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March 28, 2019 Project 2004-004.002

Ms. Jing Song Washington Department of Ecology -Toxic Cleanup Program, NWRO 3190 160th Avenue Southeast Bellevue, Washington 98008

Re: Response to Ecology Opinion Letter, Former Provisioner's Express, Inc. Facility, 2102 West Valley Highway North, Auburn, Washington, Ecology Facility ID 91612121, Cleanup Site ID 6847, VCP Project No. 3206

Dear Ms. Song:

Environmental Technologies Group, Inc. (ETG), on behalf of Commerce Road Terminals, LLC (CRT), has prepared this letter to present comments on the State of Washington Department of Ecology's (Ecology's) opinion letter, dated December 20, 2018, for the former Provisioner's Express, Inc. (Provisioner's) facility (Site) located at 2102 West Valley Highway North in Auburn, Washington.

SITE DESCRIPTION

The former Provisioner's facility is located at 2102 West Valley Highway North Auburn, Washington, east of the intersection of 22nd street Northwest and West Valley Highway North, northwest quarter of Section 12, Township 21 North, Range 4 East, Willamette Meridian in King County, Washington (Figure 1). The property is listed as Tax Parcel No. 1221049034, and the zoning is designated M-1, Light Industrial.

The facility is currently operated by Estes Express Lines (Estes), a motor freight transportation company. Estes uses the Site as a trucking terminal that includes a maintenance garage. There are currently no active underground storage tanks (USTs) on the facility.

The property is fully paved or covered by buildings and has a storm water conveyance system consisting of catch basins that are connected to an oil/water separator (OWS) through underground piping with discharge to the municipal sewer system. Pavement is primarily asphalt with concrete pads surrounding the on-Site buildings and loading bays.

The topography of the property is relatively flat with an approximate elevation of 65 feet above mean sea level. Mill Creek and the White River Park Wetland System are the

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nearest surface water bodies and are located approximate 200 feet to the southeast of the Site. A drainage ditch flowing to the White River Park Wetland System is present near the south property boundary, approximately 40 feet south of the Site. The property and the Site are separated from Mill Creek and the White River Park Wetland System by an adjoining property. The nearest major surface water body, the Green River, is located approximately 1.7 miles east of the Site.

The property contains a single Ecology Model Toxics Control Act (MTCA) Site that is defined by the lateral and vertical extent of soil and groundwater impacted by diesel and oil range petroleum hydrocarbons (TPH-d and TPH-o) at concentrations greater than applicable MTCA Method A Cleanup Levels (CULs). The location of the Site within the property is shown on Figure 2. Under the MTCA program, the Facility Site Identification No. is 91612121, Cleanup Site Identification No. is 6847, and in July 2018 the Voluntary Cleanup Program (VCP) number was change from NW2532, to VCP No. 3206 when CRT became responsible for the Site cleanup.

SITE HISTORY

Soil and groundwater at the Site were impacted by petroleum hydrocarbon releases from conveyance piping related to a 550-gallon used oil UST located near the northwest corner of the truck maintenance building (Figures 2 and 3). The UST and approximately 350 cubic yards of petroleum-contaminated soil (PCS) were removed for disposal off-Site, and four monitoring wells, designated MW-1, MW-2, MW-3, and MW-4, were constructed in December 1998 (EMR, 1999).

In January 2000, Ecology issued a conditional No Further Action (NFA) determination for the Site. The NFA contained the condition that quarterly groundwater monitoring and reporting be continued until the *site demonstrates sustained, continuous compliance with Model Toxics Control Act (MTCA) Groundwater Cleanup Levels (CULs) for at least one year.* The NFA also stipulated that analytical results for groundwater compliance *shall include BTEX {benzene, toluene, ethylbenzene, and xylene), diesel, and heavy oils.* Available records indicate that the monitoring wells were sampled approximately every quarter from December 1998 until October 2002.

In November 2002, the Site owner petitioned for a full NFA determination based on three (3) years of data demonstrating that benzene groundwater concentrations greater than MTCA Method A CULs was confined to the area on the north side of the maintenance building around MW-2. At that time, the sample collected from MW-2 had a gasoline range petroleum hydrocarbon (TPH-g) concentration of 180 micrograms per liter (μ g/L) and a benzene concentration of 12.0 μ g/L. The reported TPH-g concentration was less than the MTCA Method A CUL of 800 μ g/L. However, the benzene concentration exceeded the MTCA Method A CUL of 5 μ g/L. No other BTEX compounds, TPH-d, or TPH-o were reported in the sample collected from MW-2. Reported contaminant concentrations for the samples collected from the remaining monitoring wells were also below MTCA Method A CULs.

Groundwater sampling was discontinued in late 2002 and the Site did not receive a full NFA determination, due to the benzene concentration exceeding the MTCA Method A CUL in the samples from MW-2. Records indicate that the Site was subsequently dropped from Ecology's VCP due to inactivity.

The Site re-entered the VCP in August 2011 and was assigned VCP No. NW 2532. Quarterly groundwater sampling of the four on-Site wells was resumed in August 2011. On March 26, 2012, Ecology notified the Site owner that the January 2000 conditional NFA determination was rescinded because the benzene concentrations in groundwater samples collected from well MW-2 remained greater than the MTCA Method A CUL and the previous groundwater remedy (excavation of petroleum impacted soils followed by groundwater monitoring) did not achieve and maintain compliance with the applicable MTCA Method A CULs.

On November 28, 2012, a 12,000-gallon diesel fuel UST was decommissioned by removal south of the truck maintenance building (Figures 2 and 3). According to available information, the UST was emptied and removed from service in 1998 when the 550-gallon waste oil UST was decommissioned, and had not been operated between 1998 and 2012. EPI personnel oversaw the UST decommissioning activities and collected nine (9) soil samples and a water sample from the excavation. The diesel contaminated water was reported in the water from the excavation, and was reportedly rinsate from the UST that was spilled as the UST was removed from the excavation due to improper rigging and hoisting. EPI prepared the *Underground Storage Tank Site Assessment Report* (EPI, 2013a), dated January 4, 2013, for submittal to Ecology's Underground Storage Tank Division.

In an opinion letter dated April 22, 2013, Ecology requested installation of two additional monitoring wells designated MW-5 and MW-6. Well MW-5 was installed at the southwest corner of the truck maintenance building, near the on-Site OWS, to monitor groundwater downgradient of MW-1. Well MW-6 was installed at the southeast corner of the former 12,000-gallon diesel UST excavation to evaluate groundwater quality based on the reported petroleum hydrocarbon concentrations in a water sample collected from the in the UST excavation (EPI, 2013b).

In October 2013, EPI performed a site investigation at Ecology's request. The investigation included advancing nine (9) direct-push soil borings DP-1 through DP-9 (Figures 2 and 3); five were located around MW-1 and four were located downgradient of MW-6. Laboratory analytical results indicated soil impacts around MW-1 were limited to location DP-3, which was immediately adjacent to the exterior wall of the northwest corner of the Truck Maintenance Building. This result was anticipated because a small quantity of impacted soil was left in place immediately under the truck maintenance building footings to maintain geotechnical stability during impacted soil excavation. None of the remaining soil samples had detections for petroleum hydrocarbons (EPI, 2013b).

On August 26, 2016, EPI directed the advancement of two soil borings, designated BH-1 and BH-2 for soil sample collection, and construction of two conditional point of compliance (POC) monitoring wells, designated MW-7 and MW-8. BH-1 and BH-2 were advanced east of the former 12,000-gallon diesel UST to evaluate subsurface conditions immediately downgradient of the former UST. Well MW-7 was installed southeast and downgradient of the former 12,000-gallon diesel UST and existing well MW-6. Well MW-8 was installed northeast of MW-7, also downgradient of the former 12,000-gallon diesel UST and existing well MW-6. The purpose of the POC monitoring wells was to monitor groundwater conditions downgradient of the former 12,000-gallon diesel UST (EPI, 2017a). The soil boring and monitoring wells locations are presented on Figures 2 and 3.

On August 11, 2017, monitoring well MW-9 was installed by Holt Services near the northwest corner of the truck maintenance building (Figures 2 and 3). The additional well was requested by CRT as part of their environmental due diligence prior to their purchase of the property. Historical direct-push sampling data from this location indicated TPH-d and TPH-o was above MTCA Method A in a groundwater sample collected from the boring (EPI, 2017b).

On December 15, 2017, EPI submitted to Ecology the *Remedial Investigation/Focused Feasibility Study/Cleanup Action Plan* (EPI, 2017c) for the Site. The document selected institutional controls with an Environmental Covenant (EC) as the cleanup action. In March 2018, Ecology in an email indicated that preliminary concurrence for issuing closure with an EC. Ecology requested an addendum to the Feasibility Study be issued that included: detailed information on 1998 remedial excavation and post-excavation soil sampling; requested combining Remedial Alternatives (RA) 1 and 3; adding a RA for in-situ treatment of residual petroleum beneath the maintenance building; additional breakdown of the estimated costs for each RA; and addition of a long-term groundwater monitoring work plan.

On May 17, 2018, during collection of depth-to-water measurements, asphalt sealant was encountered in the monument for MW-8. After removal of the asphalt sealant, it was discovered that the locking expansion plug for the monitoring well was loose, and that asphalt sealant had seeped past the expansion plug. Visible material was skimmed from the well surface and the monitoring well was purged of approximately 30 gallons of groundwater prior to sampling. TPH-d and TPH-o were reported above MTCA Method A cleanup levels in the groundwater sample collected on May 17, 2018.

On June 5, 2018, ETG cleaned the casing for monitoring well MW-8, using clean absorbent pads to wipe the well casing. Following cleaning, the well was developed by extracting water with a development pump beginning at the top of the groundwater surface and lowering the pump as groundwater dropped in elevation. This process was repeated approximately 15 times until the purge water no longer changed in color between purging events. A total of 25 gallons of groundwater was removed from the well. The well was resampled following cleaning and development. Though significant reduction in TPH-d and TPH-o concentrations were reported, laboratory analytical results

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still reported TPH-d and TPH-o above MTCA Method A cleanup levels in the groundwater sample.

On September 17, 2018, ETG submitted *Groundwater Assessment Work Plan* (ETG, 2018) proposing the construction of a new groundwater monitoring well downgradient of MW-8. Ecology approved the groundwater monitoring well location in an Opinion Letter dated December 20, 2018 (Ecology, 2018).

Remedial System

In 2014, because groundwater data indicated that natural attenuation of the residual TPH-d and TPH-o impacts was not occurring at a rate that would result in a reasonable restoration timeframe, an active groundwater remediation system was designed, installed, and operated for the area around MW-1 as described in the following.

In May 2014, EPI installed three shallow air injection (AI) wells at locations upgradient of MW-1 (Figures 2 and 3) to add dissolved oxygen (DO) to the groundwater. The increased DO concentrations in groundwater would stimulate existing aerobic bacteria by providing the oxygen necessary for those bacteria to metabolize dissolved petroleum hydrocarbons in groundwater at a higher rate.

Each of the shallow AI well was equipped with a 1-foot section of Kerfoot Technologies C-Sparger® screen set in a sand filter pack and set below groundwater at approximately 14 to 15 feet bgs. Pressurized air pumped through the C-Sparger® screens forces air, containing oxygen, into groundwater as microbubbles, greatly increasing the surface area of the bubbles for more efficient oxygenation of the groundwater. The remaining well annulus was sealed using hydrated bentonite chips and the surface was completed with 8-inch diameter flush-mount steel monuments set in concrete.

An appropriately-sized rotary vane air compressor was installed in the fenced area at the north end of the truck maintenance building to provide air to the shallow air injection wells. The shallow air injection wells are connected to the compressor using 1-inch diameter polyvinyl chloride (PVC) piping installed below grade to each of the well monuments. PVC air supply lines were installed in trenches that were appropriately backfilled and patched with asphalt at the surface to match the surrounding grade.

The remediation system was started and tested on May 15, 2014 after quarterly groundwater monitoring was completed. An electrical issue with the compressor's motor caused the air injection remediation system to shut down in August 2014. Analytical results from the August 2014 monitoring event indicated that TPH-d and TPH-o concentrations were not reported, at or above laboratory method reporting limits (MRLs) in the sample from MW-1. Based on the favorable result, remediation system operation was suspended at MW-1 from August 2014 to April 2015 so that groundwater data could be collected to demonstrate that groundwater was remediated to concentrations below Ecology MTCA Method A Groundwater CULs, and to provide data intended to demonstrate that contaminant concentration rebound was not occurring.

The positive response to operation of the air injection remediation system at MW-1 demonstrated that expansion to remediate impacted groundwater at MW-6 was warranted. In January 2015, EPI installed three additional shallow AI wells at locations upgradient of MW-6 (Figures 2 and 3). The three wells are constructed like the air injection wells at MW-1, equipped with 1-foot lengths of Kerfoot Technologies C-Sparger® screen set in a sand filter pack and set below groundwater at approximately 14 to 15 feet bgs.

Operation of the expanded air injection remediation system at MW-6 was initiated on April 3, 2015. The expanded system at MW-6 ran from April until June 2015 when a new electrical issue with the compressor's motor caused the air injection remediation system to shut down, requiring replacement.

Repairs to the air injection system were completed and the remediation system was restarted on February 3, 2016. However, the system was not operational during the June 21, 2016 groundwater monitoring event, and inspection revealed that the compressor motor was damaged due to overheating. EPI was informed that the system had been off for several weeks prior to the monitoring event.

EPI evaluated the potential reasons for the compressor motor overheating and the likely cause was low voltage power throughout the area, which was measured at 208 volts at the air injection system panel. The actual voltage was lower than the design voltage of 220-230 volts. EPI concluded that although the compressor motor was rated to operate at 208 volts, voltage fluctuations below 208 volts caused high amperage on the motor, resulting in excessive heat that eventually burned-out the motor.

In November 2016, EPI installed a 1.5 horsepower, Republic Manufacturing, Model DRT-425 rotary vane compressor with a 208-volt-specific motor. Compressor operation was started on November 16, 2016. The system was operational before, and after the December 20, 2016 groundwater monitoring event. Sometime between the December 20, 2016 monitoring event and a Site visit by EPI personnel on March 20, 2017, the air injection system shut down. On March 20, 2017, EPI personnel inspected the compressor and determined that the rotary vanes were destroyed and required replacement. The compressor repair work was completed under warranty at the manufacturer's facility.

The repaired compressor was reconnected and returned to service on June 19, 2017. Both areas of the air injection system MW-1 and MW-6, were back in operation following the completion of groundwater monitoring on June 19, 2017.

Since installation in 2015, air injection well AI-6, located near monitoring well MW-6, consistently had little to no air flow. EPI tested, evaluated, and attempted to increase air flow through this point with no measurable improvement and determined that the well was plugged and unrepairable. On June 26, 2017, Holocene Drilling, under EPI direction, decommissioned AI-6 per Ecology requirements and replaced it with air injection well AI-6R.

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The air injection system was inspected during a Site visit by EPI on December 14, 2017 and again during quarterly monitoring on December 20, 2017 and was operating as designed with no excessive heat or mechanical issues noted. EPI returned to the property on January 2, 2018 to re-sample wells MW-4, MW-6, and MW-6 and noted that the air compressor was not running. The compressor was replaced, and the air injection system re-started (EPI, 2018).

The air injection system continued to operate since January 2018, with the exception of maintenance events and prior to groundwater monitoring events. Based on the November 2018 monitoring results, air injection system operation was suspended on December 6, 2018.

RESPONSE TO COMMENTS

The following presents a response to several of Ecology's comments presented in the December 20, 2018 Opinion Letter (Ecology, 2018). To assist in understanding the responses to comments, groundwater analytical summary tables, and TPH-d and TPH-o groundwater concentration trend charts are provided as Attachments A and B.

Additional ground water evaluation downgradient of monitoring well MW-8 is needed. (1. Characterization of the Site, page 2).

Summary of Comments:

The Ecology opinion letter (Ecology, 2018) approved the *Groundwater Assessment Work Plan* (ETG, 2018), dated September 17, 2018, which proposed a new groundwater monitoring well downgradient of MW-8, which if groundwater samples are compliant with MTCA Method A CULs, can replace MW-8 as a point of compliance. Ecology also requested the initial groundwater sample from the new well be sampled for TPH-g, in addition to the proposed analysis of TPH-d, TPH-o, full list volatile organic compounds (VOCs), carcinogenic polynuclear aromatic hydrocarbons (cPAHs), total lead, and polychlorinated biphenyls (PCBs), and allowed that with the exception of TPH-d and TPH-o future events could exclude the other analytes if they were not reported above the analytical Practical Quantitation Limit (PQL).

Response:

As proposed in the Work Plan and approved by Ecology, a new monitoring well (MW-10) was constructed downgradient of MW-8 in January 2019. The new well was sampled in February 2019, and the groundwater sample analyzed, as requested by Ecology in the opinion letter, for the additional chemicals.

However, it should be noted that in August 2018, the groundwater sample collected from MW-8 was analyzed for TPH-g and the additional Ecology requested chemicals. TPH-g and none of the additional chemicals were reported above their PQLs. The

analysis of TPH-g and the additional chemicals was not warranted for the new well since the contaminants of concern were not reported in the source well. Furthermore, TPH-d and TPH-o were not reported in the groundwater sample collected from MW-8 in fourth quarter 2018 and first quarter 2019; providing further supporting evidence that the release to MW-8 was limited in volume and extent.

During first quarter 2019, the groundwater sample from monitoring well MW-10 was analyzed for TPH-g, VOCs, cPAHs, total lead, and PCBs. All contaminants were not reported above their respective PQLs.

Continued ground water monitoring is needed on the existing and new monitoring wells. (1. *Characterization of the Site*, page 3).

Comment:

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 groundwater 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.

Response:

ETG agrees that analytical results for the last four quarters of groundwater samples collected MW-6, MW-8, and MW-9 do not demonstrate compliance with MCTA Method A CULs. However, MW-6 and MW-9 are not point of compliance wells and do not need to comply with MTCA Method A CULs for a conditional closure since an alternative point of compliance would be present downgradient of the wells. As presented in for the *Remedial Investigation/Focused Feasibility Study/Cleanup Action Plan*, dated December 15, 2017, the selected RA for the Site was institutional controls and an EC. Though additional characterization is required before an updated feasibility study can be completed due to the MW-8 release, the Site conditions related to the 1990s used oil UST and oil drain system release, and the 2012 diesel UST release that allowed the Ecology to preliminarily conclude that institutional controls and an EC were protective has not changed. A RA that includes institutional controls and an EC is still likely to be the selected alternative.

Used Oil UST and Oil Drain System Release

The groundwater contamination near MW-9 is a result of a historical release from the used oil drain system located in the truck maintenance building and has been present since before the conditional closure in 2000. Groundwater concentration trend charts indicate a continuous decline since well installation for wells MW-1, MW-2, MW-4, MW-5, and MW-9 (see Attachment A), as well as MW-3 when the anomalous sample from May 2018 is removed from the data set. Groundwater data from wells MW-1, MW-2, MW-4, MW-2, MW-4, and MW-5 have been compliant for more than four consecutive

quarters. These data are indicative of a diminishing groundwater contaminant plume for the used oil drain system release.

Analytical data for samples collected from groundwater monitoring wells MW-4 and MW-5, located downgradient of well MW-9, have been compliant with MTCA Method A CULs since at least second quarter 201. These wells would represent alternative POCs for the use oil release.

Regarding MW-3, as previously presented in an email to Ecology dated October 4, 2018, the groundwater sample result for TPH-d in May 2018 was the first exceedance in groundwater quality samples collected from this well for the available data set (December 1998, and August 2011 through February 2019). The May 2018 data point appears to be anomalous. Additionally, Section 10.3.2 of Ecology's *Guidance for Remediation of Petroleum Contaminated Sites* indicates a statistical method can be used to show compliance with cleanup levels. The analytical data for groundwater samples from this well appear to indicate statistical analysis will show compliance with cleanup levels. The May 2018 data point should not have more weight than the body of data presented by the 28 other groundwater samples. Additionally, groundwater quality data for the fourth quarter 2018 and first quarter 2019 monitoring events were compliant with MTCA Method A CULs.

Diesel UST Release

Groundwater contamination reported near MW-6 is the result of the spill of UST decommissioning rinsate during UST decommissioning in November 2012. The trend data for MW-6 indicates a declining trend since well installation in June 2013 (see Attachment A). Groundwater data from well MW-6 has been compliant with MTCA Method A CULs for three consecutive quarters, and has been compliant for five of the past six monitoring events. These data are indicative of a diminishing groundwater contaminant plume for the former diesel UST release.

Analytical data for samples collected from groundwater monitoring wells MW-7 and MW-8, located downgradient of well MW-6, were compliant with MTCA Method A CULs prior to the new release into MW-8 in May 2018. Before the new release in May 2018, a conditional closure with an Environmental Covenant that include long-term groundwater monitoring was proceeding to completion. With the exception of the release to MW-8, the conditions at the site have not changed since early 2018 when the conditional closure was fundamentally approved by Ecology.

The eight consecutive quarters are required for the following reasons: (1. Characterization of the Site, page 4).

Comments Summary:

Ecology indicated that additional groundwater monitoring was require due to:

- TPH-d and TPH-o concentrations in ... wells MW-3, MW-6, and MW-9 did not show stable or diminishing trend;
- The initial four quarters of TPH-d and TPH-o concentrations (after release) in groundwater samples collected from monitoring wells MW-8 and MW-9 are highly variable (the highest concentrations is more than three times the lowest concentration).

In the opinion letter (Ecology, 2018), Ecology allowed the requested eight consecutive quarters of groundwater monitoring to be reduced to four consecutive quarters for wells MW-3, MW-6, and the new monitoring well (MW-10), if TPH-d and TPH-o concentrations show a stable or diminishing concentrations over a period of four consecutive quarters.

Ecology also requested that groundwater samples collected from MW-9 be analyzed for TPH-g and benzene, toluene, ethylbenzene, and total xylenes (BTEX), and if reported below PQLs in the first monitoring event, eliminated in future events.

Response:

MW-3

As previously discussed, the analytical results for TPH-d in May 2018 for the groundwater sample from well MW-3 was the first exceedance of the MTCA Method A CUL in groundwater quality samples collected from this well for the available data set (December 1998, and August 2011 through February 2019). The May 2018 data point appears to be an anomalous. The May 2018 data point should not have more weight than the body of data presented by the remaining 28 groundwater samples collected from the well. Additionally, groundwater quality data for the past two monitoring events was compliant with MTCA Method A CULs.

<u>MW-6</u>

As previously discussed, the trend data for MW-6 indicates a declining trend since well installation in June 2013 (see Attachment A). Groundwater data from well MW-6 has been compliant with MTCA Method A CULs for three consecutive quarters, and has been compliant for five of the past six monitoring events. These data are indicative of a diminishing groundwater contaminant plume for the former diesel UST release. Groundwater concentrations are stable or diminishing, collection of groundwater quality data beyond second quarter 2019 is not warranted for closure.

<u>MW-9</u>

The groundwater contamination near MW-9 is a result of a historical release from the used oil drain system located in the truck maintenance building and has been present since before the conditional closure in 2000. This is not a new release. Groundwater concentration trend charts indicate a continuous decline since well installation for wells MW-1, MW-2, MW-4, MW-5, and MW-9, and a stable trend for MW-3 when the anomalous data point from May 2018 <u>is included</u> (see Attachment A). The perceived variability in the groundwater quality data for the well (*the highest*)

concentrations is more than three times the lowest concentration) is due only to the higher concentrations reported in the first sample collected from well. It is not usual for the first groundwater sample from a monitoring well to be higher than subsequent samples due to the disturbance of soils while advancing the soil boring to install the well. Groundwater quality data since the first sample collected has been significantly lower in concentration. Groundwater concentrations are stable or diminishing, collection of groundwater quality data beyond second quarter 2019 is not warranted for closure. Compliance with MTCA Method A is not required for a conditional closure.

<u>MW-8</u>

TPH-d and TPH-o analytical data for groundwater samples collected from well MW-8 indicated a steady decline since the release prior to May 2018. Groundwater quality samples for the past three quarterly events have been compliant with MTCA Method A CULs, with TPH-d and TPH-o not reported in the groundwater samples collected in fourth quarter 2018 and first quarter 2019. Furthermore, analytical data for the first groundwater monitoring event for the new monitoring well MW-10, indicated TPH-d and TPH-o were not present in the groundwater sample. These data provide strong supporting evidence that the release to MW-8 was limited in volume and extent and that groundwater monitoring beyond four consecutive quarters is not warranted for closure of this release.

Reduction in Chemical Analyses

During first quarter 2019 groundwater monitoring included the analysis of groundwater samples from MW-8 and MW-9 for TPH-g and BTEX, and the groundwater sample from MW-10 was analyzed for TPH-g, VOCs, cPAHs, total lead, and PCBs. All contaminants were not reported at, or above their respective PQLs in the samples from MW-8, MW-9, and MW-10. Consistent with Ecology's Opinion Letter, future groundwater samples from these wells will not be analyzed for these contaminants.

Comment:

Please provide summary tables that include all soil and groundwater samples collected to date (since 1998) ... (1. Characterization of the Site, page 5).

Response:

The groundwater summary tables have been updated with the available historical data. Data prior to August 2011 is limited to Environmental Management Resources, Incorporated's *Data Summary Report*, dated February 11, 1999, and the *Remedial Investigation/Feasibility Study*, dated March 1999. Groundwater monitoring data collected after January 1999 and prior to August 2011, can be added to the tables if made available by Ecology.

The soil tables prepared for the *Remedial Investigation/Focused Feasibility Study/Cleanup Action Plan*, dated December 15, 2017, will be updated with any available historical data when the revised *Focused Feasibility Study* is submitted to Ecology. Again, soil data is limited to Environmental Management Resources, Incorporated's *Data Summary Report*, dated February 11, 1999, and the *Remedial Investigation/Feasibility Study*, dated March 1999. Soil assessment data not include in those reports can be added to the tables if made available by Ecology.

Comments:

Please provide the following figures in a clear and readable manner and to scale: ... (1. Characterization of the Site, page 5).

Response:

The Site figures have been updated to include the requested.

Soil sampling location figures prepared for the *Remedial Investigation/Focused Feasibility Study/Cleanup Action Plan*, dated December 15, 2017, will include sample depths and concentrations for contaminants of concern (COC) with any available historical data when the revised *Focused Feasibility Study* is submitted to Ecology. Again, soil data is limited to Environmental Management Resources, Incorporated's *Data Summary Report*, dated February 11, 1999, and the *Remedial Investigation/Feasibility Study*, dated March 1999. Soil assessment data not include in those reports can be added to the tables if made available by Ecology.

A figure indicating the extent of residual soil contamination beneath the vehicle maintenance building will be prepared with any available historical data when the revised *Focused Feasibility Study* is submitted to Ecology.

A plan view figure indicating the extent of current groundwater contamination relative to the estimated influence of the existing groundwater remediation system is not required. The remedial system has been inactive since December 2018, and there is no intension at this time to reactivate the system.

Revised cross-section(s) with soil borings and groundwater wells will be prepared with any available historical data when the revised *Focused Feasibility Study* is submitted to Ecology.

TPH-d and TPH-o groundwater concentration trend graphs for MW-1, MW-3, MW-6, MW-8, and MW-9 were included in the *First Quarter 2019 Groundwater Monitoring Report* (ETG, 2019) and will be included with future groundwater monitoring reports.

Comment:

Please provide status reports for the operation and maintenance of the groundwater remediation systems. ... (1. Characterization of the Site, page 6).

Response:

The remedial system has been inactive since December 2018, and there is no intension to reactivate the system. Previous to December 2018, operation and maintenance information for the remedial was included in the groundwater monitoring reports.

Comment:

Points of compliance. The standard point of compliance for groundwater is throughout the Site, ... This is the appropriate point of compliance for the Site. (2. Establishment of cleanup standards., page 7).

Response:

As previously discussed, in March 2018 Ecology indicated that preliminary concurrence for issuing closure with an EC. The closure included the use of alternative points of compliance for monitoring groundwater. The fundamental conditions for Ecology preliminary concurrence has not changed, with the exception of the release to MW-8, an alternative point of compliance. As discussed, groundwater monitoring data for third and fourth quarter 2018, and first quarter 2019 were compliance with MTCA Method A CULs, and the initial sample from MW-10, downgradient of MW-8 was also compliant. This data indicates groundwater quality at this alternative point of compliance will likely once again comply with MTCA Method A CULs in second quarter 2019.

If there are any questions regarding this letter please call.

Sincerely,

Environmental Technologies Group, Inc.

Daniel J. Landry Senior Project Manager

David M. Seaver, L.G.

Senior Geologist



Attachments: References Figures 1, 2, and 3 Attachments A and B

cc: Ms. Angela Maidment, CRT

- Ecology. 2018. Opinion Letter Further Action at the Following Site: Site Name: Provisioner's Express Inc., Site Address: 2102 West Valley Highway North, Auburn, Washington, 98001, Facility/Site No.: 91612121, VCP Project No.: 3206, Cleanup Site ID: 6847. State of Washington Department of Ecology. December 20.
- EMR. 1999. *Remedial Investigation/Feasibility Study*, Provisioners Express Auburn Facility, 2102 West Valley Highway, Auburn, Washington. Environmental Management Resources, Inc. March.
- EPI. 2013a. Underground Storage Tank Site Assessment Report, Estes Express Facility, 2102 West Valley Highway North, Auburn, Washington. Environmental Partners, Inc. January 4.
- EPI. 2013b. *Phase II Environmental Site Assessment Report*, Estes West Express Trucking Facility, 2102 West Valley Highway North, Auburn, Washington. Environmental Partners, Inc. December 9.
- EPI. 2017a. September and December 2016 Groundwater Sampling Report Twenty and Twenty-First Rounds, Estes West Express Trucking Facility, 2102 West Valley Highway North, Auburn, Washington. Environmental Partners, Inc. February 24.
- EPI. 2017b. September 2017 Groundwater Sampling Report Twenty-Fourth Round, Estes West Express Trucking Facility, 2102 West Valley Highway North, Auburn, Washington. Environmental Partners, Inc. October 3.
- EPI. 2017c. *Remedial Investigation/Focused Feasibility Study/Cleanup Action Plan*, Provisioners Express, Inc. (a.k.a. Estes Express Lines), 2102 West Valley Highway North, Auburn, Washington. Environmental Partners, Inc. October 3.
- EPI. 2018. December 2017 January 2018 Groundwater Sampling Report Twenty-Fifth Round, Estes West Express Trucking Facility, 2102 West Valley Highway North, Auburn, Washington, VCP No. NW 2532. Environmental Partners, Inc. December 15.
- ETG. 2018. Groundwater Assessment Work Plan, Former Provisioner's Express, Inc. Facility, 2102 West Valley Highway North, Auburn, Washington, Ecology Facility ID 91612121, Cleanup Site ID 6847, VCP Project No. 3206. Environmental Technologies Group, Inc. September 17.

ETG. 2019. *First Quarter 2019 Groundwater Monitoring Report*, Former Provisioner's Express, Inc. Facility, 2102 West Valley Highway North, Auburn, Washington, Ecology Facility ID 91612121, Cleanup Site ID 6847, VCP Project No. 3206. Environmental Technologies Group, Inc. March 28.







ATTACHMENT A GROUNDWATER ANALYTICAL SUMMARY TABLES

Table 3Summary of Groundwater Analytical Results

			Ecology Method NWTPH-Gx (µg/L)	Ecology Method NWTPH-Dx (µg/L)			Volatile Organic Compounds USEPA Method 8021B/8260B (µg/L)			
Well ID	Sample ID	Collection Date	TPH-g	TPH-d	ТРН-о	Total TPH (C ₁₂ - C ₃₆₎	Benzene	Toluene	Ethylbenzene	Total Xylenes
MW-1	MW-1	12/23/1998		<250	<500	<500				
	NA	8/12/2011	<100	<250	<500	<500	<1	<1	<1	<3
	NA	11/11/2011	<100	1,500	300	1,800	<1	<1	<1	<3
	NA	2/10/2012	<100	690	<250	690	<1	<1	<1	<3
	NA	5/17/2012	<100	1,100	480	1,580	<1	<1	<1	<3
	NA	8/28/2012	<100	1,200	820	2,020	<1	<1	<1	<3
	NA	11/15/2012	<100	2,700	1,200	3,900	<1	<1	<1	<3
	NA	2/14/2013	<100	1,600	510	2,110	<1	<1	<1	<3
	NA	5/16/2013	<100	1,500	340	1,840	<1	<1	<1	<3
	NA	8/14/2013	<100	1,100	290	1,390	<1	<1	<1	<3
	NA	11/25/2013		1,400	400	1,800				
	NA	2/20/2014		700	280	980				
	NA	5/15/2014		940	<250	940				
	NA	8/14/2014		<50	<250	<250				
	NA	11/24/2014		220	<250	220				
	NA	3/31/2015		340	<250	340				
	NA	6/29/2015		240	<250	240				
	NA	9/28/2015		700	290	990				
	NA NA	5/5/2010		220	<250	220				
	INA NA	0/21/2016		100 590	< <u>-230</u>	1 000				
	INA NA	9/10/2010		580	420	1,000				
	NA NA	2/20/2010		190 52	<250	190 52				
	NA NA	6/10/2017		310	560	93 870				
	NA NA	9/5/2017		340	340	680				
	NA	12/20/2017		150	340	490				
	FW_051718_1	5/17/2018		<400	100</td <td><!--100</td--><td></td><td></td><td></td><td></td></td>	100</td <td></td> <td></td> <td></td> <td></td>				
	EW-031718-1 FW-082318-3	8/23/2018		<380	<380	<380				
	EW-002510-5	11/15/2018		<400	<400	<400				
	NS	2/19/2019								
MW-2	MW-2	12/23/1998		250	<500	<500				
	MW-2	1/29/1999	230				8.3	1.2	<1.0	4.0
	NA	8/12/2011	<100	<250	<500	<500	<1	<1	<1	<3
	NA	11/11/2011	<100	500	<250	500	<1	<1	<1	<3
	NA	2/10/2012	<100	<50	<250	<250	<1	<1	<1	<3
	NA	5/17/2012	<100	<50	<250	<250	<1	<1	<1	<3
	NA	8/28/2012	<100	470	730	1,200	<1	<1	<1	<3
	NA	11/15/2012	<100	140	<260	140	<1	<1	<1	<3
	NA	2/14/2013	<100	94	260	354	<1	<1	<1	<3
	NA	5/16/2013	<100	77	<250	77	<1	<1	<1	<3
	NA	8/14/2013	<100	280	<250	280	<1	<1	<1	<3
	NA	11/25/2013		53	<250	53				
	NA	2/20/2014		<50	<250	<250				
	NA	5/15/2014		<50	<250	<250				
	NA	8/14/2014		100	<250	100				
	NA	11/24/2014		<50	<250	<250				
	NA	3/31/2015		57	<250	57				
	NA	6/29/2015		97	<250	97				
	NA	9/28/2015		150	<250	150				
	NA	3/3/2016		<50	<250	<250				
	NA	6/21/2016		86	<250	86				
	NA	9/16/2016		95	<250	95				

Table 3Summary of Groundwater Analytical Results

		Ecology Method NWTPH-Gx	ethod Ecology Method -Gx NWTPH-Dx				Volatile Organic Compounds USEPA Method 8021B/8260B			
			(µg/L)		(ug/L)		0.		(ug/L)	0D
		Collection	(r:ə)		(PB) =)	Total TPH				Total
Well ID	Sample ID	Date	TPH-g	TPH-d	TPH-0	(C ₁₂ - C ₃₆₎	Benzene	Toluene	Ethylbenzene	Xylenes
MW-2	NA	12/20/2016		<50	<250	<250				
Continued	NA	6/19/2017		61	<250	61				
	NA	9/5/2017		100	<250	100				
	NA	12/20/2017		<50	<250	<250				
	EW-051718-4	5/17/2018		<410	<410	<410				
	NS	8/23/2018								
	NS	11/15/2018								
	NS	2/19/2019								
MW-3	MW-3	12/23/1998		<250	<500	<500				
	NA	8/12/2011	<100	<250	<500	<500	<1	<1	<1	<3
	NA	11/11/2011	<100	65	<250	65	<1	<1	<1	<3
	NA	2/10/2012	<100	100	<250	100	<1	<1	<1	<3
	NA	5/17/2012	<100	53	<250	53	<1	<1	<1	<3
	NA	8/28/2012	<100	130	<250	130	<1	<1	<1	<3
	NA	11/15/2012	<100	120	<280	120	<1	<1	<1	<3
	NA	2/14/2013	<100	150	<250	150	<1	<1	<1	<3
	NA	5/16/2013	<100	200	<250	200	<1	<1	<1	<3
	NA	8/14/2013	<100	140	<250	140	<1	<1	<1	<3
	NA	11/25/2013		170	<250	170				
	NA	2/20/2014		160	<250	160				
	NA	5/15/2014		120	<250	120				
	NA	8/14/2014		140	<250	140				
	NA	11/24/2014		130	<250	130				
	NA	3/31/2015		220	<250	220				
	NA	6/29/2015		130	<250	130				
	NA	9/28/2015		110	<250	110				
	NA	3/3/2016		92	<250 <250	92				
	NA	6/21/2016		85	<250 <250	85				
	NA	9/16/2016		100	<250	100				
	NA	12/20/2016		99	<250	99				
	INA NA	0/5/2017		310	<250	310				
	INA NA	9/5/2017		210	<250	210				
	NA EW 051719 0	5/17/2018		150 520	<250	150 520				
	EW-031/16-9	3/1//2018 8/22/2018		520	\400	520				
	INS EW 111519 1	0/23/2010				-200				
	EW 021010 4	2/10/2010		<390	<390	<390				
duplicate	EW-021919-5	2/19/2019		<400 <400	<400 <400	<400				
MW-4	MW-4	1/29/1999	<100				<1.0	<1.0	<1.0	<1.0
	NA	8/12/2011	<100	<250	<500	<500	<1	<1	<1	<3
	NA	11/11/2011	<100	72	<250	72	<1	<1	<1	<3
	NA	2/10/2012	<100	150	<250	150	<1	<1	<1	<3
	NA	5/17/2012	<100	160	<250	160	<1	<1	<1	<3
	NA	8/28/2012	<100	200	<250	200	<1	<1	<1	<3
	NA	11/15/2012	<100	220	<250	220	<1	<1	<1	<3
	NA	2/14/2013	<100	220	<250	220	<1	<1	<1	<3
	NA	5/16/2013	<100	210	<250	210	<1	<1	<1	<3
	NA	8/14/2013	<100	200	<250	200	<1	<1	<1	<3
	NA	2/20/2014		140	<250	140				
	NA	5/15/2014		140	<250	140				
	NA	8/14/2014		290	<250	290				

Table 3Summary of Groundwater Analytical Results

		Ecology Method NWTPH-Gx	Method Ecology Method PH-Gx NWTPH-Dx			Volatile Organic Compounds USEPA Method 8021B/8260B					
			(µg/L)		(µg/L)		(µg/L)				
	<i></i>	Collection			(Total TPH				Total	
Well ID	Sample ID	Date	TPH-g	TPH-d	TPH-0	(C ₁₂ - C ₃₆₎	Benzene	Toluene	Ethylbenzene	Xylenes	
MW-4	NA	11/24/2014		290	<250	290					
Continued	NA	3/31/2015		320	<250	320					
	NA	6/29/2015		240	<250	240					
	NA	9/28/2015		220	<250	220					
	NA	3/3/2016		130	<250	130					
	NA	6/21/2016		63	<250	63					
	NA	9/29/2016		68	<250	68					
	NA	12/20/2016		78	<250	78					
	NA	3/24/2017		<50	<250	<250					
	NA	6/19/2017		110	<250	110					
	NA	9/5/2017		150	<250	150					
	NA	1/2/2018		<50	<250	<250					
	EW-051718-8	5/17/2018		<400	<400	<400					
	NS	8/23/2018									
	NS	11/15/2018									
	NS	2/19/2019									
MW-5	NA	6/5/2013	<100	160	<250	160	<1	<1	<1	<3	
	NA	8/14/2013	<100	56	<250	56	<1	<1	<1	<3	
	NA	11/24/2014	<100	<50	<250	<250					
	NA	3/31/2015		52	<250	52					
	NA	6/29/2015		<50	<250	<250					
	NA	9/28/2015		<50	<250	<250					
	NA	3/3/2016		<50	<250	<250					
	NA	6/21/2016		<50	<250	<250					
	NA	9/16/2016		<50	<250	<250					
	NA	12/20/2016		<50	<250	<250					
	NA	6/19/2017		55	<250	55					
	NA	9/5/2017		68	<250	68					
	NA	1/2/2018		<50	<250	<250					
	EW-051718-5	5/17/2018		<380	<380	<380					
	NS	8/23/2018									
	NS	11/15/2018									
	NS	2/19/2019									
MW-6	NA	6/5/2013	<100	680	<250	680	<1	<1	<1	<3	
	NA	8/14/2013	<100	790	<250	790	<1	<1	<1	<3	
	NA	2/20/2014		740	<250	740					
	NA	5/15/2014		950	<250	950					
	NA	8/14/2014		1,200	<250	1,200					
	NA	11/24/2014		680	<250	680					
	NA	3/31/2015		750	<250	750					
	NA	6/29/2015		750	<250	750					
	NA	9/28/2015		610	<250	610					
	NA	3/3/2016		1,100	390	1,490					
	NA	6/21/2016		650	<250	650					
	NA	9/16/2016		340	<250	340					
	NA	12/20/2016		640	<250	640					
	NA	3/24/2017		580	<250	580					
	NA	6/19/2017		970	280	1,250					
	NA	9/5/2017		320	<250	320					
	NA	1/2/2018		240	<250	240					
	EW-051718-6	5/17/2018		880	<400	880					

Table 3Summary of Groundwater Analytical Results

			Ecology Method	Ecology Method			Volatile Organic Compounds			
			NWTPH-Gx		NWTPH-Dx		USEPA Method 8021B/8260B			
			(µg/L)		(µg/L)	Tatal TDH			(µg/L)	T ()
Well ID	Sample ID	Collection Date	TPH-g	TPH-d	TPH-o	$(C_{12} - C_{36})$	Benzene	Toluene	Ethylbenzene	Total Xylenes
MW-6	EW-082318-4	8/23/2018		<400	<400	<400				
Continued	EW-082318-3	11/15/2018		<380	<380	<380				
	EW-021919-2	2/19/2019		470	<400	470				
MW-7	NA	9/16/2016		140	<250	140				
	NA	12/20/2016		78	<250	78				
	NA	3/24/2017		<50	<250	<250				
	NA	6/19/2017		100	<250	100				
	NA	9/5/2017		59	<250	59				
	NA	12/20/2017		99	<250	99				
	EW-051718-7	5/17/2018		<380	<380	<380				
	NS	8/23/2018								
	NS	11/15/2018								
	NS	2/19/2019								
MW-8	NA	10/3/2016		290	<250	290				
	NA	12/20/2016		140	<250	140				
	NA	3/24/2017		<50	<250	<250				
	NA	6/26/2017		180	<250	180				
	NA	9/5/2017		160	<250	160				
	NA	12/20/2017		140	<250	140				
	EW-051718-10	5/17/2018		1,900	2,800	4,700				
	EW-060518-1	6/5/2018		850	770	1,620				
	EW-082318-5	8/23/2018	<100	450	<380	450	<1.0	<1.0	<1.0	<3.0
	EW-111518-2	11/15/2018		<400	<400	<400				
	EW-021919-3	2/19/2019		<400	<400	<400				
MW-9	NA	9/5/2017		4,300	<250	4,300				
	NA	12/20/2017		360	<250	360				
	EW-051718-2	5/17/2018		450	<400	450				
duplicate	EW-051718-3	5/17/2018		470	<390	470				
	EW-082318-1	8/23/2018		790	<400	790				
duplicate	EW-0823718-2	8/23/2018		700	<400	700				
	EW-111518-4	11/15/2018		<390	<390	<390				
duplicate	EW-111518-5	11/15/2018		<400	<400	<400				
	EW-021919-1	2/19/2019	<100	<400	<400	<400	<1.0	<1.0	<1.0	<3.0
MW-10	EW-021919-6	2/19/2019	<100	<400	<400	<400	<1.0	<1.0	<1.0	<3.0
MTCA Method A Cleanup Levels for Groundwater ^a			800/1,000 ^b	500	500	500	5	1,000	700	1,000

Notes:

MTCA - Model Toxics Control Act

USEPA - United States Environmental Protection Agency

CCL - Contaminant Cleanup Level

Bold - Value exceeds MTCA Method A cleanup level

TPH-d - diesel range total petroleum hydrocarbons

TPH-g - gasoline range total petroleum hydrocarbons

TPH-o - total petroleum hydrocarbons in the oil range

^a MTCA Method A Groundwater Cleanup Levels for Unrestricted Land Uses are referenced from the February 12, 2001.

Washington Department of Ecology Model Toxics Control Act Cleanup Regulation Chapter 173-340, Table 720-1.

 b 800 µg/L if benzene has been detected in groundwater; 1,000 µg/L if benzene has not been detected in groundwater.

µg/L - micrograms per liter

< - Not reported at, or above the indicated laboratory method reporting limit

Shaded value indicates compound was reported either at, or above the laboratory MRL

-- - Not Analyzed

NS - Not Sampled

NA - Not Applicable

 Table 4

 Summary of Groundwater Analytical Results - Total Lead, PCBs, cPAHs, and VOCs

			USEPA Method 6020 (µg/L)	USEPA Method 8082A (μg/L)	USEPA Method 8270D (µg/L)	USEPA Method 8260 (µg/L)				
Well ID	Sample ID	Date Sampled	Fotal Lead	PCBs	2PAHs	VOCs				
MW-2	MW-2	1/29/1999		All <0.050	All <0.05	ND				
MW-4	MW-4	01/29/99		All <0.050	All <0.05	ND (Chloroform 1.6) ^b				
MW-8	EW-082318-5	8/23/2018	<10.0	All <0.10	All <0.042	ND				
MW-10	EW-021919-6	02/19/19	<10.0	All <0.098	All <0.0.039	ND				
MTCA Method A C	Cleanup Levels for	Groundwater ^a	15	0.1	0.1	Various				
Notes: Feelogy - Washington Department of Feelogy										

USEPA - United States Environmental Protection Agency

 μ g/L - Micrograms per liter

< - Not reported at, or above, the indicated laboratory method reporting limit (MRL)

PCBs - Polychlorinated Biphenyls

PAHs - Polychlorinated Aromatic Hydrocarbons

cPAHs - Carcineogenic Polychlorinated Aromatic Hydrocarbons

VOCs - Volatile Organic Compounds

Shaded value indicates compound was reported either at, or above the laboratory MRL

ND - Not detected

^a Model Toxics Control Act (MTCA) Method A cleanup levels for unrestricted land uses are referenced from Table 720-1 in Ecology's

November 2007 document Model Toxics Control Act Cleanup Regulation, Chapter 173-340 WAC.

^b All VOCs were not reported either at, or above the laboratory practical quantitative limit (PQL), except chloroform at 1.6 µg/L.

ATTACHMENT B TPH-D AND TPH-O GROUNDWATER CONCENTRATION TREND CHARTS

















