

# Kansas Department of Health and Environment

## Bureau of Environmental Remediation, Remedial Section

### Voluntary Cleanup and Property Redevelopment Program



## *Citizens Bank*

### **Background:**

In September 2003 Citizens Bank conducted a limited site investigation of a 1.57-acre property located at the northeast corner of Kentucky and East Streets in Iola, Kansas, with the prospect of purchasing it. Prior to 1970, the property was the location of the Walton Foundry office building and loading dock. During the limited site investigation, lead and petroleum hydrocarbons in the diesel range (TPH-DRO) were found in shallow soil samples.

In March 2004 Citizens Bank purchased the property. Citizens Bank applied to and was accepted into the Voluntary Cleanup and Property Redevelopment Program (VCPRP).

At the time of the application, the property was vacant with only the slabs of former buildings remaining. Following review of the results from the limited investigation submitted with the application, the VCPRP found that additional investigation would be needed to define the magnitude and extent of contamination on the property.

### **Investigation:**

In September 2004 Citizens Bank's consultant advanced 13 borings into the subsurface in order to characterize the nature and extent of metals and TPH-DRO contamination in soil and ground water. Borings were advanced to bedrock using direct push technology (Geoprobe). Ground water was not encountered in the borings. Lead, arsenic, and TPH-DRO were detected in soil samples from several locations at levels above Residential Risk-Based Standards for Kansas (RSKs);



*The Citizens Bank property prior to redevelopment.*



*The new Citizens Bank building foundation and parking area acts as an engineered cap, preventing exposure to contaminated material beneath.*

also, cadmium and mercury were detected above residential RSKs at one location.

### **Solution:**

A cleanup action was warranted to prevent exposures to metals and TPH-DRO contamination found during the investigation. Citizens Bank prepared a Voluntary Cleanup Plan that called for capping contaminated soil to prevent exposure and implementing an Environmental Use Control (EUC). The cap consisted of the slab for the new bank building, the associated asphalt and concrete parking lots, and a compacted clay cap and vegetated cover. The EUC restricted the property to non-residential use and called for the construction of clean utility corridors. The terms of the EUC Agreement require future inspections of the cap system to ensure it continues to prevent exposures.

The KDHE-approved Voluntary Cleanup Plan was implemented between the summer of 2005 and the spring of 2006. Following verification sampling, KDHE issued a "No Further Action" letter to Citizens Bank.

### **Benefits:**

- **1.57 acres of land capped to prevent exposure to metals and TPH-DRO.**
- **Previously vacant property put back into productive use.**