



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

DEC 28 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

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

The Yucca Mountain Quality Assurance Division staff has  
 verified the corrective action to CAR YM-94-053 and determined  
 the results to be unsatisfactory because of reasons stated in  
 the enclosed CAR.

Your response, indicating the appropriate corrective action  
 completion date, is required to be submitted to this office  
 within ten working days of the date of this letter.  
 Verification of completion of the required corrective action  
 will be performed after the date provided.

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

*R. E. Spence*

Richard E. Spence, Director  
 Yucca Mountain Quality Assurance Division

YMQAD:RBC-1523

Enclosure:  
 CAR YM-94-053

*102.7  
 WM-11  
 NH03*

L. Dale Foust

-2-

DEC 28 1994

cc w/encl:

T. A. Wood, HQ (RW-14) FORS  
~~J. C. Sprawl~~, 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/Duke, Las Vegas, NV  
D. G. Horton, OQA (RW-3) 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

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

<sup>8</sup> CAR NO. YM-94-053  
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**CORRECTIVE ACTION REQUEST**

<sup>1</sup> Controlling Document M&O QAP-3-2, Design Verification, Rev. 4, Rev. P01		<sup>8</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>6</sup> Requirement:			
<p>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.</p> <p>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.</p>			
<sup>6</sup> Adverse Condition:			
<p>A. The following design verification documentation related to the Design Review was not available or was not generated for design package 1B:</p> <ol style="list-style-type: none"> <li>1. Design Verification Record</li> <li>2. Design Review Notice</li> <li>3. Design Review Team Selection Record</li> <li>4. Verification Review Memorandum</li> <li>5. Design Verification Checklist</li> </ol> <p>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.</p>			
<sup>9</sup> Does a significant condition adverse to quality exist? Yes <u>x</u> No ___ If Yes, Circle One: A <u>(B)</u> C D E		<sup>10</sup> Does a stop work condition exist? Yes ___ 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:			
<ol style="list-style-type: none"> <li>1. Generate the required documentation.</li> <li>2. Assure that other design packages that have been generated have received the proper reviews.</li> <li>3. Evaluate the quality of the records keeping processing relevant to design packages and the associated reviews.</li> <li>4. Train all responsible personnel in the appropriate areas.</li> </ol>			
<sup>7</sup> Initiator Richard G. Peck Date 6/30/94		<sup>14</sup> Issuance Approved by: QADD <i>RC Salvo</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 <i>Robert Howard</i> Date 10/12/94		<sup>18</sup> Amended Response Accepted QADD <i>RC Salvo</i> Date 10/19/94	
<sup>19</sup> Corrective Actions Verified QAR Date		<sup>20</sup> Closure Approved by: QADD Date	

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**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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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

8/31/94 LV.MG.PGJ. 8/94-236

**Interoffice Correspondence**  
Civilian Radioactive Waste Management System  
Management & Operating Contractor



TRW Environmental  
Safety Systems Inc.

QA: N/A

**Subject**  
Records Coordinators

**Date**  
September 21, 1994  
VA.RM.AT.9/94.140

From *[Signature]*  
R. Robertson

**To**  
Distribution

**cc**  
D. Foust  
R. Godman  
A. Kubo

**Location/Phone**  
TES1/8580  
703.204-8600

Beginning in January of this year, the Vienna Information Management Services Office and the Las Vegas Support Operations group have carried out several initiatives designed to increase awareness by M&O staff of their responsibilities with respect to Federal records and records inclusionary to the central OCRWM Records Management System. These initiatives have been motivated by a recognition of the M&O's contractual and regulatory requirements as well as the compelling need to ensure that records required for repository licensing have been properly identified, captured and processed.

Although this training has achieved many favorable results, and will continue to be offered, many M&O staff do not properly manage the records that they generate or receive nor turn over the inclusionary records to the Records Management System as part of their daily work routine. Furthermore, many records that are turned over contain avoidable errors due to lack of attention to detail, failure to comply with written procedures and "blind" approval of records/records packages by authenticators. One of the outcomes of this situation was the recent generation of a trending Corrective Action Report that was assigned to the Records Management organization, citing numerous failures on the part of record sources to properly create, complete and turnover records.

Accordingly, the Records Management organization has developed a strategy for Offices and Departments to better manage their records. This strategy requires the cooperation and participation of all Offices and Departments but will result in benefits to both the Records Management organization and the line organizations. The foundation of the strategy is the assignment by line organizations of a Records Coordinator to act as a liaison with the Records Management organization. The concept behind the Records Coordinator system is that there will be an employee inside each line organization who is familiar with both the work carried out in that organization as well as records policies and procedures. Attached is a list of duties of the Records Coordinators.

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**CORRECTIVE ACTION REQUEST (CONTINUATION PAGE)**

Amended Response (Continued)

**C. ROOT CAUSE DETERMINATION:**

1. The required documentation was not submitted to the Local Records Center (LRC) in a timely manner. QAP-3-2, Rev 4 assigned the Cognizant Office Manager the responsibility for submitting the Records Package to the LRC. Root cause: This appears to be too high a level for assigning this discrete task.
2. Discrepancies between Paragraph 5.4.1 and Section 6 do not prevent preparation of the index nor the documentation supporting verifier qualifications, but may have been a contributing cause to them not being prepared.

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

1. QAP-3-2, Rev 5 now assigns a Design Verification Leader to ensure that all required forms and documentation are completed in accordance with procedural requirements. This individual also has been assigned responsibility for assembling the Design Verification Records Package and submitting it to the Local Records Center. No further corrective action is required.

The M&O Records Management organization has developed a strategy which is supported at the highest level of the M&O (See Attachment I). Each line organization will assign a Records Coordinator for facilitating submission of Records Packages.

Responsible Individual: Manny De Leon  
Completion Date: 11/30/94

Lessons learned training will be conducted against all CARs relating to Records Packages

Responsible Individual: Jerry Heaney  
Completion Date: 11/30/94

2. Discrepancies between Paragraph 5.4.1 and Section 6 no longer exist in the current revision of QAP-3- 2. No further corrective action is required.

All remedial actions and corrective actions will be completed by 11/30/94.

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**CORRECTIVE ACTION REQUEST (CONTINUATION PAGE)**

Amended Response

**A. REMEDIAL ACTION:**

1. Search existing files for possible misfiling of missing documents
2. Generate the required missing documentation if required

Responsible Individual: Manny DeLeon  
Completion Date: 11/30/94

3. Continue investigation to determine the extent of the deficiency as follows:

- Review Design Review Records Packages for Design Packages 1C, 2B & 2C for any deficiencies. Determine any potential impacts based on the review, and generate the required missing documentation if required. Amend CAR response.

Responsible Individual: Manny DeLeon  
Completion Date: 11/30/94

- Since no other Design Packages conducted Design Verifications using QAP-3-2, Rev 4, no further review related to Design Verification documentation is required.

**B. EXTENT OF DEFICIENCY:**

All existing project files as well as the LRC have been searched to locate the missing Design Verification documents. None of the subject documents have been found and are considered lost. Based on the outcome of the "Extent of Deficiency" investigation conducted for CAR YM-94-052, it has been determined that these documents will have no impact on package 1B or any work done to 1B.

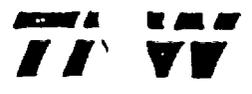
Neither the Vienna office nor the Charlotte office have conducted Design Verification, and therefore have not utilized QAP-3-2.

The Vienna office has reviewed a sampling of packages which performed reviews using QAP-3-1, Rev. 4. This review did not identify the existence of similar deficiencies with the records. Based upon this sampling, review packages for MRS-SRD Rev.1 and Trans SRD Rev. 1, we conclude that the extent of deficiency does not include Vienna.

The Charlotte office has instituted an administrative control by assigning a Conformance Verification Individual to ensure similar problems do not occur there. Because of this, a separate review at the Charlotte office was not conducted.

Similar investigations will be conducted for Design Review Records Packages to further identify the extent of the deficiencies.

**Interoffice Correspondence**  
**Civilian Radioactive Waste Management System**  
**Management & Operating Contractor**



TRW Environmental  
Safety Systems Inc.

QA: N/A

**Subject**  
Records Coordinators

**Date**  
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VA.RM.AT.9/94.140

From *[Signature]*  
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Accordingly, the Records Management organization has developed a strategy for Offices and Departments to better manage their records. This strategy requires the cooperation and participation of all Offices and Departments but will result in benefits to both the Records Management organization and the line organizations. The foundation of the strategy is the assignment by line organizations of a Records Coordinator to act as a liaison with the Records Management organization. The concept behind the Records Coordinator system is that there will be an employee inside each line organization who is familiar with both the work carried out in that organization as well as records policies and procedures. Attached is a list of duties of the Records Coordinators.

### Duties of Records Coordinators

- Learn work flows and work products of the respective line organizations in which they work.
- Learn records management (and document control) work flows, policies, procedures, and systems.
- Work with records sources to identify Federal records (vs. non-record materials).
- Work with records sources to identify inclusionary records and to prepare correct and complete records package segments and records packages.
- Advise line management in methods to ensure timely and efficient identification, turnover, and disposition of records.
- Support the line organization in making retrievals from the Records Management system, including conduct of on-line searches for records.
- Assist and advise line organization in RIDS implementation.
- Share observations with the Records Management organization on ways to improve work flows, policies, procedures and systems based on the user perspective.
- Act as a conduit between the line organization and the Records Management organization in all matters concerning Records Management and Document Control.

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**CORRECTIVE ACTION REQUEST (CONTINUATION PAGE)**

VERIFICATION OF CORRECTIVE ACTION FOR CAR YM-94-053

YMQAD staff reviewed interoffice correspondence LV.ESSD.MDL.11/94.369 from Manny DeLeon to Gail Abend dated November 29, 1994 documenting the reconstruction of the Design Verification Package for Design Package 1B. YMQAD staff reviewed the Document Review Records submitted by Russell E. Flyer, dated 12/03/93; Mark Zdrojewski, dated 12/14/93; David Barreres, dated 12/06/93; and Tim Albright, dated 11/12/93. The DRRs indicate that a design verification had been completed of Package 1B. However, YMQAD staff noted that no comments were submitted by a reviewer from the M&O Quality Assurance organization. After reviewing the reconstructed Design Team Selection Record and following discussions with Manny DeLeon (M&O ESF Surface Design), it was determined that no representative from the Quality Assurance Organization had conducted the review as required. YMQAD staff reviewed the reconstructed Verification Review Memorandum of Design Package 2C; the reconstructed Verification Review Memorandum states that 1B documents were determined to be non-quality affecting and therefore the lack of the Quality Assurance organization review did not adversely impact the document. The documentation reviewed satisfactorily closed the remedial action commitments for this CAR.

The M&O committed to assigning a Records Coordinator for facilitating submission of Records Packages. YMQAD staff interviewed Tom Ferguson, the records coordinator for MGDS design organization, and confirmed that he was knowledgeable of the responsibilities of the position.

YMQAD staff noted that several of the DRRs reviewed did not have any indication of the quality affecting status appropriately indicated. This is part of the deficiency identified in CAR YM-94-052; as noted in the verification statement of YM-94-052, dated 12/19/94. CAR YM-94-052 will remain open until those deficiencies are corrected.

The M&O committed to providing lessons learned training against all Corrective Action Requests relating to Records Package as part of the Corrective Action to Preclude Recurrence. The M&O Design Organization has not completed this training. Therefore, all Corrective Action to Preclude Recurrence could not be satisfactorily verified. CAR YM-94-053 will remain open until this action is complete.

  
\_\_\_\_\_  
Robert L. Howard, QAR

12/22/94  
\_\_\_\_\_  
Date