STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Southwest Region Office
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June 18, 2024

Bruce Hagensen
PO Box 5349
Vancouver, WA 98668

Re: No Further Action opinion for the following contaminated Site

Site name:	Franz Bakery Warehouse
Site address:	6701 NE HWY 99 Vancouver, Clark County, WA 98665
Facility/Site ID:	47124354
Cleanup Site ID:	9350
VCP Project No.:	SW1826

Dear Bruce Hagensen:

The Washington State Department of Ecology (Ecology) received your request on February 8, 2024 for an opinion regarding the sufficiency of your independent cleanup of the Franz Bakery Warehouse facility (Site) under the Voluntary Cleanup Program (VCP).[1] This letter provides our opinion and analysis. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70A.305 RCW.[2]

Opinion

Ecology has determined that no further remedial action is necessary to clean up contamination at the Site.

Ecology bases this opinion on an analysis of whether the remedial action meets the substantive requirements of MTCA and its implementing regulations, which are specified in Chapter 70A.305 RCW and Chapter 173-340 WAC[3] (collectively called "MTCA").

[1] https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Voluntary-Cleanup-Program
[2] https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305
[3] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340

Site Description

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

- Total Petroleum Hydrocarbons as diesel-range organics (TPH-DRO) and residual-range organics (TPH-RRO).
- Toluene in soil.
- Chloroform in groundwater.

Enclosure A includes Site description, history, and diagrams.

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

Ecology bases this opinion on information in the documents listed in Enclosure B. You can request these documents by filing a records request.[4] For help making a request, contact the Public Records Officer at recordsofficer@ecy.wa.gov or call (360) 407-6040. Before making a request, check if the documents are available on the cleanup site webpage.[5]

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

Analysis of the Cleanup

Ecology has concluded that no further remedial action is necessary to clean up contamination at the Site. Ecology bases its conclusion on the following analysis:

Characterizing the Site

Ecology has determined your completed Site characterization is sufficient for setting cleanup standards and selecting a cleanup action. Enclosure A describes the Site.

Site remedial investigation was conducted in two phases. The initial phase completed when the release was first discovered in 1996 and the second phase beginning in 2019. Impacted media includes soil and groundwater with both TPH-gasoline-range organics (GRO) and total TPH being quantified as part of the initial characterization efforts. As part of the second phase of remedial investigation, soil, groundwater, soil vapor, and indoor air were assessed and

[4] https://ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests

[5] https://apps.ecology.wa.gov/cleanupsearch/site/9350#site-documents

concentrations were determined to be below the MTCA Method A cleanup level (MTCA-A CUL) or not detected.

Chloroform

As part of the remedial investigation, volatile organic compounds, including chloroform, were analyzed in groundwater. Chloroform was detected in groundwater samples collected from MW-1. Additional groundwater samples exhibited chloroform concentrations in excess of the MTCA Method B (MTCA-B) cancer CUL.[6] In November 2023, additional groundwater, soil gas, and indoor air samples were collected to further evaluate the anomalous chloroform exceedances in groundwater. Chloroform was again detected in groundwater but below the MTCA-B cancer CUL. Sub-slab soil gas at SS-SG-5 contained detectable concentrations of chloroform greater than an order of magnitude below the MTCA-B cancer CUL.[7] In addition, Indoor air samples IA-4A and IA-7 exhibited concentrations of chloroform in excess of the MTCA-B cancer indoor air CUL but when adjusted for chloroform detections in ambient air,[8] the indoor air does not appear to be impacted to an unacceptable risk level by chloroform.

Based on the lack of evidence that chloroform was released at the Site, sub-slab soil gas data suggesting an undiscovered source of chloroform is unlikely, and groundwater data suggesting a probable upgradient or otherwise off-Site source of chloroform in groundwater, Ecology concludes that chloroform detected in groundwater at Site does not likely present a risk to human health or the environment.

Setting cleanup standards

Ecology has determined the cleanup levels and points of compliance you set for the Site meet the substantive requirements of MTCA.

The Site has utilized MTCA Method A cleanup levels[9] (MTCA-A CULs) for TPH-DRO, TPH-RRO, and toluene. As a MTCA-A CUL is not promulgated for chloroform, the MTCA Method B cancer cleanup level (MTCA-B cancer CUL) was used to evaluate exposure risks at the Site. The following table summarized the cleanup levels used:

Substance	Soil Cleanup Level (mg/kg)	Groundwater Cleanup Level (µg/L)	Indoor Air Cleanup Level (ug/m^3)	Cleanup Level Basis
TPH-DRO	2,000	500	NA	Method A

[6] AEI, *Additional Site Investigation*, January 2, 2024. Table 2.

[7] AEI, *Additional Site Investigation*, January 2, 2024. Table 3.

[8] AEI, *Additional Site Investigation*, January 2, 2024. Table 4.

[9] WAC 173-340-900, Table 720-1

				unrestricted land use
TPH-RRO	2,000	500	NA	Method A unrestricted land use
Toluene	7	1,000	NA	Method A unrestricted land use
Chloroform	32	1.4	0.109	Method B cancer

Site cleanup was evaluated at the standard point of compliance for the applicable impacted media. The following summarizes those points of compliance.

Media	Points of Compliance
Soil-Direct Contact	Based on human exposure via direct contact, the standard point of compliance is throughout the Site from ground surface to fifteen feet below the ground surface. WAC 173-340-740 (6)(d) **Achieved at the standard point of compliance.**
Soil- Protection of Groundwater	Based on the protection of groundwater, the standard point of compliance is throughout the Site. WAC 173-340-740 (6)(d) **Achieved at the standard point of compliance.**
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) **Achieved at the standard point of compliance.**
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) **Achieved at the standard point of compliance.**

Media	Points of Compliance
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. WAC 173-340-730(6) **Achieved at the standard point of compliance.**
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) **Achieved at the standard point of compliance.**

No additional local, state, or federal regulations affect this cleanup.

Selecting the cleanup action

Ecology has determined the cleanup action you selected for the Site meets the substantive requirements of MTCA.

The Site is utilizing Ecology's Model Remedies for Sites with Petroleum Impacts to Groundwater, Model Remedy 1[10] which requires the remedial action to result in soil and groundwater achieving MTCA-A CULs for unrestricted land use. Ecology concurs that the use of Model Remedy 1 is appropriate for this Site and as such, neither a feasibility study nor disproportionate cost analysis is required. The cleanup achieves the requirements of MTCA because it:

- Protects human health and the environment.
- Complies with cleanup standards.
- Complies with applicable state and federal laws.
- Does not primarily rely on the use of institutional controls.
- Prevents or minimizes present or future releases and migration of contaminants.
- Does not rely on dilution or dispersion.
- Does not use remediation levels.
- Uses permanent solutions to the maximum extent practicable.

[10] Ecology, *Model Remedies for Sites with Petroleum Impacts to Groundwater*, December 2017. Page 20.

Implementing the cleanup action

Ecology has determined that your cleanup meets the standards set for the Site.

A 1000-gallon diesel underground storage tank (UST) was decommissioned via removal in July 1996. An additional 13 cubic yards of petroleum-impacted soil was excavated for disposal around the UST cavity to the maximum extent practicable. Remnant soil contamination naturally degraded between 1996 and when investigation resumed in 2019. Groundwater was not encountered in 1996 and was determined not to be impacted in 2019.

You must decommission the wells that were installed as part of the remedial action that are not needed to conduct post-cleanup monitoring or for any other purpose at the Site. The wells must be decommissioned in accordance with WAC 173-160-460.[11]

Listing of the Site

Based on this opinion, Ecology will initiate the process of removing the Site from its list of contaminated sites, including the:

- Contaminated Sites List
- Leaking Underground Storage Tanks List

The Site will be added to the No Further Action sites list.

[11] https://app.leg.wa.gov/WAC/default.aspx?cite=173-160-460

Limitations of the Opinion

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).[12]

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 if the action you performed is substantially equivalent. Courts make that determination. See RCW 70A.305.080[13] and WAC 173-340-545.[14]

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).[15]

Termination of Agreement

Thank you for cleaning up the Site under the VCP. This opinion terminates the VCP Agreement governing VCP Project No. SW1826.

[12] https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.040
[13] https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.080
[14] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-545
[15] https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.170

Questions

If you have any questions about this opinion or the termination of the Agreement, please contact me at 360-407-6266 or Joseph.Kasperski@ecy.wa.gov.

Sincerely,

Joe Kasperski, LG
Southwest Region Office, Toxics Cleanup Program
JKK/at

Enclosures (2):
A – Site Description, History, and Diagrams
B – Basis for the Opinion: List of Documents

cc: Jacqueline C. Day, LG, AEI jday@aeiconsultants.com
Tim Mullin, Ecology tim.mullin@ecy.wa.gov
Fiscal, VCP Fiscal Analyst (w/o encl)
TCP, Operating Budget Analyst (w/o encl)

Enclosure A

Site Description, History, and Diagrams

Site Description

The Site is understood to be wholly contained on Clark County tax parcel 147601-000. The property is improved with two buildings used for bakery goods sales, warehousing, and distribution. A release from a 1,000-gallon UST containing diesel fuel was discovered during a 1996 underground storage tank (UST) decommissioning. Soil was determined to be impacted with TPH-DRO and TPH-RRO.

Geology underlying the Site were logged by field personnel as alternating lenses of silty clay and clayey silts to approximately 15 feet below ground surface (bgs) and silty sands to poorly graded sand to the maximum logged depth of 30 feet bgs. Groundwater has been measured approximately 27 to 30 feet bgs.

Site History

In July 1996, a leaking underground storage tank (LUST) was discovered and reported by Omega Services.[16] Omega Services indicated the UST was a 1,000-gallon tank containing diesel fuel. Approximately 95-gallons of emulsified petroleum was removed from the tank, and the tank was rinsed and removed from the property. After excavation and removal, the tank was inspected, and numerous corrosion holes were observed. Final soil excavation was measured at 10 feet long, 7 feet wide, and 9 feet deep. Approximately 18 cubic yards of soil was removed from the tank excavation. Performance soil samples were collected from the sidewalls and bottom of the excavation at collection depths of 7.5-feet and 9-feet bgs respectively. Performance soil samples collected from the excavation were analyzed for TPH-Hydrocarbon Identification (HCID) and further evaluated for total TPH. Three samples were also analyzed for TPH-GRO when the HCID analysis indicated a gas-range detection. Samples collected from the bottom and south sidewall indicated total TPH concentrations that exceeded the MTCA-A CUL. The highest concentration of total TPH was reported to be 46,600 milligrams per kilogram (mg/Kg) in a sample collected from the excavation bottom.[17] Concentrations of TPH-GRO in soil exceeded the MTCA-A CUL with a peak concentration of 5,530 mg/kg in a composite sample collected from stockpile 1 (sample ID FB#1).[17] The remaining three sidewall soil samples (west, north, and east) indicated non-detection or concentrations less than the MTCA-A CULs. Three hand auger investigation borings were advanced south of the UST excavation and north of the tax parcel boundary. Discrete samples were collected from each soil boring at depths of 3, 6, 8, and 10-feet bgs. One soil sample from each boring was selected for laboratory analysis by TPH-HCID. Laboratory analytical data did not detect any petroleum constituent in any of the three soil samples.[18] 13 cubic yards of petroleum impacted soil was transported offsite for

[16] Ecology, *Requirements for Reporting Environmental Conditions at LUST Contaminated Sites*, July 30, 1996.

[17] Omega, *UST Closure and Site Assessment Report*, April 3, 1997. Table 1.

[18] Omega, *UST Closure and Site Assessment Report*, April 3, 1997. Table 1.

disposal and the excavation was backfilled with imported fill material.[19] No further work was completed at this time.

A Phase I Environmental Site Assessment (ESA) was completed in June 2019 to evaluate environmental conditions at the property. Due to a number of recognized environmental conditions noted during the ESA, a limited Phase II ESA commenced in July 2019.

The Phase II ESA included a ground-penetrating radar (GPR) survey, a soil and groundwater investigation, and monitoring well installation. A soil boring (B-4) and monitoring well (MW-1) were advanced as part of this investigation. Soil samples were collected from depths of 15-feet bgs and deeper sample depth selection was variable.[20] Soil samples submitted for laboratory analysis indicated concentrations toluene, methylene chloride, and acetone below MTCA-A CULs.[21]

Groundwater was also collected from monitoring well MW-1 which is located approximately 10-feet west of the UST excavation and boring B-4. MW-1 was drilled via hollow-stem auger to a terminal depth of 40-feet bgs with a screened interval of 40-feet to 25-feet below ground surface (bgs). Laboratory analysis of groundwater collected during the Phase II ESA detected TPH-RRO concentrations in excess of the MTCA-A CUL at MW-1.[22] TPH-DRO and chloroform were also detected below the MTCA-A CUL and MTCA-B cancer CULs in groundwater collected from MW-1.

A May 28, 2020 Groundwater Monitoring Report summarized two groundwater sampling events. MW-1 was sampled in January and May 2020. TPH-DRO was detected during the January event and TPH-GRO in the May event, with both detections occurring below the MTCA-A CUL. In addition, chloroform was detected in groundwater collected from MW-1 in July 2019, January 2020, and May 2020 with concentrations increasing between each event.[23] Chloroform was detected in groundwater above the MTCA-B cancer CUL during the January and May events.

In July 2022, an additional soil boring was advanced in the area of 1996 soil sample location FB#4. Soil was collected at 7.5 and 10 feet bgs for laboratory analysis. Soil sample B-5-7.5 bore detectable concentrations of TPH-DRO below the MTCA-A CUL. Chloroform was not detected in

[19] Omega, *UST Closure and Site Assessment Report*, April 3, 1997. Section 3.5.

[20] AEI, *Limited Phase II Subsurface Investigation & Well Installation Report,* August 19, 2019. Section 3.4.1.

[21] AEI, *Limited Phase II Subsurface Investigation & Well Installation Report,* August 19, 2019.Table 1.

[22] AEI, *Limited Phase II Subsurface Investigation & Well Installation Report,* August 19, 2019.Table 2.

[23] AEI, *Groundwater Monitoring and Sampling Report*, May 28, 2020. Table 1.

soil at B-5.[24] A vapor intrusion assessment was completed which indicated petroleum hydrocarbons were not impacting indoor air.[25]

In October and November 2023, additional remedial investigation consisting of groundwater monitoring, sub-slab soil gas sampling, and indoor air monitoring was completed. Groundwater at MW-1 indicated chloroform was detected below the MTCA-B cancer CUL.[26] Chloroform was also detected in sub-slab soil gas below the MTCA-B cancer screening level.[27] In addition, indoor air sample analytical results from IA-4A and IA-7 indicated chloroform exceeded the MTCA-B cancer CUL.[28] However, when the indoor air sample concentrations are adjusted for ambient air contributions of chloroform, the MTCA-B cancer CUL was not exceeded.[29] Based on multiple lines of evidence, Ecology evaluates that a hazardous condition caused by the anomalous detections of chloroform is unlikely.

Site Diagrams

[24] AEI, *Additional Site Assessment*, November 2, 2022. Table 1.

[25] AEI, *Additional Site Assessment*, November 2, 2022. Table 3.

[26] AEI, *Additional Site Investigation*, January 2, 2024. Table 2.

[27] AEI, *Additional Site Investigation*, January 2, 2024. Table 3.

[28] AEI, *Additional Site Investigation*, January 2, 2024. Table 4.

[29] AEI, *Additional Site Investigation*, January 2, 2024. Section 4.2.3.

Enclosure B

Basis for the Opinion: List of Documents

Basis for the Opinion: List of Documents

- AEI Consultants (AEI), *Additional Site Investigation Report*, January 2, 2024.
- Ecology, *Further Action Letter*, May 2, 2023.
- AEI, *Additional Site Assessment*, November 7, 2022.
- AEI, *Work Plan, Additional Site Assessment, Rev. 1*, December 3, 2021.
- Ecology, *Further Action Letter*, July 14, 2021.
- AEI, *Response to December 16, 2020 Agency Letter and Work Plan for Additional Site Assessment*, February 5, 2021.
- Ecology, *Further Action Letter*, December 16, 2020.
- Ecology, *Early Notice Letter,* August 3, 2020.
- Ecology, *Initial Investigation Form,* July 1, 2020.
- AEI, *Groundwater and Sampling Report,* May 28, 2020.
- AEI, *Underground Storage Tank Decommissioning Report*, January 16, 2020.
- AEI, *Limited Phase II Subsurface Investigation & Well Installation Report,* August 19, 2019.
- AEI, *Phase I Environmental Site Assessment*, June 27, 2019.
- Ecology, *Early Notice Letter*, February 7, 2013.
- Omega Environmental, Inc., *Underground Storage Tank (UST) Closure and Site Assessment Report,* April 3, 1997.
- Ecology, *Requirements for Reporting Environmental Conditions at LUST Contaminated Sites,* July 30, 1996.