



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 8, 1999

MEMORANDUM TO: Central File

FROM: Sandra L. Wastler *SW*
Performance Assessment & HLW
Integration Branch
Division of Waste Management, NMSS

SUBJECT: SUBMITTAL OF DOCUMENTS

The following documents have been received from the U.S. Department of Energy (DOE), either directly or through the U.S. Nuclear Regulatory Commission's On-Site Representatives and should be placed in the High-Level Waste, Yucca Mountain Subject file, in the Central File and in the Public Document Room:

1. "Selected Nuclear Parameters for Laboratory Critical Experiments and Commercial Reactor Criticals, November 1998."
2. "Yucca Mountain Site Characterization Project, Panel Report on the Drift Stability Workshop, Las Vegas, NV, December 9-11, 1998," prepared by: E.J. Cording, J. Daemen, R.D.Hart, J.A. Hudson, P.K. Kaiser, S. Pelizza, February 1999.
3. Fax to Neil Coleman, from B. Belke, US NRC, Las Vegas Office, submitting 3/17/99 "M&O Field Survey Department, YMP Survey of Nye County EWDP Boreholes," GPS survey of the location of 9 Nye County Early Warning Drilling Program Boreholes performed on March 6 and 10, 1999.
4. Letter dated 4/1/99 from R. E. Spence, Acting Assistant Manager, Office of Project Execution, DOE, OCRWM, Yucca Mountain Site Characterization Office to D. R. Wilkins, Technical Project Officer for Yucca Mountain Site Characterization Project, TRW Environmental Safety Systems, Inc., Las Vegas, NV submits reports containing the data qualification team's recommendation to DOE for review and evaluation: "Final Report on Qualification of the 40Ar/39Ar Volcanism Data Using Procedure YAP-SIII.IQ, Rev. 3, ICN 0," and "Final Report on Qualification of Volcanism Isotope, Trace-Element, and Halogen Data Using Procedure YAP-SIII.IQ, Rev. 3, ICN 0," (OPE:RES-1096).
5. Fax to Neil Coleman, from B. Belke, US NRC, Las Vegas Office submitting 4/8/99 letter to R. W. Clark, Acting Dir., Office of Quality Assurance, DOE, Wash., DC to R. R. Dresel, CRWMS Management and Operating Contractor - MK, Yucca Mountain Site Characterization Project, Las Vegas, NV: "Issuance of Deficiency Report (DR) LVMO-99-D-036 Resultin From An Observation Made By Jerry Heaney," enclosure: DR LVMO-99-D-036, OQA:JB-1120.

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WM-11 PDR

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THE NRC FILE CENTER

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6. Civilian Radioactive Waste Management System, Management & Operating Contractor, Report: "Thermal Test Progress Report #2", BABEAF000-01717-5700-0000 REV 00, prepared for DOE Yucca Mountain Site Characterization Office, North Las Vegas, NV (Preliminary Draft Information Only), January 1999.
7. US Dept. of Interior, 4/26/99, to Distribution, Denver, CO from Tim Brady, YMPB, Denver, CO re: Publications - ERRATA sheet for Water-Resources Investigations Report 98-4050, "Hydrogeology of the unsaturated zone, north ramp area of the exploratory studies facility, Yucca Mountain, NV", edited by J.P. Rousseau, E.M. Kwicklis and D.C. Giles submitting replacement pages containing corrections for above report (pages 126, 127, and 188).
8. Report by Nye County Nuclear Waste Repository Project Office, Pahrump, NV, submitting "Nye County Early Warning Drilling Program, Phase I - FY 1999 Data Package, March 1999."
9. CD-ROM: (UCRL-ID-119564) "Engineered Materials Characterization Report 1994-1998", Lawrence Livermore National Laboratory.

Attachments: As stated

CONTACT: Sandra L. Wastler, NMSS
415-6724

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WASHINGTON, D. C. 20555

LAS VEGAS OFFICE
U.S. NRC On-Site Reps.
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Las Vegas, NV 89137-1048

Fax: (702) 794-5051

Verify: 794-5047 - Bill Belke
794-5046 - Chad Glenn
794-5053 - Vivian

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Neil Coleman

Organization:

Fax:

Phone:

From:

B. Belke

Date:

4/13/99

Subject:

6

Pages:

Total number of pages, including cover sheet

Comments:

FYI



Department of Energy
Washington, DC 20585

QA: L

APR 08 1999

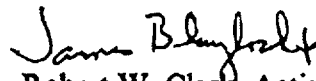
R. R. Dresel
Civilian Radioactive Waste Management System
Management and Operating Contractor – MK
Yucca Mountain Site Characterization Project
1261 Town Center Drive, M/S 760
Las Vegas, NV 89134-6352

**ISSUANCE OF DEFICIENCY REPORT (DR) LVMO-99-D-036 RESULTING FROM
AN OBSERVATION MADE BY JERRY HEANEY**

Enclosed is DR LVMO-99-D-036 generated as a result of an observation.

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 G. 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 this 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 Howard R. Cox at (702) 295-3697.


Robert W. Clark, Acting Director
Office of Quality Assurance

OQA:JB-1120

Enclosure:
DR LVMO-99-D-036

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

8 ☐ Performance Report
☒ Deficiency Report
NO. LVMO-99-D-036
PAGE 1 OF 4
QA: L

PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document: BAB000000-01717-0300-01800, para. 3.4 (01800);
BABBD000-01717-0300-02730 (02730)

2 Related Report No. QC Monitoring
Report # 01800-OQA-0002

3 Responsible Organization:
M&O

4 Discussed With:
R. Dresel

5 Requirement/Measurement Criteria:

The following four deficiencies were identified relative to potable, nonpotable water and sewer testing required by the above specifications.

(continued on page 3)

6 Description of Condition:

(continued on page 4)

7 Initiator: *Jerry Heaney*
J. Heaney Date 3/4/99

8 Is condition an isolated occurrence?

☐ Yes ☐ No ☐ Unknown; Must be Yes if PR

10 Recommended Actions: (Not required for PR)

SEE PAGE 5

11 QA Review:

QAR *[Signature]* Date 4/1/99

12 Response Due Date

20 working days from issuance

13 Director, OQA Issuance Approval: (QAR for PR)

Printed Name Robert W. Clark

Signature *[Signature]*

Date 4/8/99

22 Corrective Actions Verified

QAR

Date

21 Closure Approved by: (N/A for PR)

DOQA

Date

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

NO. LVMO-99-D-036

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PR/DR CONTINUATION PAGE

5 Requirement/Measurement Criteria: (continued)

1) QARD Section 12.0, 12.2.1A states in part: "measuring and test equipment ... shall be calibrated, adjusted, and maintained as a unit at prescribed intervals, or prior to use,"

2) 01800, 3.04D states:

"QA Control: The Constructor shall submit a procedure to the A/E for review and acceptance to perform leak detection tests for the potable and non-potable water system piping and components (not less than once per quarter). The tests can include securing all potable and non-potable water use on the pad and observing the flow through the respective water supply header measuring devices. If the leakage from either system is in excess of 310 gallons per 24 hour period, the Constructor shall notify the A/E and the A/E shall perform an evaluation to determine impact and repair requirements".

3) NWI-ESF-015Q, 1.0 states in part:

"This Nevada Work Instruction identifies requirements, ... and establishes responsibilities for the annual hydrostatic test performed on the sanitary sewer system"

4) QC Monitoring of records generated by NWI-ESF-014Q R/O EICN/1 invokes the following requirements from the procedure:

a) Paragraphs 3.1.1 through 3.1.4 state in part: Ensure that supply and distribution meters listed in Section 3.1.2 are read on a weekly basis... Record data on the Water Supply and Distribution System Meter Readings form (Exhibit 2)... Read additional meters to the system as required and record data on the Water Supply and Distribution System Meter Readings form. Read water meter(s) at Forty Mile Wash Fill Stand # 2.

b) Paragraphs 3.2.3 to 3.2.9 including Exhibit 1, Performance Criteria Item 1 and 2 state in part: Perform a visual examination of the system within 24 hours if meters give an indication of leakage. Resume and continue weekly examinations until any leaks or malfunctioning measuring devices are identified and repaired. Shut down the system after four consecutive weeks with a conclusive indication of system leakage until repairs are completed. Issue a work instruction to implement prompt repair or replacement if any leaks or malfunctioning devices are found. Document all information resulting from this process on the Water Supply and Distribution System Meter Reading form. Water meter reading shall be taken with all pumps off and valves to the ESF Pad and batch Plant and Precast Yard closed. Differences in calculated water usage greater than 5% shall be considered an indication of potential leakage.

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

NO. LVM0-99-D-036

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PR/DR CONTINUATION PAGE

6 Description of Condition: (continued)

- 1) Contrary to 1 above water meters installed in the potable and nonpotable water supply system have not been calibrated for determination of system leakage. Examples include water meters installed at J-13 Well to Blue Baker tanks, Booster Pump Station inlet/outlet, Change house building, etc..
- 2) a) Contrary to 2 above the procedure submitted for water system testing (NWI-ESF-014Q) does not contain criteria for determination of nonpotable water system leakage.

b) Contrary to 2 above the potable and non-potable leak detection tests has not been performed for the first quarter of 1999.
- 3) Contrary to 3 above the sanitary sewer system hydrostatic test has not been completed for 1998.
- 4) During monitoring of records generated by NWI-ESF-014Q the following discrepant conditions (reference QC Monitoring Report MR# 01800-OQA-0002) were found:
 - a) Contrary to 4a) above, reviews of Water Supply/Distribution Meter Reading/Observation forms indicated the following: Forms dated 11-12-98, 12-10-98, 12-23-98, 1-7-99, and 1-15-99 have incorrect data entries. Exhibit 2 has not been revised (as required by A/E submittal No. 01-C007) to correct a formula error and to add a meter at the Forty Mile Wash Fill Stand, therefore no readings are recorded for this as required.
 - b) Contrary to 4b) above, there has been more than four consecutive weeks where the calculated percentages exceed 5%. Also, Water Supply/Distribution Meter Reading/Observation form dated 1-4-99 specifies no water usage for Exile Hill Potable Water outlet and the ESF Surface Inlets indicate 2250 gallons of water was used with the percent difference block N/Aed. Form dated 1-15-99 indicated negative water usage at the ESF Supply Line. The procedural process for documenting and remedial action has not been followed and readings were taken without valves being closed as required.

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

NO. LVMO-98-D-036

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PR/DR CONTINUATION PAGE

10 Recommended Actions:

Condition 1: This condition was reported on NCR YMSCO 98-0030 on 4/9/98 and was given a Conditional Release on 4/10/98 to allow time for a DIE and Specification changes.

Recommended Action:

Determine the 'Cause' and 'Action To Preclude Recurrence' of the approximate 12 month delay in making the DIE and/or Specification changes required by the NCR Conditional Release.

Conditions 2 & 4:**Recommended Action:**

Determine the 'Cause' and 'Action To Preclude Recurrence' for a, b, c, and d below and implement remedial Actions:

- a) Determine how implementing procedures were issued for use without addressing all necessary specification requirements (reference description of Condition Item 2a).
- b) Determine how Q records were generated and processed with incorrect data (reference Description of Condition Items 4a and 4b).
- c) Determine why A/E comments on submitted procedures were not incorporated prior to implementing the procedure (reference Description of Condition Item 4a).
- d) Determine why the procedural requirement to shut down the water system after 4 consecutive weeks of differences greater than 5% was not implemented as required by the implementing procedure (reference Description of condition 4b).

Condition 3: This condition was reported on NCR YMSCO 99-0012 on 11/10/98 and was given a Conditional Release on 11/19/98. The Conditional Release was granted to allow time to re-conduct the failed test under more controlled conditions. The retest was to provide the A/E with information necessary to disposition the NCR.

Recommended Action:

Determine the 'Cause' and 'Action To Preclude Recurrence' of the approximate 3 ½ month delay in conducting the retest required by the NCR Conditional Release.



Department of Energy
Office of Civilian Radioactive Waste Management
Yucca Mountain Site Characterization Office
P.O. Box 30307
North Las Vegas, NV 89036-0307

APR 01 1999

QA: N/A

D. R. Wilkins, Technical Project Officer
For Yucca Mountain Site
Characterization Project
TRW Environmental Safety Systems, Inc.
1261 Town Center Drive, M/S 423
Las Vegas, NV 89134-6352

ACCEPTANCE OF QUALIFICATION STATUS OF VOLCANISM DATA

The following reports containing the data qualification team's recommendation were submitted to the U.S. Department of Energy (DOE) for review and evaluation: *Final Report on Qualification of the $^{40}\text{Ar}/^{39}\text{Ar}$ Volcanism Data Using Procedure YAP-SIII.1Q, Rev. 3, ICN 0*, and *Final Report on Qualification of Volcanism Isotope, Trace-Element, and Halogen Data Using Procedure YAP-SIII.1Q, Rev. 3, ICN 0*. Based on our review and evaluation, DOE accepts the data qualification team's recommendation that the volcanism data sets be accepted as qualified. Changes, if any, to the qualification status of these data sets in the Technical Information Management System should be implemented immediately.

These reports represent progress toward ensuring that sufficient qualified data is available to support the development of the license application. They adequately document the basis for the conclusion that these data sets be accepted as qualified and serve as a prototype or example of the scope of the effort and level of documentation required for qualification of other similar data sets. We compliment the efforts of the teams responsible for the timely preparation of these reports.

Richard E. Spence
Acting Assistant Manager
Office of Project Execution

OPE:RES-1096

APR 01 1999

cc:

P. R. Dixon, M&O/LANL, Las Vegas, Nv
F. V. Perry, M&O/LANL, Las Vegas, NV
L. R. Hayes, M&O, Las Vegas, NV
S. J. Bodnar, M&O, Las Vegas, NV
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J. T. Sullivan, DOE/YMSCO, Las Vegas, NV
C. M. Newbury, DOE/YMSCO, Las Vegas, NV
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