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United States Government

Department of Energy

memorandum

Carlsbad Field Office
Carlsbad, New Mexico 88221

DATE: MAY - 2 2013

REPLY TO ATTN OF: CBFO:OQA:DM:CC:13-1396:UFC 2300.00

SUBJECT: Recertification Audit A-13-18, INL/CCP Transuranic Waste Characterization Activities

TO: Jerry Wells, DOE-ID

Please be advised that a team of auditors and technical specialists from the Carlsbad Field Office (CBFO) will conduct an audit at the Idaho National Laboratory/Central Characterization Project (INL/CCP) facilities near Idaho Falls, ID, and at the CBFO Skeen-Whitlock Building in Carlsbad, NM, June 3 – 6, 2013. The audit will be conducted in accordance with the attached audit plan.

The purpose of the audit is to determine whether INL/CCP transuranic waste characterization and transportation activities should be recertified by CBFO for the Waste Isolation Pilot Plant (WIPP). Representatives from the CBFO and the New Mexico Environment Department (NMED) may be present to observe the audit process. Representatives from the U.S. Environmental Protection Agency (EPA) may be present to conduct an independent inspection.

Your representatives are requested to coordinate with the audit team to develop the necessary documentation for the audit team to access the INL/CCP facilities and conduct the audit, and to have access to necessary documentation and records. Please provide meeting rooms to hold approximately 50 people for the entrance and exit meetings, working rooms for the audit team, NMED observers, and EPA inspectors, and a full set of documentation applicable to INL/CCP work for the WIPP, including applicable procedures.

If you have any questions or comments concerning this audit, please contact me at (575) 234-7491.

D. J. Miehls

Dennis S. Miehls
Acting Quality Assurance Director

Attachment

130506

cc: w/attachment

J. Franco, CBFO	*ED
M. Navarrete, CBFO	ED
J. R. Stroble, CBFO	ED
N. Castaneda, CBFO	ED
M. Pinzel, CBFO	ED
B. Roberts, DOE-ID	ED
F. Sharif, NWP	ED
E. Gulbransen, NWP	ED
T. Reynolds, NWP/CCP	ED
D. Ploetz, NWP/CCP	ED
V. Cannon, NWP/CCP	ED
M. Walker, NWP/CCP	ED
J. Carter, NWP/CCP	ED
L. Bender, EPA	ED
E. Feltcorn, EPA	ED
R. Jogelekar, 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
P. Gilbert, LANL-CO	ED
G. Lyshik, LANL-CO	ED
T. Bowden, CTAC	ED
G. White, CTAC	ED
M. Mager, CTAC	ED
WIPP Operating Record	ED
CBFO QA File	
CBFO M&RC	

*ED denotes electronic distribution

CARLSBAD FIELD OFFICE AUDIT PLAN

Audit Number: A-13-18

Organization to be Audited: Idaho National Laboratory
Central Characterization Program (INL/CCP)

Organizations to be Notified: U.S. Department of Energy – Idaho Operations Office (DOE-ID)
U.S. Environmental Protection Agency (EPA)
Nuclear Waste Partnership, LLC (NWP)
New Mexico Environment Department (NMED)

Date and Location: June 3 – 6, 2013
Idaho Falls, ID, and Carlsbad, NM

Audit Team:

Dennis Miehls	Carlsbad Field Office (CBFO), Management Representative
Tamara Bowden	Audit Team Leader, Carlsbad Field Office Technical Assistance Contractor (CTAC)
Cindi Castillo	Auditor, CTAC (HSG)
Berry Pace	Auditor, CTAC (VE and SS)
Greg Knox	Auditor, CTAC (NDA and DTC)
Rick Castillo	Auditor, CTAC (AK)
Jim Schuetz*	Auditor, CTAC (C6 QA)
Katie Martin*	Auditor, CTAC (C6 QA)
Roger Vawter	Auditor, CTAC (Transportation)
B.J. Verret	Auditor/Technical Specialist, CTAC (GGT, Leak Test, Flam Gas, Transportation)
Prissy Martinez	Auditor/Technical Specialist, CTAC (RTR)
Paul Gomez	Technical Specialist, CTAC (HSG)
Porf Martinez	Technical Specialist, CTAC (RTR)
Kirk Kirkes	Technical Specialist, CTAC (PL V&V)
Rhett Bradford	Technical Specialist, CTAC (VE and SS)
Dick Blauvelt	Technical Specialist, CTAC (AK)
Jim Oliver	Technical Specialist, CTAC (NDA and DTC)
Joe Willis	Technical Specialist, NWP (Transportation)

*Personnel auditing in Carlsbad, NM

Audit Scope:

The audit team will evaluate the continued adequacy, implementation, and effectiveness of INL/CCP transuranic waste activities as they relate to the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit (HWFP) for characterization and certification of contact-handled Summary Category Groups (SCG) S3000 homogeneous solids, S4000 soils/gravel, S5000 debris waste, and remote-handled SCG S3000 homogeneous solids and S5000 debris waste.

The scope includes evaluation of validation and verification of data resulting from headspace gas samples and soils/gravel samples collected by INL/CCP, and solids samples collected by the Advanced Mixed Waste Treatment Project and analyzed by the INL/CCP laboratories. The specific items to be audited are listed under Activities to be Audited.

Activities to be Audited:

General

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

C6-1- and C6-3-related Quality Assurance Activities in Carlsbad, NM

- Personnel Qualification and Training
- Records
- Quality Improvement/Nonconformances
- WIPP Waste Information System/Waste Data System (WWIS/WDS)

The following technical elements will be evaluated for compliance with the HWFP, utilizing the checklists in Attachment C6.

INL (Idaho Falls)

- Acceptable Knowledge (AK)
- Waste Certification (e.g., Waste Stream Profile Forms)
- Project-level Data Validation and Verification (V&V)
- Real-time Radiography (RTR)
- Visual Examination (VE)
- Headspace Gas (HSG) Sampling
- Solids Sampling of soils/gravels (SS)
- Sample Control
- Nondestructive Assay (NDA)
- Dose-to-Curie (DTC)

- Flammable Gas Analysis
- Gas Generation Testing (GGT)
- Container Management
- Transportation

For additional details, see *Processes and Equipment to be Reviewed During Audit A-13-18 of INL/CCP*, attached to this plan.

Governing Documents/Requirements:

Adequacy of INL/CCP documents will be based on the current revisions of the following documents:

Waste Isolation Pilot Plant Hazardous Waste Facility Permit NM4890139088-TSDF

DOE/CBFO-94-1012, *Quality Assurance Program Document*

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

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

TRUPACT-II Safety Analysis Report: *Contact-Handled Transuranic Waste Authorized Methods for Payload Control (CH-TRAMPAC)*, and the TRUPACT-II Certificate of Compliance NRC 71-9218

RH-TRU 72-B Safety Analysis Report: *Remote-Handled Transuranic Waste Authorized Methods for Payload Control* (RH-TRAMPAC), and the RH-TRU 72-B Certificate of Compliance 71-9212

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

CCP-PO-001, *CCP Transuranic Waste Characterization Quality Assurance Project Plan*

CCP-PO-002, *CCP Transuranic Waste Certification Plan*

CCP-PO-003, *CCP Transuranic Authorized Methods for Payload Control (CCP CH-TRAMPAC)*

CCP-PO-505, *CCP Remote-Handled Transuranic Waste Authorized Methods for Payload Control (CCP RH-TRAMPAC)*

CCP-PO-024, *CCP/INL Interface Document*

CCP-PO-501, *CCP/INL RH TRU Waste Interface Document*

Related INL/CCP and NWP CCP QA and technical implementing procedures

Schedule of Audit Activities:

A pre-audit conference will be held Monday, June 3, 2013, at 8:30 a.m.

Audit team caucus meetings will be held Monday through Wednesday, June 3 – 5, 2013, at 4:00 p.m.

An audit team caucus meeting will be held Thursday, June 6, 2013, at 2:00 p.m.

Daily management briefings will be held Tuesday through Thursday, June 4 – 6, 2013, at 8:30 a.m.

A post-audit conference is scheduled for Thursday, June 6, 2013, at 3:30 p.m.

All meetings will take place at the designated INL and Carlsbad locations.

Prepared by: Tamara D. Bowden **Date:** 5/1/13
Tamara D. Bowden, CTAC
Audit Team Leader

Concurrence: D. J. Miehls **Date:** 5-1-13
Dennis Miehls, CBFO
Acting Quality Assurance Director

Processes and Equipment to be Reviewed During Audit A-13-18 of the INL/CCP

WIPP #	Process/Equipment Description	Applicable to the Following Waste Streams/Groups of Waste Streams	Currently Approved by NMED	Currently Approved by EPA
NEW PROCESSES OR EQUIPMENT				
N/A	N/A	N/A	N/A	N/A
PREVIOUSLY APPROVED PROCESSES OR EQUIPMENT				
14VE1	Visual Examination (VE) Procedure – CCP-TP-006 Description –Visual Examination Technique (VET)	Solids (S3000) Soils (S4000) Debris (S5000)	YES	YES
14RHVE1	Visual Examination Procedure – CCP-TP-500 Description - The VE of audio/video media process used for a total of 70 retrievably stored remote-handled (RH) debris waste drums	Solids (S3000) Soils (S4000) Debris (S5000)	YES	YES
14RR2	Nondestructive Examination Procedure – CCP-TP-053 Equipment – MCS RTR-5 Description – MCS Real-time Radiography (RTR) Mobile Characterization (RTR-5) System	Solids (S3000) Debris (S5000)	YES	YES
14RRH1	Nondestructive Examination Procedure – CCP-TP-508 Equipment – RTR-RTR-0659 Description – VJ Technologies, Real-time Radiography Characterization (RTR-RTR-0659) System	Solids (S3000) Debris (S5000)	YES	YES
N/A	Acceptable Knowledge	Solids (S3000) Soils (S4000) Debris (S5000)	YES	YES
N/A	Solids/Soils and Gravel Sampling and Custody for CH	Solids (S3000) Soils (S4000)	YES	N/A

Processes and Equipment to be Reviewed During Audit A-13-18 of the INL/CCP

WIPP #	Process/Equipment Description	Applicable to the Following Waste Streams/Groups of Waste Streams	Currently Approved by NMED	Currently Approved by EPA
N/A	Solids/Soils and Gravel Sampling and Custody for RH	Solids (S3000)	YES	N/A
N/A	SUMMA® Headspace Gas (HSG) Sampling and Custody	Debris (S5000)	YES	N/A
N/A	Data Validation and Verification	Solids (S3000) Soils (S4000) Debris (S5000)	YES	YES
N/A	WIPP Waste Information System (WWIS)/Waste Data System (WDS)	Solids (S3000) Soils (S4000 Debris (S5000)	YES	YES
14SHC1	Nondestructive Assay Procedure – CCP-TP-146 Description – CCP Super High Efficiency Neutron Counter	Solids (S3000) Debris (S5000)	N/A	YES
14HENC1	Nondestructive Assay Procedure – CCP-TP-107 Description – CCP High Efficiency Neutron Counter	Solids (S3000) Soils (S4000) Debris (S5000)	N/A	YES
14SGRS1	Nondestructive Assay Procedure – CCP-TP-115 Description – Stored Waste Examination Pilot Plant (SWEPP) Gamma Ray Spectrometer (SGRS)	Solids (S3000) Soils (S4000) Debris (S5000)	N/A	YES
14WAGS1	Nondestructive Assay Procedure – CCP-TP-019 Description – Waste Assay Gamma Spectrometer	Solids (S3000) Soils (S4000) Debris (S5000)	N/A	YES

Processes and Equipment to be Reviewed During Audit A-13-18 of the INL/CCP

WIPP #	Process/Equipment Description	Applicable to the Following Waste Streams/Groups of Waste Streams	Currently Approved by NMED	Currently Approved by EPA
14DTC1	Radiological characterization process using dose-to-curie (DTC) and modeling-derived scaling factors for assigning radionuclide values to RH waste stream Dose-rate fractional contribution of Cs-137 and Co-60 using OSPREY $La_3Br(Ce)$ gamma detector Procedure CCP-TP-504	Solids (S3000) Debris (S5000)	N/A	YES
14GG1	Gas Generation Testing Procedure – CCP-TP-089 Equipment – MGSS Unit/Cart 1 (GC-14B) Description – Gas Generation Testing 55-gallon drums	Waste Type IV	N/A	N/A
14GG2	Gas Generation Testing Procedure – CCP-TP-089 Equipment – MGSS Unit/Cart 2 (GC-17A) Description – Gas Generation Testing 55-gallon drums	Waste Type IV	N/A	N/A
N/A	Load Management	Solids (S3000) Soils (S4000) Debris (S5000)	N/A	YES
N/A	Quality Assurance Program	Solids (S3000) Soils (S4000) Debris (S5000)	N/A	YES