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

Subject: Transmittal of the Hazardous Waste Facility Permit Attachment C6 Audit Plan and Notification of Assigned Auditors for CBFO Recertification Audit A-18-13 of the Oak Ridge National Laboratory Central Characterization Program

Dear Mr. Kieling:

This letter transmits the audit plan for Carlsbad Field Office (CBFO) Recertification Audit A-18-13 of the Oak Ridge National Laboratory (ORNL) Central Characterization Program for Transuranic (TRU) Waste characterization activities. The audit will be conducted as required by the Waste Isolation Pilot Plant Hazardous Waste Facility Permit (WIPP WAP) at the ORNL in Oak Ridge, TN, and at the Skeen-Whitlock Building in Carlsbad, NM, March 26 – 28, 2018. 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 fine and imprisonment for knowing violations.

Should you have any questions concerning this notification, please contact Mr. Martin Navarrete, Acting Director for CBFO Office of Quality Assurance, at (575) 234-7483.

Sincerely,

Todd Shrader, Manager
Carlsbad Field Office
CARLSBAD FIELD OFFICE
AUDIT PLAN

Audit Number: A-18-13

Organization to be Audited: Oak Ridge National Laboratory (ORNL), Nuclear Waste Partnership LLC (NWP) Central Characterization Program (CCP)

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

Date and Location: March 26 – 28, 2018
Oak Ridge, TN, and Carlsbad, NM

Audit Team:
Martin Navarrete  Carlsbad Field Office (CBFO) Office of Quality Assurance (QA) Representative
Micheal Stapleton  CBFO QA Representative
Katie Gentry  Audit Team Leader, CBFO Technical Assistance Contractor (CTAC)
Charlie Riggs  Auditor, CTAC (Program Status)
Jim Schuetz*  Auditor, CTAC (C6 QA)
Joe Lopez*  Auditor, CTAC (C6 QA)
Ricardo Chavez  Auditor, CTAC (AK)
Prissy Yanez  Auditor, CTAC (RTR)
Paul Gomez  Auditor, CTAC (NDA/DTC)
Matt Leroch  Auditor, CTAC (VE & Container Management)
Randy Fitzgerald  Technical Specialist, CTAC (AK)
Dick Blauvelt  Technical Specialist, CTAC (AK)
Dustin Stegman  Technical Specialist, CTAC (RTR)
Rhett Bradford  Technical Specialist, CTAC (VE)
Jim Vernon  Auditor/Technical Specialist, CTAC (PL V&V)
Michel Hall  Technical Specialist, CTAC (NDA/DTC)

* 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 ORNL for characterization of contact-handled (CH) Summary Category Groups (SCGs) S4000 soils/gravel and S5000 debris wastes, and remote-handled (RH) SCG S5000 debris wastes.

The audit team will also evaluate the Chemical Compatibility Evaluation Memorandums (CCEMs) for Waste Stream OR-RED-C-CH-HET, Waste Containers Repackaged at the TRU Waste Processing Center (TWPC), and Waste Stream OR-NFS-CH-HET-A, Nuclear Fuel Services Heterogeneous Debris Stored at ORNL.
The CCEMs are currently in the review process at CBFO and are expected to be completed prior to this audit.

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 ORNL/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/TRU Waste Processing Center/Oak Ridge National Laboratory Interface Document*, CCP-PO-027
- 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 (PL/V&V)
• Enhanced Acceptable Knowledge (AK), including waste certification
  o Including, but not limited to, Enhanced CCEM, Basis of Knowledge, AK
    Assessments, AK Briefings, Interface Waste Management Documents List
• Real-time Radiography (RTR)
• Visual Examination (VE)
• Nondestructive Assay (NDA), including Performance Demonstration Program
• Dose-to-Curie (DTC)
• Container Management
• WIPP Waste Information System/Waste Data System (WWIS/WDS)
  o Including, but not limited to, Statistical Approach to Material at Risk

Schedule of Audit Activities:

A pre-audit conference is scheduled for Monday, March 26, 2018, at 8:30 a.m.

Audit team caucuses will be held at 3:30 p.m. on Monday and Tuesday, March 26 and 27, and at 1:30 p.m. on Wednesday, March 28, 2018.

If needed, the audit team leader will conduct a management briefing with appropriate ORNL and NWP/CCP management at 8:30 a.m. on Tuesday and Wednesday, March 27 and 28, 2018.

A post-audit conference is scheduled for Wednesday, March 28, 2018, at 2:00 p.m.

All meetings will take place at designated locations at the ORNL/TRU Waste Processing Center in Oak Ridge, TN, and at the Skeen-Whitlock Building in Carlsbad, NM.

Prepared by: [Signature] Katie Gentry
CTAC Audit Team Leader

Date: 2/13/18

Concurrence: [Signature] Martin Navarrete, Acting Director
CBFO Office of Quality Assurance

Date: 2-13-18
<table>
<thead>
<tr>
<th>WIPP #</th>
<th>Process/Equipment Description</th>
<th>Applicable to the Following Waste Streams/Groups of Waste Streams</th>
<th>Currently Approved by NMED</th>
<th>Currently Approved by EPA</th>
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<tr>
<td>16IQ1</td>
<td>Nondestructive Assay IQ3 Procedures – CCP-TP-046, CCP-TP-047, and CCP-TP-048</td>
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<td>16MILCC2</td>
<td>Mobile ISOCs Large Container Counter (MILCC2) Procedures – CCP-TP-076, CCP-TP-077, and CCP-TP-048</td>
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<td>16DTC1</td>
<td>Dose-to-Curie (Radiological Characterization) Procedure – CCP-TP-504</td>
<td>Debris (S5000) – RH</td>
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<td>16RR1</td>
<td>Real-Time Radiography Mobile Characterization System RTR #6 Procedures – CCP-TP-053 and CCP-TP-165</td>
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<td>16RHVE1</td>
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<td>Visual Examination Procedure – CCP-TP-113</td>
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### Attachment 1

#### ORNL CCP CH & RH NTP Scope Recertification Audit 2018

<table>
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<tr>
<th>WIPP #</th>
<th>Process/Equipment Description</th>
<th>Applicable to the Following Waste Streams/Groups of Waste Streams</th>
<th>Currently Approved by NMED</th>
<th>Currently Approved by EPA</th>
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<td>Data Verification and Validation</td>
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<td>Quality Assurance</td>
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<td>N/A</td>
<td>WIPP Waste Information System (WWIS)/Waste Data System (WDS)</td>
<td>Soils (S4000) Debris (S5000) Debris (S6000) – RH</td>
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<td>YES</td>
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</tbody>
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