

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
QUALITY ASSURANCE AUDIT PLAN
FOR AUDIT USGS-ARP-98-01
OF THE
UNITED STATES GEOLOGICAL SURVEY
AT
DENVER, COLORADO
OCTOBER 27-31, 1997

Prepared by: Richard L. Weeks Date: 9/16/97
Richard L. Weeks
Audit Team Leader
Office of Quality Assurance

Approved by: R. W. Horton Date: 9/17/97
for Donald G. Horton
Director
Office of Quality Assurance

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ENCLOSURE

1.0 SCOPE

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

2.0 AUDIT SCHEDULE

The audited activities will include work being performed at the USGS in Denver, Colorado. The audit will be performed October 27-31, 1997.

Pre-Audit Team/Observer Meeting	8:00 a.m. October 27, 1997
Pre-Audit Conference	9:00 a.m. October 27, 1997
Audit Activities	10:00 a.m. to 4:00 p.m. October 27, 1997
	8:00 a.m. to 4:00 p.m. October 28-30, 1997
	8:00 a.m. to 10:00 a.m. October 31, 1997
Post-Audit Conference	11:00 a.m. October 31, 1997

There will be a daily Audit Team Leader (ATL)/Observer meeting at 4:00 p.m. to review audit progress. Beginning on Tuesday, October 28, 1997, there will also be a daily ATL/Observer/USGS 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 a performance-based checklist. This checklist will be developed from the USGS approved and issued QA program procedures, study plans, technical procedures, and the performance objectives established and agreed upon with the USGS.

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 the deliverable for Work Breakdown Structure 1.2.3.2.8.3.6, "Probabilistic Seismic Hazards Analysis."

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

1. Process controls
2. Definition of objectives
3. Training
4. Assembly and dissemination of information
5. Management of judgments
6. Documentation and preparation of report

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

Richard L. Weeks; OQA, Las Vegas, Nevada, ATL
William J. Glasser, OQA, Las Vegas, Nevada, Auditor
Robert P. Hasson, OQA, Las Vegas, Nevada, Auditor
David F. Fenster, CRWMS M&O, Technical Specialist

6.0 AUDIT CHECKLIST

The following checklist will be used during the audit:

USGS-ARP-98-01, Performance-Based Checklist