

PCE Case History

Colorado

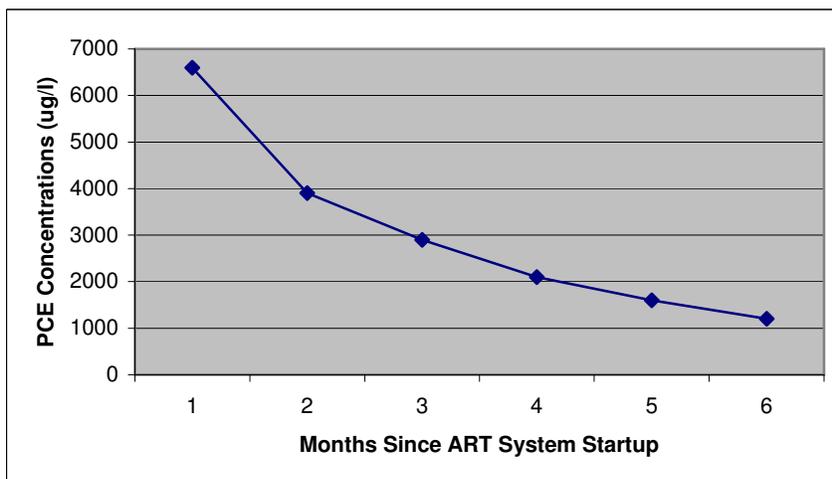
Accelerated Remediation Technologies, LLC (ART) teamed with Harding ESE, Inc. to install the ART Technology as a source area remediation system and as a barrier at a major manufacturing site in Colorado Springs, Colorado.

Contaminant(s) of concern: Tetrachloroethene (PCE) concentration levels exceeded 80,000 ppb in the source area.

Site Description: The international manufacturing facility is located in a high geographic area. Soil types consist of silty and clayey sand with depth to groundwater approximately 30 feet below grade, a saturated thickness of about 3.5 feet with a steep hydraulic gradient. Shallow groundwater in the focused treatment area exhibits concentrations ranging from 0.01 mg/l to 340 mg/l. The plume area is approximately 5 miles in length with a source area covering approximately 5 acres.

Site Remediation History: Soil vapor extraction (SVE), air sparging, pump and treat (hydraulic control) and multiple rounds of anaerobic degradation compound injection over the years (equating to millions) to remedy soils and groundwater had been implemented at this site prior to the ART System. The existing (and past) remediation system(s) had not achieved significant reduction in contaminant levels.

The ART Technology was installed in an existing, 4-inch, source area well utilizing “plant air,” existing SVE equipment and piping. Within two months, the ART Technology had reduced contamination 30-85% in surrounding monitoring wells and had achieved radius of influence exceeding 50 feet. Based on the results of the demonstration project, ten additional ART Systems were installed in the source area. At the same time 5 ART Systems were installed in down gradient wells as a barrier to mitigate offsite, PCE migration.



Summary: Within a short period of operation, the ART Technology demonstrated excellent remediation performance on a site where other technologies had fallen short. Within two months the ART Systems had reduced contamination 30-85% in the surrounding monitoring wells with a radius of 50 feet. The reductions were evident in the vadose zone, saturated zone and groundwater. In less than six months, the concentrations down gradient of the ART barrier were reduced by 82%. Costs for the ART Systems have proven to be significantly less than costs of other remedial approaches.

For additional information about the ART Technology please contact us at 913-436-4384 or visit our website www.artinwell.com

