



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

WBS 1.2.9.3  
 QA

OCT 03 1991

Willis L. Clarke  
 Acting Technical Project Officer  
 for Yucca Mountain  
 Site Characterization Project  
 University of California  
 Lawrence Livermore National Laboratory  
 P.O. Box 5514, L-217  
 Livermore, CA 94551

**EVALUATION OF RESPONSES TO CORRECTIVE ACTION REQUESTS (CARS) YM-91-056 THROUGH YM-91-062 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) AUDIT YMP-91-01 OF LAWRENCE LIVERMORE NATIONAL LABORATORY**

The YMQAD staff has evaluated the responses to CARS YM-91-056 through YM-91-062. The responses have been determined to be satisfactory. Verification of completion of the corrective actions will be performed after the effective dates provided. Any extension to these dates must be requested in writing with appropriate justification prior to the date. Please send a copy of extension requests to Nita J. Brogan, Science Applications International Corporation, Las Vegas, Nevada.

If you have any questions, please contact either Catherine E. Hampton at (702) 794-7973 or FTS 544-7973, or Frank J. Kratzinger at (702) 794-7163 or FTS 544-7163.

*Catherine Hampton*  
 Donald G. Horton, Director  
 Yucca Mountain Quality Assurance Division

YMQAD:CEH-5923

Enclosures:  
 CARS YM-91-056 through YM-91-062

cc w/encls:  
 John Lee, SAN  
 K. R. Hooks, NRC, Washington, DC  
 S. W. Zimmerman, NWPO, Carson City, NV  
 R. E. Monks, LLNL, Livermore, CA  
 J. A. Blink, LLNL, Las Vegas, NV, M/S 527

cc w/o encls:  
 J. W. Gilray, NRC, Las Vegas, NV  
 N. J. Brogan, SAIC, Las Vegas, NV, 517/T-08

YMP-5

9111010251 911003  
 PDR WASTE PDR  
 WM-11

*102.7*  
*WM-11*  
*N403*  
*ADD: Ken Hooks*



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

CAR NO.: YM-91-056  
DATE: 06/07/91  
SHEET: 2 OF 2

CORRECTIVE ACTION REQUEST  
(continuation sheet)

6 Adverse Condition (continued)

SIP 6, Revision 0.6 Draft, dated 5/31/89, was issued for use without Project Office approval and quality affecting activity has begun. This deficiency was corrected during the audit by revising the QAPP via CN R 3-0-5.

2. LLNL QAPP 033-YMP-R 3, Revision 0, paragraph 1.3.1 states in part, "The LLNL-YMP conducts a technical review of the scientific investigation planning document. This review is performed by any qualified individual(s) other than those who developed the original planning document. In exceptional cases, the originator's immediate supervisor can perform the review if the supervisor is the only technically qualified individual, and if the need is individually documented and approved in advance with the concurrence of the LLNL-YMP QA Manager..."

No LLNL YMP procedure could be found that implements the requirement for individual advanced QA Manager approval to use the supervisor as a technical reviewer. In at least one instance, a scientific investigation planning document was technically reviewed by the supervisor with no individual advanced documented QA Manager approval. (Refer to Activity Plan DM-20-53b)

3. LLNL QAPP, 033-YMP-R 17, Revision 0, paragraph 10.2.2, Alternate Storage Facilities, states in part, "The following are acceptable alternatives to the criteria for a single storage facility:
- o Two-hour fire rated vault that meets National Fire Protection Association (NFPA) 232-1975.
  - o Two-hour fire rated Class B file containers that meet the requirements of NFPA 232-1975.
  - o Two-hour fire rated file room that meets the requirements of NFPA 232-1975..."

Contrary to the above, procedure 033-YMP-QP 17.0, Revision 2, paragraph 17.0.5.6(i), states that "Facilities in which records are stored are constructed and maintained by LLNL in accordance with LLNL policies and procedures. Records are stored in locked, one-hour fire resistant containers as deemed appropriate for fire protection by the LLNL Fire Chief."

## 1. Corrective Action for Deficient Condition

### A. Extent of Deficiency

Three examples were furnished in which the QAPP and the implementing procedures allegedly did not agree. LLNL acknowledges two examples as deficiencies.

For the third example, Livermore considers its one-hour fire safe to be single facility storage, but the auditor considered these safes to be temporary storage. The LLNL interpretation was documented in a proposed change to its QAPP (LLYMP9106156) which was subsequently disapproved by the Project Office.

Additional analysis for compatibility of the QAPP and Implementing Procedures is not deemed necessary at this time since the OCRWM QA requirements document is being revised and is nearly ready for issuance. Once the officially issued new requirements document is received, LLNL will review existing implementing procedures to assure compliance, and the results will be documented.

An impact analysis was conducted to determine if plans and procedures were approved without independent review. Record packages for all plans and procedures approved from May 1990 until June 1991 were reviewed to determine if an independent technical review was documented (LLYMP9108049). As a consequence of this analysis, LLNL has determined that Activity Plans D-20-27, D-20-53b, and E-20-18a require an independent review.

### B. Root Cause

The first example (Marking SIPs "Approved for Interim Use") was known to LLNL prior to the audit. The implementing procedure was changed to reflect the correct practice, as determined by the Project Leader and the Quality Assurance Manager. However, at the time of the change, LLNL could not change its QAPP without subjecting the entire QAPP to review against the new QARD. In December 1990, OQA determined that changes could be made without revision of the entire QAPP, and LLNL began applying the new policy. However, due to an oversight, the QAPP was not changed to be consistent with the implementing procedure for the deferred situation. This is a deficiency.

*Str dtd 9/6/91 - LLYMP9109001*

The second example (no implementing procedure requirement for an independent reviewer for procedures and plans) was not anticipated. The original implementing procedure had no requirement for independent review. Until recently, all documentation of reviews was kept in the records package, and enough reviewers were assigned such that an independent reviewer was likely. However, the CRF declined to accept some packages because each comment on annotated drafts was not separately initialed and dated. To resolve this problem, it was recently decided to retain only minimal review documentation, and only the approvers of the document were required to furnish review documentation. As a result of the YMPO audit, LLNL realizes that independent review was precluded by this change in three cases. This is a deficiency.

### C. Remedial Action

For the first example, the QAPP was changed to be consistent with the implementing procedure. For the second example, an impact analysis was conducted. In the three cases that an independent review was not documented, that review will be completed by August 30, 1991.

### D. Corrective Action to Prevent Recurrence

When the replacement for the OCRWM QARD is issued, LLNL will document how the requirements are met by LLNL-YMP implementing procedures. This action will be completed within 90 days of the formal issue of the OCRWM QA requirements document.

The QAPP requirement for individual advanced QA Manager approval of the use of a supervisor as a technical reviewer will be added to QP 2.1 prior to September 6, 1991.

The QAPP and implementing procedure will be changed prior to September 6, 1991 to document the QA status of the one-hour fire safes in the LLNL-YMP Local Records Center.

Response Approved:

W. L. O'Leary

Response Accepted:

A. Stone

QAR

9/20/91

Date

Response Accepted:

Cathy H. ... for

QQA

9-26-91

Date

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

14 CAR NO.: YM-91-057  
 DATE: 06/07/91  
 SHEET: 1 OF 1  
 QA  
 WBS No.: 1.2.9.3

**CORRECTIVE ACTION REQUEST**

1 Controlling Document LLNL 033-YMP-QP 18.0, Revision 2	2 Related Report No. Audit YMP-91-01
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3 Responsible Organization LLNL	4 Discussed With R. Hamati, R. Dann
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10 Response Due 20 days after issue	11 Responsibility for Corrective Action LLNL	12 Stop Work Order Y or N N
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5 Requirement:  
 QP 18.0, paragraph 18.0.5.6, states that an Adverse Finding Report (AFR) is the result of a procedural deficiency or noncompliance and the AFR is processed through Exhibit D.

6 Adverse Condition:  
 There is no procedure or instructions for implementing the AFR reporting system.

7 Recommended Action(s):  
 Identify the remedial action to be taken to correct the deficiency noted in block 6. Identify the cause of the condition and the planned corrective action to prevent recurrence.

8 Initiator James Blaylock <i>James Blaylock 6/13/91</i>	Date: <i>6/13/91</i>	9 Severity Level - 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/>	13 Approved By: <i>OQA Catherine Harpin</i>	Date: <i>6/13/91</i>
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15 Verification of Corrective Action:

16 Corrective Action Completed and Accepted: QAR _____ Date _____	17 Closure Approved By: OQA _____
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**1. Corrective Action for Deficient Condition**

**A. Extent of Deficiency**

N/A - not requested by QAO.

**B. Root Cause**

The current AFR and CAR systems at LLNL are not as clear as they could be. Instructions from the NCR procedure were used to complete the AFR form.

**C. Remedial Action**

The Adverse Finding Report system will be eliminated and replaced by the CAR. CARs will indicate whether the deficiency is significant. This action will be completed by September 6, 1991.

**D. Corrective Action to Prevent Recurrence**

The term Adverse Finding will be used to describe an audit or surveillance finding. QPs 16.0, 18.0, and 18.1 will be revised accordingly by September 6, 1991. Adverse findings will be resolved by the issuance of a Correction Action Report or a Nonconformance Report.

The cited condition in this CAR did not have an impact on quality affecting activities.

Response Approved: \_\_\_\_\_

*W. L. Leback*

Response Accepted: \_\_\_\_\_

*J. Blylock*

QAR

9/25/91  
Date

Response Accepted: \_\_\_\_\_

*Thomas Hampton*

OQA

9/26/91  
Date

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

14CAR NO.: YM-91-058  
DATE: 06/07/91  
SHEET: 1 OF 1  
QA  
WBS No.: 1.2.9.3

**CORRECTIVE ACTION REQUEST**

1 Controlling Document LLNL 033-YMP-QP 18.2, Revision 1	2 Related Report No. Audit YMP-91-01
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3 Responsible Organization LLNL	4 Discussed With R. Hamati
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10 Response Due 20 days after issue	11 Responsibility for Corrective Action LLNL	12 Stop Work Order Y or N N
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5 Requirement:  
QP 18.2, Revision 1, paragraph 18.2.4.2, establishes the basis for lead auditor qualification.

6 Adverse Condition:  
Contrary to the requirements of paragraph 18.2.4.2, a lead auditor certification exhibited the following shortcomings:  
1. The certification worksheet showed five (5) QA audits within three years prior to the date of certification - one audit was changed to a pre-award survey. Hence, only four (4) audits are valid.  
2. The perspective lead auditor participated in those audits as an auditor-in-training; a designation that is not reflected in the QP.  
3. The examination given as part of the lead auditor certification did not meet all the program requirements per CAR YM-91-062.

7 Recommended Action(s):  
Identify the remedial actions to be taken to correct the deficiencies noted in block 6. Identify the cause of the conditions and the planned corrective actions to prevent recurrence.

8 Initiator James Elaylock <i>James Elaylock</i> 6/13/91	Date: 6/13/91	9 Severity Level - 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/>	13 Approved By: <i>OQA Cathia Hampton</i> 10/13/91	Date: 10/13/91
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15 Verification of Corrective Action:

16 Corrective Action Completed and Accepted: QAR _____ Date _____	17 Closure Approved By: OQA _____
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**1. Corrective Action for Deficient Condition**

**A. Extent of Deficiency:**

N/A - not requested by QAO.

**B. Root Cause:**

1. LLNL was requested by YMPO on 9/27/90 to redefine Audit No. 90-18, performed during July 1990, to a Pre-Award Survey. This request occurred after the completion of the Lead Auditor certification on September 14, 1990. Audit 90-18 was included as one of the required five audits for the purpose of the Lead Auditor Certification since it was still considered to be an audit by the LLNL EE Department, the auditing agency.
2. The term Auditor-in-training was used without document definition.
3. Refer to CAR YM-91-062.

**C. Remedial Action**

1. Because of the concern identified in this CAR, another audit (Audit 90-07/90-08, the sixth in the series), conducted during September/October 1990, was used for Lead Auditor Qualification purposes as the "fifth" audit to replace Audit 90-18 which is in question. The Lead Auditor Qualification Worksheet was reissued by the LLNL-YMP QA Manager.

In addition, and because Audit 90-07/90-08 was performed by Mr. Hamati as a Lead Auditor, this audit was reviewed by the LLNL-YMP QA Manager and the results were validated. A memorandum to file documents this review (LLYMP9108056).

2. The "Auditor Participation Form" for Mr. Hamati has been corrected to use the word "Auditor" instead of "Auditor-in-Training", and this change was accompanied by adequate explanation.

3. Refer to CAR YM-91-062.

**D. Corrective Action to Prevent Recurrence**

1. None required.
2. The term Auditor-in-Training will not be used in the future.
3. Refer to CAR YM-91-062.

The cited condition in this CAR did not have an impact on quality affecting activities.

*Ltr dtd 8/12/91 - LLYMP9108058*

Response Approved: \_\_\_\_\_

*Ah J. Jardine*

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

CAR NO. YM-91-058

DATE: \_\_\_\_\_

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

**CORRECTIVE ACTION REQUEST**  
(continuation sheet)

Response Accepted: J. Blaylock 9/25/91  
QAR Date

Response Accepted: Arthur L. Hampton 9/25/91  
OQA Date

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

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

14 CAR NO.: YM-91-059  
DATE: 06/07/91  
SHEET: 1 OF 2  
QA  
WBS No.: 1.2.9.3

**CORRECTIVE ACTION REQUEST**

1 Controlling Document  
LLNL 033-YMP-QP 18.2, Revision 1

2 Related Report No.  
Audit YMP-91-01

3 Responsible Organization  
LLNL

4 Discussed With  
R. Hamati

10 Response Due  
20 days after issue

11 Responsibility for Corrective Action  
LLNL

12 Stop Work Order Y or N  
N

5 Requirement:  
QP 18.2, paragraph 18.2.4.1 requires the YMP QA Manager to qualify auditors and technical specialists.

6 Adverse Condition:  
Objective evidence of this qualification of technical specialist was not available.

7 Recommended Action(s):  
Identify the remedial action to be taken to correct the deficiency noted in block 6. Identify the cause of the condition and the planned corrective action to prevent recurrence.

8 Initiator  
James Blaylock  
*James Blaylock 6/13/91*

Date: *6/13/91*

9 Severity Level -  
1  2  3

13 Approved By:  
OQA *Adhemar T. [Signature]*

Date: *6/13/91*

15 Verification of Corrective Action:

16 Corrective Action Completed and Accepted:  
QAR \_\_\_\_\_ Date \_\_\_\_\_

17 Closure Approved By:  
OQA \_\_\_\_\_

**1. Corrective Action for Deficient Condition**

**A. Extent of Deficiency**

Only one FY 1990 audit involved technical specialists.

**B. Root Cause**

The acceptance of the qualifications of technical specialists was documented only on audit preparation checklists.

**C. Remedial Action**

The Project Leader or designee and the QA Manager will review and accept the qualifications of the technical specialists for Audit 90-01 and document the review in the technical specialists' files.

**D. Corrective Actions to Prevent Recurrence**

The Project Leader or designee and the QA Manager will review and accept the qualifications of technical specialists in the future. QA 18.2 will be changed to reflect this requirement by August 30, 1991. The activity of Section "C" above will also be completed by August 30, 1991.

The cited condition in this CAR did not have an impact on quality affecting activities.

Response Approved: P. J. Jardine

Response Accepted: J. Blaylock 9/25/91  
QAR Date

Response Accepted: Catherine Hampton 9/25/91  
OQA Date

Ltr dtd 8/12/91 - LLYMP9108058

**ORIGINAL**

**THIS IS A RED STAMP**

14CAR NO.: YM-91-060

DATE: 06/07/91

SHEET: 1 OF 1

QA

WBS No.: 1.2.9.3

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

**CORRECTIVE ACTION REQUEST**

1 Controlling Document  
LLNL 033-YMP-QP 18.0, Revision 2

2 Related Report No.  
Audit YMP-91-01

3 Responsible Organization  
LLNL

4 Discussed With  
K. Baumgarten, R. Hanati

10 Response Due  
20 days after issue

11 Responsibility for Corrective Action  
LLNL

12 Stop Work Order Y or N  
N

5 Requirement:  
QP 18.0, paragraph 18.0.5.6, requires audit findings be identified and processed as a Nonconformance Report or an Adverse Finding Report. Furthermore, if an Audit Finding Report is assessed to be a significant condition adverse to quality, the QA Manager initiates a Corrective Action Report in addition to the NCR or AFR.

6 Adverse Condition:  
Audit reports 91-03, 91-08, and 91-09 identify audit findings deemed to be significant, yet no CARs were initiated per paragraph 18.0.5.6 of procedure QP 18.0. Furthermore, audit reports contain numerous examples of findings which are written as observations and comments, e.g. Audit 90-04, Audit 90-06, and Audit 90-15.

7 Recommended Action(s):  
Identify the remedial action to be taken to correct the deficiency noted in block 6. Identify the cause of the condition and the planned corrective action to prevent recurrence.

8 Initiator  
James Blaylock  
*James Blaylock 6/13/91*

Date: 6/13/91

9 Severity Level -  
1  2  3

13 Approved By:  
OQA *[Signature]* 6/13/91

Date: 6/13/91

15 Verification of Corrective Action:

16 Corrective Action Completed and Accepted:  
QAR \_\_\_\_\_ Date \_\_\_\_\_

17 Closure Approved By:  
OQA \_\_\_\_\_

**1. Corrective Action for Deficient Condition**

**A. Extent of Deficiency**

AFRs were used from March 1991 until the present to document procedural deficiencies.

All audit reports for FY 1990 and FY 1991 were reviewed. We found all audit issues to have been appropriately categorized using the current LLNL definitions.

**B. Root Cause**

"Audit finding" and "Adverse Finding" were used interchangeably at LLNL.

Conflicting definitions of finding and observation are used at YMPO and LLNL.

**C. Remedial Action**

QP 16.0 and 18.0 will be changed by September 6, 1991 to clarify definitions and to consolidate the AFR and CAR systems.

Observations and comments in all FY 1990 and FY 1991 audits were reviewed. Those that were written as procedural deficiencies will be assessed, and correction of the deficiencies will be documented by September 6, 1991.

**D. Corrective Action to Prevent Recurrence**

Auditors have been reminded of the proper terminology and definitions for "adverse finding", "observation", and "comment".

Response Approved: *Felix Jordine*

*Ltr dtd 8/12/91 - LLYMP9108058*

Response Accepted: *J. Blaylock* *9/25/91*  
QAR Date

Response Accepted: *Anthony Thompson* *9/25/91*  
OQA Date

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

14CAR NO.: YM-91-061  
 DATE: 06/07/91  
 SHEET: 1 OF 1  
 QA  
 WBS No.: 1.2.9.3

**CORRECTIVE ACTION REQUEST**

1 Controlling Document LLNL 033-YMP-QP 18.0, Revision 2		2 Related Report No. Audit YMP-91-01	
3 Responsible Organization LLNL		4 Discussed With R. Hamati, R. Dann, K. Baumgarten	
10 Response Due 20 days after issue	11 Responsibility for Corrective Action LLNL	12 Stop Work Order Y or N N	
5 Requirement: QP 18.0, paragraph 18.0.5.1, states in part "...all activities, however, are audited at least annually,..."			
6 Adverse Condition: A review of the scope of internal audits for FY 90 fails to identify Criteria 5 and 13 as elements in any of the audits.			
7 Recommended Action(s): Identify the remedial action to be taken to correct the deficiency noted in block 6. Identify the cause of the condition and the planned corrective action to prevent recurrence.			
8 Initiator James Blaylock <i>James Blaylock</i> 6/13/91	Date: 6/13/91	9 Severity Level - 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/>	13 Approved By: OQA <i>Colin Hamati</i> 6/13/91
15 Verification of Corrective Action:			
16 Corrective Action Completed and Accepted: OAR _____ Date _____		17 Closure Approved By: OQA _____	

## 1. Corrective Action for Deficient Condition

### A. Extent of Deficiency

N/A - not requested by OQA.

### B. Root Cause

Audits are performed of specific Project tasks with the audit scope, plan, and checklist being prepared in consideration of the activities required, e.g., scientific investigation, design, test, use of material samples, etc.

A review of internal audits performed during FY 1990 identified several audits that verified the existence and implementation of appropriate procedures for Project activities consistent with the requirements of 033-YMP-R 5. These requirements are implemented by procedures 033-YMP-QP 2.1, 3.0, 3.4, 5.0, and 6.0. Although some audit plans or reports did not specifically reference criterion 5 in the audit scope, the appropriate quality procedures were referenced.

Activities related to Criterion 13 (Handling, Shipping, and Storage) and its implementing procedure (QP 13.0) were not specifically identified in audits performed during FY 1990. The root cause of this deficiency is inadequate planning during the preparation of the Audit Schedule.

### C. Remedial Action

#### Criterion 5:

A review of Several audits performed in FY 1990 identified several checklist items relative to activity plans, sequence of work activities, and applicable procedures, including Technical Implementing Procedures, and Scientific Notebooks, as follows:

Audit 90-01 Checklist items 3, 4, 6 & 9.

Audit 90-03 Checklist item 4, confirming the existence and control of QAPPs, QPs, TIPs and Administrative Procedures.

Audit 90-07/90-08 Checklist items 4, 5, 7 & 10.

The requirement for independent reviewers is addressed in CAR YM-91-056. The requirement for controlled distribution to YMPO QA has been added to QP 6.0. Controlled distribution of SIPs and TIPs to YMPO QA has historically occurred; distribution of Activity Plans is being made effective immediately.

*Ltr dated 8/12/91. LLYMP9108058*

Criterion 13:

An audit will be performed by the end of this fiscal year to verify compliance.

**D. Corrective Action to Prevent Recurrence**

The planning and scheduling of future audits will provide for a review of planned project activities and the audit of all applicable criteria at least annually. The list of all applicable Project Quality Criteria will be used during the development of each Audit Scope to assure that all criteria are considered. Where project activities may not require the audit of specific criteria, the criteria will be identified in the audit schedule as "Not Required".

Response Approved: \_\_\_\_\_

*F. J. Jordan*

## 1. Corrective Action for Deficient Condition

### A. Extent of Deficiency

N/A - not requested by OQA.

### B. Root Cause

Audits are performed of specific Project tasks with the audit scope, plan, and checklist being prepared in consideration of the activities required, e.g., scientific investigation, design, test, use of material samples, etc.

A review of internal audits performed during FY 1990 identified several audits that verified the existence and implementation of appropriate procedures for Project activities consistent with the requirements of 033-YMP-R 5. These requirements are implemented by procedures 033-YMP-QP 2.1, 3.0, 3.4, 5.0, and 6.0. Although some audit plans or reports did not specifically reference criterion 5 in the audit scope, the appropriate quality procedures were referenced.

Activities related to Criterion 13 (Handling, Shipping, and Storage) and its implementing procedure (QP 13.0) were not specifically identified in audits performed during FY 1990. The root cause of this deficiency is inadequate planning during the preparation of the Audit Schedule.

### C. Remedial Action

#### Criterion 5:

A review of Several audits performed in FY 1990 identified several checklist items relative to activity plans, sequence of work activities, and applicable procedures, including Technical Implementing Procedures, and Scientific Notebooks, as follows:

Audit 90-01 Checklist items 3, 4, 6 & 9.

Audit 90-03 Checklist item 4, confirming the existence and control of QAPPs, QPs, TIPs and Administrative Procedures.

Audit 90-07/90-08 Checklist items 4, 5, 7 & 10.

The requirement for independent reviewers is addressed in CAR YM-91-056. The requirement for controlled distribution to YMPO QA has been added to QP 6.0. Controlled distribution of SIPs and TIPs to YMPO QA has historically occurred; distribution of Activity Plans is being made effective immediately.

*str dtd 9/6/91 - LL YMP 9109001*

Criterion 13:

An audit will be performed by the end of this fiscal year to verify compliance.

**D. Corrective Action to Prevent Recurrence**

The planning and scheduling of future audits will provide for a review of planned project activities and the audit of all applicable criteria at least annually. This planning will consider the organizations and individuals responsible for the implementation of the quality affecting requirements. The list of all applicable Project Quality Criteria will be used during the development of each Audit Scope to assure that all criteria are considered. Where project activities may not require the audit of specific criteria, the criteria will be identified in the audit schedule as "Not Required".

Response Approved: W. L. Llane

Response Accepted: J. Binyard 9/25/91  
QAR Date

Response Accepted: Catherine Hampton 9/25/91  
OQA Date

**ORIGINAL**  
THIS IS A RED STAMP

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

14 CAR NO.: YN-91-062  
DATE: 06/07/91  
SHEET: 1 OF 1  
QA  
WBS No.: 1.2.9.3

**CORRECTIVE ACTION REQUEST**

1 Controlling Document  
LLNL 033-YMP-R Appendix F, Revision 0

2 Related Report No.  
Audit YMP-91-01

3 Responsible Organization  
LLNL

4 Discussed With  
R. Dann

10 Response Due  
20 days after issue

11 Responsibility for Corrective Action  
LLNL

12 Stop Work Order Y or N  
N

5 Requirement:  
033-YMP-R Appendix F requires the LLNL-YMP to retain copies of the objective evidence regarding the type or types and content of the lead auditor examination.

6 Adverse Condition:  
Objective evidence of the lead auditor examination is not maintained by LLNL-YMP. Furthermore, the written examination actually in use does not meet the requirements of 033-YMP-R Appendix F paragraph 1.2.4 and 1.4.2.

7 Recommended Action(s):  
Identify the remedial action to be taken to correct the deficiency noted in block 6. Identify the cause of the condition and the planned corrective action to prevent recurrence.

8 Initiator  
James Blaylock  
*James Blaylock* 6/13/91

Date: 6/13/91

9 Severity Level -  
1  2  3

13 Approved By:  
OQA *Colin Humpfer* 10/13/91

Date: 10/13/91

15 Verification of Corrective Action:

16 Corrective Action Completed and Accepted:  
QAR \_\_\_\_\_ Date \_\_\_\_\_

17 Closure Approved By:  
OQA \_\_\_\_\_

**1. Corrective Action for Deficient Condition**

**A. Extent of Deficiency**

N/A - not requested by QAO

**B. Root Cause**

1. The lead auditor examination was physically stored at the LLNL Quality Assurance Office (QAO) because of a confidentiality agreement between the LLNL-YMP and LLNL-QAO.
2. The lead auditor examination database addressed both general subject material applicable to the audit process as well as specific questions relating to the YMP. Some database questions did not accurately reflect current program requirements and terminology.

**C. Remedial Action**

1. The lead auditor examination data base questions are now maintained by the QA Manager.
2. The lead auditor examination database questions were reviewed by the LLNL QA Manager and updated to reflect current project requirements and terminology, and additional questions were added. In addition, editorial changes were made to improve the clarity of some of the questions. LLNL-YMP Lead Auditors participated in a review session and were given an additional examination which focused on YMP specific requirements. The Lead Auditor Examination database has been updated and a change notice, CN No. 18.2-1-1 has been issued stating that the LLNL-YMP QA Manager will review the examination to determine its adequacy.

**D. Corrective Action to Prevent Recurrence**

Adhere to the requirements through procedure QP 18.2.

The cited condition in this CAR did not have an impact on quality affecting activities.

*Sta dtd 8/12/91 - LLYM P9108058*

Response Approved: *John J. Jardine*

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

CAR NO. YM-91-062

DATE: \_\_\_\_\_

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

**CORRECTIVE ACTION REQUEST**  
(continuation sheet)

Response Accepted:

J. Blaylock

QAR

9/25/91

Date

Response Accepted:

Catherine Hampton

OQA

9/25/91

Date