

C³

Case Study:

Dual Phase Extraction Pilot Test
C3 Technology Vapor Treatment
Oakland, CA

Site History

A major industrial client engaged GEO to perform a 300 cfm dual phase extraction pilot study at a closed facility near the Oakland Bay. Site soils and ground water were impacted by PCE, TCE, Vinyl Chloride, 1,2-DCA, 1,1-DCA, Carbon Tetrachloride, Chloroform, Naphthalene and Benzene. Four DPE wells were installed to varying depths (mean depth 40 ft bgs) across the site.



Project Overview

Location:
Oakland, CA

Duration:
2 weeks

VOCs Removed:
approx. 100 lbs

Contaminants:
PCE, TCE, DCA,
Vinyl Chloride,
Carbon Tetrachloride,
Chloroform,
Naphthalene &
Benzene

Performance Evaluation

The pilot study was conducted over the course of two weeks pursuant to a Bay Area Air Quality Management District permit to operate using a C3 Technology vapor condensation treatment system of 300 cfm. The permit conditions required >99.9% vapor mass removal with TVOC discharge limits below 0.2 ppmV. During the pilot study varying vacuum levels, extraction

rates and extraction intervals were tested and all operational data including mass removal rates was recorded. Approximately 2,000 gallons of groundwater as extracted during the test, and nearly 1,000 pounds of VOCs and SVOCs were removed and treated (both vapor and dissolved phases). The pilot test was successfully completed on time and on budget.