OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

QUALITY ASSURANCE AUDIT PLAN

FOR AUDIT YM-ARP-96-09

OF THE

CIVILIAN RADIOACTIVE WASTE MANAGEMENT SYSTEM MANAGEMENT AND OPERATING CONTRACTOR

AT

KIEWIT/PARSONS BRINCKERHOFF

LAS VEGAS, NEVADA MARCH 25 THROUGH 29, 1996

Prepared by:

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2-21-96

Audit Team Leader

Yucca Mountain Quality Assurance Division

Approved by:

Date: Z-22-96

Donald G. Horton

Director

Office of Quality Assurance

1.0 SCOPE

This performance-based audit of Kiewit/Parsons Brinckerhoff (Kiewit/PB) will be conducted by a team of auditors from the Yucca Mountain Quality Assurance Division (YMQAD). The audit will evaluate the effectiveness of implementation of Quality Assurance (QA) program requirements for selected activities that resulted in the product identified in Section 4.0 of this plan.

2.0 AUDIT SCHEDULE

Preaudit Team/Observer Meeting 8:30 a.m., March 25, 1996

Las Vegas, Nevada

Preaudit Conference 9:15 a.m., March 25, 1996

Las Vegas, Nevada

Audit Activities 10:00 a.m. to 4:00 p.m.

March 25, 1996

8:00 a.m. to 4:00 p.m.

March 26 through 28, 1996

8:00 a.m. to 11:30 a.m.

March 29, 1996

Postaudit Conference 1:00 p.m., March 29, 1996

Las Vegas, Nevada

There will be a daily YMQAD Audit Team/Observer meeting at 4:00 p.m. to review audit progress. Beginning on Tuesday, March 26, 1996, there will also be a daily Audit Team Leader (ATL)/Observer/Kiewit/PB management meeting at 8:15 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 Kiewit/PB.

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 Kiewit/PB's approved and issued QA program procedures, study plans, technical procedures, and the performance objectives established and agreed upon with Kiewit/PB management.

The conduct of the audit will be guided by 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

The audit team will evaluate implementation of QA program requirements with regards to the engineering, installation, and inspection of "Williams" and "Swellex" Rockbolts in the Exploratory Studies Facility. Selected construction work packages from Work Breakdown Structure 1.2.6.4.2 will be reviewed. Specifically, attributes to be evaluated are as follows:

- 1. Work process description.
- 2. Work Packages.
- 3. Procurement, order, and receipt of materials.
- 4. Initiation and completion of travelers.
- 5. Master Work Package compilation and close out.

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

Patrick V. Auer, YMQAD, Las Vegas, Nevada, ATL John S. Doyle, YMQAD, Las Vegas, Nevada, Auditor Sam H. Horton, YMQAD, Las Vegas, Nevada, Auditor

6.0 AUDIT CHECKLIST

The following checklist will be used during the audit:

YM-ARP-96-09, Performance-Based Checklist