

### **Department of Energy**

Washington, DC 20585 DEC 0 2 1996

R. W. Craig, Technical Project Officer for Yucca Mountain Site Characterization Project
U.S. Geological Survey
1261 Town Center Drive
Building 4, Room 423, M/S 423
Las Vegas, NV 89134

ISSUANCE OF DR YM-97-D-008 AND PR YM-97-P-001 RESULTING FROM OQA AUDIT USGS-ARP-97-03 OF U. S. BUREAU OF RECLAMATION

Enclosed are Deficiency Report YM-97-D-008 and Performance Report YM-97-P-001 generated as a result of Office of Quality Assurance Audit USGS-ARP-97-03.

Please provide a response to these deficiencies that meets the applicable requirements of Administrative Procedure 16.1Q, Performance/Deficiency Reporting. Send the originals of your responses to Deborah Sult, OQA/QATSS, P.O. Box 98608, Mail Stop 455, Las Vegas, Nevada 89193-8608. Responses to these deficiencies are due 20 working days from the date of this letter. Extensions to due dates must be requested in writing, with appropriate justification, prior to the due dates.

If you have any questions, please contact either Mario R. Diaz at (702) 794-1489 or Richard L. Weeks at (702) 794-1431.

**OQA:MRD-0439** 

Donald G. Horton, Director Office of Quality Assurance

Enclosure: DR YM-97-D-008 and PR YM-97-P-001

9612100012 961202 PDR WASTE WM-11 PDR cc w/encl:

J. G. Spraul, NRC, Washington, DC S. W. Zimmerman, NWPO, Carson City, NV T. H. Chaney, USGS, Denver, CO Records Processing Center

cc w/o encl:

W. L. Belke, NRC, Las Vegas, NV R. L. Weeks, OQA/QATSS, Las Vegas, NV D. G. Sult, OQA/QATSS, Las Vegas, NV

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Reup: WMSS/PAHL

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

THIS IS WHEN STAFFER ⊠Deficiency Report

NO.YM-97-D-008

PAGE \_1 OF \_2

PERFORMANCE	E/DEFICIE	NCY REPORT	-	
1 Controlling Document:		2 Related Report No.		
Quality Assurance Requirements Description (QAF DOE/RW-0333P, Revision 5, Yucca Mountain Site Characterization Project (YMP)-U.S. Geological St (USGS)-Quality Management Procedure (QMP)-3. Revision 7	urvey	USGS-ARP-97-03		
3 Responsible Organization:	41	Discussed With:		
USGS/U.S. Bureau of Reclamation	В	Bruce Parks and Tom Chaney		
5 Requirement/Measurement Criteria:			•	
QARD, Revision 5, Section 6.0, Paragraph 6.2.3, "Documents shall be reviewed for adequa requirements of Subsection 2.2.10, "Docu YMP-USGS-QMP-3.04, Revision 7, Paragraph 5.2 correctness: Is the manuscript technically sound? clearly stated? Are interpretations of data support	icy, correctiment Rev 2.2.1, requ Are all co	ctness, and complete riew." hires reviewers to cons computations correct?	ness, in accordance v sider, at a minimum, " Are assumptions rea	Technical sonable and
clearly stated? The litterpretations of data support	ed by the	data as presented or	referenced in the ma	uingoube
6 Description of Condition:  Contrary to the above requirements, the review of	the docur	ment, "Geology of the	North Ramp, Station	s 4+00 to 28+00,
Exploratory Studies Facility, Yucca Mountain Proje				
·		•		
74-20-4				
Kenneth T. McFall Date 11/20		Is condition an isolated occur  Yes   No	<sup>rence</sup> ∕ □ Unknown; Must l	be Yes if PR
10 Recommended Action: (Not required for PR)				
Perform remedial action to correct the error. Perfo	orm impa	et analysis		
	om mpa	ct attalysis		
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11 QA Review: 1/2 N/ 1/2011 A/11	/ 1 12	Response Due Date		
QAR Kenneth T. McFall Date	s/9/.	0 working days from i	ssuance	
13 Affected Organization QA manager Issuance Approval: (QAR for PR)		1100	27/1	
Printed Name Dona D G. HORTOK	Signature	23 Closure Approved By: (N/A fo	Horles	Date/2/2/96
QAR Date		AOQAM	······································	Date

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

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PR/DR NO. <u>YM-97-D-008</u>
BACE 2 OF

QA: L

PERFORMANCE/DEFI	CIENCY REPORT RE	SPONSE	
14 Remedial Actions:			
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AF Frank of Condition (Alexandrian for RC)		<u> </u>	
15 Extent of Condition: (Not required for PR)			
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16 Root Cause Determination: (Not required for PR)	Required Yes	No	
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17 Action to Preclude Recurrence: (Not required for PR)	Required Yes	J No	
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18 Corrective Action Completion Due Date:	19 Response by:		
	□ Initia!	. •	
	☐ Amended ☐	Date Phone	e
20 Response Accepted	21 Response Accepted (N/A for P		
QAR Date	AOQAM		Date Rev 07/15/96

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

THIS IS A RED TO TAKE POOR

☐Deficiency Report

NO. YM-97-P-001

PAGE \_1 OF \_2 \_\_\_ QA: L

### PERFORMANCE/DEFICIENCY REPORT 1 Controlling Document: 2 Related Report No. Quality Assurance Requirements Description. **USGS-ARP-97-03** DOE/RW-0333P, Revision 5 3 Responsible Organization: 4 Discussed With: U.S. Geological Survey/U.S. Bureau of Reclamation Bruce Parks, Tom Chaney, and Steve Beason 5 Requirement/Measurement Criteria: Supplement III, Paragraph III.2.2, B., states in part, Scientific notebooks shall contain the following: Statement of objective and description of work to be performed....." Supplement III, Paragraph III.2.2, C., states, Scientific notebooks shall be reviewed by an independent qualified individual to verify there is sufficient detail to: Retrace the investigations and confirm the results." 6 Description of Condition: Contrary to the above requirement, a statement of the objective and description of the work to be performed for statistical analysis was not documented in SN-0084, "Collection of Underground Site Characterization Data." The results of the statistical analysis were documented in Analysis Report, "Geology of the North Ramp, Stations 4+00 to 28+00, ESF, Yucca Mountain Project, Yucca Mountain, Nevada." Additionally, there is insufficient documentation within SN-0084 to allow an independent qualified individual to retrace the analysis and confirm results. 7 Initiator Date 11/26/96 □ Unknown; Must be Yes if PR 10 Recommended Action: (Not required for PR) 11 QA Review: 12 Response Due Date QAR Richard L. Weeks 7Date 20 working days from issuance Printed Name Signature Date // 22 Corrective Action Verified 23 Closure Approved by: (N/A for PR) QAR **Date MADOA** Date

# OFFE OF CIVILIAN RADIOAC WASTE MANAGEMENT

PR/DR NO.	YM-97-P-001
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U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.			PAGE _2 OFQA: L	
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	FORMANCE/DEF	CIENCY REPORT RESPONSE		
14 Remedial Actions:			• .	
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15 Extent of Condition: (Not required for PR)				
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16 Root Cause Determination: (Not required for PR)	Required	☐ Yes ☐ No		
		165 <u></u> 110		
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17 Action to Preclude Recurrence: (Not required for PR)	Required	<sup>d</sup> □ Yes □ No		
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18 Corrective Action Completion Due Date:		19 Response by		
		19 Response by:  Initial		
20 Beenges Asserted		□ Amended Date	` Phone	
20 Response Accepted  QAR	Date	21 Response Accepted (N/A for PR): AOQAM	Date	

Exhibit AP-16:1Q.2

Rev. 07/15/96