



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

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OFFICE OF  
SOLID WASTE AND EMERGENCY  
RESPONSE

OSWER Directive 9200.4-14

MEMORANDUM

SUBJECT: Consistent Implementation of the FY 1993 Guidance on  
Technical Impracticability of Ground-Water Restoration  
at Superfund Sites

FROM: Stephen D. Luftig, Acting Director *Steve Luftig*  
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TO: Director, Waste Management Division  
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Director, Emergency and Remedial Response Division  
Region II  
Director, Hazardous Waste Management Division  
Regions III, VI, VIII, IX  
Director, Hazardous Waste Division  
Region X  
Director, Environmental Services Division  
Regions I, VI, VII

Purpose

This memorandum addresses implementation of the OSWER guidance entitled "Guidance for Evaluating the Technical Impracticability of Ground-Water Restoration," dated September, 1993<sup>1</sup>. As you recall, the purpose of the guidance is to clarify how to determine when ARAR-based cleanup levels may be waived for reasons of technical impracticability.

The purpose of this memorandum is to:

- Promote national consistency in technical impracticability (TI) decision making;
- Facilitate transfer of information pertinent to TI decisions between Headquarters and the Regions;
- Identify the appropriate persons to conduct reviews of TI-related documents; and

<sup>1</sup>OSWER Publication 9234.2-25.



technically impracticable.

A typical TI "evaluation" should consist of a concise stand-alone report, or a section in a site characterization document such as an RI/FS. Reviews of TI evaluations will require site-specific decisions regarding data sufficiency, the methods of data analysis, and the selection of appropriate alternative remedial strategies where total restoration is technically impracticable. Each of these facets of a TI decision is potentially complex and resource intensive.

Technical impracticability decisions may be made as soon as sufficient information is available to demonstrate that such a finding is appropriate. From a practical perspective, this generally will be at one of three points in the remediation decision process:

A "front-end" decision made at the time of the ROD, based on site characterization and feasibility study data alone;  
A decision made at the time of the ROD, but based in part on pilot test or early remedial action performance; or  
A post-ROD decision based on a pilot test or a ground-water restoration remedy's performance.

Note that front-end TI decisions will require very thorough site characterization and feasibility study analyses, and generally will be appropriate at sites with severe contamination problems (e.g., non-recoverable NAPL contamination in complex geologic environments such as heterogeneous soil deposits or fractured bedrock). The TI guidance provides recommendations for the types of site data and data analyses generally needed for front-end TI evaluations.

The guidance also highlights the usefulness of a phased approach to ground-water remediation that employs early actions (e.g., source removal, source containment, or plume containment) because such actions not only reduce site risks, but may also be used to provide more accurate data on which to base subsequent decisions concerning the restoration potential of the site.

### Objective

The objective of this memo is to promote technically sound, nationally consistent implementation of the technical impracticability guidance. Specifically, this memo: 1) Establishes points of contact in Headquarters for transfer of TI-related information and for document reviews; 2) Requests that the Regions identify a person or persons as points of contact on TI issues and reviews; and 3) Outlines a basic process for evaluating TI decision documents.

site-specific technical support in a number of areas related to TI evaluations. The laboratories, through the Technical Support Project, offer the Regions consultation services by scientists with experience in site characterization and remediation. Review of technical impracticability evaluations may require skills in such specialized areas as computer modeling and bioremediation; the support services offered by ORD may prove crucial in determining the technical merits of such TI evaluations. The appropriate general contact for TI issues and site-specific consultations is Don Draper, Director of the Technical Support Program at the R.S. Kerr Laboratory in Ada, OK (405-436-8603).

**Conference Calls.** Regular communication between the points of contact will be established to share information and experience related to implementing the TI guidance, and to assist ORD and Headquarters to plan for the volume of TI reviews that may be required. This will be implemented through a bimonthly or quarterly conference call in which all the Regional, ORD, and Headquarters points of contact will participate, with limited space for other interested parties. The precise format of this communication system will be determined in an initial conference call, once the points of contact have been identified. OERR will coordinate the conference call; the initial call will be conducted in early March, 1995.

#### **TI Decision Review Process**

Decisions regarding TI ARAR waivers will be made by the Regional Administrator or Division Director, as appropriate, based on recommendations provided by ORD, Regional, and Headquarters reviewers.

**The TI review team.** TI decisions generally will require a significant amount of review, particularly from a technical perspective, but also from legal and policy perspectives. A Regionally-led team should be established to review TI waiver evaluations from PRPs, as well as those developed by EPA or the State. Based on experience gained on reviews of TI evaluations by Regional staff to date, the review team generally includes the following:

- RPM and first line supervisor;
- ORC site attorney;
- Ground-water specialist (ORD and/or a Regional scientist);
- State representative (as appropriate)
- Regional ROD peer reviewer (where available);
- HQ OERR representative;
- HQ OGC representative (on an as-needed basis); and
- Human health and ecological risk assessors (as appropriate)

Representatives from ORD, OERR, and OGC will either be the points of contact discussed above, or other individuals who will

consultation process.

For further information regarding the technical impracticability guidance and review process, please contact Peter Feldman of my staff at (703) 603-8768.

cc: Elliott P. Laws, Assistant Administrator  
Timothy Fields, Jr., Deputy Assistant Administrator  
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