

Phase 1 Environmental Site Assessment

1028 E. St. Louis Street

Date of Report: October 10, 2012

Assessment Funding: EPA Brownfields Assessment Grant

Acres: 4.65

Site Background

The site is a 4.65-acre property east of downtown Springfield where a bakery was previously located. The subject property contains three permanent structures and asphalt-paved parking lots. The physical address of the site is 1028 E. St. Louis Street. The site is located east of downtown Springfield, at the southwest corner of the E. St. Louis Street and South Hampton Avenue intersection. The site is bordered to the west by several commercial businesses, to the south by residential apartments, to the east by a commercial business and an educational building (Bryan College), and to the north by baseball field parking lots.

Findings

The following significant findings were identified from review of historic records, environmental database review, site reconnaissance, or interviews:

- Records review and interviews have determined that six underground storage tanks(UST) were formerly located at the site. Four USTs were removed in the 1990s, while two remain at the site have been closed in place. During removal of the four USTs, petroleum contamination was identified in surrounding soil. That contamination was characterized and remediated (excavated). Following excavation of the contaminated soil, the Missouri Department of Natural Resources (MDNR) determined "no further action" was necessary at the site in regards to the four removed USTs and identified contamination. A site-specific soil cleanup goal of 900 parts per million (ppm) for total petroleum hydrocarbons (TPH) was established for the site based on property use at that time. If future excavation occurs at this portion of the site during residential development, petroleum-contaminated soils are expected to be encountered, and the concentrations of TPH may not be protective of residential users. The four removed USTs and known petroleum- contaminated soil pose an historical recognized environmental condition (HREC) to the subject property. Historical information indicates the two USTs that have been closed in place contained gasoline and #5 heating oil. Because the gasoline UST has not been used since 1973, and #5 heating oil is not a material regulated by MDNR, both USTs are considered in compliance with applicable regulations. However, no sampling to investigate potential releases associated those two USTs is known to have occurred. Based on the lack of adequate information related to the two closed USTs, they pose a REC to the subject property.
- Records review has determined that improper disposal of antifreeze and used oil has been alleged (through an anonymous complaint to MDNR) to have occurred in a cistern/sinkhole located on the property. The complaint was made in May 2003; however, the improper disposal was alleged to have occurred over an extended period of time during the 1970s. No

investigation into the alleged improper disposal was ever conducted; however, past correspondence with MDNR indicates the improper disposal likely occurred. Currently, the location of the cistern/sinkhole is covered by asphalt. The potential for soil and groundwater contamination as a result of the improper disposal poses a REC to the site.

- Review of Sanborn® maps identified development of the site dating back to 1910. The subject property contains a large building formerly used as a bakery, asphalt-covered parking lots, and an automobile repair shop since 1933. A gasoline filling station with three gasoline storage tanks (of unknown size) was present on the northeast portion of the property between 1933 and 1950. In addition, surrounding properties contained commercial and industrial businesses dating back to 1910 (including gasoline filling stations). Historical use of the property and surrounding properties pose RECs (and HRECs) to the subject property.
- A review of Sanborn® maps identified a filling station with three gasoline storage tanks and a maintenance facility were present on the northeast portion of the property dating back to the 1920s. No records or documentation could be found showing the gasoline storage tanks have ever been removed. However, documentation of this nature was not required during the time of the filling station's operation. The former filling station and maintenance facility could be potential sources of contamination if releases of petroleum or hazardous materials occurred; therefore, those facilities/businesses pose RECs to the subject property.
- During site reconnaissance activities, it was determined asbestos-containing materials (ACM) and lead-based paint LBP were likely present at/in the former bakery building located at 1028 E. St. Louis Street. The presence of ACM and LBP is of environmental concern.
- During the site reconnaissance, various chemicals and paints were determined to be present inside the site buildings. Those buildings are still currently being used for storage. Additionally, electrical ballasts that potentially contain polychlorinated biphenyls (PCB) remain in the site buildings.

Recommendations

Based on the identification of the environmental issues, Seagull provides the following recommendations:

- A Phase II ESA of the subject property should be performed. Soil samples should be collected near the two USTs that remain at the site (closed in place), near the former filling station and maintenance facility, and at the location of the sinkhole/cistern. From those areas, soil samples should be collected and analyzed for contaminants commonly associated with petroleum, including volatile organic compounds, polynuclear aromatic hydrocarbons, metals, and TPH. Additionally, dependent on site redevelopment plans, additional sampling to determine current concentrations of TPH in soil as a result of the leaking USTs that were previously removed may also be warranted.
- If future plans for the site buildings include renovation/demolition activities, then asbestos inspections should be completed. Future demolition or renovation of building materials determined to contain ACM (including abatement and disposal activities) should be conducted in accordance with applicable local, state, and federal regulations. An inspection of the site buildings for LBP may be warranted if future plans involve renovation.
- Chemical products currently remaining inside the site buildings should be removed for proper use or disposal prior to property transfer. PCB-containing ballasts located inside the site buildings should be removed for proper use or disposal prior to demolition and/or renovations.

