

C³ | Case Study:

North LA

The project site is an industrial facility located in the foothills of northern Los Angeles, California. The facility utilized chlorinated solvents in operations.

Geology

Based on soil borings site geology consisted of unconsolidated gravely sands, sand, silty sand, sandy silt, and silt from ground surface to more than 200 feet below ground surface (bgs). Groundwater was encountered at the site at approximately 65 ft bgs.

ISTR Overview

Neighborhood:
Industrial

Duration:
24+ Months

Contaminants of Concern:
Tetrachloroethylene
Trichloroethylene
1,1 Dichloroethylene
Carbon tetrachloride

Gallons Treated:
4,500 lbs

Vapor extraction wells:
15

Geology:
Gravely Sands
Sand
Silty Sand
Sandy Silt
Silt
Groundwater

Vapor Treatment System Design

- 200 SCFM system capacity
- Fifteen vapor extraction wells were operated in cycles
- GAC redundant filtration utilized to satisfy SCAQMD requirements

Contaminants of Concern

Primary constituents of concern included tetrachloroethylene, trichloroethylene, 1,1 dichloroethylene and carbon tetrachloride.

Performance Evaluation and Results

The soil vapor extraction system operated at the site for approximately two years. The maximum influent concentrations of 4,196 parts per million by volume (ppmV) was achieved at startup. More than 4,500 gallons of chlorinated solvents had been condensed from the vapor within the first two years of operation. The uptime performance was greater than 90% with average flow rate of 178 SCFM. Provided below is the influent vapor concentration vs time during the first two years of operation.

