

# Kansas Department of Health and Environment

## Bureau of Environmental Remediation, Remedial Section

### Environmental Use Control and Brownfields Programs



## Joint Effort Facilitates Redevelopment of Brownfields Property

### **Background:**

The Kansas Department of Health and Environment (KDHE) conducted Phase I and II Brownfields Targeted Assessments (BTAs) at a property owned by the City of Chanute, Kansas. The primary BTA objective was to evaluate environmental conditions and potential risks through intrusive (Phase II) sampling activities, based on results of the previously performed non-intrusive (Phase I) environmental assessment.

The subject property occupies approximately 0.4-acres and had previously been utilized as a municipal parking lot. The City intended to redevelop the BTA property into a four-plex movie theater.

### **Phase I and Phase II activities:**

Based on the Phase I BTA Report several on- and off-site Recognized Environmental Conditions (RECs) were identified for the Proposed Movie Theater BTA Property. Based on historical information, an on-site REC consisting of a former service station was located along the southwestern portion of the site. Two off-site RECs were identified adjacent to the site; a former filling station located adjacent west across South Evergreen Street, and a former auto repair facility located adjacent north across the alley.

Phase II activities were conducted to assess the extent of on-site petroleum and petroleum-associated impacts to soil and ground water through intrusive sampling and laboratory analyses.



*Former City Owned Parking Lot Prior to Redevelopment*



*The Newly Redeveloped 4-plex Movie Theater*

Soil and ground water were evaluated by comparing laboratory data to Tier 2 KDHE Risk-Based Standards (RSK) provided in Appendix A of the Risk-Based Standards for Kansas Manual. Although the subject property is located in a primarily commercial setting, data collected during the BTA was compared to RSK levels for both residential and non-residential scenarios.

Total Petroleum Hydrocarbon (TPH) concentrations in the soil samples collected from two soil borings were above the residential RSK value, but below the non-residential RSK value. Ground water from one sample location exhibited Volatile Organic Compound (VOC) concentrations above the applicable residential RSK values but below non-residential RSK values.

Based on data collected during the Phase II BTA, no significant environmental impacts were identified at the property. It was recommended that the applicant consider placing an Environmental Use Control on the property restricting residential land use and future ground water use.

### **Redevelopment:**

An Environmental Use Control was placed on the property restricting land and ground water use in October 2006. Redevelopment of the BTA property into a movie theater was complete in March 2007.