

United States Government

Department of Energy

memorandum

Carlsbad Field Office
Carlsbad, New Mexico 88221

DATE: January 8, 2001

REPLY TO
ATTN OF: CBFO:QA:SAV:01-0609:UFC:2300


SUBJECT: Carlsbad Field Office Audit Report A-01-02, Idaho National Engineering
and Environmental Laboratory

TO: Lori Fritz, ID

The Carlsbad Field Office (CBFO) conducted an audit of the Idaho National Engineering and Environmental Laboratory (INEEL) Waste Characterization and Certification activities relating to solid waste on December 5-7, 2000. The audit team concluded that, overall, the INEEL technical and QA programs were adequate in accordance with the CBFO QAPD, WIPP Hazardous Waste Permit, and the WIPP Waste Acceptance Criteria. The audit team also concluded that INEEL processes were being satisfactorily implemented and effective. The audit team was unable to complete evaluation in the areas of acceptable knowledge confirmation, reconciliation of data quality objectives, control charting, and PCB analysis. These areas are discussed further in the attached CBFO audit report.

There were no CBFO Corrective Action Reports issued as a result of the audit. Four deficiencies were corrected during the audit, four observations and five recommendations were identified during the audit and documented in the audit report.

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


Samuel A. Vega
Quality Assurance Manager

Attachment

010108



Lori Fritz

-2-

cc: w/attachment
I. Triay, CBFO
K. Watson, CBFO
L. Chism, CBFO
G. Beausoleil, ID
J. Wells, ID
D. Winters, DNFSB
S. Monroe, EPA
M. Eagle, EPA
S. Zappe, NMED
B. Walker, EEG
T. Monk, BBWI
T. Preston, BBWI
D. Murphy, BBWI
M. Gerle, WID
T. Bowden, CTAC



U.S. DEPARTMENT OF ENERGY
CARLSBAD FIELD OFFICE

AUDIT REPORT

OF THE

IDAHO NATIONAL ENGINEERING & ENVIRONMENTAL LABORATORY


IDAHO FALLS, IDAHO

AUDIT NUMBER A-01-02

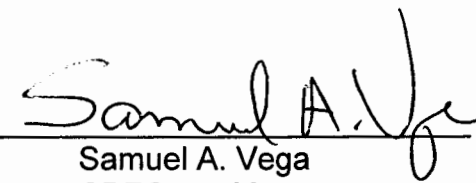
December 5-7, 2000

TRU WASTE CHARACTERIZATION AND CERTIFICATION
OF SOLIDS WASTES



Prepared By: 
Steven D. Calvert
Audit Team Leader

Date: 1/4/01

Approved By: 
Samuel A. Vega
CBFO QA Manager

Date: 1/4/01

1.0 EXECUTIVE SUMMARY

Carlsbad Field Office (CBFO) Audit A-01-02 was conducted to evaluate the adequacy, implementation, and effectiveness of Idaho National Engineering & Environmental Laboratory (INEEL) transuranic (TRU) waste characterization and certification activities related to summary category group S3000 (homogeneous solids). The audit was conducted at the INEEL facility December 5 through 7, 2000.

The audit team concluded that, overall, the INEEL technical and quality assurance procedures were adequate relative to the flow down of requirements from the CBFO Quality Assurance Program Document (QAPD); WIPP Hazardous Waste Permit (WAP); and Waste Acceptance Criteria (WAC). The audit team also concluded that, overall, the defined QA program was being satisfactorily implemented in accordance with the INEEL Quality Assurance Project Plan (QAPJP) and implementing procedures. The audit team determined that except in areas identified as indeterminate (i.e. acceptable knowledge confirmation, reconciliation of data quality objectives, control charting, and PCB analysis) the INEEL technical areas were satisfactorily implemented and effective.

The audit team identified four isolated deficiencies requiring only remedial corrective actions that were Corrected During the Audit (CDA). Four Observations were identified and five Recommendations are being offered for INEEL management consideration. No CBFO Corrective Action Reports (CARs) were issued during this audit and the corrective action from one CAR from previous review activities was verified and closed. The CDAs, Observations, and Recommendations are described in section 6.0.

2.0 SCOPE

The audit team evaluated the adequacy, implementation, and effectiveness of technical and quality assurance processes related to the INEEL TRU Waste Characterization and Certification activities related to summary category group S3000 (homogeneous solids).

The following elements were evaluated in accordance with the CBFO QAPD:

- Qualification and Training
- Document Control
- Records Management
- Control of Nonconforming Items
- Software Control

The following CBFO characterization technical elements were evaluated in accordance with the WAP:

- Sampling Design
- Sample Handling
- Nondestructive Assay (NDA)
- Visual Examination

Solid Sampling
Total Metals Analysis
Total Volatile Organic Compounds
Total Semi Volatile Organic Compounds
Data Generation
Data Verification and Validation

Evaluation of INEEL TRU Waste Characterization Program (TWCP) documents was based on current revisions of the following documents:

INEEL Site Project Office Quality Assurance Project Plan (QAPjP) for the Transuranic Waste Characterization Program, PLN-190

INEEL TRU Waste Characterization, Transportation, and Certification Quality Program Plan (QPP), PLN-182

Program Plan for Certification of INEEL Contact-Handled Stored Transuranic Waste (Cert Plan), PLN-579

Related INEEL and ANL-W technical and quality assurance implementing procedures

3.0 AUDIT TEAM AND OBSERVERS

AUDITORS/TECHNICAL SPECIALISTS

Samuel Vega	CBFO QA Manager
Steve Calvert	Audit Team Leader, CTAC
Earl Bradford	Auditor, CTAC
Wayne Ledford	Auditor, CTAC
James Schuetz	Auditor, CTAC
Dee Scott	Auditor, CTAC
Charlie Riggs	Auditor, CTAC
Pete Rodriguez	Auditor, CTAC
Randy Fitzgerald	Technical Specialist, CTAC
Patrick Kelly	Technical Specialist, CTAC
Dorothy Gill	Technical Specialist, CTAC
B. J. Verret	Technical Specialist, CTAC
Trey Greenwood	Technical Specialist, CTAC
Dick Blauvelt	Technical Specialist, CTAC

OBSERVERS/INSPECTORS

Tim Harms	DOE Headquarters
Scott Monroe	Inspector, EPA
Ray Wood	Inspector, Trinity Engineering (EPA)

Steve Holmes	Observer, NMED
William Fetner	Observer, NMED
Connie Walker	Inspector/Observer, TechLaw (EPA/NMED)
Ben Walker	Observer, EEG
Brian English	Observer, State of Idaho
Rick Denning	Observer, State of Idaho

4.0 AUDIT PARTICIPANTS

INEEL individuals involved in the audit process are identified in attachment 1. A preaudit meeting was held in the INEEL Radioactive Waste Management Complex (RWMC) conference room on December 5, 2000. Daily meetings were held with INEEL management and staff to discuss issues and potential deficiencies. The audit was concluded with a postaudit meeting held in the RWMC Building conference room on December 7, 2000.

5.0 SUMMARY OF AUDIT RESULTS

Attachment 2 provides a list of specific procedures audited.

5.1 Program Adequacy, Implementation, and Effectiveness

The audit team concluded that, overall, the INEEL technical and quality assurance procedures were adequate relative to the flow down of requirements from the CBFO Quality Assurance Program Document (QAPD); WIPP Hazardous Waste Permit (WAP); and the Waste Acceptance Criteria (WAC). The audit team concluded that, overall, the defined QA program is being satisfactorily implemented in accordance with the INEEL Quality Assurance Project Plan (QAPjP), INEEL TRU Waste Characterization, Certification, and Transportation Quality Program (QPP), Program Plan for Certification of INEEL Contact-Handled Stored Transuranic Waste (Certification Plan), and INEEL implementing procedures. The INEEL technical processes evaluated by the audit team were determined to be satisfactorily implemented and effective (except in areas identified as indeterminate).

5.2 QA Program Audit Activities

Details of audit activities, including specific objective evidence reviewed, are contained within the audit checklists. The checklists are maintained as CBFO QA records. No CARs were issued in the area of quality assurance.

5.3 Technical Activities

Evaluations of applicable INEEL technical activities are summarized below.

5.3.1 Nondestructive Assay (NDA)

The audit team evaluated the SWEPP Gamma-Ray Spectrometer/Passive-Active Neutron (SGRS/PAN) NDA system during the audit. The audit team reviewed data generated from the assay of solidified inorganic sludges. The evaluation included examination of records related to instrument calibration and a demonstration of compliance to the applicable quality assurance objectives. NDA data was observed being entered into the Transuranic Reporting and Inventory Processing System (TRIPS) and in hardcopy format. Based on the reviews and the documents examined before and during the audit, the assay procedures at INEEL were determined to be adequate. The NDA processes evaluated were determined to be satisfactorily implemented and effective (See Recommendation 2).

5.3.2 Data Generation, Verification, and Validation

The data generation, verification, and validation processes were evaluated at the Site Project Office (SPO), RWMC, and Argonne National Laboratory-West (ANL-W). The audit team examined data packages from the visual examination, coring, analyses, and NDA processes. The data generation level verification and validation was found to be implemented and effective. The TRU waste project Site Data Validation Officer (SDVO) is responsible for the project level data validation. The evaluation included examination of the data packages to assure that generation and project level reviews are occurring. Overall, the data generation and project level validation procedures were determined by the audit team to be adequate, satisfactorily implemented, and the processes were determined to be effective. The processes for reconciliation of data quality objectives and control charting have not been completed. Therefore these areas are considered indeterminate until the processes can be completed and evaluated (See Observation 2).

5.3.3 Coring

The audit team examined the solids sampling capabilities for waste characterization performed at ANL-W and witnessed activities being performed in the coring process. Coring operations are being performed and documented as required by the established WAP requirements. Review of the coring and sampling data indicate that the documentation is correct and contains the required information. The overall solids sampling procedures were determined to be adequate. The audit team determined the solid sampling process is satisfactorily implemented and effective.

5.3.4 Visual Examination

Visual examination (VE) operations and records were reviewed at ANL-W. The audit team observed VE activities being performed by the ANL-W technical staff. The results of VE activities were documented on batch reports. The reports were reviewed and determined to be accurate and complete. The visual examination process is being audio/video taped as required. The VE technicians were well trained and competent and completed the activities in a professional manner. The audit team concluded that

the procedures are adequate. The team also concluded that the visual examination process was satisfactorily implemented and effective (See Observation 4).

5.3.5 Sample Handling and Chain-of-Custody

The process for sample handling was evaluated at the Analytical Chemistry Laboratory (ACL) and at ANL-W. The evaluation established that handling of samples in these facilities was performed in accordance with the procedures. The samples are stored correctly after collection and receipt and are tracked as they move through the collection and analysis processes. It was concluded that the sample handling procedures are adequate and satisfactorily implemented and the process is effective. The chain-of-custody process at ACL was examined for samples coming from ANL-W to the laboratory facility. The overall chain-of-custody program and procedures were determined to be adequate, satisfactorily implemented and the process is effective.

5.3.6 Sampling Design

The activities being implemented to comply with specific container selection, sampling, examination, and data analysis requirements for transuranic waste were reviewed. The sample design activity has been evaluated and found to be compliant during previous audits. The procedures that address these activities were determined to be adequate and satisfactorily implemented and the process is effective (See Observation 4).

5.3.7 Software

The audit team reviewed the activities necessary to identify, develop, test, and verify software used in the Analytical Laboratories Department. The software was evaluated to the requirements of the QAPD and INEEL site procedures. The evaluation included demonstrations of functions and configuration management of the Multi-user Computer System (MCS) and Personal Computer Software programs. It was demonstrated that programs are adequately controlled using individual password protection and read-only protection, that program results are tested and verified, that program back-up is performed, and that programs are located in specific directories for work and test purposes. The software procedures are adequate, satisfactorily implemented, and the process is effective.

5.3.8 Total Metals Analysis

The audit team reviewed the process for total metals analysis. The activities were well executed and the personnel interviewed were knowledgeable, professional, and well trained. No concerns were identified for mercury determination. The matrix spiking solution expiration date, assigned by the laboratory, exceeded the annual requirement stated in procedure ACMM-2900. This situation was corrected and verified during the audit (procedure change was initiated, and an NCR was generated for the only WIPP data package affected). The procedure was determined to be adequate and the analytical process was satisfactorily implemented and effective.

No data has been generated in the laboratory in accordance with WAP requirements for PCBs. The personnel interviewed were both knowledgeable and professional. However, due to the lack of actual data for PCB analytical activities, the qualification of PCB preparation and analysis was indeterminate at the time of the audit.

5.3.9 Total Volatile Organic Compounds Analysis

The audit team examined the procedures and processes relating to volatile organic compound (VOC) analysis of solid samples. The audit included a review of laboratory notebooks and sample preparation. The audit witnessed steps of the analytical processes being performed and they were being executed in a professional and competent manner. One solids data package for VOC analyses was reviewed in depth and found to be accurate and complete. Procedures used to control the processes were determined to be adequate when compared to the requirements of the WAP. The processes for analysis of VOCs were determined to be satisfactorily implemented and effective.

5.3.10 Total Semi Volatile Organic Compounds Analysis

The audit team evaluated the procedures and processes for semi volatile organic compound (SVOC) analysis of solid samples. The audit team conducted interviews and observed the analyst conducting various steps in the processes for SVOC sample preparation and analysis. The solids data packages for SVOC analyses were reviewed in depth and found to be accurate and complete and in accordance with the requirements. Procedures used to control the processes were determined to be adequate when compared to the requirements of the WAP. The processes for analysis of SVOCs were determined to be satisfactorily implemented and effective.

5.3.11 Acceptable Knowledge

Acceptable knowledge (AK) activities were evaluated to determine compliance with the requirements of the WAP, QAPjP, and internal implementing procedures. The team examined documentation to verify that the collection, review, and management of AK information was being handled as required by established procedure. The team also examined the processes for confirmation, resolution, and reevaluation of AK information. These activities have not been performed for a solid waste stream (Summary Category Group S3000). The audit team concluded that the AK procedures are adequate. The activities for collection, review and management of AK information were determined to be satisfactorily implemented and effective. The activities for confirmation, resolution, and reevaluation were determined to be indeterminate for the S3000 Summary Category Group (See Observations 1 and 3, Recommendations 1, 3, 4, and 5).

6.0 CARs, OBSERVATIONS, RECOMMENDATIONS

6.1 Corrective Action Reports (CARs)

No CARs Were issued as a result of the audit.

6.1.1 Previously Issued CARs

The audit team evaluated the INEEL response to CAR 01-001. The response was satisfactory and follow up verification of the proposed corrective actions was performed. The results of the review indicate that the corrective actions have been satisfactorily completed. CAR 01-001 has been closed.

6.2 Deficiencies Corrected During the Audit (CDA)

Four deficiencies, requiring remedial action only, were identified during the audit. All were corrected and verified before the completion of the audit. These are identified on the completed audit checklists and documented on the "Corrected During the Audit Forms," which are maintained as CBFO QA records.

6.3 Observations

The following four Observations were identified during the audit:

- 1 The AK confirmation and reevaluation process has not been completed for the S3000 Summary Category Group. These activities need to be completed before a determination of implementation and effectiveness can be made on the AK process.
- 2 For batch report WCS-00001, the person who generated the original data (Waste Characterization Operator) also performed the technical supervisory review. The technical supervisor reviews should be performed by someone other than the operator that performed the work.
- 3 During the completion of the examination checklist elements dealing with generation of new waste stream profile forms it was discovered that when discrepancies are noted between AK and analysis, a unique AK Summary (Waste Stream Summary Sheet, WSSS) was not generated for the new waste stream. Instead, the existing WSSS was updated to include information for the new waste stream, with the intent being that the updated WSSS would apply to both the previous and new waste streams. AK summaries with unique numbers are required for each WSPF.
- 4 The list of randomly selected containers for visual examination should be forwarded to ANL-W prior to performing visual examination activities (the selection had been completed as required, but not formally documented).

This would establish which containers need to be opened prior to the start of the visual examination process.

6.4 Recommendations

The following five Recommendations are presented for INEEL management consideration:

- 1 Revise the AK Record to include shipping records identified by NDA personnel who assembled EDF-1242. EDF-1242 is an important AK document, and relevant supporting information should be included in the AK record.
- 2 The data package technical review process has not been included in an issued MCP. It is recommended that MCP-9242 be approved and issued for the process.
- 3 The accuracy report should be clarified by adding a revision number for the information obtained from the EDF-803 data so that the source of the comparison data can be determined. Alternatively the column containing this information could be deleted from the document since it does not directly factor into the accuracy calculation.
- 4 Specific page numbers for references should be included in the next revision to the AK Summary Document (INEL-98/0280).
- 5 INEL-98/0280, Appendix B includes waste volumes, however the information is unreferenced and cannot be easily traced. The document should be updated to include the appropriate reference.

7.0 LIST OF ATTACHMENTS

Attachment 1: Personnel Contacted During the Audit
Attachment 2: INEEL Procedures Audited

PERSONNEL CONTACTED DURING THE AUDIT

PERSONNEL CONTACTED				
NAME	TITLE/ORG	PREAUDIT MEETING	CONTACTED DURING AUDIT	POST AUDIT MEETING
Adams, Bruce	Systems Engineer, ANL-W		X	
Allen, Rodney	TCO, BBWI			X
Anderson, Molly	SQAO Designee, BBWI	X	X	X
Anselmo, Rick	Sample Custodian, ALD		X	
Arbon, Rod	Site Project Manager	X	X	
Baxter, Don	Project Coordinator, BBWI	X		X
Bishoff, Jim	Operations, BBWI	X		
Blackwood, Larry	Scientist, BBWI	X	X	
Blattner, Delisa	Document Control, BBWI	X	X	X
Bradford, Rhett	Project Engineer, ANL-W		X	
Bright, David	Operations Manager, BBWI	X		
Broers, Galyn	CAR Coordinator, BBWI	X		X
Brown, Dennis	DB Associates	X	X	
Bryngelson, Dwayne	Project Engineer, ANL-W		X	
Coburn, Klayne	Group Leader, ANL-W		X	
Colborn, Julie	Technician, ANL-W		X	
Connolly, Joan	SPO Support, North Wind	X		
Contreras, Paul	DOE-ID, Facility Engineer	X		X
DeCoria, Galyn	Scientist, ALD		X	
Denning, Rick	State of Idaho		X	
Dunhour, Fred	FQAO, ANL-W	X	X	X

PERSONNEL CONTACTED				
NAME	TITLE/ORG	PREAUDIT MEETING	CONTACTED DURING AUDIT	POST AUDIT MEETING
Einerson, Jeff	Statistician, BBWI		X	
Emanuelson, Kay	QA Supervisor, BBWI	X		
English, Brian	Idaho, DEQ			X
Fife, Cindy	Facility QA, BBWI	X		X
Flores, Arturo	Document Control, BBWI			X
Ford, Bryant	3100 Project Engineer	X		X
Framer, Carl	Training, BBWI			X
Friedrich, Gloria	Secretary, ALD		X	
Fritz, Lori	DOE-ID	X	X	X
Frost, Lisa	SDVO, BBWI	X	X	X
Frye, Jimmy	Technician, ANL-W		X	
Gies, Carol	Scientist, ALD		X	
Grigg, Clayne	Technical Lead, ALD		X	
Guerrier, Jack	Engineer, GTI	X	X	
Hailey, Sheila	AK Expert/SDVO, BBWI	X	X	X
Hand, Rodney	Manager, Analytical Labs.	X	X	X
Harker, Yale	Scientist, BBWI	X	X	
Hartley, Diane	TRIPS, BBWI		X	
Hernandez, Nicole	DOE-ID Facility Rep	X		
Hobbes, Jeff	Production Manager, BBWI	X		
Holzmer, Mark	DOE-CH, Team Leader		X	
Houghton, Tracy	Sample Custodian, ALD		X	

PERSONNEL CONTACTED				
NAME	TITLE/ORG	PREAUDIT MEETING	CONTACTED DURING AUDIT	POST AUDIT MEETING
Johnsen, Tom	Document Control, BBWI	X		X
Jeter, Jeff	Scientist, ALD		X	
Kahn, Dave	Technician, ANL-W		X	
Knox, Greg	QA, BBWI		X	X
Krivanek, Kenneth	Engineer, GTI			X
LaFreniere, Mike	DOE-ID	X	X	X
Lang, Jeff	Technical Leader, ALD		X	
Lee, Scott	ANL-W Project Manager	X	X	X
Lent, Dave	Training Coordinator, BBWI		X	
Lundholm, Duane	Specialist, ALD		X	
Magnan, James	Systems Engineer, ANL-W		X	
McBath, Bill	ESH&Q Manager, BBWI	X		
Mclsaac, C. V.	Advisory Scientist, BBWI	X	X	
Meachum, Teresa	Scientist, BBWI	X	X	
Menkhaus, Dan	Systems Engineer, BBWI	X	X	X
Monk, Thomas	Site Project Manager, BBWI	X	X	X
Morgan, Sabrina	Scientist, ALD		X	
Murphy, Dennis	QA Manager, BBWI	X	X	X
Neal, Cindy	Scientist, ALD		X	
Nelson, Sherrie	Technical Writer, BBWI			X
Nicklas, John	Observer, SAIC/BNFL	X	X	
Park, Gregg	Technical Lead, ALD		X	

PERSONNEL CONTACTED				
NAME	TITLE/ORG	PREAUDIT MEETING	CONTACTED DURING AUDIT	POST AUDIT MEETING
Peterson, Barbara	TRIPS Project Manager,	X		X
Ploger, Scott	Engineer, GTI			X
Pound, Don	Transportation Certification Officer,		X	X
Preston, Tim	Site Quality Assurance Officer, BBWI	X	X	X
Reidle, Martha	Training Administrator, BBWI		X	
Rogers, N. Kim	Department Manager, BBWI	X	X	
Sailer, Shelly	ALD QA Officer, BBWI	X	X	X
Sherick, Mark	Characterization PM, BBWI	X		
Simmons, Craig	Operator, BBWI		X	
Smythe, Faye	Scientist, ALD		X	
Stump, Robert	DOE-ID, Program Manager	X		
Sygitowicz, Lee	Program Manager, BBWI			X
Taylor, Spence	Technical Specialist, ALD		X	
Thomas, Mariam	Scientist, ALD		X	
Tolman, Betty	AKE, North Wind		X	
Trejo, Larry	Scientist, ALD		X	
Troescher, Patrick	QA Officer, BBWI		X	X
Twedell, Gary	Scientist, BBWI	X	X	
Walker, Reed	Operator, BBWI		X	
Wells, Jerry	DOE-ID	X	X	X

PERSONNEL CONTACTED				
NAME	TITLE/ORG	PREAUDIT MEETING	CONTACTED DURING AUDIT	POST AUDIT MEETING
Wells, Richard	Chemist, ALD		X	
Wheeler, Darren	Technician, ANL-W		X	
Williams, Jennifer	Technical Specialist, BBWI		X	

INEEL PROCEDURES AUDITED IN A-01-02		
NUMBER	PROCEDURE NUMBER	TITLE
1.	ACMM-2900	Determination of Trace Elements by ICP Atomic Emissions Spectrometry
2.	ACMM-7802	Determination of Mercury by Cold Vapor Fluorescence Spectrophotometry
3.	ACMM-8909	Microwave Assisted Digestion of Homogeneous Solids
4.	ACMM-9080	Determination of PCBs by Gas Chromatography
5.	ACMM-9260	VOCs by Gas Chromatography/Mass Spectrometry
6.	ACMM-9270	SVOCs by Gas Chromatography/Mass Spectrometry
7.	ACMM-9441	Determination of Nonhalogenated Volatile Organics by Gas Chromatography
8.	ACMM-9500	Sample Preparation for SVOCs and PCBs
9.	EDF-363	SWEPP Certified Waste Sampling Plan
10.	EDF-909	TRU Waste Sampling Plan for INEEL
11.	HFEF-OI-6810	TRIPS Container Management
12.	HFEF-OI-6862	TWCP Sample Storage and Shipment
13.	HFEF-OI-6890	TWCP Visual Examination
14.	HFEF-OI-6910	TWCP Core Drilling Operations
15.	HFEF-OI-6921	TWCP Solid Sample Preparation
16.	MCP-2002	Analytical Chain of Custody
17.	MCP-2004	Sample Management in the Analytical Chemistry Laboratory
18.	MCP-2008	Analytical Data Recording, Review and Reporting
19.	MCP-2009	Analytical Software Control
20.	MCP-2011	Analytical Logbooks
21.	MCP-2524	Collocated Core Sampling Control Charts
22.	MCP-2527	DQO Reconciliation at SPO Level
23.	MCP-2529	Drum Data Review by the SQAQ
24.	MCP-2530	SQAQ Drum Data Review Checklists
25.	MCP-2536	Project Level Data Verification by the SPM
26.	MCP-2546	Visual Examination Process
27.	MCP-2542	Preparation of Waste Profile Forms
28.	MCP-2546	Visual Examination Process
29.	MCP-2989	Collection, Review, and Management of Acceptable Knowledge Documentation
30.	MCP-2990	Radioassay Total Uncertainty Process Using Modified Statistical Sample Approach
31.	MCP-2991	Radioassay Total Uncertainty Process Using Statistical Sampling Approach
32.	MCP-2995	Project Level Electronic Data V and V By the SDVO
33.	MCP-2996	Electronic Data Review By the SDVO
34.	MCP-2997	SQAQ Electronic Data Review Checklists
35.	NT-AP-01	Documents and Records Management
36.	NT-AP-03	ANL-W TWCP Data Generation Level Review
37.	NT-AP-04	QA Requirements Implementation
38.	NT-AP-05	TWP Training Plan
39.	NT-AP-08	TWCP Data Input and QA Release for TRIPS
40.	PLN-182	INEEL TRU Waste Characterization, Certification, and Transportation Quality Program (QPP)
41.	PLN-190	Quality Assurance Project Plan (QAPjP)
42.	PLN-579	Program Plan for Certification of INEEL Contact-Handled Stored Transuranic Waste (Certification Plan)
43.	PLN-587	Training Implementation Plan for TWCP
44.	PLN-600	Analytical Laboratory Department QA Plan for the TWCP
45.	QTP-004	Qualification Test Procedure (PAN)
46.	QTP-011	Qualification Test Procedure (SGRS)
47.	TPR-1573	PAN Drum Assay System

INEEL PROCEDURES AUDITED IN A-01-02

NUMBER	PROCEDURE NUMBER	TITLE
48.	TPR-1588	Gamma Ray Spectrometer System
49.	TPR-1719	Calibration of Gamma Assay System