E-REDOX® CASE STUDY: *IN SITU* GROUNDWATER BENZENE BIODEGRADATION ENHANCEMENT AT FORMER PETROLEUM BULK PLANT IN LAFAYETTE, CO

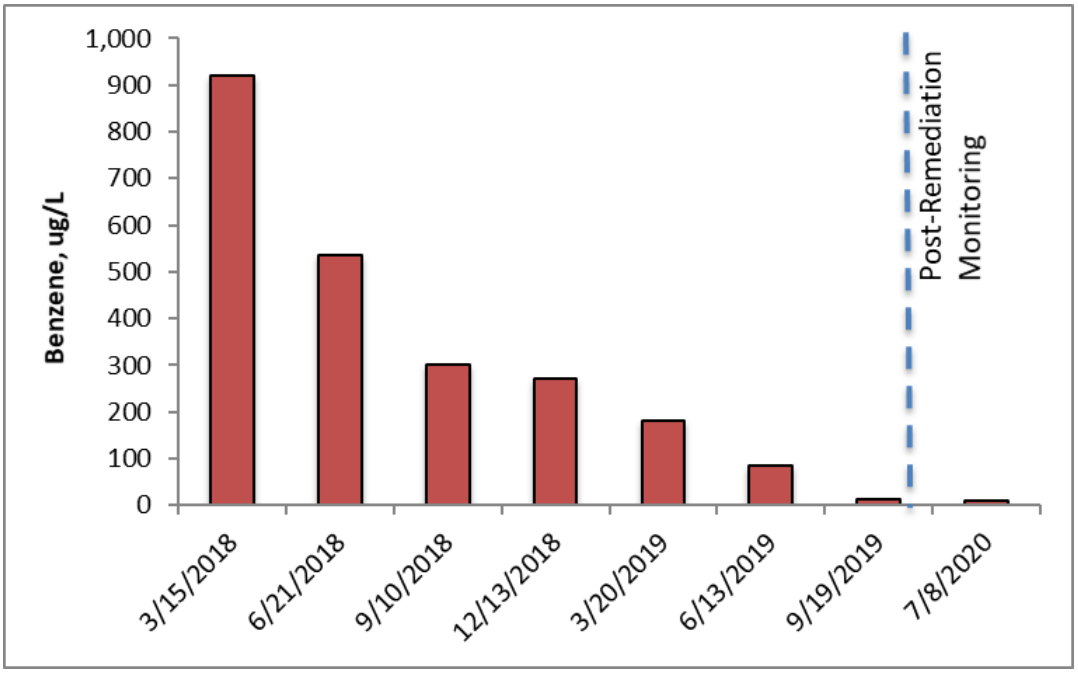
Location: Former petroleum bulk plant (contaminant area currently in residential area) in Lafayette, CO

Contaminated Matrix: Groundwater

Primary Contaminants of Concern: Benzene

Project Objective: Enhancement of in situ contaminant degradation by full-scale implementation of E-Redox® technology

Case Study: E-Redox® units were installed in groundwater wells within a residential area that had a contaminated area of 6000 ft^2. The units were installed in an array throughout the contaminant plume, and operated with zero energy input. After 18 months of operation, approximately 99% benzene mass removal was observed at the site (see figure below). Voltage was generated by all E-Redox® units, which ranged from 30 to 293 mV. The voltage profiles serve as a convenient tool for monitoring the E-Redox® units performance and groundwater quality in general, without groundwater sampling. The implementation of E-Redox®-O technology at this site has helped achieve a substantial reduction of overall benzene concentrations in the groundwater and a site closure with no further action needed.



Overall benzene concentrations

4025 Automation Way, Suite F-4, Fort Collins, CO 80525
970.449.9711 | info@aetecs.com