



MODIFIED ADVANCED OXIDATION TECHNOLOGY (mAOT)

FORMER MANUFACTURED GAS PLANT (MGP) LOUISVILLE, KENTUCKY

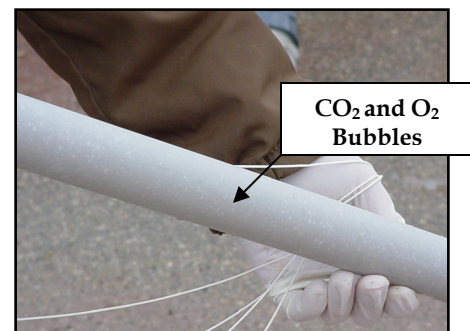
Client: Private Consulting Firm
Contaminants: Coal Tar Residue and Dissolved Phase Benzene
Impacted Matrix: Saturated Soil and Ground Water
Scope of Work: In-Situ Chemical Oxidation Treatment
Oxidant: Catalyzed Klozur™

Project Specifics: Specialty Earth Sciences, LLC was contracted to provide the remediation of residual coal tar impacted soil and ground water utilizing chemical oxidation methodologies.

Based on historical analytical data, ongoing leaching of dissolved phase benzene from impacted soils into ground water had persisted between 320 µg/L and 264 µg/L over the course of six years of monitoring.

mAOT injections were implemented for a period of one week utilizing a combination of Klozur™ oxidant and proprietary catalyst solution, in conjunction with Subterranean Hydrocarbon Oxidation Circulation (SHOC) in-situ delivery techniques. Inoculate mixtures and concentrations were derived from bench scale study results conducted prior to injection activities.

Benzene mass was reduced from pre-injection baseline levels of 276 µg/L to a sustained level of below 5 µg/L. Concentration levels currently remain below laboratory detection limits.



Current Site Status: Site Closure Pending