



Department of Energy

Washington, DC 20585

QA: L

AUG 27 1997

L. D. Foust, Technical Project Officer
for Yucca Mountain Site
Characterization Project
TRW Environmental Safety Systems, Inc.
1180 Town Center Drive, M/S 423
Las Vegas, NV 89134

EVALUATION OF RESPONSES TO DEFICIENCY REPORTS (DR) YM-97-D-065
AND YM-97-D-066, AND PERFORMANCE REPORT (PR) YM-97-P-012
RESULTING FROM OFFICE OF QUALITY ASSURANCE (OQA) SURVEILLANCE
LLNL-SR-97-039 OF LAWRENCE LIVERMORE NATIONAL LABORATORY

The OQA staff has evaluated the responses to DRs YM-97-D-065 and YM-97-D-066,
and PR YM-97-P-012. The responses have been determined to be satisfactory.
Verification of completion of the corrective actions will be performed after the effective
dates provided. Any extension to these dates must be requested in writing, with
appropriate justification, prior to the date. Please send a copy of extension requests to
Deborah G. Sult, OQA/QATSS, P.O. Box 30307, Mail Stop 455, North Las Vegas,
Nevada 89036-0307.

If you have any questions, please contact either James Blaylock at (702) 794-1420 or John
R. Doyle at (702) 295-7961.

R.W. Clark
for Donald G. Horton, Director
Office of Quality Assurance

OQA:JB-2205

Enclosure:
DRs YM-97-D-065, YM-97-D-066
and PR YM-97-P-012

cc w/encl:
T. A. Wood, DOE/HQ (RW-55) FORS
J. O. Thoma, NRC, Washington, DC
S. W. Zimmerman, NWPO, Carson City, NV
B. R. Justice, M&O, Las Vegas, NV
R. A. Morgan, M&O, Las Vegas, NV

cc w/o encl:
W. L. Belke, NRC, Las Vegas, NV
W. L. Clarke, M&O/LLNL, Livermore, CA
Royce Monks, M&O/LLNL, Livermore, CA
J. M. Ziemba, OQA/QATSS, Livermore, CA
J. R. Doyle, OQA/QATSS, Las Vegas, NV
D. G. Sult, OQA/QATSS, Las Vegas, NV
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**OFFICE OF CIVILIAN
RADIOACTIVE WASTE MANAGEMENT
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WASHINGTON, D.C.**

8 Performance Report
 Deficiency Report
 NO. YM-97-D-065
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PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document: Technical Implementation Plan (TIP)-NF-31, Revision 1	2 Related Report No. LLNL-SR-97-039
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3 Responsible Organization: Lawrence Livermore National Laboratory (LLNL)	4 Discussed With: Royce Monks, James Ziemba
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5 Requirement/Measurement Criteria:

TIP-NF-31, Revision 1, "Neutron and Gamma (Density) Logging in Welded Tuff"

Paragraph 5.0 states in part: "The field measurement sequence includes measurements of a standard outside the boreholes and measurements within boreholes for moisture or density testing.

a) Measurement of Standard Counts: The calibration of the moisture or density system is made in terms of a ratio to standard count made with the probe secured within the shielded surface unit or a special calibration fixture. A log will be kept of the standard counts taken before and after each borehole survey to allow the user to determine when a defect occurs and the rate of change per unit time of course. Selection of an appropriate base station location is discussed in the manual of operation."

In addition, Paragraph 6.0 states in part: "Documentation of the methods or procedures used to perform the test/activity will be provided in the Scientific Notebooks (SN) and the method or approach used will be determined by the Principal Investigator (PI) or the person assigned by the PI to do the work. As such, deviations from the suggested or typical approaches outlined in this procedure are allowed based on the technical judgment of the scientist responsible for this activity. Revised procedures will then be prepared to reflect changes, when appropriate.

6 Description of Condition:

Contrary to the above requirements, standard counts were not recorded in SN 00291 before and after the logging of boreholes ESF-TMA-HYD-1 and ESF-TMA-HYD-2. In addition, the above deviation was not documented in the SN for this activity nor the procedure revised to reflect same.

7 Initiator John R. Doyle <i>John R. Doyle</i> Date <u>7/2/97</u>	9 Is condition an isolated occurrence? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown; Must be Yes if PR
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10 Recommended Action: (Not required for PR)

1) Investigate impact on quality of the data collected.
 2) Revise procedures, if necessary, to reflect current practice.

11 QA Review: <i>John R. Doyle</i> QAR John R. Doyle Date <u>7/2/97</u>	12 Response Due Date 20 working days from issuance
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13 Affected Organization QA manager Issuance Approval: (QAR for PR) Printed Name <u>DONALD S. HOOD</u> Signature <i>Donald S. Hood</i> Date <u>7/10/97</u>	
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22 Corrective Action Verified QAR _____ Date _____	23 Closure Approved by: (N/A for PR) AOQAM _____ Date _____
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PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:

Review of Scientific Notebook SN00261 shows that the deviation from the procedure was noted and with explanation. This is allowed in paragraph 6 of TIP-NF-31. The decision to make the change in the procedure is allowed for both in the TIP and in 033-YMP-QP 5.0. There was no adverse affect on data collection as the log of standard counts was taken at the beginning and end of each shift.

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

033-YMP-QP 5.0 will be revised to make clear the responsibility for changing the TIP in a timely manner to reflect actual work.

18 Corrective Action Completion Due Date:

September 8, 1997

19 Response by:

Loy S. Melo

Date: 8-13-97

Phone

510
427-6518

20 Response Accepted

QAR

J. N. Doyle

Date 8/19/97

21 Response Accepted (N/A for PR)

DOQA

R. W. Chief

Date 8/25/97

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8 Performance Report Deficiency Report
NO. YM-97-D-066
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PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document:

Quality Assurance Requirements Description (QARD)
Department of Energy/RW-0333P, Revision 7

2 Related Report No.

LLNL-SR-97-039

3 Responsible Organization:

Lawrence Livermore National Laboratory (LLNL)

4 Discussed With:

Royce Monks, James Ziemba

5 Requirement/Measurement Criteria:

QARD Section 5.2 Requirements states: "Work shall be performed in accordance with implementing documents."

Section 6.2.1 states in part: "Implementing documents and documents that specify technical ^{HTA 7/7/97} requirements or quality requirements shall be controlled ..."

6 Description of Condition:

A review of Technical Implementation Plan (TIP)-NI-031, Revision 1, reveals that instructions to operate the neutron tools are described in the operations manuals. Contrary to the above requirement, a Campbell Pacific Nuclear operations manual for a 501 DR Depth Probe Moisture/Density Gauge, dated 6/27/84, is being utilized to perform quality affecting activities and not controlled.

7 Initiator

John R. Doyle *John R. Doyle* Date 7/2/97

9 Is condition an isolated occurrence?

Yes No Unknown; Must be Yes if PR

10 Recommended Action: (Not required for PR)

Revise TIP-NF-031 to have as an attachment the operations manual for this activity.
Investigate to determine if any other activities are affected by the above adverse condition to quality.

11 QA Review:

QAR John R. Doyle *John R. Doyle* Date 7/2/97

12 Response Due Date

20 working days from issuance

13 Affected Organization QA manager Issuance Approval: (QAR for PR)

Printed Name DONALD S. HORTON

Signature *Donald S. Horton*

Date 7/10/97

22 Corrective Action Verified

QAR

Date

23 Closure Approved By: (N/A for PR)

AOQAM

Date

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PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:

Revise TIP-NF-31 to include Campbell Pacific Nuclear Operations Manual for the 501 DR Depth Probe Moisture/Density Gage as an attachment to the TIP.

15 Extent of Condition: (Not required for PR)

All current TIPs were reviewed. No other TIPs contained references to manufacturer's manuals.

16 Root Cause Determination: (Not required for PR)

Required: Yes No

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

Required: Yes No

Revise 033-YMP-QP 5.0 to specifically note that Manufacturer Operations Manuals must be included as attachments to TIPs.

18 Corrective Action Completion Due Date:

September 8, 1997

19 Response by:

Royce Moul

Date 8-8-1997

SID

Phone 422-6518

20 Response Accepted

QAR *John R. Day*

Date 8/19/97

21 Response Accepted (N/A for PR)

DOQA *R.W. Cal*

Date 8/25/97

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IS A RED STAMP
 Performance Report
 Deficiency Report
 NO. YM-97-P-012
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PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document: Technical Implementation Plan (TIP)-NF-31, Revision 1		2 Related Report No. LLNL-SR-97-039	
3 Responsible Organization: Lawrence Livermore National Laboratory (LLNL)		4 Discussed With: Royce Monks, James Ziemba	
5 Requirement/Measurement Criteria: TIP-NF-31, Revision 1, "Neutron and Gamma (Density) Logging in Welded Tuff" Paragraph 7.0 states in part: "This procedure will be carried out by a geologist, geophysicist, or technician who has been trained to this procedure ..."			
6 Description of Condition: During the surveillance, no objective evidence was found for Richard Carlson for training to TIP-NF-31, Revision 1.			
7 Initiator John R. Doyle <i>John R. Doyle</i> Date <u>7/2/97</u>		9 Is condition an isolated occurrence? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown; Must be Yes if PR	
10 Recommended Action: (Not required for PR) Investigate impact and extent due to lack of training to this technical procedure.			
11 QA Review: QAR John R. Doyle <i>John R. Doyle</i> Date <u>7/2/97</u>		12 Response Due Date 20 working days from issuance	
13 Affected Organization QA manager Issuance Approval: (QAR for PR) Printed Name <u>JOHN R. DOYLE</u> Signature <i>John R. Doyle</i> Date <u>7/2/97</u>			
22 Corrective Action Verified QAR _____ Date _____		23 Closure Approved by: (N/A for PR) AOQAM _____ Date _____	

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PR/DR NO. YM-97-P-01
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PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:

The cited condition for this PR was that a contract support person for LLNL working at the NTS performing neutron logging activities had not been trained to the technical procedure controlling the work (TIP-NF-31). The individual cited completed the required training on 6/26/97. This individual was a previous LLNL employee who previously worked on the YMP and had been trained to the initial issuance of this technical procedure. He had reviewed the procedure (current version) prior to performing work at the NTS. There was no evidence that work performed was adversely impacted by the individual's performance. Note that he was also involved in the initial preparation of the technical procedure.

15 Extent of Condition: (Not required for PR)

N/A

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:

Completed 6/26/97

19 Response by:

Roy - Moore

Date 8-8-97

Phone (510) 422-6518

20 Response Accepted

QAR *John R. Day*

Date 8/19/97

21 Response Accepted (N/A for PR)

DOQA N/A

Date