



Site Overview

As a result of a property transfer assessment, 1,1-dichloroethene (DCE) and 1,1-dichloroethane (DCA) were detected at concentrations above the Maximum Contaminant Level (MCL) for drinking water. In order to complete the property transfer, the BIOX Process was chosen to remediate the site and a single treatment event was conducted using direct push assistance.

Project Specifications

- **Contaminant:** DCE and DCA
- **Contaminated Media:** Groundwater
- **Treatment Area:** 4,000 square feet
Vertical Extent – 12'- 22'
Total volume – 1.480 yd³
- **Soil Type** Dense Clay

Project Results

Groundwater monitoring after the single treatment event revealed that contaminant concentrations for both DCA and DCE in MW-4 quickly went to Non Detect (ND) levels and remained there for the duration of the groundwater monitoring program. Monitoring wells MW-1, MW-2 and MW-3 initially showed little or no change in contaminant concentrations. Since a utility corridor near these three monitoring wells prevented injection with the direct push unit in close proximity, it was decided to extend the monitoring period to allow reagents to migrate into the untreated area. Within approximately 6 months DCA and DCE concentrations in all three monitoring wells reached ND levels.

The State of California has issued a No Further Action (NFA) letter and the property transfer has been completed.

The following table shows the analytical results obtained during the groundwater monitoring program.

Analytical Results in ug/l

Location	Date	1,1-DCA	1,1-DCE
MW-1	6/24/99	5.0	ND
	7/29/99	4.7	1.8
	8/30/99	5.2	ND
	9/28/99	7.8	ND
	12/99	ND	ND
MW-2	6/24/99	16.0	5.9
	7/29/99	11.0	4.1
	8/30/99	8.9	2.1
	9/28/99	14.0	4.7
	12/99	ND	ND
MW-3	6/24/99	15.0	6.1
	7/29/99	9.1	3.5
	8/30/99	8.0	1.3
	9/28/99	11.0	3.4
	12/99	ND	ND
MW-4	6/24/99	24.4	13.4
	7/29/99	ND	ND
	8/30/99	ND	ND
	9/28/99	ND	ND
	12/99	ND	ND

**The Published Paper For This Site
Is Available Upon Request**