



**Department of Energy**  
**Yucca Mountain Site Characterization**  
**Project Office**  
**P. O. Box 98608**  
**Las Vegas, NV 89193-8608**  
**AUG 12 1993**

WBS 1.2.11  
 QA: N/A

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 RESPONSES TO CORRECTIVE ACTION REQUEST (CAR) YM-93-062 AND  
 CAR YM-93-063 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION  
 (YMQAD) AUDIT YM-93-12 OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT SYSTEM  
 MANAGEMENT AND OPERATING CONTRACTOR (SCP: N/A)

The YMQAD staff has evaluated the responses to CARs YM-93-062 and  
 YM-93-063. The responses have been determined to be satisfactory.  
 Verification of completion of the corrective actions will be performed  
 after the effective dates provided. Any extension to these dates must be  
 requested in writing, with appropriate justification, prior to the date.  
 Please send a copy of extension requests to Nita J. Brogan, YMQAD/QATSS,  
 101 Convention Center Drive, Suite 640, Las Vegas, Nevada 89109.

If you have any questions, please contact either Robert B. Constable at  
 794-7945 or Donald J. Harris at 794-7356.

*R. E. Spence*

Richard E. Spence, Director  
 Yucca Mountain Quality Assurance Division

YMQAD:RBC-5532

Enclosures:

1. CAR YM-93-062
2. CAR YM-93-063

cc w/encls:

- Trudy Wood, HQ (RW-52) FORS
- K. R. Hooks, NRC, Washington, DC
- S. W. Zimmerman, NWPO, Carson City, NV
- R. J. Brackett, M&O/Duke, Vienna, VA
- R. L. Robertson, M&O/TRW, Vienna, VA
- J. A. Jackson, M&O/TRW, Las Vegas, NV

cc w/o encls:

- J. W. Gilray, NRC, Las Vegas, NV
- N. J. Brogan, YMQAD/QATSS, Las Vegas, NV

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9308180060 930812  
 PDR WASTE  
 WM-11 PDR

ADD: Ken Hooks

*Mr. Encl.*

*102.7  
 WM-11  
 NHOZ*

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

8 CAR NO.: YM-93-062  
DATE: 07/02/93  
SHEET: 1 OF 2  
QA

**CORRECTIVE ACTION REQUEST**

1 Controlling Document QARD DOE/RW-0333P, Revision 0		2 Related Report No. YMP-93-12	
3 Responsible Organization CRWMS M&O-Nevada		4 Discussed With R. Justice/P. Hastings/E. Benton	
5 Requirement: 1) QARD DOE/RW-0333P, Section 3.0, Design Control Paragraph 3.2.2, Design Process  Item I- Drawings, specifications, and other design output documents shall contain appropriate inspection and testing acceptance.  2) QARD DOE/RW-0333P, Section 8.0, Identification and Control of Items Paragraph 8.2.3, Traceability  (Continued on next page)			
6 Adverse Condition: Contrary to the cited requirements:  1) Specification YMP-025-1-SP09, Section 1400 and Item Specifications 02165, 02310, and 03361 are unclear on the definition of commercial-grade for quality-affecting procurements, receiving inspection, including testing. There is no program in place for commercial-grade procurements, and the subsequent upgrade and dedication for use in a quality-affecting application.  2) a. The Specification YMP-025-1-SP09, Sections 1400, 02165, 02310, and 03361 currently do not address traceability.  (Continued on next page)			
9 Does a significant condition adverse to quality exist? Yes <u>X</u> No ___ If Yes, Circle One: A B <u>C</u>		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. Clarify Specification YMP-025-1-SP09 quality requirement. 2. Develop a commercial-grade upgrade and dedication program. 3. Meet traceability requirements.			
7 Initiator <u>Donald J. Harris</u> Donald J. Harris Date <u>7-1-93</u>		14 Issuance Approved by <u>[Signature]</u> QADD <u>[Signature]</u> Date <u>7-1-93</u>	
15 Response Accepted QAR <u>Donald J. Harris</u> Date <u>8/6/93</u>		16 Response Accepted QADD <u>[Signature]</u> Date <u>8/11/93</u>	
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.

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**CORRECTIVE ACTION REQUEST (Continuation Page)**

**5 Requirements (continued)**

- A. Item identification methods shall ensure that traceability is established and maintained in a manner that allows an item to be traced to applicable design or other specifying documents.
- B. Item traceability documentation shall ensure that the item can be traced at all times from its source through installation or end use.

**6 Adverse Condition (continued)**

- b. FCR 93/321 against Specification Section 02165, removed the traceability requirements for (commercial-grade) important to radiological safety or waste escalation due to production delays. This precludes traceability from source through installation or end use.

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DATE:	8/4/93
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**CORRECTIVE ACTION REQUEST (Continuation Page)**

1. Corrective Action Response for CAR # YMP-93-062

- A.) Remedial Action-Revise Specification YMP-025-1-SP09, Section 1400 and Item Specifications 02165, 02310, and 03361. This revision will clarify the definition of commercial grade materials for use in quality affecting applications and ensure commercial grade materials used in quality affecting applications meet requirements of QARD Section 3.0 Paragraph 3.2.2 and Section 8.0, Paragraph 8.2.3.
- B.) Investigative Action-Specification YMP-025-010-SP09 Item Specifications <sup>8/4/93</sup> 02165, 02310, and 03361 will be reviewed, materials identified as commercial grade will be reviewed for quality application. Those materials used in quality affecting applications will be identified.
- C.) Root Cause Determination-The determination of root cause identifies inadequate identification and implementation of QA requirements with regard to commercial grade materials use in quality affecting applications.
- D.) Corrective Action to Preclude Reoccurrence-Review Specification YMP-025-1-SP09, Section 1400 and Item Specifications 02165, 02310, and 03361 as well as all other Quality Affecting subsurface activities to identify those materials which are commercial grade and used in quality affecting applications. Revise the specifications to implement the requirements of QARD Section 3.0, Paragraph 3.2.2 and Section 8.0, Paragraph 8.2.3. To ensure commercial grade materials to be used in quality affecting applications are identified and traceability established an engineering analysis The Material Dedication Analysis for Commercial Grade Items (B00000000-01717-0200-00100) is being written. Conclusions of this analysis will identify actions necessary to meet appropriate requirements. To implement the conclusion of the analysis a FCR will be written to establish the traceability and the critical attributes of affected materials.

2. The person responsible for the above actions will be Edward Fitch (794-1969). The anticipated completion date is September 3, 1993.

3. Response Approved:  Date: 8-4-93  
Responsible Manager

*Ltr dtd 8/4/93 - LV. QA. BRJ. 08/93-193*

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8 CAR NO.: YM-93-063  
DATE: 07/02/93  
SHEET: 1 OF 2  
QA

CORRECTIVE ACTION REQUEST

1 Controlling Document QARD DOE/RW-0333P, Revision 0		2 Related Report No. YMP-93-12	
3 Responsible Organization CRWMS M&O-Nevada		4 Discussed With R. Justice/P. Hasting/H. Benton	
5 Requirement: 1) QARD DOE/RW-0333P, Revision 0, Section 15, Nonconformances Paragraph 15.2.4, Disposition of Nonconforming Items  Item B The Technical Justification for the acceptability of a nonconforming item that has been dispositioned "repair" or "use-as-is," shall be documented.  (Continued on next page)			
6 Adverse Condition: 1) Nonconformance Reports (NCRs) 93-010, 93-016, and 93-017 were dispositioned "use-as-is" and subsequently closed without a Technical Justification for the acceptability of the nonconforming items dispositioned as "use-as-is."  2) NCRs were dispositioned "use-as-is" based on Certified Mill Test Reports (CMTRs), welder records, shop drawings and Certificate of Conformances (NCR 93-010 and 93-017) and CMTR (NCR 93-016). These supplier submittals were  (Continued on next page)			
9 Does a significant condition adverse to quality exist? Yes <u>x</u> No ___ If Yes, Circle One: A B <u>C</u>		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) Review the bases for the "use-as-is" disposition.  2) Determine extent of deficiency, determine action to preclude recurrence, and determine the root cause.			
7 Initiator <u>Donald J. Harris</u> Donald J. Harris Date <u>7-1-93</u>		14 Issuance Approved by: <u>[Signature]</u> QADD <u>[Signature]</u> Date <u>07-07-93</u>	
15 Response Accepted QAR <u>Donald J. Harris</u> Date <u>8-6-93</u>		16 Response Accepted QADD <u>[Signature]</u> Date <u>8/11/93</u>	
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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**CORRECTIVE ACTION REQUEST (Continuation Page)**

5 Requirements (continued)

- 2) QARD DOE/RW-0333P, Revision 0, Section 4.0, Procurement Document Control  
Paragraph 7.2.7, Certificate of Conformance

Item F Measures shall be identified to verify the validity of the suppliers' certificates and the effectiveness of the certification process (such as by audit of the supplier or by an independent inspection or test of the item) verification shall be conducted by the purchaser at intervals commensurate with the past quality performance of the supplier.

6 Adverse Condition (continued)

received from unqualified suppliers and were used as the bases of the "use-as-is" disposition, without testing to verify the validity of the suppliers' certification process for traceability back to the Purchase Order and Technical Inspection Reports.

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**CORRECTIVE ACTION REQUEST (Continuation Page)**

1. Corrective Action Response for CAR # YMP-93-063

- A.) Remedial Action-1.)The remedial action is to write a Technical Justification for the acceptability of the nonconforming items dispositioned as "use-as-is" by NCR 93-010,016,and 017 in accordance with QARD Section 15, Paragraph 15.2.4. 2.)Initiate measures to identify the validity of supplier certificates in accordance with QARD Section 7, Paragraph 7.2.7 F.
- B.) Investigative Action-Review all existing NCR's relative to subsurface activities to determine conformance with 1.)Section 15, Paragraph 15.2.4 2.)Section 7, Paragraph 7.2.7 F
- C.) Root Cause Determination-1.)The root cause is the lack of understanding what is entailed by identifying materials as commercial grade in quality applications. 2.) The root cause is not understanding that commercial grade items require a source evaluation be completed Section 7, Paragraph 7.2.2 or receipt testing be done as per Section 7, Paragraph 7.2.12.
- D.) Corrective Action To Preclude Reoccurrence-1.)Institute refresher briefing classes on QARD Section 15 for affected procurement , QA/QC ,and Title III personnel with emphasis on meeting the requirements of the section. 2.) Initiate procurement measures in conjunction the appropriate QA organization to perform source evaluation in accordance with QAP- 7-1, Control of Purchased Items and Services.

2. The person responsible for completion of the above items is Edward Fitch (794-1969). Anticipated completion date is September 17, 1993.

3. Response Approved:

  
Responsible Manager

Date:

8-4-93

*Ed Fitch* dtd 8/4/93 - LV. QA. BRJ. 08/93-193