OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT QUALITY ASSURANCE AUDIT PLAN

FOR AUDIT LLNL-ARP-97-20

OF THE

CIVILIAN RADIOACTIVE WASTE MANAGEMENT SYSTEM MANAGEMENT AND OPERATING CONTRACTOR

AT

LAWRENCE LIVERMORE NATIONAL LABORATORY

LIVERMORE, CALIFORNIA

AND

LAS VEGAS, NEVADA

SEPTEMBER 15-19, 1997

Prepared by: James E. Clark Date: 8/7/97

Audit Team Leader

Office of Quality Assurance

Approved by: Date: 8/12/97

Fr Donald G. Horton

Director

Office of Quality Assurance

1.0 SCOPE

This performance-based audit of the Civilian Radioactive Waste Management System Management & Operating Contractor (CRWMS M&O) will be conducted by a team of auditors representing the Office of Quality Assurance (OQA) and one technical specialist from the CRWMS. The audit will evaluate the effectiveness of implementation of Quality Assurance (QA) program requirements for selected activities that will result in the products identified in Section 4.0 of this plan.

2.0 AUDIT SCHEDULE

The audited activities will include work being performed at the Lawrence Livermore National Laboratory (LLNL) in Livermore, California, and work being performed at the CRWMS M&O offices in Las Vegas, Nevada. The audit will be performed September 15-19, 1997.

Pre-Audit Team/Observer Meeting

8:00 a.m.

September 15, 1997 Livermore, California

Pre-Audit Conference

9:00 a.m.

September 15, 1997 Livermore, California

Audit Activities

10:00 a.m. to 4:00 p.m. September 15, 1997 Livermore, California

8:00 a.m. to 4:00 p.m. September 16, 1997 Livermore, California

8:00 a.m. to 10:00 a.m. September 17, 1997 Livermore, California

Preliminary Closeout

11:00 a.m.

September 17, 1997 Livermore, California **Audit Activities**

8:00 a.m. to 4:00 p.m. September 18, 1997 Las Vegas, Nevada

8:00 a.m. to 2:00 p.m. September 19, 1997 Las Vegas, Nevada

Post-Audit Conference

3:00 p.m. September 19, 1997 Las Vegas, Nevada

There will be a daily Audit Team Leader (ATL)/Observer meeting at 4:00 p.m. to review audit progress. Beginning on Tuesday, September 16, 1997 (with the exception of Thursday, September 18, 1997), there will also be a daily ATL/Observer/CRWMS M&O 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 performance-based checklists. These checklists will be developed from the CRWMS M&O's approved and issued QA program procedures, study plans, technical procedures, and the performance objectives established and agreed upon with the CRWMS M&O.

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

- Quality Assurance Procedure 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 the QA Program requirements in the development of two reports due as deliverables in Work Breakdown Structure 1.2.3.12.5, "Characteristics and Effects of Man-Made Materials and Chemicals."

The reports will be evaluated for the attributes listed below, as appropriate for the activity:

- 1. Planning
- 2. Data Collection/Selection
- 3. Data Analysis/Integration
- 4. Report Development
- 5. Report Reviews

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 results and quality of the end product
- Documentation that substantiates quality of products
- Performance of trained and qualified personnel
- Implementation of applicable QA Program elements

5.0 AUDIT TEAM MEMBERS

James E. Clark, OQA, Las Vegas, Nevada, ATL Michael Malone, OQA, Las Vegas, Nevada, Auditor Chao-Hsiung Tung, M&O, Las Vegas, Nevada, Technical Specialist

6.0 AUDIT CHECKLIST

The following checklists will be used during the audit:

LLNL-ARP-97-20-01, Performance-Based Checklist LLNL-ARP-97-20-02, Technical Checklist