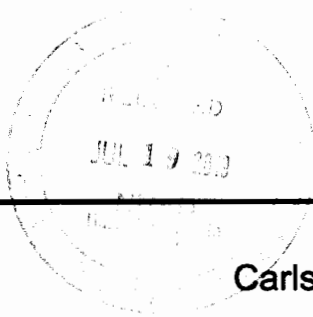


United States Government

memorandum**ENTERED**
Department of EnergyCarlsbad Field Office
Carlsbad, New Mexico 88221

DATE: JUL 19 2019

REPLY TO
ATTN OF: CBFO:OQA:DSM:TS:19-0979:UFC 2300.00

SUBJECT: Certification Audit A-19-29 of the LLNL/CCP

TO: Mr. James Davis III, DOE-LLNL

Please be advised that an audit team from the U. S. Department of Energy Carlsbad Field Office (DOE/CBFO) will conduct Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit Attachment C6 Audit A-19-29 for certification of the Lawrence Livermore National Laboratory (LLNL) and the Nuclear Waste Partnership LLC Central Characterization Program (CCP) for conducting contact-handled (CH) transuranic waste characterization activities. The audit is scheduled for August 27-29, 2019, and will be conducted in accordance with the attached audit plan.

The LLNL/CCP characterization activities for CH Summary Category Groups S3000 solids and S5000 debris wastes will be evaluated during the audit. In addition, the audit team will verify compliance with WIPP Waste Acceptance Criteria requirements. Representatives from the 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 LLNL/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 concerning the audit, please contact me at (575) 234-7491.

Dennis S. Miehl
Senior Quality Assurance Specialist

Attachment

190714



cc: w/attachment
R. Murray, EM-3.113 *ED
K. Lachman, CBFO ED
D.C. Gadbury, CBFO ED
K. Princen, CBFO ED
A. Stone, CBFO ED
M. Stapleton, CBFO ED
N. Castaneda, CBFO ED
T. Carver, CBFO ED
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S. Strong, NWP ED
M. Percy, NWP ED
R. Lee, NWP ED
R. Reeves, NWP ED
R. Hollister, NWP ED
D. Moody, NWP ED
B. Verlanic, NWP ED
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D. Wade, NWP ED
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J. Carter, NWP ED
D. Ivey, NWP ED
V. Ballew, NWP ED
S. Saiz, NWP ED
A. Boyea, NWP ED
J. Walsh, EPA ED
J. Ellis, EPA ED
T. Peake, EPA ED
E. Feltcorn, EPA ED
J. Kieling, NMED ED
R. Maestas, NMED ED
D. Biswell, NMED ED
M. McLean, NMED ED
T. Runyon, CTAC ED
P. Martinez, CTAC ED
C. Castillo, CTAC ED
J. Lopez, CTAC ED
D. Harvill, CTAC ED
G. White, CTAC ED
Site Documents ED
CBFO QA File
CBFOM&RC
*ED denotes electronic distribution

**CARLSBAD FIELD OFFICE
AUDIT PLAN**

Audit Number: A-19-29

Organization to be Audited: Lawrence Livermore National Laboratory (LLNL), Nuclear Waste Partnership LLC (NWP) Central Characterization Program (CCP)

Organizations to be Notified: LLNL
NWP
New Mexico Environment Department (NMED)
U.S. Environmental Protection Agency (EPA)

Date and Location: August 27 – 29, 2019
Livermore, CA, and Carlsbad, NM

Audit Team:

Dennis Miehls	Carlsbad Field Office (CBFO) Office of Quality Assurance (QA) Management Representative
Joe Lopez	Audit Team Leader, CBFO Technical Assistance Contractor (CTAC)
Cindi Castillo	Auditor, Co-Team Leader (CTAC)
Katie Gentry	Auditor, CTAC (Program Status, QA Program, and Interface)
Bob Prentiss*	Auditor, CTAC (C6 QA)
Rick Castillo*	Auditor, CTAC (C6 QA)
Charlie Riggs	Auditor, CTAC (AK)
Priscilla Yanez	Auditor, CTAC (RTR)
Porf Martinez	Auditor, CTAC (VE)
Tim Boswell	Auditor, CTAC (NDA)
Randy Fitzgerald	Technical Specialist, CTAC (AK)
Dick Blauvelt*	Technical Specialist, CTAC (AK)
Dustin Stegman	Technical Specialist, CTAC (VE)
Rhett Bradford	Technical Specialist, CTAC (RTR)
Paul Gomez	Technical Specialist, CTAC (PL V&V)
Jim Oliver	Technical Specialist, CTAC (NDA)
B.J. Verret	Technical Specialist, CTAC (FGA, GGT, and Container Management)

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

Audit Scope:

The audit team will evaluate the adequacy, implementation, and effectiveness of the technical and QA activities performed by NWP CCP at LLNL for characterization of contact-handled (CH) transuranic (TRU) Summary Category Groups (SCGs) S3000 solids and S5000 debris wastes. This audit is considered an initial certification audit.

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

- *CBFO 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
- *Waste Isolation Pilot Plant Documented Safety Analysis*, DOE/WIPP-07-3372 (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/LLNL Interface Document*, CCP-PO-048
- Related NWP CCP QA and technical implementing procedures

Activities to be Audited:

General

- Results of Previous Audits – N/A*
- Changes in Programs or Operations – N/A*
- New Programs or Activities Being Implemented – N/A*
- Changes in Key Personnel – N/A*

**N/A is due to this being an initial certification audit.*

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 (PL V&V)
- Acceptable Knowledge (AK)
- Real-Time Radiography (RTR)
- Visual Examination (VE)
- Nondestructive Assay (NDA), including Performance Demonstration Program
- Flammable Gas Analysis (FGA)
- Gas Generation Testing (GGT)
- Container Management
- WIPP Waste Information System/Waste Data System (WWIS/WDS)

Schedule of Audit Activities:

Please note all times listed are Pacific Daylight Time (PDT).

A pre-audit conference is scheduled for Tuesday, August 27, 2019, at 9:30 a.m. PDT, at the LLNL site in Building 361, Auditorium.

If needed, the audit team leader will conduct a management briefing with appropriate LLNL and NWP CCP management at 8:30 a.m. PDT on Wednesday and Thursday, August 28 and 29, 2019.

A post-audit conference is scheduled for Thursday, August 29, 2019, at 3:00 p.m. PDT, at the LLNL site in Building 361, Auditorium.

All meetings will take place at designated locations at the LLNL site in Livermore, CA, and at the Skeen-Whitlock Building in Carlsbad, NM, as indicated on the daily schedule.

Prepared by: Joe Lopez Date: 7/16/19
Joe Lopez
CTAC Audit Team Leader

Concurrence: Donald C. Gadbury Date: 7-17-19
Donald C. Gadbury, Director
CBFO Office of Quality Assurance

D. J. Muth 7-17-19

Processes and Equipment to be Evaluated During the A-19-29 LLNL/CCP Audit

WDS ID# Method & WIPP #	Process/Equipment Description	CH S3000 Homogeneous Solids		CH S5000 Debris	
		Newly Generated	Retrievably Stored	Newly Generated	Retrievably Stored
N/A	Acceptable Knowledge (AK) Procedures: CCP-TP-005, CCP-TP-200 ❖ Enhanced AK ❖ Enhanced Chemical Compatibility Evaluation ❖ Basis of Knowledge Evaluating Oxidizing Chemicals in TRU Waste	TBA	TBA	TBA	TBA
		TBA*	TBA*	TBA*	TBA*
		TBA*	TBA*	TBA*	TBA*
		TBA*	TBA*	TBA*	TBA*
N/A	Load Management	N/A	N/A	N/A	N/A
N/A	Project Level Data Validation & Verification Procedures: CCP-TP-001, CCP-TP-002, CCP-TP-048	TBA	TBA	TBA	TBA
13VE1 N/A	Visual Examination Procedure: CCP-TP-113	TBA	N/A	TBA	N/A
13MILCC4 MILCC4	Nondestructive Assay, including Performance Demonstration Program (PDP) Procedures: CCP-TP-076, CCP-TP-077, CCP-TP-048, CCP-TP-058 Description: Mobile ISOCS Large Container Counter (MILCC) calibrated for 55-gallon drums, 12" Pipe Overpack Containers, and Standard Waste Boxes	TBA	TBA	TBA	TBA
13SG1 SGS	Nondestructive Assay, including PDP Procedures: CCP-TP-202, CCP-TP-203, CCP-TP-048, CCP-TP-058 Description: Segmented Gamma Scanner (SGS) Calibrated for 55-gallon drums	TBA	TBA	TBA	TBA
13RR1 RTR2	Real-Time Radiography Procedures: CCP-TP-053, CCP-TP-079	N/A	TBA	N/A	TBA
13HG7 FGA7	Flammable Gas Analysis as identified in DOE/WIPP-06-3345	TBA	TBA	TBA	TBA
13GG1 GGT	Gas Generation Testing Procedure: CCP-TP-083	TBA*	TBA*	N/A	N/A

Processes and Equipment to be Evaluated During the A-19-29 LLNL/CCP Audit (cont.)

WDS ID# Method & WIPP #	Process/Equipment Description	CH S3000 Homogeneous Solids		CH S5000 Debris	
		Newly Generated	Retrievably Stored	Newly Generated	Retrievably Stored
N/A	WIPP Waste Information System/Waste Data System (WWIS/WDS) Procedure: CCP-TP-030 Description: CH TRU Waste Characterization and WWIS Data Entry	TBA*	TBA*	TBA*	TBA*
N/A	Quality Assurance (QA)	TBA	TBA	TBA	TBA
Notes: TBA: To Be Audited TBA*: The above activities may not be available during the audit, and therefore may require additional assessments. This audit is considered an initial certification audit seeking approvals from the NMED and/or the EPA.					