

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
QUALITY ASSURANCE AUDIT PLAN  
FOR AUDIT YM-ARP-95-19  
OF  
SANDIA NATIONAL LABORATORIES  
ALBUQUERQUE, NEW MEXICO  
AUGUST 21 THROUGH 23, 1995  
AND  
CIVILIAN RADIOACTIVE WASTE MANAGEMENT SYSTEM AND  
MANAGEMENT AND OPERATING CONTRACTOR  
LAS VEGAS, NEVADA  
AUGUST 24 THROUGH 25, 1995

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Approved by: Donald G. Horton Date: 7/25/95  
Donald G. Horton  
Director  
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1.0 SCOPE

This performance based audit of the Sandia National Laboratories (SNL) and Civilian Radioactive Waste Management System Management and Operating (CRWMS/M&O) Contractor will be conducted by a team of auditors from Yucca Mountain Quality Assurance Division (YMQAD). The audit team will evaluate the effectiveness of selected processes, and the quality of resultant end products identified in Section 4.0 of this plan associated with the generation of SNL report "Design Support Analyses: North Ramp Design Package 2C" and the utilization of the analysis by the CRWMS/M&O as design input for the north ramp.

2.0 TENTATIVE AUDIT SCHEDULE

Sandia National Laboratory

Pre-audit Team/Observer Meeting	8:00 a.m., August 21, 1995 Albuquerque, New Mexico
Pre-audit Conference	9:00 a.m., August 21 1995 Albuquerque, New Mexico
Audit Activities	10:00 a.m. to 4:00 p.m. August 21, 1995
	8:00 a.m. to 4:00 p.m. August 22, 1995
	8:00 a.m. to 11:30 a.m. August 23, 1995
Post-audit conference	1:00 p.m., August 23, 1995 Albuquerque, New Mexico

Civilian Radioactive Waste Management System and  
Management and Operating Contractor

Pre-audit Conference	8:30 a.m., August 24, 1995 Las Vegas, Nevada
Audit Activities	9:00 a.m. to 4:00 p.m. August 24, 1995
	8:00 a.m. to 2:00 p.m. August 25, 1995
Post-audit conference	3:00 p.m., August 25, 1995 Las Vegas, Nevada

An Audit Team/Observer meeting will be held at 4:00 p.m. daily to review audit progress. On Tuesday, August 22, and Wednesday August 23, 1995 there will be a daily Audit Team Leader (ATL) Observer/SNL management meeting at 8:15 a.m. to communicate audit progress, discuss potential deficiencies and establish needed liaison. Friday, August 25, 1995 an ATL/Observer CRWMS/M&O management meeting will be held at 8:15 a.m. to communicate audit progress, discuss potential deficiencies and establish needed liaison.

### **3.0 REQUIREMENTS TO BE AUDITED AND APPLICABLE REFERENCES**

The requirements to be audited will be contained in a performance based checklist. This checklist will be developed from SNLs and CRWMS/M&Os approved and issued Quality Assurance (QA) Program procedures, technical procedures, Work Agreements and the performance objectives established and agreed upon with SNL and CRWMS/M&O. The conduct of the audit will be in accordance with the documents (latest revision) listed below:

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

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

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 Work Breakdown Structure (WBS) 1.2.4.7, Subsurface License Application Design (previously WBS 1.2.4.2.3.2 Design Analysis) process effectiveness and product acceptability will be based upon the following elements for the organizations to be audited:

#### **SNL**

- Implementation of Work Agreements
- Training of Personnel
- Qualifications of Personnel
- Design Support Analyses
- Design Support Analyses Review
- Design Support Analyses Submittal

#### **CRWMS/M&O**

- Provide technical direction
- Design Control Process
- Technical Documents
- Training
- Designs Verified
- Specifications

- Design Analysis
- Drawings
- To Be Verified and To Be Determined Designations

**5.0 AUDIT TEAM MEMBERS**

Richard L. Weeks, YMQAD, Las Vegas, NV, ATL  
John Pelletier, YMQAD, Las Vegas, NV, Auditor  
Frank C. Tsai, CRWMS/M&O, Las Vegas, NV, Technical Specialist

**6.0 AUDIT CHECKLIST**

The following performance based checklist will be used during the audit:

YM-ARP-95-19