Please be advised that an audit team from the Carlsbad Field Office will conduct the subject audit at the Argonne National Laboratory (ANL) in Argonne, IL, and the Central Characterization Program (CCP) facilities at the Skeen-Whitlock Building in Carlsbad, NM, July 16 – 18, 2019. The audit will be conducted in accordance with the attached audit plan. Representatives from the New Mexico Environment Department may be present to observe the audit.

Your representatives are requested to coordinate with the audit team and provide the team access to ANL waste characterization facilities; provide a meeting room (with a projector and speakerphone) to accommodate approximately 30 people for the entrance and exit meetings at both locations; provide working rooms for the team at both locations; assign cognizant personnel to support the audit; and facilitate access to the appropriate documentation and records at both locations.

If you have any questions concerning this audit, please contact me at (575) 234-7048.

Martin P. Navarrete
Senior Quality Assurance Specialist

Attachment
cc: w/attachment
R. Murray, EM-43 *ED
K. Lachman, CBFO ED
D. C. Gadbury, CBFO ED
C. Fesmire, CBFO ED
D. Miehls, CBFO ED
M. Stapleton, CBFO ED
N. Castaneda, CBFO ED
T. Carver, CBFO ED
K. Joshi, DOE-CH ED
B. Covert, NWP ED
S. Strong, NWP ED
M. Pearcy, NWP/CCP ED
R. Lee, NWP/CCP ED
R. Reeves, NWP/CCP ED
D. Wade, NWP/CCP ED
C. Simmons, NWP/CCP ED
J. Harvill, NWP/CCP ED
J. Carter, NWP/CCP ED
D. Ivey, NWP/QA ED
V. Ballew, NWP/QA ED
S. Saiz, NWP/QA ED
A. Boyea, NWP/QA ED
J. Walsh, EPA ED
J. Ellis, EPA ED
T. Peake, EPA ED
E. Feltcom, 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
H. Tellez, CTAC ED
C. Castillo, CTAC ED
R. Chavez, CTAC ED
D. Harvill, CTAC ED
G. White, CTAC ED
Site Documents ED
CBFO QA File ED
CBFO M&RC ED
*ED denotes electronic distribution
CARLSBAD FIELD OFFICE
AUDIT PLAN

Audit Number: A-19-24

Organization to be Audited: Argonne National Laboratory (ANL), Nuclear Waste Partnership LLC (NWP) Central Characterization Program (CCP)

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

Date and Location: July 16 - 18, 2019
Argonne, IL, and Carlsbad, NM

Audit Team:
Martin Navarrete Carlsbad Field Office (CBFO) Office of Quality Assurance (OQA) Management Representative
Michael Stapleton CBFO OQA Representative
Ricardo Chavez Audit Team Leader, CBFO Technical Assistance Contractor (CTAC)
Katie Gentry Auditor Co-Team Leader, (CTAC)
Charlie Riggs Auditor, CTAC (Program Status)
Prissy Yanez** Auditor, CTAC (AK)
Joe Lopez* Auditor, CTAC (C6 QA)
B. J. Verret* Auditor, CTAC (C6 QA)
Tim Boswell Auditor, CTAC (DTC & DM)
Dick Blauvelt** Technical Specialist, CTAC (AK)
Randy Fitzgerald** Technical Specialist, CTAC (AK)
Jim Oliver Technical Specialist, CTAC (DTC & DM)
Rick Castillo Auditor/Technical Specialist, CTAC (VE & Container Management)
Paul Gomez* Auditor/Technical Specialist, CTAC (PL V&V)

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

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 ANL for characterization of remote-handled (RH) SCG S5000 debris waste.

A list of the equipment and processes to be evaluated is attached to this plan (Attachment 1).
Governed Documents/Requirements:

Evaluation of the overall program adequacy, implementation, and effectiveness of ANL/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
- 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/ANL RH-TRU Waste Interface Document, CCP-PO-500
- 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**
- Personnel Qualification and Training
- Records
- Quality Improvement/Nonconformances
- Measuring and Test Equipment (M&TE)
- Software Version Installation

**Technical Activities**
- Project-level Data Validation and Verification (PL/V&V)
- Acceptable Knowledge (AK)
• Visual Examination (VE)
• Dose-to-Curie (DTC)
• Dimensional Measurement (DM)
• Container Management
• WIPP Waste Information System/Waste Data System (WWIS/WDS)

Schedule of Audit Activities:

A pre-audit conference is scheduled for Tuesday, July 16, 2019, at 9:00 a.m. CDT.

If needed, the audit team leader will conduct a management briefing with appropriate ANL and NWP/CCP management at 8:30 a.m. CDT on Wednesday and Thursday, July 17 and 18, 2019.

A post-audit conference is scheduled for Thursday, July 18, 2019, at 12:00 p.m. CDT.

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

Prepared by: Ricardo Chavez  
CTAC Audit Team Leader  

Date: 6/4/19

Concurrence: Donald C. Gabbury, Director  
CBFO Office of Quality Assurance  

Date: 6-5-19  
6-5-19
### Table 1
ANL-CCP RH WIPP Certified Program Waste Characterization Processes To Be Audited
RH S5000 AERHDM Debris

<table>
<thead>
<tr>
<th>Acceptable Knowledge</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Generation and Project Level Validation &amp; Verification</td>
<td></td>
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<tr>
<td>Visual Examination</td>
<td></td>
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<tr>
<td>WIPP # 8RHVE1</td>
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<tr>
<td>WIPP # 8RHVE2 for Newly Packaged RH Drums</td>
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<tr>
<td>Dose-to-Curie (Radiological Characterization)</td>
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<tr>
<td>WIPP # 8DTC1</td>
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<tr>
<td>Dimensional/Gravimetric (DG) Measurement</td>
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<tr>
<td>WIPP # 8RHGM1</td>
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<tr>
<td>WIPP Waste Information System/Waste Data System</td>
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<tr>
<td>Quality Assurance</td>
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<tr>
<td>Permit Requirement:</td>
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<tr>
<td>- Per the WIPP Hazardous Waste Facility Permit Waste Analysis Plan; Section C6-3, Audit Position Functions. “Audits will be conducted at least annually for each site involved in the waste characterization program”.</td>
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<tr>
<td>EPA Approvals:</td>
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<tr>
<td>- Tier 1 approval adding 120 containers of AGHCF debris waste to waste stream AERHDM dated September 2010, A-98-49; II-A4-134.</td>
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<tr>
<td>- Tier 1 approval adding AGHCF fuel pin FEW in waste stream AERHDM dated November 2010, A-98-49; II-A4-140.</td>
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<tr>
<td>- Tier 1 approval adding K-Wing FEW to waste stream AERHDM dated February 2012, A-98-49; II-A4-158.</td>
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<td>- EPA letter dated September 2013, found the DOE met the goal of shipping due to measurement uncertainty by combining multiple measurements and shielding calculations.</td>
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