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

WBS 1.2.9.3
QA

APR 10 1991

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

CLOSURE OF STANDARD DEFICIENCY REPORTS (SDRS) 143 AND 145, REVISIONS 0, RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION AUDIT 88-04 OF U.S. GEOLOGICAL SURVEY

SDRs 143 and 145, Revisions 0, have been closed based on satisfactory verification of completed corrective actions. Copies of the SDRs are enclosed for your files.

If you have any questions, please contact Catherine E. Hampton at 794-7973 or Robert B. Constable at 794-7945.

Donald G. Horton, Director
Yucca Mountain Quality Assurance Division

YMQAD:CEH-3168

Enclosure:
SDR 143 and 145, Revisions 0

cc w/encl:
K. R. Hooks, NRC, Washington, DC
S. W. Zimmerman, NWPO, Carson City, NV
T. H. Chaney, USGS, Denver, CO
N. J. Brogan, SAIC, Las Vegas, NV, 517/T-08

cc w/o encl:
J. W. Gilray, NRC, Las Vegas, NV
D. D. Porter, SAIC, Golden, CO

9104190278 910410
PDR WASTE
WM-11 PDR

FULL TEXT ASCII SCAN

YMP-5
16101

add: K Hooks Ltr. 1 Encl. 1

102.7
WM-11
NH03

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date June 14, 1988 | 2 Severity Level ☐ 1 ☒ 2 ☐ 3 | Page 1 of 2

3 Discovered During	3a Identified By	3b Branch Chief Concurrence Date	4 SDR No.
Audit 88-04	Hans/Clark		143 Rev. 0

5 Organization	6 Person(s) Contacted	7 Response Due Date is 20 Working Days from Date of Transmittal
USGS-DENVER	Tom Chaney	

8 Requirement (Audit Checklist Reference, if Applicable)
Audit Item No. 2-4, QMP 2.02, R1, para. 5.2. The need for continued indoctrination and training is assessed and documented by the QA office on no less than an annual basis to accommodate changes to the QAPP, and implementing

9 Deficiency
Contrary to the above requirement, no documented evidence of an annual assessment of continued indoctrination and training needs was provided during the audit for individuals assigned to NNWSI. Records of initial generic

10 Recommended Action(s): ☒ Remedial ☒ Investigative ☒ Corrective

1.) Comply with procedural requirements set forth in QMP 2.02, R1.

Aprvl.

11 QAE/Lead Auditor Date	12 Branch Manager Date	13 Project Quality Mgr. Date
Daniel Klimas 7 25 88	[illegible] NAC 7/25/88	James Blaylock 7/25/88

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

See attached response for Blocks 14-17.

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date
Larry R. Hans 8/31/88 JR Willmon 8/31/88

Comp. by Orig. QA Org.

		QAE/Lead Auditor/Date	Branch Manager/Date
19 Response	☐ Accept ☐ Reject ☒ Amended Response	Dan Klimas 12.5.88	[illegible] 5 Dec 88
20 Amended Response	☒ Accept ☐ Reject	Dan Klimas 08-1989	[illegible] 19 May 89
21 Verification	☑ Satisfactory ☐ Unsatisfactory	[illegible]	N/A

22 Remarks Response 8/31/88 - Hoges to Derty
Extension Request - 8/23/88 - Blaylock - Accepted 8/26/88 - YMP:JB-3466
Request Amended Response 1/17/89 - YMP:CEH-1507
Rec'd Amended Response 2/10/89 - Hoges to Derty - Accepted 6/6/89 - YMP:WBM-4196
Verification information is attached

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date
	Dan Klimas 8/30/89	N/A.	[illegible] 4/1/91

[illegible] 4/1/91

ENCLOSURE

8 Requirement (continued)

procedures.

9 Deficiency (continued)

training exist, but a documented assessment of continuing indoctrination/training need was not provided.

In the area of software QA, no evidence of training of seismology personnel on USGS-QMP-3.03 has taken place for approximately 15-16 months.

BASIS FOR SDR

The USGS QAPP requires training of personnel performing activities which effect quality and those who verify the attainment of specified quality in order to assure correct performance of the activities. USGS has not maintained the training evaluation to assure that training is up to date.

RATIONAL FOR SDR

Properly trained personnel provide a greater measure of assurance that activities will be performed properly. In order to maintain the level of performance, training must be continuous.

10 Recommended Actions (continued)

2.) Determine the impact on quality caused by personnel not receiving recurrency training.

3.) Retrain and document training of supervisory personnel as to QMP 2.02 Rev. 1 requirement.

BLOCK 14: REMEDIAL/INVESTIGATIVE ACTION(S):

The annual assessment was not delineated concisely, but training information was included in the Annual QA Report - 1987. There was no adverse impact on the training program as a result of the lack of a documented assessment-type statement in the Annual QA Report. Based on an investigation of the training conducted in 1987, the following assessment is made:

> The USGS QA Office conducted extensive QA Indoctrination and Training classes as a result of the 4-28-86 WMPO imposed Stop Work Order. The subject of the training was the NNWSI-USGS-QAPP-01, R3, and the implementing Quality Management Procedures (QMPs). This training was completed and verified as acceptable based upon WMPO Surveillance No. WMPO-SR-87-011 issued March 16, 1987. The other types of specialized training conducted in 1987 are summarized in the USGS Annual QA Report - 1987. In March 1987 the USGS was notified of the changes to the WMPO QA Plan, NVO-196-17 Revision 5. Subsequently the revised USGS QA Program Plan, QAPP-01, R4, was submitted to WMPO in August 1987. Comments and comment resolution phases continued until final approval of the USGS QAPP January 5, 1988. Only two QMPs, QMP-5.03 involving the preparation of Management Procedures and QMP-8.01 regarding the identification and control of samples, were revised in February 1988 based upon the revised QAPP. By this time, the USGS was fully aware of additional revisions to the NVO-196-17 document that is now referred to as 88-9. Due to the changing requirements, the USGS QA Office decided that an extensive training program would be needed eventually for all NNWSI-USGS personnel once the QA planning documents were revised and issued. Therefore, as required by QMP-2.02, the overall assessment is that no training other than the specialized training already conducted is needed until the WMPO QA Plan and the NNWSI-USGS QA Program Plan and QMPs are issued.

Block 9 of this SDR refers to "no evidence of training of seismology personnel on USGS-QMP-3.03 ... for approximately 15-16 months." QMP-3.03, R0, was approved as part of the NNWSI-USGS-QAPP-01, R3, dated 10-27-86. The Software QA requirements are included in the QA Indoctrination and Training classes that have been ongoing since January 1987. Specific training classes involving the Software QA requirements of QMP-3.03 were conducted in March 1987. The QMP-3.03 requirements have not been revised to date and "recurrency" training of seismology personnel is not warranted.

BLOCK 15: EFFECTIVE DATE: Complete.

BLOCK 16: CAUSE OF THE CONDITION & CORRECTIVE ACTION TO PREVENT RECURRENCE:

The cause of this condition was the lack of specificity in QMP-2.02 regarding the method of stating the assessment. It was intended to be an integral part of the QA Annual Report prepared in accordance with QMP-2.01 as reflected in Section IV and generalized throughout the 1987 Annual Report.

The WMPO 88-9 and the USGS QAPP requirements involving indoctrination, training, management assessments, etc., are changing and QMP-2.02 requirements will reflect the necessary methods for implementing the new QAPP requirements. The QMP will be revised in accordance with the WMPO schedule. (Reference response to SDR-156.)

BLOCK 17: EFFECTIVE DATE: See SDR 156.

AMENDED RESPONSE TO SDR-143, -144, -145, -146,
-147, -148, -155, -156, and -157
February 10, 1989

BLOCK 14: REMEDIAL/INVESTIGATIVE ACTION(S):

Part of the "fully qualified QA program" described in block 16 will be the establishment of a qualification process for data that is intended for use in the Project Office licensing process and that had been developed by the USGS before the implementation of this "fully qualified QA Program". This process will be consistent with the Project Office AP-5.9Q.

BLOCK 15: EFFECTIVE DATE:

Thirty days subsequent to issuance of AP-5.9Q.

BLOCK 16: CAUSE OF THE CONDITION AND PREVENTIVE ACTION TO PREVENT RECURRENCE:

The USGS is currently in the process of establishing a Quality Assurance Program which meets the requirements of NNWSI/88-9, Rev.2. The establishment, implementation, and verification of this "fully qualified QA Program" will provide the corrective action to prevent recurrence for the SDRs.

BLOCK 17: EFFECTIVE DATE:

Progress on the "fully qualified QA Program" is tracked for the Project Office bi-weekly and reported as part of the Gold Star Schedule. Please refer to this schedule for current dates. A specific date cannot be accurately projected at this time because parts of the USGS QA Program are dependent upon Project Office APs.

YMPO verification of the USGS Program is scheduled by the Project Office.

Str dtd 2/10/89 - Hayes to Derty

BLOCK 22 REMARKS (CONT'D)

a) QMP 2.02 REV. 1 IS NOW QMP 2.02 REV. 5
b) QMP 2.02 NO LONGER ADDRESSES TRAINING REQUIREMENTS.
c) QMP 2.07 REV. 1 NOW ADDRESSES TRAINING. (SECT 6.3 REC. ACCESS & STORAGE
d) QAPP NO LONGER REQUIRES ANNUAL ASSESSMENT OF CONTINUED INDOC. & TRAINING
e) QMP 2.07 REV. 1 COVERS INSTRUCTION, ORIENTATION, INDOCTRINATION, & TRAINING OF PERSONNEL.

United States Department of the Interior

GEOLOGICAL SURVEY
BOX 25046 M.S. 421
DENVER FEDERAL CENTER
DENVER, COLORADO 80225

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:

WBS 1.2.9.3
QA: "QA"

February 15, 1989

QA RECEIVED

FEB 22 1989

Carl P. Gertz
Project Manager
Yucca Mountain Project Office
U.S. Department of Energy
P.O. Box 98518
Las Vegas, NV 89193-8518

Atten: James Blaylock

SUBJECT: CORRECTION TO AMENDED RESPONSE TO SDR-151

REFERENCE: Larry R. Hayes letter to Carl P. Gertz, atten: James Blaylock, dated February 10, 1989, subject: AMENDED RESPONSES TO SDRs -143, -144, -145, -146, -147, -148, -151, -153, -154, -155, -156, -157, -161, and -162

The subject amended response contained an error. In the remedial actions (block 14) "QMPs" should read "technical procedures". Please consider this letter as a correction to the amended response.

If you have any questions concerning this matter, please contact the Quality Assurance Office at FTS 776-1418.

Sincerely,

Larry R. Hayes

Larry R. Hayes,
Chief, Branch of YMP

LRH/MHM

cc: J.R. Willmon, USGS, QA
J.J. Brogan, SAIC, Las Vegas, NV
R.W. Gray, MED, NV
A.D. Boyce, MED, NV
QA Logbook
QA File 3.16.01 YMPO SDR-151
USGS Local Records Center
R.R. Luckey

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date June 22, 1988	2 Severity Level ☐ 1 ☒ 2 ☐ 3		Page 1 of 2
3 Discovered During WMPO-Audit 88-4	3a Identified By Hans/Clark	3b Branch Chief Concurrence Date	4 SDR No. 145 Rev. 0
5 Organization USGS-DENVER	6 Person(s) Contacted Joe Willmon, Susan Shipley		7 Response Due Date is 20 Working Days from Date of Transmittal

8 Requirement (Audit Checklist Reference, if Applicable)
Checklist No. 2-11: USGS QAPP-01, R4, Section 2, Para. 2.5.1. Minimum education and experience requirements shall be established and documented in position descriptions for each position involved in the performance of

9 Deficiency
Contrary to the above requirement, minimum education and experience requirements are not established for Deputy QA Manager and other QA staff positions in position descriptions. Futhermore, no position descriptions were

10 Recommended Action(s): ☒ Remedial ☒ Investigative ☒ Corrective

(1) Determine if deficiency extends to position descriptions for technical and other personnel who perform quality affecting activities.

Aprvl.

11 QAE/Lead Auditor Date	12 Branch Manager Date	13 Project Quality Mgr. Date
Daniel Klimas 7-25-88	[signature] HAC 7/25/88	James Blaylock 7/25/88

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

See attached response for Blocks 14-17.

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date
Larry R. Hayes 8/31/88 JE Willmon 8/31/88

Comp. by Orig. QA Org.

19 Response	☐ Accept ☐ Reject ☑ Amended Response	QAE/Lead Auditor/Date Dan Klimas 12-5-88	Branch Manager/Date [signature] 5 Dec 88
20 Amended Response	☑ Accept ☐ Reject	QAE/Lead Auditor/Date Dan Klimas 5/19/89	Branch Manager/Date [signature] 19 May 89
21 Verification	☑ Satisfactory ☐ Unsatisfactory	QAE/Lead Auditor/Date Robert [signature] 4/1/91	Branch Manager/Date N/A.

22 Remarks Extension Request 8/23/88 - Hayes to Blaylock - Accepted 5/26/88 - YMP: JB-3466
Response 8/31/88 - Hayes to Gerty - Request Amended 1/6/89 - YMP: JB-1028
Received Amended Response 2/10/89 - Hayes to Gerty.
Correction to Amended Response 2/15/89 - Hayes to Gerty - Accepted 6/6/89 - YMP: WBM-4196
Verification information is attached

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date
	Robert [signature] 4/1/91	N/A	Esther Hayes 4/1/91

8 Requirement (continued)

activities that affect quality.

9 Deficiency (continued)

provided for QA position titles named on the Quality Assurance Organization chart.

BASIS FOR SDR

This requirement is a WMPO requirement established NNWSI NVO.196-17 Rev. 5, para. 5.1.1. This requirement has been picked up by the current revision of the USGS QAPP, but compliance has not taken place.

RATIONAL FOR SDR

The minimum education and experience levels need to be established in order to assure that proper Project staffing is consistant with project needs. Since the minimum education and experience levels are not established, the proper staffing needs can not be determined.

10 Recommended Actions (continued)

(2) Determine impact of deficiency on quality activities, with emphasis on determining effectiveness of quality program implementation.

(3) Assure position descriptions for each position title listed on the organization chart, which must include minimum education and experience requirements commensurate with the duties and responsibilities assigned

(4) Evaluate currently assigned personnel against requirements specified in the position description.

USGS RESPONSE TO YMPO STANDARD DEFICIENCY REPORT (SDR) NO. 145

BLOCK 14: REMEDIAL/INVESTIGATIVE ACTION(S):

There is no impact on quality and remedial actions are not necessary. The USGS Certifications required by QMP-2.03 have provided sufficient documentation of the education and experience for both QA and technical personnel.

BLOCK 15: EFFECTIVE DATE: Not applicable.

BLOCK 16: CAUSE OF THE CONDITION & CORRECTIVE ACTION TO PREVENT RECURRENCE:

The cause of the condition is that the USGS had not yet revised QMP-2.02 to meet the requirements of QAPP-01, R4. QMP-2.02 is being revised to meet the requirements of QAPP-01, Draft R5 and NNWSI/88-9, R1 which require inclusion of minimum education and work experience in position descriptions. The QMPs will be revised in accordance with the WMPO schedule. (Reference response to SDR-156.)

Any other changes or differences between the position descriptions and the personnel qualifications will need to be handled on a case-by-case basis by USGS Management once the USGS-QMP-2.02 has been issued.

BLOCK 17: EFFECTIVE DATE: See SDR-156.

BLOCK 12 REMARKS: (CONT'D)

a) X-118 FED. HANDBOOK GIVES SPECIFIC REQUIREMENTS FOR EDUCATION & EXPERIENCE
b) EACH SPECIFIC "POSITION DISCRIPTION" FOR EACH X-118 TITLE DEFINES THE SPECIFIC JOB REQUIREMENT ABOVE THOSE LISTED IN X-118.
c) YMP-USGS-QMP-2.02 REV. 5 "FORM 9-3019" IDENTIFIES SPECIFIC EDUCATION, CAREER EXPERIENCE & BIBLIOGRAPHY FOR SPECIFIC ASSIGNMENTS. THIS IS VERIFIED BY PERSONNEL OFFICE AND MAINTAINED BY THE TPO OFFICE.
d) THIS IS DONE FOR ALL YMP PERSONNEL PERFORMING QUALITY ACTIVITIES.
e) PROCEDURE USGS QAPP-01 REV. 5 SECT. 2 PARA 2.5.1 REVISED TO DELETE "MINIMUM EDUCATION & EXPERIENCE REQUIREMENT" FROM THE "POSITION DISCRIPTION DOCUMENT."
f) ALL POSITION TITLES ON QA ORGANIZATIONAL CHART ARE NOW COVERED.
g) QMP 2.02 REV. 5 WAS ISSUED MARCH 11th 1991 TO INCLUDE FORM 9-3019

AMENDED RESPONSE TO SDR-143, -144, -145, -146,
-147, -148, -155, -156, and -157
February 10, 1989

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YMPO verification of the USGS Program is scheduled by the Project Office.

ltr dtd 2/10/89 - Hoyer to Dertz

United States Department of the Interior

GEOLOGICAL SURVEY
BOX 25046 M.S. 421
DENVER FEDERAL CENTER
DENVER, COLORADO 80225

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:

WBS 1.2.9.3
QA: "QA"

February 15, 1989

QA RECEIVED

FEB 22 1989

Carl P. Gertz
Project Manager
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P.O. Box 98518
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If you have any questions concerning this matter, please contact the Quality Assurance Office at FTS 776-1418.

Sincerely,

Larry R. Hayes

Larry R. Hayes,
Chief, Branch of YMP

LRH/MHM

cc: J.R. Willmon, USGS, QA
J.J. Brogan, SAIC, Las Vegas, NV
R.W. Gray, MED, NV
A.D. Boyce, MED, NV
QA Logbook
QA File 3.16.01 YMPO SDR-151
USGS Local Records Center
R.R. Luckey