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Department of Energy
Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221
APR 13 2017



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

Subject: Transmittal of the Hazardous Waste Facility Permit Attachment C6 Audit Plan and Notification of Assigned Auditors for CBFO Recertification Audit A-17-17 of the Los Alamos National Laboratory Central Characterization Program

Dear Mr. Kieling:

This letter transmits the audit plan for Carlsbad Field Office (CBFO) Recertification Audit A-17-17 of the Los Alamos National Laboratory (LANL) Central Characterization Program for transuranic waste characterization activities. The audit will be conducted as required by the Waste Isolation Pilot Plant Hazardous Waste Facility Permit at the LANL in Los Alamos, NM, and at the Skeen-Whitlock Building in Carlsbad, NM, May 16 – 18, 2017. The audit plan identifies the audit team members, as required by the Permit.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to 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.

Should you have any questions concerning this notification, please contact Mr. Dennis Miehl, Senior Quality Assurance Specialist, at (575) 234-7491.

Sincerely,


Todd Shrader, Manager
Carlsbad Field Office
Deputy MS

Enclosure



Mr. John E. Kieling

-2-

APR 13 2017

cc: w/enclosure

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CBFO QA File

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*ED denotes electronic distribution

**CARLSBAD FIELD OFFICE
AUDIT PLAN**

Audit Number: A-17-17

Organization to be Audited: Los Alamos National Laboratory (LANL), Nuclear Waste Partnership LLC (NWP) Central Characterization Program (CCP)

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

Date and Location: May 16–18, 2017
Los Alamos, NM, and Carlsbad, NM

Audit Team:

Dennis Miehl	Carlsbad Field Office (CBFO) Office of Quality Assurance Representative
Rick Castillo	Audit Team Leader, CBFO Technical Assistance Contractor (CTAC)
Charlie Riggs	Auditor, CTAC (Program Status)
John Fernandez*	Auditor, CTAC (C6 QA – Records, Training)
Jim Schuetz*	Auditor, CTAC (C6 QA – NCRs, WWIS/WDS)
Ricardo Chavez	Auditor, CTAC (AK)
Katie Chester	Auditor, CTAC (RTR)
Priscilla Yanez	Auditor, CTAC (NDA)
Porf Martinez	Auditor, CTAC (VE)
Dustin Stegman	Auditor-in-Training, CTAC (VE)
Randy Fitzgerald	Technical Specialist, CTAC (AK)
Dick Blauvelt	Technical Specialist, CTAC (AK)
Greg Knox	Technical Specialist, CTAC (RTR)
Rhett Bradford	Technical Specialist, CTAC (VE)
Paul Gomez	Technical Specialist, CTAC (PL V&V)
Jim Oliver	Technical Specialist, CTAC (NDA)
B.J. Verret	Technical Specialist, CTAC (FGA & Container Management)

* 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 LANL for characterization of contact-handled (CH) transuranic (TRU) Summary Category Groups (SCGs) S3000 solids, S4000 soils/gravel, and S5000 debris wastes. The audit team will also verify that a technical review of the generator site's processes has been performed and that any issues identified

during the technical review have been resolved per DOE/WIPP-16-3564, *Generator Site Technical Review Procedure*.

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, implementation and effectiveness of LANL/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*
- *DOE/WIPP-07-3372, Waste Isolation Pilot Plant Documented Safety Analysis (Chapter 18)*

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/LANL Interface Document, CCP-PO-012*
- *CCP Interface Document Preparation, CCP-PO-043*
- *Related NWP/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

C6-1 through C6-4 and general QA program elements as applicable

- Nonconformances
- Personnel Qualification and Training
- Measuring and Test Equipment (M&TE)
- Software Version Installation
- Records

Technical Activities

- Project-level Data Validation and Verification (PLV&V)
- Enhanced Acceptable Knowledge (AK), including waste certification
 - Including, but not limited to, Enhanced Chemical Compatibility Evaluation Memorandum, Basis of Knowledge, AK Assessments, AK Briefings, Interface Waste Management Documents List
- Real-time Radiography (RTR)
- Visual Examination (VE)
- Visual Examination Technique (VET), Off-Site Source Recovery Program
- Nondestructive Assay (NDA), including Performance Demonstration Program
- Flammable Gas Analysis (FGA)
- Container Management
- WIPP Waste Information System/Waste Data System (WWIS/WDS)
 - Including, but not limited to, Statistical Approach to Material at Risk

Schedule of Audit Activities:

A pre-audit conference is scheduled for Tuesday, May 16, 2017, at 8:30 a.m.

Audit team caucuses will be held at 4:00 p.m. on Tuesday and Wednesday, May 16 and 17, and at 2:00 p.m. on Thursday, May 18, 2017.

If needed, the audit team leader will conduct a management briefing with appropriate LANL and NWP/CCP management at 8:30 a.m. on Wednesday and Thursday, May 17 and 18, 2017.

A post-audit conference is scheduled for Thursday, May 18, 2017, at 3:00 p.m.

All meetings will take place at designated locations at the LANL in Los Alamos, NM, and at the Skeen-Whitlock Building in Carlsbad, NM.

Prepared by: _____


Rick Castillo
CTAC Audit Team Leader

Date: _____

4/13/17

Concurrence: _____


Michael R. Brown, Director
CBFO Office of Quality Assurance

Date: _____

4/13/17

Processes and Equipment to be Evaluated During Audit A-17-17 of the LANL/CCP

WIPP #	Process/Equipment Description	Applicable to the Following Waste Streams/Groups of Waste Streams	Currently Approved by NMED	Currently Approved by EPA
11HC2	Nondestructive Assay Procedure – CCP-TP-063, CCP-TP-064, CCP-TP-103 Description – Canberra Industries High Efficiency Neutron Counter (HENC) mounted in a transportation container.	*Solids (S3000) Soils/Gravel (S4000) Debris (S5000)	N/A	YES
11HC3	Nondestructive Assay Procedure – CCP-TP-103, CCP-TP-107, CCP-TP-108 Description – Canberra Industries High Efficiency Neutron Counter (HENC) mounted in a trailer	*Solids (S3000) Soils/Gravel (S4000) Debris (S5000)	N/A	YES
11SHC1	Nondestructive Assay Procedure – CCP-TP-059, CCP-TP-064, CCP-TP-103 Description – Super High-Efficiency Neutron Counter mounted in a trailer, SWBs	*Solids (S3000) Soils/Gravel (S4000) Debris (S5000)	N/A	YES
11MILCC1	Nondestructive Assay Procedure(s) – CCP-TP-076, CCP-TP-077 and CCP-TP-103 Description – Mobile In-Situ Object Counting System (ISOCS) Large Container Counter (MILCC)	*Solids (S3000) Soils/Gravel (S4000) Debris (S5000)	N/A	YES
**11MILCC3	Nondestructive Assay Procedure(s) – CCP-TP-076, CCP-TP-077 and CCP-TP-103 Description – Mobile In-Situ Object Counting System (ISOCS) Large Container Counter (MILCC)	*Solids (S3000) Soils/Gravel (S4000) Debris (S5000)	N/A	TBD
11HERTR3	High Energy Real-Time Radiography (HERTR) Procedures CCP-TP-053 and CCP-TP-198 Description – High Energy Real-Time Radiography (RTR) [built by VJ Technologies] 55-gallon drums and SWBs	*Solids (S3000) Soils/Gravel (S4000) Debris (S5000)	*TBD (S3000) YES (S4000) YES (S5000)	YES
11VE1	CH Visual Examination Procedure – CCP-TP-113 Description – CH Characterization performed utilizing Visual Examination (VE) and Acceptable Knowledge (AK)	*Solids (S3000) Soils/Gravel (S4000) Debris (S5000)	*TBD (S3000) N/A (S4000) YES (S5000)	YES
11VE2	Off-Site Source Recovery Program Procedure(s) – CCP-TP-069 and CCP-TP-101 Description – Characterization performed utilizing Visual Examination (VE) and Acceptable Knowledge (AK)	Debris (S5000)	YES	YES

Processes and Equipment to be Evaluated During Audit A-17-17 of the LANL/CCP, cont.

WIPP #	Process/Equipment Description	Applicable to the Following Waste Streams/Groups of Waste Streams	Currently Approved by NMED	Currently Approved by EPA
N/A	Acceptable Knowledge Procedure – CCP-TP-005 Description – Acceptable Knowledge (AK)	*Solids (S3000) Soils/Gravel (S4000) Debris (S5000)	*TBD (S3000) YES (S4000) YES (S5000)	YES
N/A	Data Verification and Validation Procedure(s) – CCP-TP-001, CCP-TP-002, CCP-TP-003, CCP-TP-103, CCP-TP-162 Description – Project Level Data Verification and Validation	*Solids (S3000) Soils/Gravel (S4000) Debris (S5000)	*TBD (S3000) YES (S4000) YES (S5000)	YES
N/A	WIPP Waste Information System/Waste Data System (WWIS/WDS) Procedure – CCP-TP-030 Description – CH TRU Waste Characterization and WWIS Data Entry	*Solids (S3000) Soils/Gravel (S4000) Debris (S5000)	*TBD (S3000) YES (S4000) YES (S5000)	YES
N/A	Quality Assurance Program	*Solids (S3000) Soils/Gravel (S4000) Debris (S5000)	N/A	YES

*The characterization of SCG S3000 was suspended on July 16, 2014, and CCP is now ready for certification which includes the certification of wastes processed through the Waste Characterization, Reduction, and Repackaging Facility (WCRRF).

Documents and associated files support the readiness for certification of SCG S3000:

1. Enhanced Acceptable Knowledge on existing S3000 waste streams.
2. Remediated nitrate salt waste stream LA-MIN06-NS.001 process at WCRRF
3. Equipment at TA-54 (HERTR, HENC2, MILCC, SHENC)
4. Equipment at TA-55 (HENC3)

**5. New equipment at TA-55 (MILCC3)