



Department of Energy
Washington, DC 20585

QA: L

NOV 12 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

VERIFICATION OF CORRECTIVE ACTION AND CLOSURE OF DEFICIENCY
REPORT (DR) YM-97-D-042 RESULTING FROM OFFICE OF QUALITY
ASSURANCE (OQA) SURVEILLANCE M&O-SR-97-025 OF THE UNIVERSITY OF
NEVADA AT RENO

The OQA staff has verified the corrective action to DR YM-97-D-042 and determined the results to be satisfactory. As a result, the DR is considered closed.

If you have any questions, please contact either James Blaylock at (702) 794-1420 or Daniel A. Klimas at (702) 794-1495.

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

OQA:JB-0299

Enclosure:
DR YM-97-D-042

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

NH33
1/1
wm-11
102.7

Recp: NMSS/PAHL

9711200141 971112
PDR WASTE
WM-11

PDR

190075



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

8 Performance Report
 Deficiency Report
NO. YM-97-D-042
PAGE 1 OF 2
QA: L

PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document:
Quality Assurance Requirements and Description (QARD), DOE/RW-0333P, Rev. 5

2 Related Report No.
M&O-SR-97-025

3 Responsible Organization:
Management and Operating Contractor
(M&O), University of Nevada, Reno (UNR)

4 Discussed With:
David Von Seggern, J. N. Brune, Ken Smith,
Glenn Biasi, Darrell Porter

5 Requirement/Measurement Criteria:
QAP-2-1, Rev. 05, Indoctrination and Training, requires a completed Activity Evaluation to be reviewed. (Section 5.2.1A), Reading/Self study records or attendance of classroom training for each individual working on the project (Section 5.2.1C)
QAP-2-2, Rev. 2, PO3, Verification of Personnel Qualifications, requires a Resume or Summary of work experience (Section 5.1.4), and verification of education and experience for each individual (Sections 5.2.1 and 5.3).
QAP-7-0, Rev. 0, Procurement Control Process, requires Section 5 steps to be followed to acquire "services that are subject to Quality Assurance Requirements and Description (QARD) requirements."
QAP-SIII-3, Rev. 1, Scientific Notebooks, requires an initial entry to include, among other things, a Table of Contents, list of personnel making entries, etc.
(Continued on Page 2)

6 Description of Condition:
Contrary to the above requirements:
• Training records did not contain the Activity Evaluation for any of the UNR staff, reading/self study records were not found for Rasool Anooshehpour and Walter Nicks. Resumes were not found for Glenn Biasi, Brant Wilhelm, and Nancy Stennes. verification of education and experience was not complete for Gordon Shields, Ken Smith, Walter Nicks, Arthur Aburto, Brant Wilhelm, and John Torrisi. No training records were available for Diane DePolo.
• Scientific Notebooks do not comply with the requirements of the Civilian Radioactive Waste Management System Management and Operating Contractor (CRWMS M&O) procedure QAP-SIII-3, "Scientific Notebooks."
• Services for the calibration of a voltmeter were not obtained using the M&O procedure QAP-7-0, "Procurement Control Process."
• Records of tapes for seismic activity are not being retained in a 1-hour fire rated area, dual storage, or submitted within 90 days of completion to the Records Processing Center.
• Nevada Work Instructions did not contain the requirements for Control of Electronic Management of Data from Supplement V of the QARD that apply to the University work.

7 Initiator
Daniel Klimas Date 5/13/97

9 Is condition an isolated occurrence?
 Yes No Unknown; Must be Yes if PR

10 Recommended Actions: (Not required for PR)
Complete the training records to meet the M&O procedures, clean up Scientific Notebooks to meet QAP-SIII-3 and close out notebooks that will not be used beyond the transition date of work from the U.S. Geological Survey to the M&O/UNR, resolve the procurement issue with the M&O to preclude procurement of services outside the procedure requirements, find a storage location in another building to house the data tapes or submit records to the Records Processing Center within 90 days of completion, and include in the appropriate NWIs the implementation steps for compliance with the appropriate requirements of Supplement V of the QARD.

11 QA Review
QAR Daniel Klimas Date 5/13/97

12 Response Due Date
20 days after date of issue.

13 Affected Organization QA Manager Issuance Approval: (QAR for PR)
Printed Name Donald G. Horton Signature Date 5/19/97

22 Corrective Actions Verified
QAR Date 11/31/97

23 Closure Approved by: (N/A for PR)
AQOAM R.W. Celf Date 11/7/97

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

8 Performance Report
 Deficiency Report

NO. YM-97-D-042

PAGE 2 OF 2

QA: L

PR/DR CONTINUATION PAGE

Block 5 (Continued)

AP-17.1Q, Rev. 0 ICN0, requires storage of records in a 1-hour fire rated container or facility, dual storage, or submittal of records to the Records Processing Center within 90 days of completion.

The QARD, Supplement V, Control of the Electronic Management of Data, requires the security of the data is maintained including integrity of the data and when data is retrieved using a query language, the query is checked to ensure it satisfies the Affected Organization's requirements for its intended use. (Section V.2.1C. and D.)

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

PR/DR NO. YM-97-D-042
PAGE 3 OF 4
QA: L

PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:

Deficiency - Bullet 1: There was no evidence presented that an Activity evaluation had been completed for any of the UNR (Seismic Lab) staff, and that Reading/Self Study records were not available for several active technical participants. Also, resumes were not found for Biasi, Wilhelm, Stennus, and verification of education /experience were not completed for all personnel. No training records were available for DePolo.

Response - An Activity Evaluation showing the subject task to be a Q activity existed whereby the participants examined are required to perform Q activities as reflected by their PDs. The reading/self study and missing resume deficiencies are being corrected. The personnel had been verified, although the process used was not in compliance with QAP-2.2; therefore, the process has been repeated and the credentials, as stated in the Position Descriptions of all participants, have been (See Continuation Sheet)

15 Extent of Condition: (Not required for PR)

The first four of the five conditions cited are administrative or operational in nature, and are nearing correction. Additional attention to stricter compliance will prevent recurrence of these deficiencies. The last deficient condition (compliance with QARD Supplement V) will be remedied procedurally. The conditions cited do not impact the quality of the data being produced; therefore it is believed there is no root cause determination required for the issues of this deficiency report.

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:

09/15/97

19 Response by:

David von Seggern &
Darrell Porter

David von Seggern
Darrell Porter
Date 06/13/97

Phone 295-5784

20 Response Accepted

QAR

David von Seggern Date 6/19/97

21 Response Accepted (N/A for PR)

DOQA

R.W. [Signature] Date 6/30/97

Exhibit AP-16.10.2

Rev. 06/02/87

6/16/97

LV.SPO.PP.DDP.06/97-057

P.3 of 6

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

NO. YM-97-D-042
PAGE 4 OF 4
QA: L

PR/DR CONTINUATION PAGE

14 Remedial Actions (Continued)

verified. Because Diane DePolo was a new participant, her records were not complete or available for review by the surveillance team. Ms. DePolo has been appropriately trained and the records will be in the system.

Deficiency - Bullet 2: Scientific Notebooks do not comply with QAP-SIII-3.

Response - All currently active Scientific notebooks are being thoroughly reviewed, and corrected as appropriate, for compliance with the current revision of the subject procedure. Those notebooks in use before the advent of the M&O procedure for controlling the use of Scientific Notebooks will be closed out, reviewed, and submitted as records. New notebooks are being initiated as the specific activities warrant; internal compliance overview of all notebook users will be stressed by the responsible project scientist.

Deficiency - Bullet 3: "Services for the calibration of a voltmeter were not obtained using the M&O procedure QAP-7-0....".

Response - The voltmeter was calibrated by a qualified vendor who the University historically had been using as standard practice. It is recognized that the subject procedure requires the supplier be selected as an appropriately qualified YMP vendor as denoted by the status of a listing on the YMP Qualified Supplier's List. Prior to this surveillance the determination had been made that future calibrations would be provided by , and one subsequent voltmeter calibration has been made by the QSL-listed Bechtel Calibration Laboratory. All voltmeter calibrations in the foreseeable future will continue to be made by this Bechtel Calibration Laboratory.

Deficiency - Bullet 4: "Records of tapes for seismic activity are not being retained in a 1-hour fire rated area, dual storage, or submitted within 90 days of completion".

Response - The location of tape storage was believed to be appropriately within the requirements. The facility is secure and in an adjacent building, believed to meet the separation requirements, which was a source of discussion at the surveillance. Apparently the surveillance team's final discretion was that the latter assumption was not appropriate. Accordingly, this facility will be abandoned and a commitment is made to meet the 90 day rule for these records. In the event of need for storage under extenuating circumstances, a planned fallback position is to make an arrangement with a University colleague to store a copy of these records in a separate, totally free standing building until such time that the records can be submitted.

Deficiency - Bullet 5: "Nevada Work Instructions did not contain the requirements for Control of Electronic Management of Data from Supplement V of the QARD..."

Response - At the present time the M&O procedures are silent on the requirements of Supplement V. The UNRSL will approach resolution of this issue by modifying their NWI-UNR Work Instructions that generate data bases where the issues of Supplement V for electronic data exist, to incorporate the appropriate controls.

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

NO. YM-97-D-042

PAGE OF
QA: L

PR/DR CONTINUATION PAGE

Verification of Completed Corrective Action for YM-97-D-042.

From Block 6 of the Deficiency Report:

An Activity Evaluation was verified for "Update Preliminary Seismic Hazard Analysis for Yucca Mountain" B00000000-01717-2200-00180- Rev. 00. dtd. 9-30-96, covering this work.

Reading/Self study records were verified for A. Ansooshepoor: AP-16.1Q, rev.2, ICN 0; YAP 15.1Q, rev. 3, ICN 1; QAP-SIII-1, rev. 1; QAP-SIII-2, rev.1; QAP-SIII-3, rev. 2; YAP-30.56, rev. 0, ICN 0; AP-16.2Q, rev. 2, ICN 0; AP-17.1Q, rev. 0, ICN 0; QAP-3-5, rev. 6; NWI-UNR-004Q, rev. 0.

Reading/Self study records were verified for W. Nicks: YAP-30.1, rev. 1, ICN 0; AP-16.1Q, rev.2, ICN 0; YAP-15.1Q, rev.3, ICN 1; QAP-2-1, rev. 5; AP-16.2Q, rev.2, ICN 0; AP-17.1Q, rev. 0, ICN 0; QAP 17.1, rev. 4; NLP-17-6, rev. 0; QAP-12-1, rev. 4; NWI-UNR-001Q, rev. 0.

Resumes were verified for G. Biasi, N. Stennes, and B. Wilhelm.

Completed Verification of Education and Experience forms were verified for G. Shields, K. Smith, W. Nicks, A. Aburto, B. Wilhelm and J. Torrisi.

Appropriate training records were verified for Diane dePolo: position description, verification of education, verification of work experience, resume, reading/self study records: AP-16.1Q, rev. 2, ICN 0; AP-16.2Q, rev. 2, ICN 0; YAP-30.56, rev. 0, ICN 0; YAP-15.1Q, rev. 3, ICN 1; QAP-SIII-3, rev. 2; QAP-2-1, rev. 5; AP-17.1Q, rev. 0, ICN 0; NWI-UNR-002Q, rev. 0 and NWI-UNR-003Q, rev. 0.

Scientific Notebooks. Review documentation for closeout of the following scientific notebooks was verified. QAP-SIII-3, revision 1, was used for closeout review. These procedures had been completed, for the most part, using USGS QMP 5.05, revision 4, Mods 2 & 3, *Scientific Notebook*. QAP-SIII-3, section 2.0, permits the use of an approved procedure until transition to QAP-SIII-3 as long as there is an entry describing the date of transfer. It was verified each of the following scientific notebooks had an entry describing the date of transfer to QAP-SIII-3:

- o SN-UNR-001
- o Scientific Notebook #45
- o SN-47
- o SN-061
- o SN-062
- o SN-067
- o SN-0090
- o SN-0094

Comments received during review were verified to be resolved and changes made to the corresponding sections of the scientific notebook, as appropriate.

(continued next page)

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

NO. YM-97-D-042
PAGE OF
QA: L

PR/DR CONTINUATION PAGE

Verification of Completed Corrective Action for YM-97-D-042 (continued)

Service for calibration was verified for a fluke multimeter, Model # 8060A, Ser. # 3735827 calibrated by Bechtel Nevada on 5/12/97. This had been performed just prior to the surveillance M&O-SR-97-025.

Seismic data tapes are copied in triplicate approximately every 5 days. 2 sets are retained in the computer room, 1 is placed in a safe located between the building holding the other two sets and an adjacent building. This safe was abandoned as meeting the dual storage requirement for records. They have an option to submit records to the Records Process Center within 90 days. Records package transmittal was verified for data records collected by the Southern Great Basin Digital Seismic Network for the FY 96 covering the dates of approximately 6-1-97 to 7-30-97. In discussion with David von Seggern over the telephone he stated the transmittal of records within 90 days of collection of data and the retention of the copies in the computer room would be used to meet the records requirements.

Nevada Work Instructions (NWI) were verified to have been changed to meet the appropriate requirements of Supplement V: NWI-UNR-001Q, rev. 1, ICN N/A, section 3.3.1, contains controls that apply to security of data, any changes to data input and query language checks. Check of original data input is performed by computer software and compared to acceptable data for accuracy (section 3.2.4). NWI-UNR-002Q, rev. 1, ICN N/A, Exhibit 2 contains controls for security of data, changes to data, and query language check. Section 3.4 contains the process for checking accuracy of original data. NWI-UNR-003Q, rev. 1, ICN N/A, Exhibit 2 contains controls for security of data, changes to data, and query language check. Section 3.2.4 contains the process for checking accuracy of original data.

The activities performed as indicated in the accepted response and verified as indicated above are considered satisfactorily implemented.

Stephen D. Harris
Stephen D. Harris

10/30/97
Date