



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



APR 24 2012

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

Subject: Transmittal of the Recertification Audit Report for Audit A-12-02 of the Savannah River Site Central Characterization Project

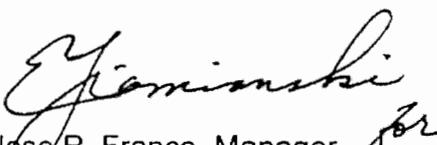
Dear Mr. Kieling:

This letter transmits the final audit report for Carlsbad Field Office Audit A-12-02 of the Savannah River Site Central Characterization Project for processes performed to characterize and certify waste in accordance with the Waste Isolation Pilot Plant Hazardous Waste Facility Permit. The report contains the results of the recertification audit conducted November 14 – 17, 2011.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

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

Sincerely,


Jose R. Franco, Manager
Carlsbad Field Office

Enclosures



Mr. John Kieling

-2-

APR 24 2012

cc: w/Report Narrative
E. Ziemianski, CBFO *ED
R. Unger, CBFO ED
C. Fesmire, CBFO ED
J.R. Stroble, CBFO ED
G. Basabilvazo, CBFO ED
T. Morgan, CBFO ED
M. Pinzel, CBFO ED
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M. Walker, WTS/CCP ED
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Y. Salmon, WTS/CCP ED
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M. Mager, CTAC ED
WWIS Database Administrators ED
R. Chavez, RES ED
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L. Pastorello, RES RCRA Chronology Record ED

cc: w/enclosures
P. Roush, WIPP Operating Record, MS: 452-09
CTAC QA File
CBFO M&RC
*ED denotes electronic distribution



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Sincerely,


Jose R. Franco, Manager *for*
Carlsbad Field Office

Enclosures

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| | |
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*ED denotes electronic distribution

U.S. DEPARTMENT OF ENERGY
CARLSBAD FIELD OFFICE

FINAL AUDIT REPORT

OF THE

SAVANNAH RIVER SITE CENTRAL CHARACTERIZATION PROJECT
TRU WASTE CHARACTERIZATION AND CERTIFICATION ACTIVITIES

AIKEN, SOUTH CAROLINA

AUDIT NUMBER A-12-02

November 14 – 17, 2011



Prepared by: Priscilla Y. Martinez
Priscilla Y. Martinez, CTAC
Audit Team Leader

Date: 3-21-12

Approved by: Randy Unger / COURTLAND FOSMIRE Date: 20 Apr 2012
for Randy Unger, CBFO
Quality Assurance Director

1.0 EXECUTIVE SUMMARY

Carlsbad Field Office (CBFO) Recertification Audit A-12-02 was conducted to evaluate the continued adequacy, implementation, and effectiveness of Savannah River Site (SRS) transuranic (TRU) waste characterization activities performed for SRS by the Washington TRU Solutions (WTS) Central Characterization Project (CCP) relative to the requirements detailed in the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit (HWFP) Waste Analysis Plan (WAP), the *CBFO Quality Assurance Program Document* (QAPD), and the *Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant* (WAC).

The audit was performed at the SRS/CCP facilities near Aiken, SC, November 14 through 17, 2011. The audit team concluded that overall, the SRS/CCP technical and WAP-related quality assurance (QA) elements, as applicable to audited activities, were adequate in addressing upper-tier requirements. The audit team concluded that overall, the defined SRS/CCP QA and technical programs for contact-handled (CH) Summary Category Groups (SCGs) S3000 homogeneous solids waste, S4000 soils/gravel waste, and S5000 debris waste were being satisfactorily implemented in accordance with the QAPD, the HWFP WAP, and the WAC, and were effective in achieving the desired results. The initial Certification Audit, A-12-04, for remote-handled (RH) SCG S5000 retrievably stored debris waste was conducted concurrently with this audit.

The audit team identified one WAP-related condition adverse to quality (CAQ), resulting in the issuance of CBFO Corrective Action Report (CAR) 12-002. The CAR combines three issues that were identified during the evaluation of project-level data validation and verification; all were attributed to inattention to detail. The CAQ is discussed in detail in section 6.1. One WAP-related Observation was identified during the audit and one WAP-related Recommendation was offered for management consideration, as described in section 7.

2.0 SCOPE AND PURPOSE

2.1 Scope

The audit team evaluated the continued adequacy, implementation, and effectiveness of the SRS/CCP TRU waste characterization activities for CH SCGs S3000 homogeneous solids waste, S4000 soils/gravel waste, and S5000 debris waste.

The following general areas were audited, as required by HWFP Attachment C6, section C6-3:

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

The following QA elements were audited, as required by the HWFP Attachment C6-1 Checklist:

- Personnel Qualification and Training
- Nonconformances
- Records
- Container Management

The following CBFO waste characterization technical elements were audited in accordance with the CBFO QAPD, the HWFP WAP, and the WAC, for CH SCG S3000 homogeneous solids and CH SCG S5000 debris waste:

- Waste Characterization and Certification
- Soils and Solids/Gravel Sampling and Analysis (SS&A)
- Acceptable Knowledge (AK) including waste certification (i.e., Waste Stream Profile Forms)
- Headspace Gas Sampling and Analysis (HSG S&A)
- Real-time Radiography (RTR)
- Visual Examination (VE)

Evaluation of adequacy of SRS/CCP documents was based on the current revisions of the following documents:

- *CBFO Quality Assurance Program Document, DOE/CBFO-94-1012*
- *Waste Isolation Pilot Plant Hazardous Waste Facility Permit NM4890139088-TSDF*
- *Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant, DOE/WIPP-02-3122*

Programmatic and technical checklists were developed from the current revisions of the following documents:

- *CCP Transuranic Waste Characterization Quality Assurance Project Plan (QAPjP), CCP-PO-001*
- *CCP Transuranic Waste Certification Plan, CCP-PO-002*
- *CCP/SRS Interface Document, CCP-PO-004*
- Related SRS/CCP technical and quality assurance implementing procedures

2.2 Purpose

Audit A-12-02 was conducted to assess the level of SRS/CCP compliance to the CBFO QAPD, the HWFP WAP, and the WAC requirements for waste characterization activities

related to the certification of CH SCG S3000 homogeneous solids, S4000 soils/gravel waste, and S5000 debris waste.

3.0 AUDIT TEAM AND OBSERVERS

AUDITORS/TECHNICAL SPECIALISTS

| | |
|-----------------------|--|
| Courtland Fesmire | CBFO Management QA Representative |
| Priscilla Y. Martinez | Audit Team Leader (ATL), CBFO Technical Assistance Contractor (CTAC) |
| Charlie Riggs | ATL, CTAC |
| Earl Bradford | Auditor, CTAC |
| Rick Castillo | Auditor, CTAC |
| Greg Knox | Auditor, CTAC |
| Katie Martin | Auditor, CTAC |
| Jack Walsh | Auditor, CTAC |
| Margie Martinez | Auditor, CTAC |
| Paul Gomez | Technical Specialist, CTAC |
| Jim Oliver | Technical Specialist, CTAC |
| Dick Blauvelt | Technical Specialist, CTAC |
| Rhett Bradford | Technical Specialist, CTAC |
| Mavis Lin | Technical Specialist, CTAC |

OBSERVERS

| | |
|--------------------|--|
| Thomas Morgan | CBFO Office of the National TRU Program |
| Kenneth Licklitter | CBFO Contractor |
| Steve Holmes | New Mexico Environment Department (NMED) |
| Tim Hall | NMED |
| Connie Walker | NMED Contractor |

4.0 AUDIT PARTICIPANTS

SRS and CCP individuals contacted during the audit are identified in Attachment 1. A pre-audit meeting was held at the SRS in trailer 707-10E, November 14, 2011. Daily meetings were held with SRS and CCP management and staff to discuss the previous day's issues and potential deficiencies. The audit was concluded with a post-audit meeting held at SRS in trailer 707-10E, and via teleconference with personnel at the Skeen-Whitlock Building in Carlsbad, NM, on November 17, 2011.

5.0 SUMMARY OF AUDIT RESULTS

5.1 Program Adequacy, Implementation, and Effectiveness

This audit was performed to assess the ability of SRS/CCP to characterize CH SCG S3000 homogeneous solids waste, S4000 soils/gravel waste, and S5000 debris waste to the requirements specified in the CBFO QAPD, the HWFP WAP, and the WAC. The related characterization methods assessed were AK, HSG S&A, SS&A, RTR, and VE.

Other areas evaluated were project-level data V&V, data quality objective (DQO) reconciliation, the preparation of Waste Stream Profile Forms (WSPFs), and WWIS/WDS data entry.

The audit team concluded that the applicable SRS/CCP TRU waste characterization activities as described in the associated SRS/CCP implementing procedures are satisfactory in meeting upper-tier requirements.

Attachment 2 contains a list of personnel contacted during the audit by area. Attachment 3 contains the objective evidence compiled during the audit. Attachment 4 contains the CAR closure package. Attachment 5 is the table of audited documents. Attachment 6 is a list of processes and equipment evaluated during the audit. Attachment 7 is the procedure revision matrix that identifies and briefly describes revisions to the implementing procedures that have occurred since the last recertification audit (CBFO Audit A-11-01).

Details of audit activities are described below.

5.2 General

5.2.1 Results of Previous Audits

The results of CBFO recertification Audit A-11-01 of SRS/CCP were examined and the audit team determined that the concerns have been addressed and continued corrective actions have been effective.

5.2.2 Changes in Programs or Operations

There were no changes in Programs or Operations since Audit A-11-01.

5.2.3 New Programs or Activities Being Implemented

RTR Unit 4 was certified to characterize the standard large box 2 (SLB2), and the Large Container Non-Destructive Examination (LCNDE) Unit was certified to characterize the standard waste box (SWB) and SLB2. These units were evaluated during CBFO Surveillances S-11-10 and S-11-21.

5.2.4 Changes in Key Personnel

Joe Stepzinski has been replaced by Pat Tilmon in the position of SRS/CCP Vendor Project Manager (VPM). Craig Simmons is no longer the SRS/CCP Site Project Manager (SPM). He has been replaced by Beverly Schrock for CH waste and Irene Quintana for RH waste. No other changes in key personnel have been made since Audit A-11-01 was performed.

5.3 HWFP WAP-Related Quality Assurance Activities

The audit team evaluated the QA elements for personnel qualification and training, records, and nonconformances to applicable upper-tier requirements. The methods used to select objective evidence are discussed, the objective evidence used to assess compliance with the HWFP WAP is cited briefly (and in detail on the checklists), and the results of the assessment are provided. The evaluation results for each area audited are described below.

5.3.1 Personnel Qualification and Training

The audit team conducted interviews with responsible personnel and reviewed implementing procedure CCP-QP-002, *CCP Training and Qualification Plan*, relative to the training and qualification of personnel to determine the degree to which the procedure adequately addresses upper-tier HWFP and QAPD requirements and the degree to which the procedure adequately addresses upper-tier requirements.

Personnel training records associated with CH activities for RTR, VE, HSG S&A, AK, and SPM were examined to verify implementation of associated requirements and to verify that personnel performing characterization activities are appropriately qualified. Documents reviewed included the SRS/CCP List of Qualified Individuals (LOQI), personnel qualification cards, required reading, and capability demonstrations. 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 Qualification and Training 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 conducted interviews with representatives of the SRS/CCP QA program and reviewed implementing procedure CCP-QP-005, *CCP TRU Nonconforming Item Reporting and Control*, relative to the control of nonconformances to determine the degree to which the procedure adequately addresses upper-tier requirements. Evidence of the control of nonconformances was verified through review of the nonconformance report (NCR) logs/database and NCRs issued.

Randomly selected NCRs were evaluated to ensure that nonconformances were appropriately identified, documented, dispositioned, resolved, and tracked through closure. The selected NCRs were reviewed, including verification to ensure that SRS/CCP was appropriately documenting and reporting WAP-related nonconformances (identified at the SPM level) to CBFO as required. No concerns were identified during the audit.

The procedures reviewed and objective evidence assembled and evaluated during the audit concluded that the applicable requirements for control of Nonconformances are adequately established for compliance with upper-tier requirements and are effectively implemented.

5.3.3 Records

The audit team reviewed implementing procedures CCP-QP-008, *CCP Records Management*, and CCP-QP-028, *CCP Records Filing, Inventorying, Scheduling, and Dispositioning*, relative to the control and administration of QA records to determine the degree to which the procedures adequately address upper-tier HWFP WAP and QAPD requirements. Evidence of the control of QA records was verified through review of the SRS/CCP CH Records Inventory and Disposition Schedule (RIDS) dated 7/28/11. ✓

The audit team interviewed records management personnel and observed activities to determine if SRS/CCP records storage methods were in compliance with procedural requirements. Documents such as records coordinator designation and training, records transmittals, and records indexes were reviewed during the evaluation. No concerns were identified during the audit.

The documents reviewed and evaluated during the audit provided evidence that the applicable requirements for Records are adequately established, satisfactorily implemented, and effective.

5.3.4 WIPP Waste Information System/Waste Data System (WWIS/WDS)

The audit team conducted interviews with responsible personnel and evaluated implementation of procedure CCP-TP-030, *CCP TRU Waste Certification and WWIS/WDS Data Entry*, relative to WWIS/WDS data entry, to determine the degree to which the procedure adequately addresses HWFP Attachment C6-1 WWIS/WDS requirements.

The evaluation included data population of the spreadsheet, review of data entry, waste certification by the Waste Certification Official (WCO), submittal for WWIS review/approval, review of shipping packages, and records submittal. The audit team reviewed CH WWIS/WDS data packages for four drums (SR57055347, SR57055358, SR57055362, and MDL0518000). No concerns were identified during the audit. ✓

The documents reviewed and evaluated during the audit provided evidence that the applicable requirements for WWIS/WDS data entry are adequately established, satisfactorily implemented, and effective.

5.3.5 Container Management

Container management activities were evaluated by a walk-through of SRS container storage areas, examination of shipping documents, and interview with the CCP Container Management Specialist (CMS). SRS personnel are trained to CCP-TP-035, *CCP Container Management*, and perform the movement and storage of containers.

The CCP CMS verifies these activities. The CMS tracks containers by obtaining the container numbers of stored containers in the field as they are transferred from SRS to CCP, then locating the containers in the CMS and CCP databases. The audit team verified that containers with NCRs were stored separately from containers without NCRs. Storage of containers ready for shipment was verified to be satisfactory to preclude ineligible containers from being shipped to WIPP. No concerns were identified during this audit.

The documents reviewed and evaluated during the audit provided evidence that the applicable requirements for Container Management are adequately established, satisfactorily implemented, and effective

5.4 Technical Activities

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

5.4.1 Table C6-1 WAP Checklist

The audit was performed to assess the ability of SRS/CCP personnel to manage and perform TRU waste characterization and certification activities for CH SCG S3000 homogeneous solids, S4000 soils/gravel waste, and SCG S5000 debris waste. The C6-1 WAP checklist addresses general program requirements from an overall management perspective. The general requirements checklist addresses technical requirements and QA programmatic requirements that, when collectively implemented, ensure effective management of TRU waste characterization and certification activities. Requirements are integrated into controlled documents that will ensure the waste characterization strategy as defined in the WAP is accomplished and documented in accordance with controlled processes and procedures.

Technical activities evaluated, including characterization and certification activities, consisted of data-generation and project-level data V&V, AK, RTR, VE, SS&A, HSG S&A (including Performance Demonstration Program [PDP] participation), and preparation of WSPFs for CH SCG S3000 homogeneous solids, S4000 soils/gravel waste, and SCG S5000 debris waste. Objective evidence was selected and reviewed to evaluate the implementation of the associated characterization activities. Batch data reports (BDRs), sampling records, and personnel training documentation were included in the evaluation. The audit included direct observation of actual waste characterization activities. Each characterization process involves:

- Collecting raw data
- Collecting quality assurance/quality control (QA/QC) samples or information
- Reducing the data to a useable format, including a standard report
- Review of the report by the data generation facility and the site project office
- Comparing the data against program DQOs
- Reporting the final waste characterization information to WIPP

Objective evidence was reviewed to ensure project-level activities were adequately performed to support waste characterization. Objective evidence included completed BDRs through CCP SPM review for RTR, HSG sampling and analysis, VE, and solids and soils/gravel sampling and analysis. During the audit, the team identified three concerns that were attributed to inattention to detail. The SPM oversees TRU waste characterization and certification activities per procedure CCP-PO-001, Rev. 20. Section C3-10b states, "Data validation and verification at this level [*Project Level*] involves scrutiny and signature release from the SPM." These three concerns were combined in CBFO CAR 12-002, as described in section 6.1.

In addition, procedures and objective evidence were reviewed to ensure that SRS/CCP personnel adequately perform random container selection for HSG, solids and soils/gravel, adequately perform data reconciliation, and properly prepare WSPFs.

Objective evidence was reviewed to determine the adequacy of the SPM V&V procedures and the reporting of the results of the validation. Evidence included BDRs from each of the waste characterization activities. The flow of data from the point of generation to inclusion in the WSPF for each characterization technique was reviewed to ensure that all applicable requirements were captured in the site operating procedures. The project-level data V&V process was evaluated by reviewing the following BDRs:

| | | | |
|---|--------------|--------------|-------------|
| <u>RTR</u> SR4RTR0130 ✓ | SRSRTR0494 ✓ | SR4RTR0199 ✓ | SRLBR0006 ✓ |
| <u>VE</u> SRVEFW0313 ✓ | SRVEFW0325 ✓ | SRVEFW0350 ✓ | |
| <u>HSG</u> SRHSG1106 ✓ | ECL11031M ✓ | | |
| <u>Solids</u> SSC11-00002 ✓ ALD11020M ✓ | ALD11020V ✓ | ALD11020S ✓ | ALD11020N ✓ |

The audit team found the BDRs to be complete and adequate.

The audit team reviewed two WSPFs for waste streams SR-MD-SOIL, SR-W027-HBL-BOX, and SR-W027-HBL-BOX change notice. The WSPFs were found to be properly completed and appropriately stored as QA records.

The audit team verified the documentation supporting the random selection of containers for solids waste streams SR-W027-221H-HOM Lot 1 and revision, SR-SDD-HOM-B, SR-SDD-HOM-A, SR-W026-221F-HOM Lot 1, SR-MD-HOM-C Lot 1, and SR-W027-773A-HOM Lot 1. The team also verified the documentation supporting the random selection of containers for HSG sampling and analysis. The waste streams included SR-W026-221F-HET Lot 3; Subsequent HB-Line selection for SR-W027-HBL-BOX and Lot 3; SR-LA-PAD1 Lot 1 and subsequent sampling for Lot 2; heterogeneous organic and inorganic debris from SR-W027-235F-HET and subsequent sampling for Lots 2 and 3; the sampling of two entire waste streams in SR-W027-221F-HET-C-D and SR-W027-221F-HET-E; subsequent sampling for SR-W027-221F-HET-A Lot 3; and the Lot 4 sampling for waste stream SR-SWMF-HET-A. The team found the waste stream profiles were satisfactorily documented, and the random sample selections for the waste streams collected since the previous audit were also satisfactorily documented and compliant with WAP requirements.

The documentation of quarterly report reviews of data-generation level BDRs was found to be properly maintained since the previous audit, in proper order, complete, and adequate. During the third and fourth quarters of 2010, VE was not performed at the site; therefore, there are no reports for those quarters. HSG was not performed during the fourth quarter of 2011; therefore, there is no report for that quarter.

The SRS/CCP was previously evaluated for the use and applicability of HSG field reference standards (FRS) in 2008. The HSG samples and the solids samples were found to be properly selected and reported, and samples were properly disposed. The SRS/CCP maintains appropriate records for the collocated samples, properly documenting the relative percent difference and F-test. No concerns were identified during the audit.

The audit team verified that SRS/CCP is satisfactorily implementing the program requirements from an overall management perspective, including the project-level data V&V process to characterize and certify waste for disposal in accordance with HWFP requirements. Overall, Project-level activities were determined to be adequate, satisfactorily implemented, and effective.

5.4.2 Table C6-2 Solids and Soils/Gravel Sampling Checklist

Solids and soils/gravel sampling and analysis and associated data generation-level V&V are performed at the Idaho National Laboratory (INL) under a separate certified program. However, the audit team did evaluate the random selection requirements for solids sampling, along with the associated BDRs. Additionally, the audit team evaluated the results of the analysis provided to SRS/CCP as part of the project-level data V&V evaluations. No concerns were identified during the audit.

Overall, the Solids and Soils/Gravel Sampling and Analysis process was determined to be adequate in addressing the requirements of the WAP as applicable, satisfactory in the implementation of these requirements, and effective in achieving the desired results.

5.4.3 Table C6-3 Acceptable Knowledge Checklist

The audit team evaluated the AK process for characterizing for CH SCG S3000 homogeneous solids, S4000 soils/gravel waste, and CH SCG S5000 debris waste. This recertification audit was based on the requirements contained in the latest revision of the WIPP Resource Conservation and Recovery Act (RCRA) permit and described in the WAP, in addition to AK requirements identified in the WAC. The audit team reviewed documentation to support all applicable AK requirements in the WAP C6-1 and C6-3 checklists, and compiled and reviewed objective evidence to demonstrate compliance with both the WAP and the WAC.

The audit team reviewed specific and complete AK program documentation for CH debris waste stream SR-W027-HBL-BOX; CH solids waste stream SR-AGNS-HOM, originally generated at the Allied-General Nuclear Services Plant; and CH soils waste stream SR-MD-SOIL, generated during remediation activities at the Mound Plant and shipped to SRS for certification and characterization.

The objective evidence reviewed and compiled included the requisite AK Summary Reports, numerous AK source documents, WAP-compliant approved or draft WSPFs and attachments, and BDRs for HSG, solids and soils/gravel sampling and analysis, and RTR. Random container selection memos for HSG and solids sampling lots, as appropriate, were reviewed along with corresponding HSG and solids analysis Summary Reports. In addition, the audit team reviewed for each waste stream cited above the AK Documentation Checklist, the AK Source Document Reference List, the AK Hazardous Constituents List, the AK Waste Form, Waste Material Parameters, Prohibited Items and Pkg., along with the applicable justification memo for waste material parameter weight estimates, and the AK Container List with memos supporting the process for adding containers to the waste streams.

Examples of the resolution of AK discrepancies in the AK record and at characterization, NCRs dealing with prohibited items, AK Accuracy reports, and the most recent internal surveillance were also collected and examined, along with screenshots from the item description code (IDC) database. Requisite training records were reviewed by the audit team for AK experts (AKEs) and SPMs. The WAP-required container traceability exercise was conducted for six waste containers from the three waste streams. The drums selected provided BDRs for HSG sampling and analysis, solids and soils/gravel sampling and analysis, and RTR. Additional traceability documentation was collected through IDC database screenshots, the AK tracking spreadsheet, and container input forms.

The audit team issued one Recommendation, which included the submission of the completed WAP Compliance Tracking Tables addressing the new AK WAP requirements, for each of the three waste streams examined (see section 7.2,

Recommendation 1). Changes to the text in the tracking tables and additions to the AK Summary Reports were captured in freeze files, reviewed, and agreed upon. Copies of these documents will be appended to the AK Summaries submitted with the final report to NMED in keeping with the agreement established between CBFO and NMED in February 2011.

The audit team also identified several inconsistencies in the AK documentation describing the AK documentation type on Attachment 3 (AK Source Document Summary) and Attachment 11 (AK Source Document Discrepancy Resolution Form). If the inconsistencies are not properly addressed, the issue may result in a condition adverse to quality. Overall, the Acceptable Knowledge process was determined to be adequate in addressing the requirements of the WAP and the WAC as applicable, satisfactory in the implementation of these requirements, and effective in achieving the desired results.

5.4.4 Table C6-4 Headspace Gas Checklist

The audit team conducted interviews and examined related documentation in the area of SRS/CCP HSG sampling activities. SRS/CCP performs HSG sampling using SUMMA[®] canisters for sample collection. Samples are then shipped to INL for analysis.

The audit team reviewed SRS/CCP procedures CCP-TP-093, *CCP Sampling of TRU Waste Containers*; CCP-TP-162, *Random Selection of Containers for Solids and Headspace Gas Sampling and Analysis*; CCP-PO-005, *CCP Conduct of Operations*; CCP-TP-106, *CCP Headspace Gas Sampling Batch Data Report Preparation*; and CCP-QP-016, *CCP Control of Measuring and Testing Equipment*. The procedures adequately address upper-tier requirements.

Sampling BDRs SRHSGS1101 and SRHSGS1106 for debris waste was examined. Collection of duplicate samples and a memo dated 10/13/08 authorizing SRS/CCP to cease collection of a FRS were verified. The Drum Age Criteria (DAC), operational logbook, sample chain of custody (COC), and documentation of transfer to the analytical laboratory were reviewed and found to be compliant. Measuring and test equipment (M&TE) certifications were audited and found to be acceptable. Training and qualification of sampling personnel were confirmed to be acceptable to the CCP training program requirements.

Interviews were conducted with HSG sampling personnel. There was no TRU waste sampling activities being performed during the audit. A mock-up demonstration of HSG sampling operations on PAD 6 at the SRS facility was witnessed by the audit team. No concerns were identified during the audit.

Overall, HSG sampling activities were determined to be adequate in addressing upper-tier requirements, satisfactory in the implementation of these requirements, and effective in achieving the desired results.

5.4.5 Table C6-5 Radiography Checklist

The audit team evaluated the adequacy, implementation, and effectiveness of SRS/CCP characterization and certification of SCGs S3000 solids waste, S4000 soils/gravel waste, and S5000 debris waste using the RTR characterization process.

The audit team evaluated SRS/CCP RTR procedures CCP-TP-053, *CCP Standard Real-Time Radiography (RTR) Inspection Procedure*, and CCP-QP-002, *CCP Training and Qualification Plan*, to determine the degree to which the procedures adequately address requirements in the WAP. The procedures were found to adequately address upper-tier requirements.

The audit team evaluated the following BDRs and their associated audio/video media:

- SRSRTR0501
- SRSRTR0494
- SRSRTR0491
- SRLBR0008
- SR4RTR0178
- SR4RTR0130

The audit team toured the Low Activity Waste Vault-Cell 2 to observe the operation of the LCNDE system. The scan of SLB2 SR307250 was observed. The team toured PAD 4 to observe the RTR-4 and RTR-15 Units. Both units were in operation at the time of the tour. During the walk-through, the audit team verified the acceptability of equipment, verified that RTR operations were performed to current procedures, interviewed RTR personnel, and reviewed operational logbooks.

The audit team evaluated evidence of RTR operator-required test and training audio/video media for three RTR operators. Records of RTR operator training and qualifications were examined, including the Training Container Evaluation Data Sheets dated 6/27/11. The audit team verified that RTR operators were appropriately qualified as required.

The procedure reviews, field observations, and document reviews provided evidence that the applicable requirements for characterizing waste using the RTR process are adequately established for compliance with upper-tier requirements, satisfactory in the implementation of these requirements, and effective in achieving the desired results.

5.4.6 Table C6-6 Visual Examination Checklist

The audit team evaluated the adequacy, implementation, and effectiveness of SRS/CCP characterization and certification of S3000 solids waste, S4000 soils/gravel waste, and S5000 debris waste using the VE characterization process.

The audit team reviewed procedures CCP-TP-113, *CCP Standard Contact-Handled Waste Visual Examination*, and CCP-QP-002, *CCP Training and Qualification Plan*, to

determine their adequacy in addressing upper-tier requirements. The results of the review determined that the procedures adequately address requirements.

The audit team evaluated the following BDRs:

- SRSVEFW0313 ✓
- SRSVEFW0325 ✓
- SRSVEFW0333 ✓
- SRSVEFW0350 ✓

SRS/CCP uses the two-operator method when performing VE characterization activities for CH waste, in which two qualified operators visually examine the waste and place it into 55-gallon drums.

The audit team performed a walk-through of the F-Canyon facility, Building 221-F, where VE of CH waste is performed. No VE activities were being performed at the time of the audit.

The audit team examined training and qualification records for three VE personnel and concluded the required training was adequate and qualifications were current. The audit team also confirmed the appointment of an SRS/CCP VE Expert (VEE), as required.

The procedure reviews, field observations (walk-through), and document reviews provided evidence that the applicable requirements for characterizing S3000 homogeneous solids, S4000 soils/gravel waste, and S5000 debris waste using the visual examination process is adequately established for compliance with upper-tier requirements, satisfactory in the implementation of these requirements, and effective in achieving the desired results.

6.0 SUMMARY OF DEFICIENCIES

6.1 Corrective Action Reports

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

The audit team identified one condition adverse to quality, necessitating the generation of CAR 12-002.

CAR 12-002

The SPM oversees TRU waste characterization and certification activities per procedure CCP-PO-001, Rev. 20. Section C3-10b states, "Data validation and verification at this level [*Project Level*] involves scrutiny and signature release from the SPM."

The following issues were identified by the audit team during the evaluation of project-level data V&V:

- WSPF numbers were incorrect on several CCP Data Evaluation Narratives;
- In Attachment 4 of the CCP SPM Nondestructive Assay Project Level Validation Checklist and Summary, question 10 did not indicate the correct information under the Criteria Met column and Comments/Qualifiers section;
- The Independent Technical Reviewer (ITR) checklist for RTR did not contain complete procedure and revision information on Attachment 3, Item 2, in BDR SRLBR0008.

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 using the following definitions:

CAQ – Term used in reference to failures, malfunctions, deficiencies, defective items, and nonconformances.

Significant CAQ – 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 QA program.

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 corrected during audit (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.

No CDAs were corrected during this 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.

Recommendation – Suggestion that is 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 Observation

The following Observation was identified during the audit.

Observation 1

Several inconsistencies were found in the AK documentation describing the AK documentation type on Attachment 3, AK Source Document Summary, and Attachment 11, AK Source Document Discrepancy Resolution Form. If the inconsistencies are not properly addressed, the issue may result in a condition adverse to quality.

7.2 Recommendation

One Recommendation was provided to SRS/CCP management as a result of the audit.

Recommendation 1

The audit team recommends that SRS/CCP revise the affected AK documentation to ensure compliance with the December 2010 WAP requirements. NMED WAP Compliance Tracking Tables completed by the CCP AKEs were reviewed for a CH TRU mixed waste stream that was examined during the AK portion of this certification audit. Appropriate and agreed-upon changes were made to the forms, and freeze files were drafted for each of the AK Summary documents to be submitted to document control for incorporation into the next revision. The tracking tables and the freeze files will be attached to the AK Summary as part of the record submitted to NMED in keeping with the agreement entered into at the first audit after the new WAP went into effect.

The AK Summaries affected are CCP-AK-SRS-4, Rev. 13 for waste stream SR-W027-HBL-BOX; CCP-AK-8, Rev. 7 for waste stream SR-MD-SOIL; and CCP-AK-11, Rev. 2 for waste stream SR-AGNS-HOM-FBL.01

8.0 LIST OF ATTACHMENTS

- Attachment 1: Personnel Contacted During the Audit
- Attachment 2: Personnel Contacted During the Audit by Area
- Attachment 3: Objective Evidence
- Attachment 4: CBFO CAR Closure Package
- Attachment 5: Listing of Audited Documents
- Attachment 6: Processes and Equipment Evaluated During CBFO Audit A-12-02
- Attachment 7: Procedures Matrix

PERSONNEL CONTACTED DURING THE AUDIT

| PERSONNEL CONTACTED DURING AUDIT A-12-02 | | | | |
|---|---------------------------------------|-------------------------|-------------------------------|---------------------------|
| NAME | TITLE/ORG | PREAUDIT MEETING | CONTACTED DURING AUDIT | POST AUDIT MEETING |
| Adams, James | VEE;NFT/CCP | X | X | X |
| Armijo, Cheryl | Records Clerk; CCP/Stoller | X | X | |
| Barr, Sean | E-Area RPD FM; SRSW | X | | |
| Billett, Michele | Training Coordinator; CCP Training | | X | |
| Brookshire, John | RTR Oper.; RTR/CCP | | X | |
| Cantu, Adela | CCP SPM; WTS/CCP | | | X |
| Ceo, Bob | NDA; MCS/Canberra | | X | |
| Crosby, Dan | NDA; MCS/Canberra | | X | |
| Davis, Will | NFT/Container Management; CCP | | X | |
| Doherty, Mark | AKE; CCP/TECH SPECS | X | X | X |
| Fussel, Buddy | SRS/CCP VPM; SRS/CCP | X | | X |
| Gilmour, John | Director SWM; SRNS | X | | X |
| Harper, Johnny | DOE-SR | X | | |
| Harrison, Jeff | AKE; CCP/TECH SPECS | X | X | |
| Harvill, Joe | NDA & DTC Lead; WTS/CCP | X | X | |
| Hasty, Jeff | Solid Waste; SRWS | X | | |
| Huff, Andrea | RTR Oper; RTR/CCP | | X | |
| Kantrowtz, Rich | Lead SPM; CCP | | | X |
| Kinard, Stacy | NFT | | | X |
| Kirkes, Creta | RCT/WCO/WCA; WTS/CCP | | X | |
| Kokovich, Mark | E-Area Facility Mgr.; SRNS-SWM | X | | |
| Lee, Ronnie | PM; WTS/CCP | X | X | |

| PERSONNEL CONTACTED DURING AUDIT A-12-02 | | | | |
|---|--|-------------------------|-------------------------------|---------------------------|
| NAME | TITLE/ORG | PREAUDIT MEETING | CONTACTED DURING AUDIT | POST AUDIT MEETING |
| McCoy, David | RTR Lead Operator; MCS/CCP | X | X | X |
| Morgan, Tom | DOE CCP Manager; DOE/CBFO | X | | |
| Muse, Steve | CCP Quality Assurance Engineer; WTS/CCP | X | X | |
| Nelson, Laura | SPM; CCP | | | X |
| Ott, Derek | RH Rad. Characterization; WTS/CCP | | X | X |
| Papp, Michael | AKE; Tech Specs/CCP | X | X | |
| Pearcy, Mark | SPM; WTS/CCP | | | X |
| Pearcy, Sheila | CCP Records Manager; CCP Records/Stoller | X | X | X |
| Ploetz, D.K. | CCP Manager; WTS/CCP | | | X |
| Quintana, Irene | RHPM; WTS/CCP | X | X | X |
| Redmond, Robert S. | RTR Oper; RTR/CCP | | X | |
| Remington, Dan | NDA/Lead Operator; MCS | | X | |
| Schrock, Beverly | SPM; CCP | X | X | X |
| Sensibaugh, Michael | SRS/CCP Project Manager; WTS/CCP | X | X | X |
| Shepley, Todd | NDA/DTC Lead Operator; CCP/MCS | X | X | X |
| Simpson, Kenneth | RTR/VJT | X | X | X |
| Stallings, Andrew | NDE Cog Eng; CCP | | | X |
| Stepzinski, Joe | VPM; CCP | X | | X |
| Stone, Keith | RCT Engineering and Projects Support; Manager | | | X |

PERSONNEL CONTACTED DURING AUDIT A-12-02

| NAME | TITLE/ORG | PREAUDIT MEETING | CONTACTED DURING AUDIT | POST AUDIT MEETING |
|-----------------|----------------------------------|-------------------------|-------------------------------|---------------------------|
| Templeton, Bret | NDA Operator; MCS/Canberra | | X | |
| Thompson, Joel | FGA/HSG Operator/ITR; NFT/CCP | X | X | X |
| Watson, Lisa | AKE; LANL-CO | X | X | |
| Whitson, Ronald | DTC; MCS | X | X | |

Personnel Contacted During the Audit by Area

| | |
|---|--|
| Nonconformances | Steve Muse |
| Training | Michele Billett |
| Records | Cheryl Armijo Sheila Pearcy |
| Acceptable Knowledge | Mark Doherty Jeff Harrison Michael Papp Lisa Watson |
| Container Management | Will Davis |
| Headspace Gas | Joel Thompson |
| Real-Time Radiography | John Brookshire Andrea Huff David McCoy Robert Redmond Kenneth Simpson |
| Visual Examination | James Adams |
| WIPP Waste Information System/Waste Data System (WWIS/WDS) | Creta Kirkes |
| Waste Certification/Project Level Validation & Verification | Ronnie Lee Beverly Schrock Michael Sensibaugh |

Objective Evidence

The objective evidence supporting Audit A-12-02 is included in the box(es) submitted with this report. Included in the box(es) is a "Content Map" describing the location (using color coding) and identity of all required objective evidence supporting the performance of the audit.

CBFO CAR Closure Package

Corrective Action Report (CAR) 12-002 supporting documentation
is located in box 1.

| LISTING OF AUDITED DOCUMENTS | | | |
|-------------------------------------|---------------------|-------------|---|
| | Document No. | Rev. | Document Title |
| 1. | CCP-PO-001 | 20 | CCP Transuranic Waste Characterization Quality Assurance Project Plan |
| 2. | CCP-PO-002 | 26 | CCP Transuranic Waste Certification Plan |
| 3. | CCP-PO-004 | 30 | CCP/SRS Interface Document |
| 4. | CCP-PO-005 | 22 | CCP Conduct of Operations |
| 5. | CCP-PO-008 | 9 | CCP Quality Assurance Interface with the WTS Quality Assurance Program |
| 6. | CCP-QP-002 | 31 | CCP Training and Qualification Plan |
| 7. | CCP-QP-005 | 20 | CCP TRU Nonconforming Item Reporting and Control |
| 8. | CCP-QP-008 | 19 | CCP Records Management |
| 9. | CCP-QP-016 | 15 | CCP Control of Measuring and Testing Equipment |
| 10. | CCP-QP-021 | 7 | CCP Surveillance Program |
| 11. | CCP-QP-028 | 13 | CCP Records Filing, Inventorying, Scheduling, and Dispositioning |
| 12. | CCP-TP-001 | 19 | CCP Project Level Data Validation and Verification |
| 13. | CCP-TP-002 | 23 | CCP Reconciliation of DQOs and Reporting Characterization Data |
| 14. | CCP-TP-003 | 18 | CCP Data Analysis for S3000, S4000, and S5000 Characterization |
| 15. | CCP-TP-005 | 23 | CCP Acceptable Knowledge Documentation |
| 16. | CCP-TP-028 | 6 | CCP Radiographic Test and Training Drum Requirements |
| 17. | CCP-TP-030 | 29 | CCP TRU Waste Certification and WWIS/WDS Data Entry |
| 18. | CCP-TP-035 | 23 | CCP Container Management |
| 19. | CCP-TP-053 | 11 | CCP Standard Real-Time Radiography (RTR) Inspection Procedure |
| 20. | CCP-TP-056 | 5 | CCP HSG-Performance Demonstration Program |
| 21. | CCP-TP-066 | 11 | CCP Radiography Screening Procedure for Prohibited Items |
| 22. | CCP-TP-074 | 1 | CCP Large Container Non-Destructive Examination (LCNDE) Operating Procedure |
| 23. | CCP-TP-075 | 0 | CCP RTR #15 Operating Procedure |
| 24. | CCP-TP-082 | 8 | CCP Preparing and Handling Waste Containers for HSG Sampling |
| 25. | CCP-TP-087 | 5 | CCP Scale Operations |
| 26. | CCP-TP-093 | 16 | CCP Sampling of TRU Waste Containers |
| 27. | CCP-TP-098 | 3 | CCP Installation of the NucFil Headspace Sample Port |
| 28. | CCP-TP-106 | 7 | CCP Headspace Gas Sampling Batch Data Report Preparation |
| 29. | CCP-TP-113 | 16 | CCP Standard Contact-Handled Waste Visual Examination |
| 30. | CCP-TP-136 | 2 | CCP Standardized Prohibited Item Remediation |
| 31. | CCP-TP-145 | 3 | CCP RTR#4 Operating Procedure |
| 32. | CCP-TP-162 | 1 | CCP Random Selection of Containers for Solids and Headspace Gas Sampling and Analysis |
| 33. | CCP-TP-163 | 2 | CCP Evaluation of Waste Packaging Records for Standard Visual Examination of Records |
| 34. | CCP-TP-180 | 2 | CCP Analytical Sample Management |
| 35. | WP 13-QA.03 | 18 | Quality Assurance Independent Assessment Program |

Processes and Equipment Reviewed

| WIPP # | Process/Equipment Description | Applicable to the Following Waste Streams/Groups of Waste Streams | Currently Approved by NMED |
|--|--|---|----------------------------|
| NEW PROCESSES OR EQUIPMENT | | | |
| NONE | | | |
| PREVIOUSLY APPROVED PROCESSES OR EQUIPMENT | | | |
| The following processes and equipment were evaluated during CBFO Audit A-11-01 | | | |
| 1LCNDE | Real-time Radiography Procedure – CCP-TP-053 and CCP-TP-074 Description – Large Container Non-Destructive Examination (LCNDE) Unit – standard waste boxes (SWBs) and SLB2s | Solids (S3000) Soils/Gravel (S4000) Debris (S5000) | YES |
| 1RR3 | Real-time Radiography Procedure – CCP-TP-053 Description – RTR-15, 55-gallon drums (PAD 4) | Solids (S3000) Soils/Gravel (S4000) Debris (S5000) | YES |
| 1RR4 | Real-time Radiography Procedure – CCP-TP-053 and CCP-TP-145 Description – RTR-4, 55-gallon drums and standard waste boxes (SWBs), Standard large box 2s (SLB2s) | Solids (S3000) Soils/Gravel (S4000) Debris (S5000) | YES |
| VISUAL | Visual Examination Procedure – CCP-TP-113 Description – VE QC Check for RTR, VE in lieu of RTR, VET for Retrievably Stored Waste | Solids (S3000) Soils/Gravel (S4000) Debris (S5000) | YES |
| N/A | Headspace Gas Sampling Procedure – CCP-TP-093 Description – CCP Sampling of TRU Waste Containers using SUMMA® Canisters | Solids (S3000) Soils/Gravel (S4000) Debris (S5000) | YES |
| N/A | Acceptable Knowledge (AK) | Solids (S3000) Soils/Gravel (S4000) Debris (S5000) | YES |

| WIPP # | Process/Equipment Description | Applicable to the Following Waste Streams/Groups of Waste Streams | Currently Approved by NMED |
|--------|---|---|----------------------------|
| N/A | Data Generation and Project Level Validation and Verification (V&V) | Solids (S3000) Soils/Gravel (S4000) Debris (S5000) | YES |

PROCEDURE REVISION MATRIX

SRS/CCP Annual Audit A-12-02

Previous SRS/CCP Annual Audit A-11-01

| 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 | 18 | 20 | <p>19 - Revised to include changes from Permit Renewal.</p> <p>20 - Revised to incorporate Class 2 Permit Modification (Transuranic Package Transporter Model III and Standard Large Box 2).</p> |
| 2 | CCP-PO-002 | CCP Transuranic Waste Certification Plan | 24 | 26 | <p>25 – Revised to incorporate Revision 7.0 of DOE/WIPP-02-3122, <i>Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant</i> and minor editorial changes.</p> <p>26 - Revised to incorporate revision 7.1 and 7.2 of DOE/WIPP-02-3122, <i>Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant</i>, minor editorial changes, and delete Appendix 11.</p> |
| 3 | CCP-PO-004 | CCP/SRS Interface Document | 27 | 30 | <p>28 - Minor revision to update references to the <i>Waste Isolation Pilot Plant Hazardous Waste Facility Permit</i>.</p> <p>29 - Revised to generalize the description of Contact-handled (CH) Transportation Containers to allow use of TRUPACT-III. Added gas generation testing (GGT) procedures.</p> <p>30 - Clarification to Sections 3.1.1, 3.3.5, 3.8.5, 4.1.2, 4.1.4, 4.11.1, 4.19.2, and 4.19.4. Removed procedure</p> |

PROCEDURE REVISION MATRIX

SRS/CCP Annual Audit A-12-02

Previous SRS/CCP Annual Audit A-11-01

| No. | Procedure Number | Procedure Title | Revision During Last Annual Audit | Revision During Current Annual Audit | Brief Description of Procedure Changes |
|-----|------------------|--|-----------------------------------|--------------------------------------|---|
| | | | | | CCP-TP-508, <i>CCP RH Standard Real-Time Radiography Inspection Procedure</i> , from 4.16.5 and 4.16.7; and other editorial changes. |
| 4 | CCP-PO-005 | CCP Conduct of Operations | 21 | 22 | 22 – Revised to add detail to Section 6.0 and Section 7.0, and make minor editorial corrections throughout. |
| 5 | CCP-PO-008 | CCP Quality Assurance Interface with the WTS Quality Assurance Program | 9 | 9 | N/A |
| 6 | CCP-QP-002 | CCP Training and Qualification Plan | 29 | 31 | 30 – Revised to bring into compliance with the revision of the <i>Waste Isolation Pilot Plant Hazardous Waste Facility Permit</i> . 31 - Revised based on Revision 2 of the DOE/WIPP 02-3214, <i>Remote-Handled TRU Waste Characterization Program Implementation Plan</i> . |
| 7 | CCP-QP-005 | CCP TRU Nonconforming Item Reporting and Control | 19 | 20 | 20 - Revised to: clarify hold tag application; Carlsbad Field Office (CBFO) notification requirements including responsibility, incorporate CCP-SO-054, 1 and CCP-SO-065, 0; revisions to Attachment 1, CCP Nonconformance Report (NCR); and other minor editorial changes. |

PROCEDURE REVISION MATRIX

SRS/CCP Annual Audit A-12-02

Previous SRS/CCP Annual Audit A-11-01

| No. | Procedure Number | Procedure Title | Revision During Last Annual Audit | Revision During Current Annual Audit | Brief Description of Procedure Changes |
|-----|------------------|--|-----------------------------------|--------------------------------------|--|
| 8 | CCP-QP-008 | CCP Records Management | 16 | 19 | <p>17 – Revised to change the submittal process for Acceptable Knowledge (AK) documentation and section on historical source documents.</p> <p>18 - Revised to support corrective action report (CAR)-LANL-0004-10.</p> <p>19 - Revised to change the number of the form in the definition of retention period. Change to Section 4.8 for clarification.</p> |
| 9 | CCP-QP-016 | CCP Control of Measuring, Testing, and Data Collection Equipment | 15 | 15 | N/A |
| 10 | CCP-QP-021 | CCP Surveillance Program | 7 | 7 | N/A |
| 11 | CCP-QP-028 | CCP Records Filing Inventorying, Scheduling, and Dispositioning | 11 | 13 | <p>12 - Revised to remove examples form and re-number remaining attachments and update Attachment 2.</p> <p>13 - Revised to correct reference section of the procedure and remove a reference that is no longer active.</p> |
| 12 | CCP-TP-001 | CCP Project Level Data Validation and Verification | 18 | 19 | <p>19 - Revised to clarify independent technical reviewer (ITR) Independence and to update references to the <i>Waste Isolation Pilot Plant Hazardous Waste Facility Permit</i>.</p> |

PROCEDURE REVISION MATRIX

SRS/CCP Annual Audit A-12-02

Previous SRS/CCP Annual Audit A-11-01

| No. | Procedure Number | Procedure Title | Revision During Last Annual Audit | Revision During Current Annual Audit | Brief Description of Procedure Changes |
|-----|------------------|--|-----------------------------------|--------------------------------------|---|
| 13 | CCP-TP-002 | CCP Reconciliation of DQOs and Reporting Characterization Data | 22 | 23 | 23 - Revised to implement the revision of the <i>Waste Isolation Pilot Plant Hazardous Waste Facility Permit</i> . |
| 14 | 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> . |
| 15 | CCP-TP-005 | CCP Acceptable Knowledge Documentation | 19 | 23 | <p>20 - Revised to allow new and updated attachments and source documents to be submitted anytime after the initial submittal.</p> <p>21 - Revised to implement the revision of the <i>Waste Isolation Pilot Plant Hazardous Waste Facility Permit</i>.</p> <p>22 - Revised to address changes in Revision 2 of the <i>Remote-Handled Tru Waste Characterization Program Implementation Plan (WCPIP)</i>. Incorporated editorial changes and technical clarifications throughout procedure.</p> <p>23 - Revised to clarify what constitutes a record as part of the resolution to resolve CBFO CAR11-043.</p> |
| 16 | CCP-TP-028 | CCP Radiographic Test and Training Drum Requirements | 5 | 6 | 6 - Revised to incorporate training containers in place of training drums. Also revised training container assembly procedures to meet the requirements of the revised <i>Waste Isolation Pilot Plant Hazardous Waste Facility Permit</i> . |
| 17 | CCP-TP-030 | CCP CH TRU Waste Certification and | 28 | 29 | 29 - Revised Attachment 2, WCO Waste Certification |

PROCEDURE REVISION MATRIX

SRS/CCP Annual Audit A-12-02

Previous SRS/CCP Annual Audit A-11-01

| No. | Procedure Number | Procedure Title | Revision During Last Annual Audit | Revision During Current Annual Audit | Brief Description of Procedure Changes |
|-----|------------------|---|-----------------------------------|--------------------------------------|---|
| | | WWIS Data Entry | | | Requirements, to include Standard Large Box 2 (SLB2) Waste Certification Official (WCO) Waste Certification Requirements. Also revised Sections 3.1.6, 4.2.6, and Attachment 1 of the Data Sources for the WDS Master Template. |
| 18 | CCP-TP-035 | CCP Container Management | 23 | 23 | N/A |
| 19 | CCP-TP-053 | CCP Standard Real – Time Radiography (RTR) Inspection Procedure | 9 | 11 | <p>10 - Revised to address Carlsbad Field Office (CBFO) Corrective Action Report (CAR)-11-015. Deleted requirement to identify locations of dense waste material, sharp/heavy objects. Deleted requirement of identification of block and/or bracing of sharp/heavy objects and heterogeneity of the waste (e.g., DO NOT just list plastic; describe it as small plastic bottles, plastic tubing, plastic sheeting, or plastic coveralls etc.). Deleted requirement of recording of liquid amounts on attachments. All prohibited conditions will be addressed in the Nonconformance Report (NCR) process. Added the ability to use procedure to Real-Time Radiography (RTR) Remote-Handled (RH) waste.</p> <p>11 - Revised to add checklist question based on agreement with New Mexico Environmental</p> |

PROCEDURE REVISION MATRIX

SRS/CCP Annual Audit A-12-02

Previous SRS/CCP Annual Audit A-11-01

| No. | Procedure Number | Procedure Title | Revision During Last Annual Audit | Revision During Current Annual Audit | Brief Description of Procedure Changes |
|-----|------------------|---|-----------------------------------|--------------------------------------|--|
| | | | | | Department (NMED). |
| 20 | CCP-TP-056 | CCP HSG Performance Demonstration Plan | 4 | 5 | 5 - Revised to eliminate the Facility Records Custodian, Independent Technical Reviewer (ITR), and Vendor Project Manager (VPM) position since they do not use this procedure. Deleted non-permit requirements and made other editorial corrections needed. |
| 21 | CCP-TP-066 | CCP Radiography Screening procedure for Prohibited Items | 10 | 11 | 11 - Revised to implement the revision of the <i>Waste Isolation Pilot Plant Hazardous Waste Facility Permit</i> . |
| 22 | CCP-TP-074 | CCP Large Container Non-Destructive Examination (LCNDE) Operating Procedure | 1 | 1 | N/A |
| 23 | CCP-TP-075 | CCP RTR #15 Operating Procedure | 0 | 0 | N/A |
| 24 | CCP-TP-082 | CCP Preparing and Handling Waste Containers for Headspace Gas Sampling | 7 | 8 | 8 - Removed elements no longer required or redundant to host site procedures. |
| 25 | CCP-TP-087 | CCP Scale Operations | 5 | 5 | N/A |
| 26 | CCP-TP-093 | CCP Sampling of TRU Waste Containers | 13 | 16 | 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 Transuranic Waste Characterization Quality Assurance 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 |

PROCEDURE REVISION MATRIX

SRS/CCP Annual Audit A-12-02

Previous SRS/CCP Annual Audit A-11-01

| No. | Procedure Number | Procedure Title | Revision During Last Annual Audit | Revision During Current Annual Audit | Brief Description of Procedure Changes |
|-----|------------------|--|-----------------------------------|--------------------------------------|---|
| | | | | | <p>report (BDR) numbering format. Incorporated recommendations from Audit A-10-04. Updated references to the <i>Waste Isolation Pilot Plant Hazardous Waste Facility Permit</i>.</p> <p>15 - Revised to update the procedure so the field blank criteria matches the permit, eliminated the Vendor Project Manager (VPM) from the responsibilities section, and clarified the use of Chain-of-Custody.</p> <p>16 - Deleted incorrect Uniform Resource Locator (URL) for approved filters and add Standard Large Box 2 (SLB2) information to Packaging Configuration Table and Drum Age Criteria (DAC) table, and other editorial changes.</p> |
| 27 | CCP-TP-098 | CCP Installation of the Nufil HSG Sample Port | 3 | 3 | N/A |
| 28 | CCP-TP-106 | CCP Headspace Gas Sampling Batch Data Report Preparation | 6 | 7 | 7 - Revised to clarify independent technical reviewer (ITR) independence. |
| 29 | CCP-TP-113 | CCP Standard Contact-Handled Waste Visual Examination | 14 | 16 | <p>15 - Revised to clarify independent technical reviewer (ITR) independence.</p> <p>16 - Revised to remove recording location and clarify transportation packaging requirements.</p> |
| 30 | CCP-TP-136 | CCP Standardized Prohibited Item | 2 | 2 | N/A |

PROCEDURE REVISION MATRIX

SRS/CCP Annual Audit A-12-02

Previous SRS/CCP Annual Audit A-11-01

| No. | Procedure Number | Procedure Title | Revision During Last Annual Audit | Revision During Current Annual Audit | Brief Description of Procedure Changes |
|-----|------------------|---|-----------------------------------|--------------------------------------|---|
| | | Remediation | | | |
| 31 | CCP-TP-145 | CCP RTR#4 Operating Procedure | 2 | 3 | 3 - Revised to eliminate an unnecessary warm up requirement when working multiple shifts in a day. |
| 32 | 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 <i>Waste Isolation Pilot Plant Hazardous Waste Facility Permit</i> . |
| 33 | CCP-TP-163 | CCP Evaluation of Waste Packaging Records for Visual Examination of Records | 2 | 2 | N/A |
| 34 | CCP-TP-180 | CCP Analytical Sample Management | 1 | 2 | 2 - Minor revision to update references to the <i>Waste Isolation Pilot Plant Hazardous Waste Facility Permit</i> . |
| 35 | WP13-QA.03 | Quality Assurance Independent Assessment Program | 17 | 18 | 18 - Added allowance for the Assurance Programs manager to extend the time limit for issuance of an audit report. (6.0) |