

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

QUALITY ASSURANCE AUDIT PLAN

FOR AUDIT NO. YMP-92-18

OF

RAYTHEON SERVICES NEVADA

LAS VEGAS, NEVADA

JUNE 22 THROUGH 26, 1992

Prepared by: Kenneth T. McFall Date: 5/12/92
Kenneth T. McFall
Audit Team Leader
Yucca Mountain Quality Assurance Division

Approved by: D. G. Horton For Date: 5/4/92
Donald G. Horton
Director
Office of Quality Assurance

1.0 SCOPE

This limited scope audit, 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 the follow-up on open Corrective Action Requests (CARs), a representative sample of discrepancies 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 to be audited during this limited scope audit are identified in Section 4.0 of this plan.

2.0 AUDIT SCHEDULE

Pre-audit Team/Observer Meeting	8:00 a.m., June 22, 1992 Las Vegas, Nevada
Pre-audit Conference	9:00 a.m., June 22, 1992 Las Vegas, Nevada
Audit Activities	10:00 a.m. to 4:00 p.m. June 22, 1992
	8:00 a.m. to 4:00 p.m. June 23 - 25, 1992
	8:00 a.m. to 11:30 a.m. June 26, 1992
Daily Team Debriefing	4:00 p.m., June 22 - 25, 1992
Post-audit Conference	2:00 p.m., June 26, 1992 Las Vegas, Nevada

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.

RSN Quality Assurance Program Description Document and current Interim Change Notices (ICNs)

- o Applicable Yucca Mountain Site Characterization Project Office Administrative Procedures - Quality.
- o RSN implementing procedures and current ICNs.

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"
- o Yucca Mountain site Characterization Project Audit Observer Inquiry
- o Policy for Participation of State, Tribal and U.S. Nuclear Regulatory Commission Representatives as Observers on U.S. Department of Energy audits, dated July 14, 1987.

4.0 ACTIVITIES TO BE AUDITED

Programmatic Elements

RSN activities associated with the following QA Program elements will be audited:

- 3.0 Design Control
- 5.0 Instructions, Procedures and Drawings
- 6.0 Document Control
- 19.0 Software Quality Assurance

Program Element 17.0, Quality Assurance Records, will be reviewed on a limited basis since all functions of this element except those of record sources have been taken over by the Management and Operations contractor.

Program Element 20.0, Scientific Investigations, is not applicable to this audit since RSN performs no scientific investigations.

In addition to the above stated program elements, Program Element 2.0, Quality Assurance Organization, will undergo a limited examination to verify compliance with the requirements imposed by Department of Energy System 80, reference letter from C. P. Gertz, YMP:CLC-511.

Technical Areas

The technical areas that will be examined on this audit center on engineering design. The specific products to be reviewed include the following:

- o Drawings
- o Specifications
- o Calculations

Evaluation of the above activities by Technical Specialists will include a determination of adequacy in the following areas:

1. Technical qualifications of engineering and design personnel.
2. Understanding of procedural requirements as they pertain to engineering and design activities.
3. Adequacy of technical procedures.
4. Development of work plans supporting Site Characterization.

5.0 AUDIT TEAM MEMBERS

Kenneth T. McFall, Science Applications International Corporation (SAIC)/YMQAD,
Las Vegas, NV, Audit Team Leader

Neil D. Cox, SAIC/YMQAD, Las Vegas, NV, Auditor

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

Gerard Heaney, SAIC/YMQAD, Las Vegas, NV, Auditor

Richard L. Maudlin, MAC Technical Services/YMQAD, Las Vegas, NV, Auditor

Cynthia H. Prater, SAIC/YMQAD, Las Vegas, NV, Auditor

Keith J. Lobo, SAIC/YMQAD, Las Vegas, NV, Technical Specialist

William R. Sublette, SAIC/YMQAD, Las Vegas, NV, Technical Specialist

6.0 AUDIT CHECKLISTS

YMP-92-18-01, Programmatic Checklist, will be used during the programmatic portions of this audit.

YMP-92-18-02, Technical Checklist, will be used for the examination of technical areas during this audit.