

WM-10, 11, 16
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MEMORANDUM FOR: WM Staff
FROM: FEA Review Coordinator *John Finlan* 7/14/86
SUBJECT: DISTRIBUTION OF REVISION NO. 3 TO THE FEA REVIEW PLAN

Attached is revision no. 3 to the FEA Review Plan. Pertinent information on this revision is listed below. Please update your original FEA review plan with this revision and also arrange for this revision to be given in a timely manner to any contractors supporting your review.

Revision No.	FEA Review Plan Section No./Title/ Page No. Revised	Description	Date of Issuance
1	Section 11, Review Procedures	7 procedures identified in section 11	June 6, 1986
2	Section 11, Review Procedures	Procedure no. 7: Revised Schedules, Figures 1 and 2	June 20, 1986
3	Section 3, Objectives Section 4, Scope, Level of Detail	Additional guidance on Reviewing Chapter 7 of the Final EAs, the Decision Agency Methodology Document, and the Recommendation Document	July 14, 1986
4	Section 11, Review Procedures, Section 7 Schedule	Procedure no. 7: Revised Schedules for Humboldt, Yucca Mt, Deep Smith, Devils Canyon, and Richter Dome	July 14, 1986
5	Section 11, Review Procedures	Procedure no. 8: Transmittal of Draft Comments Resolving from Step 1, the Technical Review.	July 14, 1986

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Additional Guidance on Reviewing Chapter 7 of the Final EAs, the Decision Aiding Methodology Document, and the Recommendation Document

1.0 INTRODUCTION

This revision to the Final EA Review Plan gives additional guidance on reviewing the following three items:

1. Chapter 7 of the Final EA
2. "A Multi-attribute Utility Analysis of Sites Nominated For Characterization For The First Radioactive-Waste Repository - A Decision-Aiding Methodology" (referred to here as the Decision-Aiding Methodology Document)
3. "Recommendation by the Secretary of Energy of Candidate Sites for Site Characterization for the First Radioactive-Waste Repository" (referred to here as the Recommendation Document).

This guidance expands upon objectives 4 and 5 in section 3.0 of the Final EA Review Plan.

The Department of Energy (DOE) released nine Draft Environmental Assessments (DEAs) on December 20, 1984. Chapter 7 of these Environmental Assessments contained a variety of comparative evaluations of the five sites under consideration for characterization. DOE revised Chapter 7 to contain only a descriptive comparative evaluation of the five sites for each guideline. DOE also decided to treat the Decision Aiding Methodology and its application of site data in a separate document. Furthermore, the Recommendation Document presents the rationale for the three sites recommended for characterization.

Chapter 7 will be reviewed for identifying major concerns regarding inconsistencies in use of data and information (including assumptions and uncertainties) between Chapter 7 and Chapters 1-6. The review does not include the comparisons of sites where, for example, it is concluded that one site is found superior to the others for a particular guideline.

NRC plans a limited review of the Decision Aiding Methodology Document focusing on the adequacy of the technical portions of the document and its consistency with the rest of the final EAs. The major portion of the review will be conducted by the Repository Projects Branch (RP) with technical assistance from Sandia and with consultation and input from lead persons in Engineering and the Geotechnical branches. The Commission has stated that as an agency our involvement in site selection is through concurrence in the siting guidelines and review of Site Characterization Plans. Therefore, our review comments will focus only on whether the Decision Aiding Methodology Document is consistent with the guidelines and whether in implementing the methodology DOE has considered the technical data/information and inherent uncertainties.

The Recommendation Document will be reviewed by the Regulations/Environmental Section of WMRP and OGC. The review will focus on whether the Recommendation Document is consistent with the guidelines (Objective 5 of the FEA Review Plan).

The following information gives further guidance on how the review will be conducted.

The topics addressed are:

- Objectives
- Scope/Level of Detail
- Responsibilities
- Product Description
- Review Activities
- Schedule
- Resource Commitment

2.0 OBJECTIVES

2.1 CHAPTER 7

1. Identify major concerns regarding inconsistencies in use of the data and information (including assumptions and uncertainties) between Chapter 7 and Chapter 1-6. The review does not include the comparisons of sites where, for example, it is concluded that one site is found superior to the others for a particular guideline (RP,GT, EG).
2. Identify any inconsistencies between Chapter 7 and the siting guidelines as concurred on by the Commission (RP,OGC).

2.2 DECISION-AIDING METHODOLOGY DOCUMENT

1. Identify any inconsistencies between the Decision Aiding Methodology Document and the siting guidelines as concurred on by the Commission (RP,OGC).
2. Identify major concerns regarding inconsistencies in use of the data and information (including assumptions and uncertainties) between the Decision Aiding Methodology Document and final EAs (RP,GT,EG).
3. Identify major concerns with any new technical data or technical analysis in the document that is not included in the final EAs (RP,EG,GT).
4. Identify major concerns with post closure scenarios including significant omissions or inconsistencies with the final EAs (EG,GT,RP).
5. Identify major concerns with technical judgments including inconsistencies with the final EAs and that the total analysis is not biased in one constant/consistent direction (EG,GT,RP,SNL).
6. Review value judgments, scaling factors and sensitivity analysis to understand how these various factors affect the analysis (RP,SNL).

2.3 RECOMMENDATION DOCUMENT

1. Identify any inconsistencies between the Recommendation Document and the siting guidelines as concurred on by the Commission (RP,OGC).

3.0 SCOPE LEVEL OF DETAIL FOR REVIEW OF DECISION AIDING METHODOLOGY DOCUMENT

The focus in reviewing the Decision-Aiding Methodology Document, as indicated by the objectives, will be on identifying major concerns. The following paragraphs provide more detailed guidance to reviewers.

RP will prepare any major comments following the format provided in the FEA Review Plan (pp 7-9). The comments will be based on RP's review and input received from EG,GT,OGC, and SNL. Verbal input, mark-ups, bullets, or handwritten comments are acceptable forms of input to RP.

In its review of the Decision-Aiding Methodology Document, the NRC staff must be careful to limit its evaluations to the quality/consistency of the technical information contained in the document and to the conclusion or judgments which the DOE has drawn directly from the available technical information concerning the repository sites. The NRC staff evaluation should not consider the site rankings themselves or the methodologies/procedures and non-technical judgments used by DOE to obtain the rankings.

As a further guide to the distinction described above it may be helpful to consider several general questions which could be formulated from the objectives of the review and within the scope of the review:

- 1a. Is the data and information contained in the document consistent with that presented in the final EAs?
- 1b. Are technical judgments consistent with and supported by data and information contained in the EAs and related documents?
- 2a. Have staff technical comments on data or information in the final EAs imposed limits, qualifications upon, or otherwise brought into question data or information contained in the methodology document?
- 2b. Similarly, have technical judgments in the methodology document been brought into question by virtue of comments or information contained in the final EAs?

Items which would not be within the scope of the review relate to:

1. The ranking methodology itself;
2. The effects of erroneous or questionable technical judgments upon the scoring or ranking of sites;
3. Non-technical judgments;

4.0 RESPONSIBILITIES

Lead technical reviewers are responsible only for the material that relates to their respective sites.

<u>Review Objectives</u>	<u>Participants</u>	<u>Responsibility</u>
Chapter 7: Objective 1	PA,GT,EG	Guidelines for which technical reviewers are responsible as identified in FEA Review Plan
Objective 2	RE,OGC	All
Decision-Aiding Methodology Document: Objective 1	RE,OGC	Chapter 2 3.1, 3.2 G.5
Objectives 2-5	(See Table of Contents, markup, Enclosure 1)	
Objective 6	PA and SNL	All Parts
Recommendation Document: Objective 1	RE,OGC	All

5.0 PRODUCT DESCRIPTION

Any major comments written will follow the guidance in the FEA Review Plan.

6.0 REVIEW ACTIVITIES FOR CHAPTER 7 AND DECISION-AIDING METHODOLOGY DOCUMENT REVIEW AND PRODUCT DEVELOPMENT

ACTIVITY	RESPONSIBILITY
Rapid "reading/scanning" of document	RP(PA,RE),OGC,SNL
Brief SLs and Proj. Teams on review	RP(PA)
Issue review guidance as a revision to FEA review plan	RP(PA)
Technical Review (time requirement variable up to five days depending on section(s) assigned) Discussion on early comments in team meetings	EG,GT,PA
Development of comments and verbal concurrence on comments	RP(PA)EG,GT,SNL

7.0 SCHEDULE

A five day period has been allocated for conducting this review (See Time-Line enclosure 2).

8.0 RESOURCE COMMITMENT

The performance assessment section will be responsible for the major portion of this review. OGC and the Regulations Environment Section of RP will provide input on objectives 1 related to the guidelines. The lead technical reviewers on the project teams will be asked to provide comment on several very focused areas of the documents as defined above. Actual review time most likely will vary depending on the discipline and site and might be as brief as one day or long as the complete five days. See Time-Line, Enclosure 2 for how this review fits into the rest of the FEA review.

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RP(CRE)

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RP, EG, ST

RPLPA)

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RPC(PA) 4
* Environ.
+ Socio-
Economic
Trans

RPC(PA)

Appendix B

INFLUENCE DIAGRAM AND PERFORMANCE MEASURES
FOR THE POSTCLOSURE OBJECTIVES

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* GT, EG

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* Technical reviewers are responsible only for their own technical area

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RPC(PA)
*EG,GT

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* Team leads responsible for their specific site only.

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INFLUENCE DIAGRAMS AND PERFORMANCE MEASURES
FOR PRECLOSURE OBJECTIVES

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ES

RPC(RE)

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RP(RE)

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Technical Review (Step 1)

Scan/Read	June 23-30
Review and prepare comments	June 25-July 14
Informal discussions TR, SL, PM	June 25-July 14
* Review of Chapter 7 and Decision Aiding Methodology Document	July 15-21

Quality Review/Resolution (Steps 2 and 3)

Section/Technical Quality Review/Resolution	July 22-August 4
Project Review/Resolution	July 22-August 4
Merge comments and edit	August 5-15
Branch Chief Review/Resolution	August 14-20
Decision Support System review/Resolution	August 21-27
Division/Office Director review/Resolution	August 28-Sep 3
Concurrence/Reproduction	Sep 4-5

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