

MTBE Site Closure Remediation Case History

Isleton, California
ART In-Well Technology

The **ART In-Well Technology** was implemented at the site of a tanker spill in Isleton, California (northern). As a result of the spill, the site was impacted by gasoline, diesel and MTBE, which posed an immediate threat to drinking water wells and an adjacent waterway. Responsible parties identified the ART Technology as the most aggressive and cost efficient remedy to clean up the impacted areas and mitigate contaminant migration. Within months, **the ART technology reduced MTBE contamination levels to below the California primary cleanup standards of 13 microgram per liter ($\mu\text{g/l}$)**. The following table summarizes MTBE concentration reduction over time at monitoring well MW-2 in the source area where the ART wells were installed.

ART Technology Remediation Results

Month/Year	9/02	12/02	3/03	4/03	6/03	7/03	8/03	10/03	2/04
MTBE ($\mu\text{g/l}$)	42,000	4,800	150	780	32	26	9.1	5.7	2.8

Note: System was shut down in August 2003.

The ART system was shut down in August 2003. Site sampling continued, as requested by the regulatory agency, to determine if contamination rebound would occur. Analytical testing confirmed that MTBE concentrations did not rebound; instead, concentrations continued to decrease. The site has been closed, wells pulled and California State closure letter received.

The ART Technology combines in-situ air stripping, air sparging, soil vapor extraction, Dynamic Subsurface Circulation™ and enhanced bioremediation/oxidation in an innovative wellhead system. **The ART technology has consistently provided enhanced remediation at chlorinated solvent and hydrocarbon sites - thus avoiding long-term remediation costs.** The ART technology has demonstrated its MTBE remediation ability at this and other sites where other technologies had failed to perform.

For additional information, please contact:

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