

Kelly Clary
Bud Clary Auto Group
1030 Commerce Ave
Longview, WA 98632
kelly.clary@budclary.com

Re: Further Action at the following Site:

- **Site Name:** Bud Clary Subaru
- **Site Address:** 961 Commerce Ave Longview, Cowlitz County, WA 98632
- **Facility/Site ID:** 34656
- **Cleanup Site ID:** 14902
- **VCP Project ID:** SW1706

Dear Kelly Clary:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Bud Clary Subaru 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

¹ <https://apps.ecology.wa.gov/publications/SummaryPages/9406.html>

² <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305>

Administrative Code [\(WAC\) chapter 173-340](#)³ (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 as gasoline range organics (TPH-GRO), as diesel range organics (TPH-DRO), and oil range organics (TPH-ORO) into soil and groundwater.
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) into soil.
- Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) into soil.

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. Blue Sage Environmental, Inc (BSE), *Groundwater Monitoring 2021–2023 & Additional Site Characterization Report*, July 15, 2023.
2. BSE, *2020 Annual Status Report*, February 8, 2021.
3. BSE, *2019 Annual Status Report*, February 3, 2020.
4. BSE, *Site Investigation/Interim Cleanup Action Report*, January 8, 2019.

You can request these documents 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

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

Analysis of the Cleanup

³ <https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340>

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=14902>

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 appreciates the extensive efforts to characterize the nature and extent of contamination, use of guidance material, and interim actions completed to date. The following describes our understanding of the Site and discusses the following understood data gaps.

- Incorrect TPH-GRO cleanup level applied.
- Insufficient soil data near the Fir Street right-of-way.

The Bud Clary Subaru facility (Site) is located in Longview on Cowlitz County tax parcel 09278 (Property). A commercial car dealership currently occupies the parcel. In 2018, an existing building was demolished to facilitate construction of a new showroom. Contamination at the Property was discovered during geotechnical investigation ahead of new building development. On April 23, 2018, several test pits were completed on the north side of the Property which facilitated visual and olfactory identification of petroleum impacts to soil and groundwater. Soil analytical data indicated total petroleum hydrocarbons as gasoline range organics (TPH-GRO), total petroleum hydrocarbons as oil range organics (TPH-ORO), and carcinogenic polycyclic aromatic hydrocarbons (cPAHs) exceeded the MTCA Method A (MTCA-A) cleanup level (CUL).

Excavation of petroleum contaminated soil (PCS) along the northern portion of the Property commenced on July 16, 2018. Approximately 45 tons of PCS, tires, oil filters, and other oily debris was transported to the Cowlitz County Landfill for disposal. Excavation terminated at approximately 10 feet below ground surface (bgs), where groundwater was encountered. Seven excavation margin soil samples were collected which indicated TPH-ORO exceeded MTCA-A CULs in various locations, however, the locations of these samples within the excavation have not been provided to Ecology.

A third phase of investigation began July 23, 2018, with advancement of 43 soil borings across the Property. Soil and groundwater analytical data indicated a lobe of TPH-GRO and TPH-ORO contamination along the north Property line extending south approximately 70 feet, at depths between 6 and 12 feet bgs. Excavation of PCS resumed in August 2018, which terminated 10 to 11 feet bgs in areas where contamination had been identified. Approximately 1,173 tons of excavated PCS was disposed of at Wasco County Landfill. August 17, 2018, approximately 4,000 gallons of groundwater, which had infiltrated the excavation, was pumped into a tanker truck, and transported to ORRCO, Inc where it was treated. On August 22, 2018, five soil samples were collected at approximately 12 feet bgs, below the excavation floor depth of 10 to 11 feet bgs. Soil samples exhibited TPH-ORO concentrations in excess of the MTCA-A CUL. Four soil borings were advanced south and east of the excavation on August 29, 2018, which facilitated collection of samples at 10 and 15 feet bgs. Analytical data for these soil samples indicated non-detectable

concentrations of analyzed constituents. On August 27, 2018, a mixture of BOS 200, gypsum, and bacteria were injected via 58 injection points to treat residual soil and groundwater contamination.

To assess the efficacy of the August 2018 bioremediation injection, five groundwater monitoring wells were constructed to facilitate quarterly groundwater sampling. On April 29, 2019, soil samples collected during soil boring advancement indicated concentrations of TPH-GRO, total petroleum hydrocarbons as diesel range organics (TPH-DRO), TPH-ORO, and benzene in excess of MTCA-A CULs at locations B7 and B8. No Site hazardous substances were detected in groundwater collected from the compliance well network (MW-1 through MW-5). Quarterly groundwater monitoring began June 27, 2019, and was discontinued after the December 19, 2019, event until resuming September 25, 2020. The most recent groundwater sampling event was completed on June 1, 2022. In that time, there was only one detection of any analyzed substances.

The customer is requesting a no further action determination with an environmental covenant as prescribed by Ecology's Model Remedies for Site with Petroleum Impacts to Groundwater, Remedy 2.

Incomplete remedial investigation

- a) Additional soil and groundwater investigation is needed along Fir Street. Reviewing Site soil data collected July 2018,⁷ soil sample locations SB-6-12, SB-8-12, SB-9-10, and SB-39-10 exhibited concentrations of TPH-GRO or TPH-DRO in excess of MTCA-A CULs. Groundwater collected from SB-40 also exhibited TPH-GRO less than but near the MTCA-A CUL of 1,000 µg/L.

Ecology needs to review additional soil and groundwater data collected from areas north-northeast of the line between SB-9 and SB-37. Soil samples collected from SB-37 and SB-40 are shallower than adjacent samples which exceed the MTCA-A CUL. Ecology has reviewed the analytical data and evaluates that the horizon of soil contamination is principally observed around 12 feet bgs. Contamination appears to be no deeper than 16 feet bgs across the Site. Additional evaluation may be needed after review of soil and groundwater data collected from this area due to the proximity of underground utilities. Ensure forthcoming soil sample collection depths are similar to nearby samples which exceed the MTCA-A CUL.

- b) Given the number of soil borings and analytical samples collected, creation and interpretation of the Site in cross section would be helpful to understand the disposition of contamination. Please provide cross section maps with contaminant isopleths to aid in

⁷ EPI, *Interim Deliverable*, August 1, 2018. Figure 1.

development of future remedial investigation activities and Ecology's review.

A composite drawing of all borings completed at the Site (SB-1 through SB-43, B-1 through B-12, and excavation performance samples) would also assist Ecology's review of Site data.

- c) cPAHs were detected in a soil sample⁸ collected by Cowlitz Clean Sweep. The location has not been provided to Ecology. Considering the detections of cPAHs lack spatial information, Ecology recommends collecting additional soil samples from areas of known or probable contamination, for cPAH analysis. Pairing cPAH analysis with TPH analysis is suggested to ensure samples are evaluating impacted areas.
- d) Please clarify whether all oily debris was excavated and disposed of⁹ or if landfilled debris is left in place.

Vapor Intrusion Assessment

Soil gas was monitored over two events separated by a month in 2021. The samples were collected under conditions that are not typically optimal for vapor intrusion analysis. Specifically, barometric pressure was not recorded. Using the National Weather Service daily almanac for Longview, WA,¹⁰ observed high temperatures were greater than 70-degree Fahrenheit suggesting elevated barometric pressure. Furthermore, there was variation of measured APH EC 5-8 concentrations between the two soil gas events to necessitate further evaluation.

Ecology recommends collecting at least one additional soil gas sample from each collection point when temperatures are low and barometric pressure is falling and low, optimal conditions for vapor intrusion to occur.¹¹ Provide sample collection meteorological data on a table with the next report. For additional guidance on performing vapor intrusion (VI) studies, Ecology recommends reviewing the Guidance for Evaluating Vapor Intrusion in Washington State, and for petroleum sites, specific attention should be given to Appendices B and E.

This Site may qualify to use a commercial exposure scenario, provided establishing an environmental covenant restricting Site use to commercial activities. Ecology suggests determining whether this is appropriate after the next sub slab soil gas sampling event.

Terrestrial Ecological Evaluation

⁸ Apex Laboratories, RE: A8E0879 – BC Subaru – 9318134, Analytical Sample Results.

⁹ BSE, Site Investigation/Interim Cleanup Action Report, January 8, 2019. Section 2.3.

¹⁰ <https://www.weather.gov/wrh/Climate?wfo=sew>

¹¹ Ecology, Guidance for Evaluating Vapor Intrusion in Washington State, March 2022. Section 3.6.3

The Terrestrial Ecological Evaluation (TEE) is suggested to end based on WAC 173-340-7491(1)(b), barriers to exposure.¹² This conclusion requires establishing those barriers as a protective cap established by a restrictive covenant. This conclusion may be appropriate for the Site, but the TEE should be re-evaluated once the remedial investigation has concluded.

Model Remedy Use

Ecology's Model Remedies use are limited to simple Sites which does not include Sites with off property impacts. Complete the Site remedial investigation as discussed above so Ecology can evaluate whether model remedy use is appropriate.

Electronic Information Management Database

Site analytical data has not been submitted to Ecology's electronic information management (EIM) database as required by Ecology's [Policy 840](#) and described Acceptance of VCP Application letter.¹³ Future opinions will not be issued until all Site data collected since August 1, 2005, has been accepted into EIM.

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

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.

TPH-GRO soil cleanup level

Soil TPH-GRO data at the Site should be compared with the lower MTCA-A soil CUL of 30 mg/kg. Benzene was observed in soil boring B7. As such, the lower soil CUL applies to Site soil.¹⁴ Benzene has not been observed in groundwater, so the higher groundwater MTCA-A groundwater CUL for TPH-GRO applies.¹⁵

Petroleum range identification

TPH-DRO and TPH-ORO have been reported as two separate ranges. It is unclear on what basis the data has been compared to two separate ranges. Until additional information is provided, Ecology considers these ranges as one and suggests summing

¹² BSE, *Site Investigation/Interim Cleanup Action Report*, January 8, 2019. Section 5.0.

¹³ Ecology, Acceptance of VCP Application for the following Contaminated Site: Bud Clary Subaru, March 24, 2020. Reporting Requirements.

¹⁴ WAC 173-340-900 Table 740-1, Footnote s.

¹⁵ WAC 173-340-900. Table 720-1, Footnote x.

the TPH-DRO and TPH-ORO concentrations. Review [Implementation Memorandum 4](#)¹⁶ for additional information regarding when using multiple ranges is appropriate.

Points of Compliance

The property boundaries have been proposed as the Site point of compliance. MTCA defines a Site as any area where a hazardous substance has been come to be located. Reliance on the property lines as points of compliance does not achieve MTCA requirements. A point of compliance is the location within a given media where cleanups established shall be obtained.¹⁷ Please review the Points of Compliance section below for MTCA citation and descriptions of each point of compliance.

Cleanup Standards: Under MTCA, cleanup standards consist of three primary components; points of compliance,¹⁷ cleanup levels,¹⁸ and applicable state and federal laws.¹⁹ After conclusion of remedial investigation work, Ecology will need you to review and/or propose specific:

- Applicable local, state, and federal laws.
- Points of compliance.
- Appropriate cleanup levels for all hazardous substances that exceeded cleanup screening levels.

Ecology suggests providing tables detailing the specific proposed cleanup standards.

- a. Points of Compliance.** Points of compliance, that you need to propose, 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:

¹⁶ <https://fortress.wa.gov/ecy/publications/documents/0409086.pdf>

¹⁷ WAC 173-340-200 "Point of Compliance."

¹⁸ WAC 173-340-200 "Cleanup level."

¹⁹ WAC 173-340-200 "Applicable state and federal laws," WAC 173-340-700(3)(c).

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. <i>WAC 173-340-740 (6)(d)</i>
Soil- Protection of Groundwater	Based on the protection of groundwater, the standard point of compliance is throughout the Site. <i>WAC 173-340-740(6)(b)</i>
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. <i>WAC 173-340-7490(4)(b)</i>
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. <i>WAC 173-340-720(8)(b)</i>
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. <i>WAC 173-340-730(6)</i>
Air Quality	Based on the protection of air quality, the point of compliance is indoor and ambient air throughout the Site. <i>WAC 173-340-750(6)</i>
Sediment	Based on the protection of sediment quality, compliance with the requirements of 173-204 WAC. <i>WAC 173-340-760</i>

- 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 screening levels were used to evaluate contamination detected at the Site. The following table summarizes Ecology's understanding of cleanup levels applied to the Site.

Hazardous Substance	MTCA-A Soil Cleanup Level ²⁰ (mg/kg)	MTCA-A Groundwater Cleanup Level ²¹ (µg/L)	MTCA-B Sub Slab Screening Level ²² (µg/m ³)
TPH-GRO	30	1,000	
TPH-DRO + ORO	2,000	500	
Total TPH			1,500
Benzene	0.03	5	11*
Toluene	7	1,000	76,000
Ethylbenzene	6	700	15,000
Xylenes	9	1,000	1,500
cPAHs (as TEF)	0.1	0.1	

²⁰ WAC 173-340-900 Table 740-1

²¹ WAC 173-340-900 Table 720-1

²² Ecology, *Cleanup Level and Risk Calculation*, August 2023.VI Meth B (calc).

* Denotes cancer screening level

- 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](#)²³ is currently available to help you evaluate the local requirements that may be necessary.

All cleanup actions conducted under MTCA shall comply with applicable state and federal laws.²⁴ 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.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.

²³ <https://apps.oria.wa.gov/opas/index.asp>

²⁴ WAC 173-340-710(1)

²⁵ WAC 173-340-710(2)

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.

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

In 2018, an interim action in the form of a contaminated soil excavation and disposal was completed. Performance sampling indicated excavation had not completely removed petroleum contaminated soil. Soil samples collected from the excavation floor exceeded the MTCA-A CUL for TPH-DRO+ORO. Soil borings advanced beyond the southern lateral limits of excavation indicated contamination did not persist in those areas. In August 2018, a slurry composed of 6,100 lbs. of BOS 200, 3,950 lbs. of gypsum, 15 gallons of microbes, and 4,350 gallons of water was injected at the Site via 58 points. In April 2019, five soil borings were advanced around and in the excavation limits. Soil borings advanced within limits of excavation indicated TPH-GRO, TPH-DRO+ORO, and benzene exceeded MTCA-A CULs.

The customer proposes to use Ecology's Model Remedies for Sites with Petroleum Impacts to Groundwater, Remedy 2. Sites utilizing the model remedy process do not have to complete a feasibility study or disproportionate cost analysis. Ecology has requested additional information prior to concurring Model Remedy use is appropriate for this Site.

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).

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](#).²⁶ If you have any questions about this opinion, please contact me at (360) 407-6266 or Joseph.Kasperski@ecy.wa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read 'J. Kasperski'.

Joe Kasperski, LG
Toxics Cleanup Program
Southwest Region Office

JKK/at

cc by email: James E Clary, Bud Clary Auto Group, jim.clary@budclary.com
Alex Koch, Blue Sage Environmental, akoch19672@gmail.com
Jerome Lambiotte, CPG, Ecology, jerome.lambiotte@ecy.wa.gov
Ecology Site File

²⁶ <https://www.ecy.wa.gov/vcp>