

## Remediation at Multiple Service Stations using Badger Application System

*RegenOx® Applied to Three Long Island Sites Contaminated with High BTEX Levels*

### Project Highlights

- BTEX levels higher than 20 mg/L observed on-site.
- Badger Injection System allowed for high volume applications of up to 700 gallons per injection point.
- In situ chemical oxidation (ISCO) using 56,400 pounds of RegenOx® was used at three service station sites.

### Project Summary

Several service station sites in Long Island, N.Y. were contaminated with high levels of BTEX. In heavily impacted areas, BTEX levels were higher than 20 mg/L. RegenOx was applied to the sites using the Badger Injection System, which is operated by Environmental Assessment and Remediation (EAR). The Badger injection process is used to deliver large volumes of reagent to targeted treatment zones. The objective is to obtain widespread distribution of reagent. Typical injection volumes are 500 to 700 gallons per injection point.

### Remediation Approach

The Long Island sites range in size from 600-square-feet to over 4,000-square-feet.

#### Injection Amounts:

- Site 1 - 30,000 pounds of RegenOx; 4 Injection Events
- Site 2 - 24,000 pounds of RegenOx; 3 Injection Events
- Site 3 - 2,400 pounds of RegenOx; 2 Injection Events

### Technology Description

RegenOx is an advanced chemical oxidation technology that destroys contaminants through powerful, yet controlled direct oxidation and free-radical reactions. This product maximizes in situ performance through the use of a solid alkaline oxidant (a sodium percarbonate complex) and a multi-part catalyst. These oxidation reactions do not inhibit natural bacterial populations and are compatible with biological treatment methods.



RegenOx was applied to three Long Island sites that were heavily impacted with BTEX.



A Badger Injection System, operated by Environmental Assessment and Remediation, was used on-site.

**Site Type:** Service Station

**Contaminant of Concern:**  
BTEX

**Concentrations:**  
BTEX - >20 mg/L

**Remediation Approach:**  
In Situ Chemical Oxidation

**Soil Type:** Silty Sand

**Technology Used:** RegenOx