



Department of Energy
 Office of Civilian Radioactive Waste Management
 Yucca Mountain Site Characterization Office
 P.O. Box 98608
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APR 12 1995

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 Site Characterization Project
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EVALUATION OF RESPONSE TO CORRECTIVE ACTION REQUEST (CAR)
 YM-95-028 RESULTING FROM U.S. DEPARTMENT OF ENERGY/HEADQUARTERS
 QUALITY ASSURANCE DIVISION'S AUDIT HQ-ARC-95-04 OF THE CIVILIAN
 RADIOACTIVE WASTE MANAGEMENT SYSTEM MANAGEMENT AND OPERATING
 CONTRACTOR (SCPB: N/A)

The Yucca Mountain Quality Assurance Division staff has evaluated the response to CAR YM-95-028. 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.

If you have any questions, please contact either Robert B. Constable at 794-7945 or John F. Pelletier at 794-7538.

Richard E. Spence, Director
 Yucca Mountain Quality Assurance Division

YMQAD:RBC-2877

Enclosure:
 CAR YM-95-028

- cc w/encl:
- T. A. Wood, HQ (RW-14) FORS
 - J. G. Spraul, NRC, Washington, DC
 - S. W. Zimmerman, NWPO, Carson City, NV
 - R. L. Robertson, M&O, Vienna, VA
 - Richard Jiu, M&O, Las Vegas, NV
 - R. P. Ruth, M&O, Las Vegas, NV
 - D. G. Horton, OQA (RW-3) NV
 - W. E. Barnes, YMSCO, NV

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

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CORRECTIVE ACTION REQUEST

1 Controlling Document OCRWM QARD DOE/RW-0333P, Revision 1		2 Related Report No. Audit HQ-ARC-95-04	
3 Responsible Organization CRWMS M&O		4 Discussed With A. Segrest	
5 Requirement: QARD Section 17.0 Paragraph 17.2.2B: "Individuals creating quality assurance records shall ensure that the quality assurance records are legible, accurate, and complete." Paragraph 17.2.2C: "Individuals handling quality assurance records shall protect them from damage or loss until the records are submitted to the records management system." Paragraph 17.2.3E3: "QA Records shall be indexed to ensure retrievability. The indexing system shall include identification of the item or related activity to which the QA records pertain."			
6 Adverse Condition: Contrary to the above requirements, records and record packages associated with drawings, specifications, and analysis are not being properly authenticated for accuracy, and appropriate to the work accomplished, completeness, nor are they being turned over to the LRC reasonably contemporaneous with completion of the individual records and record packages, or protected from deterioration, loss, or damage until turned over to the LRC. Additionally, indexing of records does not adequately provide a cross reference to the documentation or the associated activity. Examples: The following represent examples only. A comprehensive review is required to determine the extent and impact of the deficiencies. Records segment package (LRC-114) for the BAB000000-1717-6300-02341, Revision 02, Steel Sets and Accessories Subsurface (Specification) does not contain a copy of the specification review summary.			
9 Does a Significant Condition Adverse to Quality exist? Yes <u>X</u> No <u> </u> If Yes, Check One: <input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E		10 Does a stop work condition exist? Yes <u> </u> No <u>X</u> ; If Yes - Attach copy of SWO If Yes, Check One: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C	
13 Response Due Date: 20 Working Days From Issuance			
11 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			
12 Recommended Actions: 1) Recommend that a performance based surveillance be conducted to determine the extent and impact of the deficiencies. 2) Recommend that record process improvements be communicated through extensive training.			
7 Initiator <u>John F. Pelletier</u> John F. Pelletier		14 Issuance Approved by: <u>[Signature]</u> QADD <u>[Signature]</u> Date <u>3/1/95</u>	
15 Response Accepted QAR <u>John F. Pelletier</u> Date <u>4/10/95</u>		16 Response Accepted QADD <u>[Signature]</u> Date <u>4/11/95</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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5 Requirements (continued)

M&O QAP-17-1, Revision 3, PO 4

Paragraph 3.2, Authentication: "The act of attesting that the information contained within a record is legible, accurate, complete, and appropriate to the work accomplished."

Paragraph 5.3, Protection of Records and Records-In-Process: "Responsible management and Record Sources shall ensure that records/records-in-process are protected from deterioration, loss, or damage."

Paragraph 5.4.3A: "Records sources shall authenticate individual records and record packages immediately following creation and shall turn them over to the LRC reasonably contemporaneous with completion...individual records and record packages shall be turned over to the LRC no later than 20 working days after completion."

QAP-3-9, Revision 4, Paragraph 6B: "The following QA records generated as a result of this procedure shall be submitted by the LDE to the LRC in accordance with QAP-17-1: Design Analysis Review Summary."

NLP-3-24, Revision 1, Paragraph 5.1.1d: "The drawing or specification Originator shall forward the completed IL to the LDE for transmittal to Local Records Center in accordance with QAP-3-8 or QAP-3-10, after the output (drawing or specification) is approved."

QAP-3-10, Revision 4, Paragraph 6.0: "The following QA Records are generated as a result of this procedure and shall be submitted by the LDE to the Local Records Center in accordance with QAP-17-1:

- A. Approved Drawings (which will be or are baselined)
- B. Drawing Input List
- C. Drawing Review Summary*

6 Adverse Condition (continued)

The TS North Ramp Ground Support Scoping Analysis DI: BAB000000-1717-0200-00010, Revision 01, and Material Dedication Rockbolts, Shotcrete and Accessories DI: BAB000000-1717-00009, Revision 1 have not been sent to the LRC for records processing.

Records package BABEAB000-01717-0200-0002, Structural Steel Sets Analysis, Revision 01 does not contain the Design Analysis Review Summary.

Records packages BABEAB000-01717-6300-02165, Revisions 05 and 06 have not been sent to the LRC for processing.

Records packages were not cross-referenced to the related records packages for proper indexing and ease of retrievability:

BAB000000-01717-6300-01501, "Subsurface General Construction," 2/16/95

Records package for Design Package ID 90% Design Review QA Record Package, 11/28/94

Integrated Data and Control System 90% Design Review QA Record, 1/12/95

The following drawings and the related documentation were not submitted to the LRC as required by NLP-3-24, Revision 1, and QAP-3-10, Revision 4:

Drawings listed by Document Number Description:

BABEAB000-01717-2100-40151, Revision 1, TS North Ramp Ground Support Master Elevation and Sections

BABEAB000-01717-2100-40161, Revision 1, TS North Ramp Alcoves Rockbolts and

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6 Adverse Condition (continued)

Shotcrete Sections

BABEAB000-01717-2100-40162, Revision 1, TS North Ramp Alcoves Rockbolts and Shotcrete Plan and Sections

BABEAB000-01717-2100-40163, Revision 1, TS North Ramp Alcoves Rockbolts and Shotcrete Plan, Sections and Elevation

BABEAB000-01717-2100-41101, Revision 3, TS North Ramp Steel Sets and Lagging Elevation

BABEAB000-01717-2100-41102, Revision 3, TS North Ramp Steel Sets and Lagging Sections and Details

BABEAB000-01717-2100-41103, Revision 3, TS North Ramp Steel Sets and Lagging Sections and Details

13 Recommended Action(s) (continued)

- 3) Recommend that the entire records process be studied and reengineered, both at Las Vegas and Vienna.
- 4) Recommend that indexing methods and structures be devised that allow retrievability of all records pertaining to a given work effort.
- 5) Recommend that the M&O concepts of authentication and validation be evaluated in light of the deficiencies.

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Remedial Action

The following are the examples listed in the CAR.

- A) BAB000000-01717-6300-02341 Rev 02...review summary missing from record package
- B) BAB000000-01717-0200-00010 Rev 01 and
BAB000000-01717-0200-00009 Rev 01...not in RPC
- C) BABEAB000-01717-0200-00002 Rev 01...review summary missing
- D) BABEAB000-01717-6300-02165 Rev 05 & 06...not in RPC
- E) BAB000000-01717-6300-01501...not cross referenced
ID 90% Review...not cross referenced
IDCS 90% Review...not cross referenced
- F) BABEAB000-01717-2100-40151 Rev 01...not in RPC
- G) BABEAB000-01717-2100-40161 Rev 01...not in RPC
- H) BABEAB000-01717-2100-40162 Rev 01...not in RPC
- I) BABEAB000-01717-2100-40163 Rev 01...not in RPC
- J) BABEAB000-01717-2100-41101 Rev 03...not in RPC
- K) BABEAB000-01717-2100-41102 Rev 03...not in RPC
- L) BABEAB000-01717-2100-41103 Rev 03...not in RPC

These actions listed below will correct all the examples listed above.

Examples B, D, F, G, H and I are complete and in the RPC.

Example A: BAB000000-01717-6300-02341 Rev 02...(Review Summary not in record package.)

Document was created under procedure QAP-3-8 Revision 3, which did not require a review summary and there is no evidence that one was later created to meet the requirements when the specification was actually approved. An IOC from lead with the above information will be added to the record package. This has been completed.

Example C: BABEAB000-01717-0200-00002 Rev 01...(Review Summary not in record package.)

Document was created under procedure QAP-3-9 Revision 3, which did not require a review summary and there is no evidence that one was later created to meet the requirements when the analysis was actually approved. An IOC from lead with the above information will be added to the record package. This has been completed.

Example J: BABEAB000-01717-2100-41101 Rev 03

Example K: BABEAB000-01717-2100-41102 Rev 03

Example L: BABEAB000-01717-2100-41103 Rev 03

Revision 3 of these documents are processed with revision 01 and 02 to keep the records easily retrievable. In compiling the records package Revision 01 (original) was not in EDC but was later located in the records center. The ID Review for Rev 02 of these documents is not available. At the time the ID review took place only the Review Summary sheet was a required record and it was not clear as to whether to keep a copy of the ID Review document. The only comments made were against -41101 by two reviewers who performed a management review and not a technical review. The other two drawings had no comments against them as written on the Review Summary Sheet. An IOC from lead with the above information will be added to the record packages. This has been completed.

Example E: BAB000000-01717-6300-01501; ID 90% Review and the IDCS 90% Review

A supplemental to add needed information to each record package to cross reference the different reviews and the baselining document will be completed. David Parker is the responsible individual for this example.

The completion date for the Remedial Action is May 10, 1995.

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Extent of Deficiency

M&O QA will conduct a surveillance (Recommendation No. 1) to provide more information that MGDS and IM will then evaluate for extent and impact. The surveillance will include record package completeness and submittal and will be complete by May 10, 1995. D.M. Franks is the responsible individual for this activity.

MGDS Development and IM will then evaluate the results and provide, as required, a supplemental Remedial Action and Extent of Deficiency. David Parker and Terry Mueller are the responsible individuals for this activity.

The following list of documents were verified to be in the records center. During the QA surveillance these record packages will be sampled for problems similar to those listed in the examples.

BABEAD000-01717-2100-40100 Rev 01
BABEAD000-01717-2100-40104 Rev 01
BABEAD000-01717-2100-40110 Rev 01
BABEAD000-01717-2100-40111 Rev 01
BABEAD000-01717-2100-40112 Rev 01
BABEAD000-01717-2100-40113 Rev 01
BABEAD000-01717-2100-40114 Rev 01
BABEAD000-01717-2100-40115 Rev 01
BABEAD000-01717-2100-40116 Rev 01
BABEAD000-01717-2100-40120 Rev 01
BABEAD000-01717-2100-40121 Rev 01
BABEAD000-01717-2100-40122 Rev 01
BABEAD000-01717-2100-40123 Rev 01
BABEAD000-01717-2100-40124 Rev 01
BABEAD000-01717-2100-40125 Rev 01
BABEAD000-01717-2100-40126 Rev 01
BABEAD000-01717-2100-40127 Rev 01
BABEAD000-01717-2100-40128 Rev 01
BABEAD000-01717-2100-40129 Rev 01
BABEAD000-01717-2100-40151 Rev 01
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BABEAD000-01717-2100-40155 Rev 01
BABEAD000-01717-2100-40156 Rev 01
BABEAD000-01717-2100-40157 Rev 01
BABEAB000-01717-2100-40161 Rev 01
BABEAB000-01717-2100-40162 Rev 01
BABEAB000-01717-2100-40165 Rev 01
BABEAC000-01717-2100-41111 Rev 01
BABEAC000-01717-2100-41121 Rev 01
BABEAC000-01717-2100-41130 Rev 01
BAB000000-01717-6300-01500 Rev 00
BAB000000-01717-6300-01501 Rev 03
BAB000000-01717-6300-01600 Rev 01
BAB000000-01717-6300-01800 Rev 00
BABEAB000-01717-6300-02165 Rev 06
BABEAB000-01717-6300-03362 Rev 01
BABEAB000-01717-6300-03363 Rev 01

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Extent of Deficiency (Continued)

The QA surveillance will also include records packages from other M&O departments.

Root Cause and Action to Preclude Recurrence

Completion of Root Cause investigation must be postponed until after the surveillance to properly include all necessary information. Action to Prevent Recurrence will also be developed based on the root cause and will therefore be postponed until after the Root Cause Determination.

The QA surveillance will be completed by May 10, 1995. MGDS Development and IM will then evaluate the surveillance report for further extent of deficiency and impact. A supplemental response containing any additions to the Remedial Actions, Extent of Deficiency, a complete Root Cause and Actions to Preclude Recurrence will be sent to YMQAD by June 2, 1995.

This CAR contained five recommendations. Recommendation Number 1, the QA surveillance, is underway at this time. The other four recommendations will be reviewed based on the results of the surveillance and subsequent root cause determination.