



Department of Energy Carlsbad Field Office P. O. Box 3090 Carlsbad, New Mexico 88221

AUG 1 0 2011



Mr. John Kieling, Acting Chief Hazardous Waste Bureau New Mexico Environment Department 2905 Rodeo Park Drive East, Building 1 Santa Fe, New Mexico 87505-6303

Subject: Transmittal of the Revised Final Audit Report and Revised C6 Checklists for Audit A-11-08 of the Oak Ridge National Laboratory Central Characterization Project Waste Characterization Program

Dear Mr. Kieling:

This letter transmits the revised Final Audit Report for Audit A-11-08, including revised C6 checklists, and an enclosure containing responses to the New Mexico Environment Department comments received by letter dated June 17, 2011.

If you have any questions concerning these revised documents, please contact Mr. Randy Unger, Director of the Office of Quality Assurance, at (575) 234-7065.

Sincerely,

Ar Ed Ziemisuski

Edward Ziemianski Interim Manager

Enclosures



Ş

-2-

Mr. John Kieling

cc: w/Report Narrative	
D. Garcia, CBFO	*ED
G. Basabilvazo, CBFO	ED
J. R. Stroble, CBFO	ED
M. Navarrete, CBFO	ED
D. Miehls, CBFO	ED
T. Morgan, CBFO	ED
N. Castaneda, CBFO	ED
S. McCauslin, CBFO	ED
D. K. Ploetz, WTS/CCP	ED
M. Sensibaugh, WTS/CCP	ED
V. Cannon, WTS/CCP	ED
A. J. Fisher, WTS/CCP	ED
M. Walker, WTS/CCP	ED
Y. Salmon, WTS/CCP	ED
J. Carter, WTS/CCP	ED
W. McMillan, DOE-OR	ED
F. Heacker, ORNL	ED
T. Peake, EPA	ED
M. Eagle, EPA	ED
E. Feltcorn, EPA	ED
R. Joglekar, EPA	ED
S. Ghose, EPA	ED
R. Lee, EPA	ED
S. Holmes, NMED	ED
T. Hall, NMED	ED
T. Kesterson, DOE OB WIPP NMED	ED
D. Winters, DNFSB	ED
P. Gilbert, LANL-CO	ED
G. Lyshik, LANL-CO	ED
P. Martinez, CTAC	ED
M. Mager, CTAC	ED
WWIS Database Administrators	ED
R. Chavez, RES	ED
W. Most, RES	ED
D. Streng, RES	ED
L. Pastorello, RES	ED
D. Guevara, RES	ED
*ED denotes electronic distribution	

*

cc: w/enclosures WIPP Operating Record, MS: 452-09 CBFO QA File CBFO M&RC

AUG 1 0 2011

U.S. DEPARTMENT OF ENERGY CARLSBAD FIELD OFFICE

REVISED FINAL AUDIT REPORT

OF THE

OAK RIDGE NATIONAL LABORATORY (ORNL) UTILIZING THE CENTRAL CHARACTERIZATION PROJECT (CCP)

OAK RIDGE, TENNESSEE

AUDIT NUMBER A-11-08

FEBRUARY 8 - 10, 2011

FINAL AUDIT REPORT OF WASTE CHARACTERIZATION ACTIVITIES IN ACCORDANCE WITH THE HAZARDOUS WASTE FACILITY PERMIT



Prepared by:

. 1

1,

Polif Maltinez, STAC Audit Team Leader

Date: 7/28/2011

Audit Team Leader

Date: 8-8-1)

Randy Unger, CBFO Director, Office of Quality Assurance

Approved by:

1.0 EXECUTIVE SUMMARY

۰ ·

Carlsbad Field Office (CBFO) Recertification Audit A-11-08 was conducted to evaluate the continued adequacy, implementation, and effectiveness of Oak Ridge National Laboratory (ORNL) transuranic (TRU) waste characterization activities performed for remote-handled (RH) and contact-handled (CH) Summary Category Group (SCG) S5000 debris waste and CH SCG S4000 soils/gravel waste by the Washington TRU Solutions (WTS) Central Characterization Project (CCP). Activities were evaluated relative to the requirements of the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit (HWFP), the *CBFO Quality Assurance Program Document* (QAPD), the *Waste Acceptance Criteria* (WAC) for the Waste Isolation Pilot Plant, and the RH TRU Waste Characterization Program Implementation Plan (WCPIP).

The audit was conducted at the ORNL TRU Waste Processing Center (TWPC) February 8 – 10, 2011. The audit team concluded that the overall adequacy of the ORNL/CCP technical and quality assurance (QA) programs, as applicable to the audited activities, were satisfactory in meeting requirements. The audit team verified that the ORNL/CCP program for characterization and certification activities related to SCG S5000 RH and CH debris waste and SCG S4000 CH soils/gravel waste continue to be satisfactorily implemented and effective.

The audit team identified three concerns during the audit, which were submitted to CBFO QA for validation. The concerns consisted of one condition adverse to quality (CAQ), one condition adverse to quality corrected during the audit (CDA), and one Recommendation.

Objective evidence for the CAQ was provided to the audit team and CBFO QA after completion of the audit. A review of the objective evidence was performed and the audit team verified that the documentation was sufficient to address the concern. Therefore, no corrective action report (CAR) was issued and the proposed CAQ has been rescinded. The two remaining concerns resulting from this audit are discussed below.

One deficiency isolated in nature and requiring only remedial corrective action was identified and corrected during the audit as discussed in section 6.2 (CDA-1). No Observations were identified during the audit, and one Recommendation is being offered for management consideration (see section 7.2).

2.0 SCOPE AND PURPOSE

2.1 Scope

The audit team evaluated the continued adequacy, implementation, and effectiveness of the ORNL/CCP TRU waste characterization activities for SCG S5000 RH and CH debris waste and SCG S4000 CH soils/gravel waste. The following elements were evaluated.

A-11-08 Page 3 of 16

General

۰ ،

Results of previous audits Changes in programs or operations New programs or activities being implemented Changes in key personnel

Quality Assurance

Personnel Qualification and Training Nonconformances Records

Technical

Acceptable Knowledge (AK) Waste Certification (e.g., Waste Stream Profile Form) Project-Level Data Validation and Verification (V&V) Headspace Gas (HSG) Sampling Visual Examination (VE) Real-time Radiography (RTR) WIPP Waste Information System/Waste Data System (WWIS/WDS)

The evaluation of ORNL/CCP TRU waste activities and documents was based on current revisions of the following documents:

Hazardous Waste Facility Permit (HWFP) Waste Isolation Pilot Plant EPA No. NM4890139088-TSDF, New Mexico Environment Department

CBFO Quality Assurance Program Document (QAPD), DOE/CBFO-94-1012

Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant, DOE/WIPP-02-3122

CCP Transuranic Waste Quality Assurance Characterization Project Plan (QAPjP), CCP-PO-001

CCP Transuranic Waste Certification Plan, CCP-PO-002

Related technical and QA implementing procedures

2.2 Purpose

ORNL/CCP Annual Recertification Audit A-11-08 was conducted to assess the level of compliance of waste characterization and certification activities for SCG S5000 RH and CH debris waste, and SCG S4000 CH soils/gravel waste, as related to the requirements of the HWFP, WAC, and QAPD.

3.0 AUDIT TEAM AND OBSERVERS

۱.

AUDITORS/TECHNICAL SPECIALISTS

Martin Navarrete	Management Representative, CBFO Office of Quality Assurance		
Porf Martinez	Audit Team Leader, CBFO Technical Assistance		
	Contractor (CTAC)		
Rick Castillo	Auditor, CTAC		
Katie Martin	Auditor, CTAC		
Prissy Martinez	Auditor, CTAC		
Greg Knox	Auditor, CTAC		
Cindi Castillo	Auditor, CTAC		
Earl Bradford	Auditor, CTAC		
Dick Blauvelt	Technical Specialist, CTAC		
B. J. Verret	Technical Specialist, CTAC		
James Oliver	Technical Specialist, CTAC		
Rhett Bradford	Technical Specialist, CTAC		
Paul Gomez	Technical Specialist, CTAC		
Thomas Putnam	Technical Specialist, CTAC		

OBSERVERS

Tim Hall	New Mexico Environment Department (NMED)
Connie Walker	NMED Contractor
Tom Morgan	National TRU Program
Randall Allen	CTAC

4.0 AUDIT PARTICIPANTS

The individuals who were contacted during the audit are identified in Attachment 1. A pre-audit meeting was held on February 8, 2011, in the ORNL TWPC Trailer 7880JJ conference room. Daily meetings were held with ORNL/CCP management and staff to discuss the previous day's issues, audit progress, and potential deficiencies. The audit was concluded with a post-audit meeting held on February 10, 2011, in the ORNL TWPC Trailer 7880JJ conference room.

Attachment 2 contains a list of personnel contacted during the audit by area. Attachment 3 contains CDA-1 documentation (In boxes). Attachment 4 contains the objective evidence reviewed during the audit (in boxes). Attachment 5 contains a list of ORNL/CCP documents audited. Attachment 6 lists the processes and equipment evaluated during the audit. Attachment 7 is the Procedure Revision Matrix identifying procedure changes since the last audit. Audit activities, including objective evidence reviewed, are described below.

5.0 SUMMARY OF AUDIT RESULTS

5.1 Program Adequacy, Implementation, and Effectiveness

This audit was performed to assess the ability of ORNL/CCP to characterize RH and CH waste from SCG S5000 debris waste and SCG S4000 CH soils/gravel waste to the requirements specified in the WIPP *Waste Analysis Plan* (WAP), WIPP WAC, QAPD, and RH TRU WCPIP. The characterization methods assessed were AK, HSG Sampling, VE, and RTR. Other processes evaluated were generation and project-level data V&V, and WWIS data entry. Data quality objective (DQO) reconciliation and the preparation of Waste Stream Profile Forms (WSPFs) were also evaluated.

The audit team concluded that overall, the applicable ORNL/CCP TRU waste characterization activities for RH and CH SCG S5000 debris waste and CH SCG S4000 soils/gravel waste, as described in the implementing procedures, were adequate, satisfactorily implemented, and effective.

5.2 General

ι.

5.2.1 Results of Previous Audits

The audit team examined the results of CBFO certification Audit A-10-08 for RH and CH SCG S5000 debris waste and CH SCG S4000 soils/gravel waste. Two CAQs resulting in the issuance of two CBFO CARs related to RTR were evaluated. The audit team verified that continued corrective action implementation has been maintained for the two CARs issued as a result of Audit A-10-08.

5.2.2 Changes in Programs or Operations

No significant changes in programs or operations related to the HWFP have been implemented since the last recertification audit, A-10-08.

5.2.3 New Programs or Activities Being Implemented

No new programs or activities related to the HWFP have been implemented since the last recertification audit, A-10-08.

5.2.4 Changes in Key Personnel

The previous site project manager, Mr. Ron Reeves, was replaced by Mr. Pat Tilmon.

5.3 Quality Assurance Activities

۱.

5.3.1 Personnel Qualification and Training

The audit team conducted interviews with responsible personnel and reviewed implementing Procedure CCP-QP-002, Rev. 30, *CCP Training and Qualification Plan,* to determine the degree to which the procedure adequately addresses upper-tier requirements. Personnel training records associated with VE, RTR, HSG Sampling, AK, and Site Project Management were examined to verify implementation of associated requirements and to verify that personnel performing characterization activities are appropriately qualified. Records reviews included qualification cards and other pertinent qualification documentation such as attendance sheets/briefings on newly-revised AK summaries for RTR and VE operators, test drums and training container documentation, and eye exams.

No concerns were identified during the audit. The procedures reviewed and objective evidence assembled and evaluated during the audit provided evidence that the applicable requirements for personnel training and qualification are adequately established for compliance with upper-tier requirements, satisfactory in the implementation of these requirements, and effective in achieving the desired results.

5.3.2 Nonconformances

The audit team interviewed the resident QA engineer and then randomly selected a sampling of nonconformance reports (NCRs) to confirm that deficiencies are being appropriately documented and tracked through resolution as required. The following NCRs were reviewed: NCR-ORNL-0100-10, NCR-ORNL-0119-10, NCR-ORNL-0132-10, NCR-ORNL-0138-10, NCR-ORNL-0519-10, NCR-ORNL-0030-11, NCR-ORNL-0301-11, NCR-ORNL-0500-11, NCR-RHORNL-0503-10, and NCR-RHORNL-0501-11. Two NCRs (NCR-ORNL-0509-10 and NCR-RHORNL-0525-10) documented non-administrative deficiencies first identified at the site project manager (SPM) level requiring the reporting of the NCRs to the Permittees within seven days. The audit team verified notifications to CBFO were made within the required time frame. All NCRs were verified as being managed and tracked in the CCP data center and on the CCP NCR Logs.

No concerns were identified during the audit. The procedures reviewed and objective evidence assembled and evaluated during the audit provided evidence that the applicable requirements for control of nonconformances are adequately established for compliance with upper-tier requirements, satisfactory in the implementation of these requirements, and effective in achieving the desired results.

A-11-08 Page 7 of 16

5.3.3 Records

۰.

The audit team conducted interviews and reviewed implementing procedures relative to the control and administration of QA records to determine the degree to which the procedures adequately address upper-tier requirements. The audit team reviewed procedures CCP-PO-001, Rev. 18, *CCP Transuranic Waste Characterization Quality Assurance Project Plan*; CCP-QP-008, Rev. 17, *CCP Records Management*, and CCP-QP-028, Rev. 12, *CCP Records Filing, Inventory, Scheduling, and Dispositioning.* Control of QA records was verified through review of the CH records inventory and disposition schedule (RIDS) dated 6/7/10, RH RIDS dated 6/7/10, and associated characterization process batch data reports (BDRs).

No concerns were identified during the audit. The procedures reviewed and objective evidence assembled and evaluated during the audit provided evidence that the applicable requirements for QA records are adequately established for compliance with upper-tier requirements, satisfactory in the implementation of these requirements, and effective in achieving the desired results.

5.4 Technical Activities

Each technical area audited is discussed in detail in the following sections. The method used to select objective evidence is discussed, the objective evidence used to assess compliance with the HWFP is cited briefly, and the result of the assessment is provided.

5.4.1 Acceptable Knowledge

The audit team reviewed the AK record for both CH and RH S5000 TRU debris waste streams and a CH S4000 TRU soils/gravel waste stream as part of the recertification audit for ORNL TRU waste. The waste streams for which the AK record was examined included RH debris stream OR-REDC-RH-HET from the ORNL Radiochemical Engineering Development Center, CH debris waste stream OR-CHEM-CH-HET from ORNL Analytical Chemistry Laboratory Operations in Bldg 2026, and CH soils/gravel waste stream OR-NFS-CH-SOIL from Nuclear Fuels Services waste being stored at ORNL. This recertification audit was based on the requirements contained in the current WIPP Resource Conservation and Recovery Act (RCRA) permit and described in the WAP. The audit team reviewed documentation to support requirements by completing WAP C6-1 and C6-3 checklists, and compiling and reviewing objective evidence to demonstrate compliance.

The objective evidence reviewed and compiled included the AK Summary Reports CCP-AK-ORNL-500, Rev. 2, for waste stream OR-REDC-RH-HET; CCP-AK-ORNL-005, Rev. 1, for waste stream OR-CHEM-CH-HET; and CCP-AK-ORNL-001, Rev. 6, for waste stream OR-NFS-CH-SOIL; numerous AK source documents; WAP-compliant WSPFs and attachments; and BDRs for HSG, solids sampling and analysis, VE, and RTR waste characterization processes. Random container selection memos for HSG and solids sampling lots, as appropriate, were reviewed along with corresponding HSG

and solids analysis summary reports. Examples from the AK record were reviewed to assure that all of the DQOs were met.

11.

In addition to the AK Summary Reports, AK Source Document Summaries and other relevant AK records cited above, for each waste stream the audit team reviewed the AK Documentation Checklist, Attachment 1; the AK Source Document Reference List, Attachment 4; the AK Hazardous Constituents List, Attachment 5; the AK Waste Form, Waste Material Parameters, Prohibited Items and Packaging form, Attachment 6, along with the applicable justification memo for waste material parameter weight estimates; and the AK Container List, Attachment 8, with memos supporting the process for adding containers to the waste streams. Examples of the resolution of AK discrepancies in the AK record and during characterization activities, NCRs dealing with prohibited items, AK Accuracy reports, and the most recent internal surveillance reports were also collected and examined along with screenshots from the project tracking system (PTS) database. Requisite training requirements were met.

The WAP-required container traceability exercise was conducted for a total of six waste containers from the three waste streams (including individual container waste input forms when applicable), along with AK Characterization checklists and data reconciling characterization testing.

As a result of the audit, the audit team made a Recommendation that changes be made to the text of the AK Summary Reports for purposes of clarification and consistency, and to provide added focus on recent changes in WAP requirements. Freeze files of these changes were prepared by the AKEs and reviewed by the audit team. The freeze files were found to be acceptable with the understanding that they be incorporated in the next AK Summary revisions. The Recommendation also addressed minor changes to AK Attachments 5 and 6 for clarification and consistency (see section 7.2).

The procedure reviews, field observations, and document reviews provided evidence that the applicable requirements for Acceptable Knowledge are adequate for compliance with upper-tier requirements, satisfactory in the implementation of these requirements, and effective in achieving the desired results.

5.4.2 Project-Level Data Validation and Verification

The audit team conducted interviews with responsible personnel and reviewed implementing Procedures CCP-TP-001, Rev. 19, *CCP Project Level Data Validation and Verification*; CCP-TP-003, Rev. 18, *CCP Data Analysis for S3000, S4000, and S5000 Characterization*; and CCP-TP-162, Rev. 1, *CCP Random Selection of Containers for Solids and Headspace Gas Sampling and Analysis*, relative to project-level V&V activities, to determine the degree to which procedures adequately address upper-tier requirements.

The audit team reviewed objective evidence to ensure project-level V&V activities were adequately performed to support waste characterization activities. BDRs were

evaluated based on project-level V&V requirements for CH and RH S5000 debris waste and CH S4000 soils/gravel waste. Random sample selection documentation, WSPFs, and Characterization Information Summaries (CISs) for waste streams OR-CHEM-CH-HET, OR-NFS-CH-SOIL, and OR-REDC-RH-HET were evaluated. Although no S4000 soils/gravel waste has been characterized since Audit A-10-08, the audit team reexamined CH S4000 soils/gravel BDRs to verify the project-level review process for S4000 soils/gravel waste is still adequate. The project-level data V&V process was evaluated by reviewing the following BDRs.

Radiography OR-RTR6-0305 OR-RTR6-0317 OR-RTR6-0337 OR-RTR6-0347 OR-RTR6-0361

Visual Examination ORVECH0021 ORVECH0031 ORVECH0047 RHORVE100143

Solids and Soils/Gravel from A-10-08SSC09-00002ALD09004VALD09004NALD09003M

 Headspace Gas

 ORHSGS100002
 ECL10004G
 ECL10004M

 ORHSGS100003
 ECL10005G
 ECL10005M

 ORHSGS100009
 ECL10023G
 ECL10023M

 ORHSGS100011
 ECL10035G
 ECL10035M

 ORHSGS100014
 ECL10044G
 ECL10044M

The audit team found the project-level RTR, VE, soils/gravel sampling and analysis, and HSG sampling and analysis review of the BDRs to be acceptable.

A concern was identified during the audit. The CCP SPM HSG Summa Sampling Project Level Validation Checklist and Summary (CCP-TP-001, Att. 10) question 25, in part, asks the SPM to verify that a field reference sample has been collected as required. The following is an example of what is recorded in the comment section to question 25: "The collection of FRS samples is no longer necessary as the required field reference standard demonstrates accuracy (70-130%). See CP:08:00410, dated 09/12/08 for details." Other examples reference "FRS Memo: 08:01267."

During the audit, memorandum CP:08:00410 was provided to the audit team for review. Memorandum 08:01267 was not available to the audit team for review, resulting in the

A-11-08 Page 10 of 16

concern. Memorandum 08:01267 was located and provided to the audit team for review on February 14, 2011. CCP management personnel explained that Memorandum 08:01267 had been misfiled. The memorandum was misnumbered as CP:08:01267 and was referenced as such, but it should have been numbered CP:09-01267. This error was corrected on 6/24/09.

Both memoranda contained information satisfying CCP SPM HSG Summa Sampling Project Level Validation Checklist and Summary (CCP-TP-001, Att. 10) question 25. Both memoranda will be included as objective evidence. As a result of the location and subsequent evaluation of Memorandum 08:01267, this concern was withdrawn.

The procedure reviews, field observations, and document reviews provided evidence that the applicable requirements for the project-level data V&V process are adequately established for compliance with upper-tier requirements, satisfactory in the implementation of these requirements, and effective in achieving the desired results.

5.4.3 Headspace Gas Sampling

The audit team conducted interviews with responsible personnel and reviewed implementing procedures CCP-TP-082, Rev. 7, *CCP Preparing and Handling Waste Containers*; CCP-TP-093, Rev. 14, *CCP Sampling of TRU Waste Containers*; and CCP-TP-106, Rev. 7, *CCP Headspace Gas Sampling Batch Data Report Preparation*, relative to HSG sampling activities, to determine the degree to which procedures adequately address upper-tier requirements. The audit team assessed the ability of ORNL/CCP to characterize CH and RH waste from SCG S5000 (debris) using HSG sampling. ORNL/CCP operations for HSG sampling is performed using SUMMA[®] canisters. HSG sample analyses are performed by the Idaho National Laboratory (INL) Environmental Chemistry Laboratory (ECL) and were evaluated under a separate audit.

A walkthrough and examination of the sampling area was conducted on February 9, 2011. Interviews with sampling personnel included an explanation of the sampling processes for both CH and RH waste containers and packaging of samples for shipment to the off-site laboratory for analysis. The audit team observed the inspection of SUMMA[®] canisters and needle assemblies (provided by the INL ECL), calculation of drum age criteria (DAC), and temperature equilibration activities performed by ORNL/CCP.

HSG sample collection was not being performed at the time of the audit. The following BDRs were examined:

ORHSGS100002 ORHSGS100003 ORHSGS100006 ORHSGS100009



Records of HSG sampling personnel were examined, including training and qualification cards. The audit team determined that HSG sampling personnel were appropriately qualified as required.

No concerns were identified during the audit. The procedure reviews, field observations, and document reviews provided evidence that the applicable requirements for HSG are adequately established for compliance with upper-tier requirements, satisfactory in the implementation of these requirements, and effective in achieving the desired results.

5.4.4 Real-time Radiography

۰.

The audit team evaluated the adequacy, implementation, and effectiveness of ORNL/CCP characterization and certification of CH SCG S4000 soils/gravel waste and SCG S5000 debris waste using the RTR characterization process.

The audit team evaluated the following RTR-related CCP procedures: CCP-TP-053, Rev. 9, *CCP Standard Real-Time Radiography (RTR) Inspection Procedure*; CCP-TP-028, Rev. 6, *CCP Radiographic Test and Training Drum Requirements*; and CCP-TP-165, Rev. 1, *CCP Real-Time Radiography #6 Operating Procedure*. The review determined that the procedures adequately address upper-tier requirements.

The audit team examined the following CH RTR BDRs:

OR-RTR6-0290 OR-RTR6-0303 OR-RTR6-0326 OR-RTR6-0305 OR-RTR6-0317 OR-RTR6-0337 OR-RTR6-0347 OR-RTR6-0354

The audit team evaluated evidence of required capability demonstrations for three RTR operators. Records of RTR operator training and qualification, including audio/video media of capability demonstrations, were examined and the audit team determined that the RTR operators were appropriately qualified as required.

The audit team witnessed the RTR characterization process for container X10CSATNO2697G using the RTR6 Unit. The RTR Unit contained the required elements. The audit team interviewed the RTR operator and verified the use of current AK summaries and RTR operating procedures. The audit team also examined RTR operational logbook NDE-ORNL-005, 2011, and ORNL-TWPC-RTR6, 7880J, and verified logbook entries were reviewed by the vendor project manager (VPM).

No concerns were identified during the audit. The procedure reviews, field observations, and document reviews provided evidence that the applicable



requirements for RTR are adequately established for compliance with upper-tier requirements, satisfactory in the implementation of these requirements, and effective in achieving the desired results.

5.4.5 Visual Examination

The audit team evaluated the adequacy, implementation, and effectiveness of ORNL/CCP VE processes for characterizing CH SCGs S4000 soils/gravel waste and S5000 debris waste. The audit team also evaluated the adequacy, implementation, and effectiveness of ORNL/CCP VE processes for characterizing RH SCG S5000 debris waste.

A review of ORNL/CCP procedures CCP-TP-113, Rev. 15, *CCP Standard Contact-Handled Waste Visual Examination*; CCP-TP-163, Rev. 2, *CCP Evaluation of Waste Packaging Records for Visual Examination of Records*; and CCP-TP-500, Rev.10, *CCP Remote-Handled Waste Visual Examination*, to determine their adequacy in addressing upper-tier requirements. The review indicated that the procedures adequately address requirements.

ORNL/CCP uses the two-operator method when performing VE characterization, i.e., two qualified operators visually examine the waste and place it into 55-gallon drums. The audit team examined the following CH and RH VE BDRs to verify implementation and compliance with the requirements for documenting VE activities, as stipulated in CCP-TP-500 and CCP-TP-113.

<u>CH</u>

.

ORVECH0011 ORVECH0013 ORVECH0015 ORVECH0023 ORVECH0030 ORVECH0041 ORVECH0052

RHORVE100041 RHORVE100056 RHORVE100091 RHORVE100119

RHORVE100144

During the review of these BDRs, the audit team identified one concern. In BDR ORVECH0013, Attachment 2, CCP Waste Visual Examination Data Form, for Waste Container ID: X10C0102698C1, one of the RTR operators signed and dated the BDR with the wrong year (2009 vs. 2010). This concern was corrected during the audit and

was submitted to records. The audit team verified the submittal to records and received a copy of the corrected form during the audit (see section 6.2, CDA 1).

The audit team examined training records and qualification cards for seven VE operators and concluded the required training was adequate and qualifications were current. The audit team also confirmed the appointment of the ORNL/CCP VE Experts (VEEs) as required.

No concerns were identified during the audit. The procedure reviews, field observations, and document reviews provided evidence that the applicable requirements for VE are adequately established for compliance with upper-tier requirements, satisfactory in the implementation of these requirements, and effective in achieving the desired results.

5.4.6 WIPP Waste Information System Waste Data System

ан Цар

,

The audit team conducted interviews and reviewed implementing procedures relative to the WWIS/WDS data entry process to determine the degree to which the procedures adequately address upper-tier requirements. The procedures reviewed included CCP-TP-030, Rev. 28, *CCP CH TRU Waste Certification and WWIS/WDS Data Entry*, and CCP-TP-530, Rev. 9, *CCP RH TRU Waste Certification and WWIS/WDS Data Entry*.

The audit team evaluated the implementation of the WWIS/WDS data entry procedures for manual data entry and electronic data transfer into the WWIS/WDS software application. The audit team evaluated implementation of the CCP TRU Waste Certification and WWIS/WDS data entry procedure for data entry using the WWIS/WDS data entry spreadsheet. The evaluation included data population of the spreadsheet, review of data entry by a Waste Certification Assistant (WCA), and waste certification by the Waste Certification Official (WCO). Record reviews included container information summaries, pages from BDRs showing analyses values, WWIS/WDS Container Data Reports, and submittals for WWIS review/approval.

The audit team reviewed two WWIS/WDS waste certification packages for RH waste. The first package reviewed was for canister OR0061, which had three internal containers (ORRH00414, ORRH00415, and ORRH00425). The second package reviewed was for canister OR0062, which also included three containers (ORRH00424, ORRH00426, and ORRH00427). Two waste certification packages (X10C0012921A and X10C9310049A) for CH waste from Waste Stream OR-REDC-CH-HET were also reviewed.

No concerns were identified during the audit. The procedures reviewed and objective evidence assembled and evaluated during the audit provided evidence that the applicable requirements for WWIS/WDS activities are adequately established for compliance with upper-tier requirements, satisfactory in the implementation of these requirements, and effective in achieving the desired results.

6.0 CORRECTIVE ACTIONS, OBSERVATIONS, AND RECOMMENDATIONS

6.1 Corrective Action Reports

ι

During the audit, the audit team may identify conditions adverse to quality (CAQs) and document such conditions on CARs.

Condition Adverse to Quality (CAQ) – Term used in reference to failures, malfunctions, deficiencies, defective items, and nonconformances.

Significant Condition Adverse to Quality – A condition which, if uncorrected, could have a serious effect on safety, operability, waste confinement, TRU waste site certification, compliance demonstration, or the effective implementation of the Quality Assurance (QA) program.

No CARs were issued during this audit.

6.2 Deficiencies Corrected During the Audit

During the audit, the audit team may identify CAQs. The audit team members and the Audit Team Leader (ATL) evaluate the CAQs to determine if they are significant.

Once a determination is made that the CAQ is not significant, the audit team member, in conjunction with the ATL, determines if the CAQ is an isolated case requiring only remedial action and therefore can be corrected during the audit. Upon determination that the CAQ is isolated, the audit team member, in conjunction with the ATL, evaluates/verifies any objective evidence/actions submitted or taken by the audited organization and determines if the condition was corrected in an acceptable manner. Once it has been determined that the CAQ has been corrected, the ATL categorizes the condition as a CDA according to the definition below.

CDAs – Isolated deficiencies that do not require a root cause determination or actions to preclude recurrence. Correction of the deficiency can be verified prior to the end of the audit. Examples include one or two minor changes required to correct a procedure (isolated), one or two forms not signed or not dated (isolated), and one or two individuals that have not completed a reading assignment.

One CDA was identified and corrected during Audit A-11-08.

CDA 1

An RTR operator recorded an incorrect date on CCP Waste Visual Examination Data Form, Attachment 2, for Waste Container ID: X10C0102698C1 in BDR ORVECH0013. The RTR operator making the entry inadvertently dated his signature 3-3-09, rather than the correct date of 3-3-10. The date was corrected and submitted to records, and the corrected form was placed in the BDR. The audit team verified actions were completed prior to the end of the audit.

7.0 SUMMARY OF OBSERVATIONS AND RECOMMENDATIONS

During the audit, the audit team may identify potential problems or suggestions for improvement that should be communicated to the audited organization. The audit team member, in conjunction with the ATL, evaluates these conditions and classifies them as Observations or Recommendations using the following definitions.

Observation - A condition that, if not controlled, could result in a CAQ.

Recommendations – Suggestions that are directed toward identifying opportunities for improvement and enhancing methods of implementing requirements.

Once a determination is made, the audit team member, in conjunction with the ATL, categorizes the condition appropriately.

7.1 Observations

. .

No Observations were identified during this audit.

7.2 Recommendations

One Recommendation was presented to ORNL/CCP management during this audit.

Recommendation 1

It is recommended that the following changes be made to AK documentation for the three waste streams examined during the ORNL recertification audit.

- 1. AK Summary CCP-AK-ORNL-500, Rev. 2, S. 5.4.2.2, p. 39: change "DR004" to "D004"
- 2. AK Summary CCP-AK-ORNL-005, Rev. 1, S. 4.4.2, p. 17: clarify the disposition of secondary wastes
- 3. AK Summary CCP-AK-ORNL-005, Rev. 1, Table 5-4, p. 53: change the EPA Hazardous Waste Number for trichlorofluoromethane from "NA" to "F002"
- 4. AK Summary CCP-AK-ORNL-005, Rev. 1, S. 5.4.3.1, p. 56: include trichlorofluoromethane in the discussion of F002 constituents that were identified in tank waste
- 5. AK Attachment 5 for waste stream OR-NFS-CH-SOIL: change suspected present for barium from "N" to "Y"
- 6. AK Attachment 5 for waste stream OR-REDC-RH-HET: remove cyclohexane from the list of potentially flammable constituents
- 7. AK Attachment 5 for waste stream OR-CHEM-CH-HET: change "Y" to "N" under suspected present for ethyl ether
- 8. Reconcile the number of containers for waste stream OR-CHEM-CH-HET between the AK Summary and AK Attachment 8 container list

- 9. AK Summary CCP-AK-ORNL-001, Rev. 6, S. 6.4.1.1, p. 45: add language that provides additional clarification to the circumstances that resulted in the movement of these drums
- 10. Ensure freeze files are prepared for all three AK Summaries reviewed during this audit to address the action items identified in the C. Walker memo, "Compliance Tracking Table Rev. 2"

8.0 LIST OF ATTACHMENTS

- Attachment 1: Personnel Contacted During the Audit
- Attachment 2: Personnel Contacted During the Audit by Area
- Attachment 3: CDA Documentation
- Attachment 4: Objective Evidence
- Attachment 5: Table of Audited Documents
- Attachment 6: List of Processes and Equipment Reviewed
- Attachment 7: Procedure Revision Matrix



A-11-08 ATTACHMENT 1 Page 1 of 3

PERSONNEL CONTACTED DURING THE AUDIT

. 1

.

PERSONNEL CONTACTED DURING AUDIT A-11-08				
NAME ORG/TITLE		PREAUDIT MEETING	CONTACTED DURING AUDIT	POST- AUDIT MEETING
Sherry Auckland	CCP/LANL TRU Waste Sciences Manager		х	
Michele Billett	CCP Training Coordinator		х	
Larry Bolden	CCP/WTS VE Expert	X	Х	Х
John Brookshire	CCP/WTS VE Operator			
Val Cannon	CCP/WTS QA Manager		х	Х
Norma Castaneda	CBFO/NTP CH Certification Manager			x
Bob Ceo	CCP/MCS NDA Expert Analyst (EA)		х	
Don Coffey	TWPC Support			х
Tyson Christensen	CCP RTR Operator		Х	
Neil Dickes CCP/WTS NDA Nuclear Engineer		x	x	
Steve Ewing MCS RTR Operator		x	х	
A.J. Fisher	CCP/WTS Training Manager		Х	х
Thomas Gatliffe	CCP/WTS SPM		Х	
Chris Gomez	CCP/WTS QA Engineer		х	х
Tim Hall	NMED Observer	x	х	х
LaTravia Harmon	CCP/NFT HSG Operator	x	Х	X
Jeff Harrison	CCP/Tech Specs AKE		х	х
Joe P. Harvill	CCP/WTS NDA Support	X	Х	
Fred Heacker	WAI Operations Waste Manager	x		X
Kristoffer Henderson	CCP/NFT HSG Operator	X	X	Х
Martin Jones	Energx Floor Supervisor		x	
Richard Kantrowitz	CCP/WTS SPM	Х	x	Х



PERSONNEL CONTACTED DURING AUDIT A-11-08				
NAME	ORG/TITLE	PREAUDIT MEETING	CONTACTED DURING AUDIT	POST- AUDIT MEETING
Creta Kirkes	CCP/WTS WWIS WCO		×	
Rita Littleton	CCP/WTS VE Operator		X	
Ryan Martin	CCP Training/Records Analyst		×	
Bill McMillan	DOE/ORO TRU Project Manager			X
Kevin Meyer	CCP/MCS EA	X	X	
Dennis Miehls	CBFO Acting QA Manager			X
Jeri Miles	CCP/WTS Container Manager	Х	X	
Shane Miles	VPM	X		X
Dean Mooney	CCP/WTS Quality Assurance Engineer	x	X	X
Jim Moore	DOE/ORO Contract/Technical Support	x		X
Tom Morgan	CBFO/NTP Project Management Advisor			x
Wade C. Morris CCP/MCS NDA Lead Operator		x	X	
Martin Navarrete	tin Navarrete CBFO QA Representative			X
Laura Nelson	a Nelson CCP/WTS RH SPM		×	x
Mark Pearcy	CCP/WTS SPM	x	x	×
Sheila Pearcy	CCP/WTS Records Manager		X	x
Kevin Peters	CCP/Tech Specs AK Expert		×	Х
Helen Pettus	CCP/WTS WCA		x	
D. K. Ploetz	CCP/WTS Manager			Х
Larry Porter	CCP SPM		×	
Irene Quintana	CCP/WTS RH Site Project Manager	x	X	X
Mike Ramirez	CCP/WTS WCO	· · · · · · · · · · · · · · · · · · ·	×	
Steve Schafer	CCP/Tech Specs AK Expert		×	Х
Michael L. Sensibaugh	CCP/WTS Project Manager	x	X	Х

.

.

;



PERSONNEL CONTACTED DURING AUDIT A-11-08					
NAME	ORG/TITLE	PREAUDIT MEETING	CONTACTED DURING AUDIT	POST- AUDIT MEETING	
Beverly Schrock	CCP/WTS SPM	Х	x	X	
Lauren Smith	CCP/WTS Records Analyst	Х			
Ty Snipes	Energx/ Manipulator Operator		х		
J. R. Stroble DOE/CBFO RH Certification Manager				x	
Pat Tilmon	CCP/WTS Project Manager	x	Х	х	
Eric Townsend CCP VE Operator			х		
Joe Wachter Canberra/MCS EA		x		х	
Jim Walker CCP Project Control		x	х		
Lisa Watson LANL AKE			х	x	
John West CCP/MCS EA		x	х		
Wade Weyerman	CCP/LANL TCO	Х	x		
Ronald Whitson	CCP/MCS RH DTC Lead Operator	x	X		

•

.

Contraction of the second seco

Personnel Contacted During the Audit by Area					
Nonconformances	C. M. Gomez				
	Val Cannon				
Training	Michele Billett				
	Ryan Martin				
	A.J. Fisher				
Records	Sheila Pearcy				
Acceptable Knowledge	Jeff Harrison				
	Richard Kantrowitz				
	Kevin Peters				
	Steve Schafer				
	Lisa Watson				
	Thomas Gatliffe				
	Irene Quintana				
	Sherry Auckland				
	Beverly Schrock				
Headspace Gas Sampling	LaTravia Harmon				
	Kristoffer Henderson				
	Laura Nelsen				
	Dean Mooney				
Real-time Radiography	Mark Pearcy				
	Steve Ewing				
	Jim Walker				
	Larry Porter				
	Tyson Christensen				
Visual Examination	Mark Pearcy				
	Larry Bolden				
	Ty Snipes				
	Martin Jones				
	Rita Littleton				
	Eric Townsend				
	Laura Nelsen				
WIPP Waste Information System/Waste Data	Creta Kirkes				
System (WWIS/WDS)	Mike Ramirez				
	Helen Pettus				
Waste Certification/Project Level Validation &	Richard Kantrowitz				
Verification	Irene Quintana				
	Beverly Schrock				
	Deveny Ochiock				

· · · /**

۰. ۱



A-11-08 ATTACHMENT 3 Page 1 of 1

CDA DOCUMENTATION IS LOCATED IN BOXES

•



A-11-08 ATTACHMENT 4 Page 1 of 1

OBJECTIVE EVIDENCE IS LOCATED IN BOXES

. . . .

)

TABLE OF AUDITED DOCUMENTS

1 X 1 1

No.	Procedure Number	REV	DOCUMENT TITLE	
1.	CCP-PO-001	19	CCP Transuranic Waste Characterization Quality Assurance Project Plan	
2.	CCP-PO-002	25	CCP Transuranic Waste Certification Plan	
3.	CCP-QP-002	30	CCP Training and Qualification Plan	
4.	CCP-QP-005	19	CCP TRU Nonconforming Item Reporting and Control	
5.	CCP-QP-008	17	CCP Records Management	
6.	CCP-QP-021	7	CCP Surveillance Program	
7.	CCP-QP-023	3	CCP Handling, Storage and Shipping	
8.	CCP-QP-028	12	CCP Records Filing, Inventorying, Scheduling, and Dispositioning	
9.	CCP-TP-001	19	CCP Project Level Data Validation and Verification	
10.	CCP-TP-002	23	CCP Reconciliation of DQOs and Reporting Characterization Data	
11.	CCP-TP-003	18	CCP Data Analysis for S3000, S4000, and S5000 Characterization	
12.	CCP-TP-005	21	CCP Acceptable Knowledge Documentation	
13.	CCP-TP-028	6	CCP Radiographic Test and Training Drum Requirements	
14.	CCP-TP-030	28	CCP CH TRU Waste Certification and WWIS/WDS Data Entry	
15.	CCP-TP-033	18	CCP Shipping of CH TRU Waste	
16.	CCP-TP-053	9	CCP Standard Real-Time Radiography (RTR) Inspection Procedure	
27.	CCP-TP-068	8	CCP Standardized Container Management	
28.	CCP-TP-082	7	CCP Preparing and Handling Waste Containers for Headspace Gas Sampling	
31.	CCP-TP-093	14	CCP Sampling of TRU Waste Containers	
32.	CCP-TP-106	7	CCP Headspace Gas Sampling Batch Data Report Preparation	
33.	CCP-TP-113	15	CCP Standard Contact-Handled Waste Visual Examination	
35.	CCP-TP-162	1	CCP Random Selection of Containers for Solids and Headspace Gas Sampling and Analysis	
36.	CCP-TP-163	2	CCP Evaluation of Waste Packaging Records for Visual Examination of Records	
37.	CCP-TP-165	1	CCP Real-Time Radiography #6 Operating Procedure	
43.	CCP-TP-180	2	CCP Analytical Sample Management	
44.	CCP-TP-500	10	CCP RH Waste Visual Examination	
46.	CCP-TP-506	2	CCP Preparation of the Remote Handled Transuranic Waste Acceptable Knowledge	
			Characterization reconciliation Report	
47.	CCP-TP-507	7	CCP Shipping of Remote-Handled Transuranic Waste	
48.	CCP-TP-509	2	CCP Remote-Handled Transuranic Container Tracking	
49.	CCP-TP-530	9	CCP RH TRU Waste Certification and WWIS/WDS Data Entry	
50.	WP 13-QA.03	17	Quality Assurance Independent Assessment Program	

A-11-08 ATTACHMENT 6 Page 1 of 1

List of Processes and Equipment Reviewed

WIPP #	Process/Equipment Description	Applicable to the Following Waste Streams/Groups of Waste Streams	Currently Approved by NMED	Currently Approved by EPA
	PREVIOUSLY APPROVED	PROCESSES OR EQU	JIPMENT	
N/A	Acceptable Knowledge Procedures – CCP-TP-002, CCP-TP-003, CCP-TP-005, & CCP-TP-506	Soils (S4000) Debris (S5000)	YES	YES
N/A	Data Generation and Project Level Validation & Verification (V&V) Procedure – CCP-TP-001	Soils (S4000) Debris (S5000)	YES	YES
N/A	WIPP Waste Information System/Waste Data System (WWIS/WDS) Procedures – CCP-TP-030, CCP-TP-033, & CCP-TP-530	Soils (S4000) Debris (S5000)	YES	YES
16VE1	Visual Examination (VE) Procedures – CCP-TP-113	Soils (S4000) Debris (S5000)	YES	YES
16RHVE1	Visual Examination (VE) Procedures – CCP-TP-163 and CCP-TP-500	Debris (S5000)	YES	YES
16RR1	Real-Time Radiography Mobile Characterization System (MCS) RTR #6 Procedures – CCP-TP-053 & CCP-TP-165	Soils (S4000) Debris (S5000)	YES	YES
16DTC1	Radiological characterization (Dose-to-Curie) Procedure - CCP-TP-504	Debris (S5000)	N/A	YES
N/A	Headspace Gas Sampling Procedures – CCP-TP-082 & CCP-TP-093	Debris (S5000)	YES	YES

()

()

Previous ORNL/ CCP Audit A-10-08

No.	Procedure Number	Procedure Title	Revision During Last Annual Audit	Revision During Current Annual Audit	Brief Description of Procedure Changes
1.	CCP-PO-001	CCP Transuranic Waste Characterization Quality Assurance Project Plan	17	19	 18 - Revised to incorporate modifications to the Hazardous Waste Facility Permit. To make editorial changes that are needed and to change the Waste Isolation Pilot Plant (WIPP), Waste Information System (WWIS) to WWIS/Waste Data System (WDS). 19 - Revised to include changes from Permit Renewal.
2.	CCP-PO-002	CCP Transuranic Waste Certification Plan	21	25	 22 - Revised to incorporate Revision 6.4 of DOE/WIPP- 02-3122, <i>Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant</i>. 23 - Revised to add Hanford Non-Destructive Assay (NDA) equipment. 24 - Revised to incorporate Revision 6.5 of DOE/WIPP- 02-3122, <i>Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant</i>. 25 - Revised to incorporate Revision 7.0 of DOE/WIPP- 02-3122, <i>Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant</i>. 25 - Revised to incorporate Revision 7.0 of DOE/WIPP- 02-3122, <i>Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant</i>.
3.	CCP-QP-002	CCP Training and Qualification Plan	27	30	 28 - Revised to address Corrective Action Report (CAR)- CCP-0012-09, to clarify Acceptable Knowledge (AK) briefings, training for solids lab, and approval process for training material. References to Central Characterization Project (CCP) Program Manager/Project Manager were removed and the responsibilities assigned to the Lead Site Project Manager and CCP Manager responsible for Training. 29 - Revised to address Corrective Action Report (CAR)- CCP-0012-09, to clarify Acceptable Knowledge (AK) briefings, training for solids lab, and approval process for training material. References to Central Characterization Project (CCP) Program Manager/Project Manager were removed and the responsibilities assigned to the Lead

Previous ORNL/ CCP Audit A-10-08

No.	Procedure Number	Procedure Title	Revision During Last Annual Audit	Revision During Current Annual Audit	Brief Description of Procedure Changes
					Site Project Manager and CCP Manager responsible for
			:		Training.
					the Waste Isolation Pilot Plant Hazardous Waste Facility
					Permit.
4.	CCP-QP-005	CCP TRU Nonconforming Item	18	19	19 - Revised to: clarify hold tag application; Carlsbad
		Reporting and Control			Field Office (CBFO) notification requirements including
					responsibility, incorporate CCP-SO-054, 1 and CCP-SO-
					Beport (NCB): and other minor editorial changes
5.	CCP-QP-008	CCP Records Management	15	17	16 - Revised to clarify and address the submittal of
		5			historical source documents.
					17 - Revised to change the submittal process for
					Acceptable Knowledge (AK) documentation and section
			7	7	on historical source documents.
0.	CCP-QP-021	CCP Surveillance Program	/	1	
/.	CCP-QP-023	CCP Handling, Storage and Shipping	3	10	10 Deviced to incorrecte changes to Attachment 2
0.	CCP-QP-028	Scheduling and Dispositioning	9	12	Instructions for Filling Out the Becords Inventory and
					Disposition Schedule.
					11 – Revised to bring instructions regarding location in
					Attachment 4, Instructions for Filling Out the Records
					Inventory and Disposition Schedule, in line with current
					practice.
					remaining attachments and undate Attachment 2
9	CCP-TP-001	CCP Project Level Data Validation and	17	19	18 - Bevised to address Hazardous Waste Facility Permit
0.		Verification			modification, and other editorial and freeze file changes.
					19 - Revised to clarify independent technical reviewer
					(ITR) Independence and to update references to the
					Waste Isolation Pilot Plant Hazardous Waste Facility

Previous ORNL/ CCP Audit A-10-08

No.	Procedure Number	Procedure Title	Revision During Last Annual Audit	Revision During Current Annual Audit	Brief Description of Procedure Changes
					Permit.
10.	CCP-TP-002	CCP Reconciliation of DQOs and Reporting Characterization Data	21	23	 22 - Revised for Class 2 Modification Request WIPP Hazardous Waste Facility Permit EPA I.D. Number NM4890139088. 23 - Revised to implement the revision of the Waste Isolation Pilot Plant Hazardous Waste Facility Permit.
11.	CCP-TP-003	CCP Data Analysis for S3000, S4000 and S5000 Characterization	17	18	18 - Revised to implement the revision of the <i>Waste Isolation Pilot Plant Hazardous Waste Facility Permit.</i>
12.	CCP-TP-005	CCP Acceptable Knowledge Documentation	18	21	 19 - Revised document to address the Waste Isolation Pilot Plant (WIPP) Form WF09-171 from an internal Central Characterization Project (CCP) audit and to incorporate minor editorial changes and technical clarifications noted as a result of various Acceptable Knowledge audits. 20 - Revised to allow new and updated attachments and source documents to be submitted anytime after the initial submittal. 21 - Revised to implement the revision of the Waste Isolation Pilot Plant Hazardous Waste Facility Permit.
13.	CCP-TP-028	CCP Radiographic Test and Training Drum Requirements	3	6	 4 - Revised to clarify the difference between a Test Drum and a Training Drum and how they are to be constructed. 5 - Revised to correct editorial errors. 6 - Revised to incorporate training containers in place of training drums. Also revised training container assembly procedures to meet the requirements of the revised Waste Isolation Pilot Plant Hazardous Waste Facility Permit.
14.	CCP-TP-030	CCP CH TRU Waste Certification and WWIS/WDS Data Entry	27	28	28 - Revised to include steps for direct load 100-Gallon drums that require characterization prior to placement in a direct load Standard Waste Box (SWB) and for minor editorial changes.

A-11-08 ATTACHMENT 7 Page 4 of 6

PROCEDURE REVISION MATRIX

Previous ORNL/ CCP Audit A-10-08

No.	Procedure Number	Procedure Title	Revision During Last Annual	Revision During Current Annual	Brief Description of Procedure Changes
15.	CCP-TP-033	CCP Shipping of CH TRU Waste	Audit 16	Audit 18	17 - Revised to align procedure with modifications made
					to the WDS system, and editorial corrections. 18 - Minor revision to update references to the <i>Waste</i> <i>Isolation Pilot Plant Hazardous Waste Facility Permit.</i>
16.	CCP-TP-053	CCP Standard Real-Time Radiography (RTR) Inspection Procedure	7	9	 8 - Revised to incorporate April 1, 2010, modification of the Waste Isolation Pilot Plant Hazardous Waste Facility Permit (HWFP). 9 - Revised to incorporate another test image type.
17.	CCP-TP-068	CCP Standardized Container Management	6	8	 7 - Revised in response to Corrective Action Report (CAR)-Los Alamos National Laboratory (LANL)-0006-09 and to clarify when a waste container must be put through container management. 8 - Revised to clarify instructions.
18.	CCP-TP-082	CCP Preparing and Handling Waste Containers for Headspace Gas Sampling	7	7	
19.	CCP-TP-093	CCP Sampling of TRU Waste Containers	13	14	14 - Revised to eliminate the allowance of the procedure to perform Transportation Headspace sampling. Revised the note under step 4.5.6 per CCP-PO-001, <i>CCP</i> <i>Transuranic Waste Characterization Quality Assurance</i> <i>Project Plan.</i> Made editorial changes. Clarified the Field Reference Standard process. Eliminated the allowance of compositing samples. Updated the Chain-of-Custody form. Changed the batch data report (BDR) numbering format. Incorporated recommendations from Audit A-10- 04. Updated references to the <i>Waste Isolation Pilot Plant</i> <i>Hazardous Waste Facility Permit.</i>
20.	CCP-TP-106	CCP Headspace Gas Sampling Batch Data Report Preparation	6	7	7 - Revised to clarify independent technical reviewer (ITR) independence.
21.	CCP-TP-113	CCP Standard Contact-Handled Waste Visual Examination	13	15	14 - Revised to incorporate modifications to Hazardous Waste Facility Permit. Revised to address CBFO

Previous ORNL/ CCP Audit A-10-08

No.	Procedure Number	Procedure Title	Revision During Last Annual Audit	Revision During Current Annual Audit	Brief Description of Procedure Changes
					Corrective Action Report (CAR) 10-019. Revised to address procedural steps, to accommodate the visual examination (VE) process for newly generated waste and to make additional editorial changes. 15- Revised to clarify independent technical reviewer (ITR) independence.
22.	CCP-TP-162	CCP Random Selection of Containers for Solids and Headspace Gas Sampling and Analysis	0	1	1 - Minor revision to update references to the Waste Isolation Pilot Plant Hazardous Waste Facility Permit.
23.	CCP-TP-163	CCP Visual Examination of Records	2	2	
24.	CCP-TP-165	CCP Real-Time Radiography #6 Operating Procedure	1	1	
25.	CCP-TP-180	CCP Analytical Sample Management	1	2	2 - Minor revision to update references to the Waste Isolation Pilot Plant Hazardous Waste Facility Permit.
26.	CCP-TP-500	CCP Remote-Handled Waste Visual Examination	8	10	 9 - Revised to make changes for a two shift operation and two different sets of qualified operators to be able to work on the same Remote-Handled (RH)-Visual Examination (VE). Added Table 1, Prohibited Items List, and updated language to reflect the permit modification. 10 - Revised to incorporate Permit Modification Independent Technical Review (ITR) language.
27.	CCP-TP-506	CCP Preparation of the Remote- Handled Transuranic Waste Acceptable Knowledge Characterization Reconciliation Report	2	2	
28.	CCP-TP-507	CCP Shipping of Remote-Handled Transuranic Waste	5	7	 6 - Alignment of the procedure with modifications made to the Waste Data Systems (WDS), and editorial corrections. 7 - Minor revision to update references to the Waste Isolation Pilot Plant Hazardous Waste Facility Permit.

()

PROCEDURE REVISION MATRIX

Previous ORNL/ CCP Audit A-10-08

No.	Procedure Number	Procedure Title	Revision During Last Annual Audit	Revision During Current Annual Audit	Brief Description of Procedure Changes
29.	CCP-TP-509	CCP Remote-Handled Transuranic Container Tracking	2	2	
30.	CCP-TP-530	CCP RH TRU Waste Certification and WWIS/WDS Data Entry	9	9	
31.	WP 13- QA.03	Quality Assurance Independent Assessment Program	17	17	