



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE
OSWER 9283.1-13

Signed October 31, 2000

MEMORANDUM

SUBJECT: Superfund Reform Strategy, Implementation Memorandum: Optimization of Fund-lead Ground Water Pump and Treat (P&T) Systems

FROM: Elaine F. Davies, Acting Director *s/Elaine F. Davies*
Office of Emergency and Remedial Response

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TO: Superfund National Policy Managers, Regions 1-10

PURPOSE

In the OSWER Directive No. 9200.0-33, Transmittal of Final FY'00 - FY'01 Superfund Reforms Strategy, dated July 7, 2000, the Office of Solid Waste and Emergency Response outlined a commitment to optimize our Fund-lead pump and treat (P&T) systems. This memorandum provides an overview of the purpose and goals of P&T optimization, and outlines expectations of the Regions and Headquarters to jointly implement this Reform Initiative. More detailed information on this Reform Initiative including a schedule and Headquarters and Regional points of contact can be found in the attachment documents.

The Optimization Initiative is intended to encourage systematic review and modification to existing P&T systems to enhance overall remedy effectiveness and cost effectiveness, without compromising protectiveness or other objectives of the Superfund program. It provides EPA an opportunity to demonstrate our commitment to effective management of our long-term remedies. This effort recognizes that remedial approaches should not remain static, that site conditions change over time, and that better tools and strategies have evolved which allow us to continuously improve the performance of the remedy. This reform initiative does not signal any change in EPA's decision-making framework for selecting remedies that are protective of human health and the environment. Any remedy modifications should be carried out in accordance with existing guidance and policy regarding ROD modifications and the Administrative Record.

BACKGROUND

Over the last year, the Office of Emergency and Remedial Response and the Technology Innovation Office worked together to develop, pilot and implement a process to optimize ground water P&T systems. Working in cooperation with the U.S. Army Corps of Engineers, Headquarters implemented a year-long pilot in Regions IV and V to determine if EPA would benefit from a systematic optimization analysis of our Fund-lead P&T systems. The pilot included identification of all Fund-lead P&T sites in the Regions and subsequent optimization analysis of four sites (two per Region). Results from the pilot indicated that there is a potential to improve our operating Fund-lead P&T systems and a definitive need for continuous evaluation of system operation and maintenance. Recommendations for these sites included changes in P&T system operation and maintenance, remediation technology modification or changes, and changed or reduced monitoring data needs. Implementation of some recommendations will require additional capital expenditures, others are relatively low cost adjustments. Generally, these pilots demonstrate that optimization can reduce long-term remedial action costs, accelerate cleanup times, and enhance protectiveness of human health and the environment.

INITIATIVE GOAL

The primary goal of this Reform Initiative is to assist Regions in optimizing all operating Fund-lead P&T systems. An additional goal of this effort is to increase awareness of the benefits and the need for routine optimization analysis as a part of the ongoing management responsibilities for our long-term remedies.

In year one, Headquarters in collaboration with the Regions will identify all Fund-lead P&T systems, collect baseline cost and performance data on those systems, prioritize sites based on optimization potential, and further evaluate the optimization opportunities for up to two high priority sites in each Region. The approach to be used during this effort is called Remedial Systems Evaluation (RSE); a process by which an independent expert team works collaboratively with the RPM and site contractor to evaluate the performance of all major components of the operating system. The RSE team will consist of senior technical staff from EPA and technical experts from the US Army Corps of Engineers and selected support contractors.

Headquarters will work collaboratively with Regions to evaluate and implement optimization recommendations. The site RPMs will have the essential role of determining which optimization recommendations are appropriate and working with Headquarters to secure funding and technical assistance, if necessary, to complete the implementation process. Headquarters is committed to providing technical, administrative and monetary support for this project in FY'01. A system will be set up to document any cost savings or changes in remediation time frame associated with implementation of optimization recommendations.

Regions are asked to assist with this Reform Initiative in several ways. Each Region shall identify a Regional Project Liaison; an RPM or other technical person in the Region with experience in ground water issues. Many individuals have already volunteered to be Regional Project Liaisons - please refer to the

attached Fact Sheet for a list of Regional Project Liaisons. RPMs will be asked to provide baseline cost and performance information on their Fund-lead pump and treat systems. Using this information Headquarters will work the Regions to identify up to two sites in each Region for optimization analysis. RPMs, site contractors and Regional Project Liaisons will be asked to participate in a 2-day RSE site visit with the RSE team. The RSE team will prepare a draft RSE report for review by the RPM and Regional Project Liaison. Regions are encouraged to coordinate with the States in selection of sites and involve the States in RSE site visits, as appropriate.

Please distribute this memorandum to all Remedial Project Managers (RPMs), and other appropriate staff, and encourage them to actively participate in this effort. For more information, please contact Paul Nadeau of the Office of Emergency and Remedial Response at (703) 603-8794 or Kathleen Yager of the Technology Innovation Office at (732) 321-6738, or refer to the attached documents.

Attachments: Implementation Plan
Fact Sheet
Question and Answer
Draft Technical and Administrative Resources

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