



Bob Holden, Governor • Stephen M. Mahfood, Director

## DEPARTMENT OF NATURAL RESOURCES

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July 30, 2002

Ms. Pamela Thompson, Project Manager  
 United States Department of Energy  
 Weldon Spring Site Remedial Action Project Office  
 7295 Highway 94 South  
 St. Charles, MO 63304

**Subject: Pilot Scale Test Completion Report:  
In-Situ Chemical Oxidation of TCE in Groundwater**

Dear Ms. Thompson:

This office has examined the ATC Associates Inc. *Pilot Scale Test Completion Report: In-Situ Chemical Oxidation of TCE in Groundwater* report, prepared for the Department of Energy (DOE) in support of the *Interim Record of Decision for Remedial Action for the Groundwater Operable Unit at the Chemical Plant Area of the Weldon Spring Site, September 2000 (IROD)*. The DOE has put this review on the critical path for the project and requested a one-week turn-around time. In order to assist the DOE in maintaining their project schedule the department has completed its review within the requested time frame. Due to the shortened comment period the department was not able to make an in-depth review of the appendices and took the data presented at face value. Because of this, the department is reserving the right to provide further comment on this document as warranted.

Based on the information provided in the report the selected reagent, Sodium Permanganate is capable of reducing the concentrations of Trichloroethylene (TCE) below the groundwater Maximum Contaminant Level of 5 micrograms per liter. The two-phase injection methodology used prevented over-dosing the aquifer and the observed secondary effects are expected to lessen as the remaining reagent is consumed. The pilot scale test also determined that the injection wells' area of influence, and sustainable injection rates, are adequate. Based on the information presented in Section 3.3, on pages 48 and 49 of the report, the department can only conclude that full-scale treatment is technically feasible.

The cover letter attached to the Pilot Scale Test Completion Report reads:

It has been our (DOE's) plan to incorporate the decision on further TCE treatment into the final GWOU ROD.

The Statement of Basis and Purpose in paragraph two on page iii of the IROD reads:

The selected interim remedial action provides for the remediation of TCE contaminated groundwater at the Chemical Plant Area. No decision is being made relative to other contaminants determined to be of concern. These other contaminants will be addressed, as necessary, in a final ROD that will be issued at a later time. This approach allows for TCE to be remediated in the near-term while further studies are planned and conducted to determine the effectiveness and practicability of remediating any remaining contaminants.

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To delay any decision regarding TCE treatment until the final GWOU ROD would be not be appropriate and would be contradictory to the IROD. Clearly, DOE's commitment to implement a treatment application is contained in the IROD. The rigorous evaluation of the CERCLA nine criteria documents the goals and expectations, and the pilot scale completion report confirms that remediation of this contaminant can be achieved. Therefore, the department looks forward to meeting with DOE and EPA on August 6, 2002, to discuss the near future implementation of the full-scale treatment. We encourage DOE to provide the public with the details of the plans and timetable for this activity. If you have any questions please feel free to call me at (573) 751-6838, or you may contact me in writing at P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

HAZARDOUS WASTE PROGRAM



Larry Erickson P.E., DOE Unit Chief  
Federal Facilities Section

LE:dd

c: Mr. Dan Wall, U.S. Environmental Protection Agency, Region VII  
Weldon Spring Citizens Commission