



OVERVIEW

At an industrial site in New Jersey, historical leakage from a UST released petroleum hydrocarbons into the underlying groundwater and soil creating a health and ecology risk to overlying and down gradient receptors. Soil concentrations of PHCs included:

- BTEX (maximum concentration of 1,140 µg/g)
- F1 & F2 (maximum concentration of 4,200 µg/g)
- F3 & F4 (maximum concentration of 1,100 µg/g)

SCOPE OF WORK

Vertex staff:

- Acquired all relevant permits to complete the remediation program
- Designed and optimized an *in-situ* program to maximize treatment efficiencies
- Implemented a program that minimized capital expenditures and infrastructure



THE VERTEX APPROACH

- Chemical oxidation
 - Overburden formation
 - Multiple applications
 - Under parking lot and roadway
- Injection of chemical oxidant
 - Activated Persulphate
 - Hydrogen peroxide activator (Klozur)
- Injections completed using:
 - Vertical wells

OUTCOME

- Over 40,000 L of oxidant solution delivered to impacted areas
- Minimal disruption to operations
- Nearby structures not affected
- Persulphate solution effectively distributed throughout impacts areas
- Remediation objectives met for:
 - BTEX
 - F1 & F2
 - F3 & F4
- Record of Site Condition Obtained

