

Source Material Remediation and Site Redevelopment

KEY Project Overview

Highlights

Designed a remedy to meet both remediation and redevelopment requirements



Developed a grading and surface cover plan to use the site as a storage area for large shipping containers



Designed an asphaltic concrete cover system for heavy container storage



Designed a stormwater management system to tie into existing municipal system



Implemented a system to monitor natural attenuation of dissolved constituents in groundwater



Performed construction quality assurance and construction management



Key Environmental (KEY) performed the investigation, design, permitting and, ultimately, construction management for a source material remediation project in New Jersey. KEY successfully met the interests of the former facility operator and the current, third-party lease-holder while meeting state and federal remediation regulations.

Although remediation of the site is being addressed via an Administrative Consent Order between the New Jersey Department of Environmental Protection (NJDEP) and the former facility operator, the current property lease-holder is a third party with specific interests in near-term redevelopment of the site for commercial purposes.

Project Remedy

KEY designed a remedy to meet both remediation and redevelopment requirements. The remedy included in-situ stabilization of potential source materials (i.e., creosote and arsenic-impacted soils).

KEY designed a remedy that met both remediation and redevelopment requirements.

The remedy also included construction of an asphalt surface cover over the entire property and monitored natural attenuation of dissolved constituents in groundwater.

Activities Performed by KEY

- Detailed subsurface investigation to determine the location and extent of potential source materials.
- Preparation of a Remedial Action Work Plan (RAWP) for the site in accordance with requirements of the NJDEP.
- Development of a grading/surface cover plan in accordance with the lease-holder's specifications, for use of the site as a storage area for large shipping containers.
- Design of an asphaltic concrete cover system and stormwater management system.
- Preparation of detailed technical specifications and bid documents for solicitation of competitive bids from remediation contractors.
- Performance of construction quality assurance and construction management during implementation of the remedy.



Mixing head for deep stabilization.



Construction specification achieved during difficult weather conditions.



KEY SERVICES

Remedial Investigations and Site Assessments

Phase I Assessments
Geophysical Evaluations
Hydrogeological/Aquifer Testing
Soil/Sediment Characterization
Groundwater Characterization
Fate & Transport Evaluations
Risk Assessments
Natural Attenuation Assessments
GIS/GPS/Data Management

Environmental Engineering

Feasibility Studies
Remedial Design
Turnkey Projects
Construction Management
Construction QA/QC Oversight
Monitoring/Reporting
System Operations

Program Support

Permitting
Regulatory Support
Expert Witness and Reports
Contractor Procurement
Decommissioning/Demolition

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