

Kansas Department of Health and Environment

Bureau of Environmental Remediation, Remedial Section

Voluntary Cleanup and Property Redevelopment Program



Plains Pipeline– Saline River Road

Background:

In June 2006 a release of crude oil from a 6-inch pipeline, operated by Plains Pipeline Co., occurred in a pasture approximately 50 feet south of Saline River Road in Ellis County. The release occurred 1.5 miles west of U.S. Highway 183 near Hays, Kansas. After discovery of the release, approximately three barrels of oil were recovered using vacuum trucks. The pipeline was repaired and excavation of contaminated soil initiated soon after. Soil was excavated to a depth of approximately 13 feet below ground surface to bedrock. Excavation of impacted soil was halted upon discovery that contamination was more horizontally extensive than initially thought. Ground water was not encountered during excavation activities.

In July 2006 Plains' consultant conducted a subsurface investigation to characterize the nature and extent of petroleum contamination in soil and, if present, in ground water. Total petroleum hydrocarbons – diesel range organics and gasoline range organics (TPH-DRO and TPH-GRO) were identified in soil above KDHE Residential Risk-Based Standards for Kansas (RSKs) in several borings. Plains then conducted a second phase of excavation activities. Based on confirmation soil samples collected from the floor and sidewalls of the excavation, residual soil contamination remained beneath an overhead electric line and near a utility pole and fencing located north of the excavation. As with the previous excavation, ground water was not encountered.

Soon after completion of the second phase of excavation activities, Plains made application to the Voluntary Cleanup and Property Redevelopment Program and was accepted on December 15, 2006.

Investigation:

To complete the remaining delineation of the contamination, a third phase of excavation activities commenced in October 2007. The utility pole and fencing were temporarily removed in order to access the

remaining impacted soil to the north of the previous excavations. The impacted soil was removed and landfarmed onsite per KDHE approval. Plains and KDHE collected confirmation and verification soil samples from the sidewalls and floor of the excavation. Analysis of the samples indicated that the petroleum-impacted soil had been removed and cleanup standards (i.e. residential RSKs) had been met. Additionally, contaminated soil that was landfarmed onsite was sampled and determined to be remediated to applicable cleanup levels as well.

Solution:

Given that excavation activities had addressed the soil contamination and ground water was not encountered at the site, KDHE issued a “No Further Action” determination to Plains in October 2008.

Benefits:

- **More than 10,000 cubic yards of contaminated soil were excavated and remediated to below KDHE cleanup levels.**



Removal of petroleum impacted soil during the third phase of excavation activities.