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TITLE: Additional Interim Guidance for FY'87
Records of Decision

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

JUL 2 1987

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Additional Interim Guidance for FY'87 Records of Decision

FROM: J. Winston Porter
Assistant Administrator

TO: Director, Waste Management Division
Regions I, IV, V, VII, and VIII
Director, Air and Waste Management Division
Region II
Director, Hazardous Waste Management Division
Regions III and VI
Director, Toxics and Waste Management Division
Region IX
Director, Hazardous Waste Division
Region X

There are a large number of Records of Decision (RODs) to be signed by the Regions in the near term. This interim guidance memorandum is meant to assist you with making and documenting these decisions.

Records of Decision in FY'87 are governed by the current National Contingency Plan (NCP) promulgated November 20, 1985 and the Superfund Amendments and Reauthorization Act of 1986 (SARA). This memorandum supplements the "Interim Guidance on Superfund Selection of Remedy" issued December 24, 1986 which was an early effort to explain how SARA modifies the processes and procedures established in the NCP. Pending revisions to the NCP and the guidances on "Remedial Investigations (RI)," "Feasibility Studies (FS)," and "Preparation of Decision Documents (ROD Guidance)" planned for next fiscal year, Regions should follow this and the previous guidance memorandum to the extent practicable.

In brief, the remedy selection process consists of the collection of data on site and waste characteristics and the analysis of alternative approaches for remediating identified problems. The results of the analysis are then assembled to assist decisionmakers in determining what remedy is most appropriate for a given site. The remedy selection occurs in two steps: first, a proposed plan is issued with the RI/FS for public comment; based upon consideration of the comments and any new information received, the Agency then makes a final remedy selection which is explained in a Record of Decision.

In both the Proposed Plan and Record of Decision it is important to discuss and compare the alternatives in terms of specific evaluation criteria. Attachment #1 lists some of the most important criteria that should be considered in this analysis. As indicated, many of the criteria are specifically mandated by SARA; others derive from the current NCP and existing RI/FS and ROD guidances. Suggested component measures of each criteria are listed, although different measures may be more or less appropriate for an individual site.

The evaluation criteria will also be referenced in explaining the rationale for selecting the chosen alternative in the Record of Decision. The RODs must also make four statutory findings about the selected remedy:

1. That the remedy is protective of human health and the environment;
2. That the remedy attains the legally applicable or relevant and appropriate requirements of other Federal and State public health or environmental laws, or provides the grounds for invoking one of the six waivers provided for in SARA;
3. That the remedy is cost-effective; and
4. That the remedy utilizes permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable.

Additionally, the ROD should explain whether or not the remedy satisfies the statutory preference for remedies which employ treatment which permanently and significantly reduces the toxicity, mobility or volume of hazardous substances as their principal element. To promote consistency in how this documentation is organized, Attachment #2 provides an outline of the various components of ROD and their suggested sequence. A more detailed version of this proposed outline will be presented in the aforementioned ROD Guidance due out this fall.

It is hoped that this guidance will help you focus on the considerations which are most significant for the preparation of RODs this fiscal year. Recognizing that some projects are near completion, you will need to determine the extent to which these considerations can be incorporated into decision documents not yet signed on a case by case basis. Some key remedy selection issues are still under discussion and will be resolved through the process of finalizing proposed revisions to the NCP.

Attachments

CRITERIA FOR EVALUATING ALTERNATIVES

Listed below are the key criteria which should be considered in evaluating and comparing alternatives. Those criteria which relate directly to the factors SARA §121(b)(1)(A - G) mandates the Agency to assess are marked. A key listing the associated statutory factors is provided. Records of Decision must address these statutory factors; this can be accomplished by referencing or footnoting the factors in summarizing the analysis of alternatives against the nine criteria below.

1. Compliance with ARARs

Alternatives should be assessed as to whether they attain legally applicable or relevant and appropriate requirements of other Federal and State environmental and public health laws, including, as appropriate:

- ° Contaminant-specific ARARs (e.g., MCLs, NAAQs)^B
- ° Location-specific ARARs (e.g., restrictions on actions at historic preservation sites)^B
- ° Action-specific ARARs (e.g., RCRA requirements for incineration and closure)^B

SARA provides six waivers for situations where not all ARARs can be met in §121(d)(4). Use of waivers must be justified in the ROD.

2. Reduction of Toxicity, Mobility or Volume

The degree to which alternatives employ treatment that reduces toxicity, mobility, or volume should be assessed. Factors that might be relevant include:

- ° The treatment processes the remedies employ and materials they will treat;
- ° The amount of hazardous materials that will be destroyed or treated;
- ° The degree of expected reduction in toxicity, mobility or volume;^B
- ° The degree to which the treatment is irreversible;
- ° The residuals that will remain following treatment, considering the persistence, toxicity, mobility, and propensity to bioaccumulate of such hazardous substances and their constituents.^C

3. Short-Term Effectiveness

The short-term effectiveness of alternatives should be assessed considering appropriate factors among the following:

- ° Magnitude of reduction of existing risks;
- ° Short-term risks that might be posed to the community, workers, or the environment during implementation of an alternative including potential threats to human health and the environment associated with excavation, transportation, and redispal or containment;D,G
- ° Time until full protection is achieved.

4. Long-term Effectiveness and Permanence

Alternatives should be assessed for the long-term effectiveness and permanence they afford along with the degree of certainty that the remedy will prove successful. Factors which might be considered are:

- ° Magnitude of residual risks in terms of amounts and concentrations of waste remaining following implementation of a remedial action, considering the persistence, toxicity, mobility, and propensity to bioaccumulate of such hazardous substances and their constituents;A,B,C,G
- ° Type and degree of long-term management required, including monitoring and operation and maintenance;A,B,G
- ° Potential for exposure of human and environmental receptors to remaining waste considering the potential threat to human health and the environment associated with excavation, transportation, redispal, or containment;D,G
- ° Long-term reliability of the engineering and institutional controls, including uncertainties associated with land disposal of untreated wastes and residuals;A,B,F,G
- ° Potential need for replacement of the remedy.F

5. Implementability

The ease or difficulty of implementing the alternatives can be assessed by considering the following types of factors:

- ° Degree of difficulty associated with constructing the technology;
- ° Expected operational reliability of the technologies;
- ° Need to coordinate with and obtain necessary approvals and permits (e.g., NPDES, Dredge and Fill Permits for off-site actions) from other offices and agencies;
- ° Availability of necessary equipment and specialists;
- ° Available capacity and location of needed treatment, storage, and disposal services.
- ° Need to respond to other sites (§104 actions only).

6. Cost

The types of costs that should be assessed include the following:

- ° Capital costs;
- ° Operation and maintenance costs;^E
- ° Costs of five year reviews, where required;
- ° Net present value of capital and O & M costs;^E
- ° Potential future remedial action costs.^F

7. Community Acceptance

Clearly, a full assessment of community attitudes toward the alternatives cannot be made until the formal public comment period on the proposed plan and RI/FS has been held. Earlier readings of community acceptance of and preferences among the alternatives will depend on the degree and type of community involvement in a project during the RI/FS process. This assessment should look at:

- ° Components of the alternatives that the community supports;
- ° Features of the alternatives about which the community has reservations;
- ° Elements of the alternatives which the community strongly opposes.

8. State Acceptance

States are joint risk managers with EPA in the Superfund process, often taking the lead for remedial investigations and feasibility studies, sharing costs of the remedial actions, and paying for the operation and maintenance of the remedies. Because of close interaction throughout remedial projects, it may not be necessary to address State concerns with proposed alternatives as a specific evaluation criterion when comparing alternatives. In some cases, however, it may be appropriate to consider incorporating such concerns into the evaluation with regard to:

- ° Components of the alternatives the State supports;
- ° Features of the alternatives about which the State has reservations;
- ° Elements of the alternatives under consideration that the State strongly opposes.

9. Overall Protection of Human Health and the Environment

Following the analysis of remedial options against individual evaluation criteria, the alternatives should be assessed from the standpoint of whether they provide adequate protection of human health and the environment considering the multiple criteria.

KEY

(Section 121(b)(1)(A - G) Factors)

- A = the long-term uncertainties associated with land disposal
- B = the goals, objectives, and requirements of the Solid Waste Disposal Act
- C = the persistence, toxicity, mobility, and propensity to bioaccumulate of such hazardous substances and their constituents
- D = short- and long-term potential for adverse health effects from human exposure
- E = long-term maintenance costs
- F = the potential for future remedial action costs if the alternative remedial action in question were to fail
- G = the potential threat to human health and the environment associated with excavation, transportation, and redisposal, or containment

SUGGESTED OUTLINE FOR RECORDS OF DECISION.

I. DECLARATION

- A. Site Name and Location
- B. Statement of Basis and Purpose (attach Index to Administrative Record)
- C. Description of the Selected Remedy
- D. Declarations of consistency with CERCLA as amended by SARA and the NCP (attach letter of State concurrence)

II. DECISION SUMMARY

- A. Site Name, Location and Description
- B. Site History
- C. Enforcement History
- D. Community Relations History
- * E. Alternatives Evaluation
- ** F. Selected Remedy (Description and rationale for selection)

III. Responsiveness Summary

- A. Overview
- B. Background on Community Involvement
- C. Summary of Public Comments and Agency Responses
- D. Explanation of Differences Between Proposed Plan and Selected Remedy (if appropriate)
- E. Remaining Concerns
- F. Attachment listing community relations activities conducted at the site prior to and during the public comment period.

* Denotes section where analysis of alternatives against evaluation criteria will be documented (See Attachment #2).

** Indicates section where statutory findings will be discussed.