

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

Northwest Region Office

PO Box 330316, Shoreline, WA 98133-9716 • 206-594-0000

January 19, 2023

Bill Johnston Johnston Peach LLC 401 Central Avenue Bellingham, WA 98225 (wjtj47@gmail.com)

RE: No Further Action opinion for the following Property associated with a contaminated Site

Site name: 401 Central Ave LUST

Property address: 401 Central Avenue, Bellingham, WA 98225

Facility/Site ID: 10851
Cleanup Site ID: 12378
VCP Project No.: NW2987

Dear Bill Johnston:

The Washington State Department of Ecology (Ecology) received your request on June 16, 2020, for an opinion regarding the sufficiency of the Property cleanup associated with the 401 Central Ave LUST (Site) under the Voluntary Cleanup Program (VCP). To provide an opinion, we requested additional information from you in writing on October 19, 2021. We received the additional information on August 15, 2022, in your report Monitoring Well Installation Report and Property No Further Action Request, dated August 3, 2022. 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 at the Property to clean up contamination associated with the Site. However, further remedial action remains necessary elsewhere at the Site to clean up contamination.

¹ https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Voluntary-Cleanup-Program

 $^{^2}$ https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305

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 173-340 WAC ⁴ (collectively called "MTCA").

Property Description

This opinion applies only to the Property described in this section, which was affected by release(s) at the Site and addressed by your cleanup. The Property includes the following parcel of real property in Whatcom County:

380330114260

Enclosure A includes a legal description of the Property. **Enclosure B** includes a diagram that shows where the Property is located within the Site.

Site Description

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

- Total petroleum hydrocarbons as gasoline (TPH-G); benzene, toluene, and xylenes in soil.
- Benzene, total petroleum hydrocarbons as diesel and oil (TPH-D and TPH-O), and 1,2-dichloroethane (EDC) in groundwater.

Enclosure B includes the 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 Property.

Basis for the Opinion

Ecology bases this opinion on information in the documents listed in **Enclosure C**. You can request these documents by filing a <u>records request</u>. For help making a request, contact the Public Records Officer at <u>recordsofficer@ecy.wa.gov</u> or call (360) 407-6040. Before making a request, check whether the documents are available on the <u>Site webpage</u> ⁶

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 no further remedial action is necessary at the Property to clean up contamination associated with the Site. However, Ecology has also concluded that further remedial action is still necessary to clean up contamination elsewhere at the Site. Ecology bases its conclusions on the following analysis.

³ https://app.leg.wa.gov/rcw/default.aspx?cite=70A.305

⁴ https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340

⁵ https://ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests

⁶ https://apps.ecology.wa.gov/cleanupsearch/site/12378

Characterizing the Site

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

The vertical and lateral extent of soil and groundwater impacted by releases at the Site have been adequately defined for the Property per MTCA requirements by the completion of Site investigations conducted in 2016, 2017, 2019, and 2022. The Site data has been entered in the Ecology Environmental Information Management (EIM) electronic database.

Setting cleanup standards for the Site

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

Cleanup Levels

Soil

The Site does not meet the MTCA definition of an industrial property under WAC 173-340-745(a)(i); therefore, soil cleanup levels suitable for unrestricted land use are appropriate. Cleanup levels were set for soil based on the protection of groundwater via the leaching-to-groundwater pathway. The MTCA Method A unrestricted land use cleanup levels are appropriate for this purpose and were selected as cleanup levels for soil at the Site. The Method A cleanup levels are provided in WAC 173-340-900, Table 740-1.

The Site and the surrounding area provide limited terrestrial ecological habitat because it is primarily developed with buildings and areas paved with concrete and asphalt. Land use at the Site and surrounding area makes substantial wildlife exposure unlikely; however, Heritage Maritime Park is located approximately 140 feet west of the Site. The Site does not qualify for an exclusion from a terrestrial ecological evaluation (TEE) under WAC 173-340-7491 because Heritage Maritime Park contains more than 1.5 acres of contiguous undeveloped land. A simplified TEE under WAC 173-340-7492 is appropriate for this Site. The unrestricted land use screening levels provided in WAC 173-340-900, Table 749-2, are appropriate. For all contaminants on the Site, Method A values were more protective than the values in Table 749-2 and were selected as the appropriate cleanup levels.

Groundwater

The highest beneficial use for groundwater under MTCA is as a drinking water source, unless it can be demonstrated that the groundwater is not potable. Cleanup levels were set for groundwater based on its potential use as a drinking water source. The MTCA Method A cleanup levels are appropriate for this purpose and were selected as the cleanup levels for groundwater at the Site. The Method A groundwater cleanup levels are available in WAC 173-340-900, Table 720-1.

Air

Air cleanup levels are considered necessary to protect against vapor intrusion into the Property building. The results of a vapor intrusion assessment conducted on the Property concluded that there were no volatile organic compounds (VOCs) detected above the MTCA Method B soil-gas screening levels in sub-slab soil-gas samples collected beneath the building. The vapor intrusion and air exposure pathway are incomplete for the Property.

Points of Compliance

Soil

The point of compliance for soil is based on the protection of groundwater and is defined as Site-wide throughout the soil profile and may extend below the water table. This is the appropriate point of compliance for the Site.

Groundwater

The standard point of compliance for groundwater is throughout the Site, from the uppermost level of the saturated zone extending vertically to the lowest depth which could potentially be affected.

Air

The standard point of compliance for air is ambient air throughout the Site.

Selecting the cleanup action for the Property

Ecology has determined the cleanup action you selected for the Property meets the substantive requirements of MTCA. The cleanup meets the minimum cleanup requirements and does not exacerbate conditions or preclude reasonable cleanup alternatives elsewhere at the Site. The cleanup action for the Property included the following:

- Removal of gasoline and Bunker C heating oil underground storage tanks (USTs) from the Site;
- Excavation and off-Site disposal of contaminated soil from the Site around the former USTs; and
- Installation and sampling of three groundwater monitoring wells at the Site to assess compliance with groundwater cleanup standards.

Implementing the cleanup action

Ecology has determined your cleanup of the Property meets the standards set for the Site. The cleanup action for the Property included the removal of three USTs from the Site in 2013. Approximately 280 tons of petroleum-contaminated soil were removed from the Site around the former USTs and disposed off-Site.

Soil and groundwater samples collected from the Property after source removal confirm that soil exceeding the cleanup levels have been removed from the Property. A groundwater sample collected from the Property (monitoring well MW-3, screened beneath the building) confirms that contaminated groundwater associated with the source is not present beneath the Property.

Site soil contamination remains off the Property beneath the Central Avenue right-of-way, downgradient of the former USTs. The vertical extent of soil contamination extends to at least 25 feet below the ground surface (bgs); however, the vertical extent has not been fully defined. The lateral extent of the off-Property soil contamination has been defined. The extent of groundwater contamination beneath Central Avenue has not been delineated to the north, west, and south.

You must decommission resource protection wells installed as part of the remedial action that are not needed to conduct post-cleanup monitoring or for any other purpose at the Site, including additional sampling to support pursuit of Site cleanup. Wells must be decommissioned in accordance with <u>WAC 173-160-460</u>⁷.

Listing of the Site

Based on this opinion, Ecology will update the Site status on its contaminated site database. However, because further remedial action is still necessary elsewhere at the Site, Ecology will not remove the Site from its lists of contaminated sites. Furthermore, the Property will remain listed as part of the Site because the Property cleanup does not change Site boundaries.

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**:

- Change the boundaries of the Site.
- 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).8

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.305.080⁹ and WAC 173-340-545.¹⁰

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).¹¹

Termination of Agreement

Thank you for cleaning up the Property under the Standard VCP process. This opinion terminates the VCP Agreement governing VCP Project No. NW2987. If you should decide to clean up the remainder of the Site, you can re-apply and request additional services under the VCP.

⁷ https://app.leg.wa.gov/wac/default.aspx?cite=173-160-460

⁸ https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.040

⁹ https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.080

¹⁰ https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-545

¹¹ 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 by phone at (206) 556-5258 or email at kim.vik@ecy.wa.gov.

Sincerely,

Kim Vik

VCP Site Manager

Thimson

Toxics Cleanup Program, NWRO

Enclosures (3):

A – Property Legal Description

B – Site Description, History, and Diagrams

C – Basis for the Opinion: List of Documents

cc:

Harold Cashman, Whatcom Environmental Services, Inc. (hjcashman@whatcom-es.com)

Kurt Nabbefeld, City of Bellingham (planning@cob.org)

Sonia Fernandez, VCP Coordinator (sonia.fernandez@ecy.wa.gov)

Kelli Barker, VCP Fiscal Analyst (ecyrevcp@ecy.wa.gov)

Enclosure A

Property Legal Description

CENTRAL WHATCOM LOTS 21-22-FRAC OF LOT 27 BLK 19

Enclosure B

Site Description, History, and Diagrams

Site Description

This section provides Ecology's understanding and interpretation of Property conditions and is the basis for the opinion expressed in the body of the letter.

Site: The known Site covers Whatcom County Tax Parcel # 380330114260, located at 401 Central Avenue, Bellingham, Washington (Property) and the adjacent property to the west (Central Avenue and the Central Avenue right-of-way) owned by the City of Bellingham.

The Site is defined by the projected extent of contamination caused by the following releases:

- Total petroleum hydrocarbons as gasoline (TPH-G); benzene, toluene, and xylenes in soil.
- Benzene, total petroleum hydrocarbons and diesel and oil (TPH-D and TPH-O), and 1,2-dichloroethane (EDC) in groundwater.

Area and Property Description: The Property occupies approximately 5,700 square feet (0.13 acre) and is located at the southwestern terminus of Central Avenue in the Central Business District of Bellingham (Figure 1). The area is zoned Commercial, and the surrounding land is covered by buildings, streets, and parking areas to the north, east, and south. The east boundary of Bellingham Maritime Heritage Park (the former Holly Street Landfill) is located approximately 140 feet west of the Property.

Site History and Current Use: The Property and adjacent properties were reportedly utilized from approximately the 1940s into the 1980s as an operating base for fueling and repairing garbage trucks that provided collection for the City of Bellingham. It was suspected that vehicle repair occurred on the Property; however, historical documentation could not confirm this. The building on the Property was built around 1912 and was used for retail commercial purposes. The building was remodeled in 2000 from retail to office space and is currently occupied by law offices.

Sources of Contamination: The known contamination was caused by the releases from a 300-gallon gasoline underground storage tank (UST), a 1,000-gallon gasoline UST, and a 1,300-gallon hearing oil UST formerly utilized at the Site.

Physiographic Setting: Western Whatcom County and the Bellingham area are part of the Fraser-Whatcom Lowlands, broadly characterized as a north-south trending structural and topographic depression bounded to the west by the complex tectonics of the San Juan, Canadian Gulf, and Vancouver Islands, and to the east by the Cascade uplift. The Lowlands

typically feature extensive sequences of consolidated and unconsolidated sediments, typically dominated near the surface by geologically recent glacial deposition.

The Property elevation is approximately 65 feet above mean sea level. Land in the immediate area of the Site slopes gently down to the northwest, except for a steep wooded bluff 200 feet to the southwest at the edge of Maritime Heritage Park.

Surface/Storm Water System: Whatcom Creek is located 400 feet west of the Property and flows into the Whatcom Waterway and Bellingham Bay approximately 600 feet and 3,000 feet to the southwest, respectively. Water run-off from Central Avenue is conveyed to the City of Bellingham storm water system.

Ecological Setting: The Maritime Heritage Park located approximately 140 feet west of the Site is primarily a large grassy area with some native vegetation covering the former Holly Street landfill. The park includes a native plant trail, fish hatchery, athletic fields, a trail along Whatcom Creek, and landscaped areas (primarily grass with shrubs and trees). The park is heavily frequented by people and likely does not provide significant habitat to wildlife receptors. All other land areas surrounding the Site are covered by buildings and pavement.

The entire length of Whatcom Creek has been listed by Ecology as a Category 5 "Polluted Water" for concentrations of dissolved oxygen and fecal coliform and temperature variations. Documented fish using Whatcom Creek include bull trout and sea-run cutthroat, Chinook, Coho, chum, pink, and steelhead salmon. Restoration of Whatcom Creek's riparian habitat has been ongoing since the early 1990's. Estuary habitat exists in the tidal zone.

Geology: The Site is underlain by fill material up to 8 feet thick consisting of clay, silt, sand, and gravel. The Bellingham Glaciomarine Drift (consisting of silts, clays, and fine sand lenses), which was deposited by melting glacial ice near the end of the last glacial period, extends beneath the fill to 28 feet below the ground surface (bgs). The formation is of low permeability and was essentially dry in some borings at times. The weathered surface of the Chuckanut Formation (sandstone bedrock) was encountered at 28 feet bgs, the maximum depth of exploration at the Site.

Groundwater: A perched zone of ground water of limited yield was encountered at the surface of the bedrock at approximately 28 feet bgs. The groundwater possibly occupies the weathered surface of the sandstone and may have wide lateral extent. The flow direction of the groundwater is unknown but is believed to be to the west following the slope of the

bedrock surface. The nature and occurrence of deeper ground water beneath the Property are not known.

Two groundwater monitoring wells (MW-1 and MW-2) are located off the Property in Central Avenue, and one angled groundwater monitoring well (MW-3) is located near the northwest corner of the Property (**Figure 2**). MW-3 is angled toward the Property and the well screen is located beneath the building on the Property (**Figure 8**).

Water Supply: The Property is served by the City of Bellingham public drinking water utility, which obtains its water from Lake Whatcom. According to Ecology's well log database, no drinking water wells are located within ½ mile of the Property.

Extent of Soil, Groundwater, and Soil Vapor Contamination: The lateral extent of soil contamination off the Property is limited to approximately 10 to 15 feet from the former 300-gallon UST location. The vertical extent of the soil contamination off the Property has not been defined, with concentrations of benzene TPH-G, benzene and toluene exceeding the Method A cleanup levels at 25 feet bgs. The extent of the groundwater contamination is unknown. A vapor intrusion assessment concluded that sub-slab soil gas concentrations beneath the building were below the MTCA Method B screening levels.

Property Cleanup Actions:

Three USTs and associated piping were removed from the Property and the adjacent Central Avenue right-of-way along the western Property boundary in August 2013 (**Figure 2**). Removed USTs included one 1,300-gallon Bunker C heating oil UST partially located on the Property, and two gasoline USTs (1,000 gallon and 300 gallon) located in the City of Bellingham right-of-way. The heating oil and 300-gallon gasoline USTs were found to be in poor condition at the time of removal. The 1,000-gallon gasoline UST appeared to be in good condition; however, evidence of spills in shallow soil (up to 3 feet bgs) were observed around the UST fill pipe.

Approximately 280 tons of petroleum contaminated soil (PCS) were excavated from around the three USTs, on and off the Property. The excavation was limited laterally to the east due to the presence of the building foundation and to the west by Central Avenue (**Figure 3**). The excavation extended to approximately 9 to 15.5 feet bgs.

Confirmation soil samples (**Figure 3**) were collected at the limits of the excavation and analyzed for one or more of the following:

- TPH-G, TPH-D, and TPH-O;
- benzene, toluene, ethylbenzene, and xylenes (collectively BTEX);
- polycyclic aromatic hydrocarbons (PAHs);
- extractable petroleum hydrocarbons/volatile petroleum hydrocarbons (EPH/VPH);
- methyl tert-butyl ether (MTBE);
- metals (lead, arsenic, cadmium, chromium, and mercury); and
- n-hexane.

Results showed that soil around the former gasoline USTs was contaminated with benzene at concentrations exceeding the MTCA Method A cleanup level (up to 1.5 milligrams per kilogram [mg/kg] at 11 feet bgs along the west sidewall of the excavation); however, TPH-G was not detected above the laboratory method reporting limits (MRLs). TPH-D and TPH-O were also not detected in soil samples above the MRLs. All other analytes were either not detected at the MRLs or below their respective cleanup levels. Confirmation soil sample locations with results exceeding the MTCA Method A cleanup levels are shown on **Figure 4**.

In 2016 and 2017, soil samples were collected from five soil borings (B-1 through B-5) up to 25 feet bgs, and one monitoring well (MW-1) up to 20 feet bgs, and analyzed to assess the extent of soil contamination around the former 300-gallon gasoline UST (**Figure 3**). One groundwater sample was collected from MW-1 to assess groundwater quality downgradient of the former USTs. Soil and groundwater samples were analyzed for one or more of the same parameters analyzed in 2013.

Benzene (up to 3.4 mg/kg) above the Method A cleanup level of 0.03 mg/kg was detected in soil samples collected from borings B-4 and B-5 at depths of 20 and 25 feet bgs. TPH-G and toluene were also above the cleanup levels in the sample collected from B-4 at 25 feet bgs. B-4 was located near the western limit of the former UST excavation and B-5 was located near the former 300-gallon UST (**Figure 3**).

The results for soil samples collected from the other borings and from MW-1 were primarily below the MRLs. Analytes were not detected above the MRLs in the groundwater sample, except for EDC which was detected at a concentration below the cleanup level. Soil and groundwater sample locations where results exceed the cleanup levels are shown on **Figures 4** and **5**, respectively.

A vapor intrusion assessment was also conducted during the 2016/2017 investigation. Sub-slab soil samples were collected at approximately 3 feet bgs from two locations inside the boiler

room of the existing building (**Figure 3**). Sub-slab soil gas samples were also collected. No analytes were detected above the MRLs in the soil samples. Low levels of BTEX, dichlorodifluoromethane, n-hexane, and 1,2,4-trimethylbenzene were detected in soil gas; however, concentrations did not exceed the MTCA Method B soil-gas screening levels.

In 2019, an additional monitoring well (MW-2) was installed downgradient of the source area to a depth of approximately 26 feet bgs (**Figure 5**). The analytical results for soil samples that were collected from MW-2 were either below the MRLs or below the cleanup levels.

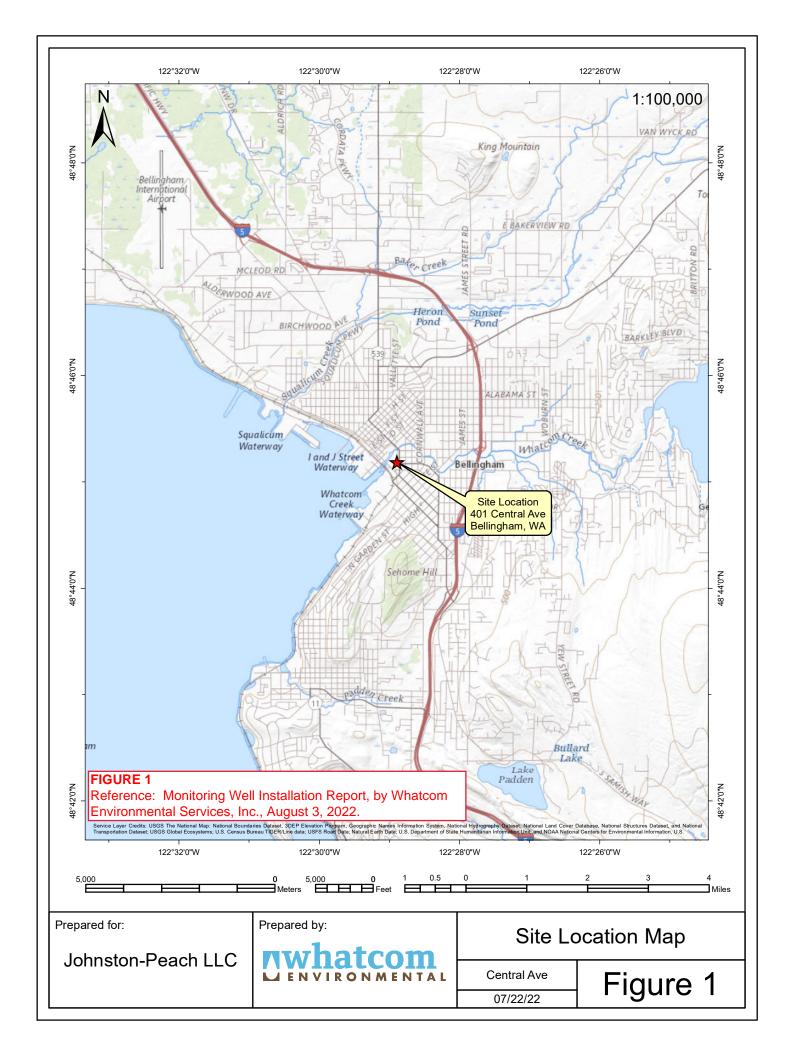
Groundwater samples were collected from off-Property wells MW-1 and MW-2 from July 2019 to May 2022. Benzene was detected twice in MW-1 (100 micrograms per liter [μ g/L] in October 2019 and 36 μ g/L in January 2020), at concentrations exceeding the MTCA Method A cleanup level of 5 μ g/L. The sum of TPH-D and TPH-O was detected at a concentration exceeding the MTCA Method A cleanup level (500 μ g/L) once in MW-1 and three times in MW-2. Method A values were derived using the entire range of TPH fractions present. Evaluation of compliance with the MTCA Method A groundwater cleanup levels for TPH-D and TPH-O requires adding concentrations of the two fractions and comparing the result to the cleanup level

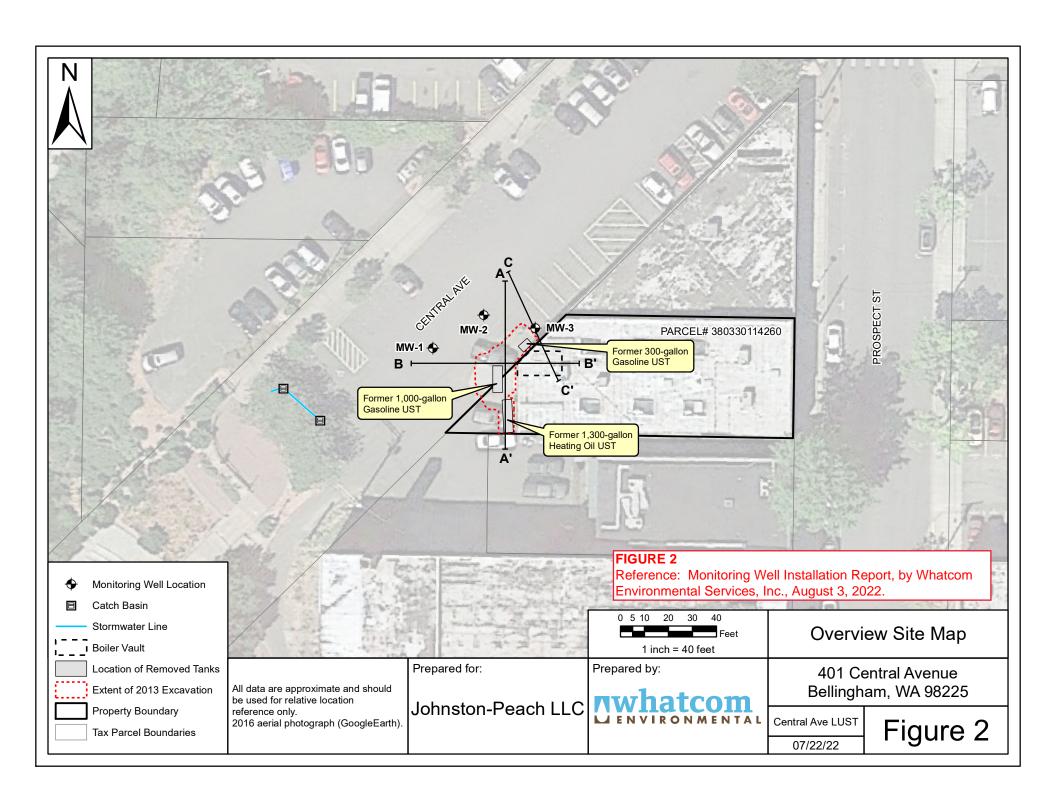
All other detections of TPH-G and TPH-D+O in MW-1 and MW-2 were either not detected above the MRLs or below the cleanup levels. The primary groundwater contaminant in MW-1 and MW-2 is EDC, which has been consistently detected above the MTCA Method A cleanup levels. EDC has been detected up to $27 \, \mu g/L$ in MW-1 (October 2019).

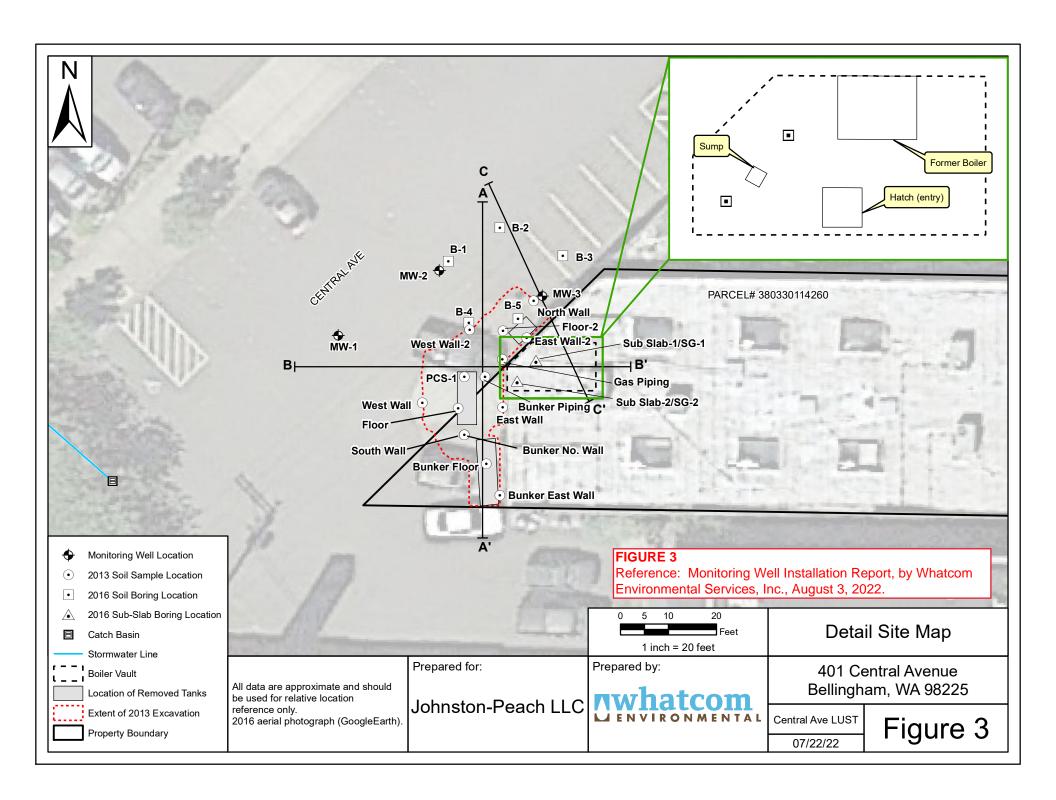
In a VCP opinion letter dated October 29, 2021, Ecology concluded that the assessment of soil and groundwater on the Property was not adequate. Ecology recommended the installation of a monitoring well to collect soil and groundwater data beneath the Property building. In 2022, groundwater monitoring well MW-3 was installed off the Property near the west wall of the existing Property building (Figure 5). The boring was angled toward the building to assess soil and groundwater beneath the Property building near the source area. TPH-G was detected in soil collected at 13 to 15 feet bgs; however, the concentration was below the MTCA Method A cleanup level. No other analyte was detected above the MRLs in any other soil sample collected from MW-3, including in samples collected at depths greater than 15 feet bgs. Ecology determined that the additional soil and groundwater assessment conducted on the Property in May 2022 (as documented in the *Monitoring Well Installation Report and Property No Further Action Request*, dated August 3, 2022) satisfied Ecology's recommendations to resolve the absence of data beneath the building, and supports a Property NFA opinion.

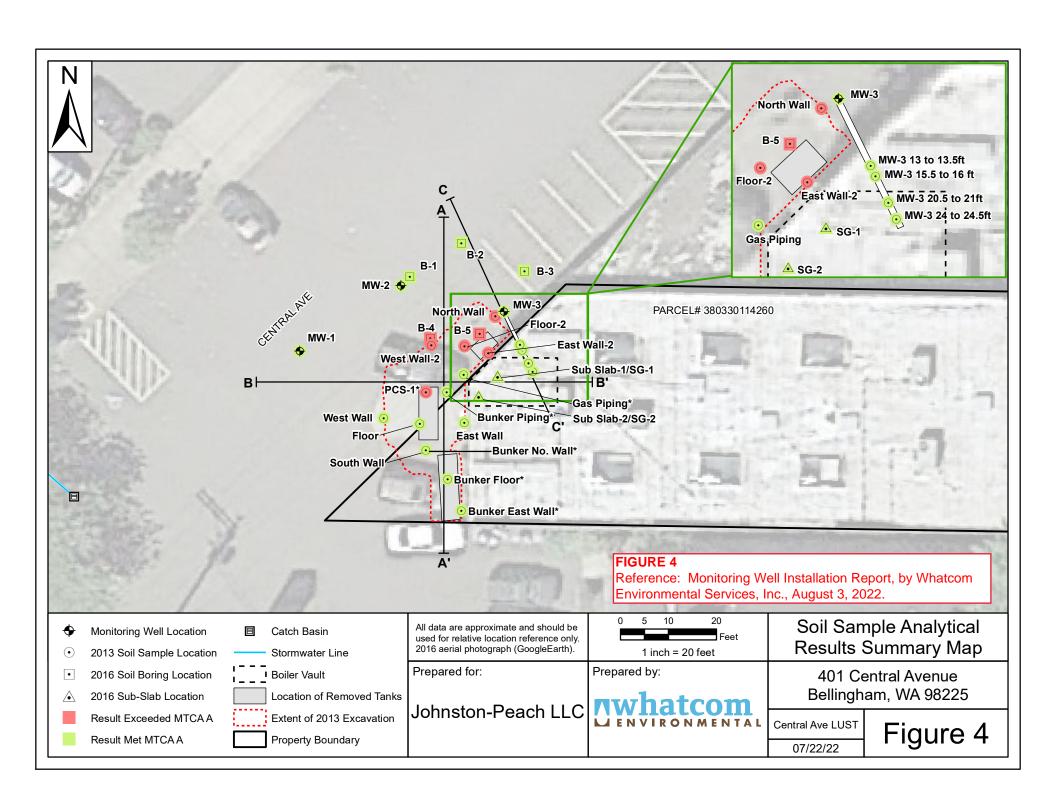
Groundwater samples were collected from MW-1, MW-2, and MW-3 in May 2022. EDC (9.6 $\mu g/L$) exceeded the cleanup level in the groundwater sample collected from MW-2. EDC was the only analyte detected in groundwater; all other analytes were below the MRLs in all three wells, including the groundwater sample collected beneath the building (sample from MW-3). Cross-sections for the Site are presented on **Figures 6, 7, and 8**.

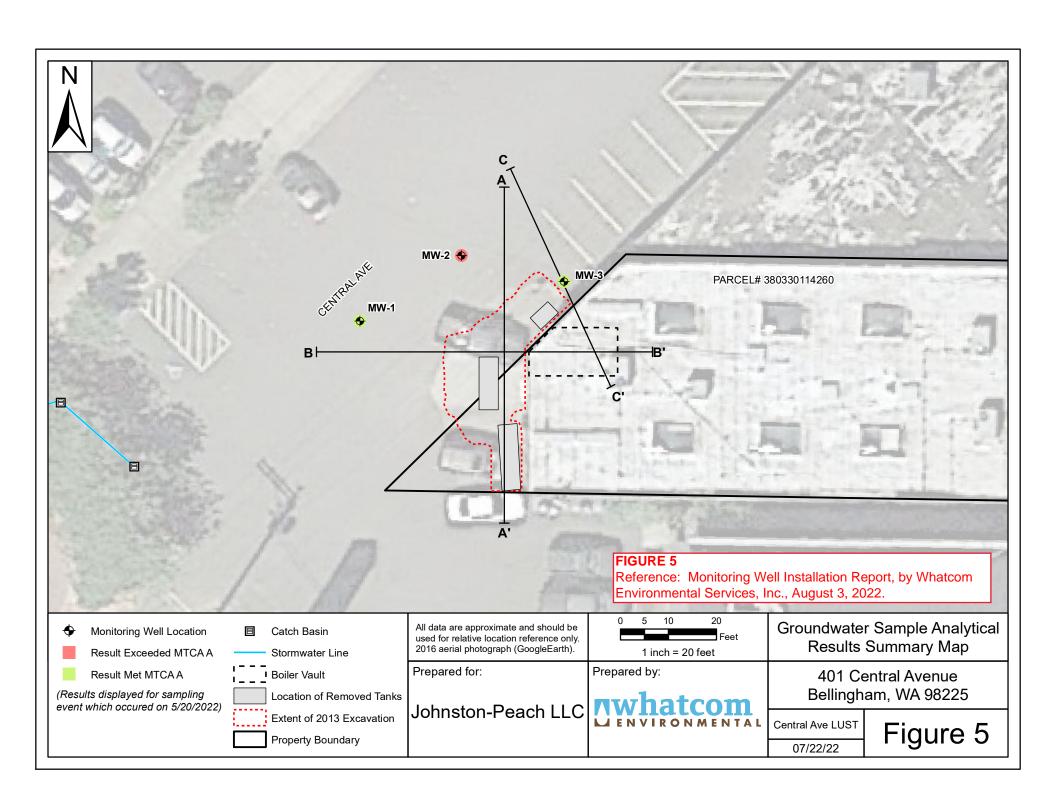
Site Diagrams

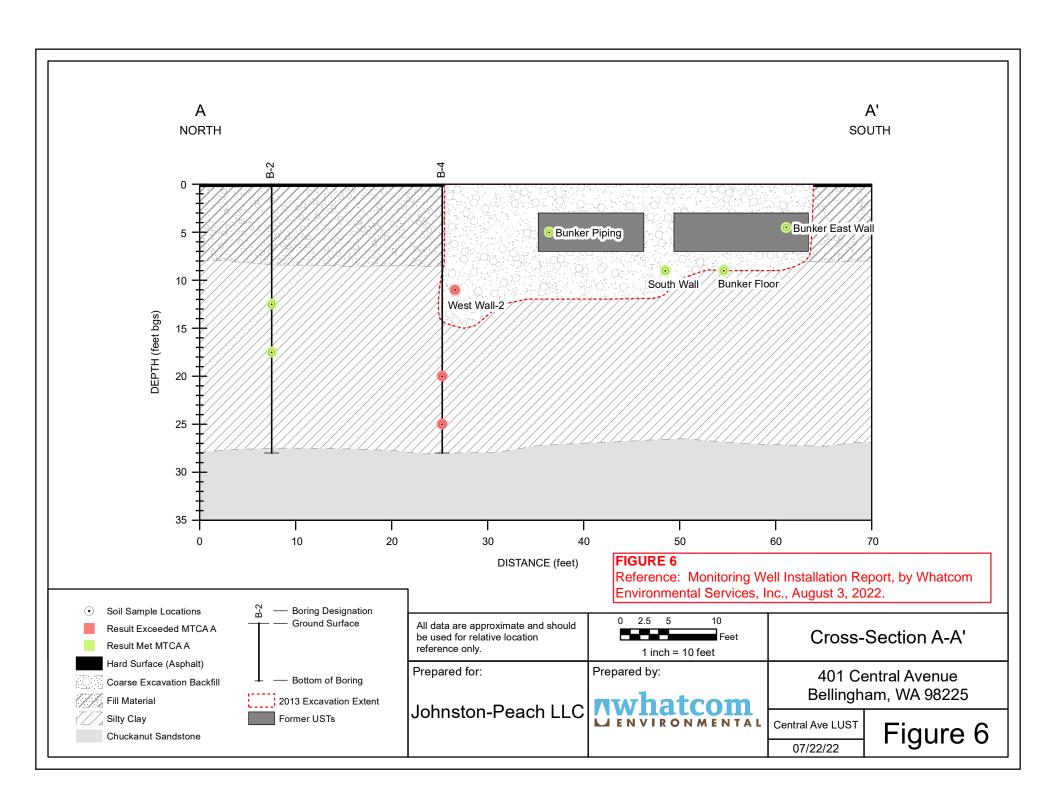


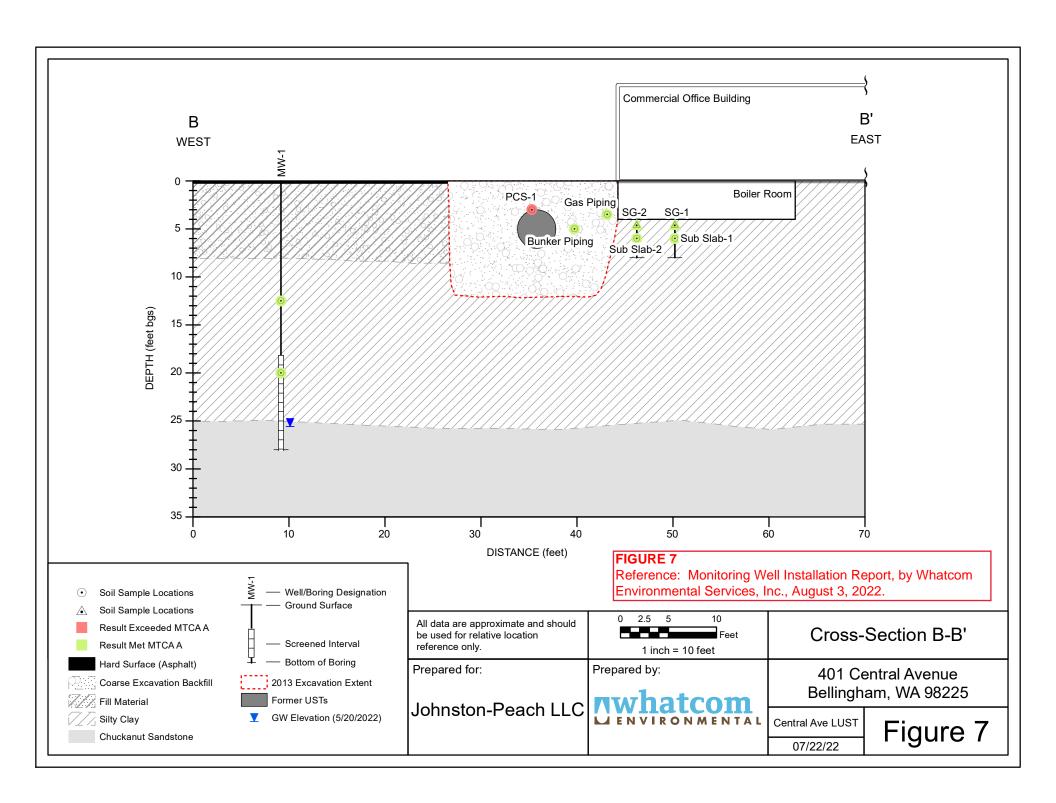


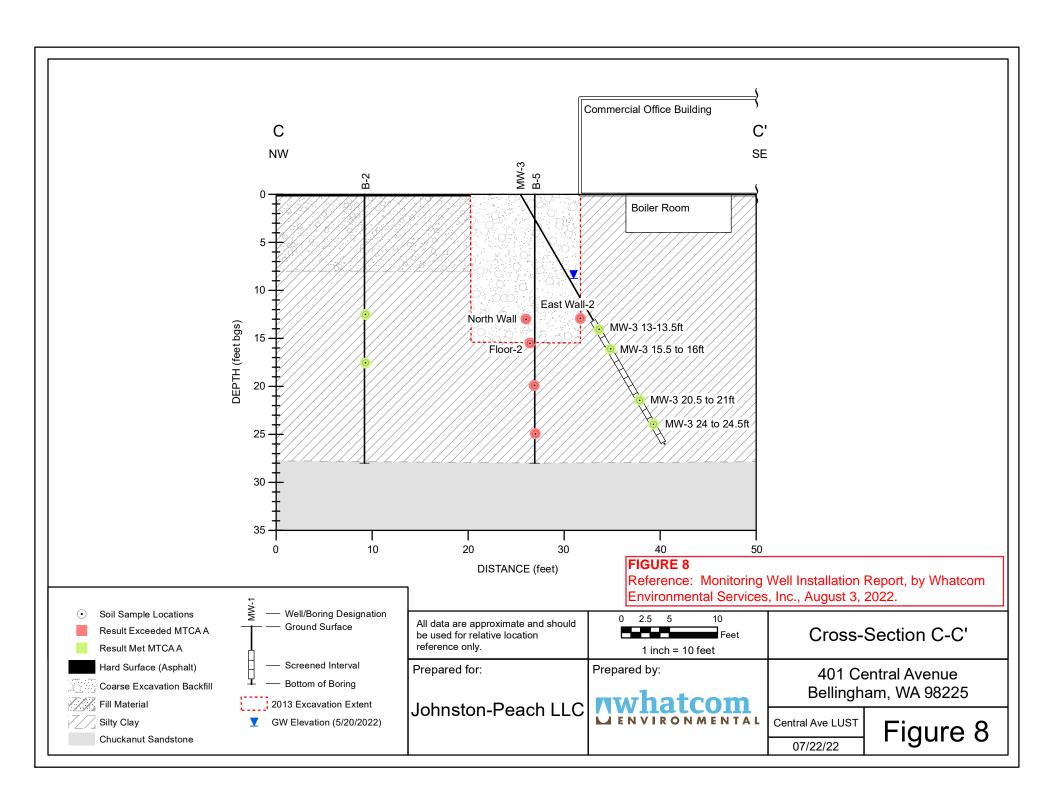












Enclosure C

Basis for the Opinion: List of Documents

- 1. Whatcom Environmental Services, Inc., *Monitoring Well Installation Report and Property No Further Action Request*, 401 Central Avenue LUST, Bellingham, Washington, FSIS #10851, VCP #NW2987, August 3, 2022.
- 2. Washington State Department of Ecology (Ecology), Opinion Letter, October 19, 2021.
- 3. Whatcom Environmental Services, Inc., *Monitoring Well Installation Report Request for Opinion, 401 Central Avenue LUST*, Bellingham, Washington, FSIS #10851, VCP #NW2987, June 16, 2020.
- 4. Ecology, Opinion Letter, May 14, 2019.
- 5. Whatcom Environmental Services, Inc., Response to Ecology Opinion Letter dated December 29, 2017 and Work Plan for Installation of a Second Groundwater Monitoring Well, October 11, 2018.
- 6. Ecology, Opinion Letter, December 29, 2017.
- 7. Whatcom Environmental Services, Inc., Independent Remedial Action Report, March 31, 2017.
- 8. Ecology, *Opinion Letter*, May 24, 2016.
- 9. Whatcom Environmental Services, Inc., *Underground Storage Tank Site Assessment and Petroleum Contaminated Soil Removal Action*, September 30, 2013.