



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

JAN 26 1993

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

EVALUATION OF AMENDED RESPONSE TO CORRECTIVE ACTION REQUEST (CAR) YM-93-013  
RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) AUDIT  
YMP-93-01 OF U.S. GEOLOGICAL SURVEY

The YMQAD staff has evaluated the amended response to CAR YM-93-013. The response has been determined to be unsatisfactory because it does not commit to the revision of the applicable administrative procedure to incorporate the corrective action identified in Section D.

A response is required to be submitted to this office within ten working days of the date of this letter. Send the original of your response to Nita J. Brogan, Science Applications International Corporation, Las Vegas, Nevada. If an extension to the due date is necessary, it must be requested in writing, with appropriate justification, prior to that date.

If you have any questions, please contact either Robert B. Constable at 794-7945 or Cynthia H. Prater at 794-7742.

Richard E. Spence, Director  
Yucca Mountain Quality Assurance Division

YMQAD:RBC-2162

Enclosure:  
CAR YM-93-013

cc w/encl:

~~K. R. Hooks, NRC, Washington, DC~~  
~~S. W. Zimmerman, NWPO, Carson City, NV~~  
T. H. Chaney, USGS, Denver, CO  
R. W. Craig, USGS, Las Vegas, NV  
R. L. Maudlin, MACTEC, Las Vegas, NV  
B. J. Verna, YMP, NV  
A. V. Gil, YMP, NV

cc w/o encl:

J. W. Gilray, NRC, Las Vegas, NV  
N. J. Brogan, SAIC, Las Vegas, NV  
D. D. Porter, SAIC, Golden, CO

010064

Add: K. R. Hooks  
DH03/11  
102.7  
WM-11

**ORIGINAL**  
**THIS IS A RED STAMP**

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

8 CAR NO.: YM-93-013  
DATE: 10-23-92  
SHEET: 1 OF 1  
QA

**CORRECTIVE ACTION REQUEST**

1 Controlling Document  
YMP-USGS-QMP-7.01 Rev. 4

2 Related Report No.  
YMP-93-01

3 Responsible Organization  
USGS

4 Discussed With  
W. Causseaux

5 Requirement:

QMP-7.01 R4, M2 Paragraph 5.1.3 states in part "An approved vendors list will be initiated, maintained, updated, and distributed by the QA Office. The list shall include... "a detailed description of the service or item..."

QMP-12-01, R5 Paragraph 5.22 require calibration service be provided by vendors on the Approved Vendors List in accordance with QMP-7.01.

6 Adverse Condition:

Contrary to the above

LI-COR provided calibration services on April 29, 1992, after being removed from the Approved Vendor List on April 21, 1992.

9 Does a significant condition  
adverse to quality exist? Yes\_\_\_ No X  
If Yes, Circle One: A B C

10 Does a stop work condition exist?  
Yes\_\_\_ No X; 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: ☒ Remedial ☐ Extent of Deficiency ☒ Preclude Recurrence ☒ Root Cause Determination

13 Recommended Actions:

7 Initiator  
J. Blaylock and C. Prater

14 Issuance Approved by:

QADD RC Spence Date 11/3/92

15 Response Accepted

16 Response Accepted

QAR Date

QADD Date

17 Amended Response Accepted

18 Amended Response Accepted

QAR Date

QADD Date

19 Corrective Actions Verified

20 Closure Approved by:

QAR Date

QADD Date

**ENCLOSURE**

REV. 08/91

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

CAR NO. YM-93-013  
DATE: \_\_\_\_\_  
SHEET: \_\_\_\_\_ OF \_\_\_\_\_

**CORRECTIVE ACTION REQUEST**  
(continuation sheet)

**1. CORRECTIVE ACTION RESPONSE FOR CAR No. YM-93-013:**

- A. Remedial Action: Incomplete calibration documentation was the reason that the vendor had been suspended from the Approved Vendors List. Therefore, calibration documentation for all calibrations performed on 4/29/92 are being evaluated. The results of this evaluation and additional remedial actions, if any, will be outlined in a supplemental response.
- B. Investigative Action: Not requested.
- C. Root Cause Determination: The intent of the suspension was to stop further authorizations for using Li-Cor for equipment calibrations. There was a valid Purchase Order (PO) in effect, and the vendor was already authorized by the QA Office to perform the required calibrations upon receipt of the equipment.
- D. Corrective Action to Preclude Recurrence: Future notices of suspensions or deletion of a vendor from the AVL will be more explicit regarding actions for procurements in various stages of processing.

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

**A. Remedial Action:**

12-16-92 -- K.W.Causseaux will be responsible for completion of the evaluation of calibration documentation and the determination of impact.

12-23-92 -- T.H.Chaney and L.R.Hayes will be responsible for providing a supplemental response to YMQAD.

**D. Corrective Action to Preclude Recurrence:**

Effective immediately, A.E.Lykins and T.H.Chaney will be responsible for assuring that QA correspondence will be more explicit concerning the effects on procurements when AVL vendor authorizations are suspended or deleted.

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WASHINGTON, D.C.

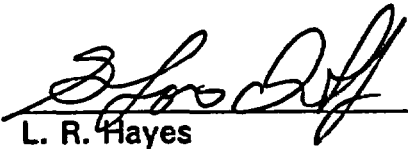
CAR NO. YM-93-013

DATE: \_\_\_\_\_

SHEET: \_\_\_\_\_ OF \_\_\_\_\_

**CORRECTIVE ACTION REQUEST**  
(continuation sheet)

3. Response Approved:

  
\_\_\_\_\_  
L. R. Hayes  
For Chief, Yucca Mountain Project Branch  
Date 12/1/92

  
\_\_\_\_\_  
T. H. Chahey  
YMP-USGS Quality Assurance Manager  
Date 12/1/92

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

CAR NO. YM-93-013  
DATE: 1/6/93  
SHEET:      OF     

**CORRECTIVE ACTION REQUEST**  
(continuation sheet)

**1. CORRECTIVE ACTION RESPONSE FOR CAR No. YM-93-013:**

- A. **Remedial Action:** Incomplete calibration documentation was the reason that the vendor had been suspended from the Approved Vendors List. Therefore, calibration documentation for all calibrations performed on 4/29/92 was evaluated and found acceptable.
- B. **Investigative Action:** Not requested.
- C. **Root Cause Determination:** Upon determination that Li Cor was not providing appropriate calibration documentation, notice was submitted to users of Li Cor's services. However, prior to receipt of the notice, some equipment had been shipped to Li Cor for calibration. The user was not aware of Li Cor's "suspension".
- D. **Corrective Action to Preclude Recurrence:** Future notices of deletion of a vendor from the AVL will be more explicit regarding actions for procurements in various stages of processing. Those notices will be forwarded to all users of the AVL and the Contracting Officer immediately upon receipt of the determination that the vendor no longer qualifies for the AVL. The notices will advise users that any QA purchases of items and/or services already in process from the referenced vendor shall be halted until the matter is resolved. The users will also be advised to contact the YMPB Administration Officer to coordinate resolution of procurements in process. If the matter cannot be solved in a time frame satisfactory to the needs of the user, another vendor will be used.

The QA staff will be responsible for submitting the notices and following-up with the user to ensure that the project's needs and QA requirements are met.

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

**A. Remedial Action:**

Completed 12-31-92 by Dan Valega.

**D. Corrective Action to Preclude Recurrence:**

Effective immediately, A.E.Lykins and T.H.Chaney will be responsible for assuring that QA correspondence will be more explicit concerning the effects on procurements when AVL vendor authorizations are suspended or deleted.

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U.S. DEPARTMENT OF ENERGY  
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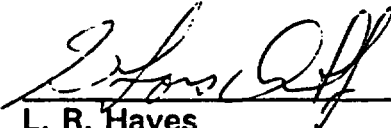
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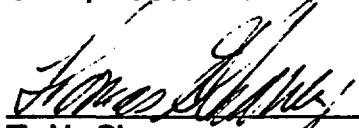
DATE: 1/6/93

SHEET: \_\_\_\_ OF \_\_\_\_

CORRECTIVE ACTION REQUEST  
(continuation sheet)

3. Response Approved:

  
\_\_\_\_\_  
for L. R. Hayes 1/6/93  
Chief, Yucca Mountain Project Branch Date

  
\_\_\_\_\_  
T. H. Chaney 1/6/93  
YMP-USGS Quality Assurance Manager Date