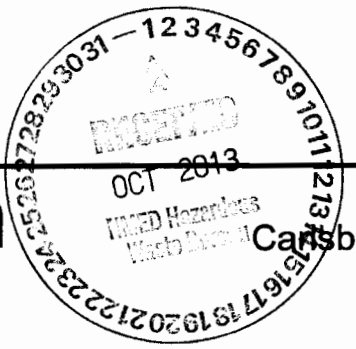
DOE F 1325.8

United States Government

memorandum



ENTERED

Department of Energy

Carlsbad Field Office
Carlsbad, New Mexico 88221

DATE: OCT 1 2013

REPLY TO ATTN OF: CBFO:OQA:DSM:MAG:13-2057:UFC 2300.00

SUBJECT: Notification of Recertification Audit A-14-04 of the SRS/CCP Transuranic Waste Characterization and Certification Program

TO: Herbert M. Crapse, Jr., DOE-SR

Please be advised that an audit team from the Carlsbad Field Office (CBFO) will conduct a recertification audit of the Savannah River Site (SRS) Central Characterization Program (CCP) at the SRS and at the Carlsbad, New Mexico facilities on November 13-15, 2013. The SRS/CCP characterization activities for remote-handled Summary Category Group (SCG) S5000 debris waste and contact-handled SCGs S3000 homogeneous solids, S4000 soils/gravel, and S5000 debris wastes will be evaluated during the audit. The audit will be conducted in accordance with the attached audit plan. Representatives from the CBFO and the New Mexico Environment Department (NMED) may be present to observe the audit. In addition, the U.S. Environmental Protection Agency may conduct an independent inspection of the SRS/CCP and/or an inspection of the CBFO audit process.

Your representatives are requested to coordinate with the audit team to develop the necessary documentation for the audit team to gain access to the SRS/CCP facilities, conduct the audit, and have appropriate access to necessary documentation and records. Please provide meeting rooms for the entrance and exit meetings, and working rooms for the audit team and observers. The audit team will need a full set of documentation applicable to the SRS/CCP characterization activities for the Waste Isolation Pilot Plant, including procedures.

If you have any questions concerning Audit A-14-04, please contact me at (575) 234-7491.

(for)

Dennis S. Miehls
Senior Quality Assurance Specialist

Attachment

cc: w/attachment

O. Vincent, CBFO	*ED
J. R. Stroble, CBFO	ED
M. Navarrete, CBFO	ED
T. Morgan, CBFO	ED
N. Castaneda, CBFO	ED
D. Moody, DOE-SR	ED
F. Sharif, NWP	ED
T. Reynolds, NWP	ED
D.E. Gulbransen, NWP/CCP	ED
V. Cannon, NWP/CCP	ED
A. J. Fisher, NWP/CCP	ED
I. Joo, NWP/CCP	ED
M. Walker, NWP/CCP	ED
W. Ledford	ED
J. Carter, NWP/CCP	ED
T. Peake, EPA	ED
L. Bender, EPA	ED
E. Feltcorn, EPA	ED
R. Joglekar, EPA	ED
S. Ghose, EPA	ED
R. Lee, EPA	ED
J. Kieling, NMED	ED
T. Kliphuis, NMED	ED
S. Holmes, NMED	ED
R. Maestas, NMED	ED
C. Smith, NMED	ED
Site Documents	ED
J. Harvill, CTAC	ED
R. Allen, CTAC	ED
P.Y. Martinez, CTAC	ED
G. White, CTAC	ED
D. Harvill, CTAC	ED
CBFO QA File	
CBFO M&RC	

*ED denotes electronic dist

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CARLSBAD FIELD OFFICE SRS/CCP RECERTIFICATION AUDIT PLAN

Audit Number: A-14-04

Organization: Savannah River Site (SRS)
Central Characterization Program (CCP)

Organizations to Be Notified: SRS
Nuclear Waste Partnership LLC (NWP)
U.S. Environmental Protection Agency
Defense Nuclear Facilities Safety Board
New Mexico Environment Department

Date and Locations: November 13 - 15, 2013
SRS and Carlsbad, NM

Audit Team:

Dennis Miehls	Carlsbad Field Office (CBFO) Quality Assurance Management Representative
Priscilla Y. Martinez	Audit Team Leader, CBFO Technical Assistance Contractor (CTAC)
Berry Pace	Auditor, CTAC
Rick Castillo	Auditor, CTAC
Katie Martin	Auditor, CTAC
Tammy Bowden	Auditor, CTAC
Cindi Castillo	Auditor, CTAC
Dick Blauvelt	Technical Specialist, CTAC
Rhett Bradford	Technical Specialist, CTAC
Paul Gomez	Technical Specialist, CTAC
Kirk Kirkes	Technical Specialist, CTAC
Jim Oliver	Technical Specialist, CTAC
Porf Martinez	Technical Specialist, CTAC
B.J. Verret	Technical Specialist, CTAC
Joe Willis	Technical Specialist, NWP

Audit Scope:

The audit team will evaluate the continued adequacy, implementation, and effectiveness of the SRS/CCP waste characterization processes for retrievably stored remote-handled (RH) Summary Category Group (SCG) S5000 debris waste and contact-handled (CH) SCGs S3000 homogeneous solids, S4000 soils/gravel, and S5000 debris waste. The audit team will also evaluate the SRS/CCP program for meeting both technical and quality assurance (QA) requirements.

Activities to Be Audited:

The following areas from Attachment C6, Section C6-3 of the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit will be audited:

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

QA elements:

Personnel Qualification and Training
Documents and Records
Nonconformances

Technical elements:

Acceptable Knowledge, including waste certification (i.e., Waste Stream Profile Forms)
Project-level Data Validation and Verification
Dose-to-Curie
Headspace Gas Sampling
Flammable Gas Analysis
Non-destructive Assay
Real-time Radiography
Visual Examination
WIPP Waste Information System/Waste Data System

Governing Documents/Requirements:

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

- DOE/CBFO-94-1012, *Quality Assurance Program Document*
- Waste Isolation Pilot Plant Hazardous Waste Facility Permit NM4890139088-TSDF
- DOE/WIPP-02-3122, *Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant*
- DOE/WIPP-02-3214, *Remote-Handled TRU Waste Characterization Program Implementation Plan*
- CH TRAMPAC
- RH TRAMPAC
- DOE/WIPP 02-3183, *CH Packaging Program Guidance*
- DOE/WIPP 02-3184, *CH Packaging Operations Manual*
- DOE/WIPP 11-3456, *TRUPACT-III Program Guidance*
- DOE/WIPP 11-3451, *TRUPACT-III Operations Manual*

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

- CCP-PO-001, *CCP Transuranic Waste Characterization Quality Assurance Project Plan*
- CCP-PO-002, *CCP Transuranic Waste Certification Plan*
- Related SRS/CCP QA and technical implementing procedures

Schedule of Audit Activities:

A pre-audit conference is scheduled for 8:00 a.m., Wednesday, November 13, 2013.

Audit team caucuses will be held at 4:00 p.m., Wednesday and Thursday, November 13 and 14, 2013, and at 12:00 p.m. on Friday, November 15, 2013.

The audit team leader will meet with SRS/CCP management to discuss audit concerns and audit progress at 8:30 a.m. daily, Thursday and Friday, November 14 and 15, 2013.

A post-audit conference is scheduled for 1:00 p.m., Friday, November 15, 2013.

Audit activities related to Headspace Gas Sampling, Project Level Validation and Verification, WIPP Waste Information System/Waste Data System, Training, and Records will be performed in Carlsbad, NM. All other activities will be at the Savannah River Site, Aiken, SC. All meeting time settings are Eastern Standard Time.

Approved By: Priscilla Y Martinez **Date:** 9-26-13
Priscilla Y. Martinez
CTAC Audit Team Leader

Approved By: (for) **Date:** 9-26-13
Dennis Miehls, CBFO
Senior Quality Assurance Specialist

Processes and Equipment to be Reviewed During Audit A-14-04

WIPP WWIS #	Site Equipment #	Equipment Description	Components	Software	NDA Calibrated Range, Operating Range and TMU
PREVIOUSLY APPROVED PROCESSES OR EQUIPMENT					
1NABC1	NABC – (SR05/SRN5)	Nondestructive Assay Box Counter – 55-gallon drums, standard waste boxes (SWBs), and standard large box 2s (SLB2s) Method identified in CCP-TP-189 and CCP-TP-191	Gamma • 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 Neutron • 320 He-3 Tubes in High Density Polyethylene Liner • Cf-252 Add-A-Source Correction	• NDA-2000 • Genie-2000	The NABC has two modalities of operation: gamma and neutron. Therefore, two sets of calibration documents exist. For the gamma modality three calibrations are approved: (1) Gamma near-field calibration utilizing multi-curve efficiency-based calibration, in accordance with ASTM Standard C1133/C1133-10 for the Box Segmented Gamma System at the Savannah River Site, CCP-SRS-NABC-2011-01, May 2, 2011. Both 1-hour extended count time and 20-minute reduced count time calibration arrangements are approved for NABC gamma near-field efficiency-based calibration. (2) Gamma near-field calibration utilizing matrix transmission correction-based calibration, in accordance with ASTM Standard C1133/C1133-10 for the Box Segmented Gamma System at the Savannah River Site, CCP-SRS-NABC-2011-01, May 2, 2011. Both 1-hour extended count time and 20-minute reduced count time calibration arrangements are approved for NABC gamma near-field matrix transmission correction-based calibration. (3) Gamma [5-foot set-back] far-field calibration utilizing multi-curve efficiency-based calibration, in accordance with ASTM Standard C1133/C1133-10 for the Box Segmented Gamma System at the Savannah River Site, CCP-SRS-NABC-2011-01, May 2, 2011. Both 1-hour extended count time and 20-minute reduced count time calibrations approved for NABC gamma efficiency-based calibration. For the passive neutron modality, two calibrations are approved: (1) Passive neutron calibration utilizing high-efficiency coincidence and multiplicity counting

Processes and Equipment to be Reviewed During Audit A-14-04					
WIPP WWIS #	**Site Equipment #**	**Equipment Description**	**Components**	**Software**	**NDA Calibrated Range, Operating Range and TMU**
					technique together with Cf-252 Add-A-Source based-calibration for 1-hour extended count time, in accordance with ASTM Standard C-1207 (Neutron Coincidence Counting) and ASTM Standard C-1500 (Neutron Multiplicity Counting) for the Box Neutron Assay System at the Savannah River Site, CCP-SRS-NABC-2011-01, May 2, 2011. The 1-Hour extended count time calibration arrangement is approved for the NABC Box Neutron Assay System neutron coincidence and multiplicity counting Cf-252 Add-A-Source-based calibrations. (2) Passive neutron calibration utilizing high-efficiency coincidence and multiplicity counting technique together with Cf-252 Add-A-Source based-calibration for 20-minute reduced count time, in accordance with ASTM Standard C-1207 (Neutron Coincidence Counting) and ASTM Standard C-1500 (Neutron Multiplicity Counting) for the Box Neutron Assay System at the Savannah River Site, CCP-SRS-NABC-2011-01, May 2, 2011. The 20-minute reduced count time calibration arrangement is approved for the NABC Box Neutron Assay System neutron coincidence and multiplicity counting Cf-252 Add-A-Source-based calibrations. 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.

Processes and Equipment to be Reviewed During Audit A-14-04

WIPP WWIS #	Site Equipment #	Equipment Description	Components	Software	NDA Calibrated Range, Operating Range and TMU
1RR3	RTR-15 (owned by SRS)	Real-time Radiography Built by Marietta X-Ray Method identified in CCP-TP-053	• 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 CCP-TP-145	• 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 CCP-TP-074	• 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

Processes and Equipment to be Reviewed During Audit A-14-04					
WIPP WWIS #	**Site Equipment #**	**Equipment Description**	**Components**	**Software**	**NDA Calibrated Range, Operating Range and TMU**
VISUAL	Visual Examination	Visual Examination Method identified in CCP-TP-113, CCP-TP-163, and CCP-TP-500	N/A	N/A	N/A
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
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