



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

DEC 27 1994

Larry R. Hayes  
Technical Project Officer  
for Yucca Mountain  
Site Characterization Project  
U.S. Geological Survey  
101 Convention Center Drive  
Suite 860  
Las Vegas, NV 89109

VERIFICATION OF CORRECTIVE ACTION AND CLOSURE OF CORRECTIVE  
ACTION REQUEST (CAR) YM-94-049 RESULTING FROM YUCCA MOUNTAIN  
QUALITY ASSURANCE DIVISION'S (YMQAD) AUDIT YMP-94-06 OF  
U.S. GEOLOGICAL SURVEY (SCPb: N/A)

The YMQAD staff has verified the corrective action to CAR  
YM-94-049 and determined the results to be satisfactory. As  
a result, the CAR is considered closed.

If you have any questions, please contact either Robert E.  
Constable at 794-7945 or James Blaylock at 794-7913.

YMQAD:RBC-1495

Richard E. Spence, Director  
Yucca Mountain Quality Assurance Division

Enclosure:  
CAR YM-94-049

cc w/encl:

~~J. G. Spraul~~, NRC, Washington, DC  
S. W. Zimmerman, NWPO, Carson City, NV  
T. H. Chaney, USGS, Denver, CO  
R. W. Craig, USGS, Las Vegas, NV  
D. D. Porter, USGS/SAIC, Golden, CO

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.

8 CAR NO.: YM-94-049  
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**CORRECTIVE ACTION REQUEST**

1 Controlling Document QARD, Rev. 0		2 Related Report No. YMP-94-06	
3 Responsible Organization USGS		4 Discussed With T. CHANEY	
5 Requirement: Section 5.2.2.D of the QARD states, in part: "Implementing documents shall include the following information as appropriate to the work to be performed: D. Quantitative or qualitative acceptance criteria sufficient for determining that activities were satisfactorily accomplished."			
6 Adverse Condition: QMP 16.03, R3, provides no criteria as to what constitutes a trend, hence the rationale and conclusions of the trend reports for the time periods 10/1/93 - 12/31/93 and 1/1/94 - 3/31/94 are not substantiated by the information provided.			
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	
		3 Response Due Date: 20 WORKING DAYS FROM J. SHAWLE	
11 Required Actions: <input checked="" type="checkbox"/> Remedial <input type="checkbox"/> Extent of Deficiency <input checked="" type="checkbox"/> Preclude Recurrence <input type="checkbox"/> Root Cause Determination			
12 Recommended Actions: 1. Provide qualitative criteria in QMP 16.03. 2. Change the definition of adverse condition to be consistent with the QARD glossary. 3. Substantiate the trend reports for the time frame identified above.			
7 Initiator J. BLAYLOCK C.C. Wanner for 6-30-94		14 Issuance Approved by: QADD [Signature] for Date 7-A-94	
15 Response Accepted QAR [Signature] Date 9/12/94		16 Response Accepted QADD [Signature] Date 9/15/94	
17 Amended Response Accepted QAR [Signature] Date 9/12/94		18 Amended Response Accepted QADD [Signature] Date 9/12/94	
19 Corrective Actions Verified QAR [Signature] Date 12/20/94		20 Closure Approved by: QADD [Signature] Date 12-23-94	

ENCLOSURE

OFFICE OF CIVILIAN  
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CORRECTIVE ACTION REQUEST (Continuation Page)

1. CORRECTIVE ACTION RESPONSE FOR CAR No. YM-94-049

- A. **REMEDIAL ACTION:** The two trend reports generated during the identified time frame will be reviewed. The review will address consistency of the approach for identifying adverse quality trends. The Quality Assurance Management Information Reports will be amended to add any supplemental information required to clarify the qualitative criteria in the trend analysis contained in the reports found.
- B. **EXTENT OF THE DEFICIENCY:** Two quarterly Quality Assurance Management Information Reports were produced during the time frame indicated.
- C. **ROOT CAUSE DETERMINATION:** Not. Required.
- D. **CORRECTIVE ACTION TO PRECLUDE RECURRENCE:** YMP-USGS QMP-16.03, R3 will be modified to include qualitative criteria for trend identification and to change the definition of "condition adverse to quality" to be consistent with the QARD.

2. For each action above, identify the name of the individual assigned responsibility for completion of the action and the anticipated (or actual, if complete) completion date.

1.A N.R. Karas, Program Development Coordinator

10/01/94

1.D N.R. Karas, Program Development Coordinator

10/01/94

3. RESPONSE APPROVED:

  
Thomas H. Chaney  
YMP-USGS Quality Assurance Manager

8/1/94  
Date

  
Larry R. Hayes  
Chief, Yucca Mountain Project Branch

8/1/94  
Date

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CORRECTIVE ACTION REQUEST (CONTINUATION PAGE)

Verification Statement for CAR YM-94-049

The USGS revised QMP 16.03 to provide criteria as to what constitutes a trend. The QMP 16.03, R3-M1 became effective December 5, 1994. In addition, the USGS did an impact analysis on the trend reports for 10/11/93 - 12/31/93 and 1/1/94 - 3/31/94. This was documented in a letter dated 12/2/94, Tom Chaney to Richard Spence. The trend report for 4/1/94 - 6/30/94 was reviewed for implementation. This trend report was distributed internally within the USGS by a letter dated 8/12/94, Tom Chaney to distribution. This trend report properly implemented QMP 16.03, R3-M1.

James Blaylock  
James Blaylock, CAR

12/20/94  
Date

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**CORRECTIVE ACTION REQUEST (Continuation Page)**

**1. AMENDED CORRECTIVE ACTION RESPONSE FOR CAR NO. YM-94049**

- A. **REMEDIAL ACTION:** The Quality Assurance Management Information Reports generated under revision 3 of QMP-16.03, prior to the modification discussed under Corrective Actions to Prevent Recurrence, will be amended as necessary. The amendments will:
- o Discuss any differences in approach used in those reports and the approach specified in the modified QMP-16.03.
  - o Clearly identify any trends (using the criteria in the modified procedure) evident during those time periods, and
  - o State what actions are being taken in regards to those trends (which will be in compliance with the procedure as modified).
- B. **EXTENT OF DEFICIENCY:** There have been three quarterly Quality Assurance Management Information Reports produced under QMP-16.03, R3 prior to modification.
- C. **ROOT CAUSE DETERMINATION:** Not required.
- D. **CORRECTIVE ACTION TO PREVENT RECURRENCE:** YMP-USGS QMP-16.03, R3 will be modified to include qualitative criteria for trend identification and to change the definition of "condition adverse to quality" to become insistent with the QARD.
2. For each action above, identify the name of the individual assigned responsibility for completion of the action and the anticipated (or actual, if complete) completion date.


1.A. N.R. Karas  
1.D. N.R. Karas

10/15/94  
10/03/94

**3. RESPONSE APPROVED:**

  
Thomas H. Chaney  
YMP-USGS Quality Assurance Manager

  
Date

  
Larry R. Hayes  
Chief, Yucca Mountain Project Branch

  
Date