

# **Electronic Copy**

# STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

# Northwest Region Office

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

August 18, 2022

Mark Salo Twelve Trees Business Park 26276 Twelve Trees Lane NW Poulsbo, WA, 98370 (marks@twelvetrees.com)

#### Re: Opinion on Proposed Cleanup of the following Site:

Site Name: Twelve Trees Business Park Site Address: 26273 to 26285 Twelve Trees Lane NW, Poulsbo, WA, 98370 Cleanup Site ID: 2735 Facility/Site ID: 39159928 VCP Project ID: NW3340

Dear Mark Salo:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your proposed independent cleanup of the Twelve Trees Business Park facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70A.305 RCW.

#### **Issue Presented and Opinion**

Based on the information provided in the *Remedial Investigation Report, Twelve Trees Business Park,* 26273, 26279, 26285 Twelve Trees Lane NW, Poulsbo Washington, dated February 22, 2022 (February 2022 RI) will further remedial action likely be necessary to clean up contamination at the Site?

# NO. Ecology has determined that, upon completion of your proposed cleanup, no further remedial action will likely be 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, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided as follows.

#### **Description of the Site**

This opinion applies to the only Site described as follows. The Site is defined by the nature and extent of contamination associated with the following releases:

• Diesel- (TPH-D) and oil-range (TPH-O) total petroleum hydrocarbons into the Soil.

• Trichloroethylene (TCE) into the Groundwater.

**Enclosure A** includes a detailed description and diagram of the Site, as currently known to Ecology.

Please note 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 documents listed in **Enclosure B**. A number of these documents are accessible in electronic form from the <u>Site webpage</u><sup>1</sup>. The complete records are stored in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. Visit our <u>Public Records Request page</u><sup>2</sup>, to submit a public records request or get more information about the process. If you require assistance with this process, you may contact the Public Records Officer at <u>publicrecordsofficer@ecy.wa.gov</u> or 360-407-6040.

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

#### Analysis of the Cleanup

Ecology has concluded that, upon completion of your proposed cleanup, **no further remedial action** will likely be necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

#### 1. Characterization of the Site.

Ecology has determined your characterization of the Site is sufficient to establish cleanup standards and select a cleanup action. The Site is described above and in **Enclosure A.** 

#### a. Soil contamination at the Site has been sufficiently characterized.

Soil at the Site contained petroleum hydrocarbons above Method A cleanup levels originating from a UST used for storage of diesel fuel, a truck bed wash area where diesel fuel was used to wash asphalt transportation trucks, and a vehicle maintenance area located in the southern portion of the Site. The contaminants of concern (COCs) in soil include TPH-D and TPH-O. Other contaminants including volatile organic compounds (VOCs) were either not detected or detected below their respective cleanup levels.

During redevelopment of the Site in 1993 and 1994, four USTs used for storage of diesel, gasoline, and waste oil were removed from the Site. A total of approximately 1,100 cubic yards of soil contaminated with TPH-D and TPH-O were excavated from the diesel UST, truck wash area, and vehicle maintenance area and stockpiled on the Site (see **Enclosure A, Figure 5**). Confirmation samples collected from excavation limits indicated soils with concentrations of TPH above Method A cleanup levels had been removed.

Stockpiled soils were treated with fertilizer to enhance bioremediation of TPH. Stockpiled soils were tested in 1997 and confirmed to contain TPH-D and TPH-O below Method A cleanup levels.

<sup>&</sup>lt;sup>1</sup> https://apps.ecology.wa.gov/cleanupsearch/site/2735

<sup>&</sup>lt;sup>2</sup> https://ecology.wa.gov/publicrecords

Following confirmation of TPH below cleanup levels, stockpiled soils were reused on the Site as fill material. A no further action (NFA) opinion letter issued by Ecology in 1998 concluded that soil at the Site no longer contained TPH-D and TPH-O above Site cleanup levels.

#### b. Groundwater contamination at the Site has not been sufficiently characterized.

Groundwater sampling was first conducted at the Site in 1991. Initial results collected from Well-1 and Well-2 indicated Well-2 contained TCE above Method A cleanup levels (see **Enclosure A, Figure 3**). Additional wells installed in 1992 and 1993 also contained TCE below laboratory detection limits.

Ecology's 1998 NFA letter states that TCE in groundwater remained above Method A at the Site. As part of the NFA letter, a restrictive covenant was recorded on the Property limiting use of groundwater, dated October 15, 1998. The 1998 NFA letter required sampling groundwater on a quarterly basis for the first year following redevelopment and annually until cleanup levels are met.

Per the recommendation in Ecology's 1998 opinion, Well-2 and Well-4 were sampled on a quarterly basis in for four quarters in 1999 and 2000. Groundwater samples collected from Well-2 contained the greatest amount of TCE in September 1999 and February 2000 (15  $\mu$ g/L). Groundwater samples collected from Well-4 during the same period did not contain TCE above laboratory reporting limits, and it was eliminated from the sampling network, in accordance with Ecology's 1998 Opinion and the restrictive covenant.

Well-2 was sampled on an annual basis in the second quarter of the year from 2001 until 2019. Following 3 years of annual TCE concentrations below Method A cleanup levels in groundwater samples collected from Well-2, four consecutive quarters of groundwater samples were collected from 2019 to 2020, per the 1998 opinion letter and correspondence with Ecology. Concentrations of TCE remained below Method A cleanup levels for all four quarters.

Groundwater samples from the Site have been collected with disposable bailers since November 1999. Ecology requires all confirmational groundwater samples be collected with using low-flow sampling methodology with submersible or bladder pumps, to reduce the potential for volatilization of analytes during sampling. At least one sample from Well-2 that is below groundwater cleanup levels for TCE and associated breakdown products is needed, using low-flow sampling methodology, to demonstrate compliance with cleanup standards. Please Refer to Ecology's *Guidance for Remediation of Petroleum Contaminated Sites, Revised June 2016*<sup>3</sup> and the Environmental Protection Agency's *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures, Dated April 1996*<sup>4</sup> for details on acceptable low-flow groundwater sampling methodology.

Please provide the following information to supplement the February 2022 RI:

- A table that includes historical depth to water measurements for all monitoring events, total well depth, well diameter, top of casing elevation, and well screen interval; and
- Documentation of well sampling procedures, including stabilization of field water- quality parameters prior to sample collection, for the additional sampling of Well-2.

<sup>&</sup>lt;sup>3</sup> https://apps.ecology.wa.gov/publications/SummaryPages/1009057.html

<sup>&</sup>lt;sup>4</sup> https://www.epa.gov/remedytech/low-flow-minimal-drawdown-ground-water-sampling-procedures

#### 2. Establishment of cleanup standards.

#### a. Soil.

MTCA Method A soil cleanup levels for unrestricted uses (WAC 173-340-740; Table 740-1) with the standard point of compliance throughout the Site to a depth of 15 feet bgs, per WAC 174-340-740(6)(d) are appropriate.

A Terrestrial Ecological Evaluation (TEE) is necessary to meet substantive requirements of MTCA, to set cleanup levels that are protective of terrestrial species, and to determine an appropriate cleanup action. Additional information on satisfying this requirement can be found on Ecology's <u>website</u><sup>5</sup>.

#### b. Groundwater

Groundwater is present at a depth of approximately 63 feet below ground surface (bgs). The highest beneficial use for groundwater at the Site is considered to be as a potable source due to the location of the Site within a critical recharge area and a 5-year wellhead protection zone for Kitsap County water supply wells, as described in **Enclosure A**. MTCA Method A cleanup levels, which are protective of groundwater as a potable source, have been selected (WAC 173-340-720; Table 720-1). Ecology agrees that MTCA Method A cleanup levels for groundwater are appropriate for this Site.

The standard point of compliance is throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest depth which could potentially be affected (WAC 173-340-720(8)(b)).

#### 3. Selection of cleanup action.

Ecology has determined the cleanup action you proposed for the Site meets the substantive requirements of MTCA. Based on the recommendations in Ecology's 1998 Opinion and the requirements of the restrictive covenant, the groundwater monitoring completed at Well-2 to date confirm that contaminant concentrations in Site groundwater have declined below cleanup levels and likely meet the cleanup standards established for the Site. Additional groundwater sampling (discussed above in section 1(b) of this opinion letter) is needed to confirm compliance with cleanup levels.

# 4. Environmental Information Management (EIM) database submittal.

Electronic submittal of all sampling data into Ecology's Electronic Environmental Information Management (EIM) database is a requirement in order to receive a final Ecology opinion for this Site. Our records indicate that no Site data has been submitted to EIM to date. Requirements for data submittal to EIM are summarized on Ecology's <u>Website</u><sup>6</sup>.

<sup>&</sup>lt;sup>5</sup> <u>https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation</u>

<sup>&</sup>lt;sup>6</sup> https://ecology.wa.gov/Research-Data/Data-resources/Environmental-Information-Managementdatabase

#### 5. Next Steps.

An addendum to the *February 2022 RI* should be submitted which includes the following:

- A completed TEE form;
- An updated groundwater analytical results summary table that includes results for TCE breakdown products cis-1,2-dichloroethene (DCE) and vinyl chloride where available;
- An updated well construction table as discussed in section 1(b); and
- Supplemental groundwater sampling data from Well-2, including details of low-flow groundwater sampling procedures, groundwater sampling field data sheets, and laboratory reports.

Once the Site NFA opinion has been completed, the process to release the restrictive covenant can proceed. In order to release the restrictive covenant, a public comment period is necessary, in accordance with WAC 173-340-440(12). Additional information about the process for releasing the restrictive covenant for the Site is available in Ecology's <u>Procedure 440C: Releasing Environmental</u> <u>Covenants under the Model Toxics Control Act, Revised December 22, 2016</u><sup>7</sup>. We look forward to working with you through the Ecology-directed process of implementing the public comment period and releasing the restrictive covenant.

#### 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 proposed will be substantially equivalent. Courts make that determination. *See* RCW 70A.305.080 and WAC 173-340-545.

#### 3. Opinion is limited to proposed cleanup.

This letter does not provide an opinion on whether further remedial action will actually be necessary at the Site upon completion of your proposed cleanup. To obtain such an opinion, you must submit a report to Ecology upon completion of your cleanup and request an opinion under the Voluntary Cleanup Program (VCP).

<sup>&</sup>lt;sup>7</sup> https://apps.ecology.wa.gov/publications/SummaryPages/1509057.html

#### 4. 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 VCP. As you conduct your cleanup, please do not hesitate to request additional services. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our <u>webpage</u><sup>8</sup>. If you have any questions about this opinion, please feel free to contact me by phone at (206) 459-6287 or by email at <u>david.unruh@ecy.wa.gov</u>

Sincerely,

David Unruh Toxics Cleanup Program, NWRO

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

cc: Shawn Williams, Krazan & Associates, Inc. (<u>shawnwilliams@krazan.com</u>)
Krista Webb, Krazan & Associates, Inc. (<u>kristalewebb@krazan.com</u>)
Sonia Fernandez, Ecology VCP Coordinator (<u>sonia.fernandez@ecy.wa.gov</u>)

<sup>&</sup>lt;sup>8</sup> https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanups/Voluntary-Cleanup-Program

Enclosure A

Description and Diagrams of the Site

### Site Description

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

<u>Site</u>: The Site is defined as releases of the following contaminants at 26273, 26279, and 26285 Twelve Trees Lane NW, Poulsbo, Kitsap County, Washington (Property, **Figure 1**):

- Diesel- (TPH-D) and oil-range total petroleum hydrocarbons (TPH-O) to the Soil.
- Trichloroethylene (TCE) to the Groundwater.

The Property consists of four irregularly shaped parcels totaling 10.2 acres with the Kitsap County parcel numbers 272701-4-062-2000, 272701-4-065-2007, 272701-4-064-2008, and 272701-4-063-2009. The Property is located west of Twelve Trees Lane NW, east of Waghorn Road NW, and south of Pioneer Way NW.

According to MTCA, the Site is defined as all areas where contamination has come to be located.

<u>Area and Property Description</u>: The Property is located in a mixed residential, commercial, and light industrial area. The Property is currently developed with three irregularly shaped one- to two-story multi-tenant office and warehouse buildings (**Figure 2**).

The current uses of surrounding properties include:

- Offices and warehouses to the east and south;
- Warehouses and a road material storage area to the north; and
- Single-family residences to the west.

**Property History and Current Use:** The Property was first developed as a gravel and asphalting plant in 1956. Site activities included asphalting, vehicle maintenance, and asphalt testing. Asphalt plant operations ceased in 1981. Following closure of the asphalt plant, the Property operated as a gravel pit until remediation began in 1994.

The Property was redeveloped with a warehouse and office building in 1997. Two additional office and warehouse buildings were constructed in 2003. The current tenants include electronics manufacturers, a retail display fabricator, a structural glass contractor, and a collectibles reseller.

**Sources of Contamination:** A groundwater quality assessment conducted in 1991 included review of historical records that indicated the presence of three aboveground storage tanks (ASTs) used for storage of liquid asphalt, two underground storage tanks (USTs) used for storage of diesel fuel, one UST used for storage of gasoline, and one UST used for storage of waste oil (**Figure 3**). Test pits were advanced in 1991 adjacent to the assumed location of a UST southeast of the office building (TP-A), the gasoline storage UST (TP-B), the western diesel UST (TP-C), and the waste oil UST (TP-D). The sample collected from 2 feet below ground surface (bgs) from TP-C contained TPH-D above Method A cleanup levels. Test pit locations are shown on **Figure 3**.

Groundwater samples collected during this investigation contained concentrations of TPH and VOCs below Method A cleanup levels, with the exception of Well-2. Groundwater collected from Well-2 contained TCE above Method A cleanup levels. Laboratory testing equipment used in asphalt plant

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operations was reportedly washed with TCE that was discharged directly to the ground surface near the Well-2 area (Figure 3).

During redevelopment activities in 1994, soil contaminated with TPH-D and TPH-O above Method A cleanup levels was excavated from the area around TP-3 and TP-4, and from the diesel UST area west of Well-3 (**Figure 3**). Soil with concentrations of TPH-D and TPH-O was present near a truck wash area located northeast of the former asphalt plant. Truck beds were reportedly washed with diesel that was subsequently discharged along with asphalt residue directly to the ground.

Soil contaminated with TPH-O was also discovered near a maintenance area for asphalt plant vehicles, located to the southeast of the former plant. Discarded vehicle parts including oil filters were observed in the excavation. Soil samples submitted for analysis of metals did not return results above Method A cleanup levels.

**Physiographic Setting:** The Site is located within the Puget Sound Lowland Physiographic Province, a north-south trending structural and topographic depression that is bordered on its west side by the Olympic Mountains and to the east by the Cascade Mountains. The Puget Sound Lowland is underlain by Tertiary volcanic and sedimentary bedrock, and has been filled to the present day land surface with Pleistocene-aged glacial and nonglacial sediments.

The Site is located on the western side of the Kitsap Peninsula on an upland with an elevation of approximately 250 feet above mean sea level (amsl). The ground surface at the Site is generally flat, sloping gently to the northwest toward the Hood Canal, located approximately 4,500 feet to the northwest.

**Surface/Storm Water System:** The closest surface water body to the Site is Jump Off Creek, which flows through the west side of the Property northwest toward the Hood Canal. Stormwater drains via sheet flow to catch basins and is collected in a stormwater detention tank before it is discharged to Jump Off Creek on the west side of the Site.

**Ecological Setting:** Approximately 20.5 acres of continuous undeveloped land is located within 500 feet of the Site. A riparian habitat including deciduous and coniferous trees is present along the intermittent stream on the western portion of the Property. A majority of the ground surface on the property is covered with asphalt and buildings.

**Geology:** The <u>geologic map of the region</u><sup>9</sup> indicates that the Site is underlain by Vashon recessional outwash, a loose, stratified unit consisting of moderately to poorly graded sands, gravels, and silts. Underneath the outwash is the Whidbey Formation, a dense, stratified unit consisting of silts, clays, and sand deposited during an interglacial period before the Vashon Stade.

Borings completed on the site indicate it is situated on 2 to 3 feet of fill material consisting of sand with gravel. Fill material is underlain by dense, fine sands with varying amounts of silt and gravel to a depth of approximately 95 feet bgs, interpreted to be Vashon recessional outwash. These soils are underlain

<sup>&</sup>lt;sup>9</sup> <u>https://ngmdb.usgs.gov/Prodesc/proddesc\_99323.htm</u>

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by hard, thinly bedded silty sands to the maximum explored depth of 119 feet bgs, interpreted to be the Whidbey Formation.

**Groundwater:** Three water supply wells were installed at the Site between 1953 and 1979. In 1993, one permanent groundwater monitoring well and two additional water supply wells were installed to monitor groundwater at the Site. Well screened intervals range from approximately 95 to 105 feet bgs. Depth to groundwater on the Site ranges from 58 to 70 feet bgs. Groundwater flow is oriented approximately northwest toward the Hood Canal (**Figure 4**).

The Site is located in a Category I Critical Recharge Area as defined in the Kitsap County Groundwater Management plan. The primary aquifer used by Kitsap County for water supply is stratigraphically deeper than first-encountered groundwater at the Site, in the Double Bluff Drift unit. Groundwater at the Site occurs under water-table conditions in Vashon-age glacial sediments overlying the Possession Drift.

**Water Supply:** Potable water is supplied to the Property by the Kitsap Public Utility District (KPUD). The majority of the District's water is supplied by wells screened in pre-Vashon Stade glacial and nonglacial deposits. The Site is located within the 5-year wellhead protection zone of the KPUD Vinland Edgewater Wells 4 and 5, which are screened at total depths of 180 feet and 446 deep, respectively.

**Release and Extent of Contamination:** In June 1991, during a Phase II Environmental Site Assessment (ESA), two groundwater samples were collected from existing Property water supply wells Well-1 and Well-2 (**Figure 3**). Well-1 was installed in 1953; well logs for the other two existing supply wells Well-2 and Well-3 are not available. The groundwater sample collected from Well-2 contained TCE above Method A cleanup levels. Groundwater samples collected in March 1991 from the two KPUD wells located approximately 1,100 feet northeast of the Site did not contain TCE above laboratory detection limits.

As part of the Phase II ESA, four test pits were advanced on the Property adjacent to the known locations of the gasoline, diesel, and waste oil USTs (TP-A to TP-D; **Figure 3**). The exploration TP-A was advanced in the eastern side of the site to explore for a possible UST. The USTs were reportedly pumped free of product in the early 1980s and had not been in use since that time. One sample collected from 2 feet bgs in TP-C contained TPH-D above Method A cleanup levels (**Figure 3**).

In August 1991, four additional test pits were advanced around the perimeter of the former asphalt plant to evaluate soils for the presence of TCE following the detection of TCE in groundwater (TP-1 to TP-4; **Figure 3**). Soil samples collected from these test pits did not contain TCE above Method A cleanup levels.

Two additional water supply wells (Well-4 and Well-5) and one monitoring well (Well-6) were also installed during the Phase II ESA in 1992 and 1993. Soil samples were not collected from the borings during the installation of the wells. An additional round of groundwater samples was collected from all Site wells in September 1993. With the exception of Well-2, contaminants were not detected above Method A cleanup levels. Well-2 contained TCE above Method A cleanup levels.

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In 1994, the four USTs were decommissioned by removal from the Site (one 10,000-gallon diesel UST, one 7,700-gallon diesel UST, one 10,500-gallon gasoline UST, and one 500-gallon waste oil UST; **Figure 5**). At the time of their removal, all tanks were noted to be in good condition with no obvious leaks.

Confirmation samples collected from the limits of all UST excavations contained TPH-G, TPH-D, and TPH-O below current Method A cleanup levels for TPH, based on field-testing results using thin layer chromatography. Soils in the diesel UST excavations showed evidence of contamination, but characterization samples were not collected during the time of excavation. Excavation limit samples contained TPH-D below the Method A cleanup level based on thin layer chromatography results.

Two additional areas of contamination were discovered during excavations in 1994: an area near the north central Property boundary (where diesel used to clean truck beds had been dumped directly to the ground), and a maintenance area for plant vehicles in the southeast corner of the site. Soil samples collected from the truck wash area and maintenance area contained TPH-D and TPH-O, respectively, above Method A cleanup levels. Soil from the truck maintenance area was also analyzed for arsenic, cadmium, chromium, lead, and mercury, none of which exceeded their Method A cleanup levels.

Approximately 250 cubic yards of soil with TPH-D above cleanup levels from diesel UST excavations were placed in a berm on plastic sheeting and treated with fertilizer to aid in bioremediation. Approximately 450 cubic yards of soil contaminated with TPH-D from the truck wash area and 230 cubic yards of soil contaminated with TPH-D from the truck wash area and 230 cubic yards of soil contaminated with TPH-D from the truck maintenance area were also treated in this manner. Samples collected in 1997 from the berms contained TPH-D and TPH-O below Method A cleanup levels. Bioremediated soils were then used as fill soil during redevelopment of the Property.

Following the successful remediation of petroleum-contaminated soils on the Property, Ecology issued a no further action (NFA) letter for soils at the Site. Since groundwater near Well-2 still contained TCE above Method A cleanup levels, a restrictive covenant was recorded on the Property. The covenant required that groundwater samples be collected and analyzed for chlorinated volatile organic compounds (CVOCs) at Well-2 and Well-4 for four consecutive quarters, for the first year of monitoring and annually until cleanup levels are met.

The first year of groundwater monitoring was conducted in 1999. Samples were collected using a disposable plastic bailer and nylon cordage. Samples collected from Well-2 exceeded the Method A cleanup level for TCE during all four quarters. Samples collected from Well-4 during the same period did not exceed the laboratory reporting limit for TCE, and Well-4 was removed from the monitoring network in accordance with Ecology's 1998 Opinion.

Annual monitoring of Well-2 continued from 2000 to 2019. Following 2 years of groundwater samples with TCE below Method A, four consecutive quarters of groundwater samples were collected from Well-2 in 2019 and 2020, all of which contained TCE below the Method A cleanup level of 5  $\mu$ g/L. Groundwater samples were also analyzed for TCE breakdown products cis-1,2-dichloroethene (DCA) and vinyl chloride, neither of which exceeded Method A cleanup levels at any point during groundwater sampling at the Site.

Site Diagrams



Source: Google Maps

Vicinity Map 12 Trees Business Park	Scale: NTS	Date: Oct-2021	Krazan
RI/FS Twelve Trees Lane NW Poulsbo, Washington	Modified by: CB	Approved by: SEW	SITE DEVELOPMENT ENGINEERS Offices Serving the Western United States
	<b>Project No.</b> 104-21028	Figure No.	Enclosure A Figure 1

KRAZAN & ASSOCIATES, INC. With Offices Serving the Western United States

	Well #5	Pioneer Way	AA103
		1	the state of the s
Well #1	Well #3		nitoring Well well #1 fells AA103
			Enclosure A Figure 2
Source: Map adapted from Kitsap County			
Site Map	Scale:	Date:	
	NTS	Oct-2021	razan
12 Trees Business Park	Modified by:	Approved by:	Ni aZall
RI/FS Twelve Trees Lane NW	CB	SEW	SITE DEVELOPMENT ENGINEERS
	СБ	5E II	SITE DE VELOI MENT ENGINEERS
Poulsbo, Washington	Project No.	Figure No.	Offices Serving the Western United States

**KRAZAN & ASSOCIATES, INC.** *With Offices Serving the Western United States* 



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Enclosure B Basis for the Opinion: List of Documents

- 1. Krazan & Associates, Inc., *Remedial Investigation Report, Twelve Trees Business Park, 26273, 26279, 26285 Twelve Trees Lane NW, Poulsbo, Washington*, February 22, 2022.
- EnviroSound Consulting, Inc., Fourth Quarter 2019-2020 Groundwater Monitoring Report, Twelve Trees Business Park, 26276 Twelve Trees Lane NW, Suite B, Poulsbo, Washington, January 17, 2020.
- 3. EnviroSound Consulting, Inc., *Third Quarter 2019 Groundwater Monitoring Report, Twelve Trees Business Park, 26276 Twelve Trees Lane NW, Suite B, Poulsbo, Washington*, October 21, 2019.
- 4. EnviroSound Consulting, Inc., Second Quarter 2019 Groundwater Monitoring Report, Twelve Trees Business Park, 26276 Twelve Trees Lane NW, Suite B, Poulsbo, Washington, July 15, 2019.
- 5. EnviroSound Consulting, Inc., Annual 2019 Groundwater Monitoring Report, Twelve Trees Business Park, 26276 Twelve Trees Lane NW, Suite B, Poulsbo, Washington, April 5, 2019.
- 6. EnviroSound Consulting, Inc., Annual 2018 Groundwater Monitoring Report, Twelve Trees Business Park, 26276 Twelve Trees Lane NW, Suite B, Poulsbo, Washington, May 11, 2018.
- 7. Washington Department of Ecology (Ecology), *Periodic Review, Twelve Trees Business Park, Facility Site ID#: 39159928*, November 2016.
- 8. EnviroSound Consulting, Inc., Annual 2016 Groundwater Monitoring Report, Twelve Trees Business Park, 26276 Twelve Trees Lane NW, Suite E, Poulsbo, Washington, April 18, 2016.
- 9. EnviroSound Consulting, Inc., Annual 2015 Groundwater Monitoring Report, Twelve Trees Business Park, 26276 Twelve Trees Lane NW, Suite E, Poulsbo, WA, April 28, 2015.
- 10. EnviroSound Consulting, Inc., Annual 2014 Groundwater Monitoring Report, Twelve Trees Business Park, 26276 Twelve Trees Lane NW, Suite E, Poulsbo, Washington, April 29, 2014.
- 11. EnviroSound Consulting, Inc., Annual 2013 Groundwater Monitoring Report, Twelve Trees Business Park, 26276 Twelve Trees Lane NW, Suite E, Poulsbo, Washington, May 14, 2013.
- 12. EnviroSound Consulting, Inc., Annual 2012 Groundwater Monitoring Report, Twelve Trees Business Park, 26276 Twelve Trees Lane NW, Suite M, Poulsbo, Washington, May 9, 2012.
- 13. Ecology, Periodic Review, Twelve Trees Business Park, Facility Site ID# 39159928, August 2011.
- 14. EnviroSound Consulting, Inc., Annual 2011 Groundwater Monitoring Report, Twelve Trees Business Park, 26276 Twelve Trees Lane NW, Suite M, Poulsbo, Washington, June 1, 2011.
- 15. EnviroSound Consulting, Inc., Annual 2010 Groundwater Monitoring Report, Twelve Trees Business Park, 26276 Twelve Trees Lane NW, Suite M, Poulsbo, Washington, April 22, 2010.
- 16. EnviroSound Consulting, Inc., Annual 2009 Groundwater Monitoring Report, Twelve Trees Business Park, 26276 Twelve Trees Lane NW, Suite M, Poulsbo, Washington, April 2, 2009.

- 17. Alkai Consultants, LLC, Annual 2007 Groundwater Monitoring Report, Twelve Trees Business Park, 26273 Twelve Trees Lane NW, Suite M, Poulsbo, Washington, May 9, 2007.
- 18. Alkai Consultants, LLC, Annual 2006 Groundwater Monitoring Report, Twelve Trees Business Park, 26273 Twelve Trees Lane NW, Suite M, Poulsbo, Washington, May 24, 2006.
- 19. Alkai Consultants, LLC, Annual 2005 Groundwater Monitoring Report, Twelve Trees Business Park, 26273 Twelve Trees Lane NW, Suite M, Poulsbo, Washington, May 9, 2005.
- 20. Krazan & Associates, Inc., Annual 2003 Groundwater Monitoring Report, Twelve Trees Business Park, 26232 Pioneer Way, Poulsbo, Washington, March 31, 2003.
- 21. Krazan & Associates, Inc., Annual 2002 Groundwater Monitoring Report, Twelve Trees Business Park, 26232 Pioneer Way, Poulsbo, Washington, April 30, 2002.
- 22. Krazan & Associates, Inc., Annual 2001 Groundwater Monitoring Report, Twelve Trees Business Park, 26232 Pioneer Way, Poulsbo, Washington, May 25, 2001.
- 23. Krazan & Associates, Inc., Fourth Quarter 2000 Groundwater Monitoring Report, Twelve Trees Business Park, 26232 Pioneer Way, Poulsbo, Washington, March 31, 2000.
- 24. Krazan & Associates, Inc., *Third Quarter 1999 Groundwater Monitoring Report, Twelve Trees Business Park, 26232 Pioneer Way, Poulsbo, Washington*, December 22, 1999.
- 25. Krazan & Associates, Inc., Second Quarter 1999 Groundwater Monitoring Report, Twelve Trees Business Park, 26232 Pioneer Way, Poulsbo, Washington, September 28, 1999.
- 26. Krazan & Associates, Inc., First Quarter 1999 Groundwater Monitoring Report, Twelve Trees Business Park, 26232 Pioneer Way, Poulsbo, Washington, July 26, 1999.
- 27. Apanage Corporation, *Restrictive Covenant, Twelve Trees Business Park*, Recorded in Kitsap County, Washington, October 15, 1998.
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