



# ISCO TREATMENT AROUND PIPELINE

Troup County, GA

## **Contaminants:**

BTEX, namely  
benzene

## **Treatment:**

ISCO injections  
using sodium  
persulfate

## **Site Status:**

Active, pending  
closure

- The site experienced a release at 2 pipeline locations dating back to the 1950s. Maximum dissolved benzene concentrations were  $>7,000 \mu\text{g/L}$ . An aerobic bio-stimulant treatment was previously performed which initially appeared effective; however, concentrations increased later due to mass desorption.
- In the first location, iron activated sodium persulfate was injected into 50+ direct push points. Confirmatory sampling over a 6-month period indicated a 90-95% reduction in dissolved benzene, with the highest benzene concentration detected at  $1,000 \mu\text{g/L}$ , below treatment goals.
- In the second location, a higher dose of  $>20,000$  lbs of iron activated persulfate was injected. Target treatment goals in this location were to  $3,750 \mu\text{g/L}$  benzene or levels supportive of monitored natural attenuation. Location 2 historically contained free product. In order to limit subsurface corrosion, a citrus based iron chelate was utilized as a persulfate activator. Confirmatory sampling results for location 2 are pending.



*Example pipeline, courtesy of FERC*