

# Remedial Investigation/Feasibility Study Work Plan

May 31, 2023

**BLT Transport**  
**8010 S 259th Street**  
**Kent, Washington 98032**  
FS ID: 60800  
Cleanup Site ID: 16551

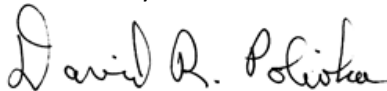
**Prepared for:**  
**BLT Transport**  
**8010 S 259th Street**  
**Kent, Washington 98032**

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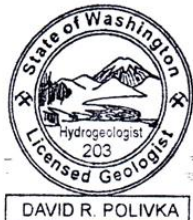


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## 1.0 INTRODUCTION

EcoCon, Inc. (ECI) has prepared this Remedial Investigation/Feasibility Study (RI/FS) Work Plan (Work Plan) for a property located at 8010 S 259th Street in Kent Washington (Property/Subject Property) (Figure 1, Appendix A). As established in the Washington State Model Toxics Control Act (MTCA) Cleanup Regulations as established in Section 200 of Chapter 173-340 of the Washington Administrative Code (WAC 173-340-200), the “Site” is defined as:

*“...any area where a hazardous substance, other than a consumer product in consumer use, has been deposited, stored, disposed of, or placed or otherwise come to be located...”*

The purpose of this work plan is to present the scope of work to address the key requirements identified by the Washington State Department of Ecology (Ecology) in their “Further Action Letter” dated March 13, 2023, before Ecology would consider closure at the Site. Those requirements include:

- Ecology has determined that MTCA Method A Industrial Cleanup Levels are not appropriate and that the MTCA Method A Cleanup Levels for Unconditional Use needs to be used at the Subject Property. Therefore, Ecology believes that soil above the MTCA Method A for Unconditional Use was used as backfill in the stormwater detention system excavations and is requiring that possibility to be further investigated.

Ecology is requesting additional borings to sample the fill in the excavation area along with the additional borings requested outside the excavation area.

- Ecology states that Total Petroleum Hydrocarbons for diesel (TPH-D) and oil (TPH-O) have not been categorized satisfactorily.

Ecology is also requiring that TPH-D and TPH-O analytical values must be combined, and the total compared to the MTCA Method A Cleanup Level to assess if an exceedance of the cleanup levels have occurred.

- Residual TPH-D, TPH-O, PCBs, cadmium, and lead are present in confirmation samples above the MTCA Method A Cleanup Levels.

After excavation activities, 11 confirmation soil samples were collected from the limits of the excavation at depths of 3 and 4 feet bgs. Based on the confirmation soil sample results, residual TPH-D, TPH-O, PCBs, cadmium, and lead were present at concentrations above the MTCA Method A Cleanup Levels.

- Contaminated stockpiled soil was used as backfill given that no records of offsite disposal of the estimated 3,000-tons of stockpiled soil (SP1 and SP2). Based on this information, Ecology is concerned that soil exceeding MTCA Method A Cleanup Levels may be present in the vicinity of the stormwater detention system.
- Arsenic is present in soil above MTCA Method A Cleanup Level up to 15-feet below ground surface (bgs).

Ten soil borings (B9 through B18) were advanced in 2021 in the vicinity of the stormwater detention system. Arsenic exists in soil beneath the Property at concentrations exceeding the MTCA Method A

Cleanup Level up to the maximum explored depth of 15 feet bgs in borings (B9 through B12 and B18). The source of the arsenic contamination in subsurface soil has not been identified. Ecology has determined that the vertical and lateral extent of arsenic in soil at the Site has not been delineated.

- Total and dissolved arsenic in groundwater is present above the MTCA Method A Cleanup Level.

Ecology notes that total and dissolved arsenic has been detected in the five monitoring wells (MW1 through MW5) at least one time in all four sampling events.

- Ecology is requiring that the extent of the stormwater detention system excavation and the stormwater detention system be determined and displayed on all figures.
- Ecology has indicated that additional borings and soil samples need to be collected to determine if contamination has extended to the north off of the Property and in a “downgradient” direction.
  - ECI notes that the Property to the north is not owned by BLT Transport and that the Property to the north was a cleanup site that is documented to have had the same contaminants of concern as the Subject Property. It was remediated by excavating the upper 1 to 2.5 feet of soil and subsequently given a No Further Action determination by Ecology without requiring further investigation.
- Evaluate the presence of arsenic in soil and groundwater with consideration of assessing background levels.

Provide a discussion regarding the presence of arsenic in soil and groundwater. The discussion should include an investigation of possible sources and background levels and a statistical evaluation as described in Ecology guidance.

- Ecology requires that a complete Remedial Investigation (RI) and a Feasibility Study (FS) with a disproportionate cost analysis (DCA) be performed.

This is being required because the Site does not meet the requirements to use the Ecology Model Remedies which would exclude the requirement for a Feasibility Study. Model Remedies can only be performed on sites with petroleum contamination. Since the Site has arsenic and PCBs which are not included in petroleum products, Model Remedies cannot be used.

The scope of work is for this RI/FS is to:

- Collect the data necessary to effectively determine the extent contamination present at the Site,
- Characterize the contamination found in the effected media to develop a Feasibility Study and develop a cleanup action plan (CAP), if needed.
- Prepare an RI/FS report that can be submitted to Ecology under Ecology’s Voluntary Cleanup Program (VCP) for an opinion on the conclusions and recommendations of the RI/FS.

### 1.1 Site Location / Description

According to the King County Assessor, the Property consists of a single tax parcel (Number 000660-0045) 65,015 square feet in size, currently zoned Commercial Manufacturing II (CM-2) by the City of Kent and is listed by the King County Assessor’s office as being used for light industrial purposes. The lot is currently

an asphalt paved dispatch, staging, and service yard for BLT Transport LLC that has been improved with one structure used for maintenance and office purposes and a stormwater detention system.

The following is an abbreviated legal description of the Parcel, as provided by the King County Assessor:

**Table 1: Abbreviated Legal Description**

Parcel details	Abbreviated Legal Description
King County: 000660-0045	SW RUSSELL DLC NO 41 POR NE 1/4 OF NE 1/4 STR 25-22-4 DAF - BEG NE COR SD SEC TH S 00-50 E 864.34 FT TO NXN OF C/L CO RD & C/L ST RD #5 TH S 89-20 W 30.12 TO W LN ST RD TH N 05-53 W 15.06 FT PLT & 30 FROM C/L ST RD #5 TH S 89-20W 160.74 FT TO POB TH S 89-20 W 478.92 FT M/L TO NP RR RY TH N 00-39-46 W 135.74 FT ALG SD RY TH N 89-20 E 479.07 FT TH S 00-40 E 135.73 FT TO POB - AKA - NEW LOT B KENT LLA #LL-95-20 REC #9510121176 LESS S 18 FT FOR RD PER REC 20160714000346

## **2.0 PREVIOUS ENVIRONMENTAL INVESTIGATIONS**

Numerous Environmental Investigations have occurred on the Subject Property. Boring and sampling locations referred to in this section are shown on Figure 2 in Appendix A. Analytical results from the previous investigations are attached in the tables in Appendix B.

### **2.1 EcoCon Inc. – Focused Subsurface Investigation – May and June 2016**

On May 16, 2016, because a Phase I Environmental Site Assessment completed by Aerotech Environmental in 2015 identified the Property as having been an automobile wrecking yard, ECI oversaw the advancement of eight borings on the Property to determine if the soil and/or groundwater on and beneath the Property had been impacted. These boring were located after dividing the Property into a grid of eight equal sections. One boring was advanced in each section. One soil sample was collected from each boring at a depth of 2 to 4 feet bgs. In addition, groundwater was encountered at a depth of 7 to 7.5 feet bgs and a sample was collected from each boring. The samples were analyzed for hydrocarbon Identification using the NWTPH-HCID analytical method.

The analytical results of the HCID analyses revealed that four of the soil samples contained ORO contaminants. GRO and DRO were not detected above the laboratory practical quantitation limits (PQLs). These four samples were subsequently analyzed for ORO. ORO was identified at concentrations exceeding the MTCA Method A Cleanup Level in two of the four soil samples. These were in samples from borings B2 and B3.

The analytical results of the groundwater samples revealed the presence of ORO in three of the samples analyzed by NWTPH-HCID. GRO and DRO were not detected above the laboratory PQLs. The samples that contained ORO were subsequently analyzed for ORO using method NWTPH-Dx extended with a silica gel cleanup to remove the effects of natural organic matter and silt in the samples. The analytical results did not report DRO or ORO above the laboratory PQLs.

Based on the analytical results of the soil samples, ECI returned to the Property on June 1, 2016, and excavated eight test pits in the northern portion of the Property to delineate the ORO contamination previously found. Soil samples were collected from a depth of 3 and 6 feet bgs in each test pit.

Ten of the samples were analyzed for DRO and ORO. Of the ten samples analyzed, four detected DRO and/or ORO above the laboratory PQLs but below the MTCA Method A Cleanup Levels.

ECI concluded that the use of the Property as an automobile wrecking yard resulted in the release of oil-range hydrocarbons onto the surface soil in the northern portion of the Property. ECI also indicated that clean surface rock had been brought onto the Property after the automobile wrecking yard was no longer operating, which would explain why the contamination was not observed at the immediate surface.

ECI recommended:

*“That soil containing concentrations in excess of the MTCA Method A Cleanup Level... be excavated, removed from the Property, and disposed of at an appropriate Subtitle D Landfill.”*

## **2.2 EcoCon Inc. – Site Characterization Report – July 2016**

After the initial FSI and sometime between June 1, 2016, and June 15 -16, 2016, approximately 6 to 7 feet of soil was excavated at the site for the stormwater detention system. The soil was segregated into two stockpiles. The first stockpile (SP1) was the top 2 to 3 feet of clean imported surface rock and soil over the entire stormwater detention system area. This pile was estimated to contain 1,000 cubic yards (1,500 tons) of material was potentially to be reused on the site.

The second stockpile (SP2) was the lower 2 to 4 feet below the top 2 to 3 feet excavated for stockpile SP1. This stockpile was the native soil below the imported fill and was estimated to contain 1,000 cubic yards (1,500 tons) of material and may have contained the ORO contaminated soils observed during ECI's previous investigation.

Following the stockpiling of the excavated soil by the excavation contractor, ECI returned to the site on June 15 and 16, 2016 to sample the stockpiles. ECI collected 10 samples from each stockpile for analysis. In addition, ECI collected 10 soil samples from the sidewalls and base of the northern portion of the excavation near where ORO contamination had previously been observed.

A total of 30 Samples were analyzed for DRO and ORO. The analytical results revealed that 24 of the samples had detectable concentrations of DRO and/or ORO. However, only one sample from stockpile SP2 (SP2-9) contained a concentration of ORO above the MTCA Method A Cleanup Level. Based on these results, 15 samples, (five from each stockpile and five from the excavation) were analyzed for PCBs and MTCA 5 metals.

The analytical results from the additional analyses revealed that PCBs were present above the MTCA Method A Industrial Cleanup Level in one of the samples from the northern sidewall of the excavation and that cadmium was present above the MTCA Method A Industrial Cleanup Level in six of the stockpile samples and five of the excavation samples.

ECI recommended further excavation within the stormwater detention system to remove the area with PCB contaminated soil, as well as removal of the area of stockpile SP2 with ORO contaminated soil. This was performed without ECI presence and placed into a separate stockpile (SP3). In addition, ECI recommended engaging with Ecology on possible cleanup alternatives and closure pathways.

On June 29, 2016, ECI returned to the Property and collected a composite sample from stockpile SP3 for disposal profiling (SP3-Composite). In addition, one sample from the sidewall of the over-excavated PCB area within the stormwater detention system excavation was collected for analysis. The analytical results of the sidewall sample were reported as being below the Method A Industrial Cleanup Levels. The



composite sample from stockpile SP3 did not detect concentrations of the contaminants of concern above their respective laboratory PQLs and or above their respective MTCA Method A industrial Cleanup Levels.

Based on the analytical results of the sample from stockpile SP3, a special waste profile was completed for disposal of the soil in stockpile SP3 at Republic Services Roosevelt Regional Landfill in Klickitat, Washington via their 3rd and Lander transfer station in Seattle, Washington. Copies of disposal receipts obtained by ECI showed that BLT Trucking transported a total of 175.38 tons of contaminated soil to the transfer facility on July 13 and 18, 2016. It should be noted that the disposal receipts were obtained after the completion of ECI's July 2016 Site Characterization Report.

### **2.3 Stormwater Detention System Installation**

Following the excavation, stockpiling, and sampling of potentially contaminated soils and the disposal of the soils in stockpile SP3, the excavation contractor completed excavation of the stormwater detention system and the stormwater detention system piping was installed and backfilled with pea gravel, and the silty sand with gravel stockpiled soils. Subsequent to ECI's investigations, it is estimated that the depth of the stormwater detention system excavation was extended approximately 6 to 8 feet.

Samples of the excavated soil were not collected by the property owner during the excavation and installation of the stormwater detention system. Due to samples not being collected, in March 2021, ECI recommended additional investigations which included the advancement of soil borings and groundwater monitoring in and around the stormwater detention system excavation to confirm that the soils in that area are not contaminated from previous activities on the Subject Property.

### **2.4 ECI – Focused Subsurface Investigation & Groundwater Monitoring – March through November 2021**

In March 2021, ECI oversaw the advancement of ten soil borings and the installation of five groundwater monitoring wells on the Property near where previous investigations had found contamination above cleanup levels during excavation for a stormwater detention system in 2016. The contaminated soil was reportedly independently remediated in 2016 by the previous owner of the Property through excavation, bioremediation, and off-site disposal. The borings advanced in March 2021 were to confirm that the soils around and beneath the stormwater detention system excavation had been effectively remediated and/or not affected by previous activities on the Property.

A total of 25 soil samples were collected from the borings and 15 were analyzed for COCs. The analytical results revealed that except for lead, total chromium, and arsenic, the contaminants of concern were reported as not being present above their respective laboratory PQLs. Lead, total chromium, and arsenic were reported above the respective laboratory PQLs in every sample analyzed. However, arsenic was the only sample reported to exceed the MTCA Method A Cleanup Levels in five of the samples collected from a depth of 15 feet bgs. The concentrations were just above the cleanup level of 20 mg/kg and ranged from 20 mg/kg to 26 mg/kg. Because arsenic was not detected above 6.92 mg/kg in shallow samples during the previous investigations or above the cleanup level in the shallow samples from the March 2021

investigation, it was ECI's opinion that the arsenic found at 15 feet bgs was not a result of activities on the Subject Property.

Between March 2021 and November 2021, ECI conducted four groundwater quarterly sampling events, where samples were collected from the five groundwater monitoring wells installed at the Site. The samples were collected to confirm that the groundwater had not been affected by the contamination previously found on the Property.

The analytical results showed total arsenic to be above its MTCA Method A Cleanup Level throughout the four quarters in samples from one or more monitoring wells. The samples reporting concentrations of total arsenic above the MTCA Method A Cleanup Level for the first through third consecutive groundwater monitoring events were further analyzed for dissolved arsenic. With the exception of the second consecutive groundwater monitoring event, the analytical results for all samples were reported below the laboratory PQL for dissolved arsenic. The remaining COCs were reported below their respective laboratory PQLs or below their respective MTCA Method A Cleanup Levels for all of the monitoring wells (MW1 through MW5).

The analytical results from the second quarter sampling event reported the concentrations of dissolved arsenic above the concentration levels of the total arsenic analytical results. This can occasionally occur due to numerous reasons ranging from sampling and/or laboratory errors to the EPA acknowledged limitations with the analytical and sample preparation methods.

Because the actual reason for the discrepancy between the total and dissolved arsenic in the samples cannot be determined and that the dissolved arsenic analytical results reported during the first and third consecutive groundwater monitoring events conducted on March 30, 2021, and September 23, 2021, reported concentrations were below the laboratory PQL for arsenic, ECI does not consider the analytical results for arsenic from second quarter sampling event to be representative of true concentrations of total and/or dissolved arsenic within the groundwater at the Site.

### **3.0 GEOLOGY AND HYDROGEOLOGY**

#### **3.1 Geology**

##### **3.1.1 Regional Geology**

The Subject Property is located within the Puget Sound Basin, which is classified as unconsolidated Pleistocene continental glacial drift. The glacial deposits predominantly consist of sand and silt, with varying amounts of gravel and cobbles (United States Geological Survey, 2005). More specifically, according to the Washington State Department Natural Resources Geologic Portal, the Subject Property is part of a meandering river valley characterized by thick fluvial and floodplain deposits of the Green and White Rivers, and numerous small streams. These deposits consist of gravel, sand, silt, with some clay. Locally could contain low-level terrace, marsh, peat and glacial deposits locally.

The Natural Resources Conservation Service (NRCS) Web Soil Survey describes the soils at the Subject Property as Urban land.

##### **3.1.2 Subject Property Geology**

According to soil boring logs, the soil on the Subject Property is recorded as brown to gray, poorly to fine grained, silty sand, and sand with gravel.

#### **3.2 Hydrogeology**

##### **3.2.1 Regional Hydrogeology**

The primary aquifers in the Puget Sound region are typically in glacial sands and gravels overlain by relatively impermeable glacial till deposits, that are present at or near the ground surface. Within these till deposits are localized areas or lenses of water-bearing sands and gravels that may result in a shallow, localized, perched water table.

Lateral and vertical migration of shallow groundwater may be impeded by the relatively impermeable nature of the till and by the sometimes-discontinuous nature of the perched water-bearing sands and gravel. In some areas the hydrogeology is controlled by large gravel deposits that are the result of advance and recessional glacial outwash or non-glacial alluvium deposited by rivers in the region.

##### **3.2.2 Subject Property Hydrogeology**

According to ECI well logs, the depth to groundwater at the Site ranges from 5 to 10 feet below ground surface (bgs). According to the United States Geological Survey (USGS) Auburn, WA, 2020, 7.5-minute quadrangle topographic map, the Property is in the Green River Valley at an elevation of approximately 40 feet above Mean Sea Level (MSL).

The Property is located between the beginning and end of a significant meander in the Green River which is situated approximately 480 feet to the southwest and 825 feet southeast of the Property and flows in a general north-northwesterly direction into Puget Sound (Elliott Bay) approximately 12.5 miles north-

northwest of the Subject Property. State Route 167 is approximately 0.66 miles west of the Subject Property.

Except for during the sampling event in November 2021, the groundwater flow at Site varied from northwest in the western portion of the Property to northeast in the eastern portion of the Property with the divide in the vicinity of the central portion of the Property. ECI originally thought this was influenced by the stormwater detention system. However, the adjacent Site to the north showed a similar flow direction with flow to the east and northeast in the eastern portion of that site and to the west and northwest in the western portion of the site.

## 4.0 REGULATORY COMPLIANCE

Regulatory compliance for this project is based on the Washington Administrative Code (WAC) 173-340 – Model Toxic Control Act (MTCA) - Chapter 70A.305 RCW), implemented by the Washington State Department of Ecology (Ecology). Pursuant to Chapter 70A.305 RCW, Ecology has established procedures for developing cleanup levels and requirements for cleanup actions. The rules establishing these levels and requirements were developed by Ecology in consultation with a Science Advisory Board (established under the Act) and with representatives from local government, citizen, environmental, and business groups. The rules were first published in February 1991, with amendments in January 1996, February 2001, and October 2007.

### 4.1 Contaminants of Concern & MTCA Cleanup Levels

#### 4.1.1 Contaminants of Concern

Based on Previous investigations ECI and Ecology have determined that the contaminants of concern (COCs) for both soil and at the Subject Site are:

- Diesel-range Organics (DRO)
- Oil-range Organics (ORO)
- Lead
- Cadmium
- Arsenic
- Polychlorinated biphenyls (PCBs)

For the metals in groundwater, both total and dissolved metals are contaminants of concern.

During this RI, along with the metals and PCB analyses, ECI will initially have the soil and groundwater samples collected analyzed for hydrocarbons using the NW-HCID method to determine if hydrocarbons are present. If present, then the specific hydrocarbon range will be analyzed. If contaminants are not detected, then future analyses for these constituents will not be performed.

Given that the COCs BTEX and cPAHs have previously been analyzed for in previous investigations and the analytical results have been reported either below their respective laboratory Practical Quantitation Limits (PQLs) or below their respective MTCA Method A Cleanup Levels, ECI does not consider BTEX or cPAHs to be a concern to the Subject Property.

#### 4.1.2 Cleanup Levels

Pursuant to Chapter 70A.305 RCW, Ecology has established procedures for developing cleanup levels and requirements for cleanup actions. The MTCA regulations provide three approaches for establishing cleanup levels:

- **Method A: ARARs and Tables.** This method is to be used where the cleanup action is routine and involves relatively few hazardous substances. The soil and groundwater cleanup levels are set at concentrations at least as stringent as concentrations specified in applicable state and federal laws (ARARs) and are presented in Tables 720-1, 740-1, and 745-1 of the regulations (WAC 173-340).

- **Method B: Universal Method.** Method B is the “universal method” for determining cleanup levels for all media at all sites. Under Method B, cleanup levels for individual hazardous substances are established using applicable state and federal laws and the risk equations and other requirements specified in WAC 173-340.

Method B has two tiers, a “Standard” tier and a “Modified” tier. The “Standard” Method B tier uses generic default assumptions to calculate cleanup levels. The “Modified” Method B tier provides for the use of chemical-specific or site-specific information to change selected default assumptions. These can be established using a quantitative risk assessment process.

- **Method C: Conditional Method.** When compliance with cleanup levels developed under Method A or B are impossible to achieve or may cause greater environmental harm, Method C cleanup levels for individual hazardous substances may be established for surface water, groundwater, and air. Method C industrial soil and air cleanup levels may also be established at industrial properties that meet specific criteria.

Like Method B, Method C is divided into two tiers, a “Standard” and a “Modified” tier. The “Standard” Method C tier uses generic default assumptions to calculate cleanup levels. The “Modified” Method C tier provides for the use of chemical-specific or site-specific information to change selected default assumptions. These can be established using a quantitative risk assessment process.

Based upon the results of previous investigations and the Ecology “Further Action Required” letter dated March 13, 2023, ECI has determined that Method A cleanup levels for “Unrestricted Use” are appropriate for this Site. Upon receipt of the analytical results, the results will be compared to the MTCA Method A Soil Cleanup Levels for “Unrestricted Use” and the Method A Groundwater Cleanup Levels. The Contaminants of Concern (COCs) and respective MTCA Method A Cleanup Levels are presented below in Table 2.

**Table 2: Cleanup Levels for the Contaminants of Concern**

Contaminant of Concern (COCs)	Soil Cleanup Levels (mg/kg)	Groundwater Cleanup Levels (µg/L)
Primary Contaminants of Concern		
(HCID)	Detect / Non-Detect	Detect / Non-Detect
Diesel-range Organics (DRO)	2,000	500
Oil-range Organics (ORO)	2,000	500
Lead	250	15
Cadmium	2	5
Arsenic	20	5
Polychlorinated biphenyls (PCBs)	1	0.1
Secondary Contaminants of Concern		
Gasoline-Range Organics (GRO)	30/100	800/1,000

## **5.0 REMEDIAL INVESTIGATION SCOPE OF WORK**

Based on ECI's review of the information as of the date of this work plan, the scope of work at this Site has been broken into four tasks.

- Task 1-Remedial Investigation
- Task 2-Feasibility Study
- Task 3-Implementation of Interim Remedial Actions and Investigations (as necessary)
- Task 4-Reporting and Submittal to Ecology.

Some portions of the Tasks can be conducted concurrently with the Remedial Investigation. The scope of work for this RI/FS is:

### **5.1 Task 1 – Remedial Investigation.**

#### **5.1.1 Utility Locating**

Prior to any subsurface work the “call before you dig service” (811) will be called a minimum of 72 hours in advance of site activities to identify public underground utilities. Additionally, utility locating contractor will conduct a private subsurface utility sweep to clear boring locations of any potential subsurface conflicts using electromagnetic survey techniques. In addition to the clearing of utilities, a qualified professional will use ground penetrating radar (GPR), to scan for electromagnetic anomalies that can accurately define the stormwater detention system so borings and groundwater monitoring wells can be placed in close proximity.

#### **5.1.2 Stormwater Detention Gallery**

In the Data Gaps section of the Ecology Further Action letter, Ecology requested an as-built of the stormwater detention gallery be included within the RI/FS report in order to assess potential pathways. In addition, ECI will research who owns and maintains the stormwater detention gallery and how stormwater is conveyed to and from the gallery.

#### **5.1.3 Soil Investigation**

During previous Subsurface Investigations, contamination was observed primarily in the vicinity of the stormwater detention system.

To evaluate the vertical and horizontal extent of soil contamination, ECI will advance six (6) borings to an approximately depth of 20 feet bgs. Borings will be advanced using direct-push drilling techniques under the supervision of an ECI environmental professional. All drilling will be completed by a licensed driller as required in Washington Administrative Code (WAC) 173-160. The boring number will begin with the next boring number sequentially from the last boring during the ECI 2021 Subsurface Investigation.

The borings will be placed in various locations in the vicinity of the stormwater detention system. Because contamination was previously observed above the MTCA Method A Cleanup Levels in the excavated soil stockpile, two (2) soil borings will be placed strategically in close proximity to elements of the stormwater

detention system and the remaining four (4) soil borings will be placed in the exterior of the stormwater detention system to assess the soil and groundwater for the identified COCs (Figure 2, Appendix A).

Soil samples will be collected continuously during drilling using standard Macro-Core® liners inside the 3-inch diameter push-probe drilling rod. Each 5-foot-long section of soil core will be logged in detail for the lithology of the soils encountered and any changes in lithology that may affect the movement and location of groundwater and contaminants. In addition, each sample will be field-screened utilizing visual (soil staining or visible product), olfactory (odor), sheen testing and a photoionization detector (PID).

Based on the field screening and the determination from a qualified environmental professional, samples for laboratory analysis will be collected as described in Section 5.1.4.1 below.

#### **5.1.4 Groundwater Investigation**

Because groundwater contamination was observed during the previous investigations conducted at the Site, ECI will conduct four (4) additional consecutive quarterly groundwater monitoring events of the installed groundwater monitoring wells at the Subject Property.

##### **5.1.4.1 Well Sampling**

Following the advancement and collection of the soil samples at the Subject Property, each well at the Site will be sampled using industry standard sampling techniques and in general accordance with American Society of Testing and Materials (ASTM) *Guideline D6771-02 "Standard Practice for Low-Flow Purging and Sampling for Wells and Devices Used for Ground-Water Quality Investigations"*. This includes the use of low-flow sampling equipment and disposable (single use) polyethylene and silicon tubing. The sample handling procedures are described below in Section 5.1.4.2.

#### **5.1.5 Sample Collection and Handling Procedures**

##### **5.1.5.1 Soil Samples**

Soil samples will be collected every 2 feet from the surface to the total depth of the boring for field screening and lithologic logging. Select soil samples will be collected for analytical analysis to address the concerns identified by Ecology within the "Further Action Letter" dated March 13, 2023.

At a minimum, the soil samples collected from the two (2) soil borings advanced in the former excavation area will need soil samples collected every two feet down to the maximum depth of the borehole. The samples collected from 2-3 feet bgs, 4-5 feet bgs, 7-8 feet bgs, the base of the fill material, soil/groundwater interface, and 15 feet bgs. The selected samples will need to be analyzed for HClID, arsenic, cadmium, lead, and PCBs. This is to determine if the backfill material contained excavated soils that were greater than the MTCA Method A Cleanup Levels for "Unrestricted Use". Previous sampling of the stockpiled soils that were not disposed of off-site revealed that samples contained concentrations of PCBs, cadmium, and lead above the MTCA Method A Cleanup Level for "Unrestricted Use" but below the MTCA Method A Cleanup Level for "Industrial Uses".



The remaining four (4) soil borings advanced outside of the former excavation area will need the soil samples collected every two feet down to the maximum depth of the borehole. The samples collected at 2-3 feet bgs, 4-5 feet bgs, 15 feet bgs, and the soil/groundwater interface to be analyzed for HCID, PCBs, arsenic, lead, and cadmium. Samples collected below 15 feet bgs will be held for analysis until after receipt of the analytical results of the samples collected at 15 feet bgs. Should the results from the samples collected at 15 feet bgs be above cleanup levels, the samples collected at 20 feet bgs will be analyzed for the contaminants above cleanup levels.

If concentrations of gasoline, diesel, or oil are reported above the HCID detection level in any of the soil samples, the sample will be further analyzed for the detected contaminant of concern.

All soil samples collected, but not immediately analyzed will be placed on hold at the laboratory pending the analysis of the initial samples and will be selectively analyzed to further delineate contamination by depth, if necessary.

Additional soil sample locations and depths will be determined in the field by a qualified environmental professional based on field screening and other site observations. All soil samples will be collected in accordance with industry standard sampling techniques.

Following collection, each discrete soil sample will be placed in new, laboratory provided containers. Samples for volatile organic constituents and GRO will be sampled using the Ecology-required Environmental Protection Agency (EPA) 5035 sampling collection method and assigned unique sample identification numbers. The samples will be identified by the boring number and the depth of the sample (e.g., B19-10 for the sample collected from boring B19 at 10 feet bgs).

Samples will then be placed into a container maintained at four degrees (4°) Celsius until delivered to the laboratory for analysis under the industry standard chain of custody protocols.

#### 5.1.5.2 Groundwater Samples

Groundwater samples will be collected using industry standard sampling techniques and in general accordance with American Society of Testing and Materials (ASTM) *Guideline D6771-02 "Standard Practice for Low-Flow Purging and Sampling for Wells and Devices Used for Ground-Water Quality Investigations"*. This includes the use of low flow sampling equipment and disposable (single use) polyethylene and silicon tubing.

Given that previous investigations have reported no concentrations above their respective cleanup levels for gasoline, diesel, oil, benzene, toluene, ethylbenzene, xylenes, PCBs, cadmium, chromium, or lead, ECI has determined that each permanent groundwater monitoring well sample will be analyzed for only HCID and total and dissolved arsenic. The dissolved arsenic samples will be field filtered by-passing groundwater through a 0.45-micron filter prior to collecting the groundwater sample.

Groundwater samples will be identified by the well number (e.g., MW1). Samples will be collected in laboratory provided analytical method specific bottles. All samples for total metals will be field filtered by-passing groundwater through a 0.45-micron filter prior to collecting the groundwater sample.

Samples will then be placed into a container maintained at four degrees (4°) Celsius until delivered to the laboratory for analysis under the industry standard chain of custody protocols.

#### 5.1.5.3 Groundwater Monitoring Schedule

Groundwater monitoring will be conducted on all installed monitoring wells at the Site for a minimum of four (4) consecutive quarters. Groundwater sample analysis will be conducted for the COCs as presented in Table 6 in Section 5.1.6 Sample Analysis.

#### 5.1.6 Sample Analysis

Samples will be delivered under industry standard chain-of-custody procedures to Washington State Department of Ecology accredited laboratory for analysis. The laboratory will initially analyze the samples for the primary COCs for each location and sample media as outlined in the tables below. If detections are reported for any of the samples analyzed for HCID, the respective contaminant will be further quantified through their respective analysis (NWTPH-Gx for GRO and NWTPH-Dx for DRO and/or ORO).

As discussed with Ecology, the historical soil samples analyzed for arsenic in 2016 were completed by the laboratory Friedman & Bruya using the Inductively Coupled Plasma EPA Method 200.8. However, the samples collected in 2021 were analyzed for arsenic by Libby Environmental using the Atomic Absorption Spectrophotometry EPA Method 7010. For ease of reference, Ecology indicated that the same method for analyzing the concentration of arsenic in soil should be used as was completed most recently in 2021. All soil samples will be sent to Libby Environmental to be analyzed for the contaminants of concern by the same methods as was conducted in 2021.

In addition, if concentrations of gasoline, diesel, or oil are reported above the HCID detection level in any of the soil samples, the sample will be further analyzed for the detected contaminant of concern.

**Table 3: Soil Analysis for Soil Borings in the Former Excavation**

Contaminant of Concern (COCs)	Soil Cleanup Levels (mg/kg)
HCID	Detect / Non-Detect
Lead	250
Cadmium	2
Arsenic	20
Polychlorinated biphenyls (PCBs)	1
Secondary Contaminants of Concern	

Contaminant of Concern (COCs)	Soil Cleanup Levels (mg/kg)
Gasoline-Range Organics (GRO)	30/100
Diesel-Range Organics (DRO)	2,000
Oil-Range Organics (ORO)	2,000

**Table 4: Soil Analysis for Soil Borings Outside the Former Excavation**

Contaminant of Concern (COCs)	Soil Cleanup Levels (mg/kg)
HCID*	Detect / Non-Detect
Lead	250
Cadmium	2
Arsenic*	20
Polychlorinated biphenyls (PCBs)	1
Secondary Contaminants of Concern	
Gasoline-Range Organics (GRO)	30/100
Diesel-Range Organics (DRO)	2,000
Oil-Range Organics (ORO)	2,000

\*= The soil samples collected from the three groundwater monitoring wells installed south of the stormwater detention gallery will be limited to HCID and arsenic analysis.

**Table 5: Groundwater Analysis for all Monitoring Wells**

Contaminant of Concern (COCs)	Groundwater Cleanup Levels (µg/L)
HCID	Detect / Non-Detect
Total and Dissolved Arsenic	5
Secondary Contaminants of Concern	
Gasoline-Range Organics (GRO)	800/1,000
Diesel-Range Organics (DRO)	500
Oil-Range Organics (ORO)	500

**5.1.7 Field Documentation****5.1.7.1 Daily Field Logs**

Daily field logs are intended to provide sufficient information to reconstruct events that occurred during field activities. The following are examples of information to be included by the sampler(s) in a field log:

- Project name and location;
- Name, date, and time of entry;
- Names and responsibilities of field crew members;
- Name and titles of any site visitors involved in or actively observing the sampling;
- Descriptions of deviations from the sampling procedures and any problems encountered;
- Weather information including air temperature and recent precipitation;
- Date and time of sample collection;
- General observations, including setting / features, sampling location, topography, etc.; and,
- Start and stop times of work.

**5.1.7.2 Boring/Well Construction Logs**

In addition to daily field logs, boring and well construction logs will be prepared for each boring advanced and each monitoring well installed by ECI. The boring and monitoring well construction logs will contain:

- Project name and location;
- Project number;
- Date of the boring or monitoring well;
- Boring or monitoring well number;
- Boring or monitoring well location referenced to a known point and placed on a map;
- Person logging the boring or monitoring well;
- The method of drilling and equipment used (e.g. hollow-stemmed auger, Split-spoon sampler etc.);
- Contractor performing the drilling or excavation;
- Start and completion time of the monitoring well or boring;
- Description of the soils encountered;
  - Color;
  - Grainsize (clay, silt sand gravel etc.);
  - Density (Soft, Hard, Very Hard, Stiff, Dense, Very Dense, etc;

- Moisture content (dry, moist, wet etc.);
- Description of any staining, oxidation, or root/shell fragments etc. present;
- Unified Soil classification symbol;
- Estimated contacts of the different soil layers;
- Depth to water and/or static water level;
- Field screening results (e.g., PID readings);
- Sample identification numbers and depth;
- Sample time;
- Total depth of the monitoring well or boring;
- Measured depth to the bottom of the screen;
- Depth of the sand pack;
- Depth of the well seal;
- Diameter of the well screen and casing;
- The type of well screen and casing (i.e., PVC, stainless steel etc.);
- Type of well surface completion (surface monument or “stickup monument”);
- Any unusual or significant observation during boring or excavation.

#### 5.1.7.3 Site Photographs

Photographs will be taken of each sample and at each sampling location. Photographs will be taken to document the soil samples and the field conditions, including the features and structures surrounding the sample locations. Photographs also will provide a record of the spatial relationships between the sampled area and surrounding features and structures.

#### 5.1.8 **Investigation Derived Waste (IDW)**

Soil and groundwater accumulated during this investigation will be containerized in 55-gallon DOT approved drums and will remain on site until all sample results have been returned by the laboratory. Should contaminants be reported exceeding applicable MTCA cleanup levels, the drummed materials will require disposal through a licensed disposal facility consistent with the specific contaminants identified.

### 5.2 **Task 2 – Feasibility Study**

Upon completion of the Remedial Investigation ECI will conduct a Feasibility Study to identify and compare potential long-term remedial options for the Site. This FS will include a Disproportionate Cost Analysis (DCA). These documents will be prepared for submittal to Ecology using the Ecology provided Feasibility Study Checklist (Publication No. 16-09-007).

### **5.2.1 Conceptual Site Model**

The feasibility study will include a conceptual site model (CSM) that will identify:

- The contaminants of concern from the remedial investigation;
- The media of potential concern at the Site (soil, groundwater air, surface water and terrestrial media);
- The distribution of contaminants as identified in the remedial investigation; and
- The potential receptors to exposure from the contaminants of concern.

Based on the CSM remedial action cleanup levels will be developed and a point of compliance identified for each of the affected media.

### **5.2.2 Remedial Alternative Identification**

The feasibility study will then identify a minimum of three remedial alternatives that will provide permanent remediation on the Subject Site taking into account the characteristics and complexity of the Site. In addition to the three remedial alternatives, a no action alternative will be used as comparison with the alternatives identified.

#### **5.2.2.1 Comparison to Threshold Requirements**

Each of the alternatives will be evaluated against the threshold requirements identified in the MTCA regulations. Those requirements are

- Protect human health and the environment;
- Comply with cleanup standards;
- Comply with applicable state and federal laws;
- Provide for compliance monitoring; and
- Reasonable Restoration Time Frame.

#### **5.2.2.2 Disproportionate Cost Analysis (DCA)**

Those alternatives that meet the threshold requirements will then be ranked for disproportionate cost analysis (DCA) they will be ranked as described in the MTCA regulations and associated guidance based on:

- Protectiveness
- Permanence
- Cost
- Effectiveness over the long-term
- Management of short-term risks

- Technical and administrative implementability; and if needed
- Consideration of public concerns.

Based on results of the alternative evaluations and the DCA, a preferred remedial alternative will be chosen.

### **5.3 Task 3- Implementation of Interim Remedial Actions**

At the conclusion of the remedial investigation outlined in this workplan, the need for the implementation of interim remedial actions may be undertaken. Interim remedial actions are actions taken to, but not be limited to:

- Reduce potential immediate risks at the Site,
- Prevent further migration of contaminants,
- Provide immediate remedial actions that are easily undertaken at the time of implementation.

Interim remedial actions may be part of a long-term remedial action at the Site or may be temporary actions taken until a permanent remedial alternative is implemented. Interim remedial actions at this Site may include:

- Excavation and off-site disposal of contaminated soil,
- Groundwater extraction to control off-site migration of contaminants or draw off-site contamination back toward the Subject Site,
- Free-product removal,
- Other actions taken as needed.

### **5.4 Task 4 – Reporting**

At the conclusion of the field work, receipt of analytical results, and conclusion of the feasibility study, ECI will prepare a Remedial Investigation/Feasibility Study Report as required by Ecology detailing:

- The Site history,
- Site current and historical activities,
- Previous investigations at the Site,
- Current Site investigation activities,
- Sampling observations,
- Laboratory analytical results,
- Identification of the extent of contamination in each affected media,
- Identification of potential receptors,
- The development and interpretation of the Site Conceptual Model developed for the Site,

- Proposed cleanup levels and points of compliance for each contaminated media,
- Recommendations for interim and permanent remedial actions that need to take place at the Site, and

This report will be submitted to Ecology for their review and comment.



# List of Appendices

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Figure 1: Site Vicinity Map

Figure 2: Proposed Soil Boring Sample Location Map

## **Appendix B: Project Tables**

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Table 7: Summary of Investigational Soil Analytical Results

Table 8: Summary of Historical Groundwater Analytical Results

Table 9: Summary of Groundwater Monitoring Analytical Results

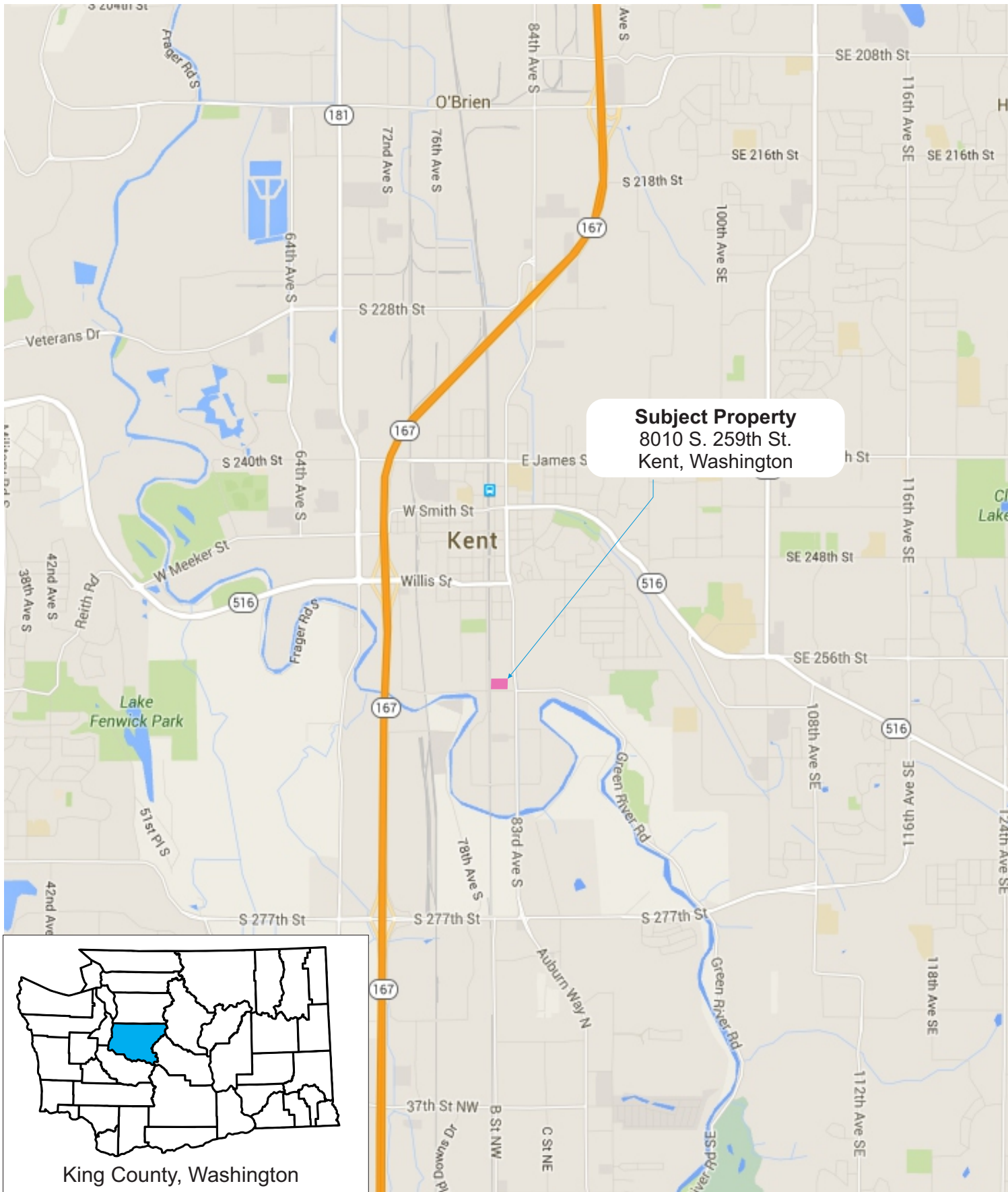
Table 10: Summary of Groundwater Elevations

## Appendix A: Project Figures

Figure 1: Site Vicinity Map

Figure 2: Proposed Soil Boring Sample Location Map

## Appendix: A Project Figures



**Site Vicinity Map**  
Remedial Investigation Work Plan  
8010 South 259th Street  
Kent, Washington

Date: April 28, 2023  
Completed By: C.Long  
Reviewed By: S.Spencer  
Version: ECI-001  
Project No.: 0611-01-03

Figure No.:

**01**

Sheet 01 of 02



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N

0

15

30

60

Approximate Scale in Feet

Proposed Soil Boring Location within excavation limits

Proposed Soil Boring Location outside excavation limits

ECI excavation confirmation samples collected June 2016

Historical ECI Soil Borings

Monitoring Well < MTCA CUL's

Monitoring Well > MTCA CUL's

Explanation

Proposed Soil Boring Location Map

Remedial Investigation Work Plan

8010 South 259th Street

Kent, Washington

Date: May 18, 2023

Completed By: C.Long

Reviewed By: S.Spencer

Version: ECI-001

Project No.: 0611-01-03

Figure No.: 02

Sheet 02 of 02

eci

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## Appendix B: Project Tables

Table 6: Summary of Historical Soil Analytical Results

Table 7: Summary of Investigational Soil Analytical Results

Table 8: Summary of Historical Groundwater Analytical Results

Table 9: Summary of Groundwater Monitoring Analytical Results

Table 10: Summary of Groundwater Elevations

## Appendix: B Project Tables





Table 7: Summary of Investigational Soil Analytical Results

8010 South 259th Street, Kent, Washington

April 28, 2023

Sample ID	Sample Depth (ft)	Date Sampled	Gasoline Range Organics	Diesel Range Organics	Oil Range Organics	PCB Mixtures	cVOCs	Arsenic	Cadmium	Chromium (Total)	Chromium VI	Mercury	Lead	Benzene	Toluene	Ethylbenzene	Total Xylenes	Polycyclic Aromatic Hydrocarbons (PAHs) (EPA 8270D SIM)						
			Gasoline Range Organics	Diesel Range Organics	Oil Range Organics	PCB Mixtures	cVOCs	Arsenic	Cadmium	Chromium (Total)	Chromium VI	Mercury	Lead	Benzene	Toluene	Ethylbenzene	Total Xylenes	Benz(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Dibenz(a,h)anthracene
																		Sample Results in milligrams per kilogram (mg/kg)						
B9-3	3	3/16/2021	<10	<50	<250	<0.1	--	17	<1.0	25	--	<0.5	180	<0.02	<0.10	<0.05	<0.15	<19.4	<38.8	<19.4	<19.4	<19.4	<38.8	<38.8
B9-15	15	3/16/2021	--	--	--	--	--	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B10-4	4	3/16/2021	<10	<50	<250	<0.1	--	14	<1.0	31	--	<0.5	100	<0.02	<0.10	<0.05	<0.15	<20.1	<40.1	<20.1	<20.1	<20.1	<40.1	<40.1
B10-15	15	3/16/2021	--	--	--	--	--	23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B11-4	4	3/16/2021	<10	<50	<250	<0.1	--	16	<1.0	5.6	--	<0.5	8	<0.02	<0.10	<0.05	<0.15	<21.8	<43.6	<21.8	<21.8	<21.8	<43.6	<43.6
B11-15	15	3/16/2021	--	--	--	--	--	26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B12-15	15	3/16/2021	<10	<50	<250	<0.1	--	22	<1.0	11	--	<0.5	75	<0.02	<0.10	<0.05	<0.15	--	--	--	--	--	--	--
B13-15	15	3/16/2021	--	<50	<250	<0.1	--	17	<1.0	5.4	--	<0.5	15	--	--	--	--	--	--	--	--	--	--	--
B14-16	16	3/16/2021	<10	<50	<250	<0.1	--	12	<1.0	<5.0	--	<0.5	<5.0	<0.02	<0.10	<0.05	<0.15	--	--	--	--	--	--	--
B15-15	15	3/16/2021	<10	<50	<250	<0.1	--	18.6	<1.0	6.9	--	<0.5	<5.0	<0.02	<0.10	<0.05	<0.15	--	--	--	--	--	--	--
B16-5	5	3/16/2021	<10	<50	<250	<0.1	--	13	<1.0	7.4	--	<0.5	140	<0.02	<0.10	<0.05	<0.15	--	--	--	--	--	--	--
B17-4	4	3/16/2021	<10	<50	<250	<0.1	--	15	<1.0	12	--	<0.5	7.8	<0.02	<0.10	<0.05	<0.15	--	--	--	--	--	--	--
B17-15	15	3/16/2021	--	--	--	--	--	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B18-3	3	3/16/2021	<10	<50	<250	<0.1	--	13	<1.0	14	--	<0.5	10	<0.02	<0.10	<0.05	<0.15	--	--	--	--	--	--	--
B18-15	15	3/16/2021	<10	<50	<250	<0.1	--	25	<1.0	14	--	<0.5	10	<0.02	<0.10	<0.05	<0.15	--	--	--	--	--	--	--
Laboratory Reporting Limit			10	50	250	0.1	Varies	5	1	5	0.548	0.5	5	0.02	0.10	0.05	0.15							
Ecology MTCA Method A Cleanup Levels			30/100 <sup>4</sup>	2,000	2,000	NE	Varies	20	2	NE	19	2	250	0.03	7	6	9	5	5	5	NE	NE	NE	NE

Notes:

<sup>1</sup>Gasoline range total petroleum hydrocarbons (TPH). Analyzed by Northwest Method NWTPH-Gx.

<sup>2</sup>Analyzed by Northwest Method NWTPH-D/Dx Extended

<sup>3</sup>Select Volatile Organic Compounds. Analyzed by EPA Method 8021B.

<sup>4</sup>Cleanup level with presence of benzene 30 mg/kg; Without benzenepresent on the Site 100 mg/kg

mg/kg = Milligrams per kilogram

MTCA = Model Toxics Control Act

-- = not analyzed for this constituent

< = not detected above laboratory detection limits

NE = Ecology has not designated a MTCA Method A cleanup level for this constituent

**Bold** indicates a detected concentration that is below Ecology MTCA Method A Cleanup Levels

**Bold and Shaded** indicates the detected concentration exceeds Ecology MTCA Method A or B Cleanup Levels

j - Estimated result. Peak separation for structural isomers is insufficient for accurate quantification

**Table 8: Summary of Historical Groundwater Analytical Results**

**8010 South 259th Street, Kent, Washington**

**April 28, 2023**

Sample ID	Sample Depth (feet bgs)	Date Sampled	Gasoline Range Organics	Diesel Range Organics	Oil Range Organics
			Sample Results in micrograms per liter (µg/L)		
B1-GW-7	7	5/16/16	<200	<50	<500
B2-GW-7.5	7.5	5/16/16	<200	<50	<250
B3-GW-7.5	7.5	5/16/16	<200	<50	<250
B4-GW-7	7	5/16/16	<200	<50	<250
B5-GW-7.5	7.5	5/16/16	<200	<500	<500
B6-GW-7	7	5/16/16	<200	<500	<500
B7-GW-7	7	5/16/16	<200	<500	<500
B8-GW-7.5	7.5	5/16/16	<200	<500	<500
Laboratory Reporting Limit			200	500/50	500/250
Ecology MTCA Method A Cleanup Levels			800/1,000 <sup>4</sup>	500	500

Notes:

(µg/l) = micrograms per liter

-- Not analyzed for constituent

< Not detected above the laboratory reporting limit

**Red Bold** indicates the detected concentration exceeds Ecology MTCA Method A cleanup level

**Bold** indicates the detected concentration is below Ecology MTCA Method A cleanup levels

<sup>1</sup> TPH-Gasoline Cleanup Level with the presence of Benzene anywhere at the Site

U1 = The practical quantitation limit is elevated due to interferences present in the sample

T = The sample chromatogram is not similar to a typical gasoline

<sup>4</sup> Cleanup level with Benzene present on the site 800 (µg/L), without Benzene present cleanup level is 1,000 (µg/L)





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**Table 9: Summary of Groundwater Monitoring Analytical Results**  
8010 South 259th Street, Kent, Washington  
April 28, 2023

Sample Number	Date Sampled	Total Petroleum Hydrocarbons (µg/l)			Select Volatile Organic Constituents (µg/l)				Metals (µg/l)				PCBs
		Gasoline	Diesel	Oil	Benzene	Ethyl benzene	Toluene	Xylenes	Arsenic	Cadmium	Chromium	Lead	
Monitoring Well 1 (MW1)													
MW1	3/30/2021	<100	<200	<400	<1	<1	<2	<2	6.4	<0.5	<5	<5	<0.02
	6/15/2021	<100	<200	<400	<1	<1	<2	<2	5.9	<0.5	<5	<5	<0.02
	9/23/2021	<100	<200	<400	<1	<1	<2	<2	3.1	<0.5	<5	<5	<0.02
	11/17/2021	<100	<200	<400	<1	<1	<2	<2	6.5	<0.5	<5	<5	<0.02
Monitoring Well 2 (MW2)													
MW2	3/30/2021	<100	<200	<400	<1	<1	<2	<2	6.9	<0.5	<5	<5	<0.02
	6/15/2021	<100	<200	<400	<1	<1	<2	<2	<3.0	<0.5	<5	<5	<0.02
	9/23/2021	<100	<200	<400	<1	<1	<2	<2	<3.0	<0.5	<5	<5	<0.02
	11/17/2021	<100	<200	<400	<1	<1	<2	<2	3.3	<0.5	<5	<5	<0.02
Monitoring Well 3 (MW3)													
MW3	3/30/2021	<100	<200	<400	<1	<1	<2	<2	3.4	<0.5	<5	<5	<0.02
	6/15/2021	<100	<200	<400	<1	<1	<2	<2	6.7	<0.5	<5	<5	<0.02
	9/23/2021	<100	<200	<400	<1	<1	<2	<2	<3.0	<0.5	<5	<5	<0.02
	11/17/2021	<100	<200	<400	<1	<1	<2	<2	<3.0	<0.5	<5	<5	<0.02
Monitoring Well 4 (MW4)													
MW4	3/30/2021	<100	<200	<400	<1	<1	<2	<2	<3.0	<0.5	<5	<5	<0.02
	6/15/2021	<100	<200	<400	<1	<1	<2	<2	4.3	<0.5	<5	<5	<0.02
	9/23/2021	<100	<200	460	<1	<1	<2	<2	7.4	<0.5	<5	<5	<0.02
	11/17/2021	<100	<200	<400	<1	<1	<2	<2	19.0	<0.5	<5	<5	<0.02
Monitoring Well 5 (MW5)													
MW5	3/30/2021	<100	<200	<400	<1	<1	<2	<2	4.3	<0.5	<5	<5	<0.02
	6/15/2021	<100	<200	<400	<1	<1	<2	<2	17.0	<0.5	<5	<5	<0.02
	9/23/2021	<100	<200	<400	<1	<1	<2	<2	<3.0	<0.5	<5	<5	<0.02
	11/17/2021	<100	<200	<400	<1	<1	<2	<2	<3.0	<0.5	<5	<5	<0.02
Laboratory Reporting Limit		100	200	400	1	1	2	2	3	0.5	5	5	0.02
Ecology MTCA Method A Cleanup Levels		800/1,000	500	500	5	700	1,000	1,000	5	5	50	15	0.1

**Notes:**

(µg/l) = micrograms per liter

-- Not analyzed for constituent

< Not detected above the laboratory reporting limit

**Red Bold** indicates the detected concentration exceeds Ecology MTCA Method A cleanup level

**Bold** indicates the detected concentration is below Ecology MTCA Method A cleanup levels

<sup>1</sup> TPH-Gasoline Cleanup Level with the presence of Benzene anywhere at the Site

U1 = The practical quantitation limit is elevated due to interferences present in the sample

T = The sample chromatogram is not similar to a typical gasoline

**Table 10: Summary of Groundwater Elevations**

**8010 South 259th Street, Kent, Washington**

**April 28, 2023**

Well	Elevation of TOC	Elevation Ground Surface	Latitude/Longitude		Date of Measurement	Depth to Water (feet)	Groundwater Elevation (feet)	Change in Elevation (feet)
			Latitude	Longitude				
MW1	48.61	48.81	47.370435	-122.232376	03/30/21	7.08	41.53	--
					06/15/21	8.14	40.47	1.06
					09/23/21	9.61	39.00	1.47
					11/17/21	5.74	42.87	-3.87
MW2	48.86	48.33	47.370499	-122.232244	03/30/21	7.43	41.43	--
					06/15/21	8.41	40.45	0.98
					09/23/21	9.65	39.21	1.24
					11/17/21	6.77	42.09	-2.88
MW3	48.85	48.60	47.370440	-122.231744	03/30/21	7.35	41.50	--
					06/15/21	8.04	40.81	0.69
					09/23/21	9.03	39.82	0.99
					11/17/21	6.94	41.91	-2.09
MW4	48.62	48.93	47.370461	-122.231631	03/30/21	7.50	41.12	--
					06/15/21	8.50	40.12	1.00
					09/23/21	10.30	38.32	1.80
					11/17/21	7.68	40.94	-2.62
MW5	49.00	49.45	47.370296	-122.232105	03/30/21	7.41	41.59	--
					06/15/21	8.20	40.80	0.79
					09/23/21	9.40	39.60	1.20
					11/17/21	6.99	42.01	-2.41

**Notes:**

TOC = Top of casing elevation relative to assigned benchmark.

-- = Not measured, not available, or not applicable