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PROJECT OFFICE QUALITY ASSURANCE AUDIT REPORT FOR

THE YUCCA MOUNTAIN PROJECT OFFICE AUDIT OF

SANDIA NATIONAL LABORATORIES

AUDIT NUMBER 90-04

CONDUCTED AUGUST 20 THROUGH 24, 1990

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Date:

9/19/90

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Date:

9/21/90

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Date:

9/28/90

102.7

EXECUTIVE SUMMARY

In the opinion of the Yucca Mountain Project Office (Project Office) audit team, the Sandia National Laboratories (SNL) Quality Assurance (QA) program is adequate for the initiation of quality-affecting activities. In addition, the audit team determined that the overall effectiveness of the SNL QA program is satisfactory. However, specific elements of the QA program were identified as either indeterminate (due to lack of implementation) or ineffective. The following is a summary of those elements of the SNL QA program judged by the audit team to be ineffective and/or requiring further evaluation by SNL staff.

1. Criterion 3 (Software)--SNL has not included sufficient detail in their Quality Assurance Implementing Procedure QAIP 3-2, Revision 00, "Software Quality Assurance Requirements," to permit a clear step-by-step performance of activities, nor complete instructions to train staff members in the specifics of what they must do (reference Observation No. 4).
2. Criteria 4 and 7 (Procurement Document Control/Control of Purchased Items and Services)--The elements of the SNL QA program were determined to be ineffective in the areas dealing with procurement related nonconformances and QA records (reference Standard Deficiency Report (SDR) Nos. 572 and 574).
3. Criterion 10 (Surveillance)--This element of the SNL QA program was judged by the audit team to be effective. However, the audit team feels that SNL should evaluate their surveillance program to determine if the present staff level is adequate to support the current surveillance schedule. The above concern was based on SNL performing only 11 out of 37 scheduled surveillances. It should be noted that the number of personnel dedicated to SNL surveillances was identified as a concern during Project Office Audit No. 89-03 of SNL.
4. Criterion 16 (Corrective Action)--This element of the SNL QA program was judged by the audit team to be effective. However, the audit team is concerned that the identification of "Root Cause" in SNL Corrective Action Report (CAR) dispositions may not, in some cases, adequately identify the actual cause of the deficient condition. If the "Root Cause" is not adequately identified, the proper action may not be taken to preclude the recurrence of a similar deficiency. SNL should evaluate this area of their program to determine if the "Root Cause" analysis for each CAR is adequate.
5. Exploratory Shaft Facility Alternatives Analysis Study (Work Breakdown Structure (WBS) 1.2.6.1.1)--During a review of this study, the technical audit team drew the following conclusions:

- o If SNL continues its present documentation practices in relation to the alternative analysis, there may be a lack of sufficient engineering documentation to allow for independent evaluation and verification of the activities and resultant products without recourse to the originator.
- o The resultant product (i.e., the preferred options for the repository configuration and ESF configuration and construction method) is only as good/defensible as the reputation/credibility of the technical input and the credibility of management who made the decision. Any other group of similarly qualified individuals using a similar process may come to a completely different decision as to the preferred option.
- o The current (in-process) products of Tasks 2 and 3 may not be suitable in their current format for meeting the QA requirements of Criterion 3, Design Control.
- o The decision methodology, as a technique, (i.e., Tasks 1 through 5) is defensible.

As a result of this audit, eight SDRs and eight observations were issued to SNL. It should be noted that during the course of the audit, SNL was able to correct eight concerns identified by the auditors. These eight concerns and the actions taken to correct them are described in this report.

It was apparent to the audit team that a great deal of time and effort had been expended by SNL staff to correct previously identified QA program deficiencies. The SNL staff were cooperative and well prepared for the audit, and the audit team appreciated their efforts to help the audit progress smoothly.

1.0 INTRODUCTION

This report contains the results of a Quality Assurance (QA) audit of the activities conducted by Sandia National Laboratories (SNL) in support of the Yucca Mountain Project Office (Project Office). The audit was conducted at the SNL facilities in Albuquerque, New Mexico, August 20 through 24, 1990. The audit was conducted in accordance with the requirements of Quality Management Procedure QMP-18-01, Revision 3, "Audit System for The Waste Management Project Office." The QA program requirements to be verified were taken from the SNL Nuclear Waste Repository Team (NWRT) Quality Assurance Program Plan (QAPP), Revision E.

2.0 AUDIT SCOPE

The scope of the audit was to evaluate the SNL QA Program to determine whether it meets the requirements and commitments imposed by the Project Office. This was done by verifying implementation and effectiveness of the program in place, as well as verifying compliance with requirements.

The following program elements were audited to assess compliance with the SNL-NWRT-QAPP, Revision E:

- 1.0 Organization
- 2.0 Quality Assurance Program
- 3.0 Scientific Investigation Control and Design Control
- 4.0 Procurement Document Control
- 5.0 Instructions, Procedures, Plans, and Drawings
- 6.0 Document Control
- 7.0 Control of Purchased Items and Services
- 8.0 Identification and Control of Items, Samples, and Data
- 10.0 Inspection
- 11.0 Test Control
- 12.0 Control of Measuring and Test Equipment
- 13.0 Handling, Shipping, and Storage
- 15.0 Control of Nonconformances
- 16.0 Corrective Action
- 17.0 Quality Assurance Records
- 18.0 Audits

The audit scope included a review and evaluation of the following technical activities:

<u>WBS Number</u>	<u>Title</u>
1.2.1.4.1	Total System Performance Assessment
1.2.1.4.4.1	Pre-Waste Emplacement Ground Water Travel Time

- 1.2.1.4.6 Development and Validation of Flow and Transport Models
- 1.2.1.4.7 Supporting Calculations for Post-closure Performance Analyses
- 1.2.1.4.9 Development and Verification of Flow and Transport Codes
- 1.2.6.1.1 Exploratory Shaft Management Planning/Technical Assessment

In addition, the above technical activities were evaluated to determine adequacy in the following areas:

1. Technical qualification of scientific investigators and design personnel.
2. Understanding of procedural requirements as they pertain to scientific investigation and design control activities.
3. Adequacy of technical procedures.
4. Development of study plans, work supporting the Site Characterization Plan (SCP), and any related work products.

3.0 AUDIT TEAM PERSONNEL AND OBSERVERS

<u>Responsibility</u>	<u>Individual</u>
Audit Team Leader	Stephen R. Dana
Audit Manager	James Blaylock
Auditor	A. Edward Cocomps
	Mario R. Diaz
	Stephen D. Harris
	Martha J. Mitchell
	John S. Martin
	Charles W. Warren
Auditor-in-Training	John Matras
	Joe Mikolajczak

	Richard E. Powe
	Cynthia H. Prater
Lead Technical Specialist	Forrest Peters
Technical Specialist	Albin Brandstetter
	Neil D. Cox
	Stephen P. Hans
	Bob White
Observer	William Belke, (Lead) U.S. Nuclear Regulatory Commission (NRC)
	Robert Brient NRC
	John Buckley NRC
	Kenneth R. Hooks NRC
	John Peshel NRC
	Englebrecht V. Tiesenhausen Clark County, Nevada
	Susan W. Zimmerman Nevada Waste Project Office (NWPO)

4.0 SUMMARY OF AUDIT RESULTS

4.1 Statement of Program Effectiveness

In the opinion of the Project Office audit team, the overall effectiveness of the SNL QA program was determined to be satisfactory. However, specific elements of the SNL QA program were identified as either indeterminate (due to lack of implementation) or ineffective, as noted below.

1. Criterion 3 (Software)--Ineffective (reference Observation No. 4).

2. Criterion 4--Ineffective (reference Standard Deficiency Report (SDR) No. 572).
3. Criterion 7--Ineffective (reference SDR No. 574).
4. Criterion 8--Indeterminate due to lack of implementation.
5. Criterion 11--Indeterminate due to lack of implementation.
6. Criterion 12--Indeterminate. Since SNL is transitioning to a new subcontractor in the area of Measuring and Test Equipment, this criterion was not verified during the audit. The Project Office will verify activities associated with Criterion 12 during the next scheduled surveillance at SNL.
7. Criterion 15--Indeterminate due to lack of implementation.

Based on the results of the audit, the SNL QA program appears to be adequate for the initiation of quality-affecting activities. The ineffective areas identified above do not represent a significant breakdown in the QA program, but they do indicate areas where management attention is needed. The audit team recommends that in-depth SNL internal surveillances or audits be performed in these areas, as well as those areas identified by the audit team as deficient (reference Enclosure 3).

4.2 Summary of Technical Activities

In the opinion of the Technical Specialists assigned to the audit, SNL technical staff are competent, capable, and appropriately dedicated to plan and carry out activities for this project. Technical training appears to be sufficient to initiate new work or to work under a qualified QA program.

In the areas relating to scientific investigation and design control activities, the following were observed by the technical audit team:

1. Five active Performance Assessment Work Breakdown Structure (WBS) elements were evaluated: WBS 1.2.1.4.1, WBS 1.2.1.4.4.1, WBS 1.2.1.4.6, WBS 1.2.1.4.7, and WBS 1.2.1.4.9. Quality Level 3 was found to be appropriate for the activities in these WBS elements. There were no findings due to technical requirements. The five work plans were adequate. The personnel designated to conduct the work were quite competent and should be able to execute the work plans. The work planned for WBS elements 1.2.1.4.6 (Development and Validation of Flow and Transport Models) and 1.2.1.4.4.1 (Pre-Waste Emplacement Ground Water Travel Time) was especially impressive.

2. A review of the activities associated with the Alternative Analysis Study was performed during this audit. The scope of these activities was identified in the Yucca Mountain Project Exploratory Shaft Facility (ESF) Alternatives Study Implementation Plan, Revision 0, dated November 30, 1989. SNL used Work Plan (WP) 1.2.6.1.1 and Implementing Technical Memo (ITM) 010 to control the activities required to complete this scope of work. The ITM was further supplemented by Design Investigation Memos (DIMs) 240 through 254, except 253. The DIMS provided control of the tasks, which made up the entire scope. Eight tasks were controlled by the DIMS, as noted below.

<u>Task</u>	<u>DIM Number</u>
1	249
2	240, 243, 245, 252
3	244
4	243
5	241, 251, 254
6	250

The last two tasks were not included in ITM 010, but were controlled by other SNL ITMs and DIMS.

This audit did not review the activities in all eight tasks--only Tasks 1, 2 and 3 were reviewed. Task 1, entitled, "Management," defined the Project participant and identified Memo of Understanding (MOU) 660015, which established the scope of work for each participant. Additionally, it established the records filing system for all activities within the study. Task 2, entitled, "Methodology," defined (1) the technical approach to be used in the decision process for the selection of a preferred repository-ESF configuration and (2) the preferred method of construction. It also selected the steps required to form a comprehensive and robust decision aiding methodology and to assist other task groups within the ESF alternate configuration study in the application of the methodology. Additionally, the documentation of the methodology and results of activities related to its development and application were identified. Task 3, entitled, "Requirements," consisted of reviews of existing program requirements documentation and all comments and concerns relating to the repository and ESF design and construction. The purpose of this review is to identify those requirements that may impact or discriminate between options of the preferred

repository access configuration and the ESF configuration and construction methods.

The techniques used during the technical audit were interview of personnel and review of documentation. These techniques revealed apparent weaknesses within the alternative studies. It must be clearly understood that this audit was not finished during the time frame allowed. Additionally, the work products reviewed during the audit were in-process. No finished work products were reviewed during the technical audit phase. Given the stage of progress of the work and the incompleteness of the audit process, the conclusions and observations that follow must be considered preliminary.

Each task audited revealed situations, that were perceived by the technical audit team to be potential weaknesses, as identified below:

- Task 1 A. There appears to be insufficient documentation of SNL investigation of various decision making methods and facilitators prior to making their selection. The selection method itself appears to be sound.
- B. There appears to be a lack of emphasis and planning on the System Engineering concepts. A review of the various outputs by a Systems Engineering organization may be warranted.
- Task 2 A. There appears to be a lack of clear engineering type documentation of assumptions in the development of the influence diagrams. This lack of documentation may lead to an inability to perform independent verification without recourse to the originators.
- B. There appears to be a dependence upon the facilitator to develop and implement the influence diagrams. This dependence includes implementation and training of panels and committees for the entire process of technical and management decisions. This dependence stems from the understanding of levels of the tasks leaders and managers. The audit team believes this is a matter of degree of understanding rather than a lack of understanding.
- Task 3 A. It appears that the identification of the individuals who made the decision about the discrimination of each requirement is uncertain. This may lead to difficulties during the verification of results.

- B. There appears to be a lack of objective evidence of the literature search that took place during the Task 3 work. There also appears to be a misunderstanding of the difference between literature searches and reference lists.
- C. There appears to be a lack of clearly identified assumptions made during the decision about discriminators. This too may effect the verification phase of the work.

Tasks 4, 5, 6, 7, and 8 were not audited.

The audit team drew the following conclusions from the apparent weaknesses identified above:

1. If SNL continues its present documentation practices involved in the alternative analysis, there may be a lack of sufficient engineering documentation to allow for independent evaluation and verification of the activities and resultant products without recourse to the originator.
2. The resultant product (i.e., the preferred options for the repository configuration and ESF configuration and construction method) is only as good/defensible as the reputation/credibility of the technical input and the credibility of the management who made the decision. Any other group of similarly qualified individuals using a similar process may come to a completely different decision as to the preferred option.
3. The current in-process products of Tasks 2 and 3 may not be suitable in their current format for meeting the QA requirements of Criterion 3, Design Control.

However, it must be noted that the decision methodology, as a technique, (i.e., Tasks 1 through 5) is defensible.

4.3 Summary of Findings

A total of eight SDRs were generated during the course of this audit. Information copies of the SDRs are attached as Enclosure 3. Eight observations were issued to SNL and are attached as Enclosure 2. A synopsis of SDRs and observations is presented in Section 6 of this report. Additionally, this synopsis includes eight concerns that were corrected during the course of the audit.

5.0 AUDIT MEETINGS

5.1 Pre-audit Conference

A pre-audit conference with the SNL Technical Project Officer (TPO) and his staff was conducted at 10:00 a.m. on August 20, 1990. The purpose, scope, and proposed agenda for the audit were presented and the audit team was introduced. A list of those attending is attached as Enclosure 1.

5.2 Persons Contacted during the Audit

(See Enclosure 1 for a list of those persons contacted during the audit).

5.3 Post-audit Conference

The post-audit conference was conducted at 2:00 p.m. on August 24, 1990, at the SNL office in Albuquerque, New Mexico. A synopsis of the preliminary SDRs and observations identified during the course of the audit was presented to the TPO and his staff. A list of those attending the post-audit conference is attached as Enclosure 1.

5.4 Audit Status Meeting

Audit status meetings were held with the SNL TPO and his key staff at 8:45 a.m. on each day of the audit. A status of how the audit was progressing and identification of discrepancies were discussed.

6.0 SYNOPSIS OF STANDARD DEFICIENCY REPORTS, OBSERVATIONS, AND CONCERNS CORRECTED DURING THE AUDIT

6.1 Standard Deficiency Reports

SDR No. 571 SNL Department Operating Procedure (DOP) 2-8 requires that a management assessment of the QA program be initiated at least once each fiscal year. This makes it possible to exceed the annual requirement of the QAPP. In addition, a review of SNL management assessments for fiscal years 1989 and 1990 indicated that they did not address effectiveness of implementation of the QA program.

- SDR No. 572 SNL has not specified QA record requirements in any of the procurement documentation for suppliers or subcontractors performing quality-affecting activities.
- SDR No. 573 SNL Work Plans (WPs) were not processed in accordance with governing procedures, and WPs do not identify all procedures applicable to the work.
- SDR No. 574 Some subcontractor procedures dealing with nonconformances do not contain the requirements described in the SNL QAPP.
- SDR No. 575 Some SNL surveillance reports were not issued within 15 working days of the surveillance.
- SDR No. 576 Numerous SNL Deficiency Reports (DRs) did not contain the required schedule for completion, personnel responsible for implementation, nor individual or organization responsible for verification of completion of the corrective action.
- SDR No. 577 A review of SNL audits indicated that (1) audit checklists are not retained as QA records and (2) audit reports do not contain sufficient information relative to each specific criterion audited. If the audit checklists are not maintained as QA records, the audit report must stand alone and state in detail what was specifically examined.
- SDR No. 578 Audit reports are not being issued within 30 calendar days of the audit.

6.2 Observations

1. The flow of SNL Quality Assurance Implementing Procedure (QAIP) 2-10 does not ensure that cognizant personnel receive QA Control Specification Records and that the QA Control Specification Records reflect approved Quality Assurance Grading (QAG) packages.
2. The requirements for documentation of design analysis information are found in SNL-NWRT-QAPP, Section 3.12.2. The responsibility of ensuring that the design information is documented is assigned to the individual Principal Investigators (PIs) per DOP 3-4, Section 7.2. However, the information is not required to be included in the Design Investigation Memo (DIM). Not passing the requirements on for inclusion in the DIM is in itself a weakness.

Since the information is not included in the DIM, as a minimum, all PIs should be trained in the responsibilities delineated in DOP 3-4, Section 7.2.

3. The WP for WBS 1.2.6.1.1 and ITM-10, which control the ESF Alternatives Study, are inconsistent in their identification of task leaders and delineation of work activities.
4. Quality Assurance Implementing Procedure QAIP 3-2 does not clearly delineate the detail necessary to determine that prescribed activities, relative to the implementation of computer software controls, have been satisfactorily accomplished.
5. QAIP 5-1 requires all appendices that are forms to be marked "Sample." In actual practice, the mark reads "SAMPLE, CONTACT THE CONTROLLED DOCUMENT CENTER STAFF TO OBTAIN THIS FORM." The forms (latest revision) are maintained per procedure, by the Controlled Document Center staff. There are no control identification (ID) numbers or dates on the forms.
6. Since January 1990, approximately 37 surveillances have been scheduled with only eleven being performed. The audit team is concerned that, due to manpower, an effective surveillance schedule cannot be maintained.
7. Voided
8. SNL-NWRT-QAPP, Section 11, requires specific information be specified on test records for engineered items and acceptance test personnel be qualified in accordance with Appendix C of the QAPP. Although no testing of engineered items has been performed by SNL, QAIP 11-1 provides for preparation and approval of Equipment Test Procedures (ETPs) without requiring that the above information be included in these procedures.
9. Currently, no procedural guidelines exist other than what is listed within QAP 18-1 to control audit findings. However, during review of audit reports, it was ascertained that a form called the Audit Finding/Observation Report (AOFR) exists and is being used, but is not identified in the procedure.

6.3 Concerns Corrected During The Audit

1. SNL QAP 1-4, Revision 0, "Resolution of Quality Assurance Disputes," did not allow QA personnel to elevate the resolution of disputes to the YMPO Project Quality Manager (PQM) if the dispute cannot be resolved within the organization. This is a requirement of SNL-NWRT-QAPP, Revision E, Section 1.2.1. SNL corrected this deficiency by issuing Interim Change Notice (ICN)

No. 02 to procedure QAP 1-4, to include the Project Office Project Quality Manager (PQM) if the dispute cannot be resolved within the organization.

2. SNL QAIP 2-10, Revision 00, "Determination of Applicable QA Controls," required completion of a QA Specification Record prior to sending QAG Packages to the Quality Review Board (QRB) for review and acceptance. During the audit, it was found that QA Specification Records for QA Grading packages sent to the QRB had not been completed. SNL corrected this deficiency by issuing ICN No. 01 to procedure QAIP 2-10, to allow completion of QA Specification Records after QA Grading Packages have been sent to the QRB.
3. SNL DOP 2-6, Revision D, "Qualification and Certification of Personnel," requires initiation of a new "Certification of YMP/NWRT Personnel Qualification" form to document annual proficiency evaluation of SNL personnel. During the audit, it was found that an "Annual Recertification YMP/NWRT Personnel Qualification" form was used to document personnel recertification, rather than the form required by DOP 2-6. SNL corrected this deficiency by issuing ICN No. 01 to DOP 2-6, to allow use of the "Annual Recertification YMP/NWRT Personnel Qualification" form.
4. SNL QAIP 3-2, Revision 00, "Software Quality Assurance Requirements," requires a copy of the Software Master Log Notebook to be maintained in the Local Records Center (LRC) and that specific entries be contained in the Software Master Log for each software version. Contrary to the above, the master log was not placed into the LRC and the entries to be contained in the master log were not added to the data base. SNL corrected this deficiency (reference Memorandum dtd. 9/30/90, Miller to Sandoval) dated August 30, 1990. The memorandum detailed the corrective actions as: (1) entry items were added to the master log data base and (2) a copy of the master log notebook was placed in the LRC. Also added as an enclosure to the memorandum is a two-page current copy of the master log.
5. SNL DOP 8-2, Revision C, "Operation of the SNL NWRT Department Samples Library," requires that the organization of the person making entries be included in the sample log-out notebook and that the organization of the person receiving samples and making entries be included in the sample log-in notebook. The organization of the person in both requirements cited above was not entered into the notebooks. SNL corrected this deficiency by adding the names of the organization to the sample log-in and log-out notebooks.

6. SNL-NWRT-QAPP, Revision E, Section 8.3.3.2, requires that long-term storage be defined by the Principal Investigator for individual samples depending on the sensitivity of the samples to storage conditions. DOP 8-2 does not define "long-term" storage of samples as described above. SNL corrected this deficiency by issuing ICN No. 01 to DOP 8-2, to define long term for individual samples depending on the sensitivity of the samples to storage conditions.
7. SNL QAP 10-1, Revision 1, "Surveillances," requires that a QA surveillance schedule be updated on a quarterly basis. The SNL surveillance for July 1990 was not issued. SNL corrected this deficiency by issuing a surveillance schedule on August 23, 1990.
8. SNL QAP 16-1, Revision B, "Corrective Action," requires that the organization responsible for implementing the corrective action shall ensure that the action is completed in a timely manner. The corrective action for SNL CAR 90-1 was not being completed within a timely manner, even after being identified as deficient for the requirement stated above on SNL CAR 90-3. SNL corrected this deficiency by the actions necessary to close CAR 90-1.

7.0 REQUIRED ACTIONS

Responses to each SDR (delineated in Section 6.0) are due within 20 working days from the date of the SDR transmittal letter. Upon response, and satisfactory verification of all remedial and corrective actions, the SDRs will be closed and SNL will be notified (by letter) of the closure.

A written response is required for the observations contained in Enclosure 2 of this report. Responses are due within 20 working days from the date of the transmittal letter of this report. ▸

ENCLOSURE 1

SANDIA NATIONAL LABORATORIES
90-07 AUDIT ROSTER

<u>Name</u>	<u>Organization</u>	<u>Title</u>	<u>Pre-Audit</u>	<u>Contacted During Audit</u>	<u>Post Audit</u>
Arbuckle, Deanna	LATA/SNL		X	X	
Barnes, Curtis	MACTEC/SNL	Auditor	X	X	
Bauer, Stephen J.	SNL	SMTS	X	X	X
Belke, Bill	NRC	Observer (Lead)	X		X
Beller, George P.	SNL	Audit Coordinator		X	X
Bingham, Felton	SNL	Supervisor, 6312	X	X	X
Blailock, Robert V.	SNL	Auditor	X	X	X
Blankenship, D. A.	SNL	6314	X		X
Blaylock, James	DOE/YMP	Audit Manager	X		X
Elejwas, T. E.	SNL	Supervisor, 6313	X	X	X
Brandstetter, Albin	SAIC/T&MSS	Technical Specialist	X		X
Brient, Robert D.	NRC	Observer	X		X
Brockman, Dottie	SNL	MA	X	X	
Buckley, John	NRC	Observer	X		X
Cheek-Martin, Frances	SNL	Procedures Coordinator	X	X	X
Cocoros, A. Edward	MACTEC/YMP	Auditor	X		X
Costin, Larry	SNL	Supervisor	X	X	X
Cox, Neil D.	SAIC/YMP	Technical Specialist	X		X
Dana, Stephen R.	SAIC/YMP	Audit Team Leader	X		X
Davis, Allison	SNL	Technical Aide	X		
Dennis, Al	LATA/SNL	SMTS	X	X	
Deshotel, Lynn	TRI/SNL		X	X	
Diaz, Mario R.	DOE/YMP	Auditor	X		X
Dockery, Holly	SNL	SMTS	X		
Dunn, Ellen	SNL	6312	X		X
Edmund, Stan	SNL	GR	X	X	
Fewell, M. E.	SNL	SMTS	X	X	X
Finley, Ray E.	LATA/SNL	SMTS	X	X	X
Foreman, Chuck	MACTEC/SNL		X	X	
George, James T.	SNL	STA	X	X	X
Glass, Bob	SNL	SMTS	X	X	
Hans, Stephen P.	SAIC/T&MSS	Technical Specialist	X		X
Hansen, Frank D.	SNL	SMTS	X	X	X
Harris, Stephen D.	SAIC/YMP	Technical Specialist			X
Hopkins, Polly	SNL	SMTS		X	
Hooks, Kenneth R.	NRC	Observer	X		X
Hotchkiss, Alice	SNL	Records Manager	X	X	X
Hunter, Thomas O.	SNL	TPO	X	X	X
Kaplan, Paul,	SNL	SMTS	X	X	
Klamerus, Leo J.	SNL	SMTS	X	X	X
Kozemchak, Stephanie	LATA/SNL	Admin. Support		X	X

SANDIA NATIONAL LABORATORIES
90-07 AUDIT ROSTER
(continued)

<u>Name</u>	<u>Organization</u>	<u>Title</u>	<u>Pre-Audit</u>	<u>Contacted During Audit</u>	<u>Post Audit</u>
Langkoph, Brenda	SNL	SMTS		X	
LaPorte, Leigh	LATA/SNL	Engineering Assistant	X	X	X
Lauffer, Franz	SNL		X		
Martin, John S.	SAIC/YMP	Auditor	X		X
Matras, John	SAIC/YMP	Auditor-in-Training	X		X
Mikolajczak, Joe	CER/OCRWM	Auditor-in-Training	X		X
Mitchell, Martha J.	SAIC/YMP	Auditor	X		X
Morales, Arthur P.	LATA/SNL	SMTS	X	X	X
Miller, Warren	SNL	STA	X		X
Parsons, Mike	SAIC/T&MSS	Prin. Invest. - ESF		X	X
Peters, Forrest D.	SAIC/T&MSS	Lead Technical Spec.	X		X
Powe, Richard E.	SAIC/YMP	Auditor-in-Training	X		X
Prater, Cynthia H.	SAIC/YMP	Auditor-in-Training	X		X
Richards, Robert R.	SNL	QA Manager	X	X	X
Ryder, Eric	SNL	MTS	X		X
Sandoval, Robert P.	SNL	Supervisor 6316	X	X	X
Schardein, Kay	TRI/SNL	DRMS Manager		X	X
Schneider, J. T.	LATA/SNL	Admin. Support	X		X
Schelling, Joe	SNL	SMTS	X		
Schenher, Al	LATA/SNL		X		
Sharpton, Sarah	SNL	Admin. Supervisor	X	X	X
Shephard, Les	SNL	Supervisor 6315	X	X	X
Siegel, malcolm D.	SNL	SMTS		X	
Smit, Gene A.	SNL	Quality Assurance	X	X	X
Sobolik, Steve	SNL	MTS		X	
Stevens, Al	SNL	Supervisor 6311	X	X	X
Taylor, Corinne	LATA/SNL	Admin. Support	X		
Teak, Jim	SAIC/SNL	Resident Integrator	X		
Tenorn, Cindy	SNL	Records		X	X
Tidwell, Vince	SNL	MTS	X		
Tiesenhausen, E. V.	Clark Co., NV	Observer	X		X
Troncoso, Richard L.	SNL	Computer System			X
Vanderbeek, Tom	TRI/SNL	DRMS Staff			X
Voigt, James V.	MACTEC/SNL	QA Engineer/Surveillor	X	X	X
Warren, Charles C.	MACTEC/YMP	Auditor	X		X
White, Robert	DOE/YMP	Observer	X		X
Wilson, Mike	SNL	SMTS	X		
Zimmerman, Susan	St. of NV	Observer	X		X

ENCLOSURE 2

YUCCA MOUNTAIN PROJECT OFFICE
1 YMPO OBSERVATION NO. 90-04-1

N-QA-012
4/89

Completed by Originating Organization	2 Noted During: Audit 90-04		3 Identified By: R. Powe A. Cocoros		4 Date: 8/24/90	
	5 Organization: SNL		6 Person(s) Contacted: R. Sandoval		7 Response Due Date is 20 Days from Date of Transmittal	
	<p>8 Discussion:</p> <p>The flow of QAIP 2-10 does not assure that cognizant personnel receive Quality Assurance (QA) Control Specification Records and that the QA Control Specification Records reflect approved Quality Assurance Grading (QAG) packages. For example,</p> <p>1. QAIP 2-10 Rev 00 requires:</p> <p>a) QA Control Specification Records to be sent to the Local Records</p>					
Completed by Respondee	9 QAE/Lead Auditor		Date		10 Branch Manager	
	<i>S. Lane</i>		9/19/90		<i>Catherine Sandoval</i>	
Completed by QA Org.	11 Response:					
	12 Signature: _____ Date: _____					
Completed by QA Org.	13 Response Receipt Acceptable <input type="checkbox"/>					
	Initiator		Date		QA/Lead Auditor	
14 Remarks:						
<table border="1"> <tr> <td>Page 1 of 2</td> </tr> </table>						Page 1 of 2
Page 1 of 2						

8 Discussion: (continued)

Center (LRC) but not to cognizant personnel.

b) QA Control Specification Records to be approved prior to project approval of QAG packages.

2. Present SNL procedures allow Work Plans (WPs) to be approved and issued prior to completion of all planning, i.e., prior to approval of QAG Packages and approval of QA Control Specification Records. WPs should not be issued until QAG Packages and QA Control Specification Records are approved. QA Package Control Specification Records should not be approved until after the QAG Package approval.

YUCCA MOUNTAIN PROJECT OFFICE
1 YMPO OBSERVATION NO. 90-04-2

N-QA-012
4/89

Completed by Originating Organization	2 Noted During: Audit 90-04	3 Identified By: M.J. Mitchell	4 Date: 8/24/90
	5 Organization: SNL	6 Person(s) Contacted: A. Stevens	7 Response Due Date is 20 Days from Date of Transmittal
	8 Discussion: The requirements for documentation of design analysis information are found in SNL-NWRT-QAPP, Section 3.12.2. The responsibility of ensuring that design information is documented is assigned to the Principal Investigator (PI) per SNL DOP 3-4, Section 7.2. However, the information is not required to be included in the Design Investigation Memo (DIM). Not passing the requirements on for inclusion in the DIM, is in itself a weakness. Since the information is not included in the DIM, as a minimum,		
Completed by Respondee	9 QAE/Lead Auditor <i>Maureen J Mitchell</i> 14 Sept 90	Date	10 Branch Manager <i>Catherine Kuyper</i> 9-20-90
	11 Response:		
Completed by QA Org.	12 Signature:		Date:
	13 Response Receipt Acceptable <input type="checkbox"/>	Initiator	Date
		QA/Lead Auditor	Date
14 Remarks:			
			Page 1 of 2

8 Discussion: (continued)

all PIs should be trained in the responsibilities delineated in DOP 3-4,
Section 7.2.

YUCCA MOUNTAIN PROJECT OFFICE
1 YMPO OBSERVATION NO. 90-04-4

N-QA-012
4/89

Completed by Originating Organization	2 Noted During: Audit 90-04		3 Identified By: S.D. Harris <i>S.D. Harris</i>		4 Date: 8/24/90	
	5 Organization: SNL		6 Person(s) Contacted: F. Bingham/W. Miller		7 Response Due Date is 20 Days from Date of Transmittal	
	8 Discussion: QAIP 3-2 does not clearly delineate the detail necessary to determine that prescribed activities, relative to the implementation of computer software controls, have been satisfactorily accomplished.					
Completed by Respondee	9 QAE/Lead Auditor <i>S.D. Harris</i>		Date <i>9/19/90</i>		10 Branch Manager <i>Arthur H. ...</i>	
					Date <i>9/29/90</i>	
Completed by QA Org.	11 Response:					
	12 Signature: _____ Date: _____					
Completed by QA Org.	13 Response Receipt Acceptable <input type="checkbox"/>					
	Initiator _____		Date _____		QA/Lead Auditor _____	
				Date _____		
14 Remarks:						
<table border="1"> <tr> <td>Page <u>1</u> of <u>1</u></td> </tr> </table>						Page <u>1</u> of <u>1</u>
Page <u>1</u> of <u>1</u>						

YUCCA MOUNTAIN PROJECT OFFICE
1 YMPO OBSERVATION NO. 90-04-5

N-QA-012
4/89

Completed by Originating Organization	2 Noted During: SNL Audit 90-04	3 Identified By: R. Powe <i>REP</i> A. Cocoros	4 Date: 8/24/90
	5 Organization: SNL	6 Person(s) Contacted: S. Edmund, C. Barnes, F. Cheek, J. Martin	7 Response Due Date is 20 Days from Date of Transmittal
	8 Discussion: QAIP 5-1, Para. 5.1 requires all appendices that are forms to be marked "Sample". In actual practice, the mark reads "SAMPLE, CONTACT THE CONTROLLED DOCUMENT CENTER STAFF TO OBTAIN THIS FORM". The forms (latest revision) are maintained per procedure, by the Controlled Document Center staff. There are no control ID numbers or dates on the forms. In order to effect better control of forms, it is recommended that form control numbers are tied to dates and which procedure describes the form.		
Completed by Respondee	9 QAE/Lead Auditor <i>REP S. Jones</i>	Date 9/19/90	10 Branch Manager <i>Catherine K. Hunter</i>
	Date 9/20/90		
Completed by QA Org.	11 Response:		
	12 Signature: _____ Date: _____		
Completed by QA Org.	13 Response Receipt Acceptable <input type="checkbox"/>		
	Initiator	Date	QA/Lead Auditor Date
14 Remarks:			Page 1 of 2

8 Discussion: (continued)

This was discussed with the document control staff and they indicated they had already begun to address better methods of controlling forms. The purpose of this Observation is to obtain SNLs written response as to planned improvements in forms control.

YUCCA MOUNTAIN PROJECT OFFICE
1 YMPO OBSERVATION NO. 90-04-6

N-QA-012
4/89

Completed by Originating Organization	2 Noted During: SNL Audit 90-04	3 Identified By: J.Martin/C.Prater	4 Date: 8/24/90
	5 Organization: SNL	6 Person(s) Contacted: J. Voigt	7 Response Due Date is 20 Days from Date of Transmittal

8 Discussion:
Since January 1990, approximately 37 surveillances have been scheduled with only eleven being performed. The audit team is concerned that, due to manpower, an effective surveillance schedule cannot be maintained.

9 QAE/Lead/Auditor <i>John S. Martin</i>	Date 9-19-90	10 Branch Manager <i>Catherine Hampton</i>	Date 9/20/90
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Completed by Respondee	11 Response:

12 Signature: _____ Date: _____

13 Response Receipt Acceptable <input type="checkbox"/>	
Initiator _____ Date _____	QA/Lead Auditor _____ Date _____

Completed by QA Org.	14 Remarks:

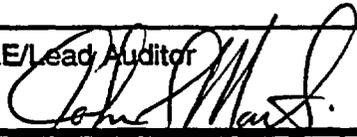
YUCCA MOUNTAIN PROJECT OFFICE
1 YMPO OBSERVATION NO. 90-04-8

N-QA-012
4/89

Completed by Originating Organization	2 Noted During: SNL Audit 90-04		3 Identified By: C. Warren		4 Date: 8/24/90		
	5 Organization: SNL		6 Person(s) Contacted: R. Price/R. Richards		7 Response Due Date is 20 Days from Date of Transmittal		
	8 Discussion: SNL-NWRT-QAPP, Revision E, Section 11 requires specific information be specified on test records for engineered items (Section 11.4.2) and acceptance test personnel be qualified in accordance with Appendix C of the QAPP (Section 11.5). Although no testing of engineered items has been performed by SNL, QAIP 11-1, Revision 00 provides for preparation and approval of equipment test procedures (ETPs) without requiring that the above information be included in these procedures.						
	9 QAE/Lead Auditor <i>C.C. Warren</i>		Date 9-19-90		10 Branch Manager <i>Catherine Hempel</i>		Date 9/20/90
Completed by Respondee	11 Response:						
	12 Signature: _____ Date: _____						
Completed by QA Org.	13 Response Receipt Acceptable <input type="checkbox"/>						
	Initiator _____		Date _____		QA/Lead Auditor _____		Date _____
14 Remarks:							
						Page 1 of 1	

YUCCA MOUNTAIN PROJECT OFFICE
1 YMPO OBSERVATION NO. 90-04-9

N-QA-012
4/89

Completed by Originating Organization	2 Noted During: SNL Audit 90-04	3 Identified By: J.Martin/C.Prater	4 Date: 8/24/90
	5 Organization: SNL	6 Person(s) Contacted: J. Voigt	7 Response Due Date is 20 Days from Date of Transmittal
	8 Discussion: Currently, no procedural guidelines exist other than what is listed within Paragraph 4.4 of QAP 18-1 to control audit findings and observations. However, during review of audit reports, it was ascertained that an "Audit Finding Observation Report" (AFOR) form existed but was not proceduralized. The AFOR should be added to QAP 18-1.		
Completed by Respondee	9 QAE/Lead Auditor 	Date 9-19-90	10 Branch Manager 
	11 Response:		
Completed by QA Org.	12 Signature: _____		Date: _____
	13 Response Receipt Acceptable <input type="checkbox"/>	Initiator _____ Date _____	QA/Lead Auditor _____ Date _____
14 Remarks:			Page <u>1</u> of <u>1</u>

ENCLOSURE 3

YMPO STANDARD DEFICIENCY REPORT

N-QA-038
4/89

Completed by Originating QA Organization	1 Date <u>8-24-90</u>		2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2	
	3 Discovered During Audit <u>90-04</u>		3a Identified By <u>C. Warren</u>		4 SDR No. <u>571</u> Rev. <u>0</u>	
	5 Organization <u>SNL</u>		6 Person(s) Contacted <u>F. Schelling/R. Sandoval</u>		7 Response Due Date is <u>20 Working Days from Date of Transmittal</u>	
	8 Requirement (Audit Checklist Reference, If Applicable) 1. SNL-NWRT-QAPP, Revision E, Section 2.8.1 states the following: "Management assessments are to be conducted at least annually for determining the effectiveness of the system and management controls"					
	9 Deficiency 1. Contrary to requirement No. 1 stated above, SNL-NWRT-DOP 2-8, Revision A requires that a management assessment of the QA Program be initiated at least once during each fiscal year. This makes it possible					
Completed by Organization in Block 5	10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective Identify the remedial action(s) to be taken to correct the deficiencies noted in block 9. Identify the cause of the condition and the planned					
	11 QAE/Lead Auditor/Date <u>C. Warren 9-7-90</u>		12 Division Manager/Date <u>N/A</u>		13 Project Quality Mgr./Date <u>[Signature]</u>	
	14 Remedial/Investigative Action(s)					
	15 Effective Date _____					
	16 Cause of the Condition & Corrective Action to Prevent Recurrence					
Comp. by Orig. QA Org.	17 Effective Date _____					
	18 Signature/Date					
	19 Response Accepted		QAE/Lead Auditor/Date		Division Manager/Date	
	20 Corrective Action Verif. Satisfactory		QAE/Lead Auditor/Date		Division Manager/Date	
	21 Remarks					
22 QA CLOSURE		QAE/Lead Auditor/Date		Division Manager/Date		
				PQM/Date		

ENCLOSURE

YMPO STANDARD DEFICIENCY REPORT
CONTINUATION SHEET

N-QA-038
2/89

SDR No. 571

Page 2 of 2

8 Requirement (continued)

that are established to achieve and assure quality...".

2. SNL-NWRT-DOP 2-8, Revision A, Section 4.2 requires the designated management assessment team to perform the following action: "As a minimum, address the effectiveness of implementation of the QA Program, and whether personnel are trained in regards to the QA Requirements of the Program."

9 Deficiency (continued)

to exceed the annual requirement of the QAPP.

2. Contrary to requirement No. 2 stated above, a review of SNL management assessments for fiscal years 1989 and 1990 indicated that they did not address effectiveness of implementation of the QA Program.

10 Recommended Actions (continued)

action to prevent recurrence.

YMPO STANDARD DEFICIENCY REPORT
CONTINUATION SHEET

N-QA-038
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Page 2 of 2

8 Requirement (continued)

will be specified in accordance with Section 17.0. Contractors for QA Level I or II procurement shall be required to have a documented QA Program that is consistent with all, or appropriate portions of, the requirements of the YMP QA Plan." Para. 17.1.2 states in part, "QA Records include (1) individual documents that have been executed, completed, and approved and that furnish evidence of the quality and completeness of activities affecting quality; (2) documents prepared and maintained to demonstrate implementation of quality assurance programs. A completed record is a document that will either receive no more entries or whose revision would normally consist of reissue of the document; and is signed and dated by the originator, and, as applicable, by personnel authorized to approve the document."

DOP 7-1, Revision C, Para. 6.3.3.6 states, "Procurement documents will specify supplier responsibilities for QA records identification, maintenance, safeguarding, and turnover to this organization (SNL)."

9 Deficiency (continued)

adequate implementation of the appropriate portions of Section 17 of SNL QAPP.

SNL has only determined requirements for the submittal of records. However, these requirements are different than for those classified as QA records in the QAPP.

NOTE:

In accordance with an SNL list of contracts important to safety or waste isolation, dated 8/23/90, thirty contracts dealing with quality have already been awarded to date.

10 Recommended Actions (continued)

to determine the extent and depth of similar deficient conditions to those listed on the SDR. Identify these deficiencies and provide the measures required to correct them. Identify the cause of the condition and the planned corrective action to prevent recurrence.

YMPO STANDARD DEFICIENCY REPORT

N-QA-038
4/89

Completed by Originating QA Organization	1 Date 8/24/90		2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2
	3 Discovered During Audit 90-04		3a Identified By R. Powe & E. Cocoros		4 SDR No. 573 Rev. 0
	5 Organization SNL		6 Person(s) Contacted R. Sandoval		7 Response Due Date is 20 Working Days from Date of Transmittal
	8 Requirement (Audit Checklist Reference, if Applicable) 1. SNL QAP 2-3, Revision A, Paragraph 4.1.4 states in part, "The Work Plan shall have 13 sections (with appropriate subsections) as follows:				
	9 Deficiency Finding: SNL Work Plans (WPs) were not processed in accordance with governing procedures and WPs do not identify all procedures applicable to the work.				
	10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective Identify the remedial action(s) to be taken to correct the deficiencies noted in Block 9. Identify the cause of the condition and the planned				
	Completed by Organization in Block 5	11 QAE/Lead Auditor/Date <i>S. Davis</i> 9/7/90		12 Division Manager/Date N/A	
14 Remedial/Investigative Action(s)				15 Effective Date _____	
16 Cause of the Condition & Corrective Action to Prevent Recurrence				17 Effective Date _____	
Comp. by Orig. QA Org.	18 Signature/Date				
	19 Response Accepted	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date	
	20 Corrective Action Verif. Satisfactory	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date	
	21 Remarks				
22 QA CLOSURE		QAE/Lead Auditor/Date	Division Manager/Date	PQM/Date	

YMPO STANDARD DEFICIENCY REPORT
CONTINUATION SHEET

N-QA-038
2/89

SDR No. 573

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8 Requirement (continued)

7. Quality Assurance Requirements

A. QA Level Assignments

B. Applicable SNL QA Procedures, DOPs, and QAPs"

2. SNL-NWRT-QAPP, Revision E, Paragraph 5.2 states, "Principal Investigators are individually responsible for ensuring that they have obtained approved documentation to perform their assigned tasks prior to initiation of those tasks. Instructions, procedures, and drawings (if applicable) will be used at the work location.

9 Deficiency (continued)

Discussion:

1. QAP 3-2, Revision A, requires that WPs have 13 sections. WP 12611, Revision 0 and other 1990 WPs have only 5 sections (Refer to Requirement 1), i.e. SNL changed the format of WPs without revising the governing QAP 2-3 procedure. (Refer to Requirement 2).
2. Neither WP 12611 (PCA's 4 and 5) nor the WP 12611, "Grading Report" identify DOP 3-4, "Design Investigation Control" as an applicable procedure. (Refer to Requirement 1).

10 Recommended Actions (continued)

action to prevent recurrence.

YMPO STANDARD DEFICIENCY REPORT

N-QA-038
4/89

Completed by Originating QA Organization	1 Date 8/22/90		2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2
	3 Discovered During Audit 90-04		3a Identified By M.R. Diaz		4 SDR No. 574 Rev. 0
	5 Organization SNL		6 Person(s) Contacted G. Smit/D. Brockman		7 Response Due Date is 20 Working Days from Date of Transmittal
	8 Requirement (Audit Checklist Reference, if Applicable) Checklists 4.2.2, 7.2.2, and 7.4.1 SNL-NWRT-QAPP, Revision E, Para. 7.2.9.2 states in part, "Nonconformances to the procurement requirements or SNL-approved documents that consist of one or				
	9 Deficiency Some subcontractor procedures dealing with nonconformances do not contain the requirements described in Block 8 above, i.e., RE/SPEC procedure QAP-14, Revision 0, "Identification, Control, and Corrective Action of				
Completed by Organization In Block 5	10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective Identify the remedial actions to be taken to correct the deficiencies noted in Block 9. Investigate the program, process, activities, or documentation				
	11 QAE/Lead Auditor/Date <i>Mario Garcia</i> 9/4/90		12 Division Manager/Date N/A		13 Project Quality Mgr./Date <i>Catherine ...</i> 9/5/90
	14 Remedial/Investigative Action(s)				
Completed by Org. QA Org.	15 Effective Date _____				
	16 Cause of the Condition & Corrective Action to Prevent Recurrence				
	17 Effective Date _____				
Comp. by Orig. QA Org.	18 Signature/Date				
	19 Response Accepted	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date	
	20 Corrective Action Verif. Satisfactory	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date	
	21 Remarks				
Comp. by Orig. QA Org.	22 QA CLOSURE				
	QAE/Lead Auditor/Date	Division Manager/Date	PQM/Date		

YMPO STANDARD DEFICIENCY REPORT
CONTINUATION SHEET

N-QA-038
2/89

SDR No. 574

Page 2 of 2

8 Requirement (continued)

more of the following shall be submitted to this organization for approval of recommended disposition:

- o Technical or material requirement is violated.
- o Requirement in supplier documents, which has been approved by the purchaser, is violated.
- o Nonconformance cannot be corrected by continuation of the original process or by rework.
- o The item does not conform to the original requirement even though the item can be restored to a condition such that the capability of the item to function is unimpaired."

9 Deficiency (continued)

Nonconformances."

A contributing factor to this deficiency could be the fact that the SNL implementing procedure for these requirements was not written with the same mandatory language as the QAPP (Ref. DOP 4-1, Revision C, Para. 4.2.1).

10 Recommended Actions (continued)

to determine the extent and depth of similar deficient conditions to those listed on the SDR. Identify these deficiencies and provide the measures required to correct them. Identify the cause of the condition and the planned corrective action to prevent recurrence.

YMPO STANDARD DEFICIENCY REPORT

N-QA-038
4/89

Completed by Originating QA Organization

1 Date 8/22/90	2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3	Page 1 of 2
3 Discovered During Audit 90-04	3a Identified By J. Martin & C. Prater	4 SDR No. 575 Rev. 0
5 Organization SNL	6 Person(s) Contacted Jim Voigt	7 Response Due Date is 20 Working Days from Date of Transmittal
8 Requirement (Audit Checklist Reference, if Applicable) Audit Checklist Item No. 10-4, Question No. 1: SNL QAP 10-1, Revision D, Para. 3.5.2 states, "The surveillance report shall be prepared by the Team Leader and sent within 15 working days of the		
9 Deficiency Contrary to the above requirement, the following surveillances were not issued as procedurally mandated: CBM-90-1, CBM-90-2, and CBM-90-3.		
10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective Identify the remedial action(s) to be taken to correct the deficiencies noted in Block 9. Identify the cause of the condition and the planned		

Apvl.

11 QAE/Lead Auditor/Date <i>John Martin</i> 9-4-90	12 Division Manager/Date N/A	13 Project Quality Mgr./Date <i>[Signature]</i> 9/5/90
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Completed by Organization in Block 5

14 Remedial/Investigative Action(s)	15 Effective Date _____
16 Cause of the Condition & Corrective Action to Prevent Recurrence	17 Effective Date _____
18 Signature/Date	

Comp. by Org. QA Org.

19 Response Accepted	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date
20 Corrective Action Verif. Satisfactory	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date
21 Remarks			
22 QA CLOSURE	QAE/Lead Auditor/Date	Division Manager/Date	PQM/Date

YMPO STANDARD DEFICIENCY REPORT
CONTINUATION SHEET

N-QA-038
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Page 2 of 2

8 Requirement (continued)

surveillance to:

- o The organization surveilled,
- o the individual within the SNL NWRT Department responsible for the item or activity surveilled,
- o concerned management personnel,
- o the SNL NWRT QA Coordinator, and
- o the Records Management System.

10 Recommended Actions (continued)

action to prevent recurrence.

YMPO STANDARD DEFICIENCY REPORT

N-QA-038
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Completed by Originating QA Organization	1 Date 8/24/90		2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2		
	3 Discovered During Audit 90-04		3a Identified By J. Martin & C. Prater		4 SDR No. 576 Rev. 0		
	5 Organization SNL		6 Person(s) Contacted Jim Voigt		7 Response Due Date is 20 Working Days from Date of Transmittal		
	8 Requirement (Audit Checklist Reference, if Applicable) Audit Checklist Item No. 16-2, Question No. 3: SNL QAP 16-2, Revision B, states in part, that the dispositioner of Part II of the DR form will "Identify organizations or personnel responsible for						
Completed by Organization in Block 5	9 Deficiency Contrary to the above, it was noted that numerous Deficiency Reports (DRs) did not contain the required schedule for completion, personnel responsible for implementation, nor individual or organization responsible for						
	10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective Identify the remedial actions to be taken to correct the deficiencies noted in Block 9. Investigate the program, process, activities, or documentation						
	11 QAE/Lead Auditor/Date <i>J. Martin</i> 8-4-90		12 Division Manager/Date N/A		13 Project Quality Mgr./Date <i>Cherise Thompson</i> 9/5/90		
Comp. by Org. QA Org.	14 Remedial/Investigative Action(s)						
	15 Effective Date _____						
	16 Cause of the Condition & Corrective Action to Prevent Recurrence						
17 Effective Date _____							
18 Signature/Date							
19 Response Accepted		QAE/Lead Auditor/Date		Division Manager/Date		Project Quality Mgr./Date	
20 Corrective Action Verif. Satisfactory		QAE/Lead Auditor/Date		Division Manager/Date		Project Quality Mgr./Date	
21 Remarks							
22 QA CLOSURE		QAE/Lead Auditor/Date		Division Manager/Date		PQM/Date	

YMPO STANDARD DEFICIENCY REPORT
CONTINUATION SHEET

N-QA-038
2/89

SDR No. 576

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8 Requirement (continued)

implementation of these actions and a schedule for completion of the disposition." In addition, it is stated, "Identify who shall verify completion of the disposition."

9 Deficiency (continued)

verification of completion of the corrective action. Typical examples include DR 90-52, DR 90-68, and DR 90-69.

10 Recommended Actions (continued)

to determine the extent and depth of similar deficient conditions to those listed on the SDR. Identify these deficiencies and provide the measures required to correct them. Identify the cause of the condition and the planned corrective action to prevent recurrence.

YMPO STANDARD DEFICIENCY REPORT

N-QA-038
4/89

Completed by Originating QA Organization	1 Date 8/24/90		2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2
	3 Discovered During Audit 90-04		3a Identified By J. Martin & C. Prater		4 SDR No. 577 Rev. 0
	5 Organization SNL		6 Person(s) Contacted J. Voigt/C. Barnes		7 Response Due Date is 20 Working Days from Date of Transmittal
	8 Requirement (Audit Checklist Reference, if Applicable) Audit Checklist Item No. 18-3, Question No. 2: SNL-NWRT-QAPP, Revision E, Section 18, Para. 18.1 states in part: "....Audits shall be performed in accordance with a written procedure using				
Completed by Organization in Block 5	9 Deficiency Contrary to the above requirement; review of SNL audits indicated that checklists are not retained as Quality Records within their Local Records Center (LRC). To not utilize or make the checklists part of the audit				
	10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective Identify the remedial actions to be taken to correct the deficiencies noted in Block 9. Investigate the program, process, activities, or documentation <i>John S. Martin</i>				
	11 QAE/Lead Auditor/Date <i>[Signature]</i> 9-10-90		12 Division Manager/Date N.A.		13 Project Quality Mgr./Date <i>[Signature]</i> for 9-10-90
Comp. by Org. QA Org.	14 Remedial/Investigative Action(s)				
	15 Effective Date _____				
	16 Cause of the Condition & Corrective Action to Prevent Recurrence				
17 Effective Date _____					
18 Signature/Date					
19 Response Accepted	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date		
20 Corrective Action Verif. Satisfactory	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date		
21 Remarks					
22 QA CLOSURE	QAE/Lead Auditor/Date	Division Manager/Date	PQM/Date		

YMPO STANDARD DEFICIENCY REPORT
CONTINUATION SHEET

N-QA-038
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SDR No. 577

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8 Requirement (continued)

checklists...."

SNL-NWRT-QAPP, Revision E, Section 17, Para. 17.1.2 states in part: "A document or other item is not considered a QA Record until it satisfies the definition of a QA Record as defined below. The term "records", used throughout this section, is to be interpreted as QA Records. QA Records include 1) individual documents that have been executed, completed, and approved and that furnish evidence of the quality and completeness of data (including raw data), and activities affecting quality; 2) documents prepared and maintained to demonstrate implementation of quality assurance programs (e.g., audit, surveillance, and inspection reports)..."

In addition, SNL-NWRT-QAPP, Revision E, Para. 18.4 states in part:

"Objective evidence shall be examined to the depth necessary to determine if these elements are adequate for effective control and to determine whether or not they are being implemented effectively...."

9 Deficiency (continued)

report or a QA record, the audit report must stand alone and state in detail what was specifically examined. For example: audit report SNL-A90-1 did not list any documents observed or specific criteria examined and audit report PB-A90-1 did list documents examined although it did not state in detail what those documents (specific criteria) were examined for. If audit checklists are not to be retained as QA records, the reports must contain sufficient detail to identify what specific criteria each document was examined to.

10 Recommended Actions (continued)

to determine the extent and depth of similar deficient conditions to those listed on the SDR. Identify these deficiencies and provide the measures required to correct them. Identify the cause of the condition and the planned corrective action to prevent recurrence.

YMPO STANDARD DEFICIENCY REPORT

N-QA-038
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Completed by Originating QA Organization	1 Date 8/24/90		2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2
	3 Discovered During Audit 90-04		3a Identified By J. Martin & C. Prater		4 SDR No. 578 Rev. 0
	5 Organization SNL		6 Person(s) Contacted Jim Voigt/Curtis Barnes		7 Response Due Date is 20 Working Days from Date of Transmittal
	8 Requirement (Audit Checklist Reference, if Applicable) Audit Checklist Item No. 18-5, Question No. 2: SNL-NWRT-QAPP, Revision E, Section 18.5.1 states in part, "The audit report shall be compiled by the audit team,...and issued within 30 calendar				
Completed by Organization in Block 5	9 Deficiency Contrary to the above requirement, audit reports are not being issued within 30 calendar days of the audit. These are Audit Numbers: PB-A90-1 performed 12/14-15/89 and issued 2/8/90				
	10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective Identify the remedial action(s) to be taken to correct the deficiencies noted in block 9. Identify the cause of the condition and the planned				
	11 QAE Lead Auditor/Date <i>J. Martin</i> 9-4-90		12 Division Manager/Date N/A		13 Project Quality Mgr./Date <i>John Harp</i> 9-4-90
Comp. by Org. QA Org.	14 Remedial/Investigative Action(s)				
	15 Effective Date _____				
	16 Cause of the Condition & Corrective Action to Prevent Recurrence				
17 Effective Date _____					
18 Signature/Date					
19 Response Accepted		QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date	
20 Corrective Action Verif. Satisfactory		QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date	
21 Remarks					
22 QA CLOSURE		QAE/Lead Auditor/Date	Division Manager/Date	PQM/Date	

YMPO STANDARD DEFICIENCY REPORT
CONTINUATION SHEET

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8 Requirement (continued)
days...."

9 Deficiency (continued)

LTA-A90-1 performed 6/20/90 is not yet issued

AGA-A90-1 performed 6/13/90 and issued 7/18/90

BNI-A90-1 performed 1/24-25/90 and issued 3/5/90

RE/SPEC-A90-1, Audit Report Designator RES-A89-2
performed 10/17-18/89 and 11/1-2/89, and issued on 12/5/89.

10 Recommended Actions (continued)
action to prevent recurrence.