



United States Government

Department of Energy

memorandum

Carlsbad Field Office
Carlsbad, New Mexico 88221

DATE: JUN 26 2012
 REPLY TO
 ATTN OF: CBFO:NTP:JRS:GL:12-0514:UFC 5900.00
 SUBJECT: Savannah River Site-Central Characterization Project Expansion to Include the Contact-Handled Recertification Audit A-12-02
 TO: David Moody, Manager, Savannah River Site
 M. F. Sharif, General Manager, Washington TRU Solutions LLC



The Carlsbad Field Office (CBFO) is expanding the Savannah River Site - Central Characterization Project (hereinafter referred to as SRS-CCP) Remote-Handled (RH) Recertification Memorandum (CBFO:NTP:JRS:GL:12 0460:UFC 5900.00) dated April 24, 2012. This expansion reflects the CBFO Recertification Audit A 12-02 conducted on November 14-17, 2011 of the Contact-Handled (CH) CCP transuranic (TRU) waste program deployed at SRS-CCP.

The CBFO completed the Initial Certification Audit A-12-04 of the CCP RH TRU waste characterization activities deployed at the SRS site conducted November 14-17, 2011. The characterization and certification activities were determined to be adequate, satisfactorily implemented, and effective.

The audit team determined that the SRS-CCP TRU programs were in compliance with the Waste Analysis Plan (WAP) of the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit (HWFP), the CBFO Quality Assurance Program Document (QAPD), the TRU Waste Acceptance Criteria for the Waste Isolation Pilot Plant (WIPP WAC), the CH and RH Transuranic Authorized Methods for Payload Control (TRAMPACs), Safety Analysis Reports, Certifications of Compliance, and Remote-Handled TRU Waste Characterization Program Implementation Plan (WCPIP). The audit team determined that the procedures/documents were effectively implemented.

Based on the results of the CBFO Audits/Surveillances (See Attachment 1) and conditions and limitations provided by the New Mexico Environment Department (NMED) and The Environmental Protection Agency (EPA), the CBFO is authorizing SRS-CCP continued authority at the SRS-CCP for the characterization, certification, and transportation activities for CH solids (S3000), CH soils/gravel (S4000), CH debris (S5000), and RH debris (S5000), as identified in Table 1, Page 3 of this memorandum.



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TRU waste characterization, certification, or transportation using significantly revised or new processes, procedures, or systems must be evaluated by the CBFO prior to their implementation. Included in this memo are the following attachments:

- Attachment 1 describes the CCP certification program status;
- Attachment 2 contains the list of processes/equipment from Table 1 of this memorandum certified at the site;
- Attachment 3 contains the list of CCP certified procedures/documents; and
- Attachment 4 describes specific CCP waste characterization process elements that must be reported to EPA. These process elements are identified as Tier 1 changes and Tier 2 changes. The SRS-CCP shall not ship for disposal at WIPP any wastes affected by a Tier 1 process element change without prior CBFO approval, and CCP shall report Tier 2 changes to CBFO on a quarterly basis.

If you have any questions, please contact the Director of the Office of the National TRU Program, Mr. J.R. Stroble, at (575) 234-7313.



Jose R. Franco, Manager
Carlsbad Field Office

Attachment(s)

cc: w/attachments

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J. Kieling, NMED	ED	G. Lyshik, LANL-CO	ED
T. Kliphuis, NMED	ED	S. Percy, SM Stoller	ED
C. Chester, WTS	ED	WIPP Operating Record	ED
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*ED denotes electronic distribution

Table 1 – SRS-CCP CH and RH Certified Waste Characterization Processes

Characterization Process ³	CH S3000 Solids		CH S4000 Soils/gravel		CH S5000 Debris		RH S5000 Debris (Waste Stream SR-RH-FBL.01) ⁴	
	Newly generated	Retrievably-stored	Newly generated	Retrievably-stored	Newly generated	Retrievably-stored	Newly generated	Retrievably-stored
Acceptable Knowledge (AK)	N/A	Approved	Approved	Approved	Approved	Approved	N/A	Approved
Data Validation & Verification (V&V)	N/A	Approved	Approved	Approved	Approved	Approved	N/A	Approved
Headspace Gas Sampling (SUMMA) ¹	N/A	N/A	N/A	N/A	Approved	Approved	N/A	N/A ¹
Load Management	N/A	Approved	Approved	Approved	Approved	Approved	N/A	N/A
Non-destructive assay (NDA)	Approved	Approved	Approved	Approved	Approved	Approved	N/A	N/A
Dose-to-Curie (DTC)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Approved
Real-time Radiography (RTR)	Approved	Approved	Approved	Approved	Approved	Approved	N/A	Approved
Solids Sampling and Analysis ²	Approved	Approved	Approved	Approved	N/A	N/A	N/A	N/A
Visual Examination (VE)	Approved	Approved	Approved	Approved	Approved	Approved	N/A	N/A
WIPP Waste Information System (WWIS)	Approved	Approved	Approved	Approved	Approved	Approved	N/A	Approved

¹ For CH waste, SUMMA sampling is performed by CCP, analysis is performed by the Idaho National Laboratory, which is approved under a separate certification.

² The soils/gravel waste stream for analysis is performed by the Idaho National Laboratory, which is approved under a separate certification.

³ Characterization Processes in this table may not be completely listed in Attachment 2.

⁴ Received EPA Baseline Approval of the waste characterization program implemented to characterize RH debris (S5000) waste from the Waste Stream SR-RH-FBL.01

*EPA approved the Baseline and Tier 1 change requests for Remote-Handled (RH) Battelle Columbus Laboratory (BCL) Waste Streams for SR-BCLDP.001.001, SR-BCLDP.002, SR-RL-BCLDP.001, SR-RL-BCLDP.002, SR-BCLDP.003, SR-BCLDP.001.002, SR-BCLDP.004.002, SR-BCLDP.004.003. The last BCL shipment from SRS was shipped on July 28, 2011 and arrived at the WIPP facility on July 29, 2011. An additional 20 BCL drums remain at the Hanford Site which will be processed as a Tier 1 to Waste Streams SR-RL-BCLDP.001 per DOCKET NO: A-98-49; II-A4-149.

CENTRAL CHARACTERIZATION PROJECT DEPLOYMENT AT SAVANNAH RIVER SITE CERTIFICATION PROGRAM STATUS

The Carlsbad Field Office (CBFO) Director of the Office of the National TRU Program and the CBFO Director of Quality Assurance have evaluated the documentation supporting the compliance of the Central Characterization Project (CCP) TRU waste program deployed at the Savannah River Site (SRS). Attachments 2 and 3 provide complete lists of certified processes, procedures, documents, and systems deployed at the SRS-CCP. Attachment 4 is the contact-handled (CH) and remote-handled (RH) Tiering of TRU Waste Characterization Processes Implemented by the CCP at SRS.

STATUS

- All program elements remain complete.
- The following site documents are *current* and demonstrate how the CCP complies with the CBFO requirements.
 - **CCP-PO-001, Revision 20 - CCP Transuranic Waste Characterization Quality Assurance Project Plan**
CBFO:NTP:JRS:GS:11-0351:UFC 5900.00 dated June 15, 2011.
 - **CCP-PO-002, Revision 26 - CCP Transuranic Waste Certification Plan**
CBFO:NTP:JRS:ANC:11-0396:UFC 5900.00 dated July 14, 2011.
QAP - Section 4.0 of CCP-PO-002.
 - **CCP-PO-003, Revision 12, CCP Transuranic Authorized Method for Payload Control**
CBFO:NTP:MRB:GS:10-2055:UFC 5900.00 dated December 17, 2010.
 - **CCP-PO-505, Revision 1, CCP Remote-Handled Transuranic Waste Authorized Methods for Payload Control**
CBFO:NTP:MP:GL:11-2030:UFC 5900.00 dated December 1, 2011.
- Certified Systems - See Attachment 2 List of Processes/Equipment from Table 1 of this memorandum that is certified and used by the CCP at the SRS.
- Standard Operating Procedures - See Attachment 3 for the complete list of certified procedures/documents used by the CCP at the SRS.
- Tiering of the CH and RH TRU Waste Characterization Processes – See Attachment 4 for the implementation by the CCP at the SRS (based on EPA Baseline Inspections)

- CCP audited and current performance demonstration programs (PDPs):
 - **NDA PDP – Cycle B11A approval** for radioassay of WIPP wastes contained in the TRU SWB using the NABC (SR05/SRN2).
Memo CBFO:NTP:MRB:GL:11-2020:UFC 5822.00 dated November 15, 2011
 - **NDA PDP – Cycle 18A approval** for radioassay of WIPP wastes contained in TRU waste drums using the HENC1 (LA06/LAN5) and HENC2 (LA07/LAN6).
Memo CBFO:NTP:MRB:GS:11-0391:UFC 5822.00 dated July 7, 2011
 - **HSG PDP (CCP-INL) – SUMMA sampling** is performed by CCP, analysis is performed by the Idaho National Laboratory, which is approved under a separate certification.
- CBFO conducted the CH Recertification Audit A-12-02 of the SRS-CCP on November 14-17, 2011.
 - CAR 12-002 was issued on December 14, 2011 and was closed on March 7, 2012.
 - Interim Audit Report was issued on December 14, 2011.
 - Final Audit Report was issued to NMED on April 24, 2012.
 - NMED approval was issued on May 23, 2012.
- CBFO conducted the RH Initial Audit A-12-04 of the SRS-CCP Waste Stream SR-RH-FBL.01 on November 14-17, 2011.
 - Interim Audit Report was issued on December 14, 2011.
 - Final Audit Report was issued on February 23, 2012.
 - NMED approval was issued on April 13, 2012.
 - EPA issued concurrence on the draft memo on April 23, 2012.
- CBFO requested a Baseline Change to the waste characterization program implemented to characterize the Remote-Handled (RH) debris (S5000) waste from the Waste Stream SR-RH-FBL.01 on July 26, 2011.
 - EPA approval was issued on April 18, 2012 (DOCKET NO: A-98-49; II-A4-161).
- CBFO conducted an A-11-06 of the Quality Assurance Program (QAP) on March 1-3, 2011.
 - CAR 11-019 and CAR 11-020 were issued on March 15, 2011.
 - Revision of CAR Number 11-019 to CAR Number 11-021 was issued on March 16, 2011.
 - CAR 11-021 was closed on June 2, 2011.
 - CAR 11-020 was closed on July 21, 2011.
 - Audit Report was issued on March 28, 2011.

- CBFO conducted CCP TRUPACT-III Transportation Operations Audit A-11-18 on May 24-26, 2011.
 - CAR 11-039 was issued on June 3, 2011.
 - CAR 11-039 was closed on July 7, 2011.
 - Audit Report was issued on June 20, 2011.

- CBFO conducted CH and RH Transportation Audit A-11-24 on September 20-22, 2011.
 - Audit Report was issued on October 4, 2011.

- EPA issued concurrence on the draft expansion to include the CBFO CH Recertification Audit A-12-02 on June 13, 2012.

RECOMMENDATION

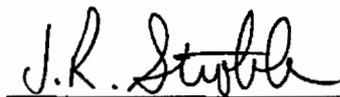
The recommendation to the CBFO Manager is for CCP at SRS to continue the authority for TRU waste characterization, certification, and transportation activities of CH solids (S3000), CH soils/gravel (S4000), CH debris (S5000), and RH debris (S5000). Attachments 2 and 3 list the systems and procedures that constitute the bounds of this authority. Attachment 4 is the CH and RH Tiering of TRU Waste Characterization Processes Implemented by the CCP at SRS.

CONCURRENCE



Randy Unger, Director
Office of Quality Assurance

19 June 12
Date



J.R. Stroble, Director
Office of the National TRU Program

6-19-12
Date

CENTRAL CHARACTERIZATION PROJECT					
List of Processes/Equipment Certified from Table 1 of Memo at Savannah River Site					
WIPP WWS #	Site Equipment #	Description	Components	Software	NDA Calibrated Range, Operating Range and TMU
Non-destructive Assay					
1NABC1	NABC – (SR05/SRN5)	<p>Nondestructive Assay Box Counter – 55-gallon drums, standard waste boxes (SWBs), and standard large box 2s (SLB2s)</p> <p>Method identified in CCP-TP-189 and CCP-TP-191</p>	<p>Gamma</p> <ul style="list-style-type: none"> • Two Co-60 Transmission Sources • Two NaI Gamma Detectors for transmission measurements • Four Broad Energy Germanium (BEGe) Detectors for gamma emission measurements • Six Digital Signal Processors <p>Neutron</p> <ul style="list-style-type: none"> • 320 He-3 Tubes in High Density Polyethylene Liner • Cf-252 Add-A-Source Correction 	<ul style="list-style-type: none"> • NDA-2000 • Genie-2000 	<p>The NABC has two modalities of operation: gamma and neutron. Therefore two sets of calibration documents exist. For the gamma modality the calibration of the Efficiency Curve Calibration Using ASM Standard C1133/C1133-10 for the Box Segmented Gamma System at the Savannah River Site, CCP-SRS-NABC-2011-01, May 2, 2011. Based on this document, the calibration limits are based on the performance capabilities and limitations of the gamma counting unit.</p> <p>The determination of the TMU for the NABC is similarly documented for the gamma modality in A40972, "Savannah River Box Gamma Box Counter Total Measurement Uncertainty Report for Alternatives for Non-Destructive Assay (NDA) of Large Containers to Allow Shipping in TRUPACT-III without Resizing and/or Repackaging," dated October 15, 2007, and for the neutron modality in A41309, "Savannah River Neutron Box Counter Total Measurement Uncertainty Report for Alternatives for Non-Destructive Assay (NDA) of Large Containers to Allow Shipping in TRUPACT-III without Resizing and/or Repackaging," dated October 15, 2007.</p>

CENTRAL CHARACTERIZATION PROJECT					
List of Processes/Equipment Certified from Table 1 of Memo at Savannah River Site					
WIPP WWIS #	Site Equipment #	Description	Components	Software	NDA Calibrated Range, Operating Range and TMU
Non-destructive Examination					
1RR3	RTR-15 (owned by SRS)	Real-time Radiography Built by Marietta X-Ray Method identified in CCP-TP-053	<ul style="list-style-type: none"> • Shielded x-ray enclosure with a hydraulic drum loading door and manually opened personnel door • Conveyer cart including drum manipulation equipment • X-ray imaging system including x-ray tube, image intensifier, and video camera • Video/audio recording equipment • Mobile platform 	N/A	N/A
1RR4	RTR-4	Real-time Radiography Method identified in CCP-TP-053	<ul style="list-style-type: none"> • Shielded x-ray enclosure with a rear container loading door and manually opened personnel door • Conveyer cart • Drum manipulation equipment • X-ray imaging system including x-ray tube, image intensifier, and video camera • Video/audio recording equipment • Mobile platform 	N/A	N/A
1LCNDE	LCNDE	Real-time Radiography Method identified in CCP-TP-053	<ul style="list-style-type: none"> • X-ray source - Linatron 3 MeV linear accelerator • Linear Diode Array (LDA) - X-ray imaging system which is used to produce a single still image of the container. • Area Detector Array (ADA) - X-ray imaging system which provides real time radioscopic images of the container. • Imaging and control software. • Container manipulation equipment • Video/audio recording equipment 	N/A	N/A

CENTRAL CHARACTERIZATION PROJECT					
List of Processes/Equipment Certified from Table 1 of Memo at Savannah River Site					
WIPP WWS #	Site Equipment #	Description	Components	Software	NDA Calibrated Range, Operating Range and TMU
Visual Examination					
VISUAL	Visual Examination	Visual Examination Method identified in CCP-TP-113	N/A	N/A	N/A
Dose-to-Curie					
1DTC1	Dose-to-Curie	Radiological characterization Method identified in CCP-TP-504	As identified in CCP-TP-504	As identified in CCP-TP-504	N/A
Headspace Gas					
N/A	HSG	SUMMA Sampling process on selected waste containers from waste stream lots.	As identified in CCP-TP-093	As identified in CCP-TP-093	N/A

List of Deactivated Equipment			
WIPP #	Site Equipment #	Site Description	Date Deactivated
1IP1	MCS IPAN/GEA – MC-01, Group MC-N1	Mobile Characterization Systems (MCS) Imaging Passive-Active Neutron/Gamma Energy Analysis (IPAN/GEA) [Built by BNFL] – 55 gallon drums	May 2006
1HG1	NUCFIL HSG DVS2	NucFil headspace gas system DVS2 – VOCs and hydrogen and methane analysis	March 2008
1IQ1	IQ3 - SR03/SR-G2	Canberra Mobile Qualitative and Quantitative Drum Counter with Isotopics (IQ3) Method identified in CCP-TP-047	July 2009
1SG1	MCS SGS – (SR04/SRG3)	Mobile Characterization Systems (MCS) Segmented Gamma Scanner (SGS) – 55 gallon drums	July 2010

CENTRAL CHARACTERIZATION PROJECT LIST OF CERTIFIED PROCEDURES AT Savannah River Site		
#	Procedure #	Procedure Title
1.	CCP-PO-001	CCP Transuranic Waste Characterization Quality Assurance Project Plan
2.	CCP-PO-002	CCP Transuranic Waste Certification Plan
3.	CCP-PO-003	CCP Transuranic Authorized Methods for Payload Control (CCP CH-TRAMPAC)
4.	CCP-PO-004	CCP/SRS Interface Document
5.	CCP-PO-005	CCP Conduct of Operations
6.	CCP-PO-006	CCP Conduct of Operations Matrix
7.	CCP-PO-008	CCP Quality Assurance Interface with the WTS Quality Assurance Program
8.	CCP-PO-050	<i>CCP TRUPACT-III TRU Waste Authorized Methods for Payload Control (CCP TRUPACT-III TRAMPAC)</i>
9.	CCP-PO-505	CCP Remote-Handled Transuranic Waste Authorized Methods for Payload Control (CCP RH-TRAMPAC)
10.	CCP-QP-001	CCP Graded Approach
11.	CCP-QP-002	CCP Training and Qualification Plan
12.	CCP-QP-004	CCP Corrective Action Management
13.	CCP-QP-005	CCP TRU Nonconforming Item Reporting and Control
14.	CCP-QP-006	CCP Corrective Action Reporting and Control
15.	CCP-QP-008	CCP Records Management
16.	CCP-QP-010	CCP Document Preparation, Approval, and Control
17.	CCP-QP-011	CCP Laboratory Logbooks
18.	CCP-QP-014	CCP Quality Assurance Trend Analysis and Reporting
19.	CCP-QP-015	CCP Procurement
20.	CCP-QP-016	CCP Control of Measuring and Testing Equipment
21.	CCP-QP-017	CCP Identification and Control of Items
22.	CCP-QP-018	CCP Management Assessment
23.	CCP-QP-019	CCP Quality Assurance Reporting to Management
24.	CCP-QP-021	CCP Surveillance Program
25.	CCP-QP-022	CCP Software Quality Assurance Plan
26.	CCP-QP-023	CCP Handling, Storage and Shipping
27.	CCP-QP-025	CCP Lessons Learned Program Management Control Procedure
28.	CCP-QP-026	CCP Inspection Control
29.	CCP-QP-027	CCP Test Control
30.	CCP-QP-028	CCP Records Filing, Inventorying, Scheduling, and Dispositioning
31.	CCP-QP-030	CCP Written Practice for the Qualification of CCP Helium Leak Detection Personnel
32.	CCP-QP-036	CCP Qualification of Acceptable Knowledge for Remote-Handled Transuranic Waste Through a Quality Assurance Equivalency Demonstration
33.	CCP-TP-001	CCP Project Level Data Validation and Verification
34.	CCP-TP-002	CCP Reconciliation of DQOs and Reporting Characterization Data
35.	CCP-TP-003	CCP Data Analysis for S3000, S4000, and S5000 Characterization
36.	CCP-TP-005	CCP Acceptable Knowledge Documentation

CENTRAL CHARACTERIZATION PROJECT LIST OF CERTIFIED PROCEDURES AT Savannah River Site		
#	Procedure #	Procedure Title
37.	CCP-TP-028	CCP Radiographic Test and Training Drum Construction
38.	CCP-TP-030	CCP CH TRU Waste Certification and WWIS/WDS Data Entry
39.	CCP-TP-035	CCP Container Management
40.	CCP-TP-050	CCP Mobile Segmented Gamma Scanner Calibration Procedure
41.	CCP-TP-051	CCP Mobile Segmented Gamma Scanner Operation
42.	CCP-TP-052	CCP Mobile Segmented Gamma Scanner Data Reviewing, Validating, and Reporting
43.	CCP-TP-053	CCP Standard Real-Time Radiography (RTR) Inspection Procedure
44.	CCP-TP-056	CCP HSG Performance Demonstration Plan
45.	CCP-TP-058	CCP NDA Performance Demonstration Plan
46.	CCP-TP-066	CCP Radiography Screening Procedure for Prohibited Items
47.	CCP-TP-074	CCP Large Container Non-Destructive Examination (LCNDE) Operating Procedure
48.	CCP-TP-075	CCP RTR #15 Operating Procedure
49.	CCP-TP-082	CCP Preparing and Handling Waste Containers for Headspace Gas Sampling
50.	CCP-TP-087	CCP Scale Operations
51.	CCP-TP-093	CCP Sampling of TRU Waste Containers
52.	CCP-TP-098	CCP Installation of the NucFil HSG Sample Port
53.	CCP-TP-106	CCP Headspace Gas Sampling Batch Data Report Preparation
54.	CCP-TP-113	CCP Standard Contact-Handled Waste Visual Examination
55.	CCP-TP-120	CCP Container Management
56.	CCP-TP-136	CCP Standardized Prohibited Item Remediation
57.	CCP-TP-139	CCP In Situ Object Counting System Nondestructive Assay Operating Procedure
58.	CCP-TP-145	CCP RTR #4 Operating Procedure
59.	CCP-TP-162	CCP Random Selection of Containers for Solids and Headspace Gas Sampling and Analysis
60.	CCP-TP-163	CCP Evaluation of Waste Packaging Records for Visual Examination of Records
61.	CCP-TP-180	CCP Analytical Sample Management
62.	CCP-TP-189	CCP Box Segmented Gamma System (BSGS) Operating Procedure
63.	CCP-TP-190	CCP Box Segmented Gamma System (BSGS) Calibration Procedure
64.	CCP-TP-191	CCP Box Neutron Assay System (BNAS) Operating Procedure
65.	CCP-TP-192	CCP Box Neutron Assay System (BNAS) Calibration Procedure
66.	CCP-TP-193	CCP Data Reviewing, Validating, and Reporting Procedure for the Nondestructive Assay Box Counters
67.	CCP-TP-500	CCP Remote-Handled Waste Visual Examination
68.	CCP-TP-504	CCP Dose-to-Curie Survey Procedure for Remote-Handled Transuranic Waste
69.	CCP-TP-506	CCP Preparation of the RH TRU Waste AK Characterization Reconciliation Report
70.	CCP-TP-507	CCP Shipping of Remote-Handled Transuranic Waste
71.	CCP-TP-509	CCP Remote-Handled Transuranic Container Tracking
72.	CCP-TP-530	CCP RH TRU Waste Certification and WWIS/WDS Data Entry

CCP SRS Deactivated Procedures			
#	Procedure #	Procedure Title	Deactivation Date
1.	CCP-QP-007	CCP Document Control	December 2001
2.	CCP-QP-009	CCP Work Control Process	October 2006
3.	CCP-QP-012	CCP Indoctrination Plan	March 2002
4.	CCP-QP-013	CCP QAPD Matrix	May 2003
5.	CCP-QP-020	CCP Independent Assessments	September 2003
6.	CCP-QP-024	CCP Certification of CCP Audit Personnel	September 2003
7.	CCP-TP-007	CCP Single Sample Manifold Headspace Gas Sampling and Analysis Procedure	January 2008
8.	CCP-TP-009	CCP Single Sample Manifold Data Handling Procedure	January 2008
9.	CCP-TP-011	CCP Radiography Inspection Operating Procedure	May 2007
10.	CCP-TP-022	CCP Mobile IPAN/GEA Maintenance Procedure	November 2007
11.	CCP-TP-023	CCP Mobile IPAN/GEA System Mobilization, Power Up, and Demobilization Procedure	November 2007
12.	CCP-TP-024	CCP Mobile IPAN/GEA Operating and Data Generation Level Validation Procedure	November 2007
13.	CCP-TP-025	CCP Mobile IPAN/GEA Expert Analysis Procedure	November 2007
14.	CCP-TP-026	CCP Mobile IPAN/GEA Calibration Procedure	May 2007
15.	CCP-TP-029	CCP Single Sample Manifold Headspace Gas Sampling and Analysis Methods and Equipment Calibration	January 2008
16.	CCP-TP-032	CCP Single Sample Manifold Data Validation Procedure	January 2008
17.	CCP-TP-046	CCP Mobile IQ3 System Calibration Procedure	July 2009
18.	CCP-TP-047	CCP Mobile IQ3 Gamma Scanner Operation	July 2009
19.	CCP-TP-048	CCP-TP-048, CCP Mobile IQ3 System Data Reviewing, Validating, and Reporting Procedure	July 2009
20.	CCP-TP-050	CCP Mobile Segmented Gamma Scanner Calibration Procedure	December 2010
21.	CCP-TP-051	CCP Mobile Segmented Gamma Scanner Operation	December 2010
22.	CCP-TP-052	CCP Mobile Segmented Gamma Scanner Data Reviewing, Validating and Reporting	December 2010
23.	CCP-TP-057	CCP Project Level Data Validation and Verification for Headspace Gas Sampling and Analysis	September 2002
24.	CCP-TP-084	CCP Removal of Prohibited Items Within Transuranic Visual Examination Facility	May 2004
25.	CCP-TP-085	CCP TRU Visual Examination Facility Operations	November 2005
26.	CCP-TP-088	CCP Disposal Program Data Generation Level Review for Visual Examination	November 2005
27.	CCP-TP-089	CCP Mobile Gas Generation Testing Sampling System (MGSS) Sampling Operation	October 2009
28.	CCP-TP-092	CCP Mobile Gas Generation Testing Sampling System (MGSS) Data Calculation	October 2009
29.	CCP-TP-094	GGTP Drum Screening and Batching	October 2009
30.	CCP-TP-160	CCP Random Selection of Containers for Headspace Gas Sampling and Analysis	June 2009
31.	CCP-TP-161	CCP Random Selection of Containers for Solids Sampling and Analysis	June 2009

**Revised Tiering of TRU Waste Characterization Processes Implemented by SRS for CH TRU Wastes
(Based on July 2006 Tier 1 Evaluation)**

Waste Characterization Process Elements	SRS-CCP Waste Characterization T1 Changes	SRS-CCP Waste Characterization T2 Changes ^a
Acceptable Knowledge and Load Management	Implementation of load management for the S3000 Summary Category Group ^d	The elements listed as T2 changes below apply to all approved SRS-CCP CH TRU waste streams and waste summary category groups. Notification to EPA upon completion of AK accuracy reports and, upon completion of new versions or updates/substantive changes ^b of the following: <ul style="list-style-type: none"> - AK-NDA memoranda - Site AK procedure CCP-TP-005 - AK accuracy reports - AK-AK and AK-NDA/NDE Discrepancy Resolution Reports - Attachments 4 and 6 and associated memoranda - WSPFs and AK summaries and related attachments for all new waste streams, including change notices - "Add Container" memoranda
Non-Destructive Assay	New equipment or physical modifications to approved equipment ^c Extension or changes to approved calibration range for approved equipment	Notification to EPA upon completion of changes to software for approved equipment, operating range(s), and site procedures that require CBFO approval.
Real-Time Radiography	N/A	Notification to EPA upon the following: <ul style="list-style-type: none"> - Implementation of new RTR equipment or substantive changes^b to approved RTR equipment - Completion of changes to site RTR procedures requiring CBFO approvals
Visual Examination and Visual Examination Technique	Changes in vendor performing VE and/or VET	Notification to EPA upon completion of changes to site VE/VET procedures that require CBFO approval.
WIPP Waste Information System	N/A	Notification to EPA upon completion of changes to WWIS procedure(s) requiring CBFO approval and other changes including algorithms specific to load management.

^a T2 changes have been updated from those presented in the baseline inspection report, which addressed only the WSPF and procedural changes, to include new AK requirements as a result of this inspection and other EPA baseline approvals to ensure consistent reporting requirements. SRS-CCP will report all T2 changes to EPA at the end of each fiscal quarter.

^b "Substantive changes" are changes with the potential to impact the site's waste characterization activities or documentation thereof, excluding changes that are solely related to ES&H, nuclear safety, or RCRA, or that are editorial in nature.

^c Modifications to approved equipment include all changes with the potential to affect NDA data relative to waste isolation and exclude minor changes, such as the addition of safety-related equipment.

^d New T1 change specific to the S3000 SCG as discussed in this report.

**Tiering of RH TRU Waste Characterization Processes Implemented by SRS-CCP (April 2012)
(Based on August 20-September 1, 2011, and December 6-7, 2011, Baseline Inspection)**

RH Waste Characterization Process Elements	SRS-CCP RH Waste Characterization Process – T1 Changes	SRS-CCP RH Waste Characterization Process – T2 Changes*
Acceptable Knowledge	Any new RH S3000 or S4000 waste stream (AK Summary) Any new RH S5000 waste stream that <u>does not</u> have a companion CH waste stream (AK Summary) Substantive modification(s)** to CCP-AK-SRS-580 or CCP-AK-SRS-582 that have the potential to affect the characterization process (AK2, AK6)	Any new RH S5000 waste stream that <u>does</u> have a companion CH waste stream (AK Summary) Notification to EPA: <ul style="list-style-type: none"> • Upon completion of revisions to CCP-AK-SRS-580, CCP-AK-SRS-582, CCP-TP-005, or nonconformance and corrective action procedures that require CBFO approval*** (AK2, AK5, AK6) • Upon completion of revisions to any CCP-TP-005 attachments, including when Attachment 4 is generated to reflect the updated AKSR Source Document Reference List (AK5, AK11) • When the final or revised WSPF, CIS, CRR and related attachments are available and upon completion of any subsequent revisions to these documents (AK10) • When AK accuracy reports are completed, prepared annually at a minimum (AK11) • When Add Container Memoranda have been prepared (AK5) • When additional discrepancy resolution reports and nonconformance reports have been prepared (AK4)
Radiological Characterization, including Dose-to-Curie	Use of the MCS/ISOCs to provide any information other than the relative determinations of ²³⁹ Pu, ²⁴⁰ Pu and ²⁴¹ Pu to ²⁴¹ Am (RC2) Future use of the ORTEC/ISOCs for any RH TRU waste (RC2) Application of a new scaling factor processes for isotopic determination other than those documented in CCP-AK-SRS-581, Revision 1 (applies to new RH waste streams and to the addition of containers to an approved waste stream) (RC1, RC4, RC5) Substantive modification(s)** to CCP-TP-504 or CCP-AK-SRS-581 that have the potential to affect the characterization process (RC4, RC5)	Any new RH waste stream characterized using an approved scaling factor process for isotopic determination (RC Summary) Notification to EPA upon completion of revisions to CCP-AK-SRS-581 or CCP-TP-504 that require CBFO approval*** (RC1, RC5) Notification to EPA when calculation package(s) CCP-SRS-44, or equivalent record(s), are available (RC Summary)
Real-Time Radiography	RTR by any new process (RTR Summary)	Notification to EPA upon completion of changes to RTR procedure(s) that require CBFO approval*** (RTR1) Addition of a new SCG to any approved RTR process (RTR2)

Notes:

- * SRS-CCP will report all T2 changes to EPA every three months.
- ** *Substantive modification* refers to a change with the potential to affect SRS-CCP's RH waste characterization process; e.g., the use of an inherently different type of measurement instrument or the use of probes not described in CCP-TP-504, excluding changes related solely to safety or to address administrative concerns.
- *** Notification to EPA is not necessary when document updates are editorial in nature or are required solely to address administrative concerns.