

Additional Phase 2 Subsurface Investigation

505 W. Commercial St. (former Welhener Awning)

Updated Report

Two Limited Phase II Subsurface Investigations were conducted at subject property in September and October 2007 by the assessor in an effort to determine if petroleum-impacted soil or groundwater were present at the property based on the historical land use information identified in the Phase I ESA.



Findings

A total of eleven soil samples and five grab groundwater samples were collected at the property in September and October 2007. The boring locations were placed in the area of the former ASTs and in the area of the USTs. The soil and groundwater samples were analyzed for benzene, toluene, ethylbenzene, xylenes and naphthalene (BTEXN), total petroleum hydrocarbons (TPH) gasoline range organics (GRO), diesel range organics/oil range organics (DRO/ORO) and ethylene dibromide (EDB) and ethylene dichloride (EDC) and lead. The October investigation encountered a UST at the property in the area previously identified in the Phase I ESA. Based on the analytical results of the soil and groundwater samples taken, a reportable release of petroleum products was identified for the subject property. Additional investigation and removal of the UST encountered was recommended.

In December 2007, a third-party company completed the removal of two 800-gallon USTs from the southeast portion of the subject property and submitted a subsequent UST Closure Report to the Missouri Department of Natural Resources (MDNR). This removal included the installation and sampling of three groundwater monitoring wells and soil sampling in the area of the removed USTs. MDNR issued a "No further action" (NFA) letter on April 11, 2008 for the removal of the USTs and the excavation of the petroleum-impacted soil. Based on the removal of the USTs and the issue of this NFA letter, these items are considered historical recognized environmental conditions.

Initial Report

Date of Report: November 26, 2007
Assessment Funding: EPA Petroleum Assessment Grant
Acres: 0.48

Site Background

On October 15, 2007 Environmental Works, Inc. (EWI) mobilized to the Former Welhener Awning property at 505 W. Commercial Street to conduct additional soil and groundwater

sampling due to petroleum constituents identified during a [subsurface investigation conducted in September 2007](#).

Findings

This additional investigation included the advancement of five soil borings in an effort to define the area of petroleum impact. These borings were located in areas of the Site where petroleum contamination was previously identified (in the September 2007 investigation). This area is the southeast portion of the property. It is suspected that underground storage tanks (USTs) and fuel dispensers were previously located here. One of the soil borings was advanced through a void at the 2 to 5 foot interval; an apparent UST. During this investigation, 18 soil samples and two grab groundwater samples were taken and submitted for laboratory analysis. The groundwater samples were obtained from two of the soil borings at depths of approximately 18 feet and 23.5 feet.

Laboratory results from the soil sampling indicate that gasoline range organics are present in three of the soil samples and two of the groundwater samples taken during this additional investigation. Diesel range organics were also found in one of the groundwater samples taken; therefore, analysis for Polyaromatic Hydrocarbons (PAHs) was also performed. This analytical did not reveal the presence of PAHs above laboratory method detection limits.

Based on field observations during the drilling activity at this property, at least one UST is still present. The full extent of impact has been generally defined to the southeast and central portions of the parking lot. Due to the presence of the building preventing further delineation to the west and the street preventing further delineation to the south, the areas of impact has not been fully defined in these directions.