



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

WBS 1.2.9.3

OCT 15 1992

Carl P. Gertz, Project Manager, YMP, NV

EVALUATION OF RESPONSE TO CORRECTIVE ACTION REQUEST (CAR) YM-92-073 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) AUDIT YMP-92-22 OF SANDIA NATIONAL LABORATORIES (SNL)

The YMQAD staff has evaluated the response to CAR YM-92-073. The response has been determined to be unsatisfactory and will not be withdrawn based on the following:

1. The response states that "Steps will be taken in accordance with Yucca Mountain Site Characterization Project Administrative Procedure 5.3Q to rectify the problem." The response does not describe what specific steps will be taken to rectify the problem. The response does not address when these actions will be completed. You are requested to provide this information.
2. The problem described on the CAR was identified by a Technical Specialist, not a quality assurance (QA) staff member, during the technical portion of the SNL audit. This fact was discussed with the Yucca Mountain Site Characterization Project Office data management staff prior to the CAR being issued.
3. As for YMQAD's charter described within the response, the programmatic review of the process and procedures for this particular effort was accomplished by the QA staff auditor during the course of the audit without any programmatic deficiencies identified. The review of analyses, calculations, and data for correctness during audits is within the purview of QA's charter. The YMQAD calls upon technical specialists for assistance in auditing these important activities.

An amended response is required to be submitted to this office within ten working days of the date of this letter. Send the original of your response to YMQAD, attention Nita J. Brogan. If an extension to the due date is necessary, it must be requested in writing with appropriate justification prior to that date.

If you have any questions, please contact either Robert B. Constable at 794-7945 or Gerard Heaney at 794-7826.

210052

YMQAD:RBC-416

Enclosure:
CAR YM-92-073

R. E. Spence

Richard E. Spence, Director
Yucca Mountain Quality Assurance Division

YMP-5

9210220134 921015
PDR WASTE
WM-11 PDR

ADD: Ken Hooks

Chr. Encl.

102.7
WM-11
NH03

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

8 CAR NO.: YM-92-073
DATE: 09-03-92
SHEET: 1 OF 1
QA

CORRECTIVE ACTION REQUEST

1 Controlling Document QARD, Revision 4		2 Related Report No. Audit YMP-92-22	
3 Responsible Organization YMP		4 Discussed With A. Simmons	
5 Requirement: The QARD, Revision 4, Appendix A, Paragraph 20.1.B.6 states planning measures include: "The evaluation of data quality to assure that generated data is valid, comparable, complete representative, precise and accurate."			
6 Adverse Condition: The Reference Information Base (RIB), Version 4, Revision 6, contains different values for Thermal/Mechanical Stratigraphy data for Borehole USW G-4. Stratigraphy depths found in Table 1 "Thermal/Mechanical Stratigraphy for Borehole USW G-4" (found in chapter 1, section 1, item 2, page 2 of 3) does not agree with the "Thermal/Mechanical Stratigraphy" values in Figure 1 "Relationship of Stratigraphy, Lithology and Hydrostatigraphic Zones at G-4" (found in chapter 1, section 4, item 4, page 3 of 6) in all cases.			
9 Does a significant condition adverse to quality exist? Yes <u> </u> No <u>X</u> If Yes, Circle One: A B C		10 Does a stop work condition exist? Yes <u> </u> No <u>X</u> ; If Yes - Attach copy of SWO If Yes, Circle One: A B C D	
11 Response Due Date: 20 days after issue			
12 Required Actions: <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Extent of Deficiency <input checked="" type="checkbox"/> Preclude Recurrence <input type="checkbox"/> Root Cause Determination			
13 Recommended Actions: Identify the remedial action to correct the deficiency identified in Block 6. Identify the extent of the deficiency and analyze for any adverse impacts. Identify the planned corrective action to prevent recurrence.			
7 Initiator Jerry Beaney <i>Jerry Beaney</i> Date <u>9-3-92</u>		14 Issuance Approved by: QADD <i>[Signature]</i> Date <u>9/9/92</u>	
15 Response Accepted QAR Date		16 Response Accepted QADD Date	
17 Amended Response Accepted QAR Date		18 Amended Response Accepted QADD Date	
19 Corrective Actions Verified QAR Date		20 Closure Approved by: QADD Date	



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WBS 1.2.9
QA:

QA RECEIVED

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Richard E. Spence, Director, Yucca Mountain Quality Assurance Division,
YMP, NV

RESPONSE TO ISSUANCE OF CORRECTIVE ACTION REQUEST (CAR) YM-092-073 RESULTING
FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION AUDIT YMP-92-22 OF SANDIA
NATIONAL LABORATORIES

After careful review of CAR YM-092-073 (enclosure 1), I have concluded that
this CAR should be withdrawn for the following reasons:

1. No Quality Assurance (QA) requirement has been violated. The requirement stated in Block 5 of the CAR is taken out of context. The stated requirement applies to planning measures included or referenced within a scientific investigation planning document. Work performed under Work Breakdown Structure 1.2.1.3.3, for the Reference Information Base (RIB) is not considered a scientific investigation, nor is the RIB a scientific investigation planning document.
2. The information items referenced in CAR YM-092-073 have two different purposes. The purpose of Item 1.1.2 (enclosure 2) is to specify a table of the corrected absolute Z-elevations for the thermomechanical units in USW G-4. The intent of Item 1.4.4 (enclosure 3) is to depict graphically the relationship between the conceptual hydrologic zones and the thermomechanical stratigraphy. The purposes of these items are clearly defined and the information sources are referenced.
3. It is clearly outside of QA's charter to review analyses, calculations, data, etc., for correctness. QA personnel do not necessarily have the technical expertise to undertake such a responsibility. Rather, QA's charter is to help establish and ensure that the processes and procedures defined for a particular effort are necessary, sufficient, and are adhered to. No violation of process or procedure has been discovered or recorded in the audit or resulting CAR.

Although no QA requirement has been breached, it is recognized that there is a potential for misuse of information presented in Figure 1 of Item 1.4.4. I appreciate the fact that the audit results pointed this out. Steps will be taken, in accordance with Yucca Mountain Site Characterization Project Administrative Procedure 5.3Q, to rectify the problem.

OCT 07 1992

Richard E. Spence

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If you have any questions, please contact either Stephen J. Bodnar at 794-1840 or Ardyth M. Simmons at 794-7998.

W. A. Lirdley

FOR

J. Russell Dyer, Director
Regulatory & Site Evaluation Division

RSER:AMS-329

Enclosures:

1. CAR YM-92-073
2. RIB Item 1.1.2
3. RIB Item 1.4.4

cc w/encls:

N. J. Brogan, SAIC, Las Vegas, NV
Gerard Heaney, SAIC, Las Vegas, NV
S. J. Bodnar, M&O/TRW, Las Vegas, NV
J. D. Verden, M&O/TRW, Las Vegas, NV
J. H. Rusk, MACTEC, Las Vegas, NV
J. W. Estella, SAIC, Las Vegas, NV
A. M. Simmons, YMP, NV
B. J. Verna, YMP, NV
R. B. Constable, YMP, NV
W. B. Simecka, YMP, NV
C. M. Newbury, YMP, NV
A. V. Gil, YMP, NV

OCT 15 1992

Carl P. Gertz

-2-

cc w/encl:

~~K. R. Hooks, NRC, Washington, DC~~
~~S. W. Zimmerman, NWPO, Carson City, NV~~
J. W. Estella, SAIC, Las Vegas, NV, 517/T-22
J. H. Rusk, MACTEC, Las Vegas, NV
B. J. Verna, YMP, NV

cc w/o encl:

J. W. Gilray, NRC, Las Vegas, NV
N. J. Brogan, SAIC, Las Vegas, NV, 517/T-12