



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Southwest Region Office
PO Box 47775 • Olympia, Washington 98504-7775 • 360-407-6300

October 23, 2023

Sally Biffle
13510 NE Fourth Plain Blvd
Vancouver, WA 98682
sbiffle16@hotmail.com

Re: Technical Assistance at the following contaminated Site:

- **Site Name:** Electro Tech Metal Finishing LLP
- **Site Address:** 13511 NE Kerr Rd Ste 7, Vancouver, Clark County, WA 98682
- **Facility/Site ID:** 74748387
- **Cleanup Site ID:** 4351
- **VCP Project ID:** SW1400

Dear Sally Biffle:

The Washington State Department of Ecology (Ecology) received your request for an opinion on proposed cleanup work for the Electro Tech Metal Finishing LLP facility (Site), on August 24, 2023. 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 concluded that further remedial action is necessary to clean up contamination at the Site.

As this is a ranked Site (2-Moderate High Risk), any no further action opinion letter issued requires a minimum 30-day public notice and comment period.

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. A Site description, as currently known to Ecology, is provided in Enclosure A. The Site is defined by the nature and extent of contamination associated with the following releases:

- Petroleum, as diesel range and heavy oil range total petroleum hydrocarbons (TPH-D and TPH-O; collectively, TPH-Dx) into the soil and groundwater.
- Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) and metals (arsenic, barium, chromium, and lead) into the soil and groundwater.

The Property is comprised of three contiguous Clark County tax parcels, numbers 107429000, 107640000, and 158613000. Parcels 107429000 and 107640000 are owned by Kings Landing LLC. Parcel 158613000 was purchased by George Amalgam in the fall of 2021 and is owned by Affordable Enterprise LLC. The Property is currently zoned as light industrial.

Please note that releases from multiple sites can affect a parcel of real property. At this time, Ecology has no information that other sites affect the parcel(s) associated with this Site.

Basis for the Opinion

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

1. Blue Mountain Environmental and Consulting Company, Inc., PAH-Impacted Soil Remediation by Soil Excavation and Groundwater Sampling Work Plan, August 24, 2023.
2. Ecology, Re: No Further Action Likely at the following contaminated Site, March 28, 2023.

You can request these documents by filing a [records request](#).⁴ For help making a request, contact the Public Records Officer at publicrecordsofficer@ecy.wa.gov or call 360-407-6040. Before making a request, check whether the documents are available on [Ecology’s Cleanup Site Search web page](#).⁵

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

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 <https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=14894>

Analysis of the Cleanup

Ecology has concluded that further remedial action is necessary to clean up contamination at the Site. We respond to the proposed confirmatory sampling and cleanup in the workplan provided, in accordance with WAC 173-340-515(3).

Ecology supports the interim action (excavation) proposed, the groundwater monitoring, with our comments, which are provided in the sections below.

1. Characterization of the Site.

Ecology has determined your characterization of the Site is sufficient to establish cleanup standards and select a cleanup action.

EDB Sampling

Ecology has considered BMEC's request in the work plan document regarding the recommended groundwater analysis for EDB. Ecology's concern is that the laboratory reporting limits for EDB in groundwater collected to date exceed the MTCA Method A cleanup level of 0.005 micrograms per Liter ($\mu\text{g/L}$). However, given that groundwater at MW7 has the highest potential for remaining contaminant concentrations, we would concur with sampling EDB at MW7 only to start. If EDB results are not detected at MW7, and the laboratory PQL is less than the MTCA Method A cleanup level, then no additional EDB sampling in groundwater would be needed. Please use EPA Method 8011 to analyze EDB in groundwater.

Proposed Excavation of SB20 and SW

At two soil sampling locations, SB20 (at 12.5 feet bgs) and SW (between 0-2.5 feet bgs), cPAHs as benzo[a]pyrene exceeded the cleanup levels. The work plan proposes to remove both locations by excavation with off-Site disposal. At SB20, the proposed excavation depth would be to remove the contamination at 12.5 feet bgs, which was bracketed by no detections of cPAHs at 10 and 15 feet bgs. Ecology concurs that contaminated soil at depths shallower than 10 feet bgs could be considered to contain cPAHs at concentrations that would permit soil re-use at the Site, in compliance with Tables 12.1 and 12.2.⁶ The proposed excavation to a depth of 5 feet bgs at SW should remove the contaminated soil.

For any backfill brought onto the Site to fill in the excavations, please provide analytical results or vendor documentation of clean fill. Placement of fill should meet the guidance provided in Tables 12.1 and 12.2 in the Guidance for Remediation of Petroleum Contaminated Sites, revised June 2016.

⁶ Ecology Publication 10-09-057, Guidance for Remediation of Petroleum Contaminated Sites, revised June 2016.

It may generate less soil to use a slot type excavation at SB20 and a test pit-sized or pothole style excavation at SW. It may not be necessary to connect the excavations, given the distance between the SB20 and SW soil sampling locations.⁷ It appears the slot excavation approach was used successfully to remove the cPAH contaminated soil at SB-19.

Confirmatory soil samples are needed (and proposed) to confirm successful removal of the cPAH in soil.

Ecology concurs with the proposed remediation at locations SB20 and SW, and sampling soils for PAH/cPAH as proposed. Ecology also concurs with BMEC's proposed confirmatory soil sampling approach, which will meet the excavation confirmatory soil sampling guidance.⁸

cPAHs in Soil at WW2 Location

At boring WW2 (including WW2A and WW2B soil samples), concentrations of cPAHs in soil exceeded the MTCA Method A cleanup level at 0-2.5 feet bgs and 7-10 feet bgs. The WW2 location in Figure 6⁹, appears to be about 20 feet away from monitoring MW-2.

- 1) Ecology acknowledges that because of the scale of features on a figure, MW-2 will appear much larger than it's approximate 1-2 feet flush mount diameter.
- 2) cPAH concentrations were not detected in soil sampled at MW-2, so the location does serve to delineate cPAHs in soil associated with WW2. Groundwater at MW-2 has also been shown to not be impacted by cPAHs.
- 3) Because of the heterogenous nature of soil, and haphazard contaminant distribution at the Site, cPAH concentrations could easily vary over the 20-foot distance from exceeding cleanup levels to not detected.
 - a. For Ecology to concur that the cPAH in soil at the WW2 location have been adequately removed, additional soil data are needed, preferably advanced adjacent to the WW2 boring patch. Since cPAH are generally not volatile, a vacuum truck may be sufficient to remove soil to over 10 feet bgs and remove any contaminated soil. A confirmatory soil sample at the base of the borehole would be needed to demonstrate successful remediation of cPAH at the location.
 - b. Traditional excavation of cPAHs in soil at WW2 is an option as well.

⁷ Figure 6 – Soil Boring and Soil Sample Locations (2015-2017), BMEC, as presented in March 29-30, 2022, Dig and Haul + Groundwater Sampling Event Report, April 30, 2022.

⁸ p. 63, Ecology Publication 10-09-057, Guidance for Remediation of Petroleum Contaminated Sites, revised June 2016.

⁹ Figure 6 – Soil Boring and Soil Sample Locations (2015-2017).

- c. Soils should be disposed of off-Site at a permitted facility (landfill).

Proposed Groundwater Monitoring

Groundwater monitoring, using low flow groundwater sampling methodology, is proposed at Site monitoring wells MW1 through MW7. We support the use of a peristaltic pump or bladder pump based on depth of groundwater (less than or over 30 feet below top of casing [TOC]). Contaminants to be sampled matches the recommendations from Ecology’s March 28, 2023, opinion, with the adjustment of EDB sampling at MW7 only.

Four consecutive quarters of contaminant concentrations in compliance with Site cleanup levels are needed for each Site monitoring well, to meet WAC 173-340-720(9)(c)(iv). Once four consecutive quarters of contaminant concentrations in groundwater comply with cleanup levels, said contaminants can be eliminated from future sampling events. For each quarter and at each well, you may review total and dissolved metals concentrations to consider compliance.

In summary, Ecology would concur with groundwater sampling at each monitoring well for the following contaminants until four consecutive quarters are reached:

<u>Monitoring Well</u>	<u>Contaminants to Sample</u>	<u>Minimum Number of Quarterly Events Remaining¹⁰</u>
MW1	total and dissolved metals (arsenic, chromium, and lead)	3
MW2	total and dissolved metals (arsenic, chromium, and lead)	4
MW3	total and dissolved metals (arsenic, chromium, and lead)	4
MW4	total and dissolved metals (arsenic, chromium, and lead)	4
MW5	total and dissolved metals (arsenic, chromium, and lead)	1
MW6	total and dissolved metals (arsenic, chromium, and lead)	3
MW7	EDB (once), diesel and heavy oil, cPAHs, total and dissolved metals (arsenic, barium, chromium, lead)	4

¹⁰ Based on total metals results to date. On an event-to-event basis, this may change if dissolved metals continue to show no detections and low flow groundwater sampling methodology reveals that the sampling method contributed to higher-than-expected total metals in groundwater concentrations.

Chromium in Site Groundwater

Chromium at the Site has been demonstrated to be trivalent (total) in nature. Because hexavalent chromium is no longer a concern at the Site, Ecology revises the proposed chromium cleanup level in groundwater to 100 µg/L. This is allowed under WAC 173-340-900, Table 720-1, footnote f, incorporating WAC 246-290-310, and 40 CFR 141.62. With this change, chromium in groundwater has the following number of compliant quarters for each Site monitoring well:

<u>Monitoring Well</u>	<u>Compliant Quarters of Chromium in Groundwater</u>	<u>Quarterly Events Needed¹¹</u>
MW1	1	3
MW2	3	1
MW3	2	2
MW4	1	3
MW5	3	1
MW6	3	1
MW7	1	3

Environmental Information Management (EIM) System

Where needed, please continue to upload all Site data to EIM for those data collected from 2009 to present, per our March 28, 2023, opinion letter.

Establishment of Cleanup Standards.

Once the additional soil remediation and groundwater monitoring have been completed, Ecology suggests confirming Site cleanup levels and points of compliance to recommend and make any needed adjustments. For instance, the updated total chromium in groundwater cleanup level. Generally, those cleanup levels and points of compliance presented in our March 28, 2023, opinion letter will likely apply.

3. Selection of Cleanup Action.

Excavation is proposed to remove cPAHs in soil at SW and SB20 at 12.5 feet bgs. Ecology concurs with the proposed cleanup action.

Ecology recommends further cleanup for cPAHs in soil at location WW2.

¹¹ Again, this is based on total chromium in groundwater results. Dissolved chromium results, if used for compliance, may reduce the total number of quarterly events needed to show chromium at the Site meets cleanup levels.

Ecology concurs with the proposed groundwater monitoring for the Site monitoring well network, adjusted per comments made in this letter.

4. Cleanup.

1. The results of the proposed excavations, confirmatory soil sampling, and groundwater monitoring should, presuming results comply with Site cleanup levels, be sufficient to request a no further action for the Site. This presumes the adjustments to the proposed scope requested in this opinion letter are also met.
 - a. No further action can be requested on a property-specific basis as well.
 - b. A VCP request for opinion letter is needed for any opinion request.
2. Ecology recommends evaluating results after each quarterly sampling event to confirm if four consecutive events have been achieved for each Site hazardous substance on a per monitoring well basis.¹²
3. As this is a ranked Site (2-Moderate High risk), any no further action opinion letter issued requires a minimum 30-day public notice and comment period.
4. Please also confirm the current property owner's information by providing Ecology with a VCP change of contact form for each.

¹² WAC 173-340-720(9)(c)(iv)

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 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 and [WAC 173-340-545](#).¹³

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).

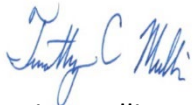
¹³ <https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-545>

Contact Information

Thank you for choosing to clean up the Site under the VCP. 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](#).¹⁴ If you have any questions about this opinion, please contact me at 360-999-9589 or tim.mullin@ecy.wa.gov.

Sincerely,



Tim Mullin, LHG
Toxics Cleanup Program
Southwest Region Office

TCM/at

Enclosure: A – Site Description

cc by mail: Chris Dechert, Kings landing LLC, Property Owner
George Amalgam, Affordable Enterprise LLC, Property Owner

cc by email: Brent Bergeron, LHG, Blue Mountain Environmental & Consulting Company, Inc.; brentb@bnbenv.com
Yancey Meyer, Blue Mountain Environmental & Consulting Company, Inc.; ymeyer@bnbenv.com
Bryan DeDoncker, Clark County Public Health; bryan.dedoncker@clark.wa.gov
Patrick Craney, City of Vancouver; patrick.craney@cityofvancouver.us
Jerome Lambiotte, CPG, Ecology; jerome.lambiotte@ecy.wa.gov
Ecology Site File

¹⁴ <https://www.ecy.wa.gov/vcp>

This page intentionally left blank.

Enclosure A

Site Description

This page intentionally left blank.

Site Description

The Site is located at 13511 NE Kerr Rd, in Vancouver, Clark County, Washington. The Property consists of three Clark County parcels: 107429000 (north), 107640000 (central) and 158613000 (south). Two buildings are located on the Property, which is nearly 1.6 acres. The L-shaped building on the central parcel consists of thirteen units, five of which were rented by Electro Tech from 2000 through March 2009. J&S Steel operated out of a former building on the south parcel, and one unit in the central parcel building from 1981 through 2014.

Property History and Current Use: The Property has been used for various manufacturing purposes, and for parking vehicles (north parcel).

Property Vicinity: The Site is in an area of mixed commercial and residential properties.

Soils and Geology: To the maximum depth explored of approximately 40 feet bgs, the Site is underlain primarily by a foot of fill and then varying amounts of silts, sands, and gravels. See p. 7 in Blue Mountain Environmental Corporation (BMEC), Dig and Haul + Groundwater Sampling Event Report, April 30, 2022, for an excellent description of Site lithology.

Groundwater: Based on boring logs and depth to water obtained from Site monitoring wells (MW-1 through MW-7), Site groundwater ranges from approximately 22-36 feet below top of casing. Seasonal fluctuation appears to be about 2-4 feet, depending on the monitoring well. The Site is at the eastern edge of the City of Vancouver's 10-year wellhead travel time frame for drinking water supply well #8 and wells 1 (WS #8 WF) and 2 (WS #8 Well #2 WW). Groundwater flow direction has been calculated to the southwest.

Surface/Storm Water/Septic Systems/Wetlands: Two catch basins are still present at the Property. Some contamination ran off into these catch basins. Three former septic systems were decommissioned on orders from Ecology, as these were a source of release at the Site. Currently, the Site building is connected to City of Vancouver sewer and water.

The nearest surface water is Burnt Bridge Creek, located approximately 0.8 miles to the south of the Site. In 2009, surface water was sampled as part of the Integrated Assessment led by EPA and Ecology and supported by Ecology and the Environment as contractor to EPA, but this referred to surface water in the storm water catch basin system. There was a concern at the time that the stormwater system might be connected to Burnt Bridge Creek, but no connection was identified. There are no wetlands or priority habitats at the Site.

This page intentionally left blank.