



Taking full advantage of the RCRA Cleanup Reforms of 1999 and 2001 and working closely with EPA Region 2, NJDEP and our client, Princeton Geoscience greatly facilitated RCRA Facility Investigation (RFI) progress at an active solvent recycling facility in New Jersey. We used abbreviated, dynamic workplans and regular progress updates and data transmittals in lieu of formal reporting for each phase of work; fully utilized existing data for offsite areas and followed a site-wide rather than area by area investigative approach onsite. Major accomplishments to date: Documented Environmental Indicators prior to EPA's target date; assessed/delineated extent of volatile organic compound (VOC) extent in soil and groundwater, including dense, non-aqueous phase liquid (DNAPL) in the soil and bedrock; conducted vapor intrusion (VI) sampling/assessment onsite and on four adjacent properties; developed a conceptual site model (CSM) that accounts for complex site conditions; prepared a three-dimensional groundwater flow model (MODFLOW); applied for and obtained an NJDEP Water Allocation Permit; obtained initial approvals from EPA and NJDEP for extraction and treatment system modifications to optimize a bedrock groundwater remedy that has operated since 1980. Current activities: Completing final delineation of offsite soil impact and DNAPL extent; negotiating final remedial system permit requirements; and establishing institutional controls, including Deed Notices and a groundwater Classification Exception Area (CEA). Planned activities: A Corrective Measures Study (CMS) will be conducted in streamlined fashion by applying NJDEP's Remedial Action Selection guidance. The multi-phase RFI and CMS will be documented in a single RFI/CMS Report.



A chemical recycling company began RCRA Corrective Action, following issuance of a HSWA Permit. The issued permit contained detailed and prescriptive requirements for investigation of various environmental media, submittal of draft and final versions of work plans and reports for multiple phases of investigation. In addition, the permit specified nine supposedly discrete site areas (six SWMUs and three AOCs) for separate investigation and reporting which were in fact more or less continuous with one another. Princeton Geoscience determined that the permit-required approach would result in problems common to many Corrective Action cases: onerous investigative requirements, confused delineation

from one area proceeding into another, non-productive paperwork and generally slow, expensive and inefficient progress through the program. We proposed an alternate approach, consistent with the RCRA Cleanup Reforms of 1999 and 2001. Under the revised approach accepted by EPA Region 2 and NJDEP, soil and groundwater was investigated using a site-wide rather than area-by-area investigative approach. Review of historical aerial photographs and site maps provided a good understanding of likely conditions at SWMUs and AOCs, allowing delineation to be completed onsite



in one field mobilization. Princeton Geoscience has identified collaborative efforts by which the owners of the subject site and



adjacent contaminated properties may most cost-effectively remediate groundwater contamination originating on their respective sites. Based on the investigative findings to date, components of the final remedy will include optimization of the existing pump and treat system to account for complex hydrogeologic conditions identified during the RFI, maintenance of existing concrete cover, and establishing institutional controls. An abbreviated CMS will evaluate and document the appropriateness of using the modified system as a final groundwater remedy. Final reporting for the investigative work and results of a CMS will be consolidated into a single RFI/CMS Report to EPA and NJDEP.