



**Department of Energy**

Washington, DC 20585

QA: QA

**MAY 20 2002**

R. W. Craig, Technical Project Officer  
for the Yucca Mountain Site  
Characterization Project  
U.S. Geological Survey  
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Las Vegas, NV 89144

**U.S. DEPARTMENT OF ENERGY OFFICE OF CIVILIAN RADIOACTIVE WASTE  
MANAGEMENT (OCRWM) QUALITY ASSURANCE (QA) NOTIFICATION OF AUDIT  
USGS-ARC-02-11 OF U.S. GEOLOGICAL SURVEY (USGS) SUPPORT OF THE YUCCA  
MOUNTAIN SITE CHARACTERIZATION PROJECT AT DENVER, COLORADO**

Please be advised that a team of auditors representing the Office of Quality Assurance will conduct a compliance-based audit of the USGS implementation of the OCRWM QA Program at the Denver, Colorado facilities, on June 17- 21, 2002. The audit will be conducted in accordance with the enclosed audit plan.

Observers from the state of Nevada, U.S. Nuclear Regulatory Commission, and other interested parties are invited and may accompany the audit team.

You are hereby requested to arrange for appropriate space to conduct meetings, provide cognizant personnel to support the audit, and provide audit team access to appropriate USGS , documentation and records.

If you have any questions, please contact either James Blaylock at (702) 794-1420 or Marilyn Kavchak at (702) 794-5423.

*James Blaylock*  
Ram B. Murthy, Acting Director  
Office of Quality Assurance

OQA:JB-1207

Enclosure:  
Audit Plan USGS-ARC-02-11



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WM-11*

MAY 20 2002

cc w/encl:

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QA: QA

**U.S. DEPARTMENT OF ENERGY  
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
OFFICE OF QUALITY ASSURANCE**

**QUALITY ASSURANCE AUDIT PLAN**

**FOR**

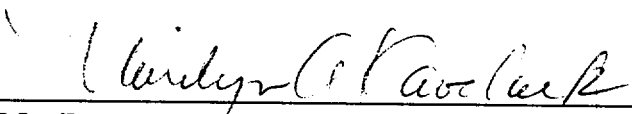
**AUDIT USGS-ARC-02-11**

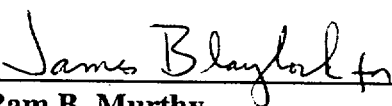
**OF THE**

**U.S. GEOLOGICAL SURVEY**

**DENVER, COLORADO**

**JUNE 17-21, 2002**

Prepared by:  Date: 5-14-02  
Marilyn A. Kavchak  
Audit Team Leader  
Office of Quality Assurance

Approved by:  Date: 5/20/02  
Ram B. Murthy  
Acting Director  
Office of Quality Assurance

ENCLOSURE

## 1.0 SCOPE

A team of auditors representing the U.S. Department of Energy (DOE), Office of Quality Assurance (OQA) will conduct a compliance-based audit to evaluate the U.S. Geological Survey's (USGS) implementation of the Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance (QA) Program as defined in the DOE/RW-0333P, *Quality Assurance Requirements and Description* (QARD) document and applicable implementing procedures. The audit team will evaluate the implementation, adequacy, and effectiveness of the USGS activities supporting the Yucca Mountain Site Characterization Project Office (YMSCO).

In addition, a review of the status of previous OCRWM deficiency documents identified in OQA Audit USGS-ARC-01-011 will be included in the scope of this audit to determine the effectiveness of completed corrective actions as well as the status of any open deficiency documents.

## 2.0 AUDIT SCHEDULE

Pre-Audit Team/Observer Meeting	1:00 p.m., June 17, 2002 Denver, CO
Pre-Audit Conference	1:30 p.m., June 17, 2002 Denver, CO
Audit Activities	2:00 p.m. to 4:00 p.m. June 17, 2002 Denver, CO
	8:00 a.m. to 4:00 p.m. June 18-20, 2002 Denver, CO
	8:00 a.m. to 10:00 a.m. June 21, 2002 Denver, CO
Post-Audit Conference	10:00 a.m. June 21, 2002 Denver, CO

Preliminary visits to the Las Vegas facilities, the Yucca Mountain Test Site and the Losee Road facility will be completed between May 28 and June 7, 2002 prior to initiation of this audit. The purpose of these visits will be to gather information and evaluate field implementation activities of selected quality program sections, including sample collection and USGS water-level monitoring activities.

There will be a daily OQA Audit Team/Observer meeting at 4:00 p.m. to review audit progress. Beginning on Tuesday, June 18, 2002, there will also be a daily Audit Team Leader/Observer/USGS management meeting at 8:15 a.m. to communicate audit progress, discuss potential deficiencies, and establish needed liaisons. All meetings will be held at locations arranged and provided by the USGS.

### 3.0 REQUIREMENTS TO BE AUDITED AND APPLICABLE REFERENCES

The requirements to be audited will be contained in the checklists. Checklists will be developed from the latest available revision of the following documents:

- OCRWM QARD
- OCRWM Administrative Procedures (AP) AP-Q/YAP-Q
- USGS Quality Management Procedures.

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

- Quality Assurance Procedure (QAP) 18.2, *Internal Audit Program*
- AP 16.1, *Management of Conditions Adverse to Quality*

### 4.0 ACTIVITIES TO BE AUDITED

The audit team will evaluate the effectiveness of applicable QA Program Sections as they apply to the activities associated with the YMSCO as follows:

Section 1.0	Organization
Section 2.0	Quality Assurance Program
Section 4.0	Procurement Document Control
Section 5.0	Implementing Documents
Section 6.0	Document Control
Section 7.0	Control of Purchased Items and Services
Section 12.0	Control of Measuring and Test Equipment
Section 15.0	Nonconformances
Section 16.0	Corrective Action
Section 17.0	Quality Assurance Records

Supplement I	Software
Supplement II	Sample Control
Supplement III	Scientific Investigation
Supplement V	Control of the Electronic Management of Data
Appendix C	Monitored Geologic Repository (amplification of QARD Sections 4.0, 7.0, and 15.0)

Based upon discussion with the USGS Technical Officer, the following QA Program Sections were found to be not applicable, since USGS currently has no activities to which these sections apply:

Section 3.0	Design Control
Section 8.0	Identification and Control of Items
Section 9.0	Control of Special Processes
Section 10.0	Inspection
Section 11.0	Test Control
Section 13.0	Handling, Storage, and Shipping
Section 14.0	Inspection, Test and Operating Status
Section 18.0	Audits
Supplement IV	Field Surveying
Appendix A	High Level Waste Form Production
Appendix B	Storage and Transportation

If the team identifies a need to verify additional programmatic areas during the audit, these areas will be added to the audit scope and evaluated accordingly.

## **5.0 AUDIT TEAM MEMBERS**

Marilyn A. Kavchak, OQA/Navarro Quality Services (NQS), Las Vegas, NV,  
Audit Team Leader  
Robert Toro, OQA/NQS, Las Vegas, NV, Audit Team Leader (Acting)  
Patrick V. Auer, OQA/NQS, Las Vegas, NV, Auditor  
Lester W. Wagner, OQA/NQS, Las Vegas, NV, Auditor  
James Blaylock, DOE/OQA, Las Vegas, NV, Auditor

## **6.0 AUDIT CHECKLISTS**

USGS-ARC-02-11, Compliance Checklists