

## Site Information

Hazardous Waste Site  
Hauppauge, New York

## Client Information

NYS Department of  
Environmental Conservation

## Project Highlights

- Site is listed as a PCE impacted NY State inactive hazardous waste site
- Over 845,000lbs of Potassium Permanganate mixed into a 2% solution (> 5.0M gallons) injected
- EnviroTrac constructed, operated, and monitored a full scale automated batching and injection system
- 38 injection points at select location throughout the impacted area
- A comprehensive monitoring program was implemented in order to track remediation progress



5 Old Dock Road  
Yaphank, NY 11980

Phone: 631-924-3001  
Fax: 631-924-5001

Website: [www.envirotrac.com](http://www.envirotrac.com)

# INSITU CHEMICAL OXIDATION TREATMENT AT HAZARDOUS WASTE SITE

EnviroTrac Ltd was contracted by the New York State Department of Environmental Conservation to construct and operate a full scale batching and injection system at the Oser Avenue site located in Hauppauge, New York. The system was implemented in order to address high levels of dissolved phase Tetrachloroethylene (PCE) in the saturated zone of the soil formation due to former industrial operations that had taken place at the site, by the addition of a chemical oxidant.

The fully automated batching system included equipment capable of inducting a granular form of potassium permanganate (KMnO<sub>4</sub>) from 3,300 pound capacity cycle bins that were delivered to the site and loaded in to the mixing unit. The granular potassium permanganate was mixed and dissolved into a solution with potable water into a 2% solution that was then transferred to four storage tanks totaling 80,000 gallons of storage capacity. The mixed solution was then injected using pumps located in the batching system into 38 injection points located at select locations throughout the subject site. The injected oxidant reacts with contaminants, producing innocuous substances such as carbon dioxide, water, and inorganic chloride. Throughout the three staged injection program a total of 845,000 pounds of potassium permanganate was mixed into 5,060,000 gallons of a 2% solution and delivered to the saturated zone of the subsurface.

As part of the \$1.94M contract, EnviroTrac Ltd provided services that included the installation of the injection and monitoring wells, the construction of the batching, storage, and injection system, carrying out the injection program, system O&M, and ground-water sampling and monitoring.

