Mr. John Kieling, Acting Bureau 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 Audit Plan and Notification of Assigned Auditors for Audit A-12-14 of the INL Central Characterization Project Analytical Laboratories

Dear Mr. Kieling:

This letter transmits the audit plan for Carlsbad Field Office (CBFO) Recertification Audit A-12-14 of the Analytical Solids and Headspace Gas Laboratories located at the Idaho National Laboratory (INL). The audit will be conducted as required by the Waste Isolation Pilot Plant Hazardous Waste Facility Permit, and will be held at the INL facilities near Idaho Falls, Idaho, on June 11-14, 2012. 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.

If you have any questions, please contact Mr. Courtland G. Fesmire, Quality Assurance Engineer, at (575) 234-7548.

Sincerely,

Jose R. Franco
Manager, Carlsbad Field Office

Enclosure
Mr. John Kieling

cc: w/enclosure
E. Ziemianski, CBFO * ED
R. Unger, CBFO ED
J.R. Stroble, CBFO ED
G. Basabilvazo, CBFO ED
T. Morgan, CBFO ED
M. Pinzel, CBFO ED
C. Fesmire, CBFO ED
N. Castaneda, CBFO ED
S. McCauslin, CBFO ED
S. Peterman, AMWTP ED
D. Haar, AMWTP ED
T. Kliphuis, NMED ED
T. Hall, NMED ED
S. Holmes, NMED ED
R. Maestas, NMED ED
P.Y. Martinez, CTAC ED
WIPP Operating Record ED
CBFO QA File
CBFO M&RC
*ED denotes electronic distribution
CARLSBAD FIELD OFFICE AUDIT PLAN

Audit Number: A-12-14

Organization to be Audited: Analytical Solids and Headspace Gas Laboratories located at Idaho National Laboratory

Organizations to be Notified: Department of Energy – Idaho Falls (DOE-ID)
New Mexico Environment Department (NMED)
Defense Nuclear Facilities Safety Board (DNFSB)
Washington TRU Solutions, LLC (WTS)

Date and Location: June 11 – 14, 2012, Idaho Falls, Idaho

Audit Team: Courtland G. Fesmire, Audit Team Management Representative, Carlsbad Field Office (CBFO)
Priscilla Y. Martínez, Audit Team Leader, Carlsbad Field Office Technical Assistance Contractor (CTAC)
Earl Bradford, Auditor, CTAC
Sheila Hailey, Auditor-in-Training, CTAC
Mavis Lin, Technical Specialist, CTAC

Audit Scope:

The audit will evaluate the continued adequacy, implementation, and effectiveness of the INL-CCP Quality Assurance (QA) Program activities and technical activities related to headspace gas (HSG) analysis of Summary Category Group (SCG) S5000 debris waste; solids analysis of SCG S3000 homogeneous solids and S4000 soils/gravel waste; generation-level data validation and verification; and SUMMA® canister preparation and certification for use by other generator sites. The specific items to be evaluated are listed under Activities to be Audited.

Activities to be Audited:

Quality Assurance Activities:
- Nonconformances
- Personnel Qualification and Training
- QA Records
- Sample Control
Technical Elements:

- Generation-Level Data Validation and Verification
- Headspace Gas Analysis
- Solids Analysis
- SUMMA® Sample Canister Preparation

The following areas from section C6-3 of the Hazardous Waste Facility Permit will be audited:

- Results of the previous audit
- Changes in programs or operations
- New programs or activities being implemented (if necessary)
- Changes in key personnel

See the attachment, Processes and Equipment to be Reviewed During Audit A-12-14 of INL-CCP Analytical Solids and Headspace Gas Laboratories.

Governing Documents/Requirements:

Adequacy of INL-CCP QA activities to be reviewed 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 (QAPD)

DOE/WIPP-02-3122, Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant (WAC)

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

CCP-PO-001, CCP Transuranic Waste Characterization Quality Assurance Project Plan

CCP-PO-002, CCP Transuranic Waste Certification Plan

Related QA and technical implementing procedures
Schedule of Audit Activities:

A pre-audit conference will be held Monday, June 11, 2012, at 8:00 a.m.

Audit team caucus meetings will be held Monday, Tuesday, and Wednesday, June 11, 12, and 13, 2012, at 4:00 p.m.

An audit team caucus meeting will be held Thursday, June 14, 2012, at 2:00 p.m.

Daily management briefings will be held Tuesday, Wednesday, and Thursday, June 12, 13, and 14, 2012, at 8:30 a.m. (as needed).

A post-audit conference is scheduled for Thursday, June 14, 2012, at 3:00 p.m.

All meetings will take place at a location to be determined.

Prepared by: Priscilla Y. Martinez, CTAC
Audit Team Leader

Date: 4-18-12

Concurrence by: Randy Unger, CBFO
Director, Office of Quality Assurance

Date: 19 April 2012
Processes and Equipment to Be Reviewed During Audit A-12-14 of the INL-CCP
Analytical Solids and Headspace Gas Laboratories

<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>
<td></td>
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<tr>
<td></td>
<td><strong>PREVIOUSLY APPROVED PROCESSES OR EQUIPMENT</strong></td>
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<tr>
<td></td>
<td><strong>Headspace Gas</strong></td>
<td></td>
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</tr>
<tr>
<td>12HE4</td>
<td>Environmental Chemistry Lab (ECL) – Headspace gas volatile organic compounds specified in Procedure CCP-TP-175 Equipment = GC/MS-H</td>
<td>DEBRIS (S5000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>12HE6</td>
<td>Environmental Chemistry Lab (ECL) – Headspace gas volatile organic compounds specified in Procedure CCP-TP-173 Equipment = GC-2</td>
<td>DEBRIS (S5000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>12HE10</td>
<td>Environmental Chemistry Lab (ECL) – Headspace gas volatile organic compounds specified in Procedure CCP-TP-175 Equipment = GC/MS-I</td>
<td>DEBRIS (S5000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>12HE11</td>
<td>Environmental Chemistry Lab (ECL) – Headspace gas volatile organic compounds specified in Procedure CCP-TP-175 Equipment = GC/MS-J</td>
<td>DEBRIS (S5000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td><strong>Solids</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12HA3</td>
<td>Analytical Chemistry Laboratory (ACL) – Total non-halogenated volatile organic compounds specified in Procedure CCP-TP-186 Equipment = GC-1</td>
<td>SOILS/GRAVEL (S4000)</td>
<td>YES</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HOMOGENEOUS SOLIDS (S3000)</td>
<td></td>
<td></td>
</tr>
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## Processes and Equipment to Be Reviewed During Audit A-12-14 of the INL-CCP Analytical Solids and Headspace Gas Laboratories

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<tbody>
<tr>
<td>12HA8</td>
<td>Analytical Chemistry Laboratory (ACL) – Total purgable volatile organic compound analysis specified in Procedure CCP-TP-184 Equipment = VOA-4</td>
<td>SOILS/GRAVEL (S4000) HOMOGENEOUS SOLIDS (S3000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>12HA10</td>
<td>Analytical Chemistry Laboratory (ACL) – Total semi-volatile organic compounds specified in Procedure CCP-TP-185 Equipment = SV-6</td>
<td>SOILS/GRAVEL (S4000) HOMOGENEOUS SOLIDS (S3000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>12HA12</td>
<td>Analytical Chemistry Laboratory (ACL) – Total semi-volatile organic compounds specified in Procedure CCP-TP-185 Equipment = SV-8</td>
<td>SOILS/GRAVEL (S4000) HOMOGENEOUS SOLIDS (S3000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>12HA13</td>
<td>Analytical Chemistry Laboratory (ACL) – Total purgable volatile organic compounds specified in Procedure CCP-TP-184 Equipment = VOA-5</td>
<td>SOILS/GRAVEL (S4000) HOMOGENEOUS SOLIDS (S3000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>12HA14</td>
<td>Analytical Chemistry Laboratory (ACL) – Total non-halogenated volatile organic compounds specified in Procedure CCP-TP-186 Equipment = GC-6</td>
<td>SOILS/GRAVEL (S4000) HOMOGENEOUS SOLIDS (S3000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>12HM8</td>
<td>Analytical Chemistry Laboratory (ACL) – Total metals (Hg) analysis specified in Procedure CCP-TP-181 Equipment = CVHG-2</td>
<td>SOILS/GRAVEL (S4000) HOMOGENEOUS SOLIDS (S3000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>12HM9</td>
<td>Analytical Chemistry Laboratory (ACL) – Total metals digestion specified in Procedure CCP-TP-183 Equipment = MW-3</td>
<td>SOILS/GRAVEL (S4000) HOMOGENEOUS SOLIDS (S3000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
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### Processes and Equipment to Be Reviewed During Audit A-12-14 of the INL-CCP
Analytical Solids and Headspace Gas Laboratories

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<tr>
<td>12HM10</td>
<td>Analytical Chemistry Laboratory (ACL) – Total metals digestion specified in Procedure CCP-TP-183</td>
<td>SOILS/GRAVEL (S4000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Equipment = MW-4</td>
<td>HOMOGENEOUS SOLIDS (S3000)</td>
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<tr>
<td>12HM11</td>
<td>Analytical Chemistry Laboratory (ACL) – Total metals analysis specified in Procedure CCP-TP-182</td>
<td>SOILS/GRAVEL (S4000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
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<td></td>
<td>Equipment = ICP-7</td>
<td>HOMOGENEOUS SOLIDS (S3000)</td>
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<tr>
<td>12HM12</td>
<td>Analytical Chemistry Laboratory (ACL) – Total metals (Hg) analysis specified in Procedure CCP-TP-181</td>
<td>SOILS/GRAVEL (S4000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Equipment = CVHG-3</td>
<td>HOMOGENEOUS SOLIDS (S3000)</td>
<td></td>
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</tr>
<tr>
<td>12HM13</td>
<td>Analytical Chemistry Laboratory (ACL) – Total metals analysis specified in Procedure CCP-TP-182</td>
<td>SOILS/GRAVEL (S4000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Equipment = ICP-8</td>
<td>HOMOGENEOUS SOLIDS (S3000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12HP1</td>
<td>Analytical Chemistry Laboratory (ACL) – Determination of Formaldehyde and Hydrazine by High-Performance Liquid Chromatography (HPLC) specified in Procedure CCP-TP-196 and CCP-TP-197</td>
<td>SOILS/GRAVEL (S4000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Equipment = HPLC-1</td>
<td>HOMOGENEOUS SOLIDS (S3000)</td>
<td></td>
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Processes and Equipment to Be Reviewed During Audit A-12-14 of the INL-CCP
Analytical Solids and Headspace Gas Laboratories

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<tr>
<td>N/A</td>
<td>Data Validation and Verification</td>
<td>DEBRIS (S5000) SOILS/GRAVEL (S4000) HOMOGENEOUS SOLIDS (S3000)</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>N/A</td>
<td>Sample Management as described in Procedure CCP-TP-180</td>
<td>SOILS/GRAVEL (S4000) HOMOGENEOUS SOLIDS (S3000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>SUMMA Canister Cleaning for generator/storage sites HSG sample collection, as described in Procedure CCP-TP-178</td>
<td>DEBRIS (S5000)</td>
<td>Yes</td>
<td>N/A</td>
</tr>
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