

## **SCOPE OF WORK**

Site Name: City of Clarkston Street Shop 1455 Bridge Street Clarkston, WA 99403

UST No.:	100255
Facility Site No.:	41379712
Cleanup Site No.:	9040
Depth to Groundwater:	Approximately 21.5 feet
Monitoring Wells:	1

## **Purpose and Introduction**

The City of Clarkston Street Shop (Site) is located at 1455 Bridge Street in Clarkston, Washington in Asotin County. The Site is comprised of one 0.92-acre parcel (#60042102000010000) currently owned by the City of Clarkston.

The objective of this project is to conduct site characterization activities to meet the requirements of the Washington State Model Toxics Control Act (MTCA) cleanup regulation, Chapter 173-340 Washington Administrative Code (WAC 173-340).

Ecology is requesting to perform investigative activities at the Site to assess if past releases at the Site currently threat to human health and the environment. Ecology anticipates the following work tasks:

- Review available background information for the Site and surrounding area.
- Attain all permits as necessary to complete the project.
- Complete public and private utility locate(s) to check for underground utilities and pipelines near the proposed sampling locations.
- Prepare associated documents for site characterization field activities, including the following:
  - Work Plan,
  - Health and Safety Plan (HASP).
- Perform field activities including:
  - A soil and groundwater investigation, including:
    - Installation of soil borings,
    - Sampling of soil borings,
    - Sampling of groundwater
    - Install groundwater monitoring wells (if applicable).
  - Sample existing monitoring well, if accessible.
- Document the results of the investigation in a Site Characterization report.

## Site Summary:

On July 13, 1992, Washington State Department of Ecology (Ecology) was notified of a suspected release of petroleum product from an underground storage tank (UST) system located at the Site. Three USTs (500-gallon gasoline, 1,000-gallon gasoline, and 1,000-gallon diesel), product transfer lines, and dispensers were removed from the site. Following UST removal, petroleum contaminated soil (PCS) was identified and believed to be from a failed weld at the base of the fill pipe on one of the gasoline tanks. Approximately 60 cubic yards of PCS was excavated to the extent possible without effecting the integrity of the adjacent building.

Following excavation activities, one groundwater monitoring well (MW-1) was installed 20 feet down gradient from the excavation and a passive bioremediation system was implemented in the excavation location which included a dry well with a large volume permeable backfill in contact with the residual contaminated soil.

Confirmation soil samples collected within the excavation indicate concentrations of gasolinerange total petroleum hydrocarbons (TPH-G) and diesel-range petroleum hydrocarbons (TPH-D) exceeding MTCA Method A cleanup levels in areas on the east and south sides of the excavation, and TPH-G at the bottom of the excavation location at approximately 13 feet below ground surface (bgs). No soil contamination above the laboratory detection limits was identified in soil samples collected during drilling of MW-1. Groundwater sampled from MW-1 had a TPH-G detection of 1,050 micrograms per liter (ug/L) which exceeds the MTCA Method A cleanup level of 1,000 mg/L<sup>1</sup>.

The Site is surrounded by commercial and light industrial properties. The Snake River is approximately 1,000 to 1,500 feet northwest and north of the site and the local topography has a gradient to the north. Based on the topographic gradient and the river north of the site, the local ground water gradient is also expected to be to the north.

The Site is located on fine to medium grained alluvium deposited as a result of flooding of the Snake River system. Major glacial outwash related flooding events impacted this area in the late Pleistocene Epoch. At the Site, near-surface silty sand overlay coarser river gravels interbedded with sand layers that overlay the Columbia River Basalt bedrock. The monitoring well terminated in a sand layer at 28 feet bgs.

**Sampling Strategy:** Approximately seven soil borings will be drilled in the vicinity of the former USTs. Soil samples will be collected every 5 ft to approximately 30 ft bgs or when groundwater is encountered. Temporary groundwater wells will be installed and utilized to collected groundwater samples. If groundwater contamination is evident from field screening (petroleum odor, exceedance with photoionization detector [PID], etc.) a permeant monitoring well may be installed at the boring location. Up to three monitoring wells will be installed. If accessible, MW-1 will be sampled.

<sup>&</sup>lt;sup>1</sup> MTCA Method A CULs for TPH-G is based on protection of groundwater for noncarcinogenic drinking water with two levels provided. The higher level (1,000 ug/Liter) is based on the assumption of no benzene present in groundwater. If any detectable amount of benzene is present in groundwater, then the lower number (800 ug/Liter) must be used. See WAC 173-340-900.

Soil and groundwater samples will be analyzed for TPH-G by method NWTPH-GX; TPH-D by analytical method NWTPH-Dx; benzene, toluene, ethylbenzene, xylenes, Ethylene dibromide (EDB), Ethylene dichloride (EDC), and Methyl tert-butyl ether (MTBE) by EPA method 8260D; and lead by EPA method 6010D.

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Location /Site Maps: See Attached



Figure 1: Clarkston Public Works LUST location and proposed soil borings.
= Proposed soil boring location.