



Department of Energy

Yucca Mountain Project Office
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WBS 1.2.9.3
QA

JUN 29 1990

Larry R. Hayes
Technical Project Officer
for Yucca Mountain Project
U.S. Geological Survey
101 Convention Center Drive
Suite 860
Las Vegas, NV 89109

CLOSURE OF STANDARD DEFICIENCY REPORT (SDR) 417 RESULTING FROM YUCCA MOUNTAIN
PROJECT OFFICE QUALITY ASSURANCE AUDIT 89-4 OF THE U.S. GEOLOGICAL SURVEY

SDR 417 has been closed based on satisfactory verification of completed
corrective actions. A copy of the SDR is enclosed for your files.

If you have any questions, please contact Catherine E. Hampton of my staff at
794-7973.

Donald G. Horton for
Donald G. Horton, Director
Quality Assurance
Yucca Mountain Project Office

YMP:CEH-3921

Enclosure:
SDR 417

cc w/encl:
Ralph Stein, HQ (RW-30) FORS
D. E. Shelor, HQ (RW-3) FORS
S. W. Zimmerman, NWPO, Carson City, NV
K. R. Hooks, NRC, Washington, DC
T. H. Chaney, USGS, Denver, CO

cc w/o encl:
J. W. Gilray, NRC, Las Vegas, NV
D. D. Porter, SAIC, Golden, CO
N. J. Brogan, SAIC, Las Vegas, NV, 517/T-08*
J. E. Clark, SAIC, Las Vegas, NV, 517/T-12
S. R. Dippner, SAIC, Las Vegas, NV, 517/T-08

YMP-51

9007090361 900629
PDR WASTE
WM-11 PDC

ADD: K Hooks

WM-11
102.7
NH03

YMPO STANDARD DEFICIENCY REPORT

N-QA-038
4/89

Completed by Originating QA Organization	1 Date August 16, 1989		2 Severity Level <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3		Page 1 of 2
	3 Discovered During Audit 89-4		3a Identified By S. L. Crawford		4 SDR No. 417 Rev. 0
	5 Organization USGS		6 Person(s) Contacted W. Langer		7 Response Due Date is 20 Working Days from Date of Transmittal
	8 Requirement (Audit Checklist Reference, if Applicable) NNWSI/88-9, Section III, Para. 1.3.1, requires "The responsible Participating Organization shall conduct a technical review of the scientific investigation planning document.... The results of this technical review, and the				
Completed by Organization in Block 5	9 Deficiency 1. Technical reviews conducted by Study Plans SP 8.3.1.2.1.2, 8.3.1.2.2.6, 8.3.1.2.3.1, and 8.3.1.16.1.1, although stated by the USGS submittal letters				
	10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input type="checkbox"/> Investigative <input type="checkbox"/> Corrective Perform all new technical review per the current QMP-3.07. Document the results of the evaluations, reviews, and reviewer's comment resolution. Assure that future Study Plans submitted to YMP are supported by properly				
	11 QAE/Lead Auditor/Date <i>[Signature]</i> 2/2/89		12 Division Manager/Date <i>[Signature]</i> 2/2/89		13 Project Quality Mgr./Date <i>[Signature]</i> 8/28/89
	14 Remedial/Investigative Action(s) See attached response				
Comp. by Org. QA Org.	15 Effective Date 12-15-89				
	16 Cause of the Condition & Corrective Action to Prevent Recurrence Not applicable for this Level 3 SDR.				
	17 Effective Date N/A				
	18 Signature/Date <i>[Signature]</i> 10/10/89 Chief, Nuclear Hydrology Program USGS, Yucca Mtn. Project Branch				
Comp. by Org. QA Org.	19 Response Accepted	QAE/Lead Auditor/Date <i>[Signature]</i> 12/22/89	Division Manager/Date <i>[Signature]</i> 12/26/89	Project Quality Mgr./Date <i>[Signature]</i> 12/27/89	
	20 Corrective Action Verif. Satisfactory	QAE/Lead Auditor/Date <i>[Signature]</i> 6/13/90	Division Manager/Date NA	Project Quality Mgr./Date <i>[Signature]</i> 6-15-90	
	21 Remarks Unrevised Response Rec'd 10/30/89 - (dated 10/26/89). Additional schedule for completion of remedial action (Block 14 above) forwarded by USGS letter, 12/15/89. New EFFECTIVE DATE (Block 15) is February 1, 1990. accept Response 1/3/90 - YMP-58-1379 Verification performed 4/17-19/90. Reference Ymp-SR-90-026 Surveillance Report. Reviewed SP 8.3.1.2.1.2, 8.3.1.2.2.1, 8.3.1.2.2.6, 8.3.1.2.3.1 and 8.3.1.16.1.1				
	22 QA CLOSURE	QAE/Lead Auditor/Date <i>[Signature]</i> 6/13/90	Division Manager/Date NA	PQM/Date <i>[Signature]</i> 6-18-90	

ENCLOSURE

**YMPO STANDARD DEFICIENCY REPORT
CONTINUATION SHEET**

**N-QA-038
12/88**

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8 Requirement (continued)

resolution of any comments by the reviewer or reviewers shall be documented, and shall become a part of the QA records."

YMP Procedure AP-1.10Q, Para. 5.1.2, requires "Participating organizations perform technical reviews of Study Plans prepared or revised by them in accordance with their procedures." Paragraph 3.11 defines Technical Reviews, in part, as: "in-depth, critical analyses and evaluations of documents, material, and data." USGS technical reviews are to be performed in accordance with QMP-3.07.

9 Deficiency (continued)

to meet the preparation and review requirements of AP-1.10Q, were performed on draft versions of the Study Plans that did not include sections required by AP-1.10Q. The later Study Plan versions that did comply with AP-1.10Q and were submitted to YMP were not subjected to new technical reviews. This contributed, in part, to the numerous discrepancies noted related to QALAs included in the Study Plans, identified in an Observation generated on this subject. The technical reviews were not performed in accordance with the revision of QMP-3.07 in effect at the time of submittal of the Study Plan.

2.

The documentation of technical reviews performed for the above listed Study Plans did not provide evidence of resolution of reviewer's comments or reviewer acknowledgement of comment resolution.

3.

Technical reviews for Study Plan SP 8.3.1.2.1.2 were conducted November 22, 1988 and December 13, 1988 following USGS procedure QMP-3.07, Revision 0; QMP-3.07, Revision 1, was issued effective November 4, 1988 and, if used, would have documented acceptance of reviewer's comments.

10 Recommended Action(s) (continued)

documented technical reviews.

RESPONSE FOR YMPO STANDARD DEFICIENCY REPORT NO. 417

BLOCK 14 REMEDIAL/INVESTIGATIVE ACTION(S):

The noted deficiency affects only the four (4) Study Plans identified in the SDR. The extent of this deficiency was confirmed by YMPO Surveillance YMP-SR-89-133.

The files for Study Plans 8.3.1.2.1.2, 8.3.1.2.2.6, 8.3.1.2.3.1, and 8.3.1.16.1.1 will be evaluated to determine the documentation and comment resolution required by the appropriate revision of QMP-3.07 in effect at the time of USGS technical reviews. Unresolved comments that are identified in this investigation will be categorized as major or minor and will be resolved by the authors and reviewers on comment resolution forms that are required by the current version of QMP-3.07, R2. This action is anticipated to be completed by 11-30-89.

The four (4) Study Plans will be reviewed to determine if any substantial changes have been made in the documents that may require additional technical review. If needed, the technical reviews will be completed for any part of the Study Plans that contain significant modification and did not receive a follow-up technical review. A schedule for completion of this action will be provided by 12-15-89.

BLOCK 15 EFFECTIVE DATE: 12-15-89

AMENDED RESPONSE FOR YMPO STANDARD DEFICIENCY REPORT NO. 417

The following response will replace the 10-10-89 USGS response. This amended response addresses a fifth Study Plan, referred to in the August YMPO Surveillance YMP-SR-89-133 report that inadvertently omitted the number of the Study Plan. The amended information is underlined.

BLOCK 14 REMEDIAL/INVESTIGATIVE ACTION(S):

The noted deficiency affects only five Study Plans: four identified in the SDR, and one referred to in YMPO Surveillance YMP-SR-89-133.

The files for Study Plans 8.3.1.2.1.2, 8.3.1.2.2.6, 8.3.1.2.3.1, 8.3.1.16.1.1, and 8.3.1.2.2.1 will be evaluated to determine the documentation and comment resolution required by the appropriate revision of QMP-3.07 in effect at the time of USGS technical reviews. Unresolved comments that are identified in this investigation will be categorized as major or minor and will be resolved by the authors and reviewers on comment resolution forms that are required by the current version of QMP-3.07, R2. This action is anticipated to be completed by 11-30-89.

The five Study Plans will be reviewed to determine if any substantial changes have been made in the documents that may require additional technical review. If needed, the technical reviews will be completed for any part of the Study Plans that contain significant modification and did not receive a follow-up technical review. A schedule for completion of this action will be provided by 12-15-89.

BLOCK 15 EFFECTIVE DATE: 12-15-89