



## Department of Energy

Yucca Mountain Project Office

P. O. Box 98608

Las Vegas, NV 89193-8608

WBS 1.2.9.3

QA

SEP 27 1990


Richard J. Herbst  
Technical Project Officer  
for Yucca Mountain Project  
Los Alamos National Laboratory  
University of California  
N-5, Mail Stop J521  
P.O. Box 1663  
Los Alamos, NM 87545

ACCEPTANCE OF AMENDED RESPONSE AND CLOSURE OF STANDARD DEFICIENCY REPORT  
(SDR) 513, REVISION 0, RESULTING FROM YUCCA MOUNTAIN PROJECT OFFICE  
(PROJECT OFFICE) QUALITY ASSURANCE (QA) AUDIT 90-01 OF LOS ALAMOS NATIONAL  
LABORATORY (LOS ALAMOS)

The Project Office QA staff has evaluated and accepted your amended  
response to SDR 513, Revision 0, generated as a result of Project Office  
QA Audit 90-01 of Los Alamos.

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

If you have any questions, please contact either Catherine E. Hampton at  
(702) 794-7973 or FTS 544-7973 or Stephen R. Dana at (702) 794-7176 or  
FTS 544-7176 of the Yucca Mountain Project QA staff.

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

QA:CEH-5147

Enclosure:  
SDR 513, Revision 0

cc w/encl:  
S. W. Zimmerman, NWPO, Carson City, NV  
K. R. Hooks, NRC, Washington, DC  
H. P. Nunes, LANL, Los Alamos, NM  
J. L. Day, LATA, Los Alamos, NM

cc w/o encl:  
H. E. Valencia, LAAO  
J. W. Hines, OQD, AL  
A. R. Chernoff, MSD, AL  
J. W. Gilray, NRC, Las Vegas, NV  
R. A. Morley, LANL, Los Alamos, NM

YMP-5  
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# YMPO STANDARD DEFICIENCY REPORT

N-QA-038  
4/89

Completed by Originating QA Organization	1 Date 03/30/90		2 Severity Level <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 24
	3 Discovered During YMP Audit 90-1		3a Identified By M.R. Diaz		4 SDR No. 513 Rev. 0
	5 Organization Los Alamos		6 Person(s) Contacted H. Nunes		7 Response Due Date is 20 Working Days from Date of Transmittal
	8 Requirement (Audit Checklist Reference, if Applicable) Los Alamos YMP QAPP, Rev. 4.3, Sect. 2, para. 2.1.1 states in part, "The QAPL or his appointee shall conduct internal audits of all phases of the application of this QAPP for all Los Alamos YMP activities affecting				
Completed by Organization in Block 5	9 Deficiency Contrary to the above requirements:  1. Internal and external audits of all phases of the application of Los				
	10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective Identify the remedial actions to be taken to correct the deficiencies noted in Block 9. Investigate the program, process, activities, or documentation to				
	11 QAE/Lead Auditor/Date Harris Jan 4/9/90		12 Division Manager/Date N/A CH-41090		13 Project Quality Mgr./Date Catherine H. [Signature] 4-10-90
	14 Remedial/Investigative Action(s)  Refer to Page 4 of 4				
Completed by Organization in Block 5	15 Effective Date MAY 31, 1990				
	16 Cause of the Condition & Corrective Action to Prevent Recurrence  Refer to Page 4 of 4				
	17 Effective Date June 29, 1990				
	18 Signature/Date H. Nunes 5/18/90				
Comp. by Orig. QA Org.	19 Response Accepted	QAE/Lead Auditor/Date Harris Jan 5/25/90	Division Manager/Date N/A	Project Quality Mgr./Date Catherine H. [Signature] 5-30-90	
	20 Corrective Action Verif. Satisfactory	QAE/Lead Auditor/Date Harris Jan 9/19/90	Division Manager/Date N/A	Project Quality Mgr./Date Catherine H. [Signature] 9/21/90	
	21 Remarks RESPONSE 5/17/90 TWS-EES-13-05-90-066 Accept Response, YMP: CEH-3552, 6-5-90 Unsat. Verification - YMP: CEH-4234 Amended Response, TWS-EES-13-08-90-061, 8-17-90 Amended Response 9/4/90 - TWS-EES-13-09-90-030 ACCEPT RESPONSE Harris Jan 9/19/90 Catherine H. [Signature] 9/21/90  SEE PAGE 3 OF 4				
	22 QA CLOSURE	QAE/Lead Auditor/Date Harris Jan 9/20/90	Division Manager/Date N/A	PQM/Date Catherine H. [Signature] 9/20/90	

ENCLOSURE

**YMPO STANDARD DEFICIENCY REPORT  
CONTINUATION SHEET**

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2/89

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CHPM

6 Persons contacted ( continued )

8 Requirement ( continued )

quality."

Section 18, para. 18.2.1, 18.2.2, and 18.2.3 state in part, "Internal and external QA audits shall be scheduled annually to provide complete coverage of QA program activities. The audit schedule shall be prepared annually and evaluated periodically and revised as necessary to ensure that coverage is maintained current. Los Alamos shall perform or arrange for annual evaluations of suppliers. The audit schedule, including dates and any revisions thereof, shall be sent to the PQM."

All applicable elements of Los Alamos' internal QA program shall be audited at least annually or at least once during the life of the activity, whichever is shorter.

Applicable elements of an external organization's QA program shall be audited at least annually or once during the activity, whichever is the shorter period.

The justification for not performing audits of vendors whose activities are less than four months in duration shall be documented, approved by the QAPL and sent to the PQM."

9 Deficiency ( continued )

Alamos QAPP for all YMP activities affecting quality during 1989 were not conducted. Consequently, it was not possible to verify the adequacy of the following evaluations performed by Los Alamos during internal/external audits:

- a) Compliance of the QA program.
- b) Adequacy of the QA program.
- c) Effectiveness of the QA program.
- d) Continuing implementation of the QA program.

2. The following specific notation to the audit program requirements were found:

- a) The audit schedule was rescinded during May 1989. It was never formally reissued. Documented evidence of the event was not sent to the PQM.
- b) Audit commitments were reinstated to start on June 1989. However, only two of the audits were conducted and portions of the QA documentation of those audits was found inadequate as previously identified on SDR 470.
- c) With the disruption of the audit schedule, there was no evaluation of the remainder of the schedule to assure complete coverage of QA program activities. The emphasis of the two audits focused on

YMPO STANDARD DEFICIENCY REPORT  
CONTINUATION SHEET

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HPM

9 Deficiency ( continued )

implementation of activities without consideration that the development and approval process of procedures fall within QA program purview.

- d) Two subcontractors, EG&G and University of Texas, El Paso were not audited in accordance with program requirements; furthermore, neither is a subcontractor at the present time to Los Alamos. No documentation exists to justify cancellation of these audits.
- e) Applicable elements of all external organization's QA program were not audited.
- f) The conditions described above are indicative that the audit schedule needed to be revised; however, this action never took place.

10 Recommended Actions ( continued )

determine the extent and depth of similar deficient conditions to those listed on the SDR. Identify these deficiencies and provide the measures required to correct them. Identify the cause of the condition and the planned corrective action to prevent recurrence.

21.- AUDIT REPORT LANL-AR-90-001 DATED 8/17/90  
PERFORMED 6/4-6/90.

AUDIT REPORT LANL-AR-90-002 DATED 8/17/90  
PERFORMED 6/6-8/90.

AUDIT REPORT LANL-AR-90-003 DATED 8/17/90  
PERFORMED 6/25-29/90.

AUDIT REPORT LANL-AR-90-004 DATED 8/2/90  
PERFORMED 7/9-13/90.

SURVEILLANCE LANL-SR-90-003 PERFORMED 4/18-5/22/90  
REPORT DATED 8/2/90.

SURVEILLANCE LANL-SR-90-004 PERFORMED 6/18-9/7/90  
REPORT DATED 9/12/90.

SURVEILLANCE LANL-SR-90-005 PERFORMED 7/2-9/7/90  
REPORT DATED 9/12/90

#### **14. Remedial/Investigative Actions**

**Remedial Actions:** Issue a new audit and survey schedule.

**Investigative Actions:** The Verification Manager will review the revised audit and survey schedules to ensure that the appropriate criteria and activities are covered-- complete audit coverage of the LANL program (full criteria coverage), complete coverage of the LANL subcontractors (applicable criteria), and ongoing surveys for program implementation. The Verification Manager will issue a written report to the QAPL for review and action. These immediate actions are documented in LANL Deficiency Report No. LANL - 0017, which has been judged to be a significant condition adverse to quality. The first audit in the new schedule is set for June 4-8, 1990, at the LANL Test Manager's Office in Las Vegas and will include TMO functions and Volcanism studies.

#### **16. Cause of the Condition and Corrective Action to Prevent Recurrence**

**Cause of the Condition:** LANL activities to achieve a fully qualified program conflicted with the execution of the audit and survey program. The LANL QAPL directed QA staff efforts towards achieving program qualification not executing the internal audit and survey program. The LANL TPO notified the PQM, letter TWS-EES-13-90-088, Herbst to Horton, that the LANL audit and survey program was not implemented:

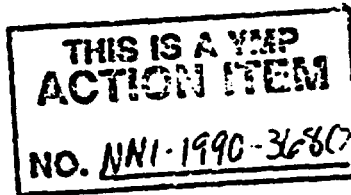
"The Los Alamos audit and survey program has not been fully implemented because our resources were fully committed to finishing the QA program and obtaining the Project Office approval of the program. We will now start the annual cycle of audit and survey March 1990. A new schedule will be transmitted to you. Project Office personnel are welcome to observe any audit or survey. Completion of the proposed procedural revisions and subsequent internal audits of the completed program will allow Los Alamos audit staff to assess the effectiveness of the quality program."

This action was prompted by the YMP No. 89-7, SDR No. 469 and SDR No. 470. Because these two SDRs defaulted the LANL internal audit program, the QAPL decided to redirect efforts towards correcting the audit procedure, including additional staff training to the revised procedure, instead of continuing with an unacceptable audit program. This action was extended to the survey program at the verbal direction of the QAPL.

**Corrective Action to Prevent Recurrence:** Establish a separate verification organization to maintain the required implementing procedures (QP-18.1, QP-18.2, and QP-18.3) and to execute the audit and survey schedules. This organization will not be charged with any program development or training responsibilities except those directly related to audits or surveys. This group will commence audits as required by LANL Deficiency Report No. LANL - 0017.

**Los Alamos**

Los Alamos National Laboratory  
Los Alamos, New Mexico 87545



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QA

August 17, 1990

TWS-EES-13-08-90-061

**QA RECEIVED**

**AUG 20 1990**

Mr. Donald Horton  
Yucca Mountain Project Office  
U. S. Department of Energy  
P. O. Box 98608  
Las Vegas, NV 89193-8608

Dear Mr. Horton:

**SUBJECT: REVISED RESPONSE, STANDARD DEFICIENCY REPORT NO. 513, ACTION ITEM NO. NN1-1990-3680**

**Reference: Letter, Horton to Herbst, dated July 30, 1990**

For your review is our revised response to the subject standard deficiency report.

**Block 16 - Cause of Condition & Corrective Action to Prevent Recurrence**

Additional response to state: Cause - These are the initial reports within our revised audit system. The delay in issuance occurred because the verification staff needed additional time to correlate the completed checklists to the final report while planning and conducting additional audits.

Corrective Action to Prevent Recurrence: None required, the subject audit reports, LANL No. 90-01, LANL No. 90-02, and LANL No. 90-03, are completed and attached for your review. LANL audit report No. 90-04 was issued within a 30 calendar day time period as recommended.

**Block 17 - Effective date August 17, 1990**

If you have any questions, please contact Henry Nunes at (FTS) 843-8039, for information regarding this standard deficiency report response.

Sincerely,

A handwritten signature in dark ink, appearing to read "R. J. Herbst".

R. J. Herbst

HPN/kb

Attachment: a/s

Mr. Donald Horton  
TWS-EES-13-08-90-061  
August 17, 1990  
Page 2

Cy:

J. Brogan, DOE/YMP, Las Vegas, NV  
C. Hampton, DOE/YMP, Las Vegas, NV  
S. Dana, SAIC, Las Vegas, NV

Cy w/o attachment (Limited Value Material):

S. L. Bolivar, EES-1, MS D462  
K. E. Brackhahn, EES-13, MS J521  
D. E. Broxton, EES-1, MS D462  
K. Campbell, A-1, MS F600  
J. A. Canepa, EES-13, MS J521  
B. A. Carlos, EES-1, MS D462  
M. J. Clevenger, EES-15, MS J495  
E. M. Cole, LATA, MS M321  
G. P. Cort, EES-13, MS J521  
B. M. Crowe, EES-13/LV, MS J900/527  
J. L. Day, LATA, MS M321  
C. J. Duffy, INC-7, MS J514  
M. H. Ebinger, EES-15, MS J495  
K. G. Eggert, EES-5, MS F665  
C. D. Harrington, EES-1, MS D462  
L. E. Hersman, LS-2, MS M880  
D. E. Hobart, INC-11, MS G739  
H. N. Kalia, EES-1/LV, MS J900/527  
S. S. Levy, EES-1, MS D462  
A. Meijer, INC-7, MS J514  
T. L. Morgan, INC-7, MS J519  
D. E. Morris, INC-11, MS G739  
R. A. Morley, EES-1/LV, MS J900/527  
J. T. Fabryka-Martin, INC-7, MS J514  
H. P. Nunes, EES-13, MS J521  
E. S. Patera, INC-DO, MS J514  
B. A. Robinson, EES-4, MS D443  
R. S. Rundberg, INC-11, MS J514  
L. W. Schempp, MEE-9, MS J521  
E. P. Springer, EES-15, MS J495  
S. R. Sebring, MAT-3, MS P274  
D. N. Simundson, LATA, MS M321  
K. W. Thomas, INC-11, MS J514  
I. R. Triay, INC-11, MS J514  
D. T. Vaniman, EES-1, MS D462  
K. A. West, EES-13, MS J521  
D. L. Williams, LATA, MS M321  
RPC File (2), LATA, MS M321  
TWS-EES-13 File, MS J521  
QAS File, LATA, M321  
CRM-4, MS A150

**LOS ALAMOS NATIONAL LABORATORY**

**YUCCA MOUNTAIN PROJECT**

**AUDIT REPORT NO. LANL-AR-90-002**

**JUNE 6-8, 1990**

Prepared By: John L. Day  
Audit Team Leader

Date: 8/17/90

Approved By: John L. Day  
QAS Verification Coordinator

Date: 8/17/90

Approved By: H. P. James  
QAPL

Date: 8/17/90



# Los Alamos

Los Alamos National Laboratory  
Los Alamos, New Mexico 87545

WBS 1.2.9.3  
QA

## memorandum

TO: Distribution

DATE: August 2, 1990

FROM: Henry P. Nunes, QAPL *HPN*

MAIL STOP/TELEPHONE: J521/7-8039

SYMBOL: TWS-EES-13-08-90-038

SUBJECT: AUDIT REPORT, LOS ALAMOS NATIONAL LABORATORY AUDIT LANL-90-004

Attached for your review and information is the completed audit report from the subject internal audit. If you have any questions, please call me at 7-8039.

Distribution:

S. L. Bolivar, EES-1, MS D462  
D. E. Broxton, EES-1, MS D462  
K. Campbell, A-1, MS F600  
J. A. Canepa, EES-13, MS J521  
M. J. Clevenger, EES-15, MS J495  
J. Day, LATA, MS M321  
M. H. Ebinger, EES-15, MS J495  
K. G. Eggert, EES-5, MS F665  
R. J. Herbst, EES-13, MS J521  
T. L. Morgan, INC-7, MS J519  
R. A. Morley, EES-1/LV, MS J900/527  
H. P. Nunes, EES-13, MS J521  
E. S. Patera, INC-DO, MS J514  
B. A. Robinson, EES-4, MS D443  
L. W. Schempp, MEE-9, MS J521  
E. P. Springer, EES-15, MS J495  
S. R. Sebring, MAT-3, MS P274  
K. A. West, EES-13, MS J521

Cy:

RPC File (2), LATA, MS M321  
TWS-EES-13 File, MS J521  
QAS File, LATA, M321