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TITLE: Treatability Studies Under CERCLA

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United States Environmental Protection Agency
Washington, DC 20460

OSWER Directive Initiation Request

1. Directive Number

9380.3-02

2. Originator Information

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3. Title

Treatability Studies Under CERCLA

4. Summary of Directive (include brief statement of purpose)

This memorandum transmits a guidance document and a fact sheet to facilitate the performance of treatability studies early in the Superfund process.

5. Keywords

6a. Does This Directive Supersede Previous Directive(s)?

☐ No

☐ Yes

What directive (number, title)

b. Does It Supplement Previous Directive(s)?

☐ No

☐ Yes

What directive (number, title)

7. Draft Level

☐ A

- Signed by AA/DAA

☒ B

- Signed by Office Director

☐ C

- For Review & Comment

☐ D

- In Development

8. Document to be distributed to States by Headquarters?

☐ Yes

☐ No

This Request Meets OSWER Directives System Format Standards.

9. Signature of Lead Office Directives Coordinator

Betti VanEpps, Superfund Document Coordinator

Date

December 28, 1989

10. Name and Title of Approving Official

Henry L. Longest II, Director
Office of Emergency and Remedial Response

Date

December 28, 1989

EPA Form 1315-17 (Rev. 5-87) Previous editions are obsolete.

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

DEC 28 1989

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

OSWER Directive No. 9380.3-02

MEMORANDUM

SUBJECT: Treatability Studies Under CERCLA

Superfund Management Review: Recommendation No. 38A and
Recommendation No. 38B

FROM: Henry L. Longest II, Director *Henry Longest II*
Office of Emergency and Remedial Response
Alfred Lindsey, Acting Director *Alfred Lindsey*
Office of Environmental Engineering and Technology
Demonstration

TO: Directors, Waste Management Division, Regions I, IV, V,
VII, and VIII
Director, Emergency and Remedial Response Division,
Region II
Directors, Hazardous Waste Management Division
Region III, VI
Director, Toxic and Waste Management Division, Region IX
Director, Hazardous Waste Division, Region X

Purpose

This memorandum transmits a guidance document and a fact sheet to facilitate the performance of treatability studies early in the Superfund process. The document, "Guide for Conducting Treatability Studies under CERCLA (Interim Final)", (EPA 540/2-89/058, December 1989), provides a systematic approach for performing treatability studies and provides a protocol for scoping, performing and reporting the results. A pre-publication copy of the document is attached.

The fact sheet, "Treatability Studies under CERCLA: an Overview", provides a summary of information presented in the guidance document (Overview of Treatability Studies) and provides additional administrative information to facilitate the planning and execution of treatability studies.

Background

The Agency is encouraging increased utilization of treatability studies to support the Superfund decision making process. This effort is in response to an overall Agency initiative to ensure that decisions are based on data of known, documented, and appropriate quality. Regions need to plan for and implement treatability studies as early as it is evident that insufficient data are available. The Agency is developing a series of guidance documents and fact sheets to facilitate the performance of and ensure the quality of treatability studies.

The Office of Research and Development (ORD) working with the Office of Emergency and Remedial Response (OERR) has developed a guidance document entitled "Guide for Conducting Treatability Studies under CERCLA (Interim Final)" (EPA 540/2-89/058, December 1989). The document describes a three-tiered approach for conducting treatability studies that consists of: 1) laboratory screening, 2) bench-scale testing, and 3) pilot-scale testing. Some or all of these levels may be needed on a case-by-case basis. The document also presents a stepwise approach or protocol for conducting treatability studies. Although the document focuses on treatability studies in support of remedy selection, much of the information presented has application for treatability studies in support of remedy implementation as well.

A companion fact sheet entitled "Treatability Studies under CERCLA: an Overview" was developed by OERR to provide information which will allow for the efficient planning and performance of treatability studies. This fact sheet provides a summary and in some cases an expansion of information presented in chapter 2 of the guidance document. The fact sheet also provides administrative information to facilitate the planning and performance of treatability studies. This information includes a discussion of: administrative planning (budget cycle), funding, CERCLIS, and technical assistance, among other topics.

Implementation

The fact sheet and the guidance document are to be utilized by RPMs, contractors, and responsible parties for the planning and implementation of the treatability studies. In addition, all work assignments for treatability studies are to include a provision requiring that a camera-ready copy of the treatability study report be sent to the address indicated in the fact sheet so that we may build on the information learned for future Superfund decisions.

These guidances provide the basic framework for treatability studies. It is recognized that treatability studies need to consider site-specific factors, literature information, and

technical expert judgement. The Agency will be issuing a series of technology specific treatability studies guidance documents in FY 90 and beyond to further aid in the quality performance of treatability studies.

The guidance document is issued as an "interim final" document and is tentatively scheduled to be revised early in FY 91 based on experience to date on treatability studies and will also address remedy implementation or post-ROD treatability studies. The guidance as presented provides a methodology which was developed based on input received from experts in ORD, Regions, contractors, and industry. This basic framework is expected to remain the same in future revisions.

The documents will be available from the U.S. Environmental Protection Agency's Center for Environmental Research Information (FTS 684-7562 or 513/569-7562) or purchased from the National Technical Information Service (703/487-4650). The document is scheduled to be distributed to the Regions and Agency contractors in February 1990.

Treatability studies are a key component of the Superfund process. The studies need to be planned in a systematic manner and are to be reported utilizing a standard format. The guidance and the fact sheet provide information to aid in this effort and should be implemented.

cc: Superfund Branch Chiefs, Region I-X
Superfund Section Chiefs, Regions I-X
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