



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

WBS 1.2.11  
 QA: N/A

**DEC 07 1993**

Julie A. Canepa  
 Technical Project Officer  
 for Yucca Mountain  
 Site Characterization Project  
 Los Alamos National Laboratory  
 University of California  
 EES-13, Mail Stop J521  
 P.O. Box 1663  
 Los Alamos, NM 87545

EVALUATION OF AMENDED RESPONSE AND CLOSURE OF CORRECTIVE ACTION REQUEST  
 (CAR) YM-91-041 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION  
 (YMQAD) AUDIT 91-03 OF LOS ALAMOS NATIONAL LABORATORY (SCP: N/A)

The YMQAD staff has evaluated the amended response to CAR YM-91-041. The amended response has been determined to be satisfactory. Verification of completion of the corrective action has been performed and was satisfactory. As a result, the CAR is considered closed.

If you have any questions, please contact either Robert B. Constable at (702) 794-7945 or John S. Martin at (702) 794-7881.

Richard E. Spence, Director  
 Yucca Mountain Quality Assurance Division

YMQAD:RBC-1053

Enclosure:  
 CAR YM-91-041

cc w/encl:  
 J. B. Tillman, LAAO  
 J. H. Hines, OQD, AL  
 K. R. Hooks, NRC, Washington, DC  
 S. W. Zimmerman, NWPO, Carson City, NV  
 N. Z. Elkins, LANL, Las Vegas, NV  
 S. L. Bolivar, LANL, Los Alamos, NM  
 J. C. de la Garza, YMP, NV

cc w/o encl:  
 J. W. Gilray, NRC, Las Vegas, NV  
 N. J. Brogan, YMQAD/QATSS, Las Vegas, NV

*Add: K.R. Hooks etc encl*  
 1 1  
 NH03 11  
 WM-11  
 102.7

**ORIGINAL**  
**THIS IS A RED STAMP**

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

14CAR NO.: YM-91-041  
DATE: 04/01/91  
SHEET: 1 OF 2  
QA  
WBS No.: 1.2.9.3

**CORRECTIVE ACTION REQUEST**

1 Controlling Document  
LANL-YMP-QAPP, Rev. 5

2 Related Report No.  
Audit No. 91-03

3 Responsible Organization  
Los Alamos National Laboratory

4 Discussed With  
R. Herbst, S. Bolivar

10 Response Due  
30 Days From Issue

11 Responsibility for Corrective Action  
R. Herbst

12 Stop Work Order Y or N  
No

5 Requirement:

LANL-YMP-QAPP, Rev. 5, Sect. 1.2 states in part:

"... Implementation of the requirements of the QAPP shall be accomplished through quality implementing procedures (QPs)..."

LANL-YMP-QP-6.2, Rev. 0 "Preparation, Review and Approval of Quality Administrative Procedures, Para. 4.4 states:

"QPs are documents that describe the methods used to conduct LANL YMP activities that affect quality. QPs implement the QA program requirements of the LANL QAPP."

6 Adverse Condition:

QAPP requirements are not being consistently reflected in QPs.

DISCUSSION: The following representative examples illustrate the adverse condition.

1. LANL-YMP-QAPP, Rev. 5, Section 15.5.3 states in part, "Persons responsible for dispositioning the NCR shall ensure that the following requirements are met...The disposition shall document action needed to preclude recurrence of the nonconforming condition."

Los Alamos QP TWS-QAS-QP-15.2, Rev. 1, "Deficiency Reporting" only requires documentation of actions to preclude recurrence of significant conditions adverse to quality (i.e., the QP does not require documentation of action needed to preclude recurrence of all nonconforming conditions).

7 Recommended Action(s):

1. Take necessary action to resolve the representative examples identified in the CAR.
2. Investigate to determine the extent of inconsistencies and resolve all inconsistencies found.
3. Evaluate results of investigation to determine if preventative action is necessary.

8 Initiator  
J.S. Martin and  
*J.P. Poye*  
Date: 04/01/91

9 Severity Level -  
1  2  3

13 Approved By:  
OQA *James Blaylock* for  
Date: 4/3/91

15 Verification of Corrective Action:

See attached memo to file dated 10/11/91 *REPone*

CAR closed based upon the Los Alamos QAPP (no longer being applicable) and amended response received November 29, 1992. *fm 11-30-92*

16 Corrective Action Completed and Accepted:  
OAR *J.P. Poye* Date 11-30-92

17 Closure Approved By:  
OQA *J.P. Poye* 12/6/93

**ENCLOSURE**

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

CAR NO.: YM-91-041  
DATE: 04/01/91  
SHEET: 2 OF 2

**CORRECTIVE ACTION REQUEST  
(continuation sheet)**

6 Adverse Condition (continued)

2. LANL-YMP-QAPP, Rev. 5, Section 7.1.3 "Bid Evaluation" states in part, "Bid evaluation shall determine the extent of conformance to the procurement documents. The evaluation, by the designated organizations, shall consider the following, as applicable to the type of procurement:

- o technical considerations
- o QA requirements
- o personnel
- o production capabilities
- o past performance
- o alternatives
- o exceptions

Los Alamos QP LANL-YMP-QP-04.5, Rev. 0, "Procurement of Noncommercial-Grade Items and Services," Para. 6.2.1 limits the evaluation of supplier's capability to provide an item or service in accordance with the technical and QA requirements of the procurement documents. (i.e., Personnel, production capabilities, past performance, alternatives, and exceptions are not addressed in the QP.)

3. LANL-YMP-QAPP, Rev. 5, Section 7.1.6, "Control of Documents Generated by Suppliers," states, "Documents generated by suppliers shall be submitted in accordance with requirements of the procurement documents and shall be handled, approved, and controlled according to LANL QPs for document control. The documents shall be evaluated against the criteria for procurement acceptance."

Los Alamos QP LANL-YMP-QP-04.5, Rev. 0, "Procurement of Noncommercial-Grade Items and Services" does not address this section of the QAPP.

4. LANL-YMP-QAPP, Rev. 5, Section 2.2.2, "Use of Data Not Generated Under Quality Assurance Controls," states in part, "For use in licensing activities, the QA Program for the LANL YMP provides some data or data integrations that were not generated under a program that meets the requirements of 10 CFR 60, Subpart G...A LANL QP shall be prepared to implement these requirements..."

No Los Alamos QP could be found that addresses this subject.

5. LANL-YMP-QAPP, Rev. 5, Section 2.5.2, "Indoctrination" states in part, "Personnel assigned to perform activities affecting quality shall first be indoctrinated to the purpose, scope, methods of implementation, and applicability of the following documents (including revisions and changes) as they relate to the work to be accomplished:

- o QAPPs
- o implementing procedures and work instructions (applicable to the individual's responsibilities)
- o regulations, and
- o Project-level documents..."

LANL-YMP-QAPP, Rev. 5, Section 3.1.1, "Preparation of Scientific Investigation Planning Documents," states in part, "Scientific investigations affecting quality shall be planned and documented to ensure a systematic approach..."

No QP or group of QPs could be found that clearly addresses control of activities performed by personnel who are not assigned to the YMP.

- e.g. In support of a publication, (Eus. J. Mineral, 1990, 2, 771-777, Long-term Thermal Stability of Clinophilolite: The Development of a "B" Phase, by David L. Bish), a Los Alamos employee not assigned to the YMP performed an analysis. No objective evidence could be found within the LANL YMP organization that this Los Alamos employee had received appropriate orientation and training or that the analysis was performed using appropriately calibrated instruments and approved procedures.

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CAR NO. \_\_\_\_\_  
DATE: \_\_\_\_\_  
SHEET: \_\_\_\_\_ OF \_\_\_\_\_

**CORRECTIVE ACTION REQUEST**  
(continuation sheet)

CAR YM-91-041

A. EXTENT - NA

B. ROOT CAUSE

We will matrix existing Quality Procedures (QPs) with the revised Quality Assurance Program Plan (QAPP) to bound the problem identified in CAR-041. We will then make a root cause determination. This will be completed 30 days after YMQAD acceptance of the revised QAPP.

C. REMEDIAL ACTION

The QAPP will be revised for compliance with the latest revision of the Quality Assurance Requirements Document (QARD) and paragraphs, or sections, needing revision will be identified. This effort will take 3 months; estimated date of completion will be July 30, 1991.

The QAPP will be revised and submitted to YMQAD for approval by September 30, 1991.

Existing QPs will be matrixed against the new QAPP. Any QPs that need to be revised to meet QAPP requirements will be identified and scheduled for revision. This task will be completed by October 15, 1991.

An evaluation will be made on a case by case basis regarding the need to stop work until affected QPs are revised.

Training to the new QAPP will commence after YMQAD acceptance. Training to revised QPs will be on a case by case basis, as needed.

The responsible individual for rewriting and obtaining approval for the new QAPP will be S. Bolivar, the QAPL. The individual responsible for training to the new QAPP will be Karen West (acting Training Coordinator).

The specific problems identified in the five representative examples (listed in the CAR) will be resolved by the above actions. Specifically:

1. Example 1 in CAR-041 is a QAPP over commitment. The QP 15.2 (Deficiency Reporting) meets QARD/NQA-1 requirements and the QAPP went beyond these requirements. The QAPP will be revised as per the time schedule described above.

After the QAPP revision is accepted by the YMQAD, it will be matrixed against QP 15.2. A revision to QP 15.2, if necessary, will be completed after the QAPP has been accepted by YMQAD.

*Ltr dtd 5/5/91 - TWS - EES - 13 - 05 - 91 - 029*

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SHEET: \_\_\_\_\_ OF \_\_\_\_\_

**CORRECTIVE ACTION REQUEST  
(continuation sheet)**

2. QP 4.5 will be revised to create a section titled Bid Evaluations. The evaluation of bid evaluations will include technical considerations, QA requirements, personnel, production capabilities, past performance, alternatives and exceptions. A QP Action Request to withdraw QP 4.5 will be submitted by May 15. The QP will be revised by July 30, 1991.

Since there have been no procurements requiring bid evaluations, there has been no impact on the quality program.

3. To resolve example 3, the QAPP will be revised. In section 7.1.6 of the QAPP, 'documents' will be changed to 'quality-affecting documents'. The revised QAPP will be submitted to the YMQAD by September 30, 1991.

QP 4.5 will be revised to address this section of the QAPP. A QP Action Request to withdraw QP 4.5 will be submitted by May 15. The QP will be revised by July 30, 1991.

4. The QAPP requires a QP be written to handle the use of data not generated under QA controls. Since no LANL personnel have attempted to qualify this type of data, the lack of a procedure has had no impact on the LANL QA program. The QAPP will be revised to identify that LANL personnel will follow the appropriate AP or APQ. The revised QAPP will be submitted to the YMQAD by September 30, 1991.

5. Example 5 states that no QP exists that addresses control of activities performed by personnel who are not assigned to the YMP. QP 2.5 (Selection of Personnel) will be revised by July 30, 1991 to address this issue. Until this procedure is rewritten, personnel not assigned to the YMP will not be allowed to conduct quality-affecting work on YMP.

**D. CORRECTIVE ACTION TO PREVENT RECURRENCE**

The requirement to matrix is in the QARD, R4, paragraph 2.7. This will be addressed in the revised QAPP, which will be submitted to the YMQAD by September 30, 1991.

CAR 041 Response Approved Steph Bolivar 5/6/91  
LANL QAPL S.L. Bolivar Date

CAR 041 Response Approved R.J. Herbst 5/2/91  
LANL TPO R.J. Herbst Date

CAR 041 Response Approved [Signature] 5-17-91  
YMQAD Date

Response Approved [Signature] 5-17-91 (REV. 10/90)  
QAR Date  
YMQAD

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WASHINGTON, D.C.

CAR NO. \_\_\_\_\_  
DATE: \_\_\_\_\_  
SHEET: \_\_\_\_\_ OF \_\_\_\_\_

**CORRECTIVE ACTION REQUEST**  
(continuation sheet)

**AMENDED RESPONSE NO. 1**  
**CAR NO. YM-91-041**  
Page 1 of 2

**A. EXTENT – NA**

**B. ROOT CAUSE**

Existing LANL YMP Quality Administrative Procedures (QPs) will be matrixed with the new quality assurance requirements document using the matrix provided by the Project Office, to bound the adverse condition identified in Section 6 of this CAR. A root cause determination will then be made. This will be completed within 180 days of receipt of the new quality assurance requirements document requirements matrix from the Project Office.

**C. REMEDIAL ACTION**

Implementation of the remedial actions will be the responsibility of the LANL YMP Quality Assurance Project Leader.

- > Upon receipt of YMQAD approval of this revised response, the LANL YMP Quality Assurance Program Plan (QAPP) will be deleted.

Existing QPs will be matrixed with the new quality assurance document. Any LANL YMP exceptions to the requirements matrix will be noted thereon. Any QPs that need to be revised to implement the new quality assurance requirements document will be identified and revised as necessary. This task will be completed within six months of receipt of the new quality assurance requirements document from the Project Office except as noted in the representative examples below. Any LANL YMP QPs that are issued prior to the receipt of the new quality assurance requirements document will be matrixed to the existing QARD, Revision, 4.

An evaluation will be made on a case by case basis regarding the need to stop work until affected QPs are revised.

Training to revised QPs will be on a case by case basis, as needed.

The five representative examples listed in Section 6 of this CAR will be resolved by the above actions. Specifically:

1. This is a QAPP over commitment to QARD requirements. To ensure that QP TWS-QAS-QP-15.2, Revision 1, "Deficiency Reporting" meets QARD/NQA-1 requirements it will be matrixed with the new quality assurance document, and revised as necessary.

*Ltr dtd 8/20/91 - TWS-EES-13-08-91-016*

**OFFICE OF CIVILIAN  
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U.S. DEPARTMENT OF ENERGY  
WASHINGTON, D.C.**

CAR NO. \_\_\_\_\_  
DATE: \_\_\_\_\_  
SHEET: \_\_\_\_\_ OF \_\_\_\_\_

**CORRECTIVE ACTION REQUEST  
(continuation sheet)**

**AMENDED RESPONSE NO. 1  
CAR NO. YM-91-041  
Page 2 of 2**

2. LANL-YMP-QP-04.5, Revision 0, "Procurement of Non-commercial Grade Items and Services" will be revised to create a section titled Bid Evaluations. The evaluation of bid evaluations will include technical considerations, QA requirements, personnel, production capabilities, past performance, alternatives, and exceptions. A QP Action Request to withdraw this QP was submitted on May 15, 1991. A draft of this procedure was completed on July 30, 1991 and it will be issued as soon as possible, but no later than October 30, 1991.
3. LANL-YMP-QP-04.5, Revision 0, "Procurement of Non-commercial Grade Items and Services" will be matrixed with the new quality assurance requirements document and revised as necessary.
4. Since no LANL YMP personnel have attempted to qualify data not generated under QA controls, the lack of a QP has had no impact on the LANL YMP QA program. LANL YMP personnel will follow the appropriate AP or APQ for use of data not generated under QA controls. This will be identified in the new quality assurance requirements document requirements matrix.
5. TWS-QAS-QP-02.5, Revision 0, "Selection of Personnel" has been revised to address this issue. A draft of this procedure was completed on July 30, 1991 and it will be issued as soon as possible, but no later than October 30, 1991. Until this revised procedure is issued, personnel not assigned to the LANL YMP will not be allowed to conduct quality-affecting work on the LANL YMP.

**D. CORRECTIVE ACTION TO PREVENT RECURRENCE**

The implementation of the corrective action to prevent recurrence will be the responsibility of the LANL YMP Quality Assurance Project Leader.

The existing QPs will be matrixed with the new quality assurance requirements document and revised as necessary. The root cause(s), if any, of the adverse condition will be determined and corrected.

Response Approved

*Stephen L Bolivar*  
\_\_\_\_\_  
LANL QAPL S. L. Bolivar

8/21/91  
Date

Response Approved

*R. J. Herbst*  
\_\_\_\_\_  
LANL TPO R. J. Herbst

8/21/91  
Date

Response Approved

*John M. ...*  
\_\_\_\_\_  
QAP

9-5-91  
Date

Response Approved

*Catharine ...*  
\_\_\_\_\_  
YMQAD

9-5-91  
Date

*see attachment to  
amended  
Response by YMQAD  
exception to responses*

*9-5-91*

CAR YM-91-041

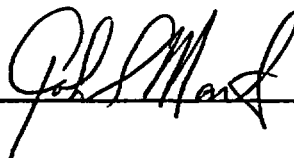
YMQAD

ATTACHMENT TO AMENDED RESPONSE DATED AUG. 20, 1991, (TWS-EES-13-08-91-016)

An evaluation of LANL amended response was performed by YMQAD on August 30, 1991. This evaluation found the amended response to be acceptable with the exception of "REMEDIAL ACTION" second sentence which reads as follows: " Upon receipt of YMQAD approval of this revised response, LANL YMP Quality Assurance Program Plan (QAPP) will be deleted.". Deletion of the LANL QAPP is unacceptable at this time. As such, LANL Quality Assurance has been notified that the rest of the response is acceptable, however; approval is not granted to delete the LANL QAPP. A new amended response is not required of at this time. In addition, in review of the LANL amended response it was noted that an extension has been requested to previously committed corrective action that was to be completed by July 30, 1991, for procedure revisions. LANL YMP Quality Assurance has been notified via telecommunication that no further extensions will be granted.

In follow-up to the amended response YMQAD requested and received from LANL draft procedures for TWS-QAS-QP-02.5 and LANL-YMP-QP-04.5 and the STOP WORK order issued by LANL against procurement.

QAR



Handwritten signature of John S. Mans, written in black ink over a horizontal line.



MEMORANDUM TO FILE

TO: CAR YM-91-041 File

10/11/91

FROM: *R. E. Powe*  
R. E. Powe

Page 1 of 3

ATL for Audits YMP-91-03 and YMP-92-01

SUBJECT: Follow-up Status

BACKGROUND

This memorandum is being issued to the subject file to assure the results of Audit YMP 92-01 are reflected in CAR YM-91-041. A copy of this memorandum is being enclosed in Audit Report YMP 92-01.

BRIEF CHRONOLOGY OF CAR YM-91-041

4/9/91 CAR issued to document an adverse quality condition identified during Audit YMP-91-03.

The CAR indicated that the Los Alamos QAPP requirements were not being consistently reflected in QPs and cited 5 examples.

5/8/91 Response received.

5/17/91 Response accepted.

8/20/91 Amended response received.

9/5/91 Amended response accepted. Expected completion date: 6 months after issuance of the revision of the Quality Assurance Requirements Document that consolidates the OCRWM QARD, QAPD, and ASME NQA-1.

RESULTS OF AUDIT YMP-92-01

During Audit YMP-92-01, which was conducted at the Los Alamos National Laboratory October 1 through October 4, 1991, a number of additional examples of the same adverse quality condition were found. These additional examples are:

(NOTE: The following examples start numbering at 6 to preclude confusion with the 5 examples already cited in the CAR).

6. Example 3. in CAR YM-91-041 indicated that the LANL QAPP required that vendor documents be controlled according to LANL QPs for document control and that LANL QP 4.5 did not reflect this method of control.

During this audit (YMP-92-01) it was determined that vendor manuals were being used to calibrate M&TE and the method of control of those vendor manuals was not in accordance with LANL QPs for document control. In one instance (refer to the vendor manual for the Automated Digital Electron Microscope, PN 840982) two different revisions of the same vendor manual was found to be in use. (Note: The method of calibration reflected in both revisions of the manual was the same, i.e. the method of calibration had not changed)

7. LANL-YMP-QAPP, Rev. 5, Section 13.0 HANDLING, SHIPPING, AND STORAGE, paragraph 13.1 "General" states in part "Work and inspection instructions, drawings, specifications, shipment instructions, or other procedures, shall be established as necessary to control the packaging, handling, storage, shipping, cleaning, and preservation of material and equipment to prevent damage, loss, or deterioration.

TWS-QAS-QP-13.1, Rev. 2, PROCEDURE FOR HANDLING, STORING, AND SHIPPING EQUIPMENT does not address packaging, cleaning or preservation.

The terms "packaging" and "preserve" are used in paragraph 6.3 "Marking and Labeling" and the term "packing" is used in paragraph 6.4 "Procuring Services or Equipment", however overall the QP does not reflect how to package, clean, and preserve materials and equipment.

A review of 14 Detailed Technical Procedures (DPs) during the audit revealed that, although the QP for developing DPs, LANL-YMP-QP-06.3, Revision 0, does not address cleaning, Los Alamos is addressing cleaning as necessary within DPs.

8. LANL-YMP-QAPP, Revision 5, Section 13.0 HANDLING, SHIPPING, AND STORAGE, paragraph 13.3 "Specific Procedures" states "When required for critical, sensitive, perishable, or exceptionally expensive articles, DPs shall be written for handling, storage, packaging, shipping, and preservation. DPs shall be subject to LANL QAPL approval."

TWS-QAS-QP-13.1, Rev. 2, PROCEDURE FOR HANDLING, STORING, AND SHIPPING EQUIPMENT, paragraph 6.1 "Special Equipment and Protective Environments" states in part "To maintain accuracy, measuring and test equipment is handled and stored using good scientific and engineering judgment, following manufacturer's recommendations of following a specific procedure if the PI so directs. Any special requirements not covered in a specific procedure are documented by the PI or experimenter in the laboratory notebook, in a DP, or in a memo to the group Resident File and are explained by the PI to the users."

In other words the QAPP requires the use of QAPL approved DPs while the QP allows the use of a laboratory notebook, DP, or memo with no QAPL approval required.

Also the QP does not define critical, sensitive, perishable or exceptionally expensive articles.

9. LANL-YMP-QAPP, Revision 5, Section 13.0 HANDLING, SHIPPING, AND STORAGE, paragraph 13.6 "Marking and Labeling" states "Marking and labeling instructions for packaging, shipment, handling, and storage of items shall be specified in LANL DPs to adequately identify, maintain, and preserve the item. Marking requirements for special environments or special controls shall also be specified in LANL DPs."

TWS-QAS-QP-13.1, Rev. 2, PROCEDURE FOR HANDLING, STORING, AND SHIPPING EQUIPMENT, paragraph 6.3 "Marking and Labeling" states "Marking and labeling instructions for packaging, shipment, handling, and storage of items are specified in LANL DPs or in memos to the group Resident File prepared by the PI and containing specific instructions to adequately identify, maintain, and preserve the item. Marking requirements for special environments or special controls are also specified in LANL DPs or memos containing specific instructions. The PI explains any such instructions to users and other appropriate personnel."

Again, the QP allows the use of a memo and the QAPP makes no provision for the use of memos in lieu of DPs.

When follow-up is performed verify that the above examples have been resolved.

#### FOLLOW-UP VERIFICATION

Part of the commitment to resolve CAR YM-91-041 included correcting Example 2 by revising LANL QP-04.5 to add a section on Bid Evaluation. During Audit YMP-92-01 it was verified that Procedure LANL-YMP-QP-04.5, Revision 1 became effective 9//30/91 and included the required section on Bid Evaluation.

NOV 29 1993

WBS 1.2.11.2  
QA

Earth and Environmental Sciences Division  
EES-13—Nuclear Waste Management R&D

November 1, 1993

TWS-EES-13-11-93-022

Mr. Richard Spence  
Yucca Mountain Site Characterization Project  
U.S. Department of Energy  
P.O. Box 98608  
Las Vegas, NV 89193-8608

Dear Mr. Spence:

**AMENDED CORRECTIVE ACTION RESPONSE TO YMP CORRECTIVE ACTION REQUEST (CAR)  
NUMBER YM-91-041 (SCP: N/A)**

This amended response is submitted for your approval based upon a meeting held on 10/26/93 between S. Bolivar, J. Day, and Yucca Mountain Project Quality Assurance personnel (R. Spence, C. Hampton, J. Therien, and J. Martin) to determine future corrective actions for CAR YM-91-041.

Subject CAR was issued as a result of Audit 91-03 and identified areas where the requirements of the Los Alamos Quality Assurance Program Plan (QAPP) were not appropriately transcribed into implementing procedures.

As discussed during this meeting, Los Alamos was notified on 12/17/92 to implement DOE/RW-0333P Quality Assurance Requirements and Description (QARD). As part of the process of implementing the QARD we are revising our internal procedures in accordance with a Transition Plan approved by Yucca Mountain Quality Assurance Division, and upon completion, the Los Alamos QAPP will no longer be applicable.

Based on the fact that the Los Alamos QAPP will no longer be applicable upon implementation of the QARD, we request consideration be given to closure of CAR YM-91-041.

To aid in your evaluation of this amended response, Los Alamos performed a review of external and internal audits (Attachment 1) conducted in 1991, 1992, and 1993 against the Office of Civilian Radioactive Waste Management DOE/214, QARD, and the Los Alamos Quality Administrative Procedures (QPs). For situations not acceptable, a CAR or Deficiency Report (DR) was issued and the deficiency addressed accordingly.

A review of the Annual Report, OCRWM QA Program Effectiveness, FY 1992, stated the Los Alamos quality assurance (QA) program to be effective. This report evaluated overall effectiveness of the OCRWM QA program. Implementation of QA program elements 1,2,3,4,5,6,7,12,15,16,17,18,19, and 20 were determined to be effective. There was insufficient activity for evaluation of elements 8, 13, and 14, and no responsibilities for program elements 9, 10, and 11.

In addition, the following actions were completed relative to CAR YM-91-041:

A new orientation class (January 1992) was developed and Los Alamos YMP personnel received training in 1992. This class describes personnel responsibilities, training procedures, and the overall YMP program.

LANL-YMP-QP-16.3, R0, "Deficiency Reports," issued 03/23/92. This procedure better reflects QARD requirements and eliminates over commitments of TWS-QAS-QP-15.2, R1, "Deficiency Reporting."

LANL-YMP-QP-04.4, R1, "Procurement of Commercial-Grade Items and Services," issued 11/15/91, and LANL-YMP-QP-04.5, R2, "Procurement of Noncommercial-Grade Items and Services," issued 12/23/91. These procedures eliminate over commitments and a section on bid evaluations was added to QP-04.5.

LANL-YMP-QP-02.5, R1, "Selection of Personnel," issued 09/30/91. Orientation and training requirements are better reflected in the procedure.

Based upon the corrective action implementation by Los Alamos to date, the evaluation of the Los Alamos program via external and internal audits, the transition of the Los Alamos QA program to the new QARD and the Los Alamos QAPP (no longer applicable), we request that consideration be given to closure of CAR YM-91-041.

If you have any questions, please contact Stephen L. Bolivar at FTS (505) 667-1868 or Michael J. Clevenger at FTS (505) 665-1454.

Sincerely,



Julie A. Canepa

JAC/kjp

Enclosure: a/s

Cy:  
S.L. Bolivar, EES-13, MS J521  
N.J. Brogan, SAIC, (Original)  
J.L. Day, LATA, MS M321  
QAS File (CAR YM-91-041), MS M321  
RPC File (2), MS M321  
TWS-EES-13 File, MS J521

Accept Amended Response

QAR

Date

11-30-93

Director YMP/QAD

Date

12/6/93

AUDIT No.	DATE	LOS ALAMOS GROUP	I/EA	CRITERIA TO BE AUDITED														
				1	2	3	4	5	6	7	8	12	13	15	16	17	18	
LANL-AR-91-001	02/04-06	EES-1/LV	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LANL-AR-91-002	02/06-08	EES-13/LV	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LANL-AR-91-03	03/11-15	EES-1	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LANL-AR-91-04	06/10-12	EES-4	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LANL-AR-91-05	05/06-10	EES-5	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LANL-AR-91-06	06/12-14	EES-16	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LANL-AR-91-07	07/29-08/02	EES-13	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LANL-AR-91-08	07/08-19	INC-4/7/11	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LANL-AR-91-09	_____	Combined with LANL-AR-91-08																
LANL-AR-91-10	11/21-22	OSU (EES-13/LV)	E	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LANL-AR-91-11	09/09-11	Stanford (INC)	E	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LANL-AR-91-12	09/11-13	LBL (INC)	E	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LANL-AR-91-13	10/03-04	UNM (EES-13/LV)	E	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LANL-AR-91-14	10/24-25	HydroGeoChem (INC)	E	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LANL-AR-91-15	11/05-07	LS-2	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LANL-AR-91-16	12/03-05	EES-13 (Verification Group)	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

1991 Los Alamos YMP Audit Schedule

## 1991 Los Alamos Surveys

Survey No.	Organization Surveyed	Date of Survey	Deficiency Reports Issued
LANL-SR-91-001	EES-13	04/15-17/91	None
LANL-SR-91-002	All LANL YMP Groups	05/21-22/91	None
LANL-SR-91-003	Lawrence Berkley Laboratory	05/21/91	None
LANL-SR-91-004	EES-13/LV	06/12/91	None
LANL-SR-91-005	EES-13	07/16/91	None
LANL-SR-91-006	EES-13/LV	09/23-27/91	None
LANL-SR-91-007	EES-13/LV	09/23-27/91	None
LANL-SR-91-008	Retain Instrument	10/10/91	None
LANL-SR-91-009	SIMCO	12/18/91 - 01/17/92	None

**1991 YMP Audits and Surveys of Los Alamos**

<u>Activity</u>	<u>Date</u>	<u>Results</u>
YMP-SR-91-009; Survey to determine compliance with selected QPs (Criteria 2, 6, 15, 17)	2/25-27/91	No findings
YMP Audit 91-03; All criteria	3/25-29/91	CAR-91-041 issued; 9 deficiencies fixed during audit
YMP-SR-91-014; Survey to determine compliance with selected QPs (Training and Design Information)	4/15-25/91	One deficiency fixed during survey
YMP-SR-91-022; Survey to evaluate criteria 16, 17 and 18	7/15-17/91	No findings
YMP-SR-91-038; Survey to evaluate compliance to criteria 5 and 6	9/17-19/91	One deficiency fixed during survey
YMP Mini Audit YMP-92-001; Criteria 4, 7, 13, and 12	10/2-5/91	3 CARS issued: YMP-92-002, and YMP-92-003



Internal Audit Schedule

Date	Audit Number & Los Alamos Group	Criteria to be Audited													
		1	2	3	4	5	6	7	8	12	13	15	16	17	18
2/10-21	LANL-AR-92-001 EES-13/LV	*	*	*	*	*	*	*	*	*	*			*	
3/23-4/3	LANL-AR-92-002 Volcanism	*	*	*	*	*	*	*	*	*	*			*	
3/24-25	LANL-AR-92-003 UNM	*	*	*	*	*	*	*	*	*	*			*	
3/26-27	LANL-AR-92-004 OSU	*	*	*	*	*	*	*	*	*	*			*	
3/30-31	LANL-AR-92-005 UC-Riverside	*	*	*	*	*	*	*	*	*	*			*	
5/11-15	LANL-AR-92-006 EES-5	*	*	*	*	*	*	*	*	*	*			*	
6/8-26	LANL-AR-92-007 EES-13	*	*	*	*	*	*	*	*	*	*	*	*	*	
12/14-18	LANL-AR-92-008 (INC-4/7/11)	*	*	*	*	*	*	*	*	*	*			*	
NA Canceled	LANL-AR-92-009 Stanford	*	*	*	*	*	*	*	*	*	*			*	
11/16-19	LANL-AR-92-010 Law. Berk. Lab.	*	*	*	*	*	*	*	*	*	*			*	
11/9-10	LANL-AR-92-011 HydroGeoChem	*	*	*	*	*	*	*	*	*	*			*	
12/7-11	LANL-AR-92-012 EES-15	*	*	*	*	*	*	*	*	*	*			*	
12/7-11	LANL-AR-92-013 EES-4	*	*	*	*	*	*	*	*	*	*			*	
NA Canceled	LANL-AR-92-014 LS-2	*	*	*	*	*	*	*	*	*	*			*	
NA Canceled	LANL-AR-92-015 Verification														*
5/6-8	LANL-AR-92-016 TCO	*	*	*	*	*	*	*	*	*	*			*	
12/7-11	LANL-AR-92-017 Software		*	*	*	*	*	*	*	*	*			*	

## Internal Survey Schedule

Survey No. and Organization Surveyed	Location of Organization Surveyed	Date of Survey	Deficiency Reports Issued
LANL-SR-92-001 (EES-13)	Los Alamos, NM	03/19-20/92	None
LANL-SR-90-002 (INC-9)	Los Alamos, NM	05/08/92 - 06/12/92	None
LANL-SR-90-003 (Mettler Instrument Corp.)	Hightstown, NJ	04/27/92 - 05/01/92	None
LANL-SR-90-004 (Rainin Instrument Co. Inc.)	Woburn, MASS	10/16/92	None

## 1992 DOE Audits and Surveys of the Los Alamos YMP

Activity	Date	Result
Audit YMP-92-012	March 17-20	Three deficiencies fixed during audit
Audit YMP-92-019	July 7-10	CAR-YM-92-057 issued. Four deficiencies fixed during audit.
Survey YMP-SR-92-006	July 9-14	CAR-YM-92-058 issued.
Audit YMP-93-02	November 2-5	CAR-YM-93-018 and -019 issued.



# **DOE YMP/QA Surveillance**

**Tuesday October 5**

## **Individuals Performing Surveillance:**

**John Martin**

**John Doyle**

## **PURPOSE:**

**"To determine if Los Alamos is requesting, receiving, storing, and tracking their YMP samples in an efficient and effective manner"**

## **PI's Selected**

**B. Carlos**

**S. Levy**

**D. Vaniman**

**D. Broxton**

**B. Crowe**

**( F. Perry and J. Poths)**

March 15, 1993

**OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
FY-93 QUALITY ASSURANCE AUDIT SCHEDULE  
Revision 2**

ORGANIZATION	LOCATION	NUMBER	TEAM LEADER	DATES	QA CRITERIA
OCRWM	Washington, DC /Las Vegas, NV	HQ-93-01	R. D. Brown	Completed	C1
USGS	Denver, CO	YMP-93-01	K. T. McFall	Completed	C2
EM-343	Germantown, MD	HQ-93-02	T. E. Rodgers	Completed	C1 & C2
LANL	Los Alamos, NM	YMP-93-02	F. J. Kratzinger	Completed	C2
M&O	Vienna, VA	HQ-93-03	R. D. Brown	Completed	C1 & C2
SNL	Albuquerque, NM	YMP-93-03	D. N. Harris	Completed	C1
LLNL	Livermore, CA	YMP-93-04	A. I. Arceo	Completed	C1
SAIC	Las Vegas, NV	YMP-93-05	R. B. Constable	Completed	C2
REECo	Las Vegas, NV	YMP-93-06	R. H. Klemens	Completed	C1
M&O	Las Vegas, NV	YMP-93-07	R. E. Powe	Completed	C1
YMPO	Las Vegas, NV	YMP-93-09	K. T. McFall	4/5-9/93	C1
PNL	Richland, WA	See Note #1	M. Horseman	4/6-8/93	C1 & C2
OCRWM	Washington, DC	See Note #1	F. H. Lentz	5/10-14/93	C2
USGS	Denver, CO	See Note #1	J. S. Martin	5/17-21/93	C1
LANL	Los Alamos, NM	See Note #1	T. J. Higgins	5/24-28/93	C1
EG&G	Las Vegas, NV	See Note #1	F. J. Kratzinger	6/7-11/1/93	C1 & C2
REECo	Las Vegas, NV	See Note #1	A. I. Areco	6/21-25/93	C2

11/2-5/92

CAR-041

11/12/91

VERIFICATION OF CORRECTIVE ACTION FOR CAR YM-91-041

This verification sheet is being issued to update the file for CAR YM-91-041. Amended response dated 8/20/91 indicated that two immediate corrective actions were to take place. These actions are, one to revise Procedure LANL-QAS-QP-04.5 and two to revise Procedure LANL-QAS-QP-02.5 to resolve deficiencies identified within subject CAR (see amended response for details). Verification of revision to LANL-QAS-QP-04.5 was accomplished as noted in Memorandum To File dated 10/11/91. Verification of revision to LANL-QAS-QP-02.5 was accomplished on 11/12/91. Review of this Procedure provides evidence that this procedure now provides for activities performed by personnel not assigned to YMP and assures appropriate training is accomplished.

Verification of other corrective action required by this CAR shall be accomplished subsequent to issuance of the new QARD.

QAR 

11-12-91