



**Department of Energy**  
Office of Civilian Radioactive Waste Management  
Yucca Mountain Site Characterization Office  
P.O. Box 98608  
Las Vegas, NV 89193-8608

QA: L

SEP 19 1994

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

EVALUATION OF RESPONSE TO CORRECTIVE ACTION REQUEST (CAR)  
YM-94-053 RESULTING FROM U.S. DEPARTMENT OF ENERGY/HEADQUARTERS  
QUALITY ASSURANCE DIVISION'S (HQAD) AUDIT HQ-94-02 OF THE  
CIVILIAN RADIOACTIVE WASTE MANAGEMENT SYSTEM MANAGEMENT AND  
OPERATING CONTRACTOR (SCPB: N/A)

The Yucca Mountain Quality Assurance Division (YMQAD) staff has evaluated the response to CAR YM-94-053. The response is unsatisfactory because it does not adequately address the Extent of Deficiency or Root Cause. Please submit an amended response that addresses the following issues:

1. The current Extent of Deficiency response does not identify the actual extent of the problem; it only details that a "review" will occur. There is no explanation as to how this review will be documented and if the CAR will be amended.
2. The root cause explanation states that Document Review Records were handled by several individuals during the design process. It is not clear that the procedure used for verification allows for such actions. Quality Assurance Procedure (QAP) 3.4, Revision 4, also requires that the Design Review chairperson assemble the records package. Clearly responsibility had been delegated to CRWMS M&O supervisory personnel for the subject packages. Specifically, the Design Verification Record for Design Package 1B clearly documents that supervision was responsible for the establishment and approval of review instructions/criteria (procedurally the same person responsible for records package assembly). The identified root cause does not deal with the actual condition.

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SEP 19 1994

3. The Design Verification Record and its implementation is similar to the implementation of the Document Review Record (DRR) via QAP 3.1. The CRWMS M&O needs to identify what actions will take place specifically to preclude recurrence of the same problems from occurring to DRRs. The CRWMS M&O must address the overall issue of records safekeeping. The revision of QAP 3.2 alone does not provide the necessary recurrence control.
4. A date for full compliance must be provided. The current response for Item D does not provide the date.

An amended response is required to be submitted to this office within ten working days of the date of this letter. Send the original of your response to Deborah Sult, YMQAD/QATSS, 101 Convention Center Drive, Suite 640, Las Vegas, Nevada 89109. If an extension to the due date is necessary, it must be requested in writing, with appropriate justification, prior to that date.

If you have any questions, please contact either Robert B. Constable at 794-7945 or Robert L. Howard at 794-7820.



Richard E. Spence, Acting Director  
Yucca Mountain Quality Assurance Division

YMQAD:RBC-5060

Enclosure:  
CAR YM-94-053

cc w/encl:

T. A. Wood, (RW-14) FORS  
~~R. L. Johnson~~, NRC, Washington, DC  
S. W. Zimmerman, NWPO, Carson City, NV  
R. L. Robertson, M&O/TRW, Vienna, VA  
Richard Jiu, M&O/Duke, Las Vegas, NV  
R. P. Ruth, M&O/TRW, Las Vegas, NV  
D. G. Horton, OQA (RW-3) YMSCO, NV  
R. M. Nelson, Jr., YMSCO, NV

cc w/o encl:

W. L. Belke, NRC, Las Vegas, NV  
D. G. Sult, YMQAD/QATSS, Las Vegas, NV

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OFFICE OF CIVILIAN  
RADIOACTIVE WASTE MANAGEMENT  
U.S. DEPARTMENT OF ENERGY  
WASHINGTON, D.C.CAR NO. YM-94-053  
PAGE: 1 OF 2  
QA

## CORRECTIVE ACTION REQUEST

<sup>1</sup> Controlling Document M&O QAP-3-2, Design Verification, Rev. 4, Rev. P01		<sup>2</sup> Related Report No. HQ-94-02	
<sup>3</sup> Responsible Organization CRWMS M&O		<sup>4</sup> Discussed With M. DeLeone, F. Arth, J. Heaney, J. Willis	
<sup>5</sup> Requirement:  1. Paragraph 6. (Records) requires that design verification record packages consist of the following, as appropriate: design verification record, document review records, design review notice, design review team selection record, interoffice correspondence approving use of supervisor as verifier, alternate calculations and analyses, qualification test records, peer report and supporting documentation, verification review memorandum and design verification checklist.  2. Paragraph 5.4.1 requires that design verification records packages shall include the following documentation: the Design Verification Record, any Technical Document Review Notices and associated Document Review Record Forms, an index identifying all documents in the design verification package, the design package and any documentation supporting verifier qualifications.			
<sup>6</sup> Adverse Condition:  A. The following design verification documentation related to the Design Review was not available or was not generated for design package 1B:  1. Design Verification Record 2. Design Review Notice 3. Design Review Team Selection Record 4. Verification Review Memorandum 5. Design Verification Checklist  B. The list of required documentation conflicts with the required records section (6. Records) where the index and verifier qualifications are not required. These items could not be produced for design package 1B.			
<sup>9</sup> Does a significant condition adverse to quality exist? Yes <u>x</u> No <u>  </u> If Yes, Circle One: A <u>(B)</u> C D E		<sup>10</sup> Does a stop work condition exist? Yes <u>  </u> No <u>x</u> ; If Yes - Attach copy of SWO If Yes, Circle One: A B C	
<sup>13</sup> Response Due Date: 20 working days from issuance			
<sup>11</sup> Required Actions: <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Extent of Deficiency <input checked="" type="checkbox"/> Preclude Recurrence <input checked="" type="checkbox"/> Root Cause Determination			
<sup>12</sup> Recommended Actions: 1. Generate the required documentation. 2. Assure that other design packages that have been generated have received the proper reviews 3. Evaluate the quality of the records keeping processing relevant to design packages and the associated reviews. 4. Train all responsible personnel in the appropriate areas.			
<sup>7</sup> Initiator Richard G. Peck <i>CC Wams for</i> Date 6/30/94		<sup>14</sup> Issuance Approved by: QADD <i>RC</i> <i>for</i> Date 7/12/94	
<sup>15</sup> Response Accepted QAR Date		<sup>16</sup> Response Accepted QADD Date	
<sup>17</sup> Amended Response Accepted QAR Date		<sup>18</sup> Amended Response Accepted QADD Date	
<sup>19</sup> Corrective Actions Verified QAR Date		<sup>20</sup> Closure Approved by: QADD Date	

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

CAR NO. YM-94-053  
PAGE 2 OF 2  
QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

**\* Adverse Condition: (Continued)**

- c. The audit team was presented the revision to Design Package 1A (Reference Yucca Mountain Site Characterization Project Change Request CR 94/181) for review prior to submittal being made to the LRC. Similar discrepancies were found by the audit team as is detailed in Items A and B above. The package was retrieved by Engineering Supervision in order to correct all deficiencies, correctly collate the package and research the root cause of the problems found by the audit team.

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CAR NO. YM-94-053  
PAGE: 2 OF 2  
QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

\* Adverse Condition: (Continued)

- c. The audit team was presented the revision to Design Package 1A (Reference Yucca Mountain Site Characterization Project Change Request CR 94/181) for review prior to submittal being made to the LRC. Similar discrepancies were found by the audit team as is detailed in Items A and B above. The package was retrieved by Engineering Supervision in order to correct all deficiencies, correctly collate the package and research the root cause of the problems found by the audit team.

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8. CAR NO. YM-94-053

PAGE 1 OF 1  
QA

**CORRECTIVE ACTION REQUEST (CONTINUATION PAGE)**

**A. REMEDIAL ACTION:**

- Search existing files for possible misfiling of missing documents
- Generate the required missing documentation

Responsible Individual: Manny DeLeon

Completion Date: 10/15/94

**B. EXTENT OF DEFICIENCY:**

- Review the other ESF Surface Design Verification Packages to ensure proper documentation is available and complete

Responsible Individual: Manny DeLeon

Completion Date: 10/15/94

**C. ROOT CAUSE DETERMINATION:**

- The required documentation was not submitted to the Local Records Center (LRC) in a timely manner. The previous revision of QAP-3-2 (Design Verification) did not assign specific responsibility for assembling the records package and submitting it to the LRC.
- Discrepancies between Paragraph 5.4.1 and Paragraph 6 of QAP-3-2, Rev.4, P01, do not prevent preparation of the index nor the documentation supporting verifier qualifications, but may have attributed to them possibly not being prepared.

**D. CORRECTIVE ACTION TO PRECLUDE RECURRENCE:**

- QAP-3-2, (Design Verification) has been revised. Paragraph 3.6 defines the Design Verification Leader as "The individual assigned to ensure that the design verification is completed in accordance with this procedure". Throughout the procedure the Design Verification leader is given responsibility to initiate/compile/develop/complete various elements of the required forms and documentation in accordance with procedural requirements, and is the focal point for coordinating these documents in the development stage. In addition, Section 6 "RECORDS" also assigns the Design Verification Leader responsibility for assembling the records package and submitting it to the Local Records Centers.
- Discrepancies between Paragraph 5.4.1 and Section 6 have been resolved in the current revision of QAP-3-2.
- We will correct the discrepancies identified by reviewing the extent of deficiency and determining any impacts on other ESF Surface Design Packages

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