



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

JAN 06 1995

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 AND CLOSURE OF CORRECTIVE ACTION REQUEST (CAR) YM-94-054 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-94-054 and determined the results to be satisfactory. As a result, the CAR is considered closed.

If you have any questions, please contact either Robert B. Constable at 794-7945 or Richard E. Powe at 794-7749.

Richard E. Spence, Director
Yucca Mountain Quality Assurance Division

YMQAD:RBC-1602

Enclosure:
CAR YM-94-054

cc w/encl:

T. A. Wood, HQ (RW-14) FORS
J. G. Spraul, 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

cc w/o encl:

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

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

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CORRECTIVE ACTION REQUEST

¹ Controlling Document M&O QAP-3-5, Rev. 5, Development of Technical Documents		² Related Report No. HQ-94-02
³ Responsible Organization CRWMS M&O	⁴ Discussed With S. Bailey, R. Justice	
⁵ Requirement: Paragraph 5.2 Technical Document Preparation states in part: B. Ensure that, as a minimum, the technical document includes the following: 4. "Identification of whether input data are of indeterminate quality... these indications will be identified and tracked in accordance with applicable line procedures and shall be classified as to be verified (TBV)."		
⁶ Adverse Condition: Technical Document was approved and issued without identifying a TBV. Example: Seismic Design Inputs for the Exploratory Studies Facility at Yucca Mountain, BAB000000-01717-5705-0001, Rev. 1, dated May 20, 1994 identified that only a portion of the data were collected under Yucca Mountain Project Approved quality assurance programs and the computer programs used had not been verified and validated in accordance with CRWMS M&O approved procedures. However, no TBVs were identified.		
⁹ Does a significant condition adverse to quality exist? Yes ___ No <u>x</u> If Yes, Circle One: A B C D E	¹⁰ Does a stop work condition exist? Yes ___ No <u>x</u> ; If Yes - Attach copy of SWO If Yes, Circle One: A B C	¹³ Response Due Date: 20 working days from issuance
¹¹ 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		
¹² Recommended Actions: 1. Revise the example document to reflect TBV. 2. Investigate to determine if other documents need to be revised to reflect TBVs. 3. Take action to preclude recurrence such as clarifying the procedure.		
⁷ Initiator R. E. Powe <i>R. E. Powe</i> Date 6/30/94	¹⁴ Issuance Approved by QADD <i>[Signature]</i> Date 7-12-94	
¹⁵ Response Accepted QAR <i>R. E. Powe</i> Date 8/16/94	¹⁶ Response Accepted QADD <i>[Signature]</i> Date 8-23-94	
¹⁷ Amended Response Accepted QAR <i>[Signature]</i> Date	¹⁸ Amended Response Accepted QADD <i>[Signature]</i> Date	
¹⁹ Corrective Actions Verified QAR <i>[Signature]</i> Date 1/6/95	²⁰ Closure Approved by QADD <i>[Signature]</i> Date 1-5-95	

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CORRECTIVE ACTION REQUEST (CONTINUATION PAGE)

A. Remedial Action:

1. Revise the report, "Seismic Design Inputs for the Exploratory Studies Facility at Yucca Mountain" (BAB000000-01717-5705-0001, REV01) to indicate "to be verified" (TBV) values. (Richard Quittmeyer, Complete by 8/19/94)
2. Provide revised version of report to Document Control for controlled distribution. Provide Document Control with a list of persons to whom the current version of the report has been distributed and put them on controlled distribution. Rev 0 of the report was distributed using M&O QAP-3-12. Rev 1 of the report was first distributed using M&O QAP-3-12 and then made a controlled document. (Richard Quittmeyer, Complete by 8/19/94)

B. Extent of the Deficiency:

1. Examine other documents prepared according to M&O QAP-3-5 within the M&O to determine if TBV values have been properly annotated. Document the areas examined and the results of the examination. Any documents that need to be revised will be brought into compliance with the current revision of M&O QAP-3-5 (Richard Quittmeyer, to be completed by October 30, 1994).
2. Control of documents generated using M&O QAP-3-5 was examined in responding to CAR HQ-94-020.

C. Root Cause:

1. Clarification of condition: A technical report developed under M&O QAP-3-5 over a period of about one year was not in compliance with the version of the procedure in effect at the time the document was approved. During the period of document preparation, the procedure was modified several times. Changes in the procedure to require identification and tracking of "to be verified" input data and to require review by the QA location manager were not taken into account in the final document. The document was revised to include a review by the QA location manager and to include a statement that input data in the report were of indeterminate quality. Although the statement that the data used were of indeterminate quality was added, the results were not identified as "to be verified (TBV)" and entered into the TBV tracking system in accordance with applicable line procedures as required by M&O QAP-3-5. The document was prepared by the M&O Site Characterization (now Scientific Programs Integration) group. Self-study training by the document preparer and approver was inadequate.

In investigating the condition it was also discovered that M&O QAP-3-12 was being used to transmit the report to the design group but that information copies were also being provided to personnel requesting them. This resulted in out-dated versions of the document being in the possession of some personnel after the document was revised. QAP-3-5, therefore, does not provide sufficient direction as to how technical documents should be distributed and controlled. (Richard Quittmeyer, complete)

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D. Preclude Recurrence:

1. Re-train document preparers and approvers in the M&O Scientific Programs Integration group to current version of M&O QAP-3-5. (Richard Quittmeyer, to be completed by 8/19/94)
2. Develop and require classroom training for document preparers within the Scientific Programs Integration group who are working according to M&O QAP-3-5. (Richard Quittmeyer, to be completed by 10/30/94)
3. M&O QAP-3-5 has been revised to require that documents subject to baseline change control be submitted to the Baseline Change Control Board (BCCB) in accordance with QAP-3-4 and that other documents be submitted to the Document Control Center in accordance with QAP-6-1. (Robert Bahney, complete, 6/23/94)



Responsible Manager, C. Thomas Statton

8/10/94

Date

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VERIFICATION OF CORRECTIVE ACTIONS

1. Report, "Seismic Design Inputs for the Exploratory Studies Facility at Yucca Mountain" (BAB000000-01717-5705-001) was reviewed and "to be verified" (TBV) values were added to revision 02 of the report.
2. The report was given to Document Control for controlled distribution. A list of names to whom revision 01 of the report was given to was given to Document Control to establish a controlled distribution list.
3. Reviewed the memo that was sent out by C. Thomas Statton on 9/26/94 asking for inputs on any document that was prepared in accordance with QAP-3-5 and the responses received. There were no negative responses.
4. Reviewed QAP-3-5, R05, P01, and verified that the required changes to the procedure had been incorporated.
5. Reviewed the material developed for the classroom training of document preparers and approvers for QAP-3-5 and the attendance sheets for the classroom training which consisted of 22 individuals.

 1/4/95

Frank J. Krafzinger
QATSS Senior Quality Assurance Specialist