

An environmental subsurface investigation and remediation company

In-Situ Chemical Oxidation Event

Former Gas Station Site-Brunswick, Georgia

Introduction: Geo Lab was contracted by a local environmental consulting firm to conduct an in-situ chemical oxidation injection event utilizing activated sodium persulfate to treat ground water at a former gas station site in Brunswick, GA. The objective of the injection event was to achieve contaminant concentrations below closure levels.

Contaminants: Benzene, Tolulene,

Ethylbenzene, and Xylenes

Remediation Treatment: Klozure Per-

sulfate activated with NaOH.

Application: In-situ injection

Design and Implementation: Geo Lab arrived on site with an injection system tai-



lored specifically for this site. The injection event was conducted over the course of 2 nights due to safety hazards associated with a high traffic parking lot. Approximately 1400 gallons of activated persulfate at 5% solution was distributed among 7 wells that were previously installed on site. A manifold system was utilized to inject into multiple locations at the same time to reduce the amount of time on site. Injection pressures ranged from 3 to 5 psi to reduce the possibility of day-lighting and the creation of preferential pathways in the subsurface



Summary

1400 gallons of activated sodium persulfate solution was successfully injected at the site. With the use of a manifold system, the project was completed a day earlier than proposed. There was no surfacing or day-lighting observed during the project. Traffic issues were avoided by scheduling the project during non-business hours.

Project Summary

ISCO Pilot Event

Site

Former Gas Station Brunswick, GA

Contaminants of Concern

- Benzene
- Tolulene
- Ethylbenzene
- Xylenes

Remediation Approach

Klozure Persulfate activated with NaOH

Summary

 1400 gallons of 5% Klozure activated persulfate solution was successfully injected among 7 existing wells

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