



**Department of Energy**  
**Yucca Mountain Site Characterization**  
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WBS 1.2.11  
 QA: N/A

NOV 15 1993

Willis L. Clarke  
 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

VERIFICATION OF CORRECTIVE ACTION AND CLOSURE OF CORRECTIVE ACTION REQUEST  
 (CAR) YM-93-085 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION  
 (YMQAD) AUDIT YMP-93-14 OF LAWRENCE LIVERMORE NATIONAL LABORATORY (SCP: N/A)

The YMQAD staff has verified the corrective action to CAR YM-93-085 and determined the results to be 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 E. Therien at (702) 794-7862.

*Catherine Hampton for*

Richard E. Spence, Director  
 Yucca Mountain Quality Assurance Division

YMQAD:RBC-657

Enclosure:  
 CAR YM-93-085

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

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 PDR WASTE  
 WM-11 PDR

*ADD: Ken Hooks*

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

8 CAR NO.: YM-93-085  
DATE: 7/29/93  
SHEET: 1 OF 1  
QA

**CORRECTIVE ACTION REQUEST**

1 Controlling Document  
Audit 033-YMP-QP 18.0, Revision 5

2 Related Report No.  
YMP-93-14

3 Responsible Organization  
Lawrence Livermore National Laboratory

4 Discussed With  
Royce Monks/Ray Hamati

5 Requirement:  
Paragraph 18.0.5.1.3 states in part,  
"Subcontractor audits shall be performed on a triennial basis when supplemented by annual evaluations. Subcontractor quality assurance programs will be evaluated on at least an annual basis to determine if an audit is necessary, and this evaluation shall be documented...."

6 Adverse Condition:  
Contrary to the cited requirement, LLNL has neither conducted an audit nor completed an annual evaluation of Pacific Northwest Laboratory (spent fuel waste form testing) or Argonne National Laboratory (defense waste processing facility glass) since September 18-19, 1991 and September 25-26, 1991 respectively.

9 Does a significant condition adverse to quality exist? Yes \_\_\_ No X  
If Yes, Circle One: A B C

10 Does a stop work condition exist? Yes \_\_\_ No X; If Yes - Attach copy of SWO  
If Yes, Circle One: A B C D

11 Response Due Date:  
20 working days from issuance

12 Required Actions:  Remedial  Extent of Deficiency  Preclude Recurrence  Root Cause Determination

13 Recommended Actions:  
1. Perform evaluation of subcontractor's work to determine any impacts on the quality of services performed, as appropriate.  
2. Perform annual evaluations and document accordingly.  
3. Provide letter of re-instruction to appropriate personnel.

7 Initiator  
John E. Therien *[Signature]* Date 7/30/93

14 Issuance Approved by:  
QADD *[Signature]* Date 8/3/93

15 Response Accepted  
QAR Date

16 Response Accepted  
QADD Date

17 Amended Response Accepted  
QAR *[Signature]* Date 9/30/93

18 Amended Response Accepted  
QADD *[Signature]* Date 10/11/93

19 Corrective Actions Verified  
QAR *[Signature]* Date 11/8/93

20 Closure Approved by:  
QADD *[Signature]* Date 11/15/93

1. Corrective Action Response for CAR #YM-93-085

A. Remedial Action:

Actions will be taken to determine methods and extent of LLNL YMP evaluation of its subcontractors (Pacific Northwest Laboratory and Argonne National Laboratory) quality assurance program and implementation. A statement will be prepared documenting any impact on the quality of services performed by these subcontractors.

Responsible Individual: Royce E. Monks

Completion Date: September 30, 1993

B. Investigative Action:

As these two laboratories are the only ones currently performing quality-affecting subcontracting services for the YMP and since past history indicates that yearly audits were performed, no additional investigative actions are anticipated.

Responsible Individual: Royce E. Monks

Completion Date: September 30, 1993

C. Root Cause Determination:

The root cause for this condition was a procedural change in 033-YMP-QP 18.0 which allowed the removal of these Laboratories from the yearly audit schedule, providing for an evaluation and audit need determination. This resulted in an oversight of not documenting any evaluation and not having the requirement flagged on the audit schedule.

Responsible Individual: Royce E. Monks

Completion Date: September 30, 1993

D. Corrective Action:

Procedure 033-YMP-QP 18.0 will be changed to require that yearly evaluations and triennial audits of subcontractors appear as action items on the annual audit schedule for the project.

Responsible Individual: Royce E. Monks

Completion Date: September 30, 1993

W. L. Clarke 8/26/93

Willis L. Clarke Date

Technical Project Officer

Yucca Mountain Project

Royce E. Monks

Royce E. Monks Date

Quality Assurance Manager

Yucca Mountain Project



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

CAR NO. YM-93-085  
DATE: \_\_\_\_\_  
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QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

**VERIFICATION OF CORRECTIVE ACTION REQUEST (CAR) YM-93-085**

Verified that actions and associated documentation regarding the evaluation of PNL and ANL have been completed. LLNL procedure 033-YMP-QP 18.0 has been revised to address yearly evaluations and triennial audits of subcontractors. The individuals who are responsible for annual evaluations and the performance of subcontractor audits are Royce Monks and Ray Hamati. Hamati authored the revision to the procedure and Monks approved the procedure, thus indicating that responsible personnel are cognizant of the contents of the revision.

  
\_\_\_\_\_  
Signature

Date 11/8/93