

C³

Case Study:

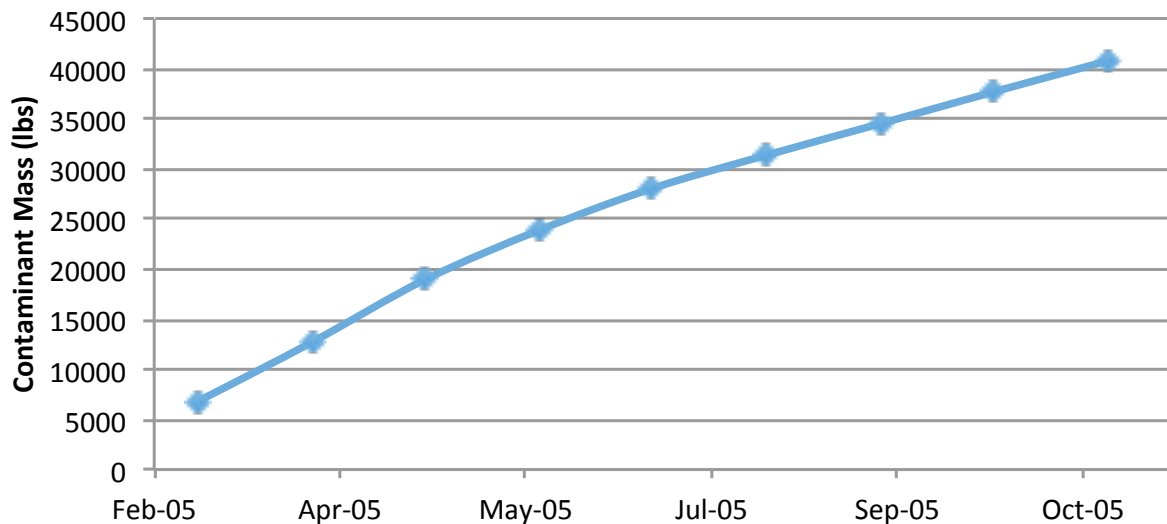
Multiple Phase Extraction and Treatment of Chlorinated VOC Off-Gas

Charlotte, NC

Site History

This active manufacturing facility in North Carolina desired an expedited approach to removing chlorinated VOCs from subsurface soils and soil gas. An MPE well field was designed and installed to address the primary contaminants of concern, including PCE, TCE, 1,2-DCE, Vinyl Chloride and BTEX compounds. Total VOC concentrations in soil gas were initially measured above 5,000 ppmV.

Total Contaminant Mass Removed Over Project Timeline



Performance Evaluation

One 200 scfm capacity high vacuum C3 Technology effluent extraction and treatment system was installed to recover the initial high concentrations of COCs in soil gas. The system operated for approximately nine months, until concentrations of off-gas reach near asymptotic levels. The system recovered over 40,000 pounds of total VOCs. The soil and soil gas goals were reached in the target volumes beneath the manufacturing building. By expediting the mass removal and treatment of VOCs at high concentrations, the use of C3 Technology was estimated to save the client over one year of remediation efforts.