



Department of Energy

Nevada Operations Office
P. O. Box 98518
Las Vegas, NV 89193-8518

WBS 1.2.9.3
QA

APR 20 1990

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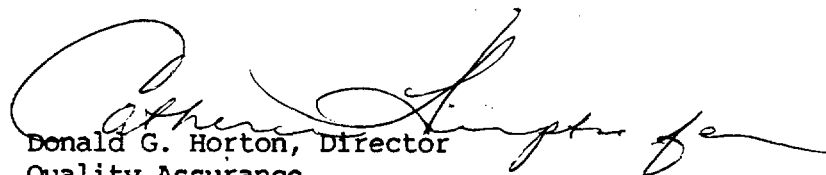
ISSUANCE OF STANDARD DEFICIENCY REPORTS (SDRS) 511, 512, 513, AND 515,
REVISION 0, RESULTING FROM YUCCA MOUNTAIN PROJECT OFFICE (PROJECT OFFICE)
QUALITY ASSURANCE (QA) AUDIT 90-01 OF LOS ALAMOS NATIONAL LABORATORY
(LOS ALAMOS) (NN1-1990-3132)

Enclosed are SDRs 511, 512, 513, and 515, Revision 0, generated as a result
of Project Office QA Audit 90-01 of Los Alamos.

Please identify the corrective actions to be taken and implemented to correct
the deficiencies by completing blocks 14 through 18, as appropriate on each
SDR.

Responses to the SDRs are due within 20 working days of the date of this
letter. Any extension to these due dates must be requested in writing with
appropriate justification prior to the due date. Please send the original
of your responses to Nita J. Brogan, Science Applications International
Corporation, 101 Convention Center Drive, Las Vegas, Nevada 89109, and a
copy to Ralph W. Gray, U.S. Department of Energy, P.O. Box 98518,
Las Vegas, Nevada 89193.

Your cooperation and timely response is appreciated. If you have any
questions, please contact Catherine E. Hampton at (702) 794-7973 or
FTS 544-7973, or Stephen R. Dana at (702) 794-7176 or FTS 544-7176, both
of the Project Office QA staff.


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

YMP:CEH-2841

Enclosure:
SDRs 511, 512, 513, and 515

9004270077 900420
PDR WASTE
WM-11 PDC

FULL TEXT ASCII SCAN
ADD: K Hooks

102.7
WM-11
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ORIGINAL

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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 type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2	
	3 Discovered During YMP Audit 90-1		3a Identified By M. R. Diaz, T. W. Noland		4 SDR No. 511 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) QAP/88-9, Rev. 4, Sect. 1, Para. 1.0 states in part, "The organizational structure, lines of communication, authority and duties of persons and organizations performing activities affecting quality shall be clearly					
	9 Deficiency An implementing procedure that clearly describes the authority and responsibility of each position in the Quality Assurance organization, in effect as of March 27, 1990, does not exist.					
Completed by Organization in Block 5	10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective Identify the remedial action(s) to be taken to correct the deficiencies noted in Block 9. Identify the cause of the condition and the planned					
	11 QAE/Lead Auditor/Date Mario San 4/9/90		12 Division Manager/Date N/A 4-10-90		13 Project Quality Mgr./Date 4-10-90	
	14 Remedial/Investigative Action(s)					
	15 Effective Date _____					
	16 Cause of the Condition & Corrective Action to Prevent Recurrence					
Comp. by Orig. QA Org.	17 Effective Date _____					
	18 Signature/Date					
	19 Response Accepted		QAE/Lead Auditor/Date		Division Manager/Date	
	20 Corrective Action Verif. Satisfactory		QAE/Lead Auditor/Date		Division Manager/Date	
	21 Remarks		Project Quality Mgr./Date		Project Quality Mgr./Date	
22 QA CLOSURE		QAE/Lead Auditor/Date		Division Manager/Date		PQM/Date

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CONTINUATION SHEET**

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SDR No. 511

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8 Requirement (continued)

established and delineated in writing." Para. 2.3 states in part, "The QA responsibilities of all organizational elements depicted on organization charts shall be described."

10 Recommended Actions (continued)

action to prevent recurrence.

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Completed by Originating QA Organization	1 Date 03/30/90		2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2	
	3 Discovered During YMP Audit 90-1		3a Identified By F.D. Peters		4 SDR No. 512 Rev. 0	
	5 Organization Los Alamos		6 Person(s) Contacted D. Hobart, B.M. Crowe		7 Response Due Date is 20 Working Days from Date of Transmittal	
	8 Requirement (Audit Checklist Reference, if Applicable) (T-67, T-112, T-116) Los Alamos procedure TWS-QAS-QP-03.2, Rev. 0, Para. 6.2.1, requires reviewers to be technically qualified and certified per QP-02.1 (for Los Alamos YMP and Los Alamos YMP subcontractor personnel) or					
Completed by Organization in Block 5	9 Deficiency Non-Los Alamos or subcontractor YMP personnel have performed technical reviews of documents in accordance with QP-03.2 and QP-03.5 without documentation or certification of qualification or indoctrination to					
	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 <i>S. J. Dena</i> 4/9/90		12 Division Manager/Date N/A 4-12-90		13 Project Quality Mgr./Date <i>C. J. Dena</i> 4-12-90	
	14 Remedial/Investigative Action(s) 15 Effective Date _____					
Comp. by Orig. QA Org.	16 Cause of the Condition & Corrective Action to Prevent Recurrence 17 Effective Date _____					
	18 Signature/Date					
	19 Response Accepted					
Comp. by Orig. QA Org.	20 Corrective Action Verif. Satisfactory		QAE/Lead Auditor/Date		Division Manager/Date	
	21 Remarks					
Comp. by Orig. QA Org.	22 QA CLOSURE		QAE/Lead Auditor/Date		Division Manager/Date	
					PQM/Date	

ENCLOSURE

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8 Requirement (continued)

authorized by a Los Alamos Group Leader on a Reviewer Qualification form (for persons "not associated with the Project").

Los Alamos procedure TWS-QAS-QP-03.5, Rev. 0, Para. 4.8, provides for technical reviewers of laboratory notebooks, field notebooks, and logbooks to have the training and experience to understand and repeat the work being reviewed, but does not specifically require documentation or certification of the reviewer's qualification basis.

9 Deficiency (continued)

applicable Los Alamos procedures for the reviews and for the activities being reviewed.

1. Report LBL-27173A, "Solubility Studies of Transuranic Elements for Nuclear Waste Disposal: Principles and Overview" was technically reviewed by a Lawrence Livermore National Laboratory (LLNL) employee.
2. Paper, "Basaltic Volcanic Episode of the Yucca Mountain Region" for the 1990 International High Level Waste Management conference was technically reviewed by a DOE/YMP employee.
3. Field notebooks for volcanism studies (WBS 1.2.3.2.5; SP 8.3.1.8.1.1, 8.3.1.8.5.1) were technically reviewed by a DOE/YMO employee.

COMMENTS:

QP-02.1, referenced by QP-03.2, has been superseded by TWS-QAS-QP-02.5, Rev. 0, TWS-QAS-QP-02.6, Rev. 0, and TWS-QAS-QP-02.9, Rev. 0. QP-02.5, QP-02.6, and QP-02.9 apply only to Los Alamos YMP Personnel (Los Alamos employees) and Los Alamos subcontractors working under the Los Alamos YMP QA program. The procedures do not apply to DOE/YMP personnel or employees of other project participants.

A similar condition was previously identified during YMP Audit 89-07 by Observation No. 89-07-04. The Los Alamos response clarification to that observation stated "Training files for non-employees who have performed quality related work will be updated in accordance with approved changes to the program."

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.

YMPO STANDARD DEFICIENCY REPORT

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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 3	
	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 <i>Wario San</i> 4/9/90		12 Division Manager/Date N/A 4-10-90		13 Project Quality Mgr./Date <i>Robert L. Jones</i> 4-10-90	
Completed by Organization in Block 5	14 Remedial/Investigative Action(s)					15 Effective Date _____
	16 Cause of the Condition & Corrective Action to Prevent Recurrence					17 Effective Date _____
	18 Signature/Date					
Comp. by Orig. QA Org.	19 Response Accepted		QAE/Lead Auditor/Date		Division Manager/Date	
	20 Corrective Action Verif. Satisfactory		QAE/Lead Auditor/Date		Division Manager/Date	
	21 Remarks					
	22 QA CLOSURE		QAE/Lead Auditor/Date		Division Manager/Date	
						PQM/Date

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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

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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.

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Completed by Originating QA Organization	1 Date 3-29-90		2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2	
	3 Discovered During Audit 90-1		3a Identified By R.L. Maudlin		4 SDR No. 515 Rev. 0	
	5 Organization Los Alamos		6 Person(s) Contacted T. Moran, S. Sebring		7 Response Due Date is 20 Working Days from Date of Transmittal	
	8 Requirement (Audit Checklist Reference, if Applicable) TWS-QAS-QP-04.1, R2, Para. 6.4 states in part: "The requestor supplements the PR with additional documentation...the requestor particularly considers the following points and requires only those that are appropriate..."					
	9 Deficiency No modification has been made to the existing Lawrence Berkeley contract to describe rights of access by DOE, pass-through of QA requirements to sub-tier contractors, and control of supplier-issued nonconformances.					
Completed by Organization in Block 5	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 <i>Richard P. Maudlin</i> 04-11-90		12 Division Manager/Date N/A 04-12-90		13 Project Quality Mgr./Date <i>William A. Sebring</i> 4-12-90	
	14 Remedial/Investigative Action(s)					
	15 Effective Date _____					
	16 Cause of the Condition & Corrective Action to Prevent Recurrence					
Comp. by Orig. QA Org.	17 Effective Date _____					
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	19 Response Accepted		QAE/Lead Auditor/Date		Division Manager/Date	
	20 Corrective Action Verif. Satisfactory		QAE/Lead Auditor/Date		Division Manager/Date	
	Project Quality Mgr./Date		Project Quality Mgr./Date		21 Remarks	
22 QA CLOSURE		QAE/Lead Auditor/Date		Division Manager/Date		PQM/Date

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8 Requirement (continued)

right-of-access provision which allows designated Los Alamos and Department of Energy (DOE) personnel entry to suppliers facilities...Subcontracting Requirements...Any subcontracts must include a pass-through of appropriate QA requirements...Control of supplier-issued nonconformances..."

10 Recommended Actions (continued)

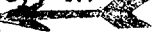
determine the extent and depth of similar deficient conditions to those listed on the SDR. Identify these deficiencies and provide the measures required to correct them. Identify the cause of the condition and the planned action to prevent recurrence.

Richard J. Herbst

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APR 20 1990

cc w/encl:

Ralph Stein, HQ (RW-30) FORS
D. E. Shelor, HQ (RW-3) FORS
H. P. Nunes, LANL, Los Alamos, NM
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
S. R. Dana, SAIC, Las Vegas, NV, 517/T-06
S. W. Zimmerman, NWPO, Carson City, NV
K. R. Hooks, NRC, Washington, DC 

cc w/o encl:

H. E. Valencia, LAAO
J. W. Hines, NWQA, AL
A. R. Chernoff, MSD, AL
J. W. Gilray, NRC, Las Vegas, NV