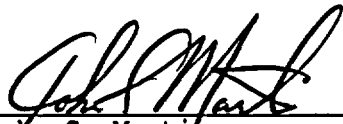
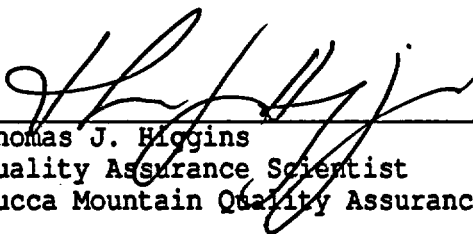



YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION
QUALITY ASSURANCE SURVEILLANCE REPORT OF
REYNOLDS ELECTRICAL AND ENGINEERING COMPANY
SURVEILLANCE NUMBER YMP-SR-91-019
CONDUCTED MAY 29 THROUGH MAY 30, 1991

ACTIVITIES SURVEILLED:

MANAGEMENT ASSESSMENT AND
READINESS REVIEWS

Prepared by:  Date 6-10-91
John S. Martin
Surveillance Team Leader
Quality Assurance Engineer
Yucca Mountain Quality Assurance Division

Concurred by:  Date 6-10-91
Thomas J. Higgins
Quality Assurance Scientist
Yucca Mountain Quality Assurance Division

Approved by:  Date 6/11/91
Donald G. Horton, Director
Yucca Mountain Quality Assurance Division

1.0 INTRODUCTION

This report contains the results of Yucca Mountain Quality Assurance Division (YMQAD) Surveillance No. YMP-SR-91-019 of Reynolds Electrical and Engineering Company (REECo), conducted at Las Vegas, Nevada, from May 29 through May 30, 1991, to verify compliance and implementation of approved REECo implementing procedures.

2.0 PURPOSE AND SCOPE

The purpose of this surveillance was to evaluate the effectiveness of the implementation of certain REECo quality procedures associated with selected criterion. The scope of the surveillance included the following criterion and its attendant procedures:

II. Quality Assurance (QA) Program

Yucca Mountain Project Quality Procedure QP-2.3, Revision 1,
"Management Assessment"
Yucca Mountain Project Administrative Procedure AP-3.0, Revision 0,
"Readiness Review"

3.0 SURVEILLANCE PERSONNEL

The surveillance was conducted by the following personnel:

John S. Martin, Quality Assurance Engineer (Surveillance Team Leader),
Science Applications International Corporation (SAIC)/YMQAD
Thomas J. Higgins, Quality Assurance Scientist, SAIC/YMQAD

4.0 SUMMARY OF SURVEILLANCE RESULTS

The implementing procedures listed in Section 2.0 of this report were the source of questions used to conduct this surveillance. Marked-up procedures were used to determine compliance. The following results were obtained during the surveillance:

4.1 Yucca Mountain Project Quality Procedure QP-2.3, Revision 1, "Management Assessment"

During the course of this surveillance, the Surveillance Team reviewed REECo's "Report of Annual Management Assessment of the REECo Yucca Mountain Project Quality Assurance Program" dated June 6, 1991. Review consisted of but, was not limited to ensuring that procedural requirements were satisfied and included verifying that the Management Assessment addressed the following:

- o Quality implementing and administrative procedures necessary for REECo's scope of work and responsibility had been appropriately addressed.

- o Ensuring that the REECO QA Program effectiveness and implementation was properly assessed and included nonconformance reports, corrective actions, audits, and surveillance documents.
- o That the assessment included an evaluation of qualification and training and a verification of personnel qualifications versus job descriptions.
- o Ensured that the report addressed; Staffing Plans, Equipment and Resources, and QA records.
- o Verified that the report provided an overall adequacy and effectiveness of the REECO/Yucca Mountain Site Characterization Project (YMP) QA Program, identified areas which required corrective action, and established a corrective action follow-up schedule.

This review provided positive evidence that REECO had complied with procedural requirements relative to overall content and format. In addition, it was noted that REECO had performed an assessment to a degree and depth commensurate with the scope of work and responsibilities assigned to them by the U.S. Department of Energy (DOE). However, it was noted during this review that REECO had identified numerous areas of concern in their Management Assessment, and failed to properly follow-up or address these areas. This failure on the part of REECO, subsequently led to issuance of several Corrective Action Requests (CARs), for deficient conditions, by the DOE/Yucca Mountain Site Characterization Project Office (YMPO) during the course of the DOE's audit of REECO (Audit No. 91-02) which REECO had previously identified as concerns. REECO has identified this deficiency of their Management Assessment via an internal audit of the Management Assessment process and the subsequent issuance of an Audit Finding Report, No. 1 of REECO Audit 006-91. As such, no additional follow-up is required as a result of this surveillance or this report.

4.2 Yucca Mountain Project Administrative Procedure AP-3.0, Revision 0, "Readiness Reviews"

Surveillance of the Readiness Review process by the Surveillance Team was performed by review of documentation and interviews with cognizant personnel. Interviews which were conducted with the Readiness Review team chairperson for the Midway Valley and the Calcite, Opaline Silica Vein Deposit Study Plan were performed to ascertain his overall knowledge of the Readiness Review process. These interviews demonstrated a clear and thorough understanding of procedural requirements and prerequisites on the part of the team chairperson and lends confidence for their portion of the Readiness Review. Documentation review consisted of reviewing that portion of the Readiness Review performed by REECO in support of the Midway Valley and the Calcite, Opaline Silica Vein Deposit Study Plan. Specifically the subject Readiness Review Package was examined and evaluated for the following:

- o Readiness Review Team Members were appropriately trained.
- o Readiness Review Checklist correctly prepared and completed as required.
- o Tracking of open items through closure.
- o Compilation of the Readiness Review Notice, the Readiness Review Board Selection Record Form, and Review Record Memorandum.
- o Review for appropriate approval signatures.

This review also provided evidence that REECo is in compliance with programmatic requirements for the generation of their Readiness Review relative to the Midway Valley and the Calcite, Opaline Silica Valley Study Plan. There was, however, one area of noncompliance noted during the course of this portion of the surveillance. This deficiency deals with the fact that the REECo procedure for Readiness Reviews is an Administrative Procedure and falls outside the Quality Program. It must be noted that Readiness Reviews are required by the REECo Quality Assurance Program Plan and as such should be administered in accordance with REECo Quality Procedures which receive review and approval of the Quality Assurance Manager. REECo has identified a generic problem with their procedures in Audit Finding Report No. 2 of REECo Audit 006-91; and through discussions with the REECo Quality Assurance Manager it is felt that issuing a DOE CAR would be redundant in nature. Based on this information, no CAR will be issued. No further action is required as a result of this surveillance or this report.

5.0 PERSONNEL CONTACTED DURING THE COURSE OF THE SURVEILLANCE

Joseph Catozzi, REECo, Operations Superintendent Surface
Bruce Gardella, REECo, Control Department Manager
William Glasser, REECo, Quality Assurance Manager
William Gratza, REECo, Quality Assurance Specialist
David Hackbert, REECo, Quality Assurance Specialist
Renee Knott, REECo, Planning Coordinator
Thomas Leonard, REECo, Construction Department Manager
Dee Moulder, REECo, Quality Assurance Administrative Assistant
Robert Pritchett, REECo, Technical Project Officer
Emily Reiter, REECo, Quality Assurance Specialist
Perry Wilson, REECo, Quality Assurance Specialist

6.0 MEASURING AND TEST EQUIPMENT UTILIZED DURING THE COURSE OF THE SURVEILLANCE

No measuring and/or test equipment was used during the course of this surveillance.

7.0 SURVEILLANCE TEAM EVALUATION

It is the opinion of the Surveillance Team that the REECO QA Program, as surveilled, is being implemented effectively except for the areas as noted in Section 4.0 of this report. The new QA Manager has demonstrated good communication and interfacing skills within the REECO organization and with YMPO.

8.0 CORRECTIVE ACTION REQUESTS (CAR) CLOSED DURING THE SURVEILLANCE

CAR YM-91-025

The subject CAR identified a concern that sufficient dedicated QA personnel had not been assigned to the REECO/YMP effort. REECO committed to providing a minimum of four full-time QA staff members in an effort to resolve the staffing problem. During the course of this surveillance it was verified that REECO had met this commitment and as such CAR YM-91-025 has been closed.