

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

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December 20, 2018

Angela Maidment Commerce Road Terminals, LLC 3901 West Broad Street Richmond, VA 23230

Re: Further Action at the following Site:

• Site Name: Provisioners Express Inc

• Site Address: 2102 West Valley Highway N, Auburn, WA 98001

Facility/Site No.: 91612121
VCP Project No.: NW3206
Cleanup Site ID: 6847

Dear Angela Maidment:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Provisioners Express Inc facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

Is further remedial action necessary to clean up contamination at the Site?

YES. Ecology has determined that further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

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

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- Gasoline-, diesel- and heavy oil-range petroleum hydrocarbons (TPHg, TPHd, and TPHo) into the Soil.
- TPHd and TPHo into the Ground Water.

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

Please note that 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.** Those documents are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. You can make an appointment by completing a Request for Public Record form (https://www.ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests) and emailing it to Public RecordsOfficer@ecy.wa.gov, or contacting the Public Records Officer at 360-407-6040. A number of these documents are accessible in electronic form from the Site web page https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=6847.

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 **further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology has determined your characterization of the Site is not sufficient to establish cleanup standards and select a cleanup action. The Site is described above and in **Enclosure A.**

- Additional ground water evaluation downgradient of monitoring well MW-8 is needed.
 - o A new release to ground water occurred in 2018 at monitoring well MW-8 located east of the former diesel underground storage tank (UST); the ground water

samples collected in May and June 2018 from monitoring well MW-8 contained TPHd and TPHo concentrations above the MTCA Method A ground water cleanup level.

- o A *Groundwater Assessment Work Plan (Work Plan)*, dated September 17, 2018 has been submitted to Ecology. The *Work Plan* proposes to install a new ground water monitoring well downgradient of monitoring well MW-8. Ecology concurs with the *Work Plan*.
 - The new monitoring well can provide additional soil and ground water data to delineate the extent of the release.
 - The new monitoring well can replace monitoring well MW-8 as a point of compliance well, if the ground water samples collected from the new monitoring well are in compliance with the MTCA Method A ground water cleanup levels.
 - The initial ground water sample collected from the new monitoring well should be analyzed for the full suite of constituents for unknown oil, according to Table 830-1 of the MTCA regulation (Chapter 173-340 WAC). These constituents include TPHg, TPHd, TPHo, total lead, naphthalenes, carcinogenic polycyclic aromatic hydrocarbons (cPAHs), polychlorinated biphenyls (PCBs), and full list of volatile organic compounds (VOCs). Except for TPHd and TPHo, continued analysis for a constituent may not be needed if the initial sampling result is below the Practical Quantitation Limit (PQL) for the constituent.
- Continued ground water monitoring is needed on the existing and new monitoring wells.
 - o Ground water samples collected to date from monitoring wells MW-3, MW-6, MW-8, and MW-9 do not demonstrate compliance with the MTCA Method A ground water cleanup levels. In addition, ground water samples collected from the new monitoring well need to demonstrate compliance with the MTCA Method A ground water cleanup levels.
 - According to Page 160 of Ecology's *Guidance for Remediation of Petroleum Contaminated Sites, Publication No. 10-09-057, June 2016*, at least eight consecutive quarters of ground water monitoring data below the MTCA Method A ground water cleanup levels are needed after remediation to demonstrate

compliance. The eight consecutive quarters are required for the following reasons:

- TPHd and TPHo concentrations in the ground water samples collected from monitoring wells MW-3, MW-6, and MW-9 did not show a stable or decreasing trend in the most recent four quarters.
- The initial four quarters of TPHd and TPHo concentrations (after release) in the ground water samples collected from monitoring wells MW-8 and MW-9 are highly variable (the highest concentration is more than three times the lowest concentration).
- The eight consecutive quarters may be reduced to four consecutive quarters for monitoring wells MW-3 and MW-6, if the TPHd and TPHo concentrations in these monitoring wells show a stable or decreasing trend over a period of four consecutive quarters.
- The eight consecutive quarters may be reduced to four consecutive quarters for the new monitoring well, if the initial four quarters of TPHd and TPHo concentrations are not highly variable, and the TPHd and TPHo concentrations show a stable or decreasing trend over a period of four consecutive quarters.
- Ground water samples collected from monitoring well MW-9 should be additionally analyzed for TPHg, benzene, toluene, ethylbenzene, and total xylenes (BTEX). The additional analysis is needed for the following reasons:
 - Historically, TPHg concentrations were detected above the MTCA Method A soil cleanup level in the soil samples collected from soil borings ST-5, ST-9, and ST-19, located inside or immediately adjacent to the vehicle maintenance building. Among them, soil boring ST-5 was advanced in the vicinity of monitoring well MW-9.
 - The ground water samples collected from monitoring well MW-9 were not analyzed for TPHg and BTEX since installation.
 - Continued analysis for TPHg and BTEX may not be needed if the sampling results are below the PQL for these constituents.
- O Ground water samples collected from monitoring wells MW-2, MW-4, and MW-8 have been analyzed for the full suite of constituents for waste oil and unknown oil, per Table 830-1 of the MTCA regulation. Concentrations of total lead,

cPAHs, PCBs, and VOCs were below their respective PQLs; therefore, these constituents are not considered contaminants of concern (COC) for ground water in these wells.

o In summary, the continued ground water monitoring should meet the minimum requirements listed in the table below.

Monitoring well	Quarters needed to	Analysis required
Number	demonstrate compliance	
MW-3	8, may reduce to 4 ¹	TPHd, TPHo ²
MW-6	8, may reduce to 4 ¹	TPHd, TPHo ²
MW-8	8	TPHd, TPHo
MW-9	8	TPHd, TPHo, TPHg ³ , BTEX ³
New Monitoring	8, may reduce to 4 ¹	TPHd, TPHo, TPHg ³ , total
Well		lead ³ , naphthalenes ³ , cPAH ³ ,
		PCB ³ , VOC ³

¹ = May reduce to four quarters if the concentrations show a stable or decreasing trend, and the concentrations in the initial four quarters are not highly variable.

- Please provide summary tables that include all soil and ground water samples collected to date (since September 1998), and all compounds that have been analyzed throughout the history of the Site. Please include explanations to any different analytical methods, such as NWTPH-HCID method.
- Please provide the following figures in a clear and readable manner and to scale:
 - Plan view maps showing the Site boundary and Property boundary, with known historic and current Site features, including former USTs and ASTs, former floor drains and sumps, the oil-water separator, and other Site features that may be an environmental concern.
 - All soil sampling locations, sample depths, and concentrations for each COC, or detection limit if not detected (color coding can be used to indicate COC concentrations that are above cleanup levels).

² = TPHg and BTEX analysis is not needed because historic data showed at least eight quarters of TPHg and BTEX concentrations below the cleanup levels.

 $^{^{3}}$ = Continued analysis may not be needed if no concentration is above PQL.

- Plan view maps showing the extent of the residual soil contamination beneath the vehicle maintenance building, relative to the soil excavation limits and building boundaries.
- Plan view maps showing the extent of the current ground water contamination, relative to the radius of influence of the existing ground water remediation systems.
- O Additional and revised cross-section(s) with the Site geologic and hydrogeologic information, including soil borings and ground water monitoring well locations, and soil and ground water sampling locations, depths, and analytical results. The vertical scale should be referenced to mean sea level.
- Trend graphs for TPHd and TPHo concentrations in monitoring wells MW-1, MW-3, MW-6, MW-8, and MW-9.
- Please provide status reports for the operation and maintenance of the ground water remediation systems. The status reports should include the system operation time during the reporting period, the maintenance work conducted on the system, and any data demonstrating the effectiveness of the system.

2. Establishment of cleanup standards.

Soil

Cleanup levels. The Property is zoned as M1 Light Industrial District. According to Auburn Municipal Code Chapter 18.23, land uses allowed in the M-1 zone include a variety of industrial, commercial, and limited residential uses. Therefore, the Property does not meet the MTCA definition of an industrial property (WAC 173-340-200 and 173-340-745). Soil cleanup levels suitable for unrestricted land use are appropriate. Because the Site has relatively few COCs, the MTCA Method A cleanup levels are appropriate for soil at the Site. These Method A soil cleanup levels are based on protection of ground water, per WAC 173-340-900, Table 740-1.

The Site appears to meet the terrestrial ecological evaluation (TEE) exclusion criteria in accordance with WAC 173-340-7492(2)(a)(ii). However, a TEE form with a completed Table 749-1 has not been submitted to Ecology. A completed TEE form located at https://fortress.wa.gov/ecy/publications/SummaryPages/ECY090300.html is required.

Points of compliance. For soil cleanup levels based on the protection of ground water, the standard point of compliance is defined as Site-wide throughout the soil profile and

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may extend below the water table. This is the appropriate point of compliance for the Site.

Ground Water

Cleanup levels. Cleanup levels were set for ground water 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 ground water at the Site. These Method A ground water cleanup levels are available in WAC 173-340-900, Table 720-1.

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

3. Selection of cleanup action.

In a *Remedial Investigation/Focused Feasibility Study/Cleanup Action Plan* (*RI/FS/CAP*), dated December 15, 2017, institutional controls with an Environmental Covenant was selected as the cleanup action. No additional remediation or continued ground water monitoring is included in this cleanup action. Ecology has determined that the incomplete Site characterization does not allow a determination whether the cleanup action you selected for the Site meets the substantive requirements of MTCA.

An appropriate cleanup action can be selected only after the Site is fully characterized. A revised Feasibility Study (FS) is needed based on additional Site characterization data. The cleanup action selected must meet the minimum requirements in WAC 173-340-360(2). In addition, the revised FS should include the following information:

- A remedial alternative that involves *in-situ* treatment of residual soil contamination beneath the vehicle maintenance building.
- A detailed disproportionate cost analysis that includes the cost breakdown for each task of each remedial alternative.
- A compliance ground water monitoring plan that meets the requirements of WAC 173-340-410(3). Information such as monitoring duration, sampling frequency, and analytical constituents should be included in the compliance monitoring plan.
- A contingency plan that includes the steps taken if ground water monitoring data indicate that cleanup action goals cannot be achieved.

4. Cleanup.

A series of cleanup actions have been conducted at the Site, which are considered as interim actions. The interim actions consisted of the following:

- Removal of one 550-gallon waste oil UST from outside the vehicle maintenance building to the northwest, and disposal of 350 cubic yards of petroleum hydrocarbon contaminated soil from the waste oil UST area.
- Removal of two floor drains and sumps, and associated drain lines from inside the vehicle maintenance building, and disposal of 100 cubic yards of petroleum hydrocarbon contaminated soil from the floor drain/sump area.
- Removal of one 12,000-gallon diesel UST from outside the vehicle maintenance building to the southeast.
- Installation and operation of two air injection ground water remediation systems in the contamination source areas northwest and southeast of the vehicle maintenance building.
- Cleaning up the well casing and monument, as well as skimming and purging approximately 55 gallons of contaminated ground water in monitoring well MW-8, after a new release to ground water was discovered.

A majority of the contamination sources have been removed from the Site by the interim cleanup actions. However, residual soil contamination remains underneath the northwestern portion of the vehicle maintenance building. The downgradient extent of the new release occurred at monitoring well MW-8 has not been fully delineated. Monitoring wells MW-3, MW-6, MW-8, and MW-9 have not reached compliance with the MTCA Method A ground water cleanup levels. Further Site characterization is needed to allow for a determination whether the cleanup actions meet MTCA cleanup standards.

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**:

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- 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 70.105D.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 70.105D.080 and WAC 173-340-545.

3. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion, please contact me at 425-649-7109 or jing.song@ecy.wa.gov.

Sincerely,

Jing Song

Site Manager

NWRO Toxics Cleanup Program

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Enclosures (2): A – Description of the Site

B – Basis for the Opinion: List of Documents

cc: Daniel Landry, Environmental Technologies Group, Inc. Sonia Fernández, Ecology VCP Coordinator, NWRO

Enclosure ADescription and Diagrams of the Site

Site Description

This enclosure provides Ecology's understanding and interpretation of Site conditions and forms the basis for the opinions expressed in the letter.

<u>Site</u>: The Site is defined as TPHg, TPHd, and TPHo released to soil, and TPHd and TPHo released to ground water at 2102 West Valley Highway North in Auburn, Washington (Property) (**Figure 1**). The Property consists of one 5.95-acre King County parcel (number 1221049034) located east of West Valley Highway North. Currently, one refrigerated warehouse building with offices is located on the central portion of the Property, and one separate vehicle maintenance building is located on the northern portion of the Property (**Figure 2**). The Site impacted by the releases is on the northern portion of the Property in the vicinity of the vehicle maintenance building.

Area and Property Description: The Property is bounded to the north, east, and south by warehouses and office buildings. The Property is bounded to the west by West Valley Highway North, with warehouses and office buildings beyond. Vacant lands are located further east, south, and southeast of the Property. State Route 167 is located approximately 580 feet east of the Property.

Currently, the Property is a refrigerated goods trucking terminal owned and operated by Commerce Road Terminals LLC, which is part of Estes Express Lines (Estes), a motor freight transportation company.

Property History and Current Use: The Property appeared to be a vacant land prior to 1987. A refrigerated goods trucking terminal was built on the Property in 1987. Provisoners Express operated at the terminal from 1988 to 2000. GI trucking leased the terminal from 2000 to 2002. Estes leased the terminal from 2002 to 2017. Estes purchased the Property in December 2017 and continues to use it as a refrigerated goods trucking terminal and a truck maintenance facility.

Historical operations on the Property included two former USTs: one 550-gallon waste oil UST located near the northwest corner of the vehicle maintenance building, and one 12,000-gallon diesel UST and dispenser located near the southeast corner of the vehicle maintenance building. The waste oil UST was removed from the Site in October 1998; the diesel UST was removed from the Site in November 2012.

One oil-water separator is located south of the vehicle maintenance building. Several above ground storage tanks (ASTs) were present on the Property for at least a period of time around 1998, including three oil ASTs located inside the western portion of the vehicle maintenance building, one waste oil AST connected to a waste oil burning heater inside the southeastern portion of the vehicle maintenance building, and a propane gas AST located immediately north of the vehicle maintenance building. Two floor drains and sumps were formerly located inside the northwestern portion of the vehicle maintenance building. The locations of the former USTs and floor drains/sumps are depicted on **Figure 2**.

<u>Sources of Contamination</u>: Based on the previous Site investigations, two contamination source areas are present at the Site.

One source area includes the interior and exterior of the northwestern portion of the vehicle maintenance building. The petroleum hydrocarbons released to soil and ground water in this area are associated with the waste oil UST formerly located outside of the building to the northwest, and two former floor drains and sumps with drain lines located inside the building. The release to ground water was initially discovered in a preliminary subsurface investigation in September 1998. The release to soil was initially discovered in the waste oil UST removal activity in October 1998. The timing of the releases is unknown.

A second source area is south and southeast of the vehicle maintenance building. A petroleum hydrocarbon release to ground water was initially discovered in a preliminary subsurface investigation in September 1998; the release was associated with the diesel UST formerly located southeast of the vehicle maintenance building. A second release to ground water was discovered in May 2018 at monitoring well MW-8. The second release appeared to occur sometime between January and May 2018; the source of the release has not been fully identified.

Physiographic Setting: The Property is situated at an elevation of 65 feet above mean sea level (amsl). The land surface in the immediate vicinity of the Property is relatively flat and is situated near the western margin of the Auburn Valley. A regional upland is located approximately 0.2 miles west of the Site, where land surface elevations rise significantly to over 400 feet amsl.

<u>Surface/Storm Water System</u>: The Property has a storm water conveyance system consisting of catch basins that are connected to an oil-water separator, with discharge to the City of Auburn storm water lines located along West Valley Highway North.

A drainage ditch tributary to Mill Creek is located near the southern Property boundary, approximately 40 feet south of the Property. Mill Creek is located approximately 200 feet southeast of the Site. The Green River is located approximately 1.7 miles east of the Site.

Ecological Setting: The area surrounding the Property is zoned for light industrial use (M1). The Property and the nearby properties are primarily paved with asphalt or concrete with small landscaped areas. Vacant lands are present further east and south.

Geology: The Site is located at the westernmost edge of the Auburn Valley, a wide floodplain formed by the Green and White Rivers. Major geologic units of the Auburn Valley include undifferentiated glacial and interglacial deposits, Vashon recessional deltaic deposits, undifferentiated alluvium, Osceola mudflow, and White River alluvium.

The undifferentiated glacial and interglacial deposits form the lowest layer in the valley and consist of materials deposited during the glacial periods. As the glaciers retreated, meltwater flowed into a water-filled embayment then occupying the present valley area. This meltwater deposited sand and gravel known as the Vashon recessional deltaic deposits. After the end of the

glacial period, the Green River deposited undifferentiated alluvium in the valley as a result of erosion of upland glacial deposits. Approximately 5,700 years ago, a massive volcanic mudflow from Mount Rainier (Osceola mudflow) flowed down into the valley. White River alluvium is the geologic unit nearest the surface and consists of alluvial deposits from the White and Green rivers. A prominent north-south trending regional upland is located approximately 0.2 miles west of the Site (immediately west of the Auburn Valley), which consists of glacial and interglacial deposits.

Based on the subsurface investigation observations, subsurface soil at the Site consists of coarse-grained sand and sandy silt with gravels (possibly fill) to approximately 6 to 10 feet below ground surface (bgs), followed by poorly-graded sand-silt mixtures to the total explored depth of 15 feet bgs. A 6-inch-thick peat layer was reportedly observed in some soil borings between 7 and 8 feet bgs.

<u>Ground Water</u>: Shallow ground water is present at the Site at depths ranging from approximately 3 to 8 feet bgs. Ground water primarily flows to the east-southeast, with an occasional northeasterly component. The hydraulic gradient is relatively flat across most of the Site and generally ranges between 0.0007 and 0.0015 feet per foot.

Nine ground water monitoring wells (MW-1 through MW-9) are present at the Site (**Figure 2**). These monitoring wells were installed between 1998 and 2017, and completed to total depths ranging between 13 and 15 feet bgs. Screens were installed from 5 to 15 feet bgs for monitoring wells MW-1 through MW-6, from 4 to 14 feet bgs for monitoring wells MW-7 and MW-8, and from 3 to 13 feet bgs for monitoring well MW-9.

Water Supply: Drinking water for the area is supplied by the City of Auburn, which is sourced from two springs (Coal Creek and West Hill Springs) and ten water supply wells (Wells 1, 2, 3A, 3B, 4, 5, 5A, 5B, 6, and 7). Among them, West Hill Springs is the closest water source, located approximately 0.4 miles southwest of the Site, on the regional upland west of the Auburn Valley, at an elevation of 305 feet amsl. The Site is located outside of the 10-year travel of time wellhead protection area of the West Hill Springs.

<u>Release and Extent of Soil and Ground Water Contamination</u>: Multiple subsurface Site investigations and cleanup actions have been conducted at the Site between 1998 and 2018, which are described in the following paragraphs.

• A Phase I and limited Phase II Site Assessment was conducted in September 1998, which included advancement of five soil borings (B-1 through B-5) to total depths ranging from 8.5 to 12.5 feet bgs. Among them, three soil borings (B-1 to B-3) were advanced south of the vehicle maintenance building near the diesel UST and the oil-water separator; two soil borings (B-4 and B-5) were advanced northwest of the vehicle maintenance building near the waste oil UST. The soil boring locations are depicted on **Figure 3**.

Ground water was encountered at approximately 9 feet bgs in the soil borings. Soil samples (at 8 feet bgs) and ground water samples were collected from four of the soil borings (B-1

through B-3, and B-5); free product (as oil) was encountered in soil boring B-4, so no soil or ground water samples were collected at this location. The ground water samples collected from soil borings B-1 and B-5 contained TPHo concentrations above the MTCA Method A ground water cleanup level.

• In October 1998, the waste oil UST was removed from the Site. Remedial excavation was conducted surrounding the UST to a maximum depth of 13 feet bgs. Approximately 350 cubic yards of petroleum hydrocarbon contaminated soil was excavated and disposed of off Site. The previous soil borings B-4 and B-5 were also removed during the excavation.

Five post-excavation samples (PX-1 through PX-5) were collected between 7 and 13 feet bgs from the bottom and sidewalls of the excavation. The excavation limits and soil sampling locations are depicted on **Figure 4**. The soil samples contained concentrations of TPHd, TPHo, and metals below the MTCA Method A soil cleanup levels, except for soil sample PX-1 collected at 7 feet bgs from the south sidewall, which contained concentrations of TPHd and TPHo above the MTCA Method A soil cleanup level.

During the excavation, observations indicated that an unknown volume of free oil had drained into the soil and backfill surrounding the waste oil UST. The source of this oil was a drain line that had been sheared off approximately 2 to 3 feet from the connection with the UST. The drain line was connected to two floor drains/sumps located inside the vehicle maintenance building.

• Remedial excavation was conducted inside the vehicle maintenance building in November 1998. The two floor drains/sumps and the section of the drain line between the drains/sumps and the north building wall were removed, and a 4.5-feet wide by 23-feet long trench was excavated below the former drains/sumps to a maximum depth of 9 feet bgs. Approximately 100 cubic yards of petroleum hydrocarbon contaminated soil was removed from inside the building.

Eleven post-excavation soil samples (PX-6 through PX-14, TR-1 and TR-2) were collected between 4 and 9 feet bgs from the bottom and sidewalls of the excavation. The excavation limits and soil sampling locations are depicted on **Figure 4**. Concentrations of TPHd and TPHo were detected above the MTCA Method A soil cleanup level between 4 and 5 feet bgs in soil samples PX-7, PX-8, PX-11, PX-12, and PX-13. Additional soil excavation was limited due to the potential impact on the structural integrity of the building.

• In November 1998, sixteen direct push soil borings (ST-1 through ST-16) were advanced to delineate the residual soil contamination inside and outside the vehicle maintenance building. The soil boring locations are depicted on **Figure 5**.

Ten soil samples were collected between 4 and 6.5 feet bgs from the soil borings. All soil samples contained TPHd and TPHo concentrations below the MTCA Method A soil cleanup level. A TPHg concentration exceeding the MTCA Method A soil cleanup level was detected in the soil sample collected from soil boring ST-5 at 6 feet bgs. In addition,

concentrations of TPHg, ethylbenzene and xylenes were detected above the MTCA Method A soil cleanup levels in the soil sample collected from soil boring ST-9 at 6.5 feet bgs. Other VOC concentrations in this soil sample were below the MTCA Method A soil cleanup levels. The detected TPHg concentrations were reportedly in the range of mineral spirits and/or Stoddard solvents; the exact source is not clear.

- In December 1998 and January 1999, four ground water monitoring wells (MW-1 through MW-4) were installed to a total depth of 15 feet bgs and screened from 5 to 15 feet bgs. The monitoring well locations are depicted on **Figure 2**. No soil samples were collected.
- In April 1999, three soil borings (ST-17 through ST-19) were advanced inside the vehicle maintenance building. The soil boring locations are depicted on **Figure 3**.

One soil sample was collected from each of the soil borings. The soil samples contained concentrations of TPHg, TPHd, TPHo, BTEX, and PAHs (in soil boring ST-17) below the MTCA Method A soil cleanup levels, except for the soil sample collected from soil boring ST-19 (near previous soil boring ST-9), which contained a TPHg concentration above the MTCA Method A soil cleanup level.

A ground water sample was collected at approximately 3 feet bgs from soil boring ST-17. The ground water sample contained a TPHg concentration above the MTCA Method A ground water cleanup level.

• A limited subsurface investigation was conducted in November 1999, which included advancing five direct push soil borings (GP001 through GP005) to 9 feet bgs inside and outside of the vehicle maintenance building. The soil boring locations are depicted on **Figure 6**.

Soil samples were collected from the soil borings between 0 and 9 feet bgs. The soil samples contained TPHg, TPHd, TPHo, and VOC concentrations below the MTCA Method A soil cleanup levels.

Ground water samples were collected from soil borings GP001, GP002, and GP004. The ground water samples from soil borings GP001 and GP002 contained TPHd and TPHo concentrations above the MTCA Method A ground water cleanup level. The ground water sample from soil boring GP004 contained a benzene concentration above the MTCA Method A ground water cleanup level. Other VOC concentrations were detected below the MTCA Method A ground water cleanup levels. The VOCs in ground water in soil boring GP004 indicated a likely presence of carburetor cleaner, or gasoline- or petroleum-based solvents; the exact source is not clear.

• The diesel UST located southeast of the vehicle maintenance building was pumped and taken out of service in 1998, and removed from the Site in November 2012. During the removal, six soil samples were collected from bottoms and sidewalls of the excavation, and one grab ground water sample was collected at the bottom of the excavation. The soil and ground

water sampling locations are depicted on **Figure 7**. The soil samples contained TPHd and TPHo concentrations below the MTCA Method A soil cleanup level. The grab ground water sample contained TPHd and TPHo concentrations above the MTCA Method A ground water cleanup level.

- In June 2013, two ground water monitoring wells (MW-5 and MW-6) were installed to a total depth of 15 feet bgs and screened from 5 to 15 feet bgs near the former diesel UST. The monitoring well locations are depicted on **Figure 2**. No soil samples were collected.
- In October 2013, a Phase II investigation was conducted at the Site, which included advancing nine direct push soil borings (DP-1 through DP-9) to 8 feet bgs. The soil boring locations are depicted on **Figure 2**. Among them, five soil boings (DP-1 through DP-5) were advanced near the northwest corner of the vehicle maintenance building in the vicinity of the former waste oil UST; four soil borings (DP-6 through DP-9) were advanced downgradient of the former diesel UST.

Soil samples were collected from soil borings DP-1 through DP-5; the soil samples contained TPHd and TPHo concentrations below the MTCA Method A soil cleanup level. Ground water samples were collected from all nine soil borings. The ground water samples collected from soil borings DP-2, DP-3, DP-4, and DP-8 contained TPHd and TPHo concentrations above the MTCA Method A ground water cleanup level.

• In August 2016, two soil borings (BH-1 and BH-2) and two ground water monitoring wells (MW-7 and MW-8) were installed downgradient (east and southeast) of the former diesel UST. The soil boring and monitoring well locations are depicted on **Figure 2**. The soil borings were advanced to 15 feet bgs, and the monitoring wells were installed to a depth of 14 feet bgs and screened from 4 to 14 feet bgs.

Soil samples were collected from the soil borings and monitoring wells between 5 and 15 feet bgs. The soil samples contained TPHd and TPHo concentrations below the MTCA Method A soil cleanup level. Ground water samples were collected from the two soil borings (BH-1 and BH-2). The ground water sample collected from soil boring BH-2 contained a TPHd concentration above the MTCA Method A ground water cleanup level.

- In August 2017, one ground water monitoring well (MW-9) was installed to a depth of 13 feet bgs and screened from 3 to 13 feet bgs, immediately west of the northwest wall of the vehicle maintenance building. The monitoring well location is depicted on **Figure 2**. No soil samples were collected.
- Periodic ground water monitoring has been conducted at the Site since December 1998. The results of ground water monitoring and ground water cleanup actions are discussed in the following paragraphs.
 - o Four ground water monitoring wells (MW-1 through MW-4) were sampled on a regular basis for TPHg, TPHd, TPHo, and BTEX from December 1998 to August 2003. In

February 1999, monitoring wells MW-2 and MW-4 were additionally analyzed for PAHs, PCBs, and full list of VOCs. By August 2003, benzene concentrations in monitoring well MW-2 were consistently above the MTCA Method A ground water cleanup level. Other COC concentrations were below the MTCA Method A ground water cleanup levels.

- Ground water monitoring was discontinued in late 2003 and restarted in August 2011.
 Monitoring wells MW-1 through MW-4 were regularly monitored since August 2011.
 Monitoring wells MW-5 through MW-9 were added into the monitoring program after their installation.
- o Since the re-initiation of the ground water sampling in August 2011, ground water samples collected from monitoring wells MW-1 through MW-6 contained TPHg and BTEX concentrations below the MTCA Method A ground water cleanup levels. TPHg and BTEX were removed from the analysis list in November 2013.
- O Monitoring well MW-1, located west of the vehicle maintenance building, contained TPHd and TPHo concentrations frequently above the MTCA Method A ground water cleanup level from November 2011 to September 2017. This monitoring well contained TPHd and TPHo concentrations below the MTCA Method A ground water cleanup level for four consecutive quarters from December 2017 to November 2018.
- Monitoring well MW-9, located immediately west of the vehicle maintenance building, contained TPHd and TPHo concentrations frequently above the MTCA Method A ground water cleanup level since installation in September 2017.
- Monitoring well MW-6, located immediately southeast of the former diesel UST, contained TPHd and TPHo concentrations frequently above the MTCA Method A ground water cleanup level from June 2013 (installation) to May 2018. This monitoring well contained TPHd and TPHo concentrations below the MTCA Method A ground water cleanup level in August and November 2018.
- Two separate ground water remediation systems were installed northwest (near monitoring wells MW-1 and MW-9) and southeast (near monitoring well MW-6) of the vehicle maintenance building in 2014 and 2015, respectively. The remediation systems are depicted on **Figure 8**. Each of the remediation systems includes three shallow air injection wells to inject oxygen-containing air as microbubbles into the ground water. Due to some mechanical and electrical issues, the air injection systems operated intermittently from 2015 to 2017. The air injection systems have operated continuously from June 2017 to November 2018, except for a brief shutdown between December 20, 2017 and January 2, 2018, due to a compressor malfunction and replacement. The operation of the air injection systems was suspended in November 2018.
- After at least seven years of TPHd and TPHo concentrations below the MTCA Method A ground water cleanup level, a ground water sample collected from monitoring well MW-

3 in May 2018 contained a TPHd concentration above the MTCA Method A ground water cleanup level. A ground water sample collected from monitoring well MW-3 in November 2018 contained a TPHd concentration below the MTCA Method A ground water cleanup level. No ground water sample was collected from monitoring well MW-3 in August 2018.

- O A new release to ground water occurred at monitoring well MW-8 in 2018. The new release is described in the following paragraphs
 - During the May 2018 ground water sampling event, a material tentatively identified as asphalt sealant was encountered in the monument of monitoring well MW-8. The locking expansion plug was reportedly loose, and the asphalt sealant had reportedly seeped into the well. The asphalt sealant in the monument was removed, and visible material was skimmed from the well surface. Approximately 30 gallons of ground water was purged from the well prior to sampling.
 - In June 2018, the casing and monument of monitoring well MW-8 (above the ground water level) was cleaned using absorbent pads. Monitoring well MW-8 was subsequently re-developed until the purge water no longer changed color. A total of 25 gallons of ground water was removed from the well.
 - Ground water samples collected from monitoring well MW-8 in May and June 2018 contained TPHd and TPHo concentrations above the MTCA Method A ground water cleanup level. The exceedances indicated a new release to ground water has occurred. The release may be associated with the material (possibly asphalt sealant) encountered, but the exact source is not clear.
 - Ground water samples collected from monitoring well MW-8 in August and November 2018 contained TPHd and TPHo concentrations below the MTCA Method A ground water cleanup level.
 - The ground water sample collected from monitoring well MW-8 in the August 2018 sampling event was analyzed for full suite of constituents for unknown oil, per Table 830-1 of the MTCA regulation. These constituents include TPHg, TPHd, TPHo, total lead, cPAHs, PCBs, and VOCs. The ground water sample contained concentrations of TPHg, total lead, cPAHs, PCBs, and VOCs below the respective PQLs, indicating these constituents are not COCs for ground water in this monitoring well.
 - A Work Plan has been submitted to Ecology, which proposes to install one monitoring well downgradient of monitoring well MW-8. The proposed monitoring well location is depicted on **Figure 9**.

<u>Site Regulatory Status</u>: The Site initially entered Ecology's VCP program in March 1999 and was issued a VCP number NW0225. After the waste oil UST removal and remedial soil excavation, and a restrictive covenant was filed and recorded with King County, Ecology issued

a conditional No Further Action (NFA) determination on January 20, 2000. The determination contained a condition that quarterly ground water monitoring and reporting be continued until "this site demonstrates sustained, continuous compliance with MTCA groundwater levels for at least one year; analytical results for groundwater compliance shall include BTEX (benzene, toluene, ethylbenzene, and xylene), diesel, and heavy oils."

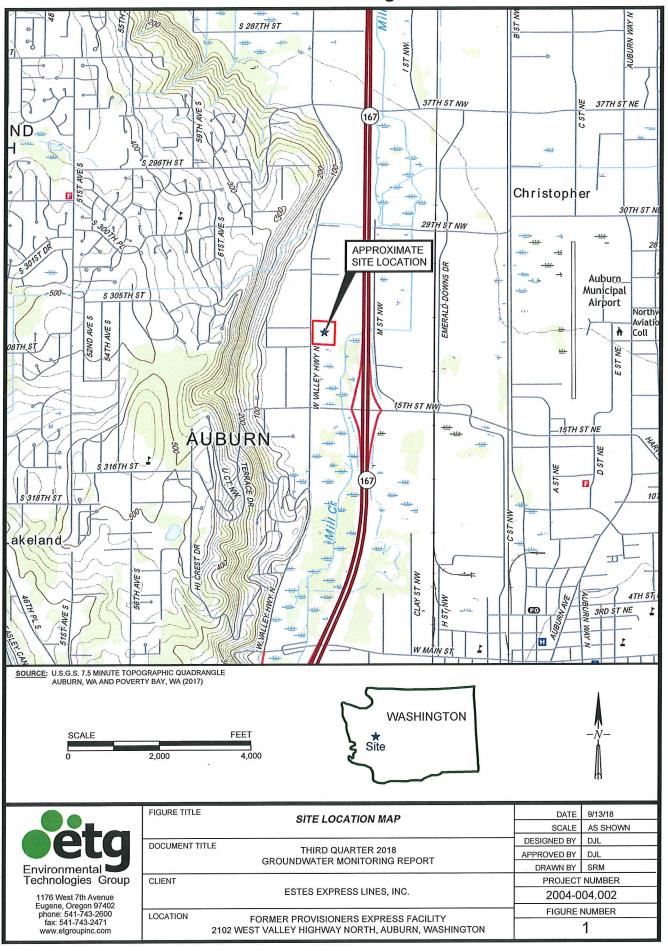
In November 2002, the Site owner at that time petitioned for a full NFA determination. At that time, the ground water samples from monitoring well MW-2 still contained benzene concentrations above the MTCA Method A ground water cleanup level. The Site did not receive a full NFA determination. Ground water sampling was discontinued in late 2003 and the Site was subsequently terminated from the VCP due to inactivity.

The Site re-entered VCP in October 2011 and was issued a VCP number NW2532. Ecology issued a letter on March 26, 2012, to rescind the conditional NFA determination issued in 2000. Ecology issued multiple opinion letters under the VCP number NW2532; the last opinion letter issued was dated August 31, 2016.

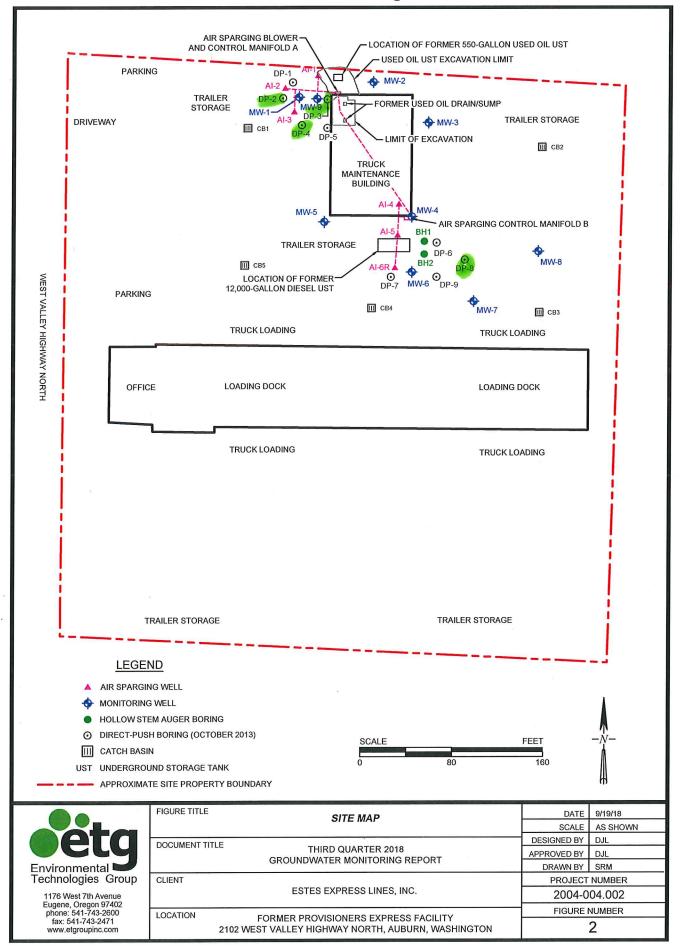
The VCP agreement under VCP number NW2532 was terminated on July 20, 2018, due to the Property ownership transfer. A new VCP agreement was established with the current Property owner (CRT) under VCP number NW3206. This letter is the first opinion that Ecology issued under VCP number 3206.

Site Diagrams

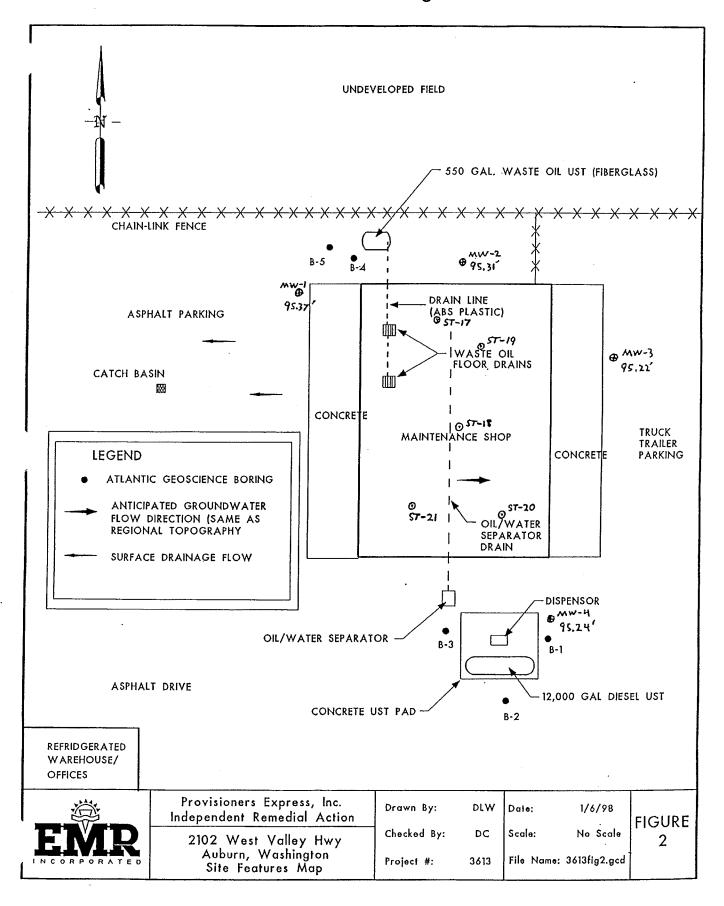
Enclosure A: Figure 1

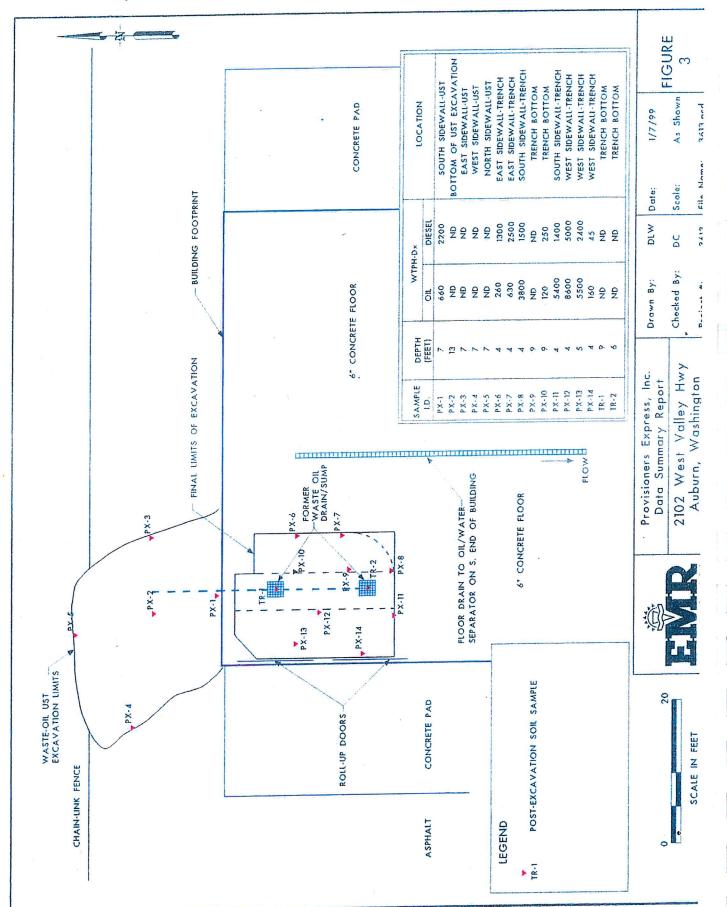


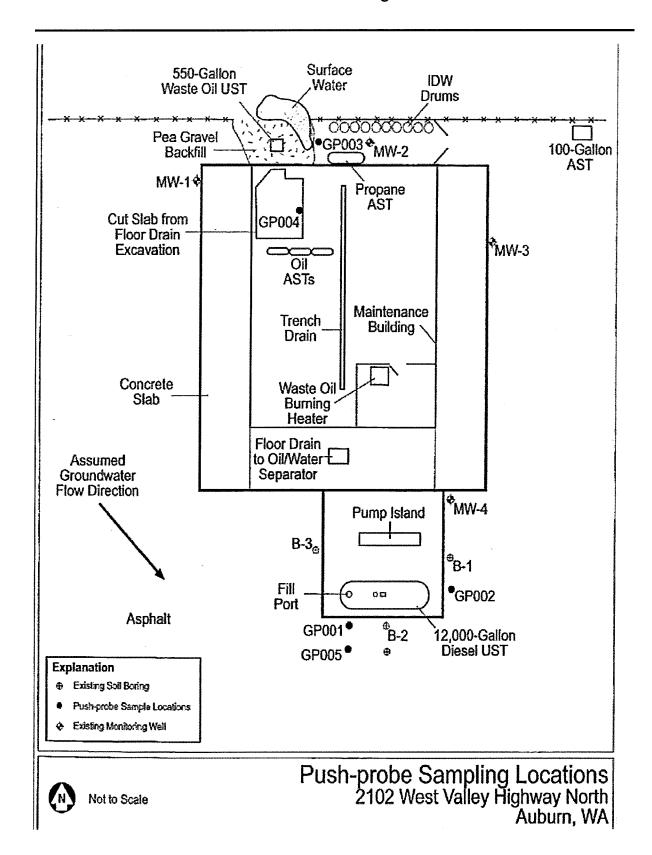
Enclosure A: Figure 2



Enclosure A: Figure 3

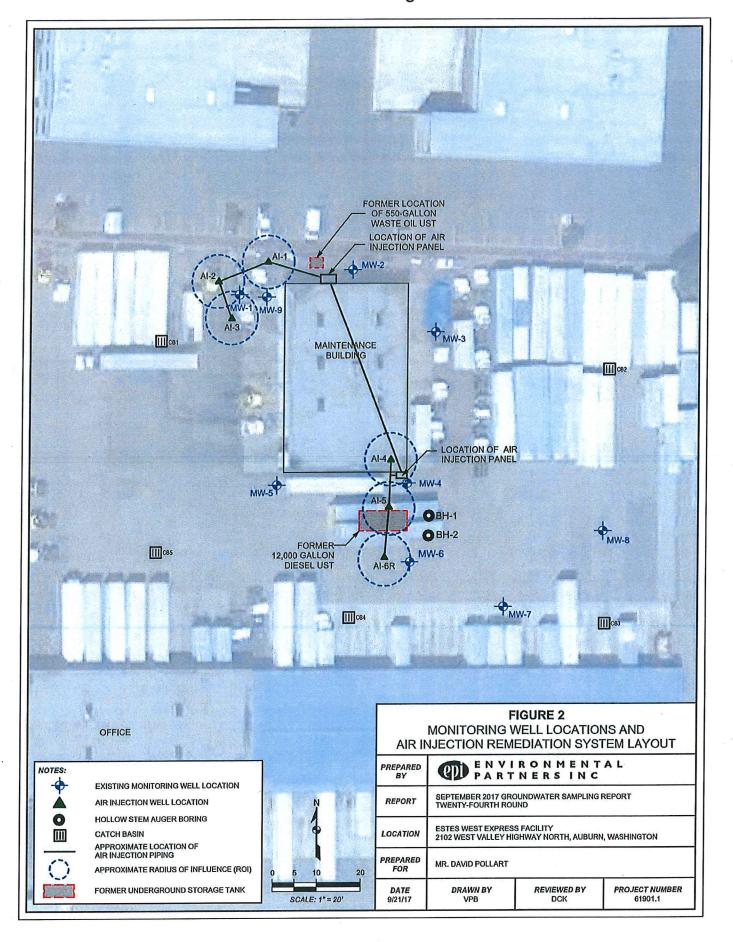




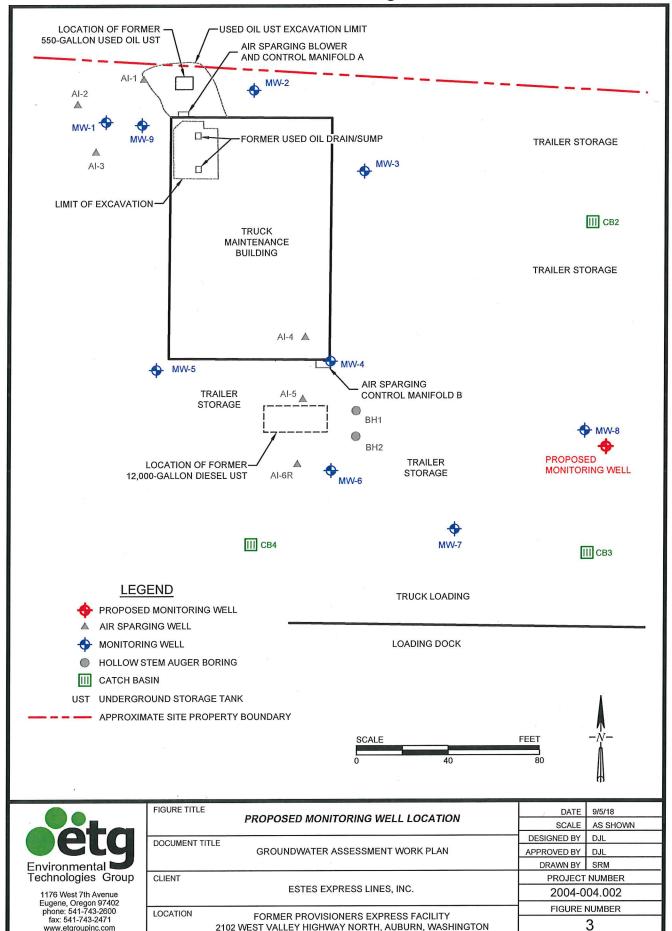


DATE 12/14/12 -CONCRETE SLAB EAST END CONCRETE APRON DRAWN BY REVIEWED BY ALW GAM ESTES EXPRESS FACILITY ASPHALT DRIVEWAY 2102 W VALLEY HWY N AUBURN, WASHINGTON -EAST BOTTOM 61901.2 -NORTH SIDEWALL PREPARED FOR LOCATION -SOUTH SIDEWALL PROJECT -PRODUCT LINE SHEET 1 Of 1 ENVIRONMENTAL PARTNERS INC 295 NE Ginau Banternet, Suite 201 PUMP ISLAND SAMPLE LOCATION MAP 0 Enclosure A: Figure 7 Issagnab, Washington 98027 UST#1 WATER WATER-0 MAINTENANCE BUILDING 12,000 GALLON— DIESEL FUEL UST FIGURES FILL PORT-WEST END-WEST BOTTOM WATER SAMPLE LOCATION SOIL SAMPLE LOCATION MONITORING WELL OIL-WATER SEPARATOR **UST LOCATION** ASPHALT DRIVEWAY × × SNIQTIN8 O. CONCRETE APRON CLEAN OUT APPROXIMATE SCALE: 1"= 10 KEY

Enclosure A: Figure 8



Enclosure A: Figure 9



Enclosure B

Basis for the Opinion:List of Documents

- 1. Atlantic Geoscience, Inc., *Phase I Environmental Site Assessment, Provisioners Terminal, Auburn, Washington*, September 14, 1998.
- 2. Environmental Management Resources (EMR), *Data Summary Report*, *Provisioners Express, Inc. Auburn Facility*, February 11, 1999.
- 3. EMR, Remedial Investigation/Feasibility Study, Provisioners Express Auburn Facility, March 1999.
- 4. Washington State Department of Ecology (Ecology), Re: Request for Review:
 Independent Remedial Action, Provisioners Express-Auburn, 2102 West Valley Highway
 Auburn, March 18, 1999.
- 5. EMR, Re: Results of Interim TPH Analysis, Groundwater Monitoring and Stream Sampling, Provisioners Express Facility, Auburn Washington, April 20, 1999.
- 6. EMR, *Re: Provisioners Express Groundwater Monitoring Report September 1999*, September 20, 1999.
- 7. Roy F. Weston, Inc., Pre-lease Assessment, Provisioners Warehouse, December 2, 1999.
- 8. EMR, Re: Provisioners Express Groundwater Monitoring Report December 1999, December 27, 1999.
- 9. Ecology, Re: Voluntary Cleanup Program Review, Former Provisioners Express, 2102 West Valley Highway, Auburn, WA, January 20, 2000.
- 10. EMR, Re: Provisioners Express Groundwater Monitoring Report April 1999 ([sic] 2000), May 9, 2000.
- 11. EMR, Re: Provisioners Express Groundwater Monitoring Report July 1999 ([sic] 2000), July 21, 2000.
- 12. EMR, Re: Provisioners Express Groundwater Monitoring Report October 2000, October 24, 2000.
- 13. EMR, Re: Provisioners Express Groundwater Monitoring Report May 2001, June 11, 2001.
- 14. EMR, *Re: Provisioners Express Groundwater Monitoring Report August 2001*, September 6, 2001.
- 15. EMR, Re: Provisioners Express Groundwater Monitoring Report December 2001, January 9, 2002.

- 16. EMR, Re: Provisioners Express Groundwater Monitoring Report December 2002 ([sic] 2001), November 26, 2002.
- 17. EMR, Re: Provisioners Express, Auburn, Washington, March 3, 2003.
- 18. EMR, Re: Provisioners Express, Auburn, Washington, April 23, 2003.
- 19. EMR, Re: Provisioners Express Facility, Groundwater Monitoring Report August 2003, August 29, 2003.
- 20. Ecology, Periodic Review, Provisioners Express, August 2011.
- 21. Environmental Partners Inc. (EPI), Re: Ground Water Sampling Report, Estes West Express Trucking Facility, August 25, 2011.
- 22. Ecology, *Re: Acceptance of VCP Application for the Following Site: Provisioners Express, VCP No. NW2532*, October 20, 2011.
- 23. EPI, Re: Ground Water Sampling Report Second Round, Estes West Express Trucking Facility, November 28, 2011.
- 24. Ecology, Re: Notice of Rescinding "No Further Action (NFA)" status at the Following Hazardous Waste Site: Provisioners Express, March 26, 2012.
- 25. EPI, Re: Ground Water Sampling Report Fourth Round, Estes West Express Trucking Facility, June 8, 2012.
- 26. EPI, Re: Ground Water Sampling Report Fifth Round, Estes West Express Trucking Facility, September 24, 2012.
- 27. EPI, Re: Ground Water Sampling Report Sixth Round, Estes West Express Trucking Facility, November 30, 2012.
- 28. EPI, Re: Ground Water Sampling Report Seventh Round, Estes West Express Trucking Facility, January 4, 2013.
- 29. EPI, Underground Storage Tank Site Assessment Report, Estes Express Facility, March 14, 2013.
- 30. Ecology, Re: Opinion Pursuant to WAC 173-340-515(5) on Proposed Remedial Action for the Following Hazardous Waste Site: Provisioners Express Inc., VCP No. NW2532, April 22, 2013.
- 31. EPI, Re: Ground Water Sampling Report Eighth Round, Estes West Express Trucking Facility, June 4, 2013.

- 32. Ecology, Re: Opinion Pursuant to WAC 173-340-515(5) on Proposed Remedial Action for the Following Hazardous Waste Site: Provisioners Express Inc., VCP No. NW2532, June 18, 2013.
- 33. EPI, Re: Ground Water Sampling Report Ninth Round, Estes West Express Trucking Facility, October 9, 2013.
- 34. EPI, Re: Phase II Environmental Site Assessment, Estes West Trucking Facility, December 9, 2013.
- 35. EPI, Re: Ground Water Sampling Report Tenth Round, Estes West Express Trucking Facility, January 8, 2014.
- 36. EPI, Re: Ground Water Sampling Report Eleventh Round, Estes West Express Trucking Facility, April 16, 2014.
- 37. EPI, Re: Ground Water Sampling Report Twelfth Round, Estes West Express Trucking Facility, June 17, 2014.
- 38. EPI, Re: Ground Water Sampling Report Thirteenth Round, Estes West Express Trucking Facility, November 7, 2014.
- 39. EPI, Re: Ground Water Sampling Report Fourteenth Round, Estes West Express Trucking Facility, December 30, 2014.
- 40. EPI, Re: March 2015 Groundwater Sampling Report Fifteenth Round, Estes West Express Trucking Facility, May 8, 2015.
- 41. Ecology, Re: Opinion Pursuant to WAC 173-340-515(5) on Proposed Remedial Action for the Following Hazardous Waste Site: Provisioners Express Inc., VCP No. NW2532, July 22, 2015.
- 42. EPI, Re: June 2015 Groundwater Sampling Report Sixteenth Round, Estes West Express Trucking Facility, July 22, 2015.
- 43. EPI, Response to Ecology Letter: Opinion Pursuant to WAC 173-340-515(5) on Proposed Remedial Action for the Provisioners Express Inc. Site VCP No. NW2532, dated July 22, 2015, August 17, 2015.
- 44. EPI, Re: September 2015 Groundwater Sampling Report Seventeenth Round, Estes West Express Trucking Facility, October 15, 2015.
- 45. EPI, Re: March 2016 Groundwater Sampling Report Eighteenth Round, Estes West Express Trucking Facility, May 15, 2016.

- 46. Ecology, Re: Opinion Pursuant to WAC 173-340-515(5) on Proposed Remedial Action for the Following Hazardous Waste Site: Provisioners Express Inc., VCP No. NW2532, July 19, 2016.
- 47. EPI, Re: June 2016 Groundwater Sampling Report Nineteenth Round, Estes West Express Trucking Facility, July 29, 2016.
- 48. Ecology, Re: Opinion Pursuant to WAC 173-340-515(5) on Proposed Remedial Action for the Following Hazardous Waste Site: Provisioners Express Inc., VCP No. NW2532, August 31, 2016.
- 49. Ecology, Periodic Review, Provisioners Express, December 2016.
- 50. EPI, Re: September and December 2016 Groundwater Sampling Report Twentieth and Twenty-First Rounds, Estes West Express Trucking Facility, February 24, 2017.
- 51. EPI, Re: March 2017 Groundwater Sampling Report Twenty-Second Round, Estes West Express Trucking Facility, May 9, 2017.
- 52. EPI, Re: June 2017 Groundwater Sampling Report Twenty-Third Round, Estes West Express Trucking Facility, July 11, 2017.
- 53. EPI, Re: September 2017 Groundwater Sampling Report Twenty-Fourth Round, Estes West Express Trucking Facility, October 3, 2017.
- 54. EPI, Remedial Investigation/Focused Feasibility Study/Cleanup Action Plan, Provisioners Express, Inc. (a.k.a. Estes Express Lines), December 15, 2017.
- 55. EPI, Re: December 2017 January 2018 Groundwater Sampling Report Twenty-Fifth Round, Estes West Express Trucking Facility, February 21, 2018.
- 56. Ecology, Re: Termination of VCP Agreement for the Following Site, Provisioners Express Inc, VCP No. NW 2532, July 20, 2018.
- 57. Ecology, Re: Acceptance of VCP Application for the Following Site, Provisioners Express Inc, VCP No. NW 3206, July 20, 2018.
- 58. Environmental Technologies Group (ETG), Re: Second Quarter 2018 Groundwater Monitoring Report, Former Provisioner's Express, Inc. Facility, August 31, 2018.
- 59. ETG, Re: Groundwater Assessment Work Plan, Former Provisioner's Express, Inc. Facility, September 17, 2018.
- 60. ETG, Re: Third Quarter 2018 Groundwater Monitoring Report, Former Provisioner's Express, Inc. Facility, September 21, 2018.

- 61. ETG, Re: Fourth Quarter 2018 Groundwater Monitoring Report, Former Provisioner's Express, Inc. Facility, December 6, 2018.
- 62. ETG, Memorandum, Groundwater Flow Direction Rose Diagram, Former Provisioners Express Facility, December 7, 2018.