

Project Profile

Buckeye Pipeline Company, L.P.

Description: Site Characterization and Remediation

Location: Linden, New Jersey

Contract Value: \$1.5 Million

Major Activities

- Site Characterization
- Hydrogeological Investigation
- Remedial Engineering and Design
- Environmental Remediation
- Waste Management

This 100 acre site is a distribution terminal for gasoline, turbine fuel, diesel and fuel oil. It contains 45 aboveground storage tanks and associated piping, handling and transfer appurtenances. A Phase III investigation was conducted which included the following tasks:

- Installed 3 new deep and 6 new shallow wells and sampled a total of 35 monitoring wells;
 - Operated field laboratory for analysis of benzene, toluene and xylenes via gas chromatography and total petroleum hydrocarbons via a modified version of USEPA method 418.1;
- drilled over 300 borings and analyzed approximately 500 samples in the field lab;
 - compared analytical data to site soil and groundwater cleanup levels;
 - delineated the extent of free product and soil contamination throughout the site;
 - conducted free product monitoring and removal from monitoring wells and recovery pits via hand bailing and use of a vac truck;
 - investigated various other site features such as drainage swales, oil/water separator, etc. via sampling, integrity testing and visual inspections; and
 - waste classification and disposal for excavated soils.

Upon completion of field activities, a Phase III Results Report and a Site Cleanup Plan were prepared and submitted to the New Jersey Department of Environmental Protection (NJDEP). The submission included the following elements:

- results of all data generated during site investigation activities;
- conclusions and recommendations regarding the extent and source(s) of contamination;
- design specifications for construction of a free product recovery system, including groundwater modeling to evaluate recovery options and selection of recovery equipment; and
- determination of contaminated soil volumes, evaluation of remedial options and cost estimates;

Since the submission was made, a free product recovery system was installed with additional monitoring wells. This system has been operated and additional groundwater sampling has been conducted. In addition, further soil sampling and contamination delineation has been completed to support establishment of a proposed Declaration of Environmental Restriction (DER) in lieu of actual soil remediation.