



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

WBS 1.2.11
QA: N/A

MAR 18 1993

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

ISSUANCE OF CORRECTIVE ACTION REQUEST (CAR) YM-93-034, YM-93-036, AND
YM-93-037 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD)
AUDIT YMP-93-07 OF MANAGEMENT AND OPERATING CONTRACTOR/TRW ENVIRONMENTAL
SAFETY SYSTEMS, INC.

Enclosed are CARs YM-93-034, YM-93-036, and YM-93-037 generated as a result
of YMQAD Audit YMP-93-07.

Please identify the corrective actions to be taken and implemented to correct
the deficiencies. CAR Continuation Sheets and instructions for completion
have been provided. Send the originals of your responses to Nita J. Brogan,
Science Applications International Corporation, Las Vegas, Nevada. Responses
to the CARs are due 20 working days from the date of this letter. Extensions
to due dates must be requested in writing, with appropriate justification,
prior to the due dates.

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-3143

Enclosures:

1. CAR YM-93-034
2. CAR YM-93-036
3. CAR YM-93-037

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PDR WASTE
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ADD: Ken Hooks
LH: Encl.
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RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.**

8 CAR NO.: YM-93-034
DATE: 3/11/93
SHEET: 1 OF 1
QA

CORRECTIVE ACTION REQUEST

1 Controlling Document M&O QAPD, Revision 3	2 Related Report No. Audit YMP-93-07
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3 Responsible Organization M&O	4 Discussed With J. Brackett/J. Jackson
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5 Requirement:

The M&O QAPD, Revision 3, Paragraph 2.1.2 states in part, "This QAPD details the M&O organizational structure, quality-affecting responsibilities, interfaces...." Paragraph 2.1.4 states, "M&O Implementing Line Procedures are used to control quality-affecting activities where detailed implementing instructions are restricted to an M&O geographic location or an individual M&O functional area."

6 Adverse Condition:

Contrary to the above, the M&O QAPD, Section 15.0, "Control of Nonconforming Items" does not address QAPD, Section 2.0 requirements. The M&O, acting as the A/E for the YMPD, has responsibility for the disposition of NCRs. Implementing procedures describing details of this activity were not in place during the audit.

9 Does a significant condition adverse to quality exist? Yes ___ No <u>X</u> If Yes, Circle One: A B C	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 D	11 Response Due Date: 20 Working Days from Issuance
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12 Required Actions: ☒ Remedial ☐ Extent of Deficiency ☐ Preclude Recurrence ☐ Root Cause Determination

13 Recommended Actions:

7 Initiator Gerard Heaney <i>G. Heaney</i> Date <u>3-11-93</u>	14 Issuance Approved by: QADD <i>[Signature]</i> Date <u>3/15/93</u>
15 Response Accepted QAR Date	16 Response Accepted QADD Date
17 Amended Response Accepted QAR Date	18 Amended Response Accepted QADD Date
19 Corrective Actions Verified QAR Date	20 Closure Approved by: QADD Date

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WASHINGTON, D.C.

CAR NO. _____
DATE: _____
PAGE: _____ OF _____
QA

CORRECTIVE ACTION REQUEST (Continuation Page)

Format for Corrective Action Response

The CAR response shall include the following information:

1. Corrective Action Response for CAR # _____
 - A. Remedial Action - Actions taken to correct specific deficiencies noted.
(Required for all CARs)
 - B. Investigative Action - Actions taken to determine the extent of the condition.
(Required for all significant conditions adverse to quality or any Condition Adverse to Quality if requested by OQA)
 - C. Root Cause Determination - Identification of the root cause of the condition.
(Required for all significant conditions adverse to quality or any Condition Adverse to Quality if requested by OQA)
 - D. Corrective Action to Preclude Recurrence - Actions taken to address the root cause and preclude recurrence of the condition.
(Required for all significant conditions adverse to quality or any Condition Adverse to Quality if requested by OQA)
2. For each action above, identify the name of the individual assigned responsibility for completion and the anticipated (or actual, if complete) completion date.
3. Response Approved: _____ Date: _____
Responsible Manager

8 CAR NO.: YM-93-036
DATE: 3/11/93
SHEET: 1 OF 3
QA

1 Controlling Document CRWMS M&O QAP 5-1, Revision 1, PCN P01		2 Related Report No. Audit YMP-93-07	
3 Responsible Organization CRWMS M&O-Nevada		4 Discussed With R. Justice/T. Redding/F. Arth	
5 Requirement: QAP 5-1, Revision 1, PCN P01 1. Paragraph 5.3.2 states in part, "Each QAP/ILP shall be distributed by the responsible manager using an interoffice memo to the reviewing managers with a PRR. The PRR shall be completed with review instructions/criteria (see Attachment III, Standard Review Criteria) for performing the review...." Paragraph 5.2.1 of Revision 0 stated in part, "The development manager shall submit the draft procedure with review instructions/criteria to the manager of each interfacing organization...." (Continued on next page)			
6 Adverse Condition: The CRWMS M&O, Nevada Operations has not been implementing QAP 5-1. Example are: 1. There were no review criteria for the review of NSP-6-2, Revision 0, and NSP-17-1, Revision 0. The Document Review Records, "Review Instruction/Criteria Prepared by:" blocks were signed and dated; however, no review criteria were found in the records package. Furthermore, the review/instructions criteria was not identified on Block 7 of a Procedure Review Record for QLP-2-1, Revision 1. (Continued on next page)			
9 Does a significant condition adverse to quality exist? Yes <u>X</u> No ___ If Yes, Circle One: A <u>(B)</u> C		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 D	
11 Response Due Date: 20 Working Days from Issuance			
12 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			
13 Recommended Actions: 1. Correct the examples identified. 2. Investigate to determine if there are similar deficiencies. 3. Determine root cause(s) and take action to preclude recurrence.			
7 Initiator <u>Amelia J. Arceo</u> A. I. Arceo Date <u>3/15/93</u>		14 Issuance Approved by: <u>[Signature]</u> QADD <u>[Signature]</u> Date <u>3/15/93</u>	
15 Response Accepted QAR _____ Date _____		16 Response Accepted QADD _____ Date _____	
17 Amended Response Accepted QAR _____ Date _____		18 Amended Response Accepted QADD _____ Date _____	
19 Corrective Actions Verified QAR _____ Date _____		20 Closure Approved by: QADD _____ Date _____	

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DATE: 3/11/93
SHEET: 2 OF 3
QA

CORRECTIVE ACTION REQUEST (Continuation Page)

5 Requirements (continued)

2. Paragraph 5.3.10 states in part, "The responsible manager shall finalize training requirements and the effective date of the QAP/ILP on the QAP/ILP Training Coordination Sheet. If formal classroom training is required, the Training Manager shall be consulted concerning the effective date... If formal classroom training is not required, the training recommendation shall be documented by the responsible manager on the QAP/ILP Training Coordination Sheet and sent to the Training Manager for tracking."
3. Paragraph 5.5.2.A states in part, "Changes in the QAP/ILP revision shall be designated by change bars in the retyped QAP/ILP...."
4. Paragraph 5.5.4.C states, "The Document Control Center shall distribute the cancellation notice and a revised Table of Contents in accordance with QAP 6-1."

Paragraph 5.7.3 states in part, "After approval, the PCN shall be given to the Document Control Center for distribution to all manual holders in accordance with QAP 6-1. The PCN shall be distributed with an updated Table of Contents...."
5. Paragraph 5.8.5 states in part, "Memos documenting the QAP/ILP review due to changes in upper documents shall be submitted to the LRC in accordance with QAP 17-1."
6. Section 6 states in part, "Documents generated as a result of this procedure shall be collected and maintained in accordance with QAP 17-1... As a minimum, the following shall be considered program records and shall be submitted through the Local Records Centers Program Records: Procedure Review Records and non-mandatory comments with distribution memo and a copy of the draft submitted for review...."

6 Adverse Condition (continued)

2. a. There was no QAP/ILP Training Coordination Sheet for NSP-6-2, Revision 0, "Nevada Site Document Tracking."

b. The QAP/ILP Training Coordination Sheet for QLP-2-1, Revision 1, "Certification of QC Inspectors"
 - 1) was not signed and dated by the Responsible Manager in the Preliminary Training Requirements Determination block, and
 - 2) the Final Determination of Training Requirements block was not filled in.

NOTE: Item b. was resolved on 3/2/93 by resubmitting corrected QAP/ILP Training Coordination Sheet to NNA.921105.0037 records package.

3. Changes to NSP-6-1, Revision 1, and NSP-17-1, Revision 1 were not indicated by change bars. The CRWMS M&O had decided that change bars were not needed when the revision was so extensive that the revision constituted a complete revision; however, the CRWMS M&O had not revised QAP 5-1 to reflect current practice.
4. The Document Control Center distributes Cancellation Notices and Procedure Change Notices without Table of Contents. There is no Table of Contents for implementing procedures.
5. There was no documented evidence indicating that ILPs were reviewed for impact when upper-tier documents are changed.
6. a. Records packages for the development of implementing procedures NSP-6-1, Revision 1, "Yucca Mountain Site Office: Document and Records Center: Document Control Operations" and NSP-17-1, Revision 1, "Yucca Mountain Site Office: Document and Records Center: Records Services Operations" were not submitted to the LRC.

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QA

CORRECTIVE ACTION REQUEST (Continuation Page)

6 Adverse Condition (continued)

- b. Record package for QLP-2-1, Revision 1 did not contain the draft procedure submitted for review.

NOTE: Item a. was resolved on 3/3/93 by transmittal of records packages to the LRC and Item b. was resolved on 3/8/93 by transmittal of the draft procedure to the LRC.

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CORRECTIVE ACTION REQUEST (Continuation Page)

Format for Corrective Action Response

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(Required for all significant conditions adverse to quality or any Condition Adverse to Quality if requested by OQA)
 - D. Corrective Action to Preclude Recurrence - Actions taken to address the root cause and preclude recurrence of the condition.
(Required for all significant conditions adverse to quality or any Condition Adverse to Quality if requested by OQA)
2. For each action above, identify the name of the individual assigned responsibility for completion and the anticipated (or actual, if complete) completion date.
3. Response Approved: _____ Date: _____
Responsible Manager

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8 CAR NO.: YM-93-037
DATE: 3/12/93
SHEET: 1 OF 2
QA

CORRECTIVE ACTION REQUEST

1 Controlling Document CRWMS M&O QAPD, Revision 3		2 Related Report No. Audit YMP-93-07	
3 Responsible Organization CRWMS M&O-Nevada		4 Discussed With L. D. Foust, J. Jackson	
5 Requirement: CRWMS M&O QAPD, Revision 3, Section 5.1 states in part: "....The M&O Quality Administrative Procedures (QAPs) and Implementing Line Procedures (ILPs) incorporate the committed requirements from the applicable sections of the QARD. QA ensures that all applicable quality assurance requirements are addressed prior to approval...."			
6 Adverse Condition: The CRWMS M&O Implementing Line Procedures (ILPs) do not meet some of the requirements of the CRWMS M&O QAPD and in some instances do not reflect current practice. Examples of ILPs that are inadequate or do not reflect current practice that were found during Audit YMP-93-07 are: 1. NSP-6-1, Revision 1, PCNs P01 and P02, Yucca Mountain Site Office: Document Control and Records Center: Document Control Operations Paragraph 5.1.6.1 states, "Upon receipt of an approved master of a design document revision, the DRC staff shall destroy all hard copies of the superceded or obsolete (old) documents, including applicable incorporated change documents." CRWMS M&O personnel were not destroying the hard copies of the superceded or obsolete document. Instead they are marking the copies as obsolete and keeping them for reference by field personnel. The documents are removed once the activity associated with the Job Package is completed and the Job Package is submitted to the Central Records facility. The ILP needs to be revised to reflect this current practice.			
9 Does a significant condition adverse to quality exist? Yes <u>X</u> No <u> </u> If Yes, Circle One: A <u>(B)</u> C		10 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 D	
11 Response Due Date: 20 work days from issuance			
12 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			
13 Recommended Actions: 1) Correct the deficiencies identified; 2) Screen other ILPs to determine the extent of the deficiency; 3) determine if M&O personnel are sufficiently trained regarding working to approved procedures and what to do if a procedure needs to be revised; 4) determine root cause(s); and 5) take action to prevent recurrence.			
7 Initiator: <u>J. Blaylock/Rj Powe</u> Date <u>3/15/93</u>		14 Issuance Approved by: QADD <u>[Signature]</u> Date <u>3/15/93</u>	
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CORRECTIVE ACTION REQUEST (Continuation Page)

6 Adverse Condition (continued)

2. NSP-17-1, Revision 1, Yucca Mountain Site Office: Document and Records Center; Record Services Operations

- a. CRWMS M&O QAPD, Revision 3, Section 17.6 states in part, "Records are controlled from the time they are completed until they are stored in predetermined locations that meet the requirements of the OCRWM QARD. The storage procedure includes:

.....
f. The method for maintaining control of and accountability for records removed from the storage area...."

NSP-17-1, Revision 1, does not provide a method for controlling documents in temporary storage that are returned to the Record Source.

- b. NSP-17-1, Revision 1, paragraph 5.1.8.1 states in part, "....The DRC records vault complies with applicable QA requirements to prevent loss, damage from moisture, temperature, pressure, excessive light, electromagnetic fields, and other hazards.

NSP-17-1 does not provide acceptance criteria for the prevention measures required, e.g. there is no criteria for what constitutes excessive light, electromagnetic fields, or other hazards.

3. General, all ILPs

CRWMS M&O QAPD, Revision 3, Section 2.1.2 states in part, "This QAPD details the M&O organizational structure, quality-affecting responsibilities, interfaces...." and Section 2.1.4 states in part, "M&O Implementing Line Procedures are used to control quality-affecting activities where detailed implementing instructions are restricted to an M&O geographic location or individual functional area...."

M&O ILPs do not reference interfacing Yucca Mountain Site Characterization Project Office Administrative Procedures such as AP 3.5Q and AP 6.17Q.

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CORRECTIVE ACTION REQUEST (Continuation Page)

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2. For each action above, identify the name of the individual assigned responsibility for completion and the anticipated (or actual, if complete) completion date.
3. Response Approved: _____ Date: _____
Responsible Manager

MAR 18 1993

L. Dale Foust

-2-

cc w/encls:

D. G. Horton, HQ (RW-3) FORS

Trudy Wood, HQ (RW-52) FORS

~~K. R. Hooks, NRC, Washington, DC~~

S. W. Zimmerman, NWPO, Carson City, NV

T. L. Badredine, M&O/TRW, Las Vegas, NV

R. J. Brackett, M&O/TRW, Vienna, VA

J. A. Jackson, M&O/TRW, Las Vegas, NV

R. L. Robertson, M&O/TRW, Vienna, VA

C. P. Gertz, YMP, NV

cc w/o encls:

J. W. Gilray, NRC, Las Vegas, NV

N. J. Brogan, SAIC, Las Vegas, NV

R. L. Maudlin, MACTEC, Las Vegas, NV