

1.0 INTRODUCTION

Tables AUD-1 through AUD-11 of this Appendix summarize assessments performed between November 2, 1998, and May 31, 2003, of transuranic (TRU) waste sites, Sandia National Laboratories (SNL), Washington TRU Solutions (WTS), LLC, suppliers performing quality-affecting work, and the Carlsbad Field Office (CBFO), and supplement the information contained in the Compliance Certification Application (CCA). The summaries are grouped in chronological order by audited agency. Each assessment entry outlines the assessment scope and results. Results of the assessment normally determine the adequacy, implementation, and effectiveness of the auditee’s quality assurance program. Adequacy addresses the migration of requirements from upper-tier program documents into implementing procedures. Implementation addresses the extent of compliance with procedures. Effectiveness addresses whether the controls established in the implementing procedures produce the desired results or end product. For ease of reference, CBFO is used throughout this appendix to mean CAO (Carlsbad Area Office) or CBFO, as appropriate. Below is a list of sites audited and the table that contains the summaries:

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The summary tables include the organization that was assessed, the assessment number, the scope of the assessment, and the results of the assessment expressed as “satisfactory” (S), “marginal” (M), “unsatisfactory” (U), “not applicable” (N/A), or “indeterminate” (I) for the three factors considered during an assessment (i.e., “adequacy,” “implementation,” and “effectiveness”). Indications of M, U, and I are addressed through the corrective action program to bring them up to S (satisfactory). They have been corrected or satisfactorily addressed and verified through subsequent audits, surveillances, corrective action reports, or other means prior to initial certification or continued certification for shipping to WIPP.

Only those CBFO assessment activities directly related to 40 CFR 191 and 194 are included in this appendix. Additional CBFO assessments are performed in other critical areas. In addition, each participant performs internal assessments of their own activities.

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AUDIT SUMMARY TABLES

Table AUD-1. Los Alamos National Laboratory (LANL) Audits

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessments	Adequacy	Implementation	Effectiveness
Los Alamos National Laboratory (LANL)	A-99-04	6/14-17/99 and 6/28-7/1/99	Technical and quality assurance (QA) activities related to LANL TRU waste characterization-certification activities added since the last CBFO recertification audit.	S	S	S
				The QA program was satisfactory in meeting requirements and implementation. Minor concerns were noted in the area of software QA. In the area of acceptable knowledge (AK), the technical processes were determined adequate and implemented. All corrective actions were completed and verified.		
LANL	A-00-03	11/9-10/00	Annual recertification audit of TRU Waste Characterization and Certification QA program.	S	S	S
				The QA program was adequate, satisfactorily implemented and effective.		
LANL	A-00-13	8/21-25/00 and 8/28-31/00	Remainder of the LANL TRU waste characterization activities for waste characterization and transportation activities for debris waste.	S	S	S
				The technical and QA programs were adequate in accordance with the Hazardous Waste Facility Permit (HWFP) requirements, satisfactorily implemented, and effective.		
LANL	A-00-16	9/25-29/00	Technical activities and associated QA program requirements related to the LANL TRU waste characterization and certification programs for debris waste.	S	S	S
				The QA programs and technical programs were adequate, effective, and satisfactorily implemented.		
LANL	A-01-11 (two visits)	5/8-9/01 and 5/14-17/01	Technical activities and associated QA program requirements related to the LANL TRU waste characterization and certification programs for debris wastes. Specifically, the visual examination (VE) technique associated with packaging operations conducted in TA-55, repackaging of containers exceeding the wattage limits in the Waste Characterization, Reduction, and Repository (WCRR) Facility, and packaging source materials for the Off-Site Source Recovery (OSR) Program.	S	S	S
				The LANL program for performing the VE technique for TA-55 and the OSR program was adequate, satisfactorily implemented, and effective.		

Table AUD-1. Los Alamos National Laboratory (LANL) Audits — Continued

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessments	Adequacy	Implementation	Effectiveness
LANL	S-01-31	7/16-17/01	The LANL TRU Waste Characterization Project (TWCP) QA and technical program as related to the Document Control program and TRU waste characterization activities.	S	S	S
				QA program requirements related to the activities evaluated during the surveillance were adequate, satisfactorily implemented, and effective.		
LANL	A-02-04	10/22-26/01	The LANL TWCP, including QA, nondestructive assay (NDA), transportation, and WIPP Waste Analysis Plan (WAP) activities.	S	S	S
				The QA programs and technical programs were adequate, satisfactorily implemented, and effective.		
LANL	A-02-16	2/25-28/02	Selected technical activities related to the LANL TRU waste characterization and certification programs for debris wastes. Audit included the evaluation of two new NDA systems: the Combined Thermal-Epithermal Neutron (CTEN) system and a portable tomographic gamma scanner (P-TGS).	S	S	S
				The LANL technical processes for the CTEN system were adequate, satisfactorily implemented, and effective. The technical activities related to the P-TGS were judged to be indeterminate. The QA program continues to be adequate, satisfactorily implemented, and effective.		
LANL	A-02-30	8/26-30/02	LANL TWCP, including QA and WIPP HWFP activities. Audit conducted to evaluate Summary Category Group S5000, contact-handled and newly generated heterogeneous debris waste.	S	S	S
				The LANL technical and QA procedures continue to be adequate. The LANL technical processes were satisfactorily implemented and effective. The LANL process for manual headspace gas sampling of S5000 waste was concluded to be indeterminate, due to a limited operational time and lack of analytical batch data reports.		
LANL	A-03-07	10/29-31/02	Obtaining manual samples of headspace gas (HSG) in Summa [®] canisters and utilizing the Idaho National Engineering and Environmental Laboratory (INEEL) for analytical services.	S	S	S
				The LANL process for obtaining manual HSG samples was adequate. The LANL technical processes were satisfactorily implemented and effective.		
LANL	S-03-07	12/17-20/02	Loading of high-wattage waste at LANL and shipment of the waste to WIPP. Receipt and venting of the inner containment vessel (ICV) at WIPP.	S	S	S
				The LANL team displayed excellent job control and conduct of operations techniques during TRUPACT-II operations. LANL management, the Transportation Certification Official, QA personnel, Radiological Control personnel, and the DOE-National Nuclear Security Administration-Los Alamos Site Office Program Management and Facility Representatives were supportive and actively involved in all phases of TRUPACT-II operations.		

1 (S) - Satisfactory; (M) - Marginal; (U) - Unsatisfactory; (N/A) - Not Applicable; (I) - Indeterminate

1 **Table AUD-2. Los Alamos National Laboratory – Carlsbad Operations Office (LANL-CO) Audits**

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessments	Adequacy	Implementation	Effectiveness
LANL-CO	A-03-12	12/17-19/02	LANL-CO QA program in accordance with CBFO Quality Assurance Program Description (QAPD) for performing quality-affecting work including the Actinide Chemistry program for the WIPP. LANL-CO implementation of the Sandia National Laboratories (SNL) QA program as detailed in the SNL and LANL Memorandum of Agreement (MOA) dated 8/2/02 and revised MOA dated 12/06/02 for performing work on the Transuranic Waste Baseline Inventory Report (TWBIR) in supporting the Performance Assessment (PA) for SNL and the WIPP.	S	I	I
				The status of LANL-CO QA program is adequate with one exception concerning nonconformances. The TWBIR program implementation performed by LANL-CO in accordance with SNL procedures was considered indeterminate. See S-03-11 for follow-up.		
LANL-CO	S-03-11	1/23/03	Implementation of the LANL-CO corrective action for Corrective Action Report (CAR) W-03-02 issued for conditions adverse to quality identified in conducting TWBIR activities.	S	S	S
				The corrective actions identified in CAR W-03-02, issued during audit A-03-01, were completed with the exception of the agreed upon LANL-CO surveillance of the TWBIR program activities, which was scheduled for the last week in February. The actions implemented for CAR W-03-02 are considered satisfactory.		

2 (S) - Satisfactory; (M) - Marginal; (U) - Unsatisfactory; (N/A) - Not Applicable; (I) - Indeterminate

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Table AUD-3. Nevada Test Site (NTS) Audits

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessments	Adequacy	Implementation	Effectiveness
Nevada Test Site (NTS)	A-99-01	11/2-6/98	The NTS TRU waste characterization and certification activities.	S	S	S
				Overall the adequacy, implementation, and effectiveness were satisfactory; however, two areas (integration process with mobile service contractor and data reconciliation) were concluded to be indeterminate.		
Audit of TRUtech, Inc. at NTS	A-99-02	12/7-11/98	The technical and QA programs related to TRUtech TRU waste characterization and certification activities.	S	S	S
				The adequacy, implementation, and effectiveness of the TRUtech QA program were satisfactory.		
Audit of Mobile Characterization Systems (MCS) at NTS	A-99-03	11/2-6/98	The technical and QA programs related to MCS TRU waste characterization and certification activities.	S	S	S
				MCS's technical and QA programs were adequate, satisfactorily implemented, and effective; however, improvements were needed in the areas of drum filter procurements, software configuration management, and the collection of field duplicates for HSG analysis.		
NTS	A-99-20	6/7-11/99	The NTS TRU waste characterization and certification activities including the AK process and the mobile services contractor interface.	S	S/M	S/M
				The adequacy of QA programs was satisfactory. However, the technical program was only marginally implemented and marginally effective. Corrective actions in the marginal areas were implemented and verified.		
NTS using the Central Characterization Project (CCP)	A-02-15	9/23-27/02	The CCP TRU waste characterization and certification activities related to Summary Category Group S5000 (debris waste) contracted to Bechtel-Nevada.	S	S	S
				The CCP technical and QA procedures were adequate relative to the flow down of requirements from the CBFO QAPD, the WAP of the WIPP HWFP, and the WIPP Waste Acceptance Criteria (WAC). The assessed activities were being satisfactorily implemented and the QA program was determined to be effective.		

2 (S) - Satisfactory; (M) - Marginal; (U) - Unsatisfactory; (N/A) - Not Applicable; (I) – Indeterminate

Table AUD-4. Hanford Site Audits

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessments	Adequacy	Implementation	Effectiveness
Hanford	A-99-05	7/12-17/99	The TRU waste characterization, certification, and transportation programs.	S	S/M	S/M
				The QA program's adequacy, implementation, and effectiveness were satisfactory. Technical processes were marginally implemented and marginally effective.		
Hanford	S-00-04	3/28-30/00	Technical processes related to NDA systems. Also, the verification of corrective actions implemented for issues identified in Carlsbad Field Office (CBFO) Audits A-99-05 and A-00-05.	S	S	S
				Overall, the Hanford Site technical and QA programs were determined to be adequate in accordance with the CBFO QAPD. The audit team also concluded that Hanford procedures were being satisfactorily implemented and that the evaluated processes were effective.		
Hanford	A-00-05	1/24-28/00	The technical and QA processes related to Hanford TRU waste characterization and transportation activities.	S	S	S
				The QA program was satisfactory and implemented as required. Technical processes evaluated were determined to also be adequate, effective and satisfactorily implemented.		
Hanford	A-01-03	6/11-15/01	The Hanford TRU waste characterization activities for contact-handled debris waste.	S	S	S
				Hanford technical and QA programs continue to meet requirements. The audit team concluded that the defined QA and technical processes for the audited activities continue to be implemented in accordance with the Hanford Quality requirements and implementing procedures and that the processes were effective.		
Hanford	S-01-04	1/16/01	The Hanford Site QA program as it relates to the Hanford organization.	S	S	S
				The Hanford activities evaluated relating to QA were adequate, satisfactorily implemented, and effective.		
Hanford	A-01-16	6/11-15/01	The applicable technical and QA activities related to the TRU waste characterization activities performed at the Plutonium Finishing Plant (PFP). Hanford procedures and processes for assay, visual examination, and repackaging of waste at the PFP as applied to retrievably stored debris were examined during this audit.	S	S	S
				The Hanford technical and QA procedures for the PFP were adequate relative to the migration of requirements from the CBFO QAPD, the WAP, and the WAC. The Hanford procedures were being satisfactorily implemented and the evaluated processes were effective.		

Table AUD-4. Hanford Site Audits — Continued

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessments	Adequacy	Implementation	Effectiveness
Hanford	S-01-33	8/8-9/01	The Hanford Site TWCP QA and technical program, as related to the Document Control program and TRU waste characterization activities.	S	S	S
				The QA program requirements related to the activities evaluated during the surveillance were adequate, satisfactorily implemented, and effective.		
Hanford	S-02-04	12/18-19/01	The technical activities related to the Hanford Site TRU waste characterization activities performed at the PFP. Hanford procedures and processes for assay, visual examination, and repackaging of waste at the PFP as applied to retrievably stored debris (S5000) and homogenous solid (S3000) waste were examined during this surveillance.	S	S	S
				The Hanford technical procedures are adequate relative to the flow down of requirements from the CBFO QAPD, and the WAC. The Hanford QA program satisfactorily met the requirements of the QAPD and WAC and is being satisfactorily implemented. The Hanford QA program was verified and documented during recertification Audit A-01-03. The Hanford technical processes evaluated for PFP are satisfactorily implemented, and effective.		
Hanford	A-02-23	6/24-28/02	Re-evaluation of the Hanford Site TRU waste characterization, transportation, and certification activities.	S	S	S
				The Hanford QA program continues to satisfactorily meet the requirements of the QAPD, WAP, contact-handled (CH) WAC, and TRUPACT-II Authorized Methods for Payload Control (TRAMPAC). The QA program is satisfactorily implemented and effective.		

1 (S) - Satisfactory; (M) - Marginal; (U) - Unsatisfactory; (N/A) - Not Applicable; (I) – Indeterminate

Table AUD-5. Rocky Flats Environmental Technology Site (RFETS) Audits

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessments	Adequacy	Implementation	Effectiveness
RFETS	A-99-07	2/23-25/99	The technical and QA processes related to the RFETS TRU waste characterization, certification, and transportation activities.	S	S/M	S
				The RFETS QA program was adequate, satisfactorily implemented, and effective. Document control was found to be marginally implemented, but effective.		
RFETS	A-99-09	3/8-12/99	The RFETS TRU waste characterization activities associated with Salt Stabilization and LECO® Crucible Repackaging.	S	S/M	S/M
				The QA program was adequate, effective, and satisfactorily implemented. The implementation and effectiveness of the technical processes were marginal.		
RFETS	A-99-13	3/24-25/99	The software QA program as evaluated by RFETS and implemented by Canberra, relative to the TRU waste characterization program.	S	S	S
				The software QA program was adequate, effective, and satisfactorily implemented for the QA program and technical processes.		
RFETS	A-99-16	4/27-29/99	The technical and QA processes related to RFETS TRU waste characterization and certification activities associated with Salt Residue Stabilization and LECO® Crucible Repackaging processes.	S	S	S
				The QA and technical processes evaluated were adequate, satisfactorily implemented, and effective.		
RFETS	A-99-17	9/13-17/99	The technical and QA processes related to RFETS TRU waste characterization and certification activities associated with Salt Residue Repack, Dry Residue Repack, Ash Repack, and Combustible Residue Repack.	S	S	S
				The audit team concluded that the adequacy, implementation, and effectiveness of the technical and QA programs were satisfactory in meeting requirements.		
RFETS	A-00-02	11/16-17/00	The technical and QA processes related to the RFETS TRU waste characterization and certification activities associated with Segmented Gamma Scanner (SGS) Drum Counter, SGS Can Counters, and mobile TGS, AK, and Field Sample QC Data Collections.	S	S	S
				All activities assessed were adequate, satisfactorily implemented, and effective.		

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Table AUD-5. Rocky Flats Environmental Technology Site (RFETS) Audits — Continued

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessments	Adequacy	Implementation	Effectiveness
RFETS	A-00-07	1/29-2/1/00	The TRU waste characterization activities relative to the requirements detailed in the WIPP HWFP and the CBFO QAPD.	S	S	S
				The RFETS technical and QA programs were adequate. The defined QA and technical programs for these activities were being satisfactorily implemented in accordance with the RFETS QA documents and the processes were effective.		
RFETS	A-00-08	12/13-17/99 and 1/18-20/00	The RFETS TRU waste characterization activities for debris waste.	S	S	S
				The RFETS technical and QA programs were adequate. The defined QA and technical programs for these activities were being implemented in accordance with the RFETS Quality Assurance Project Plan (QAPP) and the implementing procedures and processes were effective.		
RFETS	A-00-10	3/6-8/00	Proper maintenance of the RFETS QA program since the last certification audit in March 1999. Recertification audit.	S	S	S
				All activities assessed were adequate, satisfactorily implemented, and effective.		
RFETS	A-00-12	9/18-22/00 and 11/1-2/00	The RFETS TRU waste activities as they relate to the HWFP for homogenous solid waste.	S	S	S
				All activities assessed were adequate, satisfactorily implemented, and effective.		
RFETS	A-01-05	3/26-28/01	Evaluate two additional waste streams and the indeterminate actions of CBFO audit A-00-12, with the exception of the on-line HSG unit that the RFETS no longer intends to use.	S	S	S
				The adequacy of the RFETS technical and Quality Assurance (QA) programs was satisfactory. All activities assessed were satisfactorily implemented and effective.		
RFETS	A-01-07	1/29-2/1/01	The RFETS TRU waste activities related to HWFP and QA elements.	S	S	S
				All activities assessed were adequate, satisfactorily implemented, and effective.		
RFETS	A-01-12	5/14-18/01	The RFETS TRU waste activities as they related to three new NDA systems, radiography, visual examination, and the Waste and Environmental Management System (WEMS)- WIPP Waste Information System (WWIS) interface.	S	S	S
				The RFETS technical and QA programs were determined to be adequate, satisfactorily implemented, and effective.		

Table AUD-5. Rocky Flats Environmental Technology Site (RFETS) Audits — Continued

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessments	Adequacy	Implementation	Effectiveness
RFETS	S-01-30	7/11-12/01	Evaluate the RFETS QA and technical program, as related to the document control program and TRU waste characterization activities.	S	S	S
				The QA program was adequate, satisfactorily implemented, and effective.		
RFETS	S-01-39	9/25-27/01	The RFETS automated procurement system.	S	S	S
				The automated procurement system was adequate, satisfactorily implemented, and effective.		
RFETS	A-02-05	11/27-30/01	The RFETS TRU waste characterization activities for debris waste, particularly newly generated debris waste.	S	S	S
				The overall adequacy of the RFETS technical and QA programs was satisfactory in meeting requirements. The defined QA and technical programs for these activities were being satisfactorily implemented and the processes were effective.		
RFETS	A-02-07	2/4-8/02	The RFETS TRU waste characterization activities for debris and solid waste.	S	S	S
				The adequacy of the RFETS technical and QA programs was satisfactory and the defined QA and technical processes were being satisfactorily implemented and were effective.		
RFETS	A-02-19	6/4-6/02	The RFETS TRU waste characterization activities for debris waste. A new mobile real-time radiography (RTR) unit and a new multipurpose crate counter (MPCC) were also evaluated.	S	S	S
				The overall adequacy of the RFETS technical and QA programs was satisfactory and the defined QA and technical programs for these activities were being satisfactorily implemented and are effective.		
RFETS	A-03-02	11/19-20/02	The audit scope included Summary Category Groups S5000 debris and S3000 solid wastes. The audit evaluated a new VE facility (in Building 371) to confirm RTR, and polychlorinated biphenyl (PCB) analysis. In addition, the Building 440 gas generation testing program (GGTP) was evaluated.	S	S	S
				The overall adequacy of the RFETS technical and QA programs was satisfactory in meeting requirements. The audit team also concluded that the defined QA and technical programs for these activities (except PCB analysis and GGTP) were being implemented in accordance with the RFETS QAPP and the applicable implementing procedures and processes were effective. The audit team found that the adequacy, implementation, and effectiveness of the PCB analysis and GGTP activities were indeterminate.		

Table AUD-5. Rocky Flats Environmental Technology Site (RFETS) Audits — Continued

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessments	Adequacy	Implementation	Effectiveness
RFETS	A-03-03	3/4-7/03	The RFETS TRU waste characterization activities relative to the requirements detailed in the WIPP HWFP and the CBFO QAPD. Three new activities were evaluated during the audit: the Building 440 GGTP, Building 371 HSG Sampling Using an Automated Manifold, and Building 664 Mobile RTR (for lead-lined drums).	S	S	S
				Overall, the RFETS technical and QA programs were satisfactory in meeting requirements. The defined QA and technical programs for these activities were being implemented in accordance with the RFETS QAPP and its implementing procedures, and the processes were effective.		

1 (S) - Satisfactory; (M) - Marginal; (U) - Unsatisfactory; (N/A) - Not Applicable; (I) – Indeterminate

Table AUD-6. Idaho National Engineering and Environmental Laboratory (INEEL) Audits

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessments	Adequacy	Implementation	Effectiveness
Idaho National Engineering and Environmental Laboratory (INEEL)	A-99-08	5/17-20/99	The INEEL TRU waste characterization, transportation, and certification activities.	M	M	M
				The QA program was marginally adequate. Technical areas were also marginally implemented and marginally effective.		
INEEL	S-99-10	5/3-4/99	The INEEL software QA program as it relates to the Transuranic Reporting, Inventory and Processing System (TRIPS).	S	M	S
				The activities evaluated relating to QA were adequate and marginally implemented. The technical activities were determined to be effective.		
INEEL	A-00-06	4/24-28/00	The INEEL TRU waste characterization, transportation, and certification activities.	S	S	S
				The defined QA program was adequate and effectively implemented in accordance with the INEEL quality and implementing procedures. Also, except for the visual examination process, the INEEL technical areas were satisfactorily implemented and effective.		
INEEL	A-00-07	4/24-28/00	The INEEL TRU waste characterization, transportation, and certification activities for retrievably stored debris waste.	S	S	S
				The technical and QA procedures were adequate and the QA and technical programs were effectively implemented except for visual examination, which was marginally acceptable.		

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Table AUD-6. Idaho National Engineering and Environmental Laboratory (INEEL) Audits — Continued

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessments	Adequacy	Implementation	Effectiveness
INEEL	A-01-02	12/5-8/01 and 1/18/01	The INEEL TRU waste characterization, transportation, and certification activities associated with solid wastes.	S	S	S
				All activities assessed were adequate, satisfactorily implemented, and effective.		
INEEL	S-01-06	5/1/01	The INEEL QA program as it relates to the organization. Also evaluation of the trailer mounted RTR unit, analysis of gas samples for hydrogen and methane, new gas chromatography/flame ionization detector equipment, and the TRUPACT loading and unloading operations.	S	S	S
				The QA activities were adequate, satisfactorily implemented, and effective. The audit team also concluded that the RTR and TRUPACT operations procedures were adequate, implemented, and effective.		
INEEL	A-01-14	7/30-8/3/01	The INEEL TRU waste characterization, transportation, and certification activities for retrievably stored debris waste.	S	S	S
				The INEEL technical and QA procedures continue to be adequate relative to the CBFO QAPD, WAP, WAC, and TRAMPAC. Also, the procedures were adequate, satisfactorily implemented, and effective.		
INEEL	S-01-29	7/2-3/01 and 7/25-26/01	The INEEL process for use of the Waste Assay Gamma Ray Spectrometer (WAGS).	S	S	S
				The WAGS procedure was adequate. The surveillance team determined that the activities evaluated relating to WAGS process were adequate, satisfactorily implemented, and effective.		
INEEL	S-02-03	10/30/01	Evaluate new analytical equipment and the process of reducing data from composited HSG analysis results at the INEEL.	S	S	S
				The new equipment was identical to existing equipment and the process for data reduction is acceptable.		

Table AUD-6. Idaho National Engineering and Environmental Laboratory (INEEL) Audits — Continued

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessments	Adequacy	Implementation	Effectiveness
INEEL	A-02-21	4/9-11/02	Evaluate the NDA of summary category groups S3000 solid waste and S5000 heterogeneous debris waste using the WAGS and the Stored Waste Examination Pilot Plant (SWEPP) Gamma Ray Spectrometer (SGRS) Systems in absolute mode. The audit also evaluated the NDA assay of category groups S3000 homogeneous solidified organic waste streams using the Passive-Active Neutron (PAN) system in combination with the WAGS system and in combination with the SGRS system. Concurrent with the evaluation of the new NDA systems, an evaluation was conducted of the Data Review Expert System (DRXS) for NDA validation and INEEL's software QA program as they are implemented for the NDA platforms in use at INEEL.	S	S	S
				Overall, the INEEL technical and QA procedures were adequate relative to the requirements of the CBFO QAPD and WAC. The defined software QA program implemented for the NDA platforms, the SGRS and WAGS Absolute Systems, the PAN/WAGS and PAN/SGRS systems, and the DRXS were satisfactorily implemented and effective.		
INEEL	S-02-17	5/21-22/02	The INEEL recovery option of standard waste box (SWB) blending activities as applied to the payload assembly, certification, and loading process, and the TRIPS and WIPP Waste Information System (WWIS) Interface for this option.	S	S	S
				The blending methods and payload assembly, certification, and loading processes utilized were adequate, satisfactory implemented, and effective.		
INEEL	A-02-27	8/5-9/02	The INEEL Transuranic Waste Characterization, Certification, and Transportation Programs, including the following activities: Transportation, HSG sampling and analysis, VE, RTR, NDA of CH-TRU debris and organic and inorganic homogeneous solid waste, and overpacking activities associated with the SWBs.	S	S	S
				The INEEL technical and QA procedures continue to be adequate relative to the flow down of requirements from the CBFO QAPD, WIPP WAP, WAC, and TRAMPAC. The defined QA Program continued to be satisfactorily implemented in accordance with the INEEL QAPP and implementing procedures. The INEEL technical areas evaluated continue to be satisfactorily implemented and remain effective.		

Table AUD-6. Idaho National Engineering and Environmental Laboratory (INEEL) Audits — Continued

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessments	Adequacy	Implementation	Effectiveness
INEEL	S-03-01	1/28-29/03	The INEEL characterization and certification activities for the period between audit A-02-27 (August 5-9, 2002) and the last shipment of TRU waste to WIPP (October 21, 2002), 3100 m ³ project closeout activities including records disposition and turnover activities, preparation and turnover of applicable software programs for continued access and use, and the disposition and turnover of acceptable knowledge records for waste that is to be transferred to the Advanced Mixed Waste Treatment Project (AMWTP).	S	S	S
				All activities evaluated are adequate, satisfactorily implemented, and effective.		

1 (S) - Satisfactory; (M) - Marginal; (U) - Unsatisfactory; (N/A) - Not Applicable; (I) - Indeterminate

Table AUD-7. Washington TRU Solutions (WTS) Audits

NOTE: The M&OC had three different names during this time period. Up to January 2001, the M&OC was Westinghouse Waste Isolation Division (WID). From January 2001 through January 2003, the M&OC was Westinghouse TRU Solutions (WTS). From January 2003 to present, the M&OC has been Washington TRU Solutions (WTS). These names are reflected, as appropriate, in this table.

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessment	Adequacy	Implementation	Effectiveness
Westinghouse Waste Isolation Division (WID)	A-99-14	6/28-7/2/99	Evaluate the WID QA and technical programs.	S	S	S
				The audit team concluded that the technical and QA processes were adequate, satisfactorily implemented, and effective.		
WID	A-99-11	2/15-19/99	Evaluate the WID Self-Assessment Program.	S	S	S
				The WTS Self-Assessment Program was adequate, satisfactorily implemented, and effective.		
WID	S-00-03	3/13-15/00	The WID procedures and work processes related to the WWIS and WID compliance with the recently issued HWFP.	S	S	M
				The WID procedures related to the WWIS were adequate and implemented. The effectiveness of the WID QA program elements associated with the WWIS were rated as marginal due to inconsistencies identified during the surveillance.		
WID	A-00-14	8/7-8/00	The WTS QA program activities.	S	S	S
				The QA programs were adequate, satisfactorily implemented, and effective.		
Westinghouse TRU Solutions (WTS)	S-01-07	2/12-13/01	The WTS WIPP Coring Operations procedure.	S	S	S
				Current programmatic and procedural requirements relative to core storage, handling, and distribution processes were adequate, satisfactorily implemented, and effective.		
WTS	S-01-08	3/5/01	The WTS WIPP groundwater level measurement program.	S	S	S
				The procedures were adequate, satisfactorily implemented, and effective.		
WTS	S-01-12	3/19-21/01	Software used for Intranet security purposes and the process used for posting CBFO controlled documents on the Intranet and Internet.	S	S	S
				With one exception, the purchase and control of software was adequate, satisfactorily implemented, and effective.		

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Table AUD-7. Washington TRU Solutions (WTS) Audits — Continued

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessment	Adequacy	Implementation	Effectiveness
WTS	A-01-13	5/7-11/01	Verify continued implementation of the QA requirements in CBFO and WTS QAPDs – Sections 1 and 2, and applicable NQA-1 elements and implementing procedures.	M	M	M
				The WTS QA procedures were marginally adequate relative to the flow down of requirements from the CBFO QAPD. The audit team also concluded that the CBFO quality requirements contained within the CBFO QAPD Sections 1 and 2 were being marginally implemented through the WTS QAPD and WTS implementing procedures and the processes were marginally effective.		
WTS	S-01-14	8/13-16/01	The WIPP site's compliance with the requirements of the National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit (MSGP).	S	S	S
				The design, operation, and maintenance of the WIPP storm water management system at the facility was outstanding and the Best Management Practices (BMPs) were satisfactorily implemented and effective.		
WTS	A-01-18	7/30-8/2/01	The QA requirements in the CBFO and WTS QAPDs – Sections 3 and 4, applicable NQA-1 elements and implementing procedures.	M	M	M
				The WTS QA procedures were marginally adequate relative to the CBFO QAPD. The CBFO quality requirements contained within the CBFO QAPD Sections 3 and 4 were being marginally implemented through the WTS QAPD and the WTS implementing procedures. The processes were marginally effective.		
WTS	A-02-08	10/1-10/01	The WTS conduct of operations program.	S	S	S
				Overall, the conduct of operations program was adequate in accordance with the applicable WTS implementing procedures. The WTS conduct of operations were satisfactorily implemented and effective.		
WTS	A-02-02	11/27-30/01	Continued implementation of the software QA requirements defined in the CBFO and WTS QAPDs, Section 6, and the applicable WTS implementing procedures.	M	S	S
				The WTS software QA procedures are marginally adequate relative to the flow-down of requirements from the CBFO QAPD. The CBFO quality requirements contained within the CBFO QAPD Section 6 are being satisfactorily implemented through the WTS QAPD and WTS implementing procedures. The processes are effective.		

Table AUD-7. Washington TRU Solutions (WTS) Audits — Continued

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessment	Adequacy	Implementation	Effectiveness	
S (Centralized Procurement Program)	A-02-10	11/6-8/01	The WTS QAPD pertaining to the Centralized Procurement Program. (Joint audit by INEEL and Hanford site auditors.)	Supplier Evaluation	S	S	I
				CBFO Supplemental Audit	M	M	I
				Verification of CAR 01-028	S	S	S
				See specific area above (Supplier Evaluation, CBFO Supplemental Audit, and Verification of CAR 01-028).			
WTS	S-02-19	3/26/02	Verify corrective actions and assess the adequacy of the WTS implementing procedures and updated WTS QA Procedures Matrix for compliance with the applicable portions of the CBFO QAPD. (Closeout of open items from Audits A-01-13, A-01-18, and A-02-02.)	S	N/A	N/A	
				The procedures currently implemented by WTS and the updated WTS Matrix adequately address and meet applicable elements of the CBFO QAPD.			
WTS	A-02-24	5/20-21/02	The WTS QAPD requirements in accordance with the CBFO QAPD and ASME/NQA-1, 1989, Criteria 1, 2 and 3. (Included Sections 1.1, 1.2, 1.3, 2.2, 3.1 and 3.2 and the associated implementing procedures.)	S	S	S	
				Overall, the WTS QA program is adequate relative to the flow-down of requirements from the CBFO QAPD and ASME/NQA-1 Criteria 1, 2, and 3. Implementation is satisfactory and the program is effective. Corrective action continues to be effective for CARs previously identified.			
WTS	A-02-25	7/9-12/02	The WTS QAPD requirements in accordance with the CBFO QAPD and ASME NQA-1, Criteria 4, 5, 7, 8, 9, and 13. Sections 2.1 and 2.3 of the WTS QAPD were also evaluated.	S	S	S	
				Overall, the WTS QA program is adequate relative to the flow-down of requirements from the CBFO QAPD and NQA-1 Criteria. The implementing procedures are satisfactorily implemented and are effective. The corrective actions continue to be effective for CARs previously generated.			
WTS	S-02-23	7/23-24/02	The WTS software configuration management, software change control, software life cycle documentation, and data entry for container overpacking activities for the WWIS.	S	S	S	
				All audited processes are adequate, satisfactorily implemented, and effective.			

Table AUD-7. Washington TRU Solutions (WTS) Audits — Continued

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessment	Adequacy	Implementation	Effectiveness
WTS	A-03-06	11/12-15/02	The WTS QAPD requirements in accordance with the CBFO QAPD and NQA-1, Criteria 10, 11, 12, 14, and QAPD Section 4. Sections 2.4.1, 2.4.2, 2.4.3, and 2.1.3.B.5 were also evaluated.	S	S	S
				Overall, the WTS QA program is adequate relative to the flow-down of requirements from the CBFO QAPD. The implementing procedures are satisfactorily implemented and are effective. The corrective actions continue to be effective for CARs previously generated.		
Washington TRU Solutions (WTS)	A-03-10	1/13-16/03	The WTS QAPD requirements in accordance with NQA-1, Criteria 6, 15, 16, 17, and 18, the CBFO QAPD, and TRAMPAC (WTS QAPD Sections 1.3, 1.4, 1.5, 3, and 6).	S	S	S
				Overall, the WTS QA program is adequate relative to the flow-down of requirements from the CBFO QAPD to the WTS QAPD and implementing procedures. The implementing procedures are satisfactorily implemented and are effective. Corrective actions continue to be effective for previously generated CARs, except in the area of nonconforming items.		

1 (S) - Satisfactory; (M) - Marginal; (U) - Unsatisfactory; (N/A) - Not Applicable; (I) - Indeterminate

Table AUD-8. Sandia National Laboratories (SNL) Audits

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessment	Adequacy	Implementation	Effectiveness
Sandia National Laboratories (SNL)	S-99-07	2/23-25/99	The SNL document control program.	S	S	S
				The document control program was adequate, satisfactorily implemented, and effective.		
SNL	A-00-01	11/8-11/00	The SNL QA program requirements implementation.	S	S	S
				The SNL QA program was adequate, satisfactorily implemented, and effective.		
SNL	A-01-04	11/27-12/1/00	The SNL technical and QA activities.	S	M	M
				The QA program was adequate; however, implementation and effectiveness were marginal. The areas of performance assessment, parameters, and sensitivity analysis were determined to be marginal. Software QA was inadequate and the implementation and effectiveness unsatisfactory.		
SNL	A-02-01	10/29-11/2/01	The SNL QA program for WIPP activities in accordance with the CBFO QAPD, Revision 3. Scope included a technical review of performance assessment (PA), sensitivity analysis, parameters, software QA activities, and an evaluation of the effectiveness of corrective actions implemented for conditions adverse to quality identified during the previous audit (A-00-01).	S	M	S
				The SNL QA program for WIPP remains adequate and effective; however, implementation was considered to be marginal.		
SNL-C	S-02-11	3/19-20/02	The SNL-WIPP Geologic Core management activities, including evaluation of controls for the SNL-WIPP Geologic Core stored in the WIPP underground located in Q Room Access Drift (W700), and geologic cores transferred and maintained at SNL's analytical laboratories in Carlsbad.	S	S	S
				Current procedures relative to core identification, storage, handling, custody, distribution, and records controls are adequately defined, satisfactorily implemented, and effective.		
SNL-C	A-03-11	11/4-7/02	The SNL Nuclear Waste Management Program (NWMP) QA Program for the WIPP. Evaluation included a technical review of PA, sensitivity analysis, parameters, and software QA activities.	S	S	S
				The SNL QA program for the WIPP remains adequate, satisfactorily implemented, and effective.		

Table AUD-8. Sandia National Laboratories (SNL) Audits — Continued

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessment	Adequacy	Implementation	Effectiveness
SNL-C	S-03-09	2/4-5/03	The Compliance Recertification Application (CRA) activities of SNL, Carlsbad, New Mexico.	S	S	S
				SNL's activities pertaining to the CRA activities are adequate, satisfactorily implemented, and effective.		

1 (S) - Satisfactory; (M) - Marginal; (U) - Unsatisfactory; (N/A) - Not Applicable; (I) - Indeterminate

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Table AUD-9. Savannah River Site (SRS) Audits

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessment	Adequacy	Implementation	Effectiveness
Savannah River Site (SRS)	S-01-32	7/19-20/01	The SRS QA and technical program related to the Document Control program and TRU waste characterization activities.	S	S	S
				The QA program requirements related to the activities evaluated were adequate, satisfactorily implemented, and effective.		
SRS	A-02-06	12/10-14/01	The SRS TRU waste characterization activities relative to the requirements detailed in the WIPP HWFP and the CBFO QAPD.	S	S	S
				The overall adequacy of the SRS technical and QA programs, as applicable to audited activities, was satisfactory in meeting requirements, and the procedures and processes were satisfactorily implemented and effective.		
SRS	A-02-20	3/13-14/02	The TRU waste characterization activities for new HSG sampling and analysis systems and processes.	S	S	S
				The overall SRS technical and QA programs, as applicable to compositing with the currently certified HSG analysis equipment and the new canister cleaning station, were adequate and satisfactory in meeting requirements, and the procedures and processes were satisfactorily implemented and effective.		
SRS	S-02-20	7/1/02	The Acceptable Knowledge (AK) process at the SRS. Examined the characterization of contact-handled debris waste (Summary Category Group S5000) training, AK reporting, control of discrepancies and confirmation.	S	S	S
				SRS AK process is adequate and satisfactorily implementing procedural requirements and the AK process continues to be satisfactorily implemented and effective.		
SRS (CCP)	A-02-09	10/15-19/01	The Central Characterization Program (CCP) characterization and certification activities; technical and QA related to Summary Category Group S5000 (debris waste).	S	S	S
				The CCP technical and QA procedures were adequate relative to the CBFO QAPD, the WAP of the WIPP HWFP, and the WAC of the WIPP. Assessed activities were being implemented in accordance with the CCP QAPP and implementing procedures. The established technical processes and the QA program were effective.		
SRS (CCP)	A-03-01	10/22-25/02	The TRU waste characterization activities performed by the CCP.	S	S	S
				The evaluation procedures and programs were adequate and met requirements. The defined QA and technical programs for these activities were being satisfactorily implemented, and the implementing procedures and processes were effective.		

2 (S) - Satisfactory; (M) - Marginal; (U) - Unsatisfactory; (N/A) - Not Applicable; (I) – Indeterminate

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Table AUD-10. Carlsbad Field Office (CBFO) Audits

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessment	Adequacy	Implementation	Effectiveness
DOE Carlsbad Field Office (CBFO)	A-00-04	4/24-28/00	Internal QA audit by DOE/Headquarters of CBFO.	S	S	S
				The QA program was adequate, satisfactorily implemented, and effective.		
CBFO	A-01-15	4/30-5/4/01	Internal QA audit of CBFO by DOE/Headquarters.	S	S	S
				The CBFO implementation of DOE 414.1A into the QA program was adequate, satisfactorily implemented, and effective.		
CBFO	S-01-20	7/24-25/01	The CBFO observation process.	M	M	S
				The observation process was effective, but marginally implemented and marginally adequate. Corrective action reports have all been completed and closed.		
CBFO	S-03-08	2/10-13/03	Activities within the Office of Program Support.	S	U	U
				The QA program was adequate but it was not being satisfactorily implemented and was not effective. Corrective action is being taken through the CAR system.		

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(S) - Satisfactory; (M) - Marginal; (U) - Unsatisfactory; (N/A) - Not Applicable; (I) - Indeterminate

Table AUD-11. Carlsbad Field Office (CBFO) Supplier Audits

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessment	Adequacy	Implementation	Effectiveness
Carlsbad Field Office Technical Assistance Contractor (CTAC) (Portage Environmental)	A-02-11	1/21-24/02 and 1/29-31/02	The WIPP Performance Demonstration Program (PDP) activities. Verify compliance to the requirements detailed in the WIPP HWFP and the QAPD.	S	S	S
				The QA and technical activities of the PDP were adequate, satisfactorily implemented, and effective. Programmatic direction and oversight activities by the DOE/CBFO and CTAC, as specified in the PDP plans and implementing procedures, were adequate, satisfactorily implemented, and effective.		
Carlsbad Field Office Technical Assistance Contractor (CTAC) (Portage Environmental)	A-02-22	4/16, 17/02 and 4/29/02	The WIPP Performance Demonstration Program (PDP) for Nondestructive Assay. Verify compliance to the requirements detailed in the WIPP HWFP and the QAPD for drummed and boxed waste.	S	S	S
				The PDP NDA activities evaluated from PDP NDA Cycles 6 through 8 were adequate, satisfactorily implemented, and effective.		
Argonne National Laboratory East (ANL-E)	S-01-15	7/10-11/01	The Argonne National Laboratory (ANL-E) technical support activities for the preparation of samples needed to support the WIPP HSG PDP.	S	S	S
				The HSG PDP activities were adequate, satisfactorily implemented, and effective. The implementing procedures and activities for sample preparation, verification, and distribution were also adequate, satisfactorily implemented, and effective.		
ANL-E/CCP	A-02-03 and A-03-13	9/9-13/02 and 2/10-13/03	The ANL-E/CCP TRU waste characterization and certification activities related to Summary Category Groups S5000 (debris waste) and S3000 (homogeneous solid waste). Previous audit assessed the technical and QA activities and the characterization of homogeneous solid waste activities.	S	S	S
				The ANL-E/CCP technical and QA programs met the requirements contained in the HWFP. The deficiencies identified in previous CARs have been corrected. The QA and technical processes are adequate and are being implemented in accordance with the CCP Transuranic Waste QAPP and the associated implementing procedures. The processes were also found to be effective.		
Battelle Columbus Lab (BCL)	A-99-15	5/6-7/99	The BCL Decommissioning Project (BCLDP) TRU Waste AK activities.	N/A	U	U
				The procedures related to AK were not implemented and the evaluated processes were ineffective.		
BCL	S-01-37	7/28-30/01	Assess the implementation of the BCLDP AK program as it applies to selected waste attributes.	S	S	S
				Battelle has established a program that can quantify these waste attributes.		

Table AUD-11. Carlsbad Field Office (CBFO) Supplier Audits — Continued

Organization Assessed	Assessment Number	Assessment Dates	Scope of Assessment	Adequacy	Implementation	Effectiveness
Mobile Characterization Services, LLC (MCS)	A-99-18	6/7-11/99	The QA processes related to the MCS TRU waste characterization and certification activities.	S	S	S
				The QA and technical programs were adequate, satisfactorily implemented, and effective.		
Carlsbad Environmental Monitoring and Research Center (CEMRC)	A-03-09	12/10-13/02	Audit A-03-09 was conducted to qualify the Carlsbad Environmental Monitoring and Research Center (CEMRC) QA program for quality-affecting activities for the WIPP. CEMRC may provide actinide chemistry support in the future.	M	M	M
				The CEMRC QA program for quality-affecting activities for the WIPP was marginally inadequate, implemented, and effective.		

1 (S) - Satisfactory; (M) - Marginal; (U) - Unsatisfactory; (N/A) - Not Applicable; (I) - Indeterminate