

An environmental subsurface investigation and remediation company

In-Situ Chemical Oxidation Event

Active Gas Station-Mableton, Georgia

Introduction: Geo Lab was contracted by a local environmental consulting company to conduct an in-situ chemical oxidation pilot event at an active gas station in Mableton, GA. The objective of the project was to evaluate the overall effectiveness of the injection as a treatment alternative for this site.

Contaminants: Benzene, Tolulene,

Ethylbenzene, Xylenes

Remediation Treatment: RegenOx®, a

two-part chemical oxidant

Application: In-situ injection

Design and Implementation: Geo Lab arrived on site with a Geoprobe 6620 track unit and it's Chem-Ox ready injection system. The consultant pre-located 13 direct push injection points on a grid pattern based on the anticipated distribution radius of the

RegenOx® material. Over the course of 6 days, approximately 3000 gallons of RegenOx® material was distributed among the 13 direct push locations. The Geoprobe 6620 track unit was utilized to drive 1.5 inch steel rods with expendable injection tips to a target depth of 32 feet below ground surface. Approximately 60 gallons of solution was distributed into four different intervals as the rods were extracted. Up to three different injection points were injected into at one time through the use of a manifold system. Injection pressures ranged from 15 psi to 40 psi depending on the acceptance rate of the subsurface, and Injection volumes varied among DPT points due to subsurface conditions and acceptance rates.





ISCO Pilot Event

Project Summary

Active Gas Station Mableton, GA

Site

Contaminants of Concern

- Benzene
- Tolulene
- Ethylbenzene
- Xylenes

Remediation Approach

 In-Situ injection of a twopart chemical oxidant (RegenOx®)

Summary

genOx® material was injected among 13 direct push injection points

Summary

Geo Lab successfully injected 3000 gallons of RegenOx® remediation material among 13 direct push injection points utilizing a Geoprobe 6620 track unit. The use of a manifold system helped speed up the injection process and the project was completed on time and within budget.

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