

Phase 2 Environmental Site Assessment

1420 W. College Street

Date of Report: June 24, 2010

Assessment Funding: EPA Brownfields Assessment Grant

Acreage: 0.55

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Site Background

The subject site contains a one-story, approximately 1,920 square foot building built in 1983 and a one-story, approximately 600 square foot building built in 1924. The subject site is currently occupied by Stone Effects. Stone Effects constructs architectural cast concrete products using a rubber mold and in-house made specialty molds. Previous use of the subject site includes a bulk oil/filling station (prior to 1933 to at least 1969), unknown use (1969-1983), and Smith Starter Service (1983-2006).



Findings

Etech Environmental & Safety Solutions, Inc. (Etech) has been tasked by the U.S. Environmental Protection Agency (EPA) to perform a Phase II Environmental Site Assessment (ESA) at the Ehler's Property Site (1420 West College Street) in Springfield, Greene County, Missouri. This report describes the findings of that investigation and provides remedial recommendations as outlined in the EPA Scope of Work.

The purpose of the Phase II ESA was to further investigate the recognized environmental conditions (RECs) identified in the Phase I ESA conducted at the Ehler's Property site (ARGO Systems, LLC, 2009). As defined in the American Society of Testing and Materials (ASTM) Standards, a REC consists of "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property." (ASTM, 2005).

The Phase II ESA field investigation at the Ehler's Property site was performed December 14-17, 2009 in accordance with the procedures detailed in the Quality Assurance Project Plan (QAPP) for three sites in Springfield, Missouri (Etech, 2009). The QAPP, which included the Field Sampling Plan (FSP) for the Phase II ESA, identified sampling locations, data quality objectives, analytical requirements, and sampling techniques to be employed at the site.

Recommendations

Due to the subsurface impact indicated by this Phase II ESA at the Ehler's Property, future changes in land use at the site should be carefully considered. Elevated levels of PAH and petroleum contamination are present in both subsurface soils and the shallow groundwater beneath the site. Any construction work on site or work within the adjacent Jordan Creek stream channel could potentially involve the exposure of these contaminants to workers and the environment.

Prior to any future development work on this property, a more extensive subsurface investigation should be performed to characterize the full extent of impact to subsurface soils and groundwater. This will enable future decisions to be made regarding remediation of the property prior to redevelopment.

In addition, paint on metal window frames in the interior of the shop building on the north, northeast, and west windows tested positive for LBP with the XRF. XRF results indicated a level of >5.0 mg/cm² on the north and northeast window frames, and a level of >1.0 mg/cm² on the west window frame. HUD considers LBP to be above 1.0 mg/cm². Etech recommends treating the painted surface as containing LBP and, therefore, any contractors performing demolition or renovation work must comply with the OSHA Lead in Construction Standard, Title 29 of Code of Federal Regulations (CFR), Part 1926.62. The demolition or renovation contractor must also remove peeling and chipping paint from any damaged LBP surfaces on these window frames prior to demolition or remodeling.