

# C<sup>3</sup>

## Case Study:

Soil Vapor Extraction of Polychlorinated Ethylenes

*Sylmar, CA*



### *Project Overview*

**Location:**  
Sylmar, CA

**Duration:**  
4 Months

**Contaminants:**  
PCE, TCE,  
daughter products

**Initial Off-Gas  
Concentrations:**  
8,000 ppmV

**VOC Mass  
Recovered:**  
11,000 pounds

### Site History

Chlorinated VOCs were identified at an industrial site in Los Angeles during a soil gas investigation. Elevated concentrations of tetrachloroethylene (PCE) and trichloroethylene (TCE) required remedial efforts. A variety of treatment alternatives were considered, including excavation and soil vapor extraction (SVE). SVE was selected as the preferred remedy, and C3 Technology vapor treatment was chosen to treat high levels of off-gas contaminant mass. The C3 Technology system operated for four months and recovered approximately 11,000 pounds of chlorinated VOC mass.

# C<sup>3</sup>

# Case Study:

Soil Vapor Extraction of Polychlorinated Etylenes  
*Sylmar, CA*

Figure 2: Cumulative quantity of contaminants PCE and TCE collected in both pounds and gallons over project timeline.

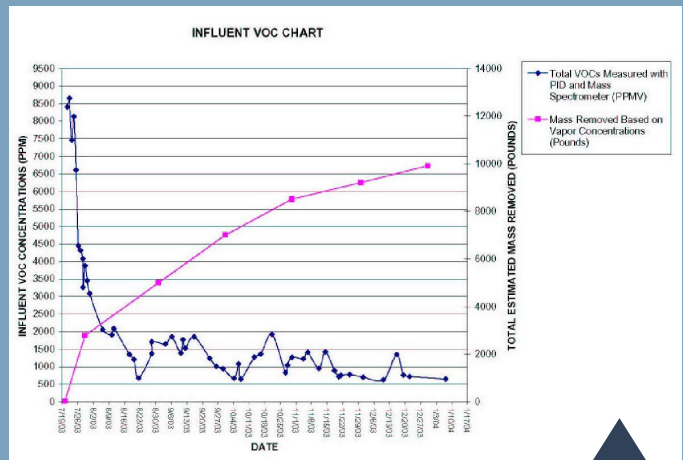
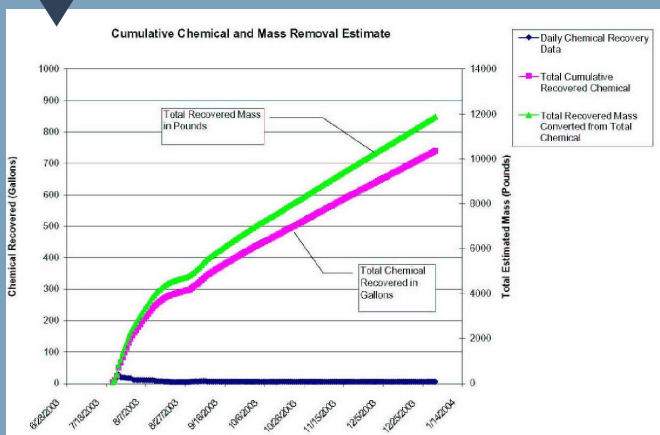


Figure 1: Influent VOC concentrations and cumulative chemical mass recovered over time.

## Performance Evaluation

C3 Technology presented an effective and economical medium term alternative to thermal oxidation or granular activated carbon filtration. The portable treatment system recovered 11,000 lbs of contaminant mass in 4 months, at approximately 35% the cost of conventional vapor extraction and treatment methods.