

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

QUALITY ASSURANCE AUDIT PLAN

FOR AUDIT YM-AR-95-06

OF

LOS ALAMOS NATIONAL LABORATORY

LOS ALAMOS, NEW MEXICO

JANUARY 9 THROUGH 13, 1995

Prepared by: _____


Thomas J. Higgins
Audit Team Leader

Yucca Mountain Quality Assurance Division

Date: _____

12-1-94

Approved by: _____


Donald G. Horton
Director
Office of Quality Assurance

Date: _____

12/6/94

1.0 SCOPE

This audit of Los Alamos National Laboratory (LANL) will be conducted by a team of auditors and a technical specialist from the Yucca Mountain Quality Assurance Division (YMQAD). The audit will consist a limited scope audit of four Quality Assurance (QA) program elements and a performance based audit of a technical product as specified below.

The limited scope programmatic audit will evaluate general compliance to LANL's procedures that implement QA Program Elements 4.0, "Procurement Document Control;" 7.0, "Control of Purchased Items and Services;" 15.0, "Nonconformances;" and 17.0, "Quality Assurance Records."

The performance based audit will focus on a selected product and processes related to LANL activity supporting Work Breakdown Structure (WBS) 1.2.3.4.1, and will be open to all applicable QA program elements.

Finally, the scheduled performance based audit of products resulting from work described by WBS 1.2.3.2.1.1 has been deferred to a future audit when those products will have been completed..

2.0 AUDIT SCHEDULE

Pre-audit Team/Observer Meeting	8:30 a.m., January 9, 1995 Los Alamos, New Mexico
Pre-audit Conference	9:15 a.m., January 9, 1995 Los Alamos, New Mexico
Audit Activities	10:00 a.m. to 4:00 p.m. January 9, 1995
	8:00 a.m. to 4:00 p.m. January 10 through 12, 1995
	8:00 a.m. to 11:45 a.m. January 13, 1995
Post-audit Conference	1:00 p.m., January 13, 1995 Los Alamos, New Mexico

There will be a daily Audit Team/Observer meeting at 4:00 p.m. to review audit progress. Beginning on Tuesday, January 10, 1995, there will also be a daily Audit Team Leader (ATL)/Observer/LANL management meeting at 8:15 a.m. to communicate audit progress, to discuss potential deficiencies and to establish needed liaison.

3.0 REQUIREMENTS TO BE AUDITED AND APPLICABLE REFERENCES

The requirements to be audited will be contained in programmatic and performance based checklists. This checklist will be developed from LANL's approved and issued QA program procedures, study plans, technical procedures and the performance objectives established and agreed upon with LANL.

The conduct of the audit will be guided by the documents (latest revision) listed below:

- Quality Assurance Procedure (QAP) 18.2, "Audit Program"
- QAP 16.1, "Corrective Action"

4.0 ACTIVITIES TO BE AUDITED

The following QA program elements will be audited to determine the degree of compliance to LANL's implementing procedures:

- 4.0 Procurement Document Control
- 7.0 Control of Purchased Items and Services
- 15.0 Nonconformances
- 17.0 Quality Assurance Records

The audit team will also conduct a performance based audit of activity supporting WBS 1.2.3.4.1, Geochemistry Investigations. The specific product chosen as the focal point for this portion of the audit is the report, "Utilization of Autoradiography to Study the Effects of Fracture Coatings on Radionuclide Transport," by D. Vaniman et. al. which is a product of WBS 1.2.3.4.1.4, Radionuclide Retardation by Dispersive, Diffusive, and Advective Processes.

A performance based audit evaluates products and activities to determine the degree to which they meet program requirements and management commitments and expectations. This evaluation of process effectiveness and product acceptability will be based upon:

- Satisfactory completion of the critical process steps
- Acceptable end product
- Documentation that substantiates products quality
- Performance of trained and qualified personnel
- Implementation of applicable QA program elements

5.0 AUDIT TEAM MEMBERS

Thomas J. Higgins, YMQAD, Las Vegas, Nevada, ATL
Sandra D. Bates, YMQAD, Las Vegas, Nevada, Auditor
Robert B. Constable, U.S. Department of Energy, Las Vegas, Nevada, Auditor
Kenneth T. McFall, YMQAD, Las Vegas, Nevada, Auditor
Paul L. Cloke, Management and Operating Contractor/Science Applications
International Corporation, Las Vegas, Nevada, Technical Specialist

6.0 AUDIT CHECKLISTS

The following checklists will be used during the audit:

YM-AR-95-06-01, Programmatic Checklist
YM-AR-95-06-02, Performance Based Checklist