

**OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT**

**QUALITY ASSURANCE AUDIT PLAN**

**FOR AUDIT SNL-ARP-97-02**

**OF THE**

**CIVILIAN RADIOACTIVE WASTE MANAGEMENT SYSTEM  
MANAGEMENT AND OPERATING CONTRACTOR**

**AT**

**SANDIA NATIONAL LABORATORIES**

**ALBUQUERQUE, NEW MEXICO**

**OCTOBER 28 THROUGH 31, 1996**

Prepared by: *Kristi A. Hodges* Date: 9/19/96  
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Yucca Mountain Quality Assurance Division

Approved by: *Donald G. Horton* Date: 9/24/96  
Donald G. Horton  
Director  
Office of Quality Assurance

## 1.0 SCOPE

This performance-based audit of Sandia National Laboratories (SNL) will be conducted by a team of auditors from the Yucca Mountain Quality Assurance Division (YMQAD) and a technical specialist from the U.S. Geological Survey (USGS). The audit will evaluate the effectiveness of implementation of SNL Quality Assurance (QA) program requirements for the selected studies identified in Section 4.0 of this plan.

## 2.0 AUDIT SCHEDULE

Preaudit Team/Observer Meeting	8:15 a.m., October 28, 1996 Albuquerque, New Mexico
Preaudit Conference	9:00 a.m., October 28, 1996 Albuquerque, New Mexico
Audit Activities	10:00 a.m. - 4:00 p.m. October 28, 1996
	8:00 a.m. - 4:00 p.m. October 29-30, 1996
	8:00 a.m. to 10:00 a.m. October 31, 1996
Postaudit Conference	11:00 a.m., October 31, 1996 Albuquerque, New Mexico

There will be a daily YMQAD Audit Team/Observer meeting at 4:00 p.m. to review audit progress. Beginning on Tuesday, October 29, 1996, there will also be a daily Audit Team Leader (ATL)/Observer/SNL management meeting at 8:00 a.m. to communicate audit progress, to discuss potential deficiencies, and to establish needed liaison. Both daily meetings will be held at locations provided by SNL.

## 3.0 REQUIREMENTS TO BE AUDITED AND APPLICABLE REFERENCES

The requirements to be audited will be contained in performance-based and technical checklists. These checklists will be developed from the latest available revision of SNL's approved and issued QA program procedures, study plans, technical procedures, and the performance objectives established and agreed upon with SNL management.

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

- Quality Assurance Procedure QAP 18.2, "Internal Audit Program"
- Administrative Procedure (AP)-16.1Q, "Performance/Deficiency Reporting"
- AP-16.2Q, "Corrective Action and Stop Work"

#### **4.0 ACTIVITIES TO BE AUDITED**

The audit team will evaluate implementation of QA program requirements with regards to the studies and products associated with the Work Breakdown Structure numbers listed below:

- 1.2.5.4.1 - "Total Performance Assessment"
- 1.2.5.4.4 - "Site Performance Assessment"

A performance-based audit evaluates products and associated processes 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 results and quality of the end product;
- Documentation that substantiates quality of product;
- Performance of trained and qualified personnel; and
- Implementation of applicable QA program elements.

#### **5.0 AUDIT TEAM MEMBERS**

Kristi A. Hodges, YMQAD, Las Vegas, Nevada, ATL  
James E. Clark, YMQAD, Las Vegas, Nevada, ATL in Training  
Stephen D. Harris, YMQAD, Las Vegas, Nevada, Auditor  
Dwight T. Hoxie, USGS, Las Vegas, Nevada, Technical Specialist

#### **6.0 AUDIT CHECKLIST**

The following checklists will be used during the audit:

SNL-ARP-97-02-01, Performance-Based Checklist  
SNL-ARP-97-02-02, Technical Checklist