

YUCCA MOUNTAIN PROJECT OFFICE

QUALITY ASSURANCE SURVEILLANCE REPORT OF

LOS ALAMOS NATIONAL LABORATORY

SURVEILLANCE REPORT NUMBER YMP-SR-91-02

CONDUCTED OCTOBER 9 THROUGH OCTOBER 11, 1990

ACTIVITIES SURVEILLED:

PROCUREMENT, CALIBRATION OF MEASURING AND TEST EQUIPMENT,  
DEFICIENCY REPORTING AND CORRECTIVE ACTION

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ENCLOSURE 1

## 1.0 INTRODUCTION

This report contains the results of Yucca Mountain Project Office (Project Office) Quality Assurance (QA) surveillance of Los Alamos National Laboratory, YMP-SR-91-02, conducted in Los Alamos, New Mexico to verify compliance and implementation of their approved procedures.

## 2.0 PURPOSE AND SCOPE

The purpose of this surveillance was to determine the adequacy and effectiveness of the implementation of selected LANL QA Procedures. The scope of the surveillance covered the procedures and activities associated with the following criteria:

- IV Procurement
- XII Control of Measuring and Test Equipment
- XV Nonconformances
- XVI Corrective Action

Criterion XV, (Nonconformances) and XVI, (Corrective Action) are combined by LANL into a single procedure, "Deficiency Reporting". The following LANL implementing procedures were examined during the course of the surveillance:

1. TWS-QAS-QP-04.1, Revision 2, Procedure for Procurement
2. TWS-QAS-QP-04.2, Revision 2, Procedure for Accepting the Performance of Procured Services
3. TWS-QAS-QP-04.3, Revision 1, Qualification of Suppliers of Engineered Items and Services
4. TWS-QAS-QP-12.1, Revision 4, Procedure for Control of Measuring and Test Equipment
5. TWS-QAS-QP-15.2, Revision 1, Deficiency Reporting
6. TWS-QAS-QP-16.2. Revision 0, Procedure for Trending

In addition to the above procedures, the surveillance included the attempt to verify the corrective action and closure of all Standard Deficiency Reports (SDRs) identified by LANL as ready for closure.

### 3.0 SURVEILLANCE PERSONNEL

The surveillance was conducted by the following personnel:

K. T. McFall, QA Scientist, SAIC/Project Office, Surveillance Lead  
D. J. Harris, Sr. QA Engineer, Harza Engineering/Project Office, Team  
Member  
R. B. Constable, YMPO Project Office, DOE Lead  
S. W. Zimmerman, State of Nevada, Observer

### 4.0 SUMMARY OF SURVEILLANCE RESULTS

The documents 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:

#### TWS-QAS-QP0-04.1, Rev. 2, Procedure for Procurement

A total of twelve Purchase Order procurement packages were examined for compliance with the requirements stated in this procedure. Overall the procurement packages involving this procedure were found to be in good order with only a few minor document omissions which were corrected during the course of the surveillance.

#### TWS-QAS-QP-04.2, Rev. 2, Procedure for Accepting the Performance of Procured Services

In examining implementation of this procedure it was noted that the existing contracts predate the procedure by a considerable time, thus negating many of the requirements that would be called for in a contract that would be let after the effective date of this procedure. In the areas that were surveilled no problems were encountered with the exception of the Hydro Geo Chem Inc. contract which was missing the annually required "Acceptance of Results of Procured Services" form. This condition had been noted by internal LANL review and documented by the issuance of LANL Deficiency Reports (DRs) 0083 and 0084, dated August 16, 1990.

#### TWS-QAS-QP-04.3, REV. 1, Qualification of Suppliers of Engineered Items and Services

There were only three suppliers on the Authorized Vendors List (AVL) which could be examined during this surveillance. There were no problem areas identified with the implementation of this procedure.

TWS-QAS-QP-12.1, Rev. 4, Procedure for Control of Measuring and Test Equipment

Calibration of measuring and test equipment was reviewed on a limited basis with no intent of examining all all equipment involved in the Project. The examination centered on balances. M&TE Calibration Records which had exhibited some problems in the past were reviewed and found to be up to date and complete, primarily as a result of recent corrective action resulting from Project Office SDRs generated from surveillance YMP-SR-90-018. The instrumentation examined all had the required Calibration Labels containing all called for information. No problem areas were encountered in the implementation of this procedure.

TWS-QAS-QP-15.2, Rev. 1, Deficiency Reporting

A sample of 19 Deficiency Reports (DRs) from a population of 109 was reviewed to determine if the DRs were being processed in accordance with the procedure. For those DRs processed through any given procedure step, the DRs reflected an acceptable process. However, the review indicated numerous DRs currently have not been dispositioned within the allotted procedure time frame and the assigned dispositioner failed to request an extension. In addition, the QA organization failed to perform the verification for closure of the DR within the allotted time frame specified by the procedure.

The Project Office initiated SDR 562 during Surveillance YMP-SR-90-32 (7/11/90), which identified recurring problems in effective and timely implementation of LANL's corrective action system. LANL's QA organization has committed to amend their response to SDR 562 to encompass their Deficiency Reports with a corrective action completion date of November 15, 1990.

In LANL's initial response to SDR 562, they committed and have assigned Mr. Rich Morley, a QA Liaison person to head up LANL's deficiency reporting system. Mr. Morley has been provided full authority to direct needed actions. Mr. Morley has developed a computer tracking system for the DRs and Project Office Deficiency Documents. The following documents are generated:

- o Deficiency Report Log
- o Overdue Response Report
- o Overdue Completion Report
- o Overdue Verification Report

Mr. Morley has also initiated weekly meetings with the QA Liaison personnel assigned to each LANL organization to discuss their deficiency documents and status. Based on the above LANL action an improvement should be forth-coming in regards to LANL's deficiency reporting system.

TWS-QAS-QP-16.2, Rev. 0, Procedure for Trending

The LANL Trend Analysis Report for the period of January 1, through January 30, 1990 was evaluated for compliance to the procedure. The evaluation resulted in the initiation of SDR 597 for procedure noncompliance. The Trend Report failed to address Nonconformance Reports (NCRs) generated per superseded QP-15.1 and Corrective Action Reports (CARs) generated per superseded QP-16.1 during the period from 1 January through 3 April, 1990. The Trend Report also failed to address deficiencies remaining open at the end of the last 12 months and provide a comparison of the present 6 months trend to the previous 6 months. In addition, DRs were not issued for the positive trends in Criteria IV, V, and VII, nor was there any objective evidence of management action for trend indication in Criterion VI.

During the course of the surveillance, verification of corrective action was performed on 6 SDRs issued by the Yucca Mountain Project Office against LANL. The specific SDRs were: 464, 465, 490, 491, 512, and 513. The Completion of Corrective Action Date for SDR 466 was extended to 12/16/90, SDR 511 was extended to 11/30/90, and SDR 515 was extended to 12/15/90. An amended response to SDR 562 will be forthcoming.

5.0 PERSONS CONTACTED DURING THE SURVEILLANCE

H. Nunes, QAPL, LANL  
G. Rand, QA Engineer, LATA  
J. Day, QA Verification Coordinator, LATA  
G. Gainer, QA Engineer, LATA  
R. Morley, QA Liaison, LANL  
T. Morgan, QA Liaison, LANL  
M. Clevenger, QA Liaison, LANL  
G. Cort, Deputy QA Project Leader, LANL

6.0 MEASURING AND TEST EQUIPMENT USED DURING THE SURVEILLANCE

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

7.0 SYNOPSIS OF DEFICIENCY DOCUMENTS

SDR 597; Trend Report failed to address certain Nonconformance Reports and certain open deficiencies. Deficiency Reports were not issued for positive trends as required.

#### 8.0 RECOMMENDATIONS

The Project Office QA Surveillance Team recommends that LANL apply additional resources to the corrective action system until the status of each deficiency document is current with required time frame specified in the procedure.

#### 9.0 REQUIRED ACTIONS

LANL is requested to provide a response to SDR 597 within 20 working days of the transmittal of the Standard Deficiency Report. In addition, LANL is requested to provide a request for extension of the due date for implementation of corrective action on SDRs 466, 511, and 515.

**YMPO STANDARD DEFICIENCY REPORT**

N-QA-038  
4/89

Completed by Originating QA Organization	1 Date 10/10/90		2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2
	3 Discovered During YMP-SR-91-002		3a Identified By D. J. Harris		4 SDR No. 597 Rev. 0
	5 Organization LANL		6 Person(s) Contacted Rich Morley/J.L. Day		7 Response Due Date is 20 Working Days from Date of Transmittal
	8 Requirement (Audit Checklist Reference, if Applicable) QP 16.2, Revision 0, Change Request 120 and 123, Procedure for Trending.				
Completed by Organization in Block 5	9 Deficiency 1. Paragraph 6.1-1 states in part, "Evaluates DRs and SDRs that have been Trend Report only references NCRs that were not closed and transferred to DRs as of 3/26/90. The report has no objective evidence that NCRs processed and closed in accordance with QP 15.1 were included in the				
	10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective Identify the remedial action to be taken to correct the deficiencies noted in Block 9 and identify the cause of the condition and the planned action to				
	11 QAE/Lead Auditor/Date <i>N. Morris 10-15-90</i>		12 Division Manager/Date <i>N/A</i>		13 Project Quality Mgr./Date <i>John Huntington 10/15/90</i>
	14 Remedial/Investigative Action(s) 15 Effective Date _____				
Completed by Orig. QA Org.	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		

ENCLOSURE 2

**YMPO STANDARD DEFICIENCY REPORT  
CONTINUATION SHEET**

N-QA-038  
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SDR No. 597

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8 Requirement ( continued )

issued through QP 15.2 (effective 3/12/90) (prior to 3/12/90, NCR issued through QP 15.1)."

2. Paragraph 6.1-4 states in part, "Provides the following information: Number of deficiencies remaining open at the end of each of the last 12 months."
3. Paragraph 6.1-4 states in part, "Provides the following information: A comparison of the present six months period trend to the previous quarter's annual trend".
4. Paragraph 6.3-2 states in part, "Issues DRs based on the Trend Report as warranted. DR issued by this process will be tracked, verified, and closed using QP 15.2."
5. Paragraph 6.3-3 states in part, "Initiates management action for those items that may not require a corrective action but may warrant further assessment."

9 Deficiency ( continued )

Trend Report.

2. The Trend Report for period ending 6/30/90 fails to address the number of deficiencies remaining open at the end of the last 12 months.
3. The Trend Report fails to provide a comparison of the present six months trend to the previous 6 months trend. The report only reflects the current trend period.
4. DRs were not issued for the positive trend indicated in the January/December 1989 or January/June 1990 Trend Report.
5. Further assessments were not addressed in the current Trend Report. The report indicated Criteria 4, 5, and 17 as positive trends. The report reflects indication of a positive trend in Criteria 6 but no further action was addressed.

10 Recommended Actions ( continued )

prevent recurrence.