

## Davis Liquid Waste Superfund Site Smithfield, Rhode Island

ESS Group, Inc. is currently the Supervising (Prime) Contractor for the implementation of the Groundwater Remedy Pre-design Statement of Work (SOW) for the potentially responsible parties (PRPs) at the Davis Liquid Waste Superfund Site in Smithfield, Rhode Island. The site was formerly used for the disposal of a variety of liquid industrial wastes including chlorinated volatile organic compounds, medical wastes, and over one million tires.

The objective of the pre-design work is to characterize current site conditions for the purpose of evaluating the appropriateness of the original groundwater remedy, groundwater pump and treat, and other alternative approaches that would be acceptable to the Site PRPs, US Environmental Protection Agency (USEPA), and Rhode Island Department of Environmental Management (RIDEM). The project scope has included the development and negotiation of work plans for a comprehensive hydrogeologic evaluation and groundwater plume delineation in a fractured bedrock setting.

Phase I of the investigation program, which included a comprehensive well integrity assessment and groundwater monitoring of the existing monitoring well network, was completed in 2002. Phase II was completed in 2004 and involved the installation of overburden and bedrock wells, followed by the comprehensive monitoring of an extensive groundwater monitoring well network to allow better definition of the groundwater plume and hydrogeologic characteristics. Phase III, which involved groundwater monitoring and evaluation of geochemical conditions related to natural attenuation for approximately two years, has also been completed. Phase IV activities, including a Focused Feasibility Study to select the groundwater remedy, are currently ongoing and include a detailed subsurface investigation in the former disposal areas.

ESS uses a GIS/Key™ database to house all chemistry, geology, and hydrology data that has been collected at the Site during the pre-design investigation. This database supports the efficient management and reporting of data and the development of graphics for data interpretation.

ESS also supports the PRPs with both task-specific and long-range cost estimating and strategic technical and regulatory consulting services.



### Relevant Services Include:

- Supervising Contractor
- Preparation of USEPA Region 1 Work Plan Documents
- Development and Negotiation of Groundwater Investigatory Approaches with USEPA and RIDEM
- Implementation of Comprehensive Hydrogeologic Evaluation in Unconsolidated Deposits and Fractured Bedrock
- Performance of Monitored Natural Attenuation Evaluation as Potential Groundwater Remedy
- Comprehensive Groundwater Monitoring Program
- GIS/Key™ Database Management and Reporting
- Development of Conceptual Model of Site Hydrogeology and Fate and Transport
- Preparation of Task-Specific and Long-Range Cost Estimates
- Development and Implementation of Source Area Investigation Program