HENKEL CORPORATION
Ontario, Canada

Hydrogeologic Investigation

Alberto A. Gutiérrez served as principal in charge of this project while serving as President of GCL, predecessor to Geolex, Inc.

Under contract to Cognis, Inc., a wholly owned subsidiary of the Henkel Corporation, GCL provided remedial action design services for a former chemical manufacturing facility in Ontario, Canada. Cognis was the environmental management division of Henkel. The plant site, which manufactured organic chemicals for many years, had been operated by numerous companies prior to ownership by Henkel. Subsurface contamination consisted of petroleum hydrocarbons, halogenated hydrocarbons, and oil and grease. Groundwater and soil had been impacted by accidental releases and discharges from the site. Off-site migration of contaminants had also occurred. Adjacent sites impacted by the release included residential areas and a proposed school.

Based upon a detailed site investigation, GCL evaluated a series of potential remedies for an interim and final remedial action for the site. The alternatives for a soil remedy included excavation and off-site disposal, excavation and on-site treatment, in situ bioremediation and in-situ soil-vapor extraction. The practicality and effectiveness of each alternative was evaluated and two alternatives were selected for conceptual design and cost analysis. Excavation and off-site disposal was evaluated because an adjacent facility had selected this remedy and the public had accepted this solution. In situ soil-vapor extraction was also evaluated due to the high ranking of this method of the initial screening of alternatives.

GCL prepared a final report to Cognis for use as a decision-making document for Henkel management for use in public meetings and as a provincial permitting document. GCL also evaluated alternatives for groundwater remediation of the site and selected in situ vapor extraction as the remedy because it would integrate with several potential groundwater remedial actions, such as air sparging.

Major Project Elements:

- Remedial design/ Remedial action
- Hydrology/Hydrogeology
- Feasibility study
- Cost analysis
- Soil-vapor extraction
- Permitting
- Public participation

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