

Excavation Treatment Reduces Contamination Below Clean-Up Target Levels

ORC® Advanced Pellets Enhance Excavation Treatment at Florida Retail Petroleum Station

Project Highlights

- Remediation activities included excavating a 1,600-square-foot area contaminated with BTEX and TPH.
- ORC Advanced Pellets applied on-site to stimulate aerobic biodegradation during backfill activities.
- Two monitoring wells reduced to below groundwater contaminant targets.

Project Summary

The Bryant Grocery and Saw Co. site in the Florida Panhandle was the subject of excavation activities to remediate significant BTEX and TPH contamination as a result of historical releases from gasoline underground storage tanks (USTs). Excavation activities were planned for an area of approximately 1,600-square-feet to a depth of 14 feet below ground surface.

Remediation Approach

During backfill activities, ORC Advanced Pellets were added to provide a long-term source of oxygen to promote aerobic biodegradation of residual, dissolved-phase petroleum constituents remaining in the excavation area. A total of 520 pounds of ORC Advanced Pellets were applied to the saturated zone of the excavation.

Both MW-7R and MW-14R have seen BTEX, TRPH, and MTBE reduced to stringent groundwater quality standards for Florida (Groundwater Contaminant Target Levels, or GCTLs). In MW-5R, Total Residual Petroleum Hydrocarbons (TRPH), MTBE, benzene, and ethylbenzene have been reduced to below GCTLs. Toluene and xylenes concentrations remain slightly above GCTLs but have declined by more than 99% related to both constituents.

Technology Description

Advanced Formula Oxygen Release Compound (ORC Advanced®) is a proprietary formulation of food-grade, calcium oxy-hydroxide that produces a controlled-release of molecular oxygen for periods of up to 12 months upon hydration.

Site Type: Retail Store

Contaminant of Concern:
BTEX, TPH

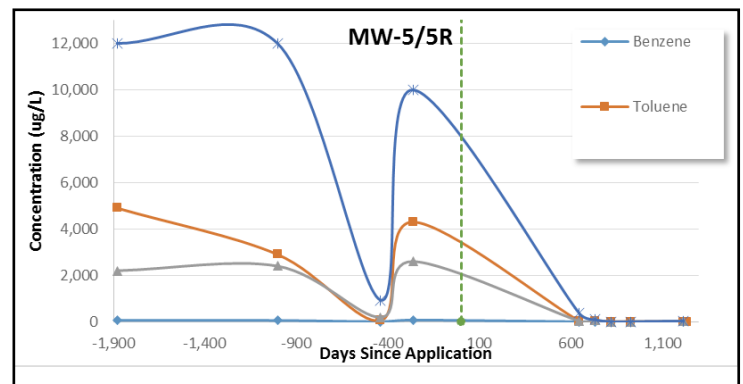
Remediation Approach:
Enhanced Aerobic
Bioremediation Post-
Excavation

Soil Type: Sand

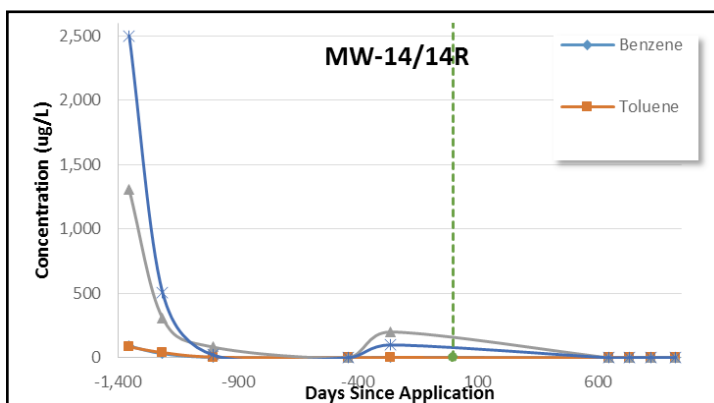
Treatment Area: 1,600
Square Feet

Technology Used:
ORC Advanced

Contaminant Concentration Trends in MW 5



Contaminant Concentration Trends in MW 14



Contaminant Concentration Trends in MW 7

