

JUN 24 1991

Mr. Dwight E. Shelor, 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. Shelor:

SUBJECT: OBSERVATION REPORT NO. 91-S8 ON QUALITY ASSURANCE SURVEILLANCE  
YMP-SR-91-017 OF THE SCIENCE APPLICATIONS INTERNATIONAL  
CORPORATION (SAIC)/TECHNICAL & MANAGEMENT SUPPORT SERVICES  
(T&MSS)

I am transmitting the U.S. Nuclear Regulatory Commission (NRC) Surveillance Observation Report No. 91-S8 for the U.S. Department of Energy (DOE)/Yucca Mountain Site Characterization Project Office (YMPO) Quality Assurance (QA) Surveillance No. YMP-SR-91-017 of the SAIC/T&MSS QA program conducted in Las Vegas, Nevada, on May 6-8, 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 SAIC/T&MSS are properly implementing the requirements of their QA programs by assessing the effectiveness of the DOE/YMPO surveillance and determining the adequacy of the SAIC/T&MSS QA program in the areas surveilled. The staff's evaluation is based on direct observations of the surveillance process, discussions with the DOE/YMPO surveillance team members and SAIC/T&MSS staff, and reviews of pertinent SAIC/T&MSS records.

The scope of this surveillance was limited to procedural implementation. No assessment of technical adequacy and qualification of any of the technical products such as technical documents or data was made during the surveillance.

The staff observer found the DOE/YMPO surveillance of the SAIC/T&MSS QA program useful and effective. The surveillance team was well prepared and was familiar with the SAIC/T&MSS QA plan and the relevant QA procedures being implemented. The checklists for this surveillance were well prepared and effectively used in determining the adequacy of procedural controls and status of procedural implementation of the SAIC/T&MSS QA program under the Code of Federal Regulations Title 10 Part 50, Appendix B Criteria 2, 4, and 17. The surveillance team identified two potential Corrective Action Requests (CARs) for deficiencies related to procedural implementation under the criteria surveilled.

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The NRC staff agrees with the DOE/YMPO surveillance team's preliminary conclusions that the SAIC/T&MSS QA program, under the criteria surveilled, provides adequate procedural controls and procedural implementation for quality affecting activities.

If you have any questions concerning this report, please contact Tilak Verma of my staff at 301/FTS 492-3465.

Sincerely,

*for*  
 (Original Signed by *Joseph J. Holonich*)

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
- M. Baughman, Lincoln County, NV
- D. Bechtel, Clark County, NV
- D. Weigel, GAO
- P. Niedzielski-Eichner, Nye County, NV
- C. Thistlethwaite, Inyo County, CA

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Date: 06/21/91 : 06/21/91 : 06/24/91

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SURVEILLANCE OBSERVATION REPORT NO. 91-S8

## 1.0 INTRODUCTION

The Science Applications International Corporation (SAIC)/Technical & Management Support Services (T&MSS), a participant in the Yucca Mountain Site Characterization Project (YMP), is responsible for the environmental and radiological monitoring activities for the YMP. SAIC/T&MSS is also responsible for providing technical and management assistance to the U.S. Department of Energy (DOE)/Yucca Mountain Site Characterization Project Office (YMPO).

From May 6-8, 1991, the DOE/YMPO conducted a quality assurance (QA) surveillance (YMP-SR-91-017) of the SAIC/T&MSS QA program at Las Vegas, Nevada. This surveillance was conducted in accordance with the YMPO Quality Management 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 SAIC/T&MSS QA program procedural controls, and the status of their implementation under Criteria 2, 4 and 17 of the Code of Federal Regulations Title 10, Part 50, Appendix B.

## 2. PURPOSE

This DOE/YMPO surveillance evaluated the adequacy of procedural controls and the status of their implementation under selected program elements of the SAIC/T&MSS QA program. The staff's purpose in observing this surveillance was to gain confidence that 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 SAIC/T&MSS QA program in the areas surveilled.

## 3. SCOPE

The DOE/YMPO surveillance team selected Criteria 2, 4 and 17 requirements from the SAIC/T&MSS QA Program Plan (QAPP) for review and assessment of adequacy of procedural controls and status of procedural implementation. The SAIC/T&MSS procedural controls associated with the preparation and review of the Exploratory Studies Facility Design Requirements (ESFDR) document, Appendix J; review of the Site Characterization Program Baseline (SCPB) document; flow-down to the Environmental Regulatory Compliance Plan (ERCP) requirements of the ESFDR, Appendix J; records; and associated personnel training were reviewed and evaluated. The scope of this surveillance did not include any review of the technical adequacy and qualification of technical products such as technical documents or data.

#### 4.0 SURVEILLANCE PARTICIPANTS

##### DOE/YMPO

Donald J. Harris	Surveillance Team Leader, Harza Engineering Company
Terry W. Noland	Surveillance Team member, Westinghouse Electric Corporation
Kenneth T. McFall	Surveillance Team member, SAIC

##### NRC

Tilak R. Verma	Observer
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##### STATE OF NEVADA

Susan W. Zimmerman	Observer
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#### 5.0 SURVEILLANCE SUMMARY RESULTS

The DOE/YMPO surveillance team conducted a detailed examination and review of the review packages for ESFDR, Appendix J; SCPB; and ERCP. Personnel qualification and training records associated with the review of these documents were also reviewed and examined by the surveillance team. The surveillance team interviewed several SAIC/T&MSS personnel to assess their knowledge of relevant QA requirements and applicable implementing procedures under each criterion surveilled.

The surveillance team used checklists and questions that were based on SAIC/T&MSS Standard Practice Procedure (SP) 1.31, Revision 3, "Initial Evaluations, Qualification, and Training of T&MSS Personnel;" SP 2.3, Revision 1, "Review of T&MSS Technical Documents," and SP 1.36, Revision 3, "Records Management: Record Source Implementation." Adequacy of controls and status of implementation for these procedures were assessed and documented on the checklist for each of the criteria surveilled. The surveillance team was thorough in its review of documents and in ascertaining relevant information from its questioning of SAIC/T&MSS personnel.

The surveillance team concluded that the SAIC/T&MSS QA program provides adequate controls under the criteria surveilled. With the exception of two minor procedural violations, the team found procedural implementation of SP 2.3 for the review of the SCPB satisfactory. The surveillance team identified two Corrective Action Requests (CARs) for these minor procedural violations associated with the review of the SCPB.

The procedural controls for the preparation and review of ESFDR, Appendix J were found not to be fully implemented. The surveillance team was directed (verbally) by the DOE/YMPO QA management to document these procedural violations in the text of the surveillance report and therefore, no CARs were generated for lack of procedural implementation during the preparation and review of the ESFDR, Appendix J. The ESFDR, Appendix J is on Project Requirements List (PRL) as non-quality affecting.

#### 6.0 SAIC/T&MSS PERSONNEL CONTACTED DURING THE SURVEILLANCE

K. H. Amaditz, Training Coordinator, Geotechnical Department  
J. B. Harper, Manager, Quality Assurance Department  
L. P. Larkin, Training Coordinator, Nuclear Regulatory Compliance Department  
M. A. Lugo, Staff Licensing Integration  
E. W. McCann, Manager, Environmental Compliance and Planning Department  
J. R. Narron, Training Coordinator, Quality Assurance Department  
L. C. Raymer, Training Coordinator, Systems Engineering Department  
G. J. Schaning, Training Coordinator, Environmental Compliance and Permitting Department  
S. H. Sims, Training Coordinator, Project Management  
C. K. VanHouse, Training Coordinator, Field Operations and Support Department

#### 7.0 NRC CONCLUSIONS

The staff found the DOE/YMPO surveillance of the SAIC/T&MSS QA program useful and effective. The DOE/YMPO surveillance team was well prepared and was familiar with the SAIC/T&MSS QAPP requirements and relevant implementing procedures for the areas surveilled. The checklists for this surveillance were well prepared and used effectively in determining the adequacy of procedural controls under Criteria 2, 4 and 17. The auditors were thorough and professional in conducting the surveillance, and did not hesitate to depart from the Checklist items to ascertain information required to determine the status and adequacy of procedural implementation.

The NRC staff observer and the DOE/YMPO surveillance team were able to review all pertinent personnel qualifications and training documents. The SAIC/T&MSS personnel were cooperative and open in responding to questions and information requests by the surveillance team and the NRC staff observer.

The NRC staff agrees with the DOE/YMPO surveillance team's preliminary conclusions that the SAIC/T&MSS QA program provides adequate procedural controls under the criteria surveilled. The staff also agrees with surveillance team's conclusion regarding the adequacy and status of procedural implementation under the criteria surveilled.