

Mitchel Field Project



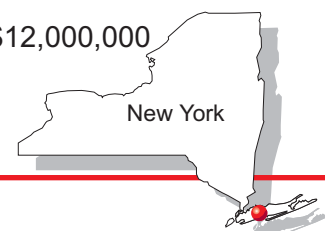
Location: Nassau County, Long Island, New York

Site Issue: Ground water contamination in a drinking water aquifer.

Solution: Design and construct a multi-story treatment plant and associated ground water extraction system.

Client: Purex Industries

Total Cost: \$12,000,000



Brief History

Bulk chemicals arrived by railroad tanker cars for repackaging into smaller containers at this former distribution facility. Soil and ground water beneath this facility became impacted by VOCs originating from spills entering dry wells in the parking lot. HE&C personnel were responsible for both design and construction of the soil and ground water remediation system, including preparation and submittal of all design documents and work plans. The project was bid and completed on a lump sum basis and costs were tracked and controlled by HE&C using electronic accounting software. The scope of work included constructing the water treatment system and the building which housed the system. Approximately 80 percent of the work on the project was completed by subcontractors under the direction of HE&C construction management personnel. Local union subcontractors were retained to perform electrical, structural, HVAC, roofing, painting, and paving work. HE&C also conducted monthly meetings which served as the mechanism to update the owner and the regulatory community as to the project status. The overall project schedule was monitored using Primavera software, and updated schedules were prepared and distributed monthly at the project meetings.

The primary agency governing approval of work on the project was the New York State Department of Law. The Nassau County Department of Public Works acted as the oversight agency during construction. Other regulatory oversight agencies included the New York State Department of Environmental Conservation and the Nassau County Department of Health. HE&C personnel participated as a technical advisor for the project's community relations program. The program included two press conferences by the New York State Attorney General, and conducting tours of the facility for local groups such as the League of Women Voters.

Primary Activities Performed by HEC Personnel

- Designed and managed the construction of the multi-story, 6,000 sq. ft. treatment plant.
- Performed ground water modeling to locate wells based on pump test analysis of two aquifer levels.
- Designed water collection system to connect five wells with 700 feet of pressurized pipeline.
- Utilized on-site vapor phase carbon adsorption and regeneration system.
- Designed, built, and installed eight air strippers to treat 1,400 gpm by aeration.
- Designed iron oxide removal system.
- Utilized four 20,000 pound liquid phase carbon adsorption units.
- Designed and installed a recharge system to flush 700 gpm through the ground to remove contaminants above the ground water table.

