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 Audit Plan and Notification of Assigned Auditors for Recertification Audit A-13-18, INL/CCP Transuranic Waste Characterization Activities

Dear Mr. Kieling:

This letter transmits the audit plan for Carlsbad Field Office (CBFO) Recertification Audit A-13-18 of the Idaho National Laboratory/Central Characterization Project (INL/CCP). The audit will be conducted as required by the Waste Isolation Pilot Plant Hazardous Waste Facility Permit Section C4-3g, and will be held at the INL/CCP facilities near Idaho Falls, ID, and the CBFO Skeen-Whitlock Building in Carlsbad, NM, June 3 – 6, 2013. The audit plan identifies the audit team members as required by the Permit Section C6-3.

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. Dennis Miehls, Acting Quality Assurance Director, at (575) 234-7491.

Sincerely,

Jose R. Franco, Manager
Carlsbad Field Office

Enclosure
cc: w/enclosure
D. Miehls, CBFO *ED
M. Navarrete, CBFO ED
J. R. Stroble, CBFO ED
M. Pinzel, CBFO ED
G. Basabilvazoz, CBFO ED
N. Castaneda, CBFO ED
T. Kliphuis, NMED ED
S. Holmes, NMED ED
R. Maestas, NMED ED
T. Bowden, CTAC ED
G. White, CTAC ED
WIPP Operating Record ED
CBFO QA File
CBFO M&RC
*ED denotes electronic distribution
CARLSBAD FIELD OFFICE AUDIT PLAN

Audit Number: A-13-18

Organization to be Audited: Idaho National Laboratory
Central Characterization Program (INL/CCP)

U.S. Environmental Protection Agency (EPA)
Nuclear Waste Partnership, LLC (NWP)
New Mexico Environment Department (NMED)

Date and Location: June 3 – 6, 2013
Idaho Falls, ID, and Carlsbad, NM

Audit Team:

Dennis Miehls Carlsbad Field Office (CBFO), Management Representative
Tamara Bowden Audit Team Leader, Carlsbad Field Office
Cindi Castillo Technical Assistance Contractor (CTAC)
Berry Pace Auditor, CTAC (HSG)
Greg Knox Auditor, CTAC (VE and SS)
Rick Castillo Auditor, CTAC (NDA and DTC)
Jim Schuetz* Auditor, CTAC (C6 QA)
Katie Martin* Auditor, CTAC (C6 QA)
Roger Vawter Auditor, CTAC (Transportation)
B.J. Verret Auditor/Technical Specialist, CTAC
Prissy Martinez (GGT, Leak Test, Flam Gas, Transportation)
Paul Gomez Auditor/Technical Specialist, CTAC (RTR)
Porf Martinez Technical Specialist, CTAC (RTR)
Kirk Kirkes Technical Specialist, CTAC (PL V&V)
Rhett Bradford Technical Specialist, CTAC (VE and SS)
Dick Blauvelt Technical Specialist, CTAC (AK)
Jim Oliver Technical Specialist, CTAC (NDA and DTC)
Joe Willis Technical Specialist, NWP (Transportation)

*Personnel auditing in Carlsbad, NM
Audit Scope:

The audit team will evaluate the continued adequacy, implementation, and effectiveness of INL/CCP transuranic waste activities as they relate to the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit (HWFP) for characterization and certification of contact-handled Summary Category Groups (SCG) S3000 homogeneous solids, S4000 soils/gravel, S5000 debris waste, and remote-handled SCG S3000 homogeneous solids and S5000 debris waste.

The scope includes evaluation of validation and verification of data resulting from headspace gas samples and soils/gravel samples collected by INL/CCP, and solids samples collected by the Advanced Mixed Waste Treatment Project and analyzed by the INL/CCP laboratories. The specific items to be audited are listed under Activities to be Audited.

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- and C6-3-related Quality Assurance Activities in Carlsbad, NM

- Personnel Qualification and Training
- Records
- Quality Improvement/Nonconformances
- WIPP Waste Information System/Waste Data System (WWIS/WDS)

The following technical elements will be evaluated for compliance with the HWFP, utilizing the checklists in Attachment C6.

INL (Idaho Falls)

- Acceptable Knowledge (AK)
- Waste Certification (e.g., Waste Stream Profile Forms)
- Project-level Data Validation and Verification (V&V)
- Real-time Radiography (RTR)
- Visual Examination (VE)
- Headspace Gas (HSG) Sampling
- Solids Sampling of soils/gravel (SS)
- Sample Control
- Nondestructive Assay (NDA)
- Dose-to-Curie (DTC)
• Flammable Gas Analysis
• Gas Generation Testing (GGT)
• Container Management
• Transportation

For additional details, see *Processes and Equipment to be Reviewed During Audit A-13-18 of INL/CCP*, attached to this plan.

**Governing Documents/Requirements:**

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

- Waste Isolation Pilot Plant Hazardous Waste Facility Permit NM4890139088-TSDF
- DOE/CBFO-94-1012, *Quality Assurance Program Document*
- DOE/WIPP-02-3214, *Remote-Handled TRU Waste Characterization Program Implementation Plan*

Programmatic and technical checklists will be developed from the active revisions of the following documents:

- CCP-PO-001, *CCP Transuranic Waste Characterization Quality Assurance Project Plan*
- CCP-PO-002, *CCP Transuranic Waste Certification Plan*
- CCP-PO-003, *CCP Transuranic Authorized Methods for Payload Control (CCP CH-TRAMPAC)*
- CCP-PO-024, *CCP/INL Interface Document*
- CCP-PO-501, *CCP/INL RH TRU Waste Interface Document*

Related INL/CCP and NWP CCP QA and technical implementing procedures
Schedule of Audit Activities:

A pre-audit conference will be held Monday, June 3, 2013, at 8:30 a.m.

Audit team caucus meetings will be held Monday through Wednesday, June 3 – 5, 2013, at 4:00 p.m.

An audit team caucus meeting will be held Thursday, June 6, 2013, at 2:00 p.m.

Daily management briefings will be held Tuesday through Thursday, June 4 – 6, 2013, at 8:30 a.m.

A post-audit conference is scheduled for Thursday, June 6, 2013, at 3:30 p.m.

All meetings will take place at the designated INL and Carlsbad locations.

Prepared by: 

Tamara Bowden, CTAC
Audit Team Leader

Date: 5/1/13

Concurrence: 

Dennis Miehls, CBFO
Acting Quality Assurance Director

Date: 5/1/13
Processes and Equipment to be Reviewed During Audit A-13-18 of the INL/CCP

<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>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>NEW PROCESSES OR EQUIPMENT</strong></td>
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<td></td>
<td></td>
<td>N/A</td>
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<td></td>
<td><strong>PREVIOUSLY APPROVED PROCESSES OR EQUIPMENT</strong></td>
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<tr>
<td>14VE1</td>
<td>Visual Examination (VE)</td>
<td>Solids (S3000)</td>
<td>YES</td>
<td>YES</td>
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<tr>
<td></td>
<td>Procedure – CCP-TP-006</td>
<td>Soils (S4000)</td>
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<tr>
<td></td>
<td>Description –Visual Examination Technique (VET)</td>
<td>Debris (S5000)</td>
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<tr>
<td>14RHVE1</td>
<td>Visual Examination</td>
<td>Solids (S3000)</td>
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<td>YES</td>
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<td>Procedure – CCP-TP-500</td>
<td>Soils (S4000)</td>
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<td>Description - The VE of audio/video media process used for a total of 70 retrievably stored remote-handled (RH) debris waste drums</td>
<td>Debris (S5000)</td>
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<tr>
<td>14RR2</td>
<td>Nondestructive Examination</td>
<td>Solids (S3000)</td>
<td>YES</td>
<td>YES</td>
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<td></td>
<td>Procedure – CCP-TP-053</td>
<td>Debris (S5000)</td>
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<td>Equipment – MCS RTR-5</td>
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<tr>
<td></td>
<td>Description – MCS Real-time Radiography (RTR) Mobile Characterization (RTR-5) System</td>
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<td>14RRH1</td>
<td>Nondestructive Examination</td>
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<td>Procedure – CCP-TP-508</td>
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<td>Equipment – RTR-RTR-0659</td>
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<td>Description – VJ Technologies, Real-time Radiography Characterization (RTR-RTR-0659) System</td>
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<td>N/A</td>
<td>Acceptable Knowledge</td>
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<td>YES</td>
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<td>Soils (S4000)</td>
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<tr>
<td></td>
<td>Debris (S5000)</td>
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<tr>
<td>N/A</td>
<td>Solids/Soils and Gravel Sampling and Custody for CH</td>
<td>Solids (S3000)</td>
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<td>N/A</td>
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<tr>
<td></td>
<td>Soils (S4000)</td>
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</tr>
<tr>
<td>N/A</td>
<td>Solids/Soils and Gravel Sampling and Custody for RH</td>
<td>Solids (S3000)</td>
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<td>N/A</td>
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<tr>
<td>N/A</td>
<td>SUMMA® Headspace Gas (HSG) Sampling and Custody</td>
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<td>Data Validation and Verification</td>
<td>Solids (S3000)</td>
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<td>YES</td>
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<td>N/A</td>
<td>WIPP Waste Information System (WWIS)/Waste Data System (WDS)</td>
<td>Solids (S3000)</td>
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<td>14SHC1</td>
<td>Nondestructive Assay Procedure – CCP-TP-146 Description – CCP Super High Efficiency Neutron Counter</td>
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<td>14HENC1</td>
<td>Nondestructive Assay Procedure – CCP-TP-107 Description – CCP High Efficiency Neutron Counter</td>
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<td>14SGRS1</td>
<td>Nondestructive Assay Procedure – CCP-TP-115 Description – Stored Waste Examination Pilot Plant (SWEPP) Gamma Ray Spectrometer (SGRS)</td>
<td>Solids (S3000)</td>
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<td>14WAGS1</td>
<td>Nondestructive Assay Procedure – CCP-TP-019 Description – Waste Assay Gamma Spectrometer</td>
<td>Solids (S3000)</td>
<td>N/A</td>
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</tbody>
</table>
### Processes and Equipment to be Reviewed During Audit A-13-18 of the INL/CCP

<table>
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</tr>
</thead>
</table>
| 14DTC1 | Radiological characterization process using dose-to-curie (DTC) and modeling-derived scaling factors for assigning radionuclide values to RH waste stream  
Dose-rate fractional contribution of Cs-137 and Co-60 using OSPREY LaBr(Ce) gamma detector  
Procedure CCP-TP-504 | Solids (S3000)  
Debris (S5000) | N/A | YES |
| 14GG1 | Gas Generation Testing  
Procedure – CCP-TP-089  
Equipment – MGSS Unit/Cart 1 (GC-148)  
Description – Gas Generation Testing 55-gallon drums | Waste Type IV | N/A | N/A |
| 14GG2 | Gas Generation Testing  
Procedure – CCP-TP-089  
Equipment – MGSS Unit/Cart 2 (GC-17A)  
Description – Gas Generation Testing 55-gallon drums | Waste Type IV | N/A | N/A |
| N/A   | Load Management  
Solids (S3000)  
Soils (S4000)  
Debris (S5000) | N/A | YES |
| N/A   | Quality Assurance Program  
Solids (S3000)  
Soils (S4000)  
Debris (S5000) | N/A | YES |