

## Case Study Pit Water Treatment Project

### Introduction

Two large pit excavations contained significant solvent and petroleum hydrocarbon contamination. The local regulatory authority wanted to treat the water within the pits prior to refilling the tank cavities.

### Treatment Method

Advanced Oxidation Technology, Inc. tested the water within the pits to establish how much oxidation would be required to achieve the state mandated limits. After calculating the dosages required, VTX was sprayed evenly across each tank pit cavity followed by a spray application of the appropriate dosage of hydrogen peroxide. The reactions were allowed to occur over a four-hour period and samples were taken for analysis.

### Results

#### Description: Pit 1 – Hopper Area

Sample	TCE	Cis 1,2 DCE	1,1 DCE	1,1,1 TCA	1,1 DCA
Pre Treated	32,200 ppb	11,400 ppb	3,380 ppb	60,300 ppb	14,400 ppb
Post Treated	<1,000 ppb	<1,000 ppb	< 1,000 ppb	6,430 ppb	1,010 ppb

#### Description: Pit 2 – Former UST Area

Sample	1,2,4 TMB	Ethylbenzene	Benzene	Toluene	Xylenes	Propylbenzene
Pre Treated	1,180 ppb	170 ppb	223 ppb	2,170 ppb	3,910 ppb	171 ppb
Post Treated	5.13 ppb	1.8 ppb	ND	6.59 ppb	16.1 ppb	2.55 ppb

### Summary

VTX treatment of the two pit cavities resulted in meeting state limits for closure of the two pits.