



FORMER DRY CLEANING FACILITY- BROWNFIELD SITE

Duluth, GA

Contaminants:

PCE and daughter products

Treatment:

ISCO injections using iron activated sodium persulfate

Site Status:

Limitation of Liability/NFA

- This site was a former dry cleaner in a strip mall in Gwinnett County that experienced a release of dry cleaning solvents (PCE). Highest PCE concentrations in soils were 1.3 ppm at 23-25 ft-bgs, and treatment goals included reduction of PCE to <math><0.5\text{ ppm}</math>, the Type I RRS. The treatment area was 140sf at depths of 25-30 ft-bgs and soils consisted of fine-grained silty sandy and sandy silt saprolite.
- Due to depth of contamination, access restrictions, and time frame for implementation, both soil excavation and soil vapor extraction (SVE) were eliminated as remedial alternatives. After reviewing the site geochemistry and soil conditions, Eden personnel designed an ISCO program utilizing sodium persulfate combined with a slow release iron activator. Two injection treatments were performed in the source area utilizing a 15-20% solution of activated persulfate with delivery into 1" PVC injection wells screened from 20-35 feet.
- During injection, geochemical parameters (primarily pH and conductivity) were measured indicating that the oxidant was successfully delivered to the target zones.
- Confirmatory sampling indicated results indicated treatment goals were achieved. The site subsequently received Limitation of Liability approval/NFA from the Georgia EPD.

