



Department of Energy

Washington, DC 20585

QA: L

JUN 30 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

ISSUANCE OF DEFICIENCY REPORT (DR) YM-97-D-053 RESULTING FROM OFFICE OF QUALITY ASSURANCE (OQA) AUDIT UNR-ARP-97-17 OF THE UNIVERSITY OF NEVADA AT RENO

Enclosed is DR YM-97-D-053 generated as a result of OQA Audit UNR-ARP-97-17.

Please provide a response to this deficiency that meets the applicable requirements of Administrative Procedure 16.1Q, Performance/Deficiency Reporting. Send the original of your response to Deborah Sult, OQA/QATSS, P.O. Box 30307, Mail Stop 455, North Las Vegas, Nevada 89036-0307. Response to the DR is due 20 working days from the date of this letter. Any extension to the due date must be requested in writing, with appropriate justification, prior to the due date.

If you have any questions, please contact either James Blaylock at (702) 794-1420 or Daniel A. Klimas at (702) 734-0853.

R.W. Cell

rc Donald G. Horton, Director
Office of Quality Assurance

OQA:JB-1765

Enclosure:
DR YM-97-D-053

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Recip in mss / HLWR

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L. D. Foust

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JUN 30 1997

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
M. C. Tynan, DOE/YMSCO, Las Vegas, NV

cc w/o encl:

W. L. Belke, NRC, Las Vegas, NV
D. A. Klimas, OQA/QATSS, Las Vegas, NV
D. G. Sult, OQA/QATSS, Las Vegas, NV
R. W. Clark, DOE/OQA, Las Vegas, NV

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

8 Performance Report
 Deficiency Report

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PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document: Quality Assurance Requirements and Description, Revision 5 (QARD)	2 Related Report No. UNR-ARP-97-17
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3 Responsible Organization: Civilian Radioactive Waste Management System Management & Operating Contractor (CRWMS M&O) University of Nevada, Reno (UNR)	4 Discussed With Darrell Porter, Steve Castor
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5 Requirement/Measurement Criteria:

QARD Section 1.2 requires organizational interfaces, organizational structures, requirements and responsibilities for its scope of work to be documented.

QARD Section 2.2.5 requires planning to be documented to ensure work is accomplished under suitably controlled conditions. Planning elements shall include: (D) Identification and selective application or development of appropriate implementing documents. (G) Identification of Quality Assurance program verifications of the work performed.

QARD Section 2.2.12 (F) Requires minimum education and experience to be verified.

See Page 3

6 Description of Condition:

Contrary to the requirements noted in Block 5.

QARD 1.2: Organizational interfaces, organizational structures, requirements and responsibilities for the scope of work are not adequately described or documented.

QARD 2.2.5: Planning documents did not identify appropriate implementing procedures or Quality Assurance (QA) program verifications of the work performed with one exception: University of Nevada, Reno, Statement of Work, December 17, 1996, mentioned use of YAP-SIII.3Q for deliverable data.

QARD 2.2.12: Indoctrination and training records for UNR staff working on the Yucca Mountain Project were incomplete for compliance to QAP-2-1, Revision 5, and QAP-2-2, Revision 2 PO3.

See Page 4.

7 Initiator Daniel A. Klimas Date 5/28/97	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)

- Perform investigative actions to determine any deficiencies in activities not evaluated during the audit and to determine the extent of these deficiencies. Specifically investigate Hydrocarbon Resources, Geothermal Assessment, and Water Resource activities performed by other organizations for the Natural Resource Assessment study.
- Take action to resolve all deficient conditions.

11 QA Review: QAR Daniel A. Klimas Date 5/28/97	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 Donald G. Horton Signature R.W. Clark for Date 6/30/97

22 Corrective Action Verified QAR Date	23 Closure Approved by: (N/A for PR) AOQAM Date
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ENCLOSURE

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PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:

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:

19 Response by:

Initial

Amended _____ Date _____ Phone _____

20 Response Accepted

QAR _____ Date _____

21 Response Accepted (N/A for PR):

AOQAM _____ Date _____

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Block 5 Requirement/Measurement Criteria: (Continued)

H. Ensure the required indoctrination and training for a specified task is completed prior to performing the task.

J. Ensure personnel are indoctrinated in the following topics as they relate to a particular function:

1. General criteria, including the QARD, applicable codes, regulations and standards.
2. Applicable implementing documents.

QARD section 4.2.1.C requires procurement documents issued by each Affected Organization to include (among other things) QA program requirements including, "a requirement for the supplier to have a documented QA program that implements applicable QARD requirements prior to the initiation of work."

QARD section 5.2.4 requires compliance with implementing documents:

A. When work cannot be accomplished as described in the implementing document...the work shall be stopped.

QARD section 7.2.2.A requires a supplier evaluation for selection be performed before the contract is awarded. These procurement issues should be resolved in conjunction with YMP-97-C-001.

CRWMS M&O procedure QAP-7-5, Revision 0, requires acceptance for services provided.

QARD section 12.2.7.C requires calibration data for measuring and test equipment.

YAP-15.1Q, Revision 3, requires nonconformance reports to be created for unacceptable scientific results submitted for acceptance.

QARD supplement II.2.7 requires nonconformances to be evaluated in accordance with QARD section 15 requirements for samples that do not meet requirements. Supplement II.2.2 requires traceability of samples.

QARD supplement III.2.1.A requires scientific investigations to be planned in accordance with QARD section 2.0.
Supplement III.2.2.B.1 requires scientific notebooks to contain a statement of objective and description of work.
Supplement III.2.2.C requires scientific notebooks to be reviewed by an independent qualified individual.

QARD supplement V requires the Affected Organization to establish controls to ensure:

- A. Completeness and accuracy of the data input.
- B. Completeness and accuracy of subsequent changes to data input.
- C. The security of the data is maintained including integrity of the data.

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Block 6 Description of Condition: (Continued)

QARD 4.2.1.C: The following procurements were not conducted in accordance with the CRWMS M&O procurement procedure QAP-7-0, Revision 0:

- o Quality Control Services - calibration of balances
- o Howard Ross - personal service contract
- o Idaho Petrographics - preparation of rock thin sections
- o Rainin - calibration of pipettes
- o USML - analytical services

QARD 5.2.4: QAP-SIII-3, Revision 0, was effective 10/21/96, Revision 2 effective 2/19/97. This procedure for scientific notebooks had not been used after these dates. No procedure had been used before these dates for controls on scientific notebooks. There was no process in place at UNR to assure procedure implementation was performed.

QARD 7.2.2.A: There were no documented evaluations available for the above-mentioned suppliers and they were not on the Office of Civilian Radioactive Waste Management Qualified Suppliers List. The services provided by ACTLABS for analytical data were not accepted as required by procedure QAP-7-6, Revision 0.

QARD 12.2.7.C: No calibration data were available to support the calibration status of Mettler balances PR203 (SN 1114342238) and H16 (SN 55382) posted by Quality Control Services, a vendor hired directly through the UNR procurement system. No "As Found" data was provided to indicate whether the balances were out-of-tolerance preceding the annual recalibration.

QARD 15.2: The unacceptable results of analytical data provided by ACTLABS was not documented in a nonconformance report. Samples of cuttings were found unacceptable for use, but were not identified, segregated and dispositioned as required. (Nonconforming sample requirements are also in QARD Supplement II.2.7.)

QARD, Supplement II: All surface samples (YMR 0001 through YMR 0879) collected for analysis were not passed through the Sample Management Facility to establish traceability as required by YAP-SII.4Q, Revision 0.

QARD, Supplement III: Planning did not meet the requirements of QARD 2.2.5, as invoked by QARD III.2.1.A. Specifically there was insufficient identification of applicable standards and criteria preceding initiation of work.

Scientific notebooks did not consistently contain a statement of objectives and description of work to be performed, as required by QARD III.2.2.B.1. There was a reference to the study plan in the "master" notebook, but the study plan was not followed.

There was no evidence that scientific notebooks were reviewed by an independent qualified individual as required by QARD III.2.2.C.1 and C.2. Data from the notebooks have been submitted for input to a compendium, without the required review to verify sufficient detail.

QARD, Supplement V: No procedures were available for implementation of the stated applicable requirements.