

SAMPLING AND ANALYSIS PLAN
Mandl Holdings SHA
18864 Front St. NE
Poulsbo, WA 98370
Ecology FS ID #8180381
Kitsap County Tax Parcel ID 4227-000-004-0005

December 14, 2012

1. SITE DESCRIPTION / HISTORY

The Mandl Holdings Trust property is a 0.41 acre commercial site located in Poulsbo, WA. The site is currently owned by Mandl Holdings, LLC. The current use of the property is commercial retail with parking. The site is on the east side of Front Street. The ground slopes down from the site to Liberty Bay of Puget Sound. The slopes on the site are approximately 5%. There are three two story commercial buildings on site with the balance of the property, approximately 40%, covered in asphalt. According to assessor records these buildings were built in 1915.

The site was added to the Confirmed and Suspected Contaminated Sites List in January of 2008 after an Initial Investigation. A report of a sheen in Liberty Bay led to a storm water pipe and a leaking Underground Storage Tank. When the tank was removed, holes were found in the tank. Soil was excavated, but, apparently never sampled. A monitoring well was installed to check ground water contamination. No sampling data has been located for this site or well.

FIELD PERSONNEL / DATES OF ACTIVITIES

Field personnel for sampling activities associated with this site and their duties are as follows:

Grant Holdcroft – KPHD Field Supervisor and Site Health and Safety Officer:

Conduct sampling and decontamination activities and make field decisions regarding sampling locations. Oversee establishment of control zones, air monitoring and personal protective equipment selection.

Richard Bazzell - KPHD Field Team Member:

Assist with sampling and decontamination activities and provide input for making field decisions regarding sampling locations. Assist with health and safety equipment calibration, air monitoring and sampling documentation.

Sampling activities will be conducted November 27, 2012. Samples will be delivered, under chain of custody documentation, within 24 hours to Analytical Resources, Inc. in Tukwila for analysis. Analytical Resources is accredited by the Washington State Department of Ecology for all analyses to be conducted at this site. Results from the analyses and standard laboratory Quality Assurance/Quality control documentation will be received within thirty calendar days.

2. SAMPLING OBJECTIVES

Objectives for this sampling effort include:

1. Obtain a representative water sample to establish, or confirm, presence of specific hazardous constituents;
2. Gather additional data to assign Washington Ranking Method (WARM) toxicity/release scoring values;
3. Determine if groundwater has been impacted by releases of contaminants from the site; and,
4. Document any contaminant concentrations below applicable Model Toxics Control Act (MTCA) cleanup levels and make a recommendation of "No Further Action" (NFA) for the site, as applicable.

3. SAMPLING

3.1 Locations

One sample will be taken from the monitoring well located on the property. The well location is shown on Figure 1.

4.2 Sample designation

Samples will be designated as MHW-X

Where: MHW = Mandl Holdings Water
X = Sequential sample number

Example: MHW-1 = Mandl Holdings Water sample location number 1

4.3 Types

A discrete sample will be collected for ground water analyses.

4.4 Frequency

This will be a one-time sampling event.

4.5 Methods

Water samples will be collected using disposable bailers if groundwater is available in the soil sampling auger holes. For monitoring wells – the well will be purged 3 times the casing volume. Purge water will be collected and disposed of properly.

4. ANALYTICAL METHODS / CONTAINERS / PRESERVATION

4.1 Methods

Chemicals of Concern: Chemicals of concern in soil at this site are petroleum products (TPH-Dx) related to a leaking underground storage tank.

The analytical methods for samples collected during this investigation are as follows:

Analyte	Analytical Method	MTCA Groundwater Cleanup Level
Total Petroleum Hydrocarbons - Diesel Range Extended	NWTPH-Dx	500 µg/liter ¹

1 - Method A groundwater, table value

Containers

The contract laboratory will provide sample containers for the analyses to be performed. Sample containers requiring preservatives will be prepared by the laboratory.

4.2 Preservation

Immediately after sampling, the containers will be stored in an iced cooler. Samples will be delivered to the Analytical Resources, Inc. laboratory in Tukwila within 24 hours of the sampling event either by hand or through express delivery. All samples will be stored in a refrigerator at Kitsap Public Health District's (KPHD) offices if an overnight delay is required. KPHD shall be responsible for delivering samples to its contract laboratory.

6. SAMPLING EQUIPMENT DECONTAMINATION

Sampling equipment will be decontaminated by the sampling crew between sampling events in the field with a Liquinox solution and rinsed with distilled water. After the final sample has been collected, Health District equipment will be decontaminated at the Health District field support facility according to the cleaning procedures for sampling equipment outlined in the KPHD quality assurance project plan for site hazard assessments.

7. INVESTIGATIVE WASTES DISPOSITION

No investigative waste will be generated during this sampling event.

8. QUALITY ASSURANCE / QUALITY CONTROL (QA/QC) PROCEDURES

Field sampling and Chain-of-Custody documentation are to be completed in the field.

8.1 Laboratory QA/QC

All analyses will be done by Analytical Resources, Inc., Tukwila, a Department of Ecology accredited laboratory for the sampling analyses.

The lab will provide the following information:

Check standards (Method Blanks): Estimates the precision of the method and checks bias due to calibration.

Duplicate analyses of samples: Checks the precision of the actual samples.

Matrix spikes: Tests for bias due to chemical interference from the sample matrix.

Chain-of-custody: The chain-of-custody form will be filled out in the field and the appropriate methods of transfer will be completed at the lab.

The laboratory will provide a letter, signed by its legally authorized representative, stating that the laboratory operates and maintains records of its QA/QC program for samples from SHAs and that its results meet all applicable standards.

8.2 Field QA/QC Assurance

A field duplicate sample will be collected to insure laboratory result accuracy. If samples are collected for volatiles analysis, a trip blank will be prepared by the laboratory to accompany the sample containers, throughout the entire sampling event. In addition, as disposable bailers have not been used in some time a field blank will be used to check the disposable bailers by transferring deionized water from a stainless steel container to a sample bottle using one of the disposable bailers.

8.3 Documentation of Field Activities

Notes and observations of activities conducted in the field during the sampling event will be taken by Health District staff following standard recording procedures. This documentation will include but not be limited to information on: date, time, weather, temperature, personnel on site, deviations from procedure, sample locations (latitude and longitude using GPS), and unusual conditions. In addition, photographs will be taken of the site, each sample location and any unusual conditions at the site. Each photograph will be accompanied by notes on the following:

- Date;
- Time;
- Number of Photo;
- Type of film and camera;
- Photographers name;
- Name and address of site, and;
- Location & general description of the area of the photograph.

8.4 Chain of Custody

All samples will be immediately placed into appropriate containers; labeled, sealed, and cooled. Samples will be labeled with the following:

- Client name

- Project/site name
- Unique identifying lab number
- Date and time of collection
- Preservation method used (if any)
- Analyses requested

Chain of Custody documentation will be completed for all samples collected. Chain of custody will be maintained from the time the samples are collected to the time the samples are submitted to the lab and will include:

- The sampler's names;
- Date and time of collection;
- Sample location;
- Analyses to be performed;
- Date and signatures of those releasing and receiving the samples;

- Date and time the samples were received in the lab, and;
- The total number of samples received by the lab.

Samples shipped to the lab or delivered after business hours shall be sealed to protect custody. Sample custody seals must be signed by the sampler and affixed to the sample cooler or individual samples in such a way as to require breaking of the seal to open the cooler or sample. Sample custody seals are not required when samples are delivered directly to the lab by the sampler. Sample custody seals shall be used for all samples shipped to the laboratory by a third party or when delivered to the laboratory after business hours.



Mandl Holdings Sampling location

GAH 11/14/2012

0 5 10 20 30 40
Feet




KITSAP PUBLIC
HEALTH DISTRICT