

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

QUALITY ASSURANCE AUDIT PLAN

FOR AUDIT YMP-93-08

OF

RAYTHEON SERVICES NEVADA

LAS VEGAS, NEVADA

MARCH 15-19, 1993

Prepared by:

Neil D. Cox

Date:

Jan. 27, 1993

Neil D. Cox
Audit Team Leader
Yucca Mountain Quality Assurance Division

Approved by:

RC Spence For

Date:

2/1/93

Donald G. Horton
Director
Office of Quality Assurance

1.0 SCOPE

This audit, to be performed by a team of auditors from the Yucca Mountain Quality Assurance Division (YMQAD), will evaluate the Raytheon Services Nevada (RSN) Quality Assurance (QA) Program to determine whether it meets the requirements and commitments imposed by the Office of Civilian Radioactive Waste Management (OCRWM). This will be done by verifying implementation and effectiveness of the system in place, as well as verifying compliance with requirements.

In addition to a follow-up on any open Corrective Action Requests (CARs), a representative sample of deficiencies identified during previous QA audits and surveillances of RSN, will be included in the scope of this audit to determine the effectiveness of RSN corrective actions.

The programmatic elements and technical elements to be audited, as well as those programmatic elements not included in this audit, are identified in Section 4.0 of this plan.

2.0 AUDIT SCHEDULE

| | |
|----------------------------------|---|
| Pre-Audit Team/Observers Meeting | 8:00 a.m., March 15, 1993, Las Vegas, Nevada |
| Pre-Audit Conference | 8:30 a.m., March 15, 1993, Las Vegas, Nevada |
| Audit Activities | 9:30 a.m. to 4:00 p.m., March 15, 1993 |
| Audit Activities | 8:00 a.m. to 4:00 p.m., March 16 - 18, 1993 |
| Audit Activities | 8:00 a.m. to 11:00 a.m., March 19, 1993 |
| Post-Audit Conference | 1:00 p.m., March 19, 1993, Las Vegas, Nevada |

There will be daily YMQAD audit team/observer caucus meetings starting at 4:15 p.m. in the YMQAD offices and also daily audit team/observer/RSN meetings starting at 8:00 a.m. to 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 the programmatic and technical checklists. These checklists will be developed from the latest available revision of the following documents:

- o RSN Quality Assurance Program Description (QAPD) for the Yucca Mountain Site Characterization Project (YMP), QAPD-002, Revision 0, February 13, 1991 and implementing procedures
- o Applicable Yucca Mountain Site Characterization Project Office Administrative Procedures-Quality

The conduct of the audit will be guided by the documents listed below:

- o Quality Assurance Administrative Procedure (QAAP) 18.2, Revision 5, "Audit Program"
- o QAAP 16.1, Revision 4, "Corrective Action Requests"

4.0 ACTIVITIES TO BE AUDITED

Programmatic Elements:

- 3.0 Design Control
- 4.0 Procurement Document Control
- 7.0 Control of Purchased Items and Services
- 10.0 Inspection
- 15.0 Control of Nonconforming Items
- 19.0 Computer Software

The following programmatic elements were considered during development of this audit scope and determined to be not applicable, since RSN has no activities for which these elements apply:

- 8.0 Identification and Control of Materials, Parts, Components and Samples
- 11.0 Test Control
- 14.0 Inspection, Test, and Operating Status
- 20.0 Scientific Investigations

Technical Areas

| <u>WBS Number</u> | <u>Title</u> |
|-------------------|---|
| 1.2.3 | Design of two borehole pads and access roads |
| 1.2.3 | C-well Complex discharge pipeline (classification status) |
| 1.2.6 | ESF Design - North Portal starter tunnel - resize |
| 1.2.6 | Power line design - 69 KV (classification status) |

If the audit team identifies a need to verify additional programmatic/technical areas during the audit, they will be added to the audit scope and verified accordingly.

5.0 AUDIT TEAM MEMBERS

Neil D. Cox, Audit Team Leader, Science Applications International Corporation (SAIC)/YMQAD, Las Vegas, Nevada

Stephen R. Dana, Auditor, SAIC/YMQAD, Las Vegas, Nevada

Donald J. Harris, Auditor, SAIC/YMQAD, Las Vegas, Nevada

Thomas J. Higgins, Auditor, SAIC/YMQAD, Las Vegas, Nevada

John E. Therien, Auditor, SAIC/YMQAD, Las Vegas, Nevada

Richard L. Weeks, Lead Technical Specialist, SAIC/YMQAD, Las Vegas, Nevada

6.0 AUDIT CHECKLISTS

YMP-93-08-01, Programmatic Checklist

YMP-93-08-02, Technical Checklist