



Environmental Specialties
12512 Littlerock Road SW, Olympia, WA 98512

WORK PLAN

Soil Remediation Removal of Diesel Range Impacted Soil Ground Water Monitoring Site Closure Project

Owner

**Store Master Funding IV LLC
1345 George Jenkins Blvd
Lakeland, FL 33815**

Site Manager/Site

**Buddy's Furniture
8219 Pacific Ave
Tacoma, WA
May 2024**

Consultant

**Environmental Specialties
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Work Plan
Site Remediation/Closure
Buddy's - Old Big Wheel Site

Project Date: June 2024

Site: 8219 Pacific Ave
Tacoma, WA
Tax Parcel/Pierce County 6835000020
DOE VCP # 5973778

Owner: Store Master Funding IV LLC
1345 George Jenkins Blvd
Lakeland, FL 33815

Site Manager: Buddy's Furniture
8219 Pacific Ave
Tacoma, WA
Contact: Ryan Weisenfeld 360-529-1975
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Consultant
Site Supervisor: Environmental Specialties
12512 Littlerock Road SW
Olympia, WA 98512
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This report is for the use of our client. Remediation at this site is scheduled to be performed as a covenant condition as stated in the Washington DOE NFA and the recent email letter dated April 30, 2024, restating the July 30, 2015 evaluation letter referring to this site.



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Items 5 and 6 of the above referenced letter are as follows:

5. Once development occurs, the interim remedial action proposed is excavation with removal of applicable soil and groundwater monitoring.
6. The Goal is to pursue a clean (unencumbered) closure, and terminate the EC.
 - a. Contingent upon compliant sampling results with the site cleanup levels at standard points of compliance.

It is the intent of this project to fulfill these goals through a dig and haul project removing the remaining diesel range petroleum impacted soil from the site (WPTH-DX) and the installation of four monitoring wells and groundwater sampling to demonstrate the groundwater quality. At least one of the three existing monitoring wells will likely need repair and/or replacement.

Background

Two concrete block structures with domed wood framed roofs built on a concrete slab foundation were located on this site. They dated from 1948. It appears the southern building may have been added sometime later. The northern structure was an automotive repair facility with the southern building likely a storage/workspace. The building structure and contents burned in May of 2023. Last use was a furniture store. A cleanup occurred during April of this year removing the structure, slab and foundation. A section of the back retaining wall and foundation remain as does some asphalt parking and public sidewalks.

In the recent past (1990's) Big Wheel Auto Parts was located at this site. They removed the three Underground Oil Tanks (UST's) in 1999. The northern ust outside the southern wall footing/wall line of the northern auto workshop portion of the building leaked. Extensive characterization along with excavation of available impacted diesel range soils was undertaken in 2014. The site was screened for several petroleum types and constituents with diesel range petroleum found in excess of the MTCA-A. A Characterization Report authored by ECI Environmental Services determined that soil under the building foundation that was unavailable for removal, was still in place and exceeded the MTCA limit of 2000 mg/kg. Three groundwater monitoring wells at the perimeter of the site were installed and checked over time with no indication the groundwater was contaminated at the property boundaries. Groundwater contamination was found close to the impacted soil area around the tank location.

Soil

Soils at the site are poorly graded gravel and gravel/sand mixtures with some fines. Currently the site is uncovered with the soil appearing consistent overall. No remnants of manufactured gravel were observed under the concrete slab floor. The back foundation of the northern building



Environmental Specialties
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wall was demolished to the footing leaving the extensive French drain exposed. The concrete wall to the south past the stub wall of the smaller northern building is still intact.

The location of the UST site is documented. At present there is a depression in the overall grade generally outlining the old excavation. Remnants of the building footings are visible. A concrete stub wall remains showing the line of the old footing. Native soil appears to have been used as backfill of the UST excavation.

Impacted Soil Removal

Clean soil for reuse at this project will be defined as DRO, Diesels #1 & #2 as shown to be the known contaminants in past sampling. The lower limit for reuse at the site will be 200 mg/kg. The MTCA general use standard is 2000 mg/kg. The project goal is to remove impacted soil to a 200 mg/kg “clean” standard due to likely direct contact of impacted soil to groundwater which is highly likely at this site. Clean general use pit-run from a local pit will be used as backfill.

Upon excavation of suspected petroleum contamination, two stockpiles will be used. One for impacted soil and one for what is thought to be clean soil. Each stockpile will have a double 6mil poly base and be covered at the end of the workday and throughout the project with 6 mil poly. Adequate hold-downs will be used to keep the plastic stable throughout the project. After soil and water sampling is complete for the stockpiles, the excavation and upon the return of soil analysis, arrangements will be made with LRI in Graham for disposal of the petroleum contamination in their landfill. Should LRI not take the impacted soil Republic Services of Seattle or Waste Management of Seattle will be contacted. Project scope is estimated to be 30-100 tons.

Groundwater is located at the site at eight feet below grade (BG). Petroleum impacted soil will be removed from just below the groundwater level laterally outward in all directions until clean soil is achieved.

Sampling

Sample Definitions:

Characterization (CH)

A sample collected to provide information about the level of contamination, the type of contamination and information regarding plume location. This sample can be converted to a confirmation sample if the level of contamination is lower than the MTCA limit or the project limit with a low contaminate value, generally representing the boundary of the contamination plume.



Environmental Specialties
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Confirmation (C)

This sample is collected to show that the level of contamination is below MTCA or project limits or to define the outer limits of a plume. Values below MTCA or project limits could be used for closure. A high value sample originally collected as confirmation would be reclassified as Characterization and would generally be used to show contamination is still present, and that the plume boundary had not been reached.

Confirmation/Closure (CC)

These samples are collected to confirm the level of contamination at the boundaries of an excavation during a site assessment or at the end of a remediation project. Media type, proximity to the contamination and field screening are all considered when selecting the location for these samples. A worst-case sample strategy is applied to provide the highest possible statistical accuracy for the sample analytical results.

Soil Sampling

Planned soil sampling will include five soil samples from the excavation: Four samples from the sidewalls and one from the center of the excavation. Sidewall samples will be oriented north, south, east and west. Three soil samples from each stockpile will be collected, up to 75 cubic yards. More will be added as needed if the total quantity excavated exceeds 75 cubic yards. Sample quantities will follow WA DOE guidance for site assessments. More samples may be added for characterization if additional data is needed or required.

Groundwater Monitoring Wells

Five groundwater monitoring wells are planned. One of these is a replacement for the east wall well that appears to be gone. If it is found intact under the gravel, then it will be used. The remaining four wells will be installed 10 feet from the edge of the finished impacted soil excavation on a North, South, East, and West axis. This will allow the collection of data closer to the source and provide additional confidence that the results are accurate if no contamination is present as is expected. If additional suspect materials are found or additional contamination is found that is above MTCA (Model Toxic Control Act (WA)), then a work plan modification will be put into place.

Groundwater monitoring wells will be installed by a licensed well driller to the standards set forth in WAC 173-60. Each well will be installed to 15 feet below grade plus or minus depending on soil conditions. Well material will be scheduled 40 PVC and the diameter will be two inches. A standard metal monument will be installed to protect the well. Wells will be screened from the groundwater level (8 feet below grade) to the bottom of the well (15 ft bg). Each well will be surveyed for relative elevation to establish groundwater directional flow. Measurements will be collected from the top of the well casing. Each well will be developed after installation and allowed to settle for 24 hours noting the recovery rate. After at least 24



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hours the groundwater level will be documented and sampling will occur. A low flow sampler will be used for the collection of groundwater. A purge of three well volumes will be collected and discarded. The sampler will then collect the water and place it in the appropriate containers for the appropriate method in Laboratory supplied containers. A clean ground cover will be used to store sampling equipment at each workstation. These steps will be repeated for each well. After the water sample analysis returns from the laboratory, a monitoring report will be written with a summary chart listing the analysis results and the well data. Date, time, well depths, water depths, air and water temperature, and ground water direction, if indicated, will be shown.

Groundwater Analysis

The following chart lists the DRO analysis to be conducted on each groundwater sample. Only NWTPH-DX shown method on the list will be used for analyzing groundwater samples. In addition, water samples will be checked and documented for PH, conductivity, turbidity, specific gravity, color and sheen. Should other contaminates be shown through soil sampling, then the appropriate test will be run for that contaminate.

Contaminants of Concern, Test Methods and Method A Cleanup Levels for <u>Ground Water</u> (MTCA-A and MTCA-B) (MTCA Cleanup Regulation 173-340-900: Table 720-1)		
Contaminants of Concern	Laboratory Test Method	Cleanup Levels (µg/L)

DRO	NWTPH-DX	500



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Soil Sample Analysis

Soil Sample analysis will be NWTPH-DX, BTEX, PAHS's and Napthalenes. Should other contaminants be found, then appropriate additional analysis will be documented for that contaminate.

Contaminants of Concern, Test Methods and Method A Cleanup Levels for <u>Soil</u> (MTCA-A and MTCA-B) (MTCA Cleanup Regulation 173-340-900: Table 745.1)		
Contaminants of Concern	Laboratory Test Method	Cleanup Levels (mg/kg)

DRO	NWTPH-DX	2000
BTEX-Benzene	EPA Test Method 8021B	.03
BTEX-Ethylbenzene	EPA Test Method 8021B	6
Touluene	EPA Test Method 8021B	7
Xylenes	EPA Test Method 8021B	9
Napthalenes	EPA Test Method 8270	5
PAH's	EPA Test Method 8270	1

Project Venders

General Contractor KD&S Environmental
 PO Box 312
 Montesano, WA 98563

Impacted Soil
Receiver LRI
 Graham, WA
 Pierce County Soils Only

Well Drilling/
Decommission B&W Standard Probe
 Spanaway, WA

Laboratory Friedman & Bruya Laboratory
 4th Ave, Seattle, WA



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Robert F. Simons

Site Assessor:

Robert F. Simons
EPA Site Supervisor, Hazwapor Supervisor
Site Assessor/Decommissioner, ICC#32000769
253-683-1144

Enclosures: Building Survey, Site Sketch, As Built Pictures