

Project Summary

IET implemented two remedial technology designs at a site in Cherry Hill, NJ. The first remedial injection utilized sulfate free radical oxidation and was implemented in August 2013. The second remedial injection was implemented between April 21st and April 24th 2014 and targeted the promotion of anaerobic conditions in the groundwater, favorable to anaerobic bacteria that degrade CVOCs. The site has been identified as having soils and groundwater impacted by the historical spill of chlorinated solvents. The primary class of compounds of concern at the site are 1,1,1-trichloroethane (1,1,1-TCA), trichloroethene (TCE) and their daughter products.

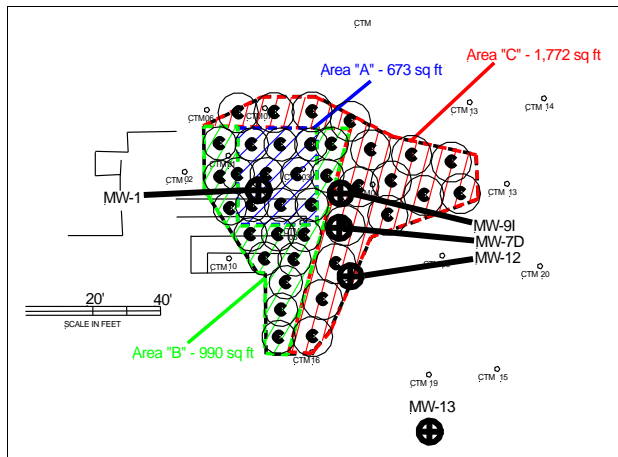


Figure 1. Injection Points and Well Locations of First Remedial Design

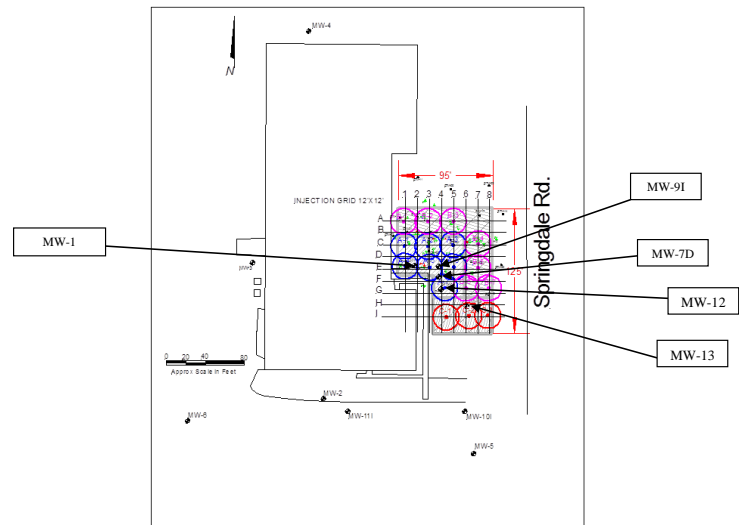
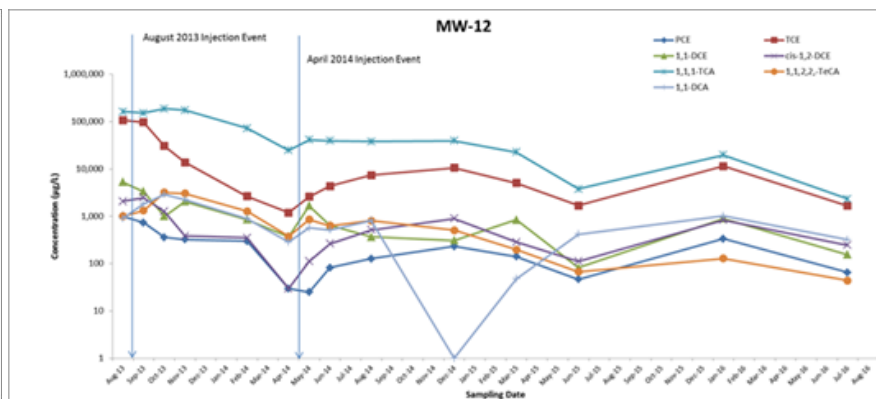
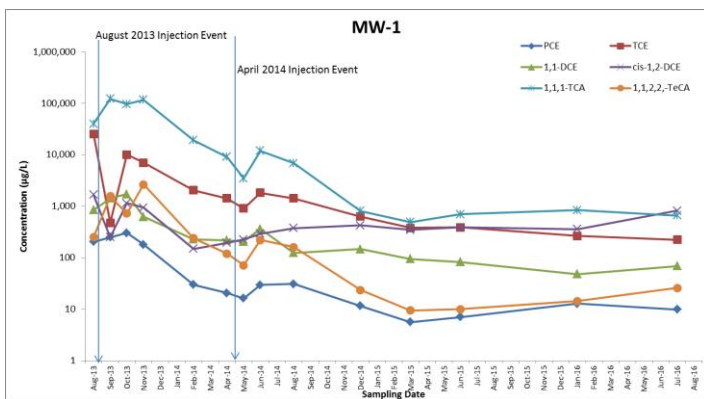


Figure 2. Injection Points and Well Locations of Second Remedial Design



Conclusions

- In targeted well MW-1, PCE, TCE and 1,1,1-TCA decreased by 95%, 99% and 98% respectively since the August 2013 sampling period. Similarly, to the parent compounds, the concentrations of 1,1-DCE and cis-1,2-DCE have decreased by 92% and 51% respectively.
- In targeted well MW-12, the concentrations of the chlorinated ethanes 1,1,1-TCA, 1,1,2,2-TeCA and 1,1-DCA have decreased by 99%, 96% and 65% respectively. Similar behavior is observed for the concentrations of the chlorinated ethenes. The concentrations of PCE, TCE, 1,1-DCE and cis-1,2-DCE showed overall decreases of 96%, 98%, 97% and 88% respectively.