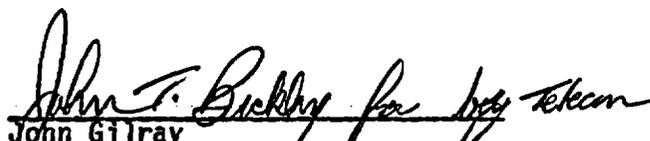
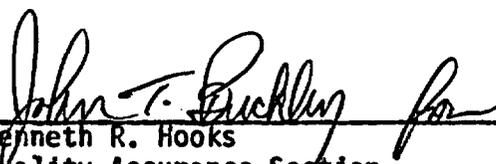


U.S. NUCLEAR REGULATORY COMMISSION  
OBSERVATION AUDIT REPORT NO. 92-05  
FOR THE OFFICE OF CIVILIAN  
RADIOACTIVE WASTE MANAGEMENT  
AUDIT NO. YMP-92-06 OF  
RAYTHEON SERVICES NEVADA

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## 1.0 INTRODUCTION

From December 16-18, 1991, a U.S. Nuclear Regulatory Commission (NRC) staff member participated as an observer on the U.S. Department of Energy (DOE), Office of Civilian Radioactive Waste Management (OCRWM), Yucca Mountain Quality Assurance Division (YMQAD) Quality Assurance (QA) Audit YMP-92-06 of the RSN QA program in Las Vegas, Nevada. The audit scope was limited to the areas of procurement document control; control of purchased material, equipment and components; and control of measuring and test equipment. No technical reviews or evaluations were included in the scope of the audit, and the audit team did not include any technical specialists.

This report addresses the effectiveness of the audit and, to a lesser extent, the adequacy of the RSN QA program.

## 2.0 OBJECTIVES

The objectives of this YMQAD audit were to evaluate the implementation and effectiveness of the RSN QA program in meeting the requirements of RSN's Quality Assurance Program Description (QAPD). The NRC staff's objective was to gain confidence that YMQAD and RSN are properly implementing the requirements of their QA programs in accordance with Title 10 Code of Federal Regulations (10 CFR), Part 50, Appendix B.

## 3.0 SUMMARY AND CONCLUSIONS

The NRC staff based its evaluation of the YMQAD audit process and the RSN QA program on direct observations of the auditors, discussions with the audit team and RSN personnel, and reviews of pertinent audit information (e.g., audit plan, checklists and RSN documents). The audit was well organized and conducted in a thorough and professional manner with minimal logistic delays. The audit team was well qualified in the QA discipline, and their assignments and checklist items were acceptably described in the audit plan. However, the timing of the audit was questionable due to the limited activity in the areas audited.

The NRC staff agrees with the preliminary YMQAD audit team findings that the RSN QA program has adequate procedural controls in place, and program implementation is adequate, in the areas audited.

## 4.0 AUDIT PARTICIPANTS

### 4.1 NRC

John W. Gilray            Observer

4.2 YMQAD

John Martin	Audit Team Leader	Science Applications International Corporation (SAIC)
Richard Powe	Auditor	SAIC
Sandra Bates	Auditor in Training	SAIC
Bob Constable	Auditor	Yucca Mountain Site Characterization Project (YMP)

5.0 REVIEW OF THE AUDITED ORGANIZATION

This audit was conducted in accordance with OCRWM QA Administrative Procedure (QAAP) 18.2, "Audit Program," Revision 4 and OCRWM QAAP 16.1, "Corrective Action Requests," Revision 3.

The NRC staff observation audit of this YMQAD audit of RSN was based on the NRC procedure, "Conduct of Audits," issued October 6, 1989.

5.1 Purpose/Scope of Audit

The purpose of the audit was to evaluate the implementation and effectiveness of RSN's QA program relative to the control of procurement documents; purchased material, equipment and services; and measuring and test equipment.

(a) Programmatic Elements

The auditors used checklists based on the requirements in the RSN QAPD Sections 4.0, 7.0 and 12.0 (10 CFR 50 Appendix B criteria IV, VII and XII), and other applicable documents pertaining to QA controls.

(b) Technical Areas

This audit did not involve technical areas.

5.2 Timing of the Audit

The NRC staff believes the timing of the QA audit of RSN was questionable, since there was limited activity being performed by RSN in the areas audited. Although OCRWM is committed to perform an audit of all criteria at least once a year, consideration should be given to waiving audits in areas with minimal activity, and document the rationale.

### 5.3- Examination of Programmatic Elements

The audit consisted of interviews with the RSN staff, and a review of quality records to evaluate the procedural compliance with RSN Quality Assurance Procedures (QAP) 4.1, "QA Review of Procurement Documents," QAP 7.1, "Supplier Selection," and QAP 12-01, "Control of Measuring and Test Equipment."

The auditors interviewed the RSN staff and verified through documented evidence, that proper procedural controls and provisions were established.

### 5.4 Conduct of Audits

This audit was performed in a professional manner. The audit team was well prepared and demonstrated a sound knowledge of the RSN's QA program. The audit checklists included the important controls addressed in RSN's QAPP. The auditors used the checklists effectively during the interviews with personnel and review of documents. The observer was kept well informed during the entire audit.

### 5.5 Qualification of Auditors

The qualifications of the QA auditors on the audit team were reviewed by the NRC observer and were found to be acceptable, meeting the requirements of QMP-02-02, "Qualification of Auditors."

### 5.6 Audit Team Preparation

The auditors were prepared in the areas they were assigned to audit and knowledgeable in the RSN QA procedures. Overall, Audit Plan YMP-92-06 was complete and included: (1) the audit scope; (2) a list of audit team personnel; (3) a list of the audit activities; (4) the audit notification letter; (5) the appropriate RSN QA procedures; and (6) the QA checklist.

### 5.7 Audit Team Independence

The audit team members did not have prior responsibility for performing the activities they investigated. The audit team members had sufficient independence to carry out their assigned functions in a correct manner without adverse pressure or influence.

### 5.8 Review of Previous Audit Findings

There were no previous unresolved audit findings to review.

### 5.9 Summary of NRC Staff Findings

The NRC staff did not identify any observations relating to deficiencies in either the audit process or of RSN QA program implementation.

The auditors were well prepared, thorough, and displayed acceptable knowledge of the appropriate RSN procedures. The NRC staff agrees with the audit team's preliminary conclusion that RSN's implementation of the procedures audited were acceptable. The NRC staff believes that the conduct of this audit was acceptable.

5.10 Summary - YMQAD Audit Team Findings

The audit team did not write any potential Corrective Action Requests against RSN's QA program.