Kansas Department of Health and Environment

Bureau of Environmental Remediation, Remedial Section

State Cooperative Program

Kansas Public Service

Background:
The Kansas Public Service site is located at the northeast corner of the intersection of 8th Street and Pennsylvania in Lawrence, Douglas County, Kansas. In 1993 KPS initiated a site investigation when the City of Lawrence wanted to buy the property to be included in the East Lawrence Bypass corridor. KPS and KDHE entered into a consent order to perform a thorough investigation. The site was previously a former manufactured gas plant where coal gas was produced from approximately 1869 to 1905. Residuals produced during the gas manufacturing process were primarily coal tar and spent gas purifier media (lime).

In 1993, a Site Investigation (SI) was implemented by Burns and McDonnell with KDHE oversight. Sampling during the SI detected discolored and odorous soil in the area of the former tar well. Excavation of the material associated with the former tar well was recommended.

Solution:
Excavation and monitoring well installation activities started in 1998. Since the exact location of the tar well was unknown, the initial excavation consisted of the removal of the upper 1 to 2 feet of soil in the approximate area of the former tar well to locate the subsurface structure.

Looking southeast at where the railroad tracks entered the site.

Looking southeast at a portion of the Old Coal Shed.

Once the tar well was located and contaminated material removed, the excavated area was backfilled with 62 tons of gravel. Stained soil was disposed of as hazardous waste at the Laidlaw Lone Mountain facility in Waynoka, Oklahoma. The soil was treated by chemical oxidation to remove toxicity characteristics prior to disposal.

An on-site monitoring well was sampled twice a year for two years. Groundwater samples were collected for volatile organic compounds (VOC) and polynuclear aromatic hydrocarbons (PAH). Two VOCs were detected in the groundwater sample, however levels were below existing health-based standards for drinking water. Wastewater generated during corrective action was disposed of as a non-hazardous industrial wastewater by Laidlaw. The property is currently used as a vehicle maintenance and storage shop for Utilicorp, formerly Kansas Public Service.

Benefits:

- **A total of 33.15 tons of stained soils from the former tar well was removed and excavated.**
- **Property in productive use.**

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