## CIVILIAN RADIOACTIVE WASTE MANAGEMENT SYSTEM M&O CONTRACTOR QUALITY ADMINISTRATIVE PROCEDURE

Title:

**READINESS REVIEW** 

Procedure Number:

OAP-2-6

Revision:

1

Date:

July 15, 1992

Approvals:

Öeneral Manager, CRWMS M&O

Manager, Quality Assurance



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#### 1. PURPOSE

This procedure establishes the responsibilities and methods for conducting readiness reviews.

#### 2. SCOPE

This procedure applies to reviews conducted by the Civilian Radioactive Waste Management System Management and Operating (CRWMS M&O) Contractor to verify that specific prerequisites and programmatic requirements have been satisfied prior to the start or continuation of a design phase, process, or other Contractor activity.

#### 3. APPLICABLE DOCUMENTS/DEFINITIONS

#### 3.1 APPLICABLE DOCUMENTS

- 3.1.1 "Quality Assurance Requirements for the Civilian Radioactive Waste Management Program," (QARD), DOE/RW-0214.
- 3.1.2 "The Civilian Radioactive Waste Management System, Management & Operating Contractor Quality Assurance Program Description Document," (QAPD).

#### 3.2 DEFINITIONS

- 3.2.1 The definitions of other quality assurance related terms are found in the Glossary contained in paragraph 3.1.1.
- 3.2.2 Attribute List A list of prerequisites from detailed implementing documents and management controls which are available and approved to be verified during the Readiness Review.
- 3.2.3 Open Item An attribute prerequisite which has not been satisfied.
- 3.2.4 Hold point An open item of which it has been determined that work tasks cannot proceed until corrective actions have occurred and proper release to start work has been obtained.

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#### 4. RESPONSIBILITIES

#### 4.1 GENERAL MANAGER

- 4.1.1 Review and approve this procedure.
- 4.1.2 Determine if and when a readiness review should be performed.
- 4.1.3 Determine the scope of the readiness review.
- 4.1.4 Appoint the chairperson and members of the Readiness Review Board.
- 4.1.5 Appoint the team leader of the Readiness Review Team.
- 4.1.6 Approve the Readiness Review Report.
- 4.1.7 Authorize the start or continuation of work following completion of the readiness review.

#### 4.1 READINESS REVIEW BOARD CHAIRPERSON

- 4.2.1 Approve the Readiness Review Plan.
- 4.2.2 Approve the Readiness Review Report prior to forwarding to the General Manager for his final action.

#### 4.3 READINESS REVIEW BOARD

The Readiness Review Board is responsible for advising the Readiness Review Board Chairperson.

#### 4.4 READINESS REVIEW TEAM LEADER

- 4.4.1 Establish the qualifications and select Readiness Review Team members.
- 4.4.2 Prepare the Readiness Review Plan.
- 4.4.3 Prepare the Attribute List prior to the start of the review.
- 4.4.4 Approve the Attribute List.

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- 4.4.5 Direct team members during the conduct of the review.
- 4.4.6 Prepare and approve the Readiness Review Report.
- 4.4.7 Submit Quality Assurance (QA) records generated by the review to the M&O QA Manager.
- 4.4.8 Verify proper closure on Open Items identified during the review.
- 4.4.9 Distribute the final report to the affected organizations.

#### 4.5 READINESS REVIEW TEAM

- 4.5.1 Support the Readiness Review Team Leader (RRTL) in the development of the Readiness Review Plan.
- 4.5.2 Support the RRTL in the development the Readiness Review Attribute List.
- 4.5.3 Complete assigned sections of the Attribute List and prepare Open Item Reports during the readiness review.
- 4.5.4 Provide input and recommendations for the Readiness Review Report.

#### 4.6 QUALITY ASSURANCE MANAGER

- 4.6.1 Direct the preparation and maintenance of this procedure.
- 4.6.2 Review and approve this procedure.
- 4.6.3 Provide resources and assistance in the performance of readiness reviews, as requested.
- 4.6.4 Track open items and verify closure.

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#### 5. PROCEDURE

#### 5.1 GUIDELINES FOR READINESS REVIEWS

Guidelines for the performance of readiness reviews should include: location of the review (site or office); details of the design phase, process, or other Program activity to be reviewed: items requiring special attention such as potential problem areas, items that impact schedule or items requiring specialized technical expertise; results of applicable management assessments, peer reviews, design reviews, technical document reviews, and readiness reviews; appropriate acceptance criteria to be used during the readiness review; and identification of personnel assigned to assist the reviewers.

#### 5.2 READINESS REVIEW TEAM

- 5.2.1 Readiness Review Team (RRT) members will usually be M&O personnel unless particular outside expertise is required.
- 5.2.2 Team members shall have, at a minimum, experience in the disciplines undergoing readiness review. Team members shall be trained on this procedure and other appropriate procedures as assigned by the RRTL.

#### 5.3 READINESS REVIEW BOARD

A Readiness Review Board will be selected by the General Manager. The board membership will provide broad experience in the areas to be reviewed. The General Manager may also select Board members from outside the M&O organization if he feels that the review warrants additional expertise.

#### 5.4 INITIATING READINESS REVIEW

- 5.4.1 Determination of the need for a readiness review shall be made by the M&O General Manager. He will document the need for the readiness review and identify the specific point at which the readiness review will be performed.
- 5.4.2 When a readiness review is required, the General Manager shall define the scope of the review, establish guidelines in accordance with paragraph 5.1 for performing the review, and appoint the Readiness Review Board Chairperson, the Readiness Review Board, and the Readiness Review Team Leader (RRTL).
- 5.4.3 Based upon the scope of the readiness review, the RRTL shall select team members for the Readiness Review Team and assign any needed training.

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- 5.4.4 The Readiness Review Team shall prepare the Readiness Review Plan using the guidelines provided by the General Manager. The Plan shall include the following, as appropriate:
  - A. Introduction and overview
  - B. Scope and areas to be covered
  - C. Objectives to be determined
  - D. Reference procedures to be used
  - E. Readiness review guidelines
  - F. Readiness review schedule, indicating significant milestones and due dates for reports
  - G. Identification of RRT members and their area of responsibility.
- 5.4.5 The RRTL will review the Plan with the Readiness Review Board and obtain the approval of the Board Chairperson.
- 5.4.6 Following approval of the plan, the RRT shall develop the Attribute List (Attachment I). The Attribute List identifies the prerequisites to be verified during the readiness review.
- 5.4.7 The RRTL shall review and approve the Attribute Lists.

#### 5.5 READINESS REVIEW

- 5.5.1 The RRT shall use the approved Attribute List as directed by the RRTL to conduct the readiness review and ensure that each identified prerequisite is evaluated. Team members shall initial and date each attribute when it is verified that the prerequisite has been satisfied or identify the Open Item Number for attributes that are not closed.
- 5.5.2 Team members shall document any attribute remaining open on an Open Item Report (Attachment II). The Open Item Report shall identify:
  - A. The Attribute and Open Item Numbers
  - B. Descriptions of the prerequisites and the open item

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- Required actions, and the responsibility and estimated completion date for each action
- D. Name of the preparer and date
- E. Identification of any hold points that are established if work is permitted to start or resume prior to closure of the open item.
- 5.5.3 Open Items shall be evaluated by the review team members to determine if a Corrective Action Report should be generated as outlined in QAP-16-1, Corrective Action Report.
- 5.5.4 The RRTL shall prepare an Open Items List (Attachment III) for tracking of open items.
- 5.5.5 The RRTL shall coordinate the preparation of the Readiness Review Report, ensuring that all items on the Attribute List have been closed or have been incorporated on Open Item Reports, as appropriate. The report shall include a list of team members and any recommendations regarding readiness to start or continue the activity undergoing review. The RRTL shall attach any Open Item Reports, sign and date the Readiness Review Report, and submit the report to the Readiness Review Board for their approval.
- 5.5.6 The RRTL shall present the Readiness Review Report to the Readiness Review Board for their consideration. The RRTL and team shall respond to any questions from the board and provide any necessary clarification.
- The Readiness Review board will advise the Chairperson as to the disposition of the 5.5.7 report. The board may accept the report or direct changes to reflect the decisions of the board. The Chairperson will sign the final report approved by the board and forward it to the General Manager for approval.

#### 5.6 ACTION SUBSEQUENT TO REVIEW

5.6.1 When the General Manager has reviewed and approved the Readiness Review Report and directed any necessary hold points, the report and attached Open Item Reports shall be distributed to affected organizations by the RRTL.

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5.6.2 The QA Manager shall track open items and verify closure of the Open Item Reports as appropriate. An open item report will be considered closed when the RRTL signs and dates the report in the appropriate space. The QA Manager shall notify the General Manager when all actions required prior to the start or continuation of work have been completed.

5.6.3 Following the approval of the Readiness Review Report or the notification described in paragraph 5.6.2, as necessary, the General Manager may authorize the start or continuation of the design phase, process, or Program activity. The QA Manager shall continue to track remaining open items, verifying closure of the Open Item Report when actions are completed. Work shall not proceed beyond any hold point established on the Open Item Report until the closure of the item is approved by the General Manager. When no hold points are involved, the General Manager has no action and the space provided for his signature will be N/A by the RRTL for closure.

NOTE: It is recommended that an independent surveillance be conducted to verify through objective evidence that any or all open item reports have been properly closed in accordance with QAP-2-6.

- 5.6.4 The QA Manager shall assemble the quality assurance records generated as a result of this procedure for submittal to the M&O local records center in accordance with paragraph 6.
- 5.6.5 Readiness Review Boards and teams will be disbanded upon the completion of the recommendations by the Board to the General Manager. Individual team members may be assigned to assist in tracking open items and assembling quality assurance records.

#### 6. RECORDS

The Readiness Review Plan, Open Item Reports, Readiness Review Team Report, final Readiness Review Report signed by the Readiness Review Board Chairperson, and the General Manager's authorization to start or continue work are QA records that shall be collected and maintained in accordance with QAP-17-1, QA Records Management.

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#### 7. ATTACHMENTS

- 7.1 ATTACHMENT I Readiness Review Attribute List (Example).
- | 7.2 ATTACHMENT II Readiness Review Open Report List (Example).
- 7.3 ATTACHMENT III Readiness Review Open Items List (Example).

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# READINESS REVIEW ATTRIBUTE LIST - (EXAMPLE)

Civilian Radioactive Waste Management System

Readiness Review

Attribute List

Management & Operating

Contractor

Readiness Re	view:	10、14、10年15日(1014年15日)。					
Attribute Number	Description of Prerequisite	Closed	Open Rem Number	Evaluated By (Initials)			
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### ATTACHMENT II READINESS REVIEW OPEN ITEM REPORT - (EXAMPLE)

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Management & Operating Contractor		eny applicable floms.	Page of
Readiness Review		bute Number	Open Nem Number
Description of Prerequisite:	·		
Description of Open Item:			
Action Required,	Responsib	lltyi	Estimated Completion Data
		Hold Point Re	equired? Yes No
Prepared By:			
Approved By:	Member	Date	•
Approved by Ri	R Team Leader	Date	•
Assignments of Hold Point	E!		
Actions Completed Date:		Closed By:	
Classes Appeared Dis			RR Team Leader
Closure Approved By:			y y
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### ATTACHMENT III READINESS REVIEW OPEN ITEMS LIST - (EXAMPLE)

Civilian Radioactive Waste Management System

Readiness Review
Open items List

Management & Operating Contractor

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Civillan Radioactive Waste Management System

Management & Operating Contractor

READINESS REVIEW PLAN

FOF

DEPARTMENT OF ENERGY

YUCCA MOUNTAIN PROJECT OFFICE

CONSTRUCTION START

OF

EXPLORATORY STUDIES FACILITY

SEPTEMBER 4, 1992

roproved

Readiness Review Team Leader

Approved

Readiness Review Chairman

9209170-15-1

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#### 1. INTRODUCTION AND OVERVIEW

This Readiness Review Plan has been prepared on behalf of the Director. Engineering and Development Division, Office of Geologic Disposal, Yucca Mountain Project Office (YMPO). The Director is acting under the authority of the Manager, Yucca Mountain Site Characterization Project, to conduct this assessment of the readiness review of the preparation to begin ESF construction. All contractors participating in this review have been previously cleared to commence Quality Affecting Work within their respective functional areas. Participants to be evaluated during this review are:

- Management and Operating Contractor Construction Management Support to YMPO
- · Reynolds Electrical & Engineering Co., Inc. Constructor
- Technical and Management Support Services Environmental Support
- Raytheon Services Nevada Title I Design and Title II Design for Package IA

Therefore, this review is limited to work to be performed under the OCRWM program in accordance with tasking received from Yucca Mountain Project Office (YMPO), Office of Civilian Radioactive Waste Management (OCRWM), Department of Energy in the activities to be reviewed. The OCRWM Management System Improvement Strategy (MSIS) included a complete review of the hierarchy of management control documents as well as the relationship of OCRWM and M&O documents. The resulting structure is displayed as Attachment I. Although the structure is now defined, there are two additional primary documents that should provide criteria for the review, i.e., the OCRWM Program Management System Manual (PMSM) and the joint OCRWM/M&O Systems Engineering Management Plan (SEMP), both of which are still in the development and/or approval process. This review will therefore use draft versions of those documents if the approval process is still not complete by the time of the review.

#### 2. SCOPE

The scope of this review is to evaluate the readiness of all project participants to begin construction of the Exploratory Studies Facility, and to accomplish assigned work tasks required to be performed under the OCRWM Program.

The scope of work is as assigned by OCRWM in accordance with DOE Order 5700.7B.

Work Authorization System, and in support of the Yucca Mountain Project Office. OCRWM participation will include observers with the Readiness Review Team.

Although the activities being reviewed may or may not be quality affecting, this review will utilize the successful model from previous M&O QA Readiness Reviews. Therefore, this review will verify the readiness to perform tasks which are within the scope of the following DOE Quality Assurance Requirements Document (QARD) basic requirements:

Requirement 1	• Organization
Requirement 2	Quality Assurance Program
Requirement 3	- Design Control
Requirement 4	- Procurement Document Control
Requirement 5	Instructions, Procedures and Drawings
Requirement 6	- Document Control
Requirement 7	Control of Purchased Services
Requirement 8	Identification and Control of Items
Requirement 9	- Control of Special Processes
Requirement 10	- Inspections
Requirement 11	- Test Control
Requirement 12	- Control of Measuring & Test Equipment
Requirement 13	- Handling, Storage & Shipping
Requirement 14	- Inspections, Test and Operating Status
Requirement 15	- Nonconformances
Requirement 16	- Corrective Action
Requirement 17	- Quality Assurance Records
Requirement 18	- Audits
Requirement 19	- Computer Software

The Attribute Lists for these areas will be based, at a minimum, on the requirements derived from the scope of work utilizing OCRWM QARD criteria, the OCRWM Systems Engineering Management Plan (SEMP) (Draft) and the OCRWM Program Management System Manual (PMSM) (Draft).

#### 2.1 TASK ASSIGNMENTS

The tasks assigned by OCRWM are defined in accordance with the Program Work Breakdown Structure (Attachment II), the respective scopes of work, and applicable Task Directives as promulgated to the participants by the YMPO.

#### 3. OBJECTIVES

The following objectives are established for this review:

- Verify readiness to accomplish tasks to be performed under the OCRWM program considering the following readiness review criteria:
  - Work activity prerequisites have been satisfied
  - Detailed implementing documents are available and approved
  - Adequate numbers of personnel have been suitably trained and qualified.

#### 4. REFERENCE DOCUMENTS

The following references will provide the basis for this review:

- Participants' current Contract Statements of Work,
- Letter, William B. Simecka, Director, Engineering and Development Division, YMPO to L. Dale Foust, M&O. dated July 23, 1992
- ASME, NQA-1-1989 Edition, Quality Assurance Program Requirements for Nuclear Facilities.
- Yucca Mountain Project, Project Management Plan, Revision 2.
- Quality Assurance Requirements Document for the Civilian Radioactive Waste Management Program. (QARD), DOE/RW-0214, Revision 4.
- CRWMS/M&O Quality Assurance Program Description (QAPD). Revision
- OCRWM Quality Assurance Administrative Procedure, QAAP-2-6, Readiness Review. Revision 2.
- DOE Order 4700.1, Change 1, Project Management System.
- DOE Order 5700.7B, Work Authorization System.
- OCRWM Program Management System Manual (PMSM) (DRAFT)

OCRWM/M&O Systems Engineering Management Plan (SEMP) (DRAFT)

#### 5. READINESS REVIEW GUIDELINES

The OCRWM Director. Engineering & Development, Office of Geologic Disposal, directed this review on July 23, 1992 and provided guidelines for conducting the review (Attachment III). The Director requested a description of the approach to be utilized and a milestone chart which were provided (Attachment IV). The review is scheduled for September 14-16, 1992. As noted in his direction, this Readiness Review must support a construction start date in mid to late November, 1992.

#### 6. READINESS REVIEW BASELINE

System requirements, technical studies, and design work are in support of the YMPO and are a subset of, and work to, YMPO management plans, baselines and Technical Directives. The following are the applicable baseline documents for this review:

- OCRWM PMSM (DRAFT)
- OCRWM/M&O SEMP (DRAFT)
- YMPO Technical Directives
- Participants' Statements of Work

#### 7. READINESS REVIEW SCHEDULE, PARTICIPANTS AND PROCESS

#### 7.1 SCHEDULE

- 7.1.1 Activate and Train Readiness Review Team August 3-17
  - Publish Readiness Review Plan September 4
  - Develop Attributes Lists August 20 September 4
  - Conduct Readiness Review September 14-16
  - Present Summary of Open Items and Hold Points to Director September 25
  - Complete Readiness Review Report October 26
  - Present Readiness Review Report to Director October 27

- Director's Decision November 4
- 7.2.1 The Director has appointed Thomas I. Fortner, as the Readiness Review Team Chairman who has, in turn appointed Arthur S. Kubo as the Readiness Review Team Leader. The following individuals have been appointed to the Readiness Review Team with responsibilities as indicated:
  - T. Faries Team Coordinator
  - R. Morgan Team Consultant
  - D. Evans ADP; Facilities and Equipment: Procurement
  - J. Tiemey QA
  - S. Blackley Design Controls
  - W. Houston Design Controls
  - R. Parker Construction Management
  - M. Stern Regulatory and Licensing
  - H. Sindt Project Management
  - C. Tankersley Environmental Activities

The qualifications and training of the M&O team members are documented in accordance with QMP-02-01. Project Office Indoctrination and Qualification Training.

7.2.2 The responsibility for the adequacy of the Team to fulfill the objectives of the review and the requirements of QAAP-2-6, has been delegated to the CRWMS M&O Contractor by the Director (see Attachment III).. OCRWM will designate observers of the Readiness Review Team to facilitate authorization for participants to commence work at the completion of the review.

#### 7.3 PROCESS

The review will be conducted in accordance with the process defined in QAAP-2-6. Readiness Review, utilizing the flow chart included herein as Attachment V.

- 7.3.1 Upon approval of this plan by the Readiness Review Chairman, the Readiness Review Team will develop the Attribute Lists using:
  - Requirements Lists prepared by each respective Design function utilizing the form shown as Attachment VI
  - The scope of work as defined by the Work Authorization System

- The criteria contained in the OCRWM QARD, the OCRWM/M&O SEMP and the OCRWM PMSM.
- 7.3.2 The Readiness Review Chairman will approve the Attribute List.
- 7.3.3 Prior to the beginning of the review, individual members of the team will complete the review of documents and procedures in support of the objectives of the review.

- 7.3.4 Day 1 The review will commence with an introduction by the Readiness Review Team Leader. This presentation will address the following:
  - Readiness requirements
  - Readiness strategy
  - Assumptions of the review
  - Roles and responsibilities of the review participants.
- 7.3.5 The M&O ESF Construction Manager will then present the following information:
  - Organization
  - Scope of Work Plan
  - List of activities to be performed under the OCRWM program
  - Requirements List, with emphasis on incomplete elements, if any
  - Process used to identify requirements
  - Implementation Plan or the OCRWM scope of work
  - Determination of staffing requirements and qualifications of personnel
- 7.3.6 The REECO Construction Manager will then offer a presentation utilizing the format outlined in 7.3.5 above.
- 7.3.7 The RSN Manager will then offer a presentation utilizing the format outlined in 7.3.5 above.
- 7.3.8 Day 2 The Technical & Management Support Services (T&MSS) Manager will offer a presentation utilizing the format outlined in 7.3.5 above.
- 7.3.9 Daily, upon completion of the site presentations, the review team will conduct the Readiness Review and complete the Attribute Lists through reference to presentations, referring to previously reviewed documents and records, and by individual or group discussions with participants' personnel. The sample matrix shown in Attachment VII will be completed to identify the tasks to be performed under the OCRWM program and to verify the prerequisites for these tasks.

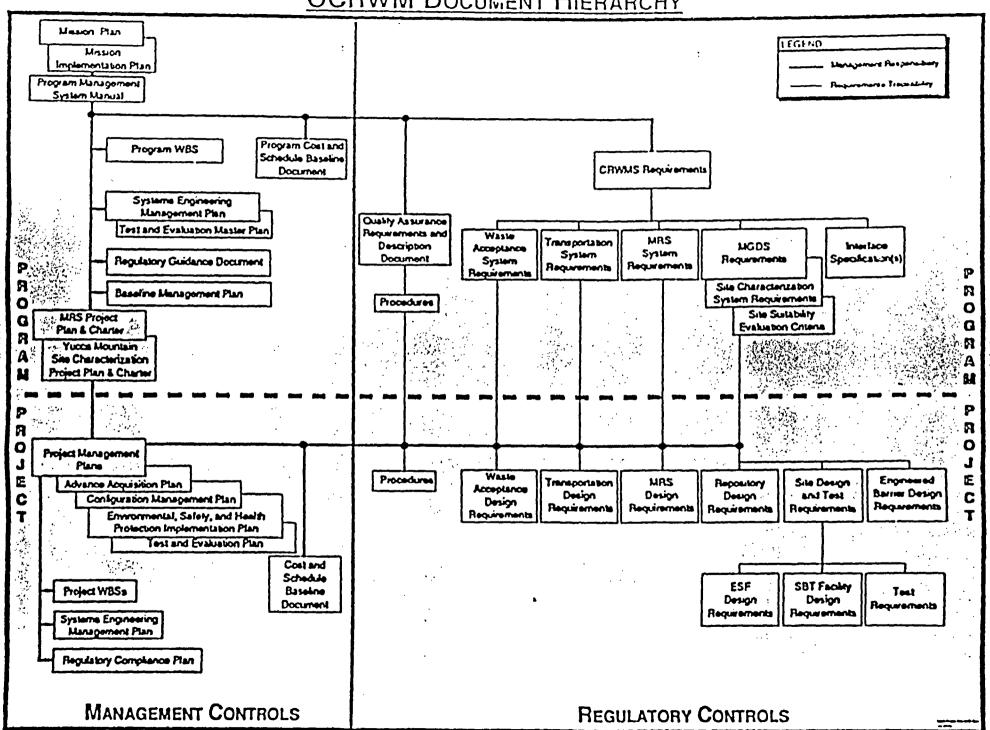
- 7.3.10 Day 3 Continuation day, if required.
- 7.3.11 Observers shall only interact with members of the Readiness Review Team. Any questions, other than minor clarifications, shall be presented to a team member utilizing the Observer Question Form (Attachment VIII). Documents, files and procedures may be reviewed in conjunction with a team member during the review; however, copies will not be provided.
- 7.3.12 Upon completion of the Attribute Lists, the Review Team will prepare a summary presentation of Open Items and Hold Points for delivery by the Readiness Review Team Leader to the Director and Readiness Review Chairman on September 25, 1992.
- 7.3.13 The final report will be presented by the Readiness Review Team Leader to the Director and Readiness Review Chairman on October 27, 1992. The report will include a review of any Open Item Reports and Hold Points generated during the review, actions required to close the Open Item Reports and Hold Points and their impact on readiness. The report will conclude with an overall recommendation for the Director's consideration regarding readiness to proceed within the defined scope of work.
- 7.3.14 The Director will be requested to accept the report as written or direct changes to incorporate his determination of the adequacy of the Review. The Director will consider the report and recommendations of the Readiness Review Team and announce his decision relative to continuation of work by November 4, 1992

#### 8. ATTACHMENTS

8.1	ATTACHMENT I	- CRWMS Document Hierarchy
8.2	ATTACHMENT II	- Program Work Breakdown Structure
8.3	ATTACHMENT III	- DOE Readiness Review letter dated July 23, 1992
8.4	ATTACHMENT IV	- Readiness Review Approach & Milestone Chart
8.5	ATTACHMENT V	- Readiness Review Process Flow Chart

- 8.6 ATTACHMENT VI 18 Requirements List Form
- 8.7 ATTACHMENT VII Task Matrix Form
- 8.8 ATTACHMENT VIII Observer Question Form

OCRWM DOCUMENT HIERARCHY



Attachment

Figure 1- Program Work Breakdown Structure

Revision 6

Attachment II

Martine Fiders Electors



#### Department of Energy

Yucca Mountain Site Characterization
Project Office
P. O. Box 98608
Las Vegas, NV 89193-8608

WBS 1.2.6 QA: N/A

JUL 2 3 1992

L. Dale Foust
Technical Project Officer
for Yucca Mountain
Site Characterization Project
TEW Environmental Safety Systems, Inc.
Valley Bank Center, Suite P-110
101 Convention Center Drive
Las Vegas, NV 89109

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT CONSTRUCTION READINESS REVIEW

This will confirm our request that the Civilian Radioactive Waste Management System Management and Operating Contractor assume the responsibility for managing and conducting the subject readiness review. Please furnish this office by July 27, 1992, a description of the approach you would recommend along with a milestone schedule for the required activities for our approval. This readiness review must support a construction start in mid to late November 1992. Appropriate time is to be included for Yucca Mountain Site Characterization Project Office review and concurrence of your readiness review plan as well as the readiness review report, which will document the review results. It is expected that the readiness review plan will minimally address the following:

- o Objective
- o Governing/Controlling Documents
- o Areas of Review
- o Attributes List
- o Team Organization/Membership
- o Schedule

We look forward to discussing this in more detail once we have reviewed your recommended approach and schedule.

If you have any questions, please call Thomas I. Fortner at 794-7583.

EDD:TIF-4586

William B. Simecka, Director Engineering & Development Division



\*RW Enveronmental dety Systems Inc.

191 Convenion Center Drive Suite P 110 Las Vinjas NV 89109 107 I/A 1860 WBS: 1.2.1 OA: OA

July 22, 1992

Contract No: DE-AC01-91RW00134 LV.MG.7/92.RMS-031

Carl P. Gertz, Project Manager
U. S. Department of Energy
Yucca Mountain Site Characterization Project Office
P. O. Box 98608
Las Vegas, NV 89193-8606

Attention: William B. Simecka, Director

Engineering and Development Division

Subject: OCRWM ESF Construction Readiness Review

Please reference our recent discussion and your request for a recommended approach and milestone schedule for the subject review. The following key participant areas will be included in the subject readiness review:

- M&O Construction Management Support
- RSN Architect-Engineer
- TMSS Environmental
- REECo Constructor

Based on our experience with the readiness review process the following approach is recommended for this review:

- 1. Identify readiness review requirements for the key participants.

  Compile appropriate documentation relative to all aspects of the review.
- 2. Define DOE participation and the governing procedures for the review.
- 3. Identify key participants' management responsible for achieving readiness in their respective areas.
- 4. Key participants will prepare draft internal plans for their respective areas to assure that required elements are in place prior to the actual readiness review.
- 5. Key participants' management approve respective internal plans.

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July 22, 1992
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- 6. Address readiness utilizing Project Office guidance and the recently completed M&O MGDS QA review.
- 7. Identify appropriate readiness review team members from the internal M&O readiness review teams. Augment this team with additional members with required construction experience. These will be furnished by appropriate M&O teammate organizations.
- 8. Initiate draft of Readiness Review Plan.
- 9. Activate the Readiness Review Team. Assign tasks:
  - Individual team member training matrix completion
  - Indoctrination in prior M&O readiness reviews
  - Preparation of an attributes list
  - Attendance at planning and team coordination meetings
  - Review key participants' internal readiness plans to assure consistency between internal plans and the readiness review plan
  - Review the results of any internal readiness reviews, audits, and/or surveillance conducted by key participants' management organizations in preparation for this readiness review
  - Perform initial surveillance to assure continuity and readiness in each area
- 10. Request that the Project Office identity appropriate DOE readiness review team members.
- 11. Finalize the draft Readiness Review Plan and submit to the Project Office for approval.
- 12. Request names of DOE and NRC observers from the Project Office.
- 13. Receive Project Office approval of Readiness Review Plan.
- 14. Hold Readiness Review.
- 15. Prepare draft Readiness Review Report.
- 16. Hold required meetings with the Project Office to assure readiness review was complete and appropriate.

  Attachment IV

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Page Three

- 17. Close open items and hold points as determined by the Team and the Project Office.
- 18. Prepare and submit to the Project Office the final version of the Readiness Review Report for approval outlining the readiness review results and a recommendation on the appropriateness of proceeding with the work.
- 19. Receive Project Office approval of the Readiness Review Report.
- 20. Distribute finalized readiness review documentation.

Attachment 1 is a milestone schedule which appropriately addresses the Project Office interface points with the readiness review team and the readiness review activities. This schedule has been structured to support a start of construction in mid to late November of this year.

With your concurrence, we will proceed with the preparatory activities for this review. We look forward to providing you with a productive and successful readiness review.

If you have any questions regarding this matter, please contact Robert M. Sandifer at 794-1869.

Sincerely,

L. Dale Foust, Manager, Nevada Site Management and Operating Contractor

Technical Project Officer

TAE/POSE

Enclosures

1. OCRWM Construction Readiness Review Milestone Schedule

cc w/ enc:

M&O. Las Vegas, NV

J. N. Allan

H. A. Benton

A. P. Hahn

J. A. Jackson

P. W. McKie

P. A. Pimentel

R. M. Sandifer

W. D. Schutt

M&O. Vienna. VA

R. J. Brackett

D. D. Evans

T. A. Faries

A. S. Kubo

R. L. Robertson

# OCRWM CONSTRUCTION READINESS REVIEW

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Wednesday, July 22, 1892

Attachment

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## OCRWM READINESS REVIEW REQUIREMENTS MATRIX

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#### **OBSERVER QUESTION FORM**

# Readiness Review Observer Question

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