



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

JUL 22 1996

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 RESPONSE TO DEFICIENCY REPORT (DR) YM-96-D-061
RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD)
SURVEILLANCE YMP-SR-96-011 OF THE CIVILIAN RADIOACTIVE WASTE
MANAGEMENT SYSTEM MANAGEMENT AND OPERATING CONTRACTOR
(SCPB: N/A)**

The YMQAD staff has evaluated the response to DR YM-96-D-061. 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 G. 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 (702) 794-5580 or Patout H. Cotter at (702) 794-1332.

Richard E. Spence, Director
Yucca Mountain Quality Assurance Division

YMQAD:RBC-2178

Enclosure:
DR YM-96-D-061

cc w/encl:
T. A. Wood, HQ (RW-14) FORS
J. G. Spraul, NRC, Washington, DC
S. W. Zimmerman, NWPO, Carson City, NV
R. B. Justice, M&O, Las Vegas, NV
R. P. Ruth, M&O, Las Vegas, NV
R. L. Strickler, M&O, Vienna, VA
Records Processing Center

cc w/o encl:
W. L. Belke, NRC, Las Vegas, NV
P. H. Cotter, YMQAD/QATSS, Las Vegas, NV
D. G. Sult, YMQAD/QATSS, Las Vegas, NV
D. G. Horton, OQA, NV

9607290186 960722
PDR WASTE
WM-11 PDR

NH03/1
102.7
WM-11

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

THIS IS A RED STAMP
☐ Performance Report
☒ Deficiency Report
NO YMQAD-96-D061
PAGE 1 OF 84
QA: L

PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document:

QARD, DOE/RW-0333P, Revision 5

2 Related Report No.

YMP-SR-96-011

3 Responsible Organization:

CRWMS M&O Design

4 Discussed With

O. J. Gilstrap / A. Segrest / J. Willis / J. Bailey / W. Glasser

5 Requirement/Measurement Criteria:

1. QARD, Section 2.0, "Quality Assurance Program," Paragraph 2.2.1, "Quality Assurance Program Documents."
- "B. Affected Organizations shall establish implementing documents applicable to their scope of work that translate Quality Assurance Requirements and Description (QARD) requirements into work processes."
- QARD Section 3.0, "Design Control," Paragraph 3.2.8, "Design Change Control," states:
"Design changes shall be controlled according to the following requirements:
A. Changes to final designs, field changes, and nonconforming items dispositioned "use-as-is" or "repair" shall be justified and shall be subject to design control measures commensurate with those applied to the original design.
B. Design control measures for changes shall include provisions to assess the effect of the changes on the overall previously verified design and ensure that the design analyses for the item are still valid."

6 Description of Condition:

1. Contrary to the requirements in paragraph 2.2.1 and 3.2.8, the Design Control measures for NCRs dispositioned "use-as-is" (those not covered by an ECR) or "repair" resulting in changes to design requirements are presently not described and documented in CRWMS M&O implementing procedures.
2. Contrary to the requirements in paragraph 2.2.1, the CRWMS M&O matrix does not correctly identify where the QARD requirements are directly addressed for the following procedures:

NLP-3.25, "Configuration/Change Control," NLP-3.10, "Preparation of Changes to Engineering Drawings and Specifications," QAP-3-8, Specifications," QAP-3-9, "Design Analysis," and QAP-3-10, "Engineering Drawings."

7 Initiator

Patout H. Cotter

Date 5/17/96

9 QA Review

QAR

Date 5/17/96

10 Response Due Date:

20 Working Days From Issuance

11 QA Issuance Approval

QAR (PR)/AOQAM (DR)

Date 5/29/96

12 Remedial Actions:

Revise CRWMS M&O procedure(s) as necessary to comply with QARD requirements.

SEE DETAILED RESPONSE ON P. 4

13 Remedial Actions Response By

ALDEN M. SEGREST

Date 6/27/96

14 Remedial Action Due Date

SEP. 30, 1996

Date

15 Remedial Action Response Acceptance

QAR

Date 7/3/96

16 PR Verification /Closure

QAR

Date

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

8
DR NO. YMOAD-86-D061
PAGE 2 OF 11 8-26-96
QA: L

DEFICIENCY REPORT

17 Recommended Actions:

1. Initiate action to update procedures.
2. Determine the root cause of deficient condition.
3. Determine and implement actions to preclude recurrence.

18 Investigative Actions:

SEE ATTACHED P. 4 FOR RESPONSE

19 Root Cause Determination:

SEE PAGE 4

20 Action to Preclude Recurrence:

SEE PAGE 4

21 Response By:

ALDEN M. SEGREST

Date 06/27/96

22 Corrective Action Completion Due Date

SEP. 30, 1996

23 Response Accepted

QAR

Date *7/3/96*

24 Response Accepted

AOQAM

Date *7/19/96*

25 Amended Response Accepted

QAR

Date

26 Amended Response Accepted

AOQAM

Date

27 Corrective Action Verified

QAR

Date

28 Closure Approved by:

AOQAM

Date

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

⁸ ☐ Performance Report
☒ Deficiency Report
NO. YMOAD-96-D061
PAGE 3 OF 4
QA: L

PERFORMANCE/DEFICIENCY REPORT

Block 5, Requirement/Measurement Criteria, continued:

2. QARD, Section 2.0, "Quality Assurance Program," Paragraph 2.2.1, "Quality Assurance Program Document," states:
- *2.2.1C Each Affected Organization shall complete a QARD requirements matrix for the portion of the QARD which they are implementing.
- 2.2.1C.1 The matrix shall identify: a) Where the QARD requirements are directly addressed."

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

8 ☐ Performance Report
☒ Deficiency Report

NO. YMQAD-96-D061

PAGE 4 OF 4

QA: L

PR/DR CONTINUATION PAGE

12 Remedial Actions

The remedial actions will be:

1. Write a DAR to change YAP-15.1Q procedure, if required. MGDS Development cannot take responsibility for the actual revision of the procedure.
2. Write a PAR to change NLP-3-10, Preparation of changes to Engineering Drawings and Specifications, to provide additional clarification regarding "use-as-is" or "Repair".
3. Revise NLP-3-10 and Matrix as required.
4. Complete the above remedial actions by September 30, 1996.

BLOCK 18 Investigative Actions:

The M&O has updated the traces (on 4/23/96) for YAP 15.1Q in the QARD Trace matrix. This update was not and could not be entered in the RTN since DOE owns the document. We now trace the YAP to 3.2.8.A. but not 3.2.8.B. For 3.2.8.A, we also trace to NLP-3-8, 3-9, 3-10, 3-13, and 3-25, VLP-3-4, and QAPs 3-8, 3-9, 3-10. For 3.2.8.B we trace to NLP-2-0, 3-10, 3-25, VLP-3-4 and QAPs 3-8, 3-9, 3-10. These traces are adequate.

The traces have all been reviewed and determined to be adequate by a QAR within the M&O. The QARD Trace Matrix (The M&O replacement for RTN) and the RTN traces are the same.

There are two categories of "Use-as-is" and "repair" NCRs.

- A) Those that are "one time exceptions" not requiring a change to a drawing or a specification, and,
- B) Those that require a change to a drawing or specification (usually a change made by an ECR (NLP-3-25) or a drawing (QAP-3-10) or specification (QAP-3-8) revision)

For A above, procedure YAP-3.3Q titled "Preparation and Submittal of As- Built Drawings and Specifications" Attachment 9.3 last para. specifically states "Features documented in nonconformance reports and dispositioned "use-as-is" or "repair" shall also be incorporated into the as-built drawings and specifications." As-built drawings, which is another revision that is intended to be the last, and specifications will be revised using existing procedures QAP-3-8 and QAP-3-10, therefore ensuring that Changes to final designs, field changes, and nonconforming items dispositioned "use-as-is" or "repair" shall be justified and shall be subject to design control measures commensurate with those applied to the original design.

For B above, when ECRs are incorporated or a drawing or specification is revised drawings and specifications will be revised using existing procedures QAP-3-8 and QAP-3-10, therefore ensuring that changes to final designs, field changes, and nonconforming items dispositioned "use-as-is" or "repair" shall be justified and shall be subject to design control measures commensurate with those applied to the original design.

BLOCK 19 Root Cause Determination

The implementing procedures do not provide clear adequate instruction on how to Process NCRs that have dispositions of "use-as-is" or "repair".

BLOCK 20 Action to Preclude Recurrence:

The Actions to preclude Recurrence are covered in BLOCK 12 Remedial Actions.