



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

OCT 21 1991

Mr. John P. Roberts, Acting Associate Director
for Systems and Compliance
Office of Civilian Radioactive Waste Management
U. S. Department of Energy, RW 30
Washington, D.C. 20585

Dear Mr. Roberts:

SUBJECT: OBSERVATION REPORT NO. 91-S11 ON QUALITY ASSURANCE SURVEILLANCE
YMP-SR-91-026 OF RAYTHEON SERVICES NEVADA

I am transmitting U.S. Nuclear Regulatory Commission (NRC) Surveillance Observation Report No. 91-S11 for the U.S. Department of Energy (DOE)/Yucca Mountain Site Characterization Project Office (YMPO) Quality Assurance (QA) Surveillance No. YMP-SR-91-026 of the Raytheon Services Nevada (RSN) QA program conducted in Las Vegas on September 18-20, 1991. A member of the NRC staff participated as an observer on this surveillance.

The NRC staff observed and evaluated the DOE/YMPO QA surveillance to gain confidence that DOE and RSN are properly implementing the requirements of their QA programs by assessing the effectiveness of the DOE/YMPO surveillance and determining the adequacy of the RSN QA program in the areas surveilled. The staff's evaluation is based on direct observations of the surveillance process, discussions with the DOE/YMPO auditors and RSN staff, and reviews of pertinent RSN records.

The scope of this surveillance was limited to procedural controls and implementation associated with Title I design of the Experimental Studies Facility. No assessment of technical adequacy and qualification of any of the technical documents (technical procedures and laboratory and/or field data) was made during the surveillance.

The staff observer found the DOE/YMPO surveillance of the RSN QA program useful and effective. The auditors were well prepared and were familiar with the RSN Quality Assurance Program Description and the relevant QA procedures being implemented. The surveillance evaluated the adequacy of procedural controls and status of procedural implementation of the RSN QA program under the Code of Federal Regulations Title 10 Part 50, Appendix B, Criterion 2, "QA Program," Criterion 3, "Scientific Investigation and Design Control," Criterion 6, "Document Control," and Criterion 17, "Quality Assurance Records."

The NRC staff agrees with the DOE/YMPO auditors' preliminary conclusion that the RSN QA program provides adequate procedural controls and procedural implementation is adequate for the criteria surveilled.

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Mr. John P. Roberts

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If you have any questions concerning this report, please contact John Buckley of my staff at (301)/FTS 492-0513.

Sincerely,



John J. Linehan, Acting Director
Repository Licensing and Quality
Assurance Project Directorate
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure: As Stated

cc: R. Loux, State of Nevada
C. Gertz, DOE/NV
S. Bradhurst, Nye County, NV
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SURVEILLANCE OBSERVATION REPORT NO. 91-S11

1.0 INTRODUCTION

Raytheon Services Nevada (RSN), a participant in the Yucca Mountain Site Characterization Project (YMP), is responsible for the Title I and II Design of surface and subsurface facilities, nondestructive testing, materials testing, field surveying, microfilming of YPM records and engineering support services.

On September 18-20, 1991, the U.S. Department of Energy (DOE)/Yucca Mountain Site Characterization Project Office (YMPO) conducted a quality assurance (QA) surveillance (YMP-SR-91-26) of the RSN YMP QA program in Las Vegas, NV. This surveillance was conducted in accordance with the YMPO Quality Assurance Procedure (QMP)-18-02, Revision 2, "Surveillance." A member of the U.S. Nuclear Regulatory Commission (NRC) staff participated in the surveillance as an observer. This report documents the staff's assessment of the effectiveness of the DOE/YMPO surveillance, the adequacy of the RSN program procedural controls, and the procedural implementation under Criteria 2, 3, 6 and 17 of the Code of Federal Regulations Title 10, Part 50, Appendix B.

2.0 PURPOSE

This DOE/YMPO surveillance evaluated the adequacy of procedural controls and their implementation under selected program elements of the RSN QA program. The staff's purpose in observing this surveillance was to gain confidence that the DOE and its contractors are properly implementing the requirements of their QA programs by assessing the effectiveness of the DOE/YMPO surveillance and determining the adequacy of the RSN QA program in the areas surveilled.

3.0 SCOPE

The DOE/YMPO auditors selected Criterion 2, "Quality Assurance Program," Criterion 3, "Scientific Investigation and Design Control," Criterion 6, "Document Control," and Criterion 17, "Quality Assurance Records," for review and assessment of the adequacy of procedural controls and implementation as related to the RSN Experimental Studies Facility (ESF) Title I design work. The scope of this surveillance did not include any review of the technical adequacy of technical products and activities.

4.0 SURVEILLANCE PARTICIPANTS

DOE/YMPO - Donald J. Harris, Harza Engineering
Kenneth T. McFall, Technical & Management Support Services (T&MSS)

NRC - John T. Buckley

5.0 SURVEILLANCE SUMMARY RESULTS

The DOE/YMPO auditors developed the surveillance checklists based on the requirements found in RSN Project Procedures (PP) PP-03-09, PP-03-12, PP-03-13 and PP-03-21 which deal with "Interdiscipline Review," "Preparation and Control of Drawings," "Basis for Design," and "Management & Independent Technical Reviews," respectively. In order to determine compliance with the above noted procedures the auditors conducted interviews with RSN staff members and reviewed several Title I design documents. The auditors began by reviewing the "YMP ESF Title I Design Summary Report" and associated comment sheets from the management and technical reviews of this document. Their evaluation consisted of checking the qualifications of the reviewers, reviewing the comments generated, and tracking comment resolution into Draft H (latest version) of the ESF Title I Design Summary Report. The auditors also reviewed the Title II Basis for Design Draft Report, Title I drawings, and six review packages for the Title I drawings.

6.0 CONTACTED DURING THE SURVEILLANCE

Randolph L. Schreiner, Manager, Systems Engineering, RSN
Arshad Ali, Manager, Audits & Surveillances, RSN

7.0 NRC CONCLUSIONS

The staff observer found the DOE/YMPO surveillance of the RSN QA program to be useful and effective. The auditors were familiar with the RSN Quality Assurance Program Description and relevant implementing procedures for the areas surveilled. The auditors were thorough and professional in conducting the surveillance and asked pertinent questions necessary to obtain the required objective evidence.

Additional planning may have been beneficial prior to the surveillance. It was apparent at the surveillance kick-off meeting that the RSN personnel in attendance were not fully aware of what the scope of the surveillance was, how long it was to last, and what information would be reviewed. Also, RSN did not have a room pre-arranged for the auditors' use so audit time was spent looking for an empty office.

Although not required by QMP-18-02, "Surveillance", it would be beneficial for the observers to receive a copy of the surveillance notification letter and plan prior to the surveillance, and a copy of the checklist at the kickoff meeting. Due to a lack of this information, the NRC observer was unaware that the kickoff meeting had been postponed from 8:00am to 9:00am on September 18, that Criterion 6 had been added to the surveillance scope and that the surveillance would be extended from September 20 to September 23. In addition, a copy of the checklist was not immediately available to the observer which limited his effectiveness during the early stages of the surveillance.