



**Department of Energy**  
 Carlsbad Field Office  
 P. O. Box 3090  
 Carlsbad, New Mexico 88221

**ENTERED**



**APR 30 2012**

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 Recertification Audit A-12-13, INL/CCP Transuranic Waste Characterization Activities**

Dear Mr. Kieling:

This letter transmits the audit plan for Carlsbad Field Office (CBFO) Recertification Audit A-12-13 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, and will be held at the INL/CCP facilities near Idaho Falls, Idaho, and the CBFO Skeen-Whitlock Building in Carlsbad, New Mexico, 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 concerning this notification, please contact Mr. Courtland G. Fesmire, P.E., Quality Assurance Engineer, at (575) 234-7548.

Sincerely,

*Jose R. Franco*  
 Jose R. Franco, Manager  
 Carlsbad Field Office

Enclosure

cc: w/enclosure  
 E. Ziemianski, CBFO  
 R. Unger, CBFO  
 G. Basabilvazo, CBFO  
 J. R. Stroble, CBFO  
 C. Fesmire, CBFO  
 N. Castaneda, CBFO  
 S. McCauslin, CBFO  
 T. Kliphuis, NMED

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T. Hall, NMED  
 S. Holmes, NMED  
 R. Maestas, NMED  
 T. Bowden, CTAC  
 M. Mager, CTAC  
 WIPP Operating Record  
 CBFO QA File  
 CBFO M&RC

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\*ED denotes electronic distribution



## CARLSBAD FIELD OFFICE AUDIT PLAN

**Audit Number:** A-12-13

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

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

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**Date and Location:** June 11 – 14, 2012  
Idaho Falls, ID, and Carlsbad, NM

**Audit Team:**

Courtland G. Fesmire	Carlsbad Field Office (CBFO), Management Representative
Tamara Bowden	Audit Team Leader, Carlsbad Field Office Technical Assistance Contractor (CTAC)
Randall Allen	Auditor, CTAC (HSG, SS, GGT, Flam Gas)
Charlie Riggs	Auditor, CTAC (VE)
Cindi Castillo	Auditor, CTAC (RTR)
Greg Knox	Auditor, CTAC (Transportation)
Rick Castillo	Auditor, CTAC (NDA and DTC)
Miles Littlefield*	Auditor, CTAC (AK)
Jack Walsh*	Auditor, CTAC (C6 QA)
Katie Martin*	Auditor, CTAC (C6 QA)
Tommy Putnam	Technical Specialist, CTAC (Transportation)
Porf Martinez	Technical Specialist/Auditor, CTAC (RTR)
Paul Gomez	Technical Specialist, CTAC (PL V&V)
Rhett Bradford	Technical Specialist, CTAC (VE)
B.J. Verret	Technical Specialist, CTAC (HSG, GGT, Flam Gas)
Dick Blauvelt*	Technical Specialist, CTAC (AK)
Jim Oliver	Technical Specialist, CTAC (NDA and DTC)
Joe Willis	Technical Specialist, WTS (Transportation)

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\*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 S3000 homogeneous solids, S4000 soils/gravel, S5000 debris, and remote-handled 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~~ solid 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**

- Project-level Data Validation and Verification (V&V)
- Acceptable Knowledge (AK)
- Waste Certification (e.g., Waste Stream Profile Form)
- 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)**

- Project-level Data Validation and Verification (V&V)
- Real-time Radiography (RTR)
- Visual Examination (VE)
- Headspace Gas (HSG) Sampling
- Solids Sampling of soils/gravels
- Sample Control
- Nondestructive Assay (NDA)

- Dose-to-Curie (DTC)
- Flammable Gas Analysis
- Gas Generation Testing (GGT)
- Container Management
- Transportation

For additional details, see the attachment, Processes and Equipment to be Reviewed During Audit A-12-13 of INL/CCP.

### **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 (QAPD)*

DOEWIPP-02-3214, *Remote-Handled TRU Waste Characterization Program Implementation Plan (WCPIP)*

DOEWIPP-02-3122, *Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant (WAC)*

TRUPACT-II Safety Analysis Report: *TRUPACT-II Authorized Methods for Payload Control (TRAMPAC)*, and the TRUPACT-II Certification of Compliance NRC 71-9281

RH-TRU 72B Safety Analysis Report: *Remote-Handled Transuranic Waste Authorized Methods for Payload Control (RH-TRAMPAC)*, and the RH-TRU 72-B Certification of Compliance 71-9212

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 (QAPjP)*

CCP-PO-002, *CCP Transuranic Waste Certification Plan*

CCP-PO-003, *CCP Transuranic Authorized Methods for Payload Control (CCP CH-TRAMPAC)*

CCP-PO-505, *CCP Remote-Handled Transuranic Waste Authorized Methods for Payload Control (CCP RH-TRAMPAC)*

CCP-PO-024, *CCP/INL Interface Document*

CCP-PO-501, *CCP/INL RH TRU Waste Interface Document*

Related INL/CCP and WTS CCP 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 through Wednesday, June 11 – 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 through Thursday, June 12 – 14, 2012, at 8:30 a.m.

A post-audit conference is scheduled for Thursday, June 14, 2012, at 3:30 p.m.

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

Prepared by: Tamara D. Bowden  
Tamara D. Bowden, CTAC  
Audit Team Leader

Date: 04/24/12

Concurrence: Richard Staveland  
for Randy Unger, CBFO  
Quality Assurance Director

Date: 4-27-2012

## Processes and Equipment to be Reviewed During Audit A-12-13 of the INL/CCP

WIPP #	Process/Equipment Description	Applicable to the Following Waste Streams/Groups of Waste Streams	Currently Approved by NMED	Currently Approved by EPA
<b>NEW PROCESSES OR EQUIPMENT</b>				
TBD	Nondestructive Examination Procedure – CCP-TP-508 Equipment – RTR-0659 Description – INTEC Real-time Radiography (RTR)	Solids (S3000)	NO	NO
<b>PREVIOUSLY APPROVED PROCESSES OR EQUIPMENT</b>				
14VE1	Visual Examination (VE) Procedure – CCP-TP-006 Description – Visual Examination Technique (VET)	Solids (S3000) Soils (S4000) Debris (S5000)	YES	YES
14RHVE1	Visual Examination Procedure – CCP-TP-500 Description - The VE of audio/video media process used for a total of 70 retrievably stored remote-handled (RH) debris waste drums	Solids (S3000) Soils (S4000) Debris (S5000)	YES	YES
14RR2	Nondestructive Examination Procedure – CCP-TP-053 Equipment – MCS RTR-5 Description – MCS Real-time Radiography (RTR) Mobile Characterization (RTR-5) System	Solids (S3000) Debris (S5000)	YES	YES
14RRH1	Nondestructive Examination Procedure – CCP-TP-508 Equipment – RTR-RTR-0659 Description – VJ Technologies, Real-time Radiography Characterization (RTR-RTR-0659) System	Debris (S5000)	YES	YES
N/A	Acceptable Knowledge	Solids (S3000) Soils (S4000) Debris (S5000)	YES	YES

## Processes and Equipment to be Reviewed During Audit A-12-13 of the INL/CCP

WIPP #	Process/Equipment Description	Applicable to the Following Waste Streams/Groups of Waste Streams	Currently Approved by NMED	Currently Approved by EPA
N/A	Solids/Soils and Gravel Sampling and Custody for CH	Solids (S3000) Soils (S4000)	YES	N/A
N/A	Solids/Soils and Gravel Sampling and Custody for RH	Solids (S3000)	YES	N/A
N/A	SUMMA <sup>®</sup> Headspace Gas (HSG) Sampling and Custody	Debris (S5000)	YES	N/A
N/A	Data Validation and Verification	Solids (S3000) Soils (S4000) Debris (S5000)	YES	YES
N/A	WIPP Waste Information System (WWIS)	Solids (S3000) Soils (S4000) Debris (S5000)	YES	YES
14SHC1	Nondestructive Assay Procedure – CCP-TP-146 Description – CCP Super High Efficiency Neutron Counter	Solids (S3000) Debris (S5000)	N/A	YES
14HENC1	Nondestructive Assay Procedure – CCP-TP-107 Description – CCP High Efficiency Neutron Counter	Solids (S3000) Soils (S4000) Debris (S5000)	N/A	YES
14SGRS1	Nondestructive Assay Procedure – CCP-TP-115 Description – Stored Waste Examination Pilot Plant (SWEPP) Gamma Ray Spectrometer (SGRS)	Solids (S3000) Soils (S4000) Debris (S5000)	N/A	YES

## Processes and Equipment to be Reviewed During Audit A-12-13 of the INL/CCP

WIPP #	Process/Equipment Description	Applicable to the Following Waste Streams/Groups of Waste Streams	Currently Approved by NMED	Currently Approved by EPA
14WAGS1	Nondestructive Assay Procedure – CCP-TP-019 Description – Waste Assay Gamma Spectrometer	Solids (S3000) Soils (S4000) Debris (S5000)	N/A	YES
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 La <sub>3</sub> Br(Ce) gamma detector  Procedure CCP-TP-504	Solids (S3000) Debris (S5000)	N/A	YES
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