eki environment & water

Program Manager at Midwest Superfund Site Midwest Federal Superfund Site



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On behalf of two Fortune 100 clients, EKI provides overall technical oversight at an active Federal Superfund site in the Midwest. EKI has coordinated and tracked the actions of six major remedial contractors. Our services, including identifying cost-effective technical strategies, have added clear value to our clients' site management effort, resulting in present worth savings for our clients exceeding one-quarter billion dollars.

As Program Manager, EKI performed the following:

- Directed the characterization of an 8-acre onsite industrial landfill containing 300,000 cubic yards of chemical process waste, including spent chlorinated solvent DNAPLs and process sludges with polycyclic aromatic hydrocarbons and BTEX. Chemicals associated with this landfill were found to have leached into the underlying fractured, dolomitic bedrock, a local source of drinking water.
- Oversaw the remedial design of a cap over the landfill along with a large-scale landfill gas extraction and treatment system.
- Performed a comprehensive evaluation of natural attenuation parameters in site groundwater and demonstrated to United States Environmental Protection Agency that significant biological degradation was occurring in the subsurface and that this degradation would be enhanced by shutdown of the groundwater extraction and treatment system.
- Proposed and obtained regulatory approval for a comprehensive revised remedy, which included monitored natural attenuation, including the preparation of a CERCLA-consistent Focused Feasibility Study evaluating existing remedial technologies and their potential effectiveness, implementability and cost at the Site.
- Coordinated the implementation of an alternative remedial approach whereby downgradient residences on private wells were connected to an extension of the municipal water system. These connections were coupled with the shutdown of the existing pump-and-treat system and an expanded monitoring network. The remedy change was justified through a Technical Impracticability (TI) evaluation overseen by EKI.
- Created a conceptual site model, supervised the drilling of numerous deep and shallow bedrock wells, and integrated stratigraphic, hydrologic, and geophysical data into a digital threedimensional groundwater flow model that guided the groundwater and soil vapor extraction remediation system design.