Site Remediation, Complex Bedrock Evaluation, DNAPL Management Cost Reduction

Investigation, Remedy Selection, Design, Construction Oversight, OM&M

Highlights

New Hampshire

Complex Bedrock

Consultant Management and Coordination: KEY managed specialty consultants and contractors in order to meet the varied and wide ranging project needs to assess the Site's natural resources.

Groundwater

Management Permit

Community Relations

Remedial Design

Remedial Construction
Oversight

Permitting

Project History

Former Wood-Treating Site

New Hampshire



Regulatory Agency/Programs

New Hampshire Department of Environmental Services (NHDES)/Administrative Consent Decree, Groundwater Management Permit

Constituents of Interest

Metals, VOAs, SVOCs, DNAPL

Project Description

KEY is engaged to provide consulting services on a former wood treating site in Nashua, NH. The site is approximately 100 acres in size and is bordered by a residential community, a City park and the Merrimack River. KEY recently gained approval of a Remedial Action Work Plan (RAP) prepared in accordance with NH Code of Administrative Rules Env-Or 606. Once approval of the RAP was obtained, KEY prepared and implemented a Pre-Design Work Plan which included, among other activities, investigation of the potential for DNAPL in bedrock. KEY prepared a Remedial Design Report (RDR) for the

remedy that included installing a cement bentonite slurry wall, sediment removal, capping of soils and in-situ stabilization of impacted subsurface soils. The groundwater remedy includes natural attenuation and monitoring for a Groundwater Management Zone /Groundwater Management Permit (GMP).

KEY acted as a liaison with the NHDES, public entities and federal agencies.

KEY led the effort to obtain various state, local and federal permits. KEY managed other specialty consultants and contractors in order to meet the varied and wide ranging project needs to assess the Site's natural resources.

KEY also led the effort for public outreach and participated in various meetings and opportunities to inform the public of the project.



Activities Performed

- Conducted investigation needed to determine the extent and potential recoverability of DNAPL
- Conducted all pre-design efforts and prepared Remedial Design documents and associated plans and CQA documents
- Designed and managed the installation of an infiltration gallery system for groundwater pumped during DNAPL recovery efforts
- Prepared a Remedial Action Plan to address DNAPL, river sediments and groundwater

- Prepared bi-weekly reports to the applicable State Departments
- Conducted all pre-design efforts and prepared Remedial Design documents and associated plans and CQA documents
- Prepared and obtained all state, local and federal permits for the project.
- Performed construction oversight to support implementation of the remedial actions including cement bentonite wall, site grading, waste material conditioning and consolidation, geosynthetic liner cap installation, in situ treatment and site restoration
- Provided oversight to verify compliance with the NHDES, Alteration of Terrain, Shoreland, Wetlands, and Construction Erosion and Sediment Control permits
- Submitted Storm Water Pollution and Prevention inspection reports on a weekly basis with documentation of compliance repairs
- Conducted public outreach with various stakeholders including the local government, river committee personnel, State Oversight Consultants and interested residents















