



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

MAY 28 1996

Robert W. Craig
Acting 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 RESPONSE TO CORRECTIVE ACTION REQUEST (CAR)
YMQAD-96-C005 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE
DIVISION'S (YMQAD) AUDIT YM-ARC-96-10 OF U.S. GEOLOGICAL SURVEY
(SCPB: N/A)

The YMQAD staff has evaluated the response to CAR YMQAD-96-C005. The response has been determined to be satisfactory. Verification of completion of the corrective action will be performed after the effective date provided. Any extension to this date must be requested in writing, with appropriate justification, prior to that date. Please send a copy of extension requests to Deborah Sult, YMQAD/QATSS, P.O. Box 98608, Mail Stop 455, Las Vegas, Nevada 89193-8608.

If you have any questions, please contact either Robert B. Constable at 794-5580 or Kenneth T. McFall at 794-5470.

Richard E. Spence, Director
Yucca Mountain Quality Assurance Division

YMQAD:RBC-1828

Enclosure:
CAR YMQAD-96-C005

cc w/encl:
J. G. Spraul, NRC, Washington, DC
S. W. Zimmerman, NWPO, Carson City, NV
T. H. Chaney, USGS, Denver, CO
D. G. Horton, OQA (RW-3) NV
W. E. Barnes, YMSCO, NV
Records Processing Center

cc w/o encl:
W. L. Belke, NRC, Las Vegas, NV
K. T. McFall, YMQAD/QATSS, Las Vegas, NV
D. G. Sult, YMQAD/QATSS, Las Vegas, NV

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RADIOACTIVE WASTE MANAGEMENT
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WASHINGTON, D.C.**

CORRECTIVE ACTION REQUEST

1 Controlling Document: QARD, DOE/RW-0333P, Revision 5, and AP-16.1Q, Revision 0	2 Related Report No.: YM-ARC-96-10
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3 Responsible Organization: U.S. Geological Survey (USGS)	4 Discussed With: P. Rodriguez / T. Chaney
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5 Requirement:

1. QARD, Revision 5, Paragraph 16.2.5, requires the QA organization to close corrective action documentation in a timely manner when actions are complete.
2. AP-16.1Q, Revision 0, Paragraph 5.1.3b requires the Affected Organization PR/DR Coordinator to maintain a log of PRs and DRs.
AP-16.1Q, Revision 0, Paragraph 5.1.5c requires the PR/DR Coordinator to update the PR/DR log as PRs and DRs are issued or change in status occurs.
AP-16.1Q, Revision 0, Paragraph 6.3 requires that the PR/DR log be maintained for tracking the progress and status of PRs and DRs. The PR/DR log identifies, as a minimum, the unique PR or DR number, the assigned QAR, the organization responsible for responding to the PR or DR, the date of issuance, and other action due dates, as appropriate.

6 Description of Condition:

1. Contrary to the above requirement, USGS-95-D001 was closed over five months after the completed corrective action.
2. Contrary to the above requirements, the PR/DR log has not been maintained current.
3. Contrary to the above requirement, there is no documentation for USGS-95-D012, D013, D014, D015, and D017.
4. Contrary to the above requirement there is no documented evidence that the following deficiency documents have ever received a response.

DOCUMENT	RESPONSE DUE DATE
USGS-95-D010	No Response date given, but issued 9/7/95
USGS-95-016	10/18/95
USGS-95-D002	10/6/95
USGS-96-P006	1/25/96

5. Contrary to the above requirements, the following PRs were initiated to address conditions adverse to quality, but were not issued by USGS: USGS-96-P001, P002, P003, P004, P005, P006, P007, and P008.

7 Initiator: <i>Kenneth T. McFall</i> Kenneth T. McFall Date <i>3/29/96</i>	9. Does a stop work condition exist? Yes ___ No <input checked="" type="checkbox"/> ; If Yes, Attach copy of SWO If Yes, Check One: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
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10. Recommended Actions:

- Take immediate action to determine the status of USGS-95-D012, D013, D014, D015, and D017. Prepare corrective action documents accordingly.
- Perform remedial action to bring deficiencies up to date.
- Investigate the extent of the deficiency. Examine all initiated PRs and DRs
- Perform a root cause analysis to determine how and why the deficient conditions came about.
- Determine the actions necessary to preclude recurrence.

11 QA Review: <i>Kenneth T. McFall</i> Date <i>3/29/96</i>	12 Response Due Date: 20 working days from issuance
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13 Affected Organization QA Manager Issuance Approval:

Printed Name R.E. SPENCE Signature *Robert B. Spence* Date *4-10-96*

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14 Remedial Actions:

See response dated 5/10/96

15 Investigative Actions:

See response dated 5/10/96

16 Root Cause Determination:

See response dated 5/10/96

17 Action to Preclude Recurrence:

See response dated 5/10/96

18 Response by:

See response Date 5/10/96

19 Corrective Action Due Date:

See response dated 5/10/96

20 Response Accepted

QAR *Kenneth McCall* Date 5/20/96

21 Response Accepted

AOQAM *R. Spina* Date 5/24/96

22 Amended Response Accepted

QAR Date

23 Amended Response Accepted

AOQAM Date

24 Corrective Actions Verified

QAR Date

25 Closure Approved by:

AOQAM Date

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Block 5, Requirement, cont'd

3. AP-16.1Q, Revision 0, Paragraph 5.1.5b, requires the PR/DR Coordinator to maintain PRs, DRs, continuation page(s), requests for extension and all relevant correspondence for status and records.
4. AP-16.1Q, Revision 0, Paragraph 5.3h, requires the Responsible Individual to transmit a response by the response due date to the PR/DR Coordinator.
5. AP-16.1Q, Revision 0, Paragraph 5.1.2.1, requires the QAR to issue a copy of the PR to the Responsible Individual for response with a copy to the Affected Organization's QA Manager for notification.
6. AP-16.1Q, Revision 0, Paragraph 5.1.4.C requires the Affected Organization's QA Manager to forward a copy of the DR with applicable issuance correspondence to the Responsible Individual.

Block 6, Description of Condition, cont'd

6. Contrary to the above requirement, the following DRs were initiated to address conditions adverse to quality, but were not issued by USGS: USGS-95-D010, D012, D014, D015, D017, and D018.

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Block 14: Remedial Actions:

The CARLOG will be brought up to date for YMP-USGS initiated deficiencies (includes PRs, DRs, and CARs) and will be updated within a week of change of status. Open deficiencies are being prioritized and QA Office actions (issuance, evaluation of responses, verifications, closures) will proceed according to the prioritization. The QA Manager will meet weekly with the PR/DR/CAR Coordinator to review the status of deficiencies and re-set priorities.

The status of the specific deficiencies cited in this CAR are as follows:

USGS-95-D001 QAR to verify.

USGS-95-D002 Response in progress.

USGS-95-D010 Response in progress.

USGS-95-D012 The number was assigned on the paper-copy DR log for the proposed conversion of Quality Deficiency Report (QDR) QDR-94027-2 but QDR-94027-2 was converted to a PR (USGS-96-P013) instead. This DR number was never actually used for an issued deficiency document and will not be used. It was never entered into the CARLOG. The paper log has been updated to state the correct status. No further actions are necessary.

USGS-95-D013 The number was assigned on the paper-copy DR log for the proposed conversion of QDR-95001-2 but QDR-95001-2 was verified and closed without conversion. This DR number was never actually used for an issued deficiency and will not be used. It was never entered into the CARLOG. The paper log has been updated to state the correct status. No further actions are necessary.

USGS-95-D014 The number was assigned on the paper-copy DR log for the proposed conversion of QDR-95009-2 but QDR-95009-2 was converted to a PR (USGS-96-P010) instead. This DR number was never actually used for an issued deficiency document and will not be used. It was never entered into the CARLOG. The paper log has been updated to state the correct status. No further actions are necessary.

USGS-95-D015 The number was assigned on the paper-copy DR log for the proposed conversion of QDR-95048-3-2 but QDR-95048-3 was verified and closed without conversion. This DR number was never actually used for an issued deficiency and will not be used. It was never entered into the CARLOG. The paper log has been updated to state the correct status. No further actions are necessary.

5/12/96 CRAIG TO SPENCE

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USGS-95-D016	Response is in progress. This DR number will be entered into the CARLOG.
USGS-95-D017	The number was assigned on the paper-copy DR log for the proposed conversion of QDR-95041-2 but QDR-95041-2 was converted to a PR (USGS-96-P015) instead. This DR number was never actually used for an issued deficiency document and will not be used. It was never entered into the CARLOG. The paper log has been updated to state the correct status. No further actions are necessary.
USGS-95-D018	The number was assigned on the paper-copy DR log for the proposed conversion of QDR-94041-2 but QDR-94041-2 was converted to a PR (USGS-96-P012) instead. This DR number was never actually used for an issued deficiency document and will not be used. It was never entered into the CARLOG. The paper log has been updated to state the correct status. No further actions are necessary.
USGS-96-P001	Response received with initiated PR, verification presently being documented
USGS-96-P002	Response received with initiated PR, verification presently being documented
USGS-96-P003	Response received with initiated PR, verification presently being documented
USGS-96-P004	Response received with initiated PR, verification presently being documented
USGS-96-P005	Closed 4-23-96
USGS-96-P006	Actions in progress.
USGS-96-P007	Response to be evaluated.
USGS-96-P008	Closed 4-15-96

Block 15 Investigative Actions:

The scope of this condition encompasses all USGS initiated deficiencies with regard to timeliness of actions and timeliness of CARLOG updates. (See cause statement.) Priority was given to those YMP-USGS deficiencies that impacted milestones and to DOE initiated deficiencies. There is no evidence of a negative impact on USGS products, other than this tardiness.

With regard to non-issuance of deficiency documents identified on logs and the lack of documentation for cited DRs, these conditions arose because DRs or PRs were drafted or,

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at least the numbers assigned on the paper logs, in anticipation of a conversion from our Quality Deficiency Report (QDR) system that never took place. YMP-USGS deficiency documents under our old internal system of QDRs were slated to be converted to the Project-wide system of PRs, DRs, and CARs by the end of September 1995 as part of DOE's Verification Transition (see DOE Office of Civilian Radioactive Waste Management (OCRWM) report "Reengineering of the Quality Assurance Function on the Office of Civilian Radioactive Waste Management Program"). The date of conversion to PRs/DRs was pushed back to December 1995 and the FY '95 deficiency numbers were not used. There is no negative impact from these deficiencies not being issued as identified on the paper logs; the QDRs were either verified and closed under their original QDR designation or were converted to FY '96 PRs. These unused FY '95 DR numbers were never entered into the official DOE computer database CARLOG but tracked only on paper-copy logs. The paper-copy logs have now been updated.

Block 16: Root Cause:

The root cause of the untimely actions is that the QA Office staff was cut back from 13 full-time positions at the end of September 1995 to 6.5 full-time equivalents at present (this has varied from 5.5 to 7.5 during this fiscal year.) Especially hard hit was the verification group which had consisted of 6 contractor positions in FY '95 and currently is one full-time verification position, but during the beginning of the FY '96 there were insufficient staff to staff it full-time.

In addition to funding and staffing cut-backs, the following transitions were concurrently taking place:

- o Transition of the corrective action coordinator position since the end of last September (twice),
- o Transition from YMP-USGS internal corrective action system to the Project-wide deficiency system prescribed by APs 16.1Q, 16.2Q, and 16.3Q (originally scheduled for completion September 1995 but extended to December 1995),
- o Transition of Lawrence Berkeley Laboratory from YMP-USGS sub-tier organization to the M&O,
- o Transition of University of Nevada Reno Seismological Laboratory from YMP-USGS sub-tier organization to M&O.

Additionally, the YMP-USGS staff was cut back severely (besides the QA Office) resulting in the shift of personnel responsibilities for some deficiency documents and a consequent loss of continuity in processing specific deficiencies. This change is considered a contributing cause, not the prime reason for the backlog of processing

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deficiency documents.

Another contributing cause is that DOE issued deficiencies have received higher priority in attention.

Block 17: Actions to Preclude Recurrence:

Until the backlog is cleared up, one YMP-USGS QA Office FTE position will be dedicated to corrective action. Secretarial support will be in addition to this position. (Please note that the coordinator position is vacant as of next Monday necessitating another transition. Until the vacancy is filled, the necessary actions will be handled on a part-time basis by existing YMP-USGS QA Office staff.) In addition, the role of Quality Assurance Representative will be more widely distributed among the rest of the QA Office staff.

Most of the transitions that have taken place since last September have been out of the control of YMP-USGS. To better prepare for the possibility of additional transitions, a higher priority will be placed on keeping the CARLOG up-to-date (within a week of any change); this will enable the YMP-USGS QA Office to continually adjust priorities appropriately, if necessary.

The QA Manager will increase awareness of the responsible managers for overdue responses to deficiencies or overdue corrective action.

Block 18: Response by:

for Martha H. Mustard
Thomas H. Chaney,
YMP-USGS Quality Assurance Manager

Date: 5-10-96

for Robert W. Craig
Robert W. Craig,
Chief, Yucca Mountain Project Branch

Date: 5/10/96

Block 19: Corrective Action Due Date:

June 14, 1996 (to bring the CARLOG up-to-date and keep it updated within one week of changes and to initiate weekly meetings)