



United States Government

Department of Energy

memorandum

Carlsbad Field Office
Carlsbad, New Mexico 88221

DATE: MAR 16 2016
REPLY TO
ATTN OF: CBFO:OQA:MPN:BA:16-1290:UFC 2300.00
SUBJECT: Recertification Audit A-16-15 of the ORNL/CCP
TO: Ms. Laura Wilkerson, DOE-OR



Please be advised that an audit team from the Carlsbad Field Office (CBFO) will conduct Waste Isolation Pilot Plant Hazardous Waste Facility Permit Attachment C6 Audit A-16-15 of the Oak Ridge National Laboratory (ORNL), and services of the Nuclear Waste Partnership LLC (NWP) Central Characterization Program (CCP) for the recertification of contact-handled (CH) and remote-handled (RH) transuranic waste characterization activities. The audit, which is scheduled for April 19 – 21, 2016, will be conducted in accordance with the attached audit plan. The ORNL/CCP characterization activities for CH Summary Category Groups (SCGs) S3000 solids, S4000 soils/gravel, and S5000 debris wastes, and RH SCG S5000 debris wastes will be evaluated during the audit. Representatives from Department of Energy (DOE)/CBFO and the New Mexico Environment Department may be present to observe the audit.

Your representatives are requested to coordinate with the audit team to provide access to ORNL/CCP facilities and to supply the necessary documentation and records for the audit team to conduct the audit. Please ensure availability of appropriate space for auditors to conduct meetings. Also, please arrange to have cognizant personnel available to support the audit.

If you have any questions or comments concerning the audit, please contact me at (575) 234-7483.

Martin P. Navarrete
Senior Quality Assurance Specialist

Attachment

160318



Ms. Laura Wilkerson

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cc: w/attachment

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Site Documents	ED
CBFO QA File	
CBFO M&RC	

*ED denotes electronic distribution

**CARLSBAD FIELD OFFICE
AUDIT PLAN**

Audit Number: A-16-15

Organization to be Audited: Oak Ridge National Laboratory (ORNL), Nuclear Waste Partnership LLC (NWP) Central Characterization Program (CCP)

Organizations to be Notified: ORNL
NWP
New Mexico Environment Department (NMED)
Defense Nuclear Facilities Safety Board
U.S. Environmental Protection Agency

Date and Location: April 19 – April 21, 2016
Oak Ridge, TN, and Carlsbad, NM

Audit Team:

Martin Navarrete	Management Representative, Carlsbad Field Office (CBFO) Office of Quality Assurance
Michael Hernandez	Management Representative-in-Training, CBFO Office of Quality Assurance
Rick Castillo	Audit Team Leader, CBFO Technical Assistance Contractor (CTAC)
Berry Pace	Auditor, CTAC
Charlie Riggs (AK)	Auditor, CTAC
Priscilla Martinez (NDA)	Auditor, CTAC
Katie Martin (VE)	Auditor, CTAC
Tamara Ackman (RTR)	Auditor, CTAC
Jim Schuetz (C6 QA)*	Auditor, CTAC
Dick Blauvelt (AK)	Technical Specialist, CTAC
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Greg Knox (RTR)	Technical Specialist, CTAC
Rhett Bradford (VE)	Technical Specialist, CTAC
Paul Gomez (PLV&V)	Technical Specialist, CTAC
Jim Oliver (NDA/DTC)	Technical Specialist, CTAC
B.J. Verret (FGA/CM)	Technical Specialist, CTAC

* Indicates team members working at the Skeen-Whitlock Building in Carlsbad, NM.

Audit Scope:

The audit team will evaluate the continued adequacy, implementation, and effectiveness of the technical and quality assurance (QA) activities performed by NWP/CCP at ORNL for characterization of contact-handled (CH) Summary Category Groups (SCGs) S3000 solids, S4000 soils/gravel, and S5000 debris wastes, and remote-handled (RH) SCG S5000 debris wastes.

The audit will be performed at the ORNL site in Oak Ridge, TN, and at the Skeen-Whitlock Building in Carlsbad, NM. A list of the equipment and processes to be evaluated is attached to this plan (Attachment 1).

Governing Documents/Requirements:

Evaluation of the overall program adequacy and effectiveness of ORNL/CCP documents will be based on the current revisions of the following documents:

- *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*
- *Remote-Handled TRU Waste Characterization Program Implementation Plan, DOE/WIPP-02-3214*

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

- *CCP Transuranic Waste Characterization Quality Assurance Project Plan, CCP-PO-001*
- *CCP Transuranic Waste Certification Plan, CCP-PO-002*
- *CCP/TRU Waste Processing Center/Oak Ridge National Laboratory Interface Document, CCP-PO-027*
- *CCP Interface Document Preparation, CCP-PO-043*
- Related CCP QA and technical implementing procedures

Activities to be Audited:

General

- Results of Previous Audits
- Changes in Programs or Operations
- New Programs or Activities Being Implemented
- Changes in Key Personnel

Quality Assurance

The following general areas from section C6-1 of the Hazardous Waste Facility Permit:

- Nonconformances
- Personnel Qualification and Training
- Records

Technical Activities

- Project-level Data Validation and Verification (PLV&V)
- Acceptable Knowledge (AK), including waste certification (i.e., Waste Stream Profile Forms)
- Real-time Radiography (RTR)
- Visual Examination (VE)
- Nondestructive Assay (NDA)
- Dose-to-Curie (DTC)
- Flammable Gas Analysis (FGA)
- WIPP Waste Information System/Waste Data System (WWIS/WDS)

Schedule of Audit Activities:

A pre-audit conference is scheduled for Tuesday, April 19, 2016, at 8:30 a.m.

Audit team caucuses will be held at 4:00 p.m. on Tuesday and Wednesday, April 19 and 20, and at 1:00 p.m. on Thursday, April 21, 2016.

If needed, the audit team leader will conduct a management briefing with appropriate ORNL and CCP management Wednesday, April 20, and Thursday, April 21, 2016, at 8:30 a.m.

A post-audit conference is scheduled for Thursday, April 21, 2016, at 3:00 p.m.

All meetings will take place at the designated locations at the ORNL in Oak Ridge, TN, and Skeen-Whitlock Building in Carlsbad, NM.

Prepared by:  Date: 3/9/16
Rick L. Castillo
CTAC Audit Team Leader

Concurrence:  Date: 3/9/2016
Michael R. Brown, Director
CBFO Office of Quality Assurance

CENTRAL CHARACTERIZATION PROGRAM LIST OF CH AND RH EQUIPMENT AND PROCESSES REQUIRING EVALUATION AND CERTIFICATION AT OAK RIDGE NATIONAL LABORATORY					
WDS Method ID #	Site Equipment # or Title	Description	Components	Software	NDA Calibrated Range, Operating Range and TMU
Nondestructive Assay (NDA)					
16IQ1	IQ3	Canberra Mobile Qualitative and Quantitative Drum Counter with Isotopics (IQ3) Procedure CCP-TP-046, CCP-TP-047, CCP-TP-048	<ul style="list-style-type: none"> • High Sensitivity Gamma Waste Assay System • 3 HPGe Coaxial Detectors • 3 LEGe Detectors 	NDA-2000 Genie 2000	The calibration of the IQ3 is documented in MCS-IQ3-CALIB-2012, Revision 1, <i>Calibration Report for the MCS IQ3</i> , MCS-IQ3-TMU-2009. <i>Total Measurement Uncertainty</i> for the MCS IQ3 documents the estimate of total measurement uncertainty.
16MILCC2	MILCC2	Mobile ISOCS Large Container Counter (MILCC) Approved for 55-gallon drums Procedures CCP-TP-076, CCP-TP-077, and CCP-TP-048	<ul style="list-style-type: none"> • ISOCS Characterized Broad Energy Gamma Detectors (2) • ISOCS rails and collimator sets (2) • ISOCS carts (2) • Signal cables • Canberra LYNX Digital Signal Processors (2) 	NDA-2000 Genie 2000	The calibration of the MILCC is documented in CI-MILCC2-NDA-1001, Revision A, <i>Calibration Report for the MCS Mobile ISOCS Large Container Counter (MILCC) at the Transuranic Waste Processing Center in Oak Ridge, TN</i> . The acceptance range is LLD and limited by dead time. Acceptable density range for gamma is approximately 0.001-2.50 g/cc. The CI-MILCC2-NDA-1002, Revision B, <i>Oak Ridge Mobile ISOCS Large Container Counter 2 Total Measurement Uncertainty Report</i> , documents the estimate of total measurement uncertainty.
Dose-to-Curie (DTC)					
16DTC1	Dose-to-Curie	Radiological characterization process Procedure CCP-TP-504	As identified in CCP-TP-504	As identified in CCP-TP-504	N/A

CENTRAL CHARACTERIZATION PROGRAM LIST OF CH AND RH EQUIPMENT AND PROCESSES REQUIRING EVALUATION AND CERTIFICATION AT OAK RIDGE NATIONAL LABORATORY					
WDS Method ID #	Site Equipment # or Title	Description	Components	Software	NDA Calibrated Range, Operating Range and TMU
Nondestructive Examination (NDE)					
16RR1	MCS RTR #6	Real-time Radiography Mobile Characterization System RTR #6 Procedure CCP-TP-053, CCP-TP-165	<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
Visual Examination (VE)					
16RHVE1	Visual Examination	Visual Examination Procedure CCP-TP-500	N/A	N/A	N/A
16VE1	Visual Examination	Visual Examination Procedure CCP-TP-113	N/A	N/A	N/A

List of Deactivated Equipment			
WIPP #	Site Equipment #	Site Description	Date Deactivated
16RR2	MCS RTR #7	Real-Time Radiography Mobile Characterization	September 2015