

# Phase 2 Environmental Site Assessment

## 405 N. Jefferson Avenue (Former Willow Brook Foods)

Date of Report: April 2009

Assessment Funding: EPA Brownfields Petroleum Assessment Grant

Acres: 4

### Site Background

The subject site is located in downtown Springfield, Missouri, at 405 North Jefferson Avenue. The property is located northwest and southwest of N. Jefferson Avenue and E. Phelps Street. The site occupies approximately 4 acres with a two-story structure comprising approximately 121,200-square feet of operational space. The facility was most recently used as a poultry processing plant which ceased operations in October 2008. Terracon understands the former processing plant is not currently occupied.



A Phase I Environmental Site Assessment (ESA) of the property was completed in October 2008. Historical records suggest the property was developed since at least 1884 with dwellings and/or light commercial and retail structures. Jordan Creek (formerly Wilson's Creek) was located within the central portion of the site until 1933 and has since been replaced with an underground culvert. Commercial and industrial use of the site dates back to at least 1933. Commercial use of the site includes historical laundry and dry cleaning operations, former USTs, a large automotive repair facility, and a printing facility. Historical operations on the adjoining properties have included auto garages and repair facilities, filling stations, a foundry, stove company, plating and retinning facilities and other related operations, and a grain elevator. The use of the site and adjoining properties were identified as Recognized Environmental Condition (RECs).

### Findings

Terracon Consultants, Inc. completed a Phase II Brownfields Assessment of the property in February 2009 to further assess the Phase I RECs noted above. A total of 12 soil borings were advanced on the site and 10 borings were completed with temporary casings for collection of groundwater samples.

Analytical results indicated there were some reported heavy metal detections; however, these concentrations (with the exception of lead) in the soil are likely attributable to naturally occurring and/or non-point sources related to urban land use. Lead is detected across the site at

concentrations above the Missouri Department of Natural Resources (MDNR) residential levels and above expected levels based on urban industrial background use; but below the non-residential levels. The source of the lead, based on distribution, appears to be related to historical area industrial activities and not related to site specific sources as the area may have been filled over time for development.

Petroleum related impact is detected in the soil and groundwater on the western portion of the site. Based on the detections in the surrounding soil borings, it appears that this impact is localized to the area surrounding these two borings. The source of the petroleum impact is not known but would appear to be related to either the historical auto repair facility (in this area and/or west of the site) or potential historic USTs (the location of former on-site USTs is not known).

The detected petroleum concentrations are below the residential MDNR levels except for GRO (gasoline range organics) in groundwater which is detected at the residential value for protection of indoor air. Based on the detected concentrations and current and planned non-residential land use, additional investigation for delineation does not appear warranted.