



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

WBS 1.2.9.3
QA

MAR 04 1991

Carl P. Gertz, Project Manager, YMP, NV

VERIFICATION OF CORRECTIVE ACTION AND CLOSURE OF CORRECTIVE ACTION REQUEST
(CAR) YM-91-009 RESULTING FROM THE OFFICE OF CIVILIAN RADIOACTIVE WASTE
MANAGEMENT AUDIT 90-I-01 OF THE YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT
OFFICE

The YMQAD staff has verified the corrective action to CAR YM-91-009 and
determined the results to be satisfactory. As a result, the CAR is
considered closed.

If you have any questions, please contact either Catherine E. Hampton at
794-7973 or Stephen R. Dana at 794-7176.

Donald G. Horton, Director
Yucca Mountain Quality Assurance Division

YMQAD:CEH-2418

Enclosure:
CAR YM-91-009

cc w/encl:
K. R. Hooks, NRC, Washington, DC
S. W. Zimmerman, NWPO, Carson City, NV
N. J. Brogan, SAIC, Las Vegas, NV, 517/T-08

cc w/o encl:
J. W. Gilray, NRC, Las Vegas, NV

YMP-5

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PDR WASTE
WM-11 PDR

FULL TEXT ASCII SCAN

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**OFFICE OF CIVILIAN
RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.**

14CAR NO.: YM-91-009
DATE: 11/09/90
SHEET: 1 OF 2
QA
WBS No.: 1.2.9.3

CORRECTIVE ACTION REQUEST

1 Controlling Document QAPD, Revision 3; QMP-06-04, Revision 0		2 Related Report No. Audit No. 90-I-01	
3 Responsible Organization Engineering & Development Division		4 Discussed With Jon White and George Dymmel	
10 Response Due 11/29/90	11 Responsibility for Corrective Action E. Petrie	12 Stop Work Order Y or N N	
5 Requirement: <p>QAPD, Para. 3.1.6, states in part, "Technical reviews are performed by any competent individual(s) or groups..."</p> <p>QMP-06-04, Step 12, states, "Assign reviewer(s) by entering name(s) on Page 1 of DRS (name & discipline of the qualified, independent reviewer for technical reviews); provide reviewer(s) with review package and established review criteria. Attachment 7 provides examples for guidance in establishing criteria."</p> <p>QMP-06-04, Step 13, states in part, "Review document as instructed in the review package."</p>			
6 Adverse Condition: <p>The following conditions are associated with review of the Technical Requirements for the Yucca Mountain Project (YMP/CM-0007):</p> <ol style="list-style-type: none">1. The scope of expertise of the person who performed a technical review was not broad enough to cover the entire spectrum of characteristics requiring review. For example, the reviewer stated he did not perform a "flowdown" review because he had no systems engineering experience. The reviewer was unfamiliar with the fact that YMP/CM-0007 was to be based on WMSR requirements.2. The reviewer was not familiar with technical review criteria in Attachment 7 to QMP-06-04. These were the only criteria provided the reviewer. <p>NOTE: The reviewer received no classroom instruction on QMP-06-04 and did not seek</p>			
7 Recommended Action(s): Identify the remedial action(s) to be taken to correct the deficiencies noted in Block 6. Identify the condition and the planned action to prevent recurrence.			
8 Initiator Marc Meyer	Date: 10/26/90	9 Severity Level - 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/>	13 Approved By: OQA <u>Jane Blaylock</u> <u>11/9/90</u>
15 Verification of Corrective Action: <p>Reference attached sheets for verification of corrective action 5/20/91</p>			
16 Corrective Action Completed and Accepted: OAR <u>[Signature]</u> Date <u>2/20/91</u>		17 Closure Approved By: OQA <u>[Signature]</u> <u>2/22/91</u>	

ENCLOSURE

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**CORRECTIVE ACTION REQUEST
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6 Adverse Condition (continued)
clarification on criteria during the course of his review.

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CORRECTIVE ACTION REQUEST
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CORRECTIVE ACTION RESPONSE

EXTENT OF DEFICIENCY:

The requirements document (CM-0007) is a unique, one-of-a-kind document that was prepared to temporarily take the place of portions of several higher tier documents that were or still are in preparation.

ROOT CAUSE:

An independent Root Cause Analysis disclosed the follow root causes for this deficiency:

1. Fundamental purpose and scope of Project Office reviews not clearly defined by procedures for special cases where the Project Office is the preparer of the document (versus performing an acceptance review on a document that has been prepared under a Participant's QA program).
2. Project documents addressing development and review of the Requirements Document, including QMP-06-04, lacked sufficient information and criteria for reviewers regarding format, flowdown, and traceability.
3. Lack of feedback communications to inform management of questions and seek clarification regarding assigned tasks.

REMEDIAL ACTION:

✓ Additional regulatory, technical, management, and quality assurance reviews conducted in accordance with QMP-06-04 have been completed on YMP/CM-0007.

✓ Specific concern number 1: The further reviews conducted included reviewers from many disciplines. The technical areas covered (see attached for a list of reviewers and their specialties) were: engineering and construction, seismic, faulting hazards, sample management, environmental, systems, performance assessment, TE process, and testing linkage.

ENCLOSURE 3

REV. 10/90

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CORRECTIVE ACTION REQUEST
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The review criteria are attached.

Specific concern number 2: General review criteria was given to all reviewers (see attached). In addition, specific technical review criteria was provided to the technical reviewers (see attached). All reviewers were trained in the use of QMP-06-04 prior to performing the review.

Please note that on page 1 of the Review Instructions it states that a hold on the completion of verification of H&N design products until the new revision of the requirements document was completed. That hold was never assigned. The document was released for use on November 28, 1990 and the verification of the design products is not scheduled for completion until the first week of December. Therefore, the hold is no longer necessary.

CORRECTIVE ACTION TO PREVENT RECURRENCE:

As stated previously, CM-0007 is a unique, one-of-a-kind document. ~~Even though there are no plans to prepare additional, similar documents, we have taken or are taking the following actions to ensure the quality of other types of documents that may be prepared by the Project Office in the future. The actions are numbered to coincide with the root causes that they address.~~

- 7 1. QMP-06-04 will be revised to be more specific regarding the purpose and scope of Project Office reviews in those special cases where the Project Office acts as the preparer of a document as opposed to reviews of documents prepared by Participants.
2. BTP-EDD-002 has been issued to provide more specific review criteria for document reviewers in the EDD. In addition, when the uniqueness of a document requires it, we will exercise additional care in identifying more specific supplemental guidance to the assigned reviewers.

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CORRECTIVE ACTION REQUEST
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3. The Director, EDD will hold discussions with all EDD personnel to ensure that they understand that management wants, and it is their obligation to provide, feedback and seek clarification from their managers anytime they have questions regarding the scope, schedule or methods to be used in accomplishing assigned tasks.

The revisions to QMP-06-04 will be completed by 1/30/91 (Petrie/Alderson). The discussions with EDD personnel will be completed by 12/14/90 (Petrie).

Edgar H. Petrie

RESPONSIBLE MANAGER

11/30/90

DATE

S. Jara

QAR

12/18/90

DATE

Cather H. Hempt

OQA

12-19-90

DATE

VERIFICATION OF CORRECTIVE ACTION CAR YM-91-009

1. Remedial Action (Reference pg 3 & 4 of CAR)

- o First Paragraph - Verified during surveillance YM-SR-91-006 (reference Surveillance Report (SR), items 1-12).
- o Second Paragraph - Verified during surveillance YM-SR-91-006 (reference SR, item 2).
- o Third Paragraph (pg 4) - Verified during surveillance YM-SR-91-006 (reference SR, item 3) and surveillance YM-SR-91-003 (reference SR, Section 4.0).

2. Corrective Action To Preclude Recurrence (Reference pg 5 of CAR)

- o Item No. 3 - Reference the following items attached as objective evidence that actions are complete:

- (1) Letter EDD:RDE-1349,
- (2) Letter EDD:RDE-1268,
- (3) Letter EDD:EHP-1628,
- (4) Meeting Attendance Lists (5 pages),
- (5) Meeting Handout.

3. Added Information to Response (Reference Letter EDD:RDE-1168)

- ~~o The following attached item provides objective evidence that actions are complete:~~

- (1) Yucca Mountain Project Lesson Plan Revision.

S. Danc 1/30/91

1. Corrective Action To Prevent Recurrence (Reference page 4 of CAR)

Item No. 1 - Reviewed QMP-06-04, Revision 2. Verified that this item has been resolved by the following paragraphs found in the procedure:

- a. Step 5 (Note)
- b. Step 6
- c. Step 10 (Note)
- d. Step 11, g.
- e. Step 12
- f. Step 13
- g. Step 14
- h. Step 14 (first Note)

Item No. 2 - Reviewed BTP-EDD-002, Revision 0, and verified that the procedure contains specific review criteria for document reviews performed by the Engineering and Development Division.

S. Jones 2/20/91