PlumeStop® Brownfield Site Remediation Reduces cVOCs by up to 97% in 78 Days

Rapid Treatment and Precise Project Execution Keeps Large Chicago Redevelopment on Track

Project Highlights

- Monitoring wells indicated up to a 97% reduction in cVOCs 78 days post treatment
- Development schedule of urban Chicago high-rise hotel and sports arena development kept on track with effective remediation implementation
- PlumeStop® provided a long-term means of addressing contaminant mass flux migrating from untreated areas

Project Summary

Located in the heart of downtown Chicago, this brownfield site was impacted by chlorinated solvents used for a range of manufacturing activities over many decades. Redevelopment is underway to construct a multi-million dollar urban event center and sports arena with adjacent hotel and retail space planned.

The affected site stood in the way of the planned redevelopment activities. REGENESIS® Remediation Services (RRS) was contracted to treat the contaminated area. An effective combination of PlumeStop®, Hydrogen Release Compound (HRC®) and a bioaugmentation culture, BioDechlor INOCULUM Plus® (BDI Plus), was applied to achieve the remediation targets. At 78 days post-application, the two primary treatment performance wells observed up to 97% reduction in total cVOCs achieving site remediation goals.

Site Details

Site Type: Former industrial manufacturing plant

Contaminant of Concern: cVOCs, TCE

Remediation Approach: Sorption, Biodegradation, and Bioaugmentation

Soil Type: Silty Sand, Clay

Technology Used:

PLUMESTOP Liquid Activated Carbon

HRC HYDROGEN RELEASE COMPOUND

BDI BIO-DECHLOR INOCULUM

Technology Description

PlumeStop is an innovative groundwater remediation technology designed to address the challenges of excessive time and end-point uncertainty in groundwater remediation.

HRC is an engineered, hydrogen release compound designed specifically for enhanced, *in situ* anaerobic bioremediation of chlorinated compounds in groundwater or highly saturated soils.

BDI Plus is designed for use at sites where chlorinated contaminants are present and unable to be completely biodegraded via the existing microbial communities.

Results

By the first monthly monitoring event, the performance wells met the remediation objective and continued to maintain cVOC reduction throughout the monitoring period.

REGENESIS®

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