

July 6, 2023

Canyon Town Center, LLC
5602 South Tacoma Way
Tacoma WA 98409

Attention: Pat Austin

Subject: Environmental Reports Review, Summary and Recommendation
17201 to 17221 Canyon Road E., Puyallup, Washington 98375

Mr. Austin:

EcoCon, Inc. (ECI), at your request completed a review of documents provided by you including a January 13, 2023, Partner Engineering and Science, Inc. (Partner) Phase I Environmental Site Assessment (Phase I ESA) and the Washington State Department of Ecology files contained within that document, the Partner April 26, 2023 Phase II ESA each completed on the Property located at 17201 to 17221 Canyon Road East, Puyallup, Washington 98375 (Subject Property/Property/Site/Austin Property).

In addition, we have reviewed the other documents provided by, accessible through the Department of Ecology online portal and have also requested files from the Washington State Department of Ecology for the adjacent site to the east (the Looker & Associates Inc. property) and the site to the south (the Frederickson Market property).

Subject Property History

According to the Partner Phase I ESA and the Phase II ESA, the Subject Property was a gravel Pit operated as part of the larger J.D. Shotwell Company Frederickson Gravel Pit that was located across Canyon Rd to the west from approximately 1968 to 2004 when gravel mining operations ceased and the Washington State Department of Natural Resources (DNR) Surface Mine Reclamation Permit was terminated. Based on aerial photographs It appears that the Subject Property was minimally used for gravel mining from at least 1969 to at least 1990. With the exception of two drainage ponds in the northeast corner of the Property constructed around 2007, the Property appears to have been filled and graded to its current grade by 2002. The drainage ponds were used as settling and infiltration ponds for process water and stormwater from the adjacent Looker gravel pit. These ponds appear to have been filled and replaced with a new pond in the northeast portion of the Looker property by 2022.

Contamination Investigations

According to a November 2, 2009 "Further Action" letter to the owners of the adjacent site to the east, (the Looker & Associates Property), diesel-range organics (DRO) were found in the soil and groundwater adjacent to the property boundary with the Subject Property in June 2007. Follow-up investigations found evidence of DRO contamination in soil and groundwater along the Subject Property's eastern boundary.

Because the contamination was found near the Property boundary, in July 2007, 13 test pits were excavated on the Subject Property which confirmed the presence of DRO in the soil and groundwater

along the eastern boundary. As a result of the findings, approximately 824 tons of contaminated soils on the Subject Property were excavated for disposal.

In September 2007, six monitoring wells were installed on the Subject Property in September 2007. Soil samples from these wells along with soil samples from test pits on the Property did not reveal the presence of DRO in the soils above the laboratory practical quantitation limits (PQLs). However, DRO and carcinogenic polycyclic aromatic hydrocarbons (cPAHs) above the Model Toxics Control Act (MTCA) cleanup levels were found in the groundwater beneath the Subject Property. Because the groundwater flow direction appeared to be to the northwest, it was concluded that the source of the contamination was from the adjacent Looker & Associates property.

Because DRO and cPAH contamination was found on the Subject Property and appeared to be coming from the Looker property, Parametrix was hired to conduct several investigations on the Looker property including excavation of 27 test pits. Parametrix identified a potential spill may have occurred in the early 1990s during a diesel transfer to an on-Site aboveground storage tank (AST) at the site that was located approximately 160 feet east of the central portion of the Subject Property.

In August 2008, Parametrix conducted excavation of the upper 6 feet in the area of the former AST spill, segregating and stockpiling them as clean soil based on field screening criteria. Further excavation of the area to the depth of groundwater, 12 to 17 feet, occurred in November 2008 at the request of Ecology.

In December 2008, Parametrix installed six groundwater monitoring wells, with three of the monitoring wells on the property and three monitoring wells off the property to the north. Groundwater samples revealed that one well had concentrations of benzene and DRO above the MTCA Cleanup Levels. This well (LP-MW-2) is located in the area of the former AST spill.

Austin Property Phase I Environmental Site Assessment - Partner Engineering and Science, Inc. 2023

In January 13, 2023, Partner conducted a Phase I Environmental Site Assessment on the Subject Property. That Phase I ESA included a summary of the site history, a property and adjacent site reconnaissance, a review of select regulatory agency records, and a review of a regulatory database report. The appendices of this Phase I ESA contained copies of some of the files obtained from various agencies for

- the J.D. Shotwell Company Frederickson Gravel Pit,
- the Underground Storage tank files for the Frederickson Market property to the south and
- partial files for the Looker & Associates files

Also included were copies of the report for the database review and previous Phase I ESA for the northern parcel of the Subject Property prepared by Aerotech Environmental Consulting dated September 16,

2022. That report reviewed files for the J.D. Shotwell Company Frederickson Gravel Pit but not the Looker & Associates files. Aerotech concluded that contamination on the J.D. Shotwell Company Frederickson Gravel Pit site have not impacted the Subject Property and concluded that *“the risk of contamination at the Site is so minimal that no further investigation is warranted.”*

The information gathered by Partner was used to determine if any recognized environmental conditions (RECs) or Business Environmental Risks (BER) as defined by the American Society for Testing and Materials (ASTM) Standard E 1527-13.

A REC is defined as

“The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment”

A BER is defined as

“...a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, and is not necessarily an issue required to be investigated...”

Based on their review of information during the Phase I ESA, Partner indicated that they did not find any RECs on the Subject Property. However, Partner did say that there were BERs associated With the Subject Property. The BERs identified were:

- *“Based on review of historical information, the subject property operated as a gravel pit from circa 1968 to circa 2009. The subject property was part of the Frederickson Gravel Pit, which also included the present day western adjacent property- across Canyon Road East. A release of metals, removal of impacted soil, and soil and groundwater testing occurred on the western adjacent property, resulting in a No Further Action (NFA) status with the Washington Department of Ecology (WDOE). However, no related impacts were reported on the subject property.”*
- *“...the east-adjacent property (Looker & Associates, 5825 176th Street East), was identified as a Voluntary Cleanup Program (VCP) site primarily in connection with diesel impacts in groundwater discovered during investigations beginning in 2007. Based on a review of available WDOE documents, approximately 10 test pits for soil samples and four monitoring wells were installed on the subject property in September or December 2007 as part of a larger investigation including the east-adjacent property; however, analytical results from this sampling were not provided in the documents reviewed.”*

“...Based on the documents reviewed, the groundwater impacts at concentrations requiring additional investigation appear to have been located on the east-adjacent

property, in the area of the historical diesel release, and do not appear to have significantly impacted the subject property. As such, these listings are not expected to represent a REC to the subject property.”

Partner went on to recommend that:

“Based on the conclusions of this assessment, Partner recommends no further investigation of the subject property at this time”

Austin Property Phase II Environmental Site Assessment - Partner Engineering and Science, Inc. 2023

In April 2023, Partner performed a Phase II ESA on the Subject Property to evaluate the potential impact of petroleum hydrocarbons and/or volatile organic compounds (VOCs) to soil, groundwater, and/or soil gas as a consequence of a release or releases from the former on-site gravel pit and off-site gravel pit.

The Phase II ESA consisted of advancing 10 borings on the Property (borings B1 through B10) to depths between 15 and 25 below the ground surface (bgs). These borings were located Primarily along the eastern Property boundary, adjacent to the Looker Gravel Pit site, and center of the Subject Property. In addition, one boring was located along the southern boundary of the Subject Property adjacent to the Fredrickson Market gas station property. In addition Partner sampled the groundwater from an existing monitoring well located in the center of the Subject Property.

In each boring, a soil gas sample was collected at a depth of 5 feet bgs and two to four soil samples collected for possible chemical analysis. Groundwater grab samples were also collected from each of the borings except for borings B4, and B7 through B10, where groundwater was not encountered during drilling.

Based on field screening which did not detect evidence of contamination in the soil. Partner had one soil sample from each boring analyzed for gasoline-range organics (GRO), diesel-range organics (DDRO), Oil-range organics (ORO) (also known as residual-range organics (RRO)), and volatile organic compounds (VOCs). The groundwater samples were analyzed for the same contaminants and the soil gas samples were analyzed only for VOCs.

The analytical results revealed that concentrations of the analytes in the soil samples were either below the laboratory practical quantitation limits (PQLs) or significantly below the MTCA Cleanup Levels. The analytical samples for the groundwater revealed the presence of DRO and/or ORO above the individual MTCA Cleanup Levels in three of the borings located in the northeast and north central portion of the Subject Property (borings B1, B2, and B5).

The groundwater sample from boring B5 located in the north central portion of the Subject Property had the highest concentrations of DRO and ORO at 96,400 µg/L and 19,000 µg/L. These concentrations may reflect the presence of free-product in the groundwater at this location.

The groundwater sample from the existing monitoring well on the Property reveal concentrations of DRO and ORO below the individual MTCA Cleanup levels. However, because DRO and ORO can overlap in the analytical chromatograms, Ecology requires that unless a hydrocarbon identification (HCID) analysis is performed to determine if the hydrocarbons are strictly DRO, ORO or a mix of both, that the DRO and ORO analytical results be added together to get a total petroleum hydrocarbon (TPH) concentration. That TPH concentration is then compared to the MTCA Cleanup Level. While the sample from the existing monitoring well reveals concentrations of DRO and ORO below the individual cleanup Levels, when added together the total concentration of the two added together is above the MTCA Cleanup Level for TPHs.

The analytical results of the soil gas samples revealed that concentrations of benzene and/or 1,3-butadiene were above the Ecology soil-gas screening levels that would require further evaluation and/or mitigation in samples from all of the borings. The highest soil gas concentration of benzene 52.4 µg/m³ was located in boring B7 that is close to the existing monitoring well in the center of the Subject Property. The screening level for benzene is 11 µg/m³.

The highest 1,3-butadiene soil gas concentration is located along the southern portion of the eastern property boundary in boring B9. That concentration was 184 µg/m³. The screening level for 1,3-butadiene is 2.8 µg/m³.

In addition to benzene and 1,3-butadiene, the soil gas sample from boring B10 located in the southeast corner of the Property revealed the presence of vinyl chloride at 1.19 µg/m³ which is above the soil gas screening level of 0.33 µg/m³. It is not known where the vinyl chloride may be coming from.

Partner concluded that:

- Based on the lack of elevated DRO or ORO in the soil on the Subject Property and the concentrations observed in the groundwater, that a DRO plume in the groundwater was migrating to the northwest in the northeastern portion of the Subject Property from offsite, the Looker property.
- For the soil gas that, based on the lack of elevated VOCs in soil and groundwater samples, the source for the elevated concentrations of VOCs is the off-site gravel pit.

Partner recommended:

- *“Engineering controls such as a Vapor Intrusion Mitigation System (VIMS) be considered as part of the building design when the property is redeveloped in order to mitigate any potential vapor*

intrusion risk to human health followed by a baseline and periodic indoor air quality surveys to document the effectiveness of these measures”; and

- *“Installing a minimum of three groundwater monitoring wells in the vicinity of borings B1, B2 and B5 followed by performance of a groundwater sampling event in order to document the direction of groundwater flow as well as the off-site source for the groundwater contamination.”*

ECI Comments and Recommendations

After reviewing the information available as of the date of this report ECI has the following comments:

- ECI agrees that there is likely an offsite source for some of the contamination observed. However, there may also be an on-site source near Boring B5, located in the north central portion of the Property. At that location, the concentration of DRO and ORO in groundwater was higher than anywhere else on the Property and were indicative of potential free-product. The borings reported to be upgradient of boring B5 had significantly lower concentrations of DRO and ORO.
- ECI observed that while the ESA reports indicate that the site was filled and graded sometime after gravel mining ceased on the Subject Property, the reports do not indicate where the fill material came from the J.D. Shotwell Company Frederickson Gravel Pit where an asphalt plant was located. It is possible that some contamination may be from the fill material, especially if the fill came from the main This includes potential for metals to be present in the fill. Metals were not analyzed in the samples collected from the Property.
- Partner indicated in their Phase II ESA, indicated that the source for the soil gas concentrations observed was from off-site presumably from the off-site gravel pit. In addition, Partner indicated that the vinyl chloride observed in one soil gas sample from the southeast corner Of the Property was from an unknown off-site source.

ECI observed that the soil gas samples were analyzed only for VOCs and did not look for petroleum hydrocarbons. After reviewing the soil gas data, ECI noted that the results appear to resemble soil gas related to gasoline.

- Review of the regulatory database report included in the Partner Phase I ESA, revealed that the gasoline service station to the south and up-gradient of the Subject Property had numerous releases of gasoline to the pavement of the site due to dispenser nozzles failing to shut off when a vehicle tank was full. These incidents were reported to Ecology who made note that the spill was located on pavement and did not require further investigation at the time. It is possible that gasoline may have penetrated the pavement through cracks and joints to the subsurface and be a source of vapors migrating to the Subject Property in addition to any vapors migrating from the off-site gravel pit.

ECI Recommendations

It is ECI's understanding that it is the desire of our client to obtain closure at the Subject Property from the appropriate regulatory agency using engineering controls and an environmental covenant through the Ecology Voluntary Cleanup Program (VCP) or the Washington State Pollution Liability Agency (PLIA)

Technical Assistance Program (TAP). In order to do that, it is ECI's opinion that further investigation on the Subject Property is required to satisfy the "*substantive requirements of MTCA*". Therefore, ECI recommends the following work be Performed in Phases.

- Further soil gas investigation be performed using a grid overlaid on the Property. The soil gas samples would be analyzed for VOCs and petroleum hydrocarbons. The results of the soil gas would be used to target locations for additional soil and groundwater sampling.
 - Soil borings be installed in various area of the site based on the results of the above-mentioned soil gas analyses and where previous groundwater and soil gas analyses revealed contamination above the MTCA cleanup levels. These soil borings will be used to characterize the fill that was used on the Property and determine if potentially contaminated fill was used. Soil samples collected from these borings should be analyzed for VOC GRO, DRO, ORO, and MTCA five metals (arsenic, cadmium, chromium, lead and mercury) In addition, because DRO and ORO has previously been observed at the site Ecology requires that additional analytical parameters specified in Table 830-1 of the MTCA be performed on at least a representative subset of the soil samples collected. These parameters include cPAHs, naphthalene, PCBs, and gasoline Fuel additives if gasoline is found in the samples.
 - Permanent groundwater monitoring wells be installed on the Property and sampled at least quarterly to determine the groundwater flow direction and gradient. The wells will also assist in characterizing the extent of contaminated groundwater beneath the Subject Property and whether the contamination found is from an on-site source, an off-site source, or a combination of both. ECI anticipates that at least six (6) wells will be needed. ECI anticipates that the wells be located:
 - near boring B5 to determine if there is free product on the groundwater at that location,
 - At least one (1) or two (2) wells and possibly more located in the anticipated eastern and southern upgradient portions of the Property near the Property boundaries to determine whether there is migration from off site sources
 - The remaining wells would be located in downgradient portions of the Subject Property and in locations based on the results of the soil gas analytical results and possibly the soil boring analytical results if the wells are not installed at the same time as the soil borings.
 - After obtaining the results from the above investigations, a report the satisfies the requirements for a remedial investigation (RI) be submitted to the appropriate agency (Ecology or PLIA) for review and opinion with the goal of obtaining a "*No Further Action*" determination with an Environmental Covenant.
- It should be noted that Ecology has developed "*Model Remedies*" for petroleum contaminated sites that may be appropriate for use at the Subject Property. If used, then the MTCA required Feasibility Study (FS) and disproportionate cost analysis (DCA) for remedial options will not be required. While it is likely that a "*Model Remedy*" can be used, the determination cannot be made until after the results from the RI have been obtained.
- After approval of the RI from Ecology or PLIA, MTCA requires that a Corrective Action Plan (CAP) be prepared that outlines how the Site will remediated and/or monitored for closure.

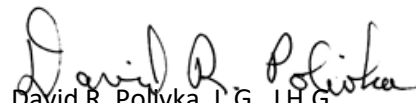
- Once the RI and CAP are approved it is anticipated that ECI will work with the regulatory agencies to draft an Environmental Covenant for the Property to be filed with the Pierce County Auditor and included in a “*No Further Action*” determination form the regulatory agency.

Closing

ECI appreciates this opportunity to review the documents for this Property and provide a recommended pathway to obtain closure for this site so the Property can be redeveloped. If there are any questions regarding this or any other matter, please do not hesitate to contact us.

Sincerely,

ECI | Environmental Consulting



David R. Polivka, L.G., L.H.G.
Sr. Hydrogeologist



Stephen M. Spencer
Principal