



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

SEP 13 1996

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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 PERFORMANCE REPORT (PR) YM-96-P-029  
RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION'S  
(YMQAD) SURVEILLANCE YMP-SR-96-016 OF LOS ALAMOS NATIONAL  
LABORATORY**

The YMQAD staff has evaluated the response to Performance Report YM-96-P-029. The response has been determined to be unsatisfactory due to reasons as stated in the enclosed PR.

An amended 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 Deborah G. Sult, YMQAD/QATSS, P.O. Box 98608, Mail Stop 455, Las Vegas, Nevada 89193-8608. 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 (702) 794-5580 or John S. Martin at (702) 794-5591.

Richard E. Spence, Director  
Yucca Mountain Quality Assurance Division

YMQAD:RBC-2604

Enclosure:  
PR YM-96-P-029

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Recip: NMSS/HLUR

L. D. Foust

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SEP 13 1996

cc w/encl:

T. A. Wood, DOE/HQ (RW-14) FORS  
J. G. Spraul, NRC, Washington, DC  
S. W. Zimmerman, NWPO, Carson City, NV  
N. Z. Elkins, M&O/LANL, Las Vegas, NV  
J. B. Tillman, LAAO, Los Alamos, NM  
J. A. Canepa, M&O/LANL, Los Alamos, NM  
M. J. Clevenger, M&O/LANL, Los Alamos, NM  
R. L. Strickler, M&O, Vienna, VA  
B. R. Justice, M&O, Las Vegas, NV  
R. P. Ruth, M&O, Las Vegas, NV  
Records Processing Center

cc w/o encl:

W. L. Belke, NRC, Las Vegas, NV  
J. S. Martin, YMQAD/QATSS, Las Vegas, NV  
D. G. Sult, YMQAD/QATSS, Las Vegas, NV  
D. G. Horton, DOE/OQA, Las Vegas, NV

230092

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

8 ☒ Performance Report  
☐ Deficiency Report  
NO. YM-96-P-029  
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PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document:

QARD, DOE/RW-0333P, Revision 5

2 Related Report No.

YMP-SR-96-016

3 Responsible Organization:

Los Alamos National Laboratory

4 Discussed With:

A. Burningham / S. Jones

5 Requirement/Measurement Criteria:

- 1) QARD, Section 5.0, Paragraph 5.2.2, states: "Implementing documents shall include the following information as appropriate to the work to be performed:"

Paragraph 5.2.2B, states: "Technical and regulatory requirements."

Supplement II, Paragraph II.2.1C, states: "Controls shall include specifics on orientation relative to the location that was sampled, as appropriate."

- 2) QARD, Section 6.0, Paragraph 6.2.6A, states in part: "Changes to documents shall be reviewed...prior to approval for release."

6 Description of Condition:

- 1) Contrary to the above requirement, LANL procedure LANL-EES-13-DP-612, Revision 0, does not clearly describe a technical methodology for providing positive control relative to the orientation of drill core collected within the Exploratory Studies Facility (ESF).

- 2) LANL procedure LANL-EES-13-DP-612, Revision 0, Paragraph 6.5.2.3, NOTE, states in part that drill core: "Measurements must be taken to the nearest 1/100th of a foot..." ESF Drilling Shift Report Form utilized by LANL indicates that: "All measurements shall be taken to the nearest 1/10th of an inch."

ESF Drilling Shift Report Forms for drill holes ESF-TMA-ERT-1 and ESF-TMS-ERT-1 were revised, without going through the appropriate review and approval process, to read 1-100th of a foot instead of 1-10th of an inch, by the Field Engineer. This was accomplished by one lining, initialing, and dating the change.

7 Initiator

John S. Martin

Date 7/2/96

9 QA Review

QAR

Date 7/3/96

10 Response Due Date:

20 Working Days From Issuance

11 QA Issuance Approval

QAR (PR)/AOQAM (DR)

Date 7/5/96

12 Remedial Actions:

13 Remedial Actions Response By:

SEE ATTACHED RESPONSE  
Date

14 Remedial Action Due Date

SEE ATTACHED RESPONSE  
Date

15 Remedial Action Response Acceptance

QAR

Date

16 PR Verification /Closure

QAR

Date

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WASHINGTON, D.C.

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PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:

The description of conditions identified in the Performance Report result from a difference of interpretations of QARD requirements. Due to the reasons described below, it is not apparent to the ESF TCO that a QARD violation has occurred.

1) Sections 6.5.2.3 through 6.5.2.8 of DP-612 clearly and appropriately described the process for identifying the orientation of core. This process was consistent with the technical requirements identified by the PI organizations and the Department of Energy at the time the core was collected. Technical staff collected core using the DP meeting both the intent and the requirements of the procedure.

Continued

15 Extent of Condition: (Not required for PR)

16 Root Cause Determination: (Not required for PR)

Required: ☐ Yes ☐ No

17 Action to Preclude Recurrence: (Not required for PR)

Required: ☐ Yes ☐ No

18 Corrective Action Completion Due Date:

9/30/96

19 Response by:

- ☒ Initial Ned Elkins  
☐ Amended

Date 9/30/96

Phone 4-7097

20 Response Accepted

QAR

Date

21 Response Accepted (N/A for PR)

AOQAM

Date

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RADIOACTIVE WASTE MANAGEMENT  
U.S. DEPARTMENT OF ENERGY  
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2) Section 7.0 of DP-612 states: "The following record resulting from the implementation of this DP may be documented in any format provided they meet the legibility and indexing requirements of QP-17.6 and are signed and dated." The ESF Drilling Shift Report Form identified in the Performance Report was not part of DP-612 and therefore did not require review in accordance with QARD section 6.2.6A. The page did meet the requirements identified in the DP and corrections were made in accordance with both Department of Energy and Los Alamos records procedures.

REMEDIAL ACTION

Based on additional requirements provided by the Department of Energy after the completion of surveillance YMP-SR-96-016, the following change in process will have been made. These changes also address the perceived QARD violations identified in this Performance Report.

- 1) DP-612 will be revised to eliminate all core collection activities, referring to NWI-DS-001Q.
- 2) NWI-DS-001Q has been revised to include non-required assigned core collection and provide for ESF TCO personnel to use that procedure.

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PR/DR CONTINUATION PAGE

EVALUATION OF RESPONSE TO PR YM-96-P-029

The response to PR YM-96-P-029 has been determined to be unsatisfactory due to reasons as follows:

- Subject response states in part that "it is not apparent to the ESF TCO that a QARD violation has occurred." Further, it was stated that "DP-612 clearly describes the process for identifying the orientation of core." As noted in several meetings with the LANL TCO and DOE Project Management, DP-612 did not identify positive controls for orientation of drill core as required by the QARD. The failure of the LANL TCO to recognize this fact and the failure to coordinate the generation of DP-612 with other organizations, familiar with commitments made to the NRC relative to the acquisition of core, resulted in a procedure that was determined to be inadequate.
- Subject response identifies that the ESF Drilling Shift Report form utilized for recording pertinent data from core acquisition was not a part of DP-612. The QARD, Section 5.0, requires that methods for demonstrating that the work was performed as required (such as provisions for recording inspection and test results, checkoff lists, sign off blocks) be included in implementing documents. Procedure DP-612 failed to include the ESF Drilling Shift Report forms utilized to record data as a controlled implementing document, as required.

Based on the above, the overall evaluation the LANL TCO response was found to be unsatisfactory. However, the final resolution to the cited deficiencies, the revision of DP-612 to eliminate all core collection activities, was found to be acceptable.

Your response fails to identify a completion date of when DP-612 will be revised. As such, it is requested that a completion date be provided as to when DP-612 will be revised to eliminate all core collection activities.

  
John S. Martin, QAR

8/28/96  
Date