United States Government

memorandum

DATE: May 21, 2020
REPLY TO: CBFO:OQA:DSM:JM:20-0803:UFC 2300.00
SUBJECT: Recertification Audit A-20-15 of the LANL/CCP

to: Mr. Thomas Johnson, EM-LA
    Mr. Steve. W. Goodrum, NA-LA

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-20-15 for recertification of the Los Alamos National Laboratory and the Nuclear Waste Partnership LLC Central Characterization Program (LANL/CCP) for conducting contact-handled (CH) transuranic waste characterization activities. The audit is scheduled for June 23–July TBD, 2020, and will be conducted in accordance with the attached audit plan.

The LANL/CCP characterization activities for CH Summary Category Groups S3000 solids, S4000 soils/gravel, and S5000 debris wastes will be evaluated during the audit. In addition, the audit team will verify compliance with the WIPP Waste Acceptance Criteria. Representatives from 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 LANL/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) 706-0067.

Dennis S. Miehls
Dennis S. Miehls, Acting Director
Office of Quality Assurance

Attachment
cc: w/attachment
R. Murray, EM-3.113
D. Nickless, EM-LA
L. Bishop, EM-LA
J. Shafer, EM-LA
Z. Buitta, EM-LA
G. Sosson, CBFO
K. Lachman, CBFO
K. Princen, CBFO
J. Lopez, CBFO
M. Stapleton, CBFO
N. Castaneda, CBFO
C. Fesmire, CBFO
T. Carver, CBFO
P. Maggiore, DOE/NA-LA
J. Sanchez, DOE/NA-LA
T. Wald, DOE/NA-LA
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A. Nash, DOE/NA-LA
S. Duragan, NWP
S. Strong, NWP
K. Stone, NWP/CCP
R. Lee, NWP/CCP
T. Groover, NWP/CCP
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J. Carter, NWP/CCP
L. Turner, NWP/CCP
D. Ivey, NWP/QA
V. Ballew, NWP/QA
S. Salz, NWP/QA
A. Boyea, NWP/QA
J. Ellis, EPA
T. Peake, EPA
E. Felotorn, EPA
K. Pierard, NMED
R. Maestas, NMED
D. Biswell, NMED
M. McLean, NMED
T. Runyon, CTAC
P. Martinez, CTAC
C. Castillo, CTAC
R. Castillo, CTAC
D. Harvill, CTAC
G. White, CTAC
Site Documents
CBFO M&R
CBFO QA File
*ED denotes electronic distribution
CARLSBAD FIELD OFFICE
AUDIT PLAN

Audit Number: A-20-15

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)
U.S. Environmental Protection Agency (EPA)

Date and Location: June 23 – July TBD, 2020
Los Alamos, NM, and Carlsbad, NM

Audit Team:
Dennis Miehls  Carlsbad Field Office (CBFO) Office of Quality Assurance (QA) Management Representative
Rick Castillo  Audit Team Leader, CBFO Technical Assistance Contractor (CTAC)
Charlie Riggs*  Auditor, CTAC (Program Status)
Bob Prentiss*  Auditor, CTAC (C6 QA)
Katie Gentry*  Auditor, CTAC (C6 QA)
Nathan Denney*  Auditor, CTAC (AK)
Priscilla Yanez*  Auditor, CTAC (RTR)
Steve Shafer*  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)
Shelly Gomez*  Technical Specialist, CTAC (RTR)
Kirk Kirkes*  Technical Specialist, CTAC (PL V&V)
Paul Gomez  Technical Specialist, CTAC (FGA/CM)
Jim Oliver*  Technical Specialist, CTAC (NDA)
Michel Hall  Technical Specialist, CTAC (NDA)

* Indicates team members working via teleconference.

Audit Scope:
The audit team will evaluate the continued adequacy, implementation, and effectiveness of the technical and QA activities performed by NWP/CCP at LANL for characterization of contact-handled (CH) transuranic Summary Category Groups (SCGs) S3000 solids, S4000 soils/gravel, and S5000 debris wastes.

Due to heightened awareness and to decrease the potential development, spread, and impact of the acute respiratory illness, COVID-19, limited audit team members will travel to the LANL site. Most audit activities will be conducted from Carlsbad, NM, or via teleconference. This will not be the normal method for
performing recertification audits. Transportation activities will not be included in the scope of this audit; however, Flammable Gas Analysis will be included.

Additionally, LANL/CCP operations at Technical Area (TA)-54 are not being performed currently due to the impact of COVID-19; therefore, field activities associated with the characterization processes will be evaluated in July. The audit will remain open until such time that all equipment and processes can be evaluated. The audit will be performed in accordance with this plan unless additional changes or restrictions are imposed due to the COVID-19 crisis.

The following on-site field activities will be evaluated at the LANL in June and July 2020:

**June 23-25, 2020 On-Site Field Activities**

**TA-55:**
- Visual Examination (VE)
- High Efficiency Neutron Counter (HENC)3
- Container Management

**TRU Waste Facility (TWF):**
- HENC1
- Mobile ISOCS Large Container Counter (MILCC)3
- Flammable Gas Analysis (FGA) Unit 13

**July TBD, 2020 On-Site Field Activities**

**TA-54 (Area G):**
- High Energy Real-time Radiography (RTR)
- HENC2
- SuperHENC
- MILCC1

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
• Waste Isolation Pilot Plant Documented Safety Analysis (Chapter 18), DOE/WIPP-07-3372

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/TRIAD National Security LLC at LANL Interface Document, CCP-PO-012
• CCP/N3B LLC at LANL Interface Document, CCP-PO-051
• 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
  *All program elements will be evaluated in June, as applicable

Technical Activities

June Evaluations:
• Acceptable Knowledge (AK)
• Visual Examination (VE)
• Visual Examination Technique (VET), Off-Site Source Recovery Program
• Real-time Radiography (RTR)
• Nondestructive Assay (NDA), including Performance Demonstration Program
• Flammable Gas Analysis (FGA)
• Project-level Data Validation and Verification (PL/V&V)
• WIPP Waste Information System/Waste Data System (WWIS/WDS)
• Container Management
  *Documentation only will be evaluated for RTR, HENC2, SuperHENC, and MILCC1

July Evaluations:
• Real-time Radiography (RTR)
• Nondestructive Assay (NDA), including Performance Demonstration Program
Schedule of Audit Activities:

A pre-audit conference is scheduled for Tuesday, June 23, 2020, at 8:30 a.m.

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, June 24 and 25, 2020. Additional management briefings may be conducted at a later time in July once the TA-54 field activity evaluations have been conducted.

A post-audit conference will be scheduled for a time to be determined in July 2020, after field activity evaluations for all associated characterization processes have been evaluated.

All meetings will take place at a designated location at the LANL in Los Alamos, NM, Skeen-Whitlock Building in Carlsbad, NM, and/or via teleconference.

Prepared by: ___________________________ Date: _____________
Rick L. Castillo
CTAC Audit Team Leader

Concurrence: ___________________________ Date: _____________
Dennis S. Miehls, Acting Director
CBFO Office of Quality Assurance
## Processes and Equipment to be Evaluated During the A-20-15 LANL/CCP Audit

<table>
<thead>
<tr>
<th>WIPP #</th>
<th>Process/Equipment Description</th>
<th>Applicable to the Following Summary Category Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>11HC1</strong></td>
<td>Nondestructive Assay Procedures – CCP-TP-063, CCP-TP-064, CCP-TP-103 Description – Canberra Industries High Efficiency Neutron Counter (HENC) mounted in a transportation container.</td>
<td>Solids (S3000) Soils/Gravel (S4000) Debris (S5000)</td>
</tr>
<tr>
<td>11HC2</td>
<td>Nondestructive Assay Procedures – CCP-TP-063, CCP-TP-064, CCP-TP-103 Description – Canberra Industries High Efficiency Neutron Counter (HENC) mounted in a transportation container.</td>
<td>Solids (S3000) Soils/Gravel (S4000) Debris (S5000)</td>
</tr>
<tr>
<td>11HC3</td>
<td>Nondestructive Assay Procedures – CCP-TP-103, CCP-TP-107, CCP-TP-108 Description – Canberra Industries High Efficiency Neutron Counter (HENC) mounted in a trailer</td>
<td>Solids (S3000) Soils/Gravel (S4000) Debris (S5000)</td>
</tr>
<tr>
<td><strong>11SHC1</strong></td>
<td>Nondestructive Assay Procedures – CCP-TP-059, CCP-TP-064, CCP-TP-103 Description – Super High-Efficiency Neutron Counter mounted in a trailer, SWBs</td>
<td>Solids (S3000) Soils/Gravel (S4000) Debris (S5000)</td>
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<tr>
<td>11MILCC1</td>
<td>Nondestructive Assay Procedures – CCP-TP-076, CCP-TP-077 and CCP-TP-103 Description – Mobile In-Situ Object Counting System (ISOCS) Large Container Counter (MILCC)</td>
<td>Solids (S3000) Soils/Gravel (S4000) Debris (S5000)</td>
</tr>
<tr>
<td>11MILCC3</td>
<td>Nondestructive Assay Procedures – CCP-TP-076, CCP-TP-077 and CCP-TP-103 Description – Mobile In-Situ Object Counting System (ISOCS) Large Container Counter (MILCC)</td>
<td>Solids (S3000) Soils/Gravel (S4000) Debris (S5000)</td>
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<tr>
<td>11VE1</td>
<td>CH Visual Examination Procedure – CCP-TP-113 Description – CH Characterization performed utilizing Visual Examination (VE) and Acceptable Knowledge (AK)</td>
<td>Solids (S3000) Soils/Gravel (S4000) Debris (S5000)</td>
</tr>
</tbody>
</table>
Processes and Equipment to be Evaluated During the A-20-15 LANL/CCP Audit (cont.)

<table>
<thead>
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<th>WIPP #</th>
<th>Process/Equipment Description</th>
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</thead>
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<tr>
<td>11VE2</td>
<td>Off-Site Source Recovery Program Procedures – CCP-TP-069 and CCP-TP-101 Description – Characterization performed utilizing Visual Examination (VE) and Acceptable Knowledge (AK)</td>
<td>Debris (S5000)</td>
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<tr>
<td>N/A</td>
<td>Acceptable Knowledge Procedure – CCP-TP-005 Description – Acceptable Knowledge (AK)</td>
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<td></td>
<td></td>
<td>Soils/Gravel (S4000)</td>
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<td></td>
<td></td>
<td>Debris (S5000)</td>
</tr>
<tr>
<td>N/A</td>
<td>Data Verification and Validation Procedures – CCP-TP-001, CCP-TP-002, CCP-TP-003, CCP-TP-103, CCP-TP-162 Description – Project Level Data Verification and Validation</td>
<td>Solids (S3000)</td>
</tr>
<tr>
<td></td>
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<td>Soils/Gravel (S4000)</td>
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<td></td>
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<td>Debris (S5000)</td>
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<tr>
<td>N/A</td>
<td>WIPP Waste Information System/Waste Data System (WWIS/WDS) Procedure – CCP-TP-030 Description – CH TRU Waste Characterization and WWIS Data Entry</td>
<td>Solids (S3000)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Soils/Gravel (S4000)</td>
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<td>Debris (S5000)</td>
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<td>N/A</td>
<td>Quality Assurance Program</td>
<td>Solids (S3000)</td>
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<td></td>
<td></td>
<td>Soils/Gravel (S4000)</td>
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<tr>
<td></td>
<td></td>
<td>Debris (S5000)</td>
</tr>
</tbody>
</table>

**New equipment to be evaluated at the TRU Waste Facility (TWF) (HENC1).**

**New equipment to be evaluated at TA-54 (SHENC).**