

YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION

QUALITY ASSURANCE SURVEILLANCE REPORT

OF

SANDIA NATIONAL LABORATORIES

SURVEILLANCE NUMBER YMP-SR-91-016

CONDUCTED MAY 6 THROUGH 10, 1991

ACTIVITIES SURVEILLED:

TRAINING AND FAMILIARIZATION, QUALIFICATION AND
CERTIFICATION, QUALIFICATION OF QUALITY ASSURANCE
PROGRAM AUDIT PERSONNEL, AND QUALITY ASSURANCE AUDITS

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Date: 6/14/91

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Date: 6/19/91

1.0 INTRODUCTION

This report contains the results of the Yucca Mountain Quality Assurance Division (YMQAD) Surveillance No. YMP-SR-91-016 of Sandia National Laboratories (SNL) conducted in Albuquerque, New Mexico, from May 6 through 10, 1991.

2.0 PURPOSE AND SCOPE

The purpose of this surveillance was to evaluate the effectiveness of the implementation of selected SNL procedures covering Criterion II, "Quality Assurance Program," relating to the indoctrination, training, qualification and certification of personnel and Criterion XVIII "Audits." This evaluation focused on compliance with the following approved SNL implementing procedures:

1. Quality Assurance Procedure QAP 02-05, Revision C, Interim Change Number ICN-01, "Training and Familiarization Procedures"
2. Department Operating Procedure DOP 02-06, Revision D, ICN-01, "Qualification and Certification of Personnel"
3. QAP 02-07, Revision D, "Qualification of Quality Assurance Program Audit Personnel"
4. QAP 18-01, Revision C, ICN-01, "Quality Assurance Audits"

The scope of this surveillance initially included Criterion XVI "Corrective Action," but a second member of the surveillance team was withdrawn, so this criterion was not evaluated.

In addition to the above procedures, the surveillance included verification of corrective action of Standard Deficiency Report (SDR) 568.

3.0 SURVEILLANCE PERSONNEL

The surveillance was conducted by Amelia I. Arceo, Quality Assurance Engineer, Science Applications International Corporation/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. Checklists generated from these documents were used to determine compliance. The following results were obtained during the surveillance:

QAP 2-5, Revision C, "Training and Familiarization"

The training files of SNL personnel and contractors were reviewed. The list below identified the files that were used to verify compliance with the above procedure.

<u>Name</u>	<u>Organization</u>	<u>Job Position</u>
Barnes, C.H.	MACTEC	Support Staff
Blejwas, T.E.	SNL	Manager
Boyd, P.J.	NER	Support Staff
Connoly, J.R.	UNM	Support Staff
Foreman, C.E.	MACTEC	Support Staff
Hingston, M.P.	NER	Support Staff
Letz, J.A.	SNL	Support Staff
Nimick, F.B.	SNL	Supervisor
Noel, J.S.	NER	Support Staff
Richards, R.R.	SNL	Supervisor
Sandoval, R.P.	SNL	Supervisor
Watt, P.	UNM	Support Staff

Training Assignment Forms which documented the required training, Confirmation of Familiarization or Training Activities forms, and Training Attendance Sheets which documented that the required training were completed were found in the above files. Training Database "SNAPSHOTS" which indicate the the status of training of each personnel, revealed that the above personnel were current in their assigned training requirement. The comparison of data from some of the above forms with the Training Database Snapshots revealed that the data input were accurately done. It was noted that the sample forms found in the procedure were revised and computerized which improved the system.

The list of designated trainers was verified. The Qualification Training forms of trainers who conducted training in 1990 (Warren Miller, A.R. Schenker, and A.P. Hotchkiss) were reviewed. There was no classroom training conducted in 1991. The three classroom training record packages generated by the trainers were verified to include the records required. One record package was incomplete, but was rectified during the surveillance (see Paragraph 7.2.1).

DOP 02-06, Revision D, ICN-01, "Qualification and Certification of Personnel"

The Certification of Yucca Mountain Project (YMP)/Nuclear Waste Respository Technology (NWRT) Department Personnel Qualifications Forms were completed for the personnel listed above. The Employee Placement Reports, (computerized printout of employee's education work experience,

etc., prepared by SNL's Personnel Department who verified the education and experience of personnel during the hiring process) were reviewed to verify that personnel met the minimum qualifications for their job position. The annual job performance evaluation of F.B. Nimick, R.P. Sandoval, P.J. Boyd, T.E. Blejwas were reviewed. Additional training was required of F.B. Nimick who became a supervisor (he was a Task Leader prior to his promotion). He was certified on October 3, 1990 for this new assignment after completion of his additional training requirement.

SNL-QAP-2-7, Revision D, "Qualification of Quality Assurance Program Audit Personnel"

The lead auditor, auditors and technical specialists who performed the audits of Bechtel National Inc., BNI-A91-1; Oak Ridge National Laboratory, ORNL-A91-1 and Teledyne, TEL-A91-1 were verified to meet the qualification requirements specified in the above procedure.

The following qualification files were reviewed for compliance to the above procedure:

C.H. Barnes	Lead Auditor
Charles Foreman	Auditor
D.R. Hawkinson	Auditor
A.P. Hotchkiss	Records Specialist
J.A. Letz	Auditor
R.P. Sandoval	Technical Specialist
Greg Warner	Auditor

An examination specific to SNL NWRT and YMP Site Characterization Project was completed by C.H. Barnes. An ICN No. 01, QAP 2-7, Revision D was generated during the surveillance to clarify the administration of Lead Auditor Examination (see Paragraph 7.2.2). None of the above personnel required recertification as Lead Auditor or Auditors.

QAP 18-1, Revision C, ICN 01, "Quality Assurance Audits"

The SNL Quality Assurance Audit Schedule for Fiscal Year (FY) 1991, Revision 1, dated January 24, 1991 was reviewed. It was identified that the requirements against which the activities are to be audited were not listed on the schedule. The schedule was revised during the surveillance to reflect the missing element (see Paragraph 7.2.3). The audit schedule was transmitted to D.G. Horton on January 24, 1991.

It was verified that the audit schedule was revised to ensure that audit coverage is current. The QA Program Status Summary (January and February 1991) dated April 29, 1991 from R.R. Richards to T.E. Blejwas included the trends based on Audit Finding/Observation Reports (AFORs).

Three of the nine completed audits for FY 1991 were checked. The following audit record packages were reviewed:

<u>Auditee</u>	<u>Audit Number</u>	<u>Audit Date</u>
Bechtel National, Inc.	BNI-A91-1	1/22-23/91
Oak Ridge National Laboratory	ORNL-A91-1	11/6-7/91
Teledyne	TEL-A91-1	3/19-20/91

The Lead Auditor, Auditors, and Technical Specialists who performed the above audits were verified to be independent of the activities audited and qualified. The notification letter, audit plan and checklists were available. The checklists for BNI-A91-1 and ORNL-A91-1 were not properly filled-in and TEL-A91-1 was incomplete; however, these were resolved during the surveillance (see Paragraph 7.2.4). It should be noted that the checklist is not listed as a quality assurance (QA) record in the above procedure. It was recommended that SNL keep the checklist to provide objective evidence that pertinent information from the checklist are covered in the report.

Audit report BNI-91-A indicated closure of three AFORs issued during the BNI-90-1 (January 24 and 25, 1990) audit and the closed AFORs were attached. There was no close-out letter stating that the corrective action was adequate, as required by the above procedure. ICN No. 02, QAP 18-1 was issued to resolve the problem (see Paragraph 7.2.5).

Audits BNI-A91-1 and TEL-A91-1 identified AFORs. The AFORs were not issued to the audited organization within the 30-days after the completion of the audit as required by the above procedure (see attached Corrective Action Request (CAR) No. YM-91-047).

Verification of corrective action of SDR 568 was performed during the surveillance. The result was satisfactory and the SDR was closed.

5.0 PERSONS CONTACTED DURING THE SURVEILLANCE

Barnes, Curtis H., Quality Assurance Engineer, SNL
Blejwas, Thomas E., Acting Department Manager, SNL
Foreman, Charles E., Quality Assurance Engineer, SNL
Hawkinson, David R., Quality Assurance Engineer, SNL
Hersum, Taber G., Quality Assurance Engineer, SNL
Hooks, Kenneth R., Observer, U.S. Nuclear Regulatory Commission
Hotchkiss, Alice P., Records Manager, SNL
Letz, Jerry A., Quality Assurance Engineer, SNL
Richards, Robert R., QA Division Supervisor, SNL
Smit, Gene A., Quality Assurance Engineer, SNL
Tang, Mary A., Training Manager, SNL
Vanderbeer, Thomas E., Training Assistant, SNL

6.0 MEASURING AND TEST EQUIPMENT USED DURING THE SURVEILLANCE

None.

7.0 SYNOPSIS OF DEFICIENCY DOCUMENT AND DEFICIENCIES CORRECTED DURING THE SURVEILLANCE

7.1 Corrective Action Request

CAR No. YM-91-047 Audit findings were not issued to the audited organization within 30 calendar days after completion of the audit.

7.2 Deficiencies Corrected During the Surveillance

1. The training course for "Testing Requirements" given at the University of Colorado on November 20, 1990 had no documented evaluation of the course. The Lesson Plan Cover Sheet was noted that "Questions and Answers Sessions" would be conducted to evaluate the training course. The "questions and answers" were not in the training records package, as required by procedure QAP 02-05. Prior to the conclusion of the surveillance, the concerned SNL trainer corrected the problem by providing the "Question and Answer Session" documentation.

It should be noted that the surveillor reviewed all the training record packages for the training conducted in 1990, (none was conducted in 1991). Only 1 out of a total of 3 record packages had the above problem.

2. During the review of the test taken by the Lead Auditor, C.H. Barnes, it was noted that examination questions did not meet the requirements of QAP 2-07, Paragraph 4.3.4. SNL issued ICN No. 01 to Revision D of QAP 2-07 to clarify the administration of examination to Lead Auditors with Lead Auditor Qualification documents from other employers.

It should be noted that the Lead Auditor Qualification file reviewed was that of a consultant who have qualification documentation from his employer.

3. The SNL QA Audit Schedule for FY 1991, Revision 1, dated January 24, 1991 did not identify the requirements against which the activities are to be audited. Revision 2, dated May 8, 1991 was issued to identify the requirements.

4. The checklists for BNI-A91-1 and ORNL-A91-1 were not filled-in properly (some items were left blank), and the TEL-A91-1 checklist was incomplete. The auditors completed the blanks prior to the end of the surveillance and the completed TEL-A91-1 checklist is now on file.
5. Closeout letter(s) stating that corrective action(s) was(were) adequate after a satisfactory verification of corrective action(s) was not written to document the closure of AFORS generated during the Bechtel (BNI-A90-1) audit, as required by QAP 18-01, Revision C. Verification was conducted during the 1991 audit and the closed AFORS were attached to the audit report.

SNL issued ICN No. 02, to Revision C of QAP 18-01 to delete the requirement. The rationale states, "Requirements of this paragraph exceed those of Quality Assurance Program Procedure, Revision E, Paragraph 1.8.7. A closeout letter is unnecessary. Corrective action is verified on each audit finding individually, and a copy of the closed finding is forwarded to QA records."

8.0 RECOMMENDATIONS

It was recommended that SNL keep their completed checklists to provide objective evidence that pertinent information from the checklists are covered in the report.

9.0 REQUIRED ACTIONS

A written response is required for CAR YM-91-047 delineated in Section 7.1. Response to the CAR is due within 20 days from issuance of CAR transmittal letter. Upon issuance, and satisfactory verification of all remedial and corrective actions, the CAR will be closed and YMQAD will notify SNL (by letter) of the closure.

**OFFICE OF CIVILIAN
RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.**

CAR NO.: YM-91-047
DATE: 5/15/91
SHEET: 2 OF 2

**CORRECTIVE ACTION REQUEST
(continuation sheet)**

7 Recommended Action(s) (continued)

2. Investigate the program, process, activities, or documentation to determine the extent and depth of similar conditions to those listed on the CAR. Identify these deficiencies and provide the measures required to correct them.
3. Identify the cause of the condition and the planned corrective action to prevent recurrence.