The Carlsbad Area Office (CAO) conducted an annual recertification audit (in conjunction with an EPA inspection) of the Los Alamos National Laboratory (LANL) Waste Characterization and Certification Quality Assurance Program activities on November 9-10, 1999. The audit team concluded that the LANL QA program is adequate in accordance with the CAO QAPD, effective, and satisfactorily implemented.

One isolated deficiency was identified and was Corrected During the Audit (CDA). Two Observations and two Recommendations are presented for management consideration.

Prior to the audit, LANL had suspended their TRU waste characterization and certification activities and had begun the process of realigning their technical program to the WIPP Hazardous Waste Facility Permit requirements. For this reason, the LANL technical program activities were not assessed during this audit and must be satisfactorily evaluated prior to further TRU waste shipments from LANL.

If you have any questions or comments concerning this report, please contact me at (505) 234-7423.

Samuel A. Vega
Quality Assurance Manager

Attachment
cc w/original attachment:
L. Chism, CAO

cc w/attachment:
R. A. Stroud, CAO
D. Winters, DNFSB
J. Channell, EEG
M. Eagle, EPA
S. Monroe, EPA
M. Gavett, LANL
P. Rogers, LANL
S. Zappe, NMED
T. Bowden, CTAC
S. Kouba, WID
W. Most, WID
U.S. DEPARTMENT OF ENERGY
CARLSBAD AREA OFFICE

AUDIT REPORT

OF THE

LOS ALAMOS NATIONAL LABORATORY

LOS ALAMOS, NEW MEXICO

AUDIT NUMBER A-00-03

NOVEMBER 9 – 10, 1999

TRU WASTE CHARACTERIZATION AND CERTIFICATION
QUALITY ASSURANCE PROGRAM RECERTIFICATION

Prepared By: John Ptacek
Audit Team Leader

Approved By: Samuel Vega
CAO Quality Assurance Manager

Date: 11/22/99
Date: 11/30/99
1.0 EXECUTIVE SUMMARY

Carlsbad Area Office (CAO) Audit A-00-03 was conducted to evaluate the continuing adequacy, implementation, and effectiveness of the quality assurance program activities supporting the Los Alamos National Laboratory (LANL) Transuranic (TRU) Waste Characterization and Certification Program (TWCP). The U.S. Environmental Protection Agency (EPA) also conducted a concurrent inspection of these activities.

The audit was conducted at LANL November 9 and 10, 1999. The audit team concluded that the applicable LANL quality assurance procedures were adequate relative to the flow down of requirements from the CAO Quality Assurance Program Document (QAPD).

The audit team concluded that the defined LANL QA Program continues to be satisfactorily implemented in accordance with the LANL Quality Assurance Project Plan (QAPP) and implementing procedures. The LANL QA Program was determined to be effective.

Prior to the audit, LANL had suspended their TRU waste characterization and certification activities and began the process of realigning their technical program to the WIPP Hazardous Waste Facility Permit requirements. For this reason, LANL technical program activities were not assessed during this audit and must, therefore, be satisfactorily evaluated prior to further TRU waste shipments from LANL.

The audit team identified one isolated deficiency in the area of Nonconformance reports (NCRs) that required only remedial corrective action and that was Corrected During the Audit (CDA). Two Observations and two Recommendations were also identified. The CDAs, Observations, and Recommendations are discussed in Section 6.0.

2.0 SCOPE

The audit team evaluated the adequacy, implementation, and effectiveness of quality assurance program activities supporting the Los Alamos National Laboratory (LANL) Transuranic (TRU) Waste Characterization and Certification Program.

Due to the suspension of LANL TRU waste characterization and certification activities while LANL completes the process of realigning their technical programs to the requirements of the recently issued WIPP Hazardous Waste Facility Permit, LANL technical program activities were not assessed during this audit.

The following Quality Assurance (QA) program elements were determined to be the core elements needed to support LANL program realignment activities and were evaluated in accordance with the CAO QAPD:
Organization and Interface Control
Document Control
Records
Training
Nonconformance Reports
Corrective Action Reports

3.0 AUDIT TEAM AND OBSERVERS

AUDITORS/TECHNICAL SPECIALISTS

Samuel Vega CAO Quality Assurance Manager
John Ptacek Audit Team Leader, CTAC
Mario Chavez Auditor, CTAC

INSPECTORS/OBSERVERS

Mike Eagle EPA Inspector
Patrick Kelly EPA Inspector
Gary Walvatne EPA Inspector
James Channell EEG Observer

4.0 AUDIT PARTICIPANTS

LANL individuals involved in the audit process are identified in Attachment 1. A preaudit meeting was held in the Technical Area (TA) 50, RAMROD Conference Room on November 9, 1999. Meetings were convened with LANL management and staff, as necessary, to discuss issues and potential deficiencies. The audit was concluded with a postaudit meeting held in the TA-50, RAMROD Conference Room on November 10, 1999.

5.0 SUMMARY OF AUDIT RESULTS

5.1 Program Adequacy, Implementation, and Effectiveness

The audit team evaluated the adequacy, implementation, and effectiveness of the six core elements of the LANL QA program that were within the scope of this audit. No adequacy or effectiveness deficiencies were identified. One minor, isolated deficiency in the implementation of the LANL nonconformance reporting process was identified and Corrected During the Audit. This issue is addressed as CDA #1 in Section 6.0. The audit team concluded that the adequacy of the LANL QA Program continues to satisfactorily meet the requirements of CAO’s QAPD, Revision 2, and that the QA program continues to be satisfactorily implemented and effective. A summary of the audit results is contained in Attachment 2.
5.2 QA Program Audit Activities

The audit team evaluated the QA program organization and interfaces. The evaluation included a review of the current TWCP organizational charts and interface documents, and interviews with the LANL TWCP Group Leader, Site Project Manager, and Site Project QA Officer. Particular emphasis was placed on the resource and organizational support issues identified during recent audits (A-99-04 and A-99-22). Good progress in both areas was observed. The LANL group (AA-2) that conducts internal assessments for the TWCP program is not always timely in processing their assessment reports. Observation #1 addresses this issue. The audit team determined that the LANL TWCP organization and interface structures are adequate, satisfactorily implemented, and effective.

Records and document control processes were evaluated to the requirements of applicable LANL procedures (TWCP-QP-1.1-002, Rev. 3 and TWCP-QP-1.1-004, Rev. 5). The evaluation included a review of document control files for nine of 59 controlled documents and a sample of twelve of approximately 2773 TWCP records. An additional 33 records were accessed and examined during the evaluation of training, nonconformance reporting, and corrective action reports. In addition to CDA #1 (see Section 5.1), one Recommendation (Recommendation #1) is submitted concerning clarification of document review criteria. The audit team determined that the document control and records processes are adequate, satisfactorily implemented, and effective.

The training process was evaluated to the requirements of LANL procedure TWCP-QP-1.1-003, R6. The evaluation included a review of eleven of 75 training files. Six of the eleven were from the management and QA staff. One Recommendation (Recommendation #2) is offered concerning proceduralizing the data recovery process of the training files in the corporate Electronic Data System (EDS). The audit team determined that the TWCP training process is adequate, satisfactorily implemented, and effective.

The nonconformance reporting process was evaluated to the requirements of LANL procedures TWCP-QP-1.1-007, R5. The evaluation included a review of 14 of 93 nonconformance reports (NCRs) issued in the last year that were not identifying prohibited items, which number over six hundred. Two of the 14 sampled NCRs were missing information in the "requirement violated" block of the form. This was corrected during the audit (CDA-1). The NCR process is adequate, satisfactorily implemented, and effective.

The corrective action report (CAR) process was reviewed to the requirements of LANL procedure TWCP-QP-1.1-008, R4. The evaluation included a review of eight of 22 CARs initiated since the previous re-certification audit in November 1998. Observation #2 identifies a concern with the lack of proceduralization in the definition and
documentation of signature dates that occur out of the normal sequence. The audit team determined that the CAR process is adequate, satisfactorily implemented, and effective.

6.0 CDAs, OBSERVATIONS, AND RECOMMENDATIONS

6.1 Corrected During the Audit (CDAs)

1. Two NCR forms were discovered to have missing information in the "requirements violated" block (#3). These omissions were determined to be isolated in nature and were satisfactorily Corrected During the Audit.

6.2 Observations

1. An internal audit was conducted for the TWCP program by the LANL Audits and Assessments Group (AA-2) in late July and early August, 1999. The audit report had not been finalized as of November 10, 1999. There is not a specific criteria for timeliness of these reports, but the benefits of the audit process are increasingly diluted as the interval between the audit and the resulting report becomes more protracted. The TWCP program should identify the need for more timely feedback from AA-2.

2. The signature dates on three CARs give the impression of an inconsistent or out-of-sequence signature process. Investigation revealed that these were due to review and verification actions, some of which occurred in a somewhat tardy manner, but which did not constitute a violation of the prescribed processes. Signatories of deficiency identification documents (CARs, NCRs, etc.) should annotate late or corrected signatures with a description of the significance of the signatures and dates appearing on the documents.

6.3 Recommendations

1. Some of the document review criteria for QA, technical, and management reviews are sketchy and are identified in different manners and areas of the procedure. CAO recommends clarification and standardization of the review criteria to assist the various reviewers in conducting their tasks.

2. The centralized LANL EDS database is used by the TWCP program to document and track the completion of required training. This database is organized by division assignment and prohibits access to records outside the division. In the space of two months, the TWCP was shifted from CST Division, to ETWT Division, and then to E-ET Division. Tracking of the status of required training was rendered difficult and could have resulted in lapsed training or lost documentation without the additional
efforts expended by the training staff. CAO recommends that the training procedure address the EDS recovery steps necessary during these transitions.

7.0 LIST OF ATTACHMENTS

Attachment 1: Personnel Contacted During the Audit
Attachment 2: Summary Table of Audit Results
<table>
<thead>
<tr>
<th>NAME</th>
<th>ORG/TITLE</th>
<th>PREAUDIT MEETING</th>
<th>CONTACTED DURING AUDIT</th>
<th>POST AUDIT MEETING</th>
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## CAO Audit A-00-03 Detail Summary

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### Definitions
- **E** = Effective
- **S** = Satisfactory
- **I** = Indeterminate
- **A** = Adequate
- **CDA** = Corrected During Audit
- **CAR** = Corrective Action Report
- **Obs** = Observation
- **Rec** = Recommendation