

Phase 2 Environmental Site Assessment

312-314 E. Olive Street

Date of Report: August 18, 2010

Assessment Funding: EPA Brownfields Petroleum Assessment Grant

Acres: approximately 0.14

Site Background

The subject site is located in downtown Springfield, Missouri, near the intersection of East Olive Street and North Robberson Avenue. The property occupies 0.14 acres of developed land within a mixed commercial setting. Specific improvements include a 7,900 square foot slab-on-grade brick building that generally extends to the property boundaries in all directions. The first level of the building is designated to use as commercial retail and office space. The second level of the building has been renovated into apartments.



Findings

The purpose of the Phase II Assessment was to further evaluate environmental conditions in relation to historical land use and prospective area reuse/redevelopment. Previous Phase I Assessment identified Recognized Environmental Conditions (RECs) in connection with the subject property, including former printing operations on site and petroleum storage tank use on adjoining land to the north and west.

Field screening and laboratory procedures did not identify petroleum, petroleum-related or other volatile organic compound (VOC) impacts to soil. Related concentrations above laboratory detection capabilities were not reported. Groundwater was not encountered prior to shallow refusal at depth of approximately 14 feet below ground surface.

Soil samples indicated variable concentrations of heavy metals below risk-based cleanup thresholds, with the exception of arsenic, beryllium, and lead. Supplemental evaluations for lead indicate relatively low levels that do not exceed expanded Tier 1 screening criteria or documented background (i.e. naturally occurring) conditions. Reported levels of beryllium and arsenic exceed both residential and non-residential Tier 1 cleanup thresholds established by the Missouri Department of Natural Resources (MDNR). Arsenic levels in soil also exceed documented background conditions. Background data for beryllium in soil (specific to Greene County) was not available for supplemental Phase II evaluations.

Metals results are not indicative of an extensive point source release to soil. Non-point sources (on and off site) and/or low-level influences from surrounding urban developments also provide a non-specific mechanism for heavy metal deposition. Regardless, concentrations above residential and non-residential standards were identified and suggest the need for specific soil management practices in the event of future excavations, subsurface construction or other related activities on site. Exposure risks given current site conditions and surface coverage appear minimal based on available data. It should also be noted that planned field and laboratory procedures were limited due to various access restrictions. Consequently, further sampling may be required to fully evaluate the nature and extent of metals in soil.