



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

SEP 27 1996

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Technical Project Officer
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Site Characterization Project
TRW Environmental Safety Systems, Inc.
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**VERIFICATION OF CORRECTIVE ACTIONS AND CLOSURE OF DEFICIENCY REPORT
(DR) YM-96-D-054 AND PERFORMANCE REPORT (PR) YM-96-P-026 RESULTING
FROM YUCCA MOUNTAIN QUALITY ASSURANCE (YMQA) AUDIT
YM-ARC-96-11 OF LAWRENCE LIVERMORE NATIONAL LABORATORY**

The YMQA staff has verified the corrective actions to DR YM-96-D-054 and
PR YM-96-P-026 and determined the results to be satisfactory. As a result, these deficiency
documents are considered closed.

If you have any questions, please contact either Robert B. Constable at (702) 794-5580 or
Donald J. Harris at (702) 794-1467.

Robert B. Constable

Richard E. Spence
Yucca Mountain Quality Assurance

YMQA:RBC-2733

Enclosure:
DR YM-96-D-054 and
PR YM-96-P-026

cc w/encl:
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cc w/o encl:
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Recip: NMSS/HLR

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WASHINGTON, D.C.

8 ☐ Performance Report
☒ Deficiency Report
YM-96-D-054
NO. HQAD-96-0054
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PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document:
QARD DOE/RW-0333P, Revision 5

2 Related Report No.
YM-ARC-96-11

3 Responsible Organization:
Lawrence Livermore National Laboratory

4 Discussed With:
R. Monks

5 Requirement/Measurement Criteria:
Section 2.2.2, "Classifying Items."

The QA program shall apply to the following, which shall be included on the Q-List (Items A through G).

Section 2.2.3, "Controlling Activities."

- A. The QA program shall apply to site characterization data and samples.
- B. The QA program applies to activities related to items on Q-List.
- C. The QA program shall apply to those activities that provide data used to assess the potential dispersion of radioactive materials from the licensed facility.

Section 2.2.4, "Applying QA Controls."

QA Controls (grading) to be applied.

6 Description of Condition:

1) 033-YMP-QAP 2.8, Revision 4, "Quality Assurance Grading." This procedure provides a process or methodology of taking Participant Planning Sheet (PPS) (PSA03) statement of work designated on the PPS that the "QARD applies to this effort," and grade the work or activity out to be either Non-Quality affecting or specifies what QA requirements apply.

2) QAG-L-020, Revision 1, indicates the activity is not subject to the QARD. The PPS Work Breakdown Structure (WBS) 1.2.2.5.1 states the QARD applies to this effort.

3) QAG-L-038, Revision 1, indicates the activity is not subject to the QARD. The PPS WBS 1.2.2.4.1 states the QARD applies.

4) QAG-L-014, Revision 2 indicates activity is not subject to the QARD. The PPS states the QARD applies.

7 Initiator

Donald J. Harris

Date 04/24/96

9 QA Review

QAR Donald J. Harris

Date 5-1-96

10 Response Due Date

20 Working Days From Issuance

11 QA Issuance Approval

QAR (PR)/AOQAM (DR)

Date 5/8/96

12 Remedial Actions:

All LLNL technical activities graded "Not Quality Affecting" or "Not subject to the requirements of the QARD" will be regraded or canceled as appropriate.

13 Remedial Action Response By:

Royce E. Monks

Date 6-4-96

14 Remedial Action Due Date

July 31, 1996

Date

15 Remedial Action Response Acceptance

QAR Donald J. Harris

Date 6-20-96

16 PR Verification/Closure

QAR

N/A

Date

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17 Recommended Actions:

Revise the QA Grading Report to reflect of PPS for the WBS activities or incorporate the QA requirements in the Activity Plan or Scientific Investigation Plan.

NOTE: All PPS' includes a statement when the QARD applies or does not apply.

18 Investigative Actions:

A review of all Grading Reports indicate that the technical staff has attempted to include experimental set-up or preliminary test activities required to assure confidence in data in their planning documents. Only these portions of the total activity were graded as "Non Q" or "not subject to the QARD". Review of Activity Plans and Study Plans referred to in the Grading Reports allows one to differentiate when "Q" data may be obtained and require re-grading or have been graded as "Q" in separate Grading Reports.

19 Root Cause Determination:

In an attempt to conserve funds and manpower in the early start-up of Scientific Investigation Activities, the QA grading procedure was used to allow broad discretion by the PIs in selecting controls considered applicable to the preliminary phases of their activities.

20 Action to Preclude Recurrence:

YMP-QP 3.0, "Scientific Investigation Control," and YMP-QP 2.8, "Quality Assurance Grading" will be revised to assure that LLNL staff work is accomplished in accordance with the requirements of the QARD and as specific in the PPSs.

21 Response by:

[Signature] Date 6-9-96

22 Corrective Action Completion Due Date:

23 Response Accepted

QAR *[Signature]* Date 6-20-96

24 Response Accepted

AOQAM *[Signature]* Date 6-26-96

25 Amended Response Accepted

QAR *[Signature]* Date

26 Amended Response Accepted

AOQAM *[Signature]* Date

27 Corrective Actions Verified

QAR *[Signature]* Date 9/24/96

28 Closure Approved by:

AOQAM *[Signature]* Date 9-26-96

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PR/DR CONTINUATION PAGE

VERIFICATION OF CORRECTIVE ACTION FOR DR YM-96-D-054

Block 27, Corrective Actions Verified -

Remedial Actions: Verified Change Notices to LLNL QA Grading Reports were issued, effective 9/12/96, which stated: All activities are subject to the QARD. In addition, LLNL Memorandum LLYMP9607066 was appended to the QA Grading Reports. The memorandum provided the reason for the changes to the following QA Grading Reports:

LLNL-QAG's L002 CN 2-1, L003 CN 2-1, L005 CN 1-1, L008 CAN 1-1, L011 CN 1-1, L014 CN 2-1, L017 CN 1-1, L020 CN 1-1, L021 CN 1-1, L025 CN 1-1, L026 CN 1-1, L027 CN 1-1, L028 CN 1-1, L029 CN 1-1, L030 CN 1-1, L032 CN 1-1, L033 CN 1-1, L034 CN 1-1, L037 CN 1-1, L038 CN 1-1, L039 CN 1-1, L040 CN 1-1, L041 CN 1-1, L041 CN 1-1, L043 CN 1-1, L047 CN 1-1, L048 CN 1-1, L061 CN 1-1, L062 CN 1-1, L068 CN 1-1, L071 CN 1-1, L072 CN 1-1, L076 CN 0-1, L080 CN 0-1, L081 CN 0-1.

Action to Preclude Recurrence:

- 1) Verified LLNL 033-YMP-QP 2.8, Revision 4, Quality Assurance Grading was canceled, effective 9/10/96.
- 2) Verified LLNL 033-YMP-QP 3.0, Revision 5, Scientific Investigation became effective 9/19/96, was revised to incorporate the requirements of QARD, Revision 5 changes. In addition, it eliminated the Task Leader references, changed the responsibilities for LLNL's QA Grading and designated the Participant Planning Sheets (PPS) as the determinant factor in QA Grading, when the PPS states the activities are "subject to the QARD".

Donald J. Harris
Donald J. Harris, QAR

9/24/96
Date

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WASHINGTON, D.C.**

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PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document: 033-YMP-QP 2.8, Revision 4, "QA Grading"	2 Related Report No. YM-ARC-96-11
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3 Responsible Organization: Lawrence Livermore National Laboratory	4 Discussed With: R. Monks
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5 Requirement/Measurement Criteria:
Paragraph 2.8.5.3, "QA Grading Reviewers, Appointed by the Project Leader."
The Task Leader (TL) initiates the QA Grading Review by notifying the Project Leader.....

If the TL and TAL are the same, QA Grading Review is accomplished by the Project Leader or designee.

6 Description of Condition:

The term TL has been cancelled. The procedure has not been revised to remove the TLs responsibilities or coordinate with the QA Grading Report Review Record Form YMP075, Revision 8 (Grading Report LLNL-QAG-L082) which removed the TL.

7 Initiator Donald J. Harris Date 04/24/96	9 QA Review QAR Donald J. Harris Date 5/1/96
10 Response Due Date 20 Working Days From Issuance	11 QA Issuance Approval QAR (PRI)/AOQAM (DRI) Date 5/1/96

12 Remedial Actions:

Procedures are being revised as required and forms supporting procedures revision will also be revised.

Both are on the Document Server as of this date.

13 Remedial Action Response By: Royce M. [Signature] Date 6-4-96	14 Remedial Action Due Date July 31, 1996 Date 6/9/96
15 Remedial Action Response Acceptance QAR [Signature] Date 6-20-96	16 PR Verification/Closure QAR [Signature] Date 7/24/96

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PR/DR CONTINUATION PAGE

VERIFICATION OF CORRECTIVE ACTION FOR PR YM-96-P-026

Block 16, PR Verification/Closure

- 1) Verified 033-YMP-QP 2.8 was canceled on 9/10/96.
- 2) Verified 033-YMP-QP 3.0, Scientific Investigation Control, Revision 5, effective 9/19/96, incorporated QARD, Revision 5 changes and incorporated the requirements that the Participant Planning Sheets (PPS) are the determining factor in classifying LLNL-QA Grading Reports when the PPS states the activity is subject to the QARD. The Task Leader designation has been removed as being responsible for QA Grading Report and is in agreement with the QA Grading Report Form; LLNL-QAG-L082.

Donald J. Harris
Donald J. Harris, QAR

9/29/96
Date