



## CARLSBAD FIELD OFFICE AUDIT PLAN

**Audit Number:** A-11-10

**Organization to be Audited:** Hanford Site, Washington TRU Solutions, LLC  
(WTS) Central Characterization Project (CCP)

**Organizations to be Notified:** Hanford Site  
WTS  
New Mexico Environment Department (NMED)  
Defense Nuclear Facilities Safety Board (DNFSB)  
U.S. Environmental Protection Agency (EPA)

**Date and Location:** April 5 – 7, 2011  
Hanford Site and Carlsbad, New Mexico

**Audit Team:**

Earl Bradford	Audit Team Leader, CBFO Technical Assistance Contractor (CTAC)
Charlie Riggs	Auditor, CTAC
Prissy Martinez	Auditor, CTAC
Nick Wade	Auditor, CTAC
Rick Castillo**	Auditor, CTAC (C6-1 QA)
Katie Martin**	Auditor, CTAC (C6-1 QA)
Cindi Castillo	Auditor, CTAC
Tammy Bowden	Auditor, CTAC
Dick Blauvelt **	Technical Specialist, CTAC (AK)
Paul Gomez**	Technical Specialist, CTAC (PL Data V&V)
B. J. Verret	Technical Specialist, CTAC
James Oliver	Technical Specialist, CTAC
Rhett Bradford	Technical Specialist, CTAC
Porf Martinez	Technical Specialist, CTAC
Tommy Putnam	Technical Specialist, CTAC
Joe Willis	Technical Specialist, WTS

\*\* Identifies personnel auditing in Carlsbad, NM

### Audit Scope:

The audit team will evaluate the adequacy, implementation, and effectiveness of the Hanford/CCP technical and quality assurance (QA) activities performed at Hanford for characterization and certification of contact-handled (CH) S3000 solids waste and S5000 debris waste. The audit team will also evaluate transportation activities performed at Hanford for shipping of CH transuranic (TRU) waste to the Waste Isolation Pilot Plant (WIPP).

See the attached "Process and Equipment to be Audited During Audit A-11-10 of Hanford/CCP" for additional details.

### **Governing Documents/Requirements**

Evaluation of the overall program adequacy and effectiveness of Hanford/CCP documents will be based on the current revisions of the following documents:

- *Quality Assurance Program Document (QAPD)*, DOE/CBFO-94-1012
- *Hazardous Waste Facility Permit (HWFP)*, Waste Isolation Pilot Plant EPA No. NM4890139088-TSDF, the New Mexico Environment Department
- *Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant (WAC)*, DOEWIPP-02-3122
- *TRUPACT-II Safety Analysis Report: TRUPACT-II Authorized Methods for Payload Control (TRAMPAC)*, and the TRUPACT-II Certification of Compliance, NRC 71-9281
- *Waste Isolation Pilot Plant Flammable Gas Analysis*, DOEWIPP-06-3345

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

- *CCP Transuranic Waste Quality Assurance Characterization Project Plan (QAPjP)*, CCP-PO-001
- *CCP Transuranic Waste Certification Plan*, CCP-PO-002
- *CCP Transuranic Authorized Methods for Payload Control (CCP CH-TRAMPAC)*, CCP-PO-003
- Related CCP quality assurance 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

**Quality Assurance**

The following general areas from section C6-1 of the HWFP:

- Nonconformances
- Personnel Qualification and Training
- Records

**Technical Activities**

- Generation and Project Level Data Validation & Verification (V&V)
- Acceptable Knowledge (AK)
- Real-time Radiography (RTR)
- Visual Examination (VE)
- Headspace Gas (HSG) Sampling
- Nondestructive Assay (NDA)
- Waste Certification (e.g., Waste Stream Profile Form)
- WIPP Waste Information System (WWIS)/Waste Data System (WDS)
- Transportation (including Flammable Gas Analysis)

**Schedule of Audit Activities:**

A pre-audit conference is scheduled for Tuesday, April 5, 2011, at 8:00 a.m.

Audit team caucus meetings will be held Tuesday, April 5, and Wednesday, April 6, 2011, at 4:00 p.m., and Thursday, April 7, 2011, at 2:00 p.m.

The audit team leader will conduct a management briefing with appropriate Hanford Site and CCP management personnel Wednesday, April 6, and Thursday, April 7, 2011, at 8:30 a.m.

A post-audit conference is scheduled for Thursday, April 7, 2011, at 4:00 p.m.

All meetings will take place at the designated locations at the Hanford Site and in Carlsbad, New Mexico.

Prepared by:   
Earl Bradford, CTAC  
Audit Team Leader

Date: 3/1/2011

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

Date: 3-2-2011

**Processes and Equipment to be Audited During  
Audit A-11-10 of the Hanford/CCP**

<b>WIPP #</b>	<b>Process/Equipment Description</b>	<b>Applicable to the Following Waste Streams/Groups of Waste Streams</b>	<b>Currently Approved by NMED</b>	<b>Currently Approved by EPA</b>
<b>NEW EQUIPMENT</b>				
18HERTR	High-Energy Real-Time Radiography System – 55/85-gallon drums and SWBs Procedure – CCP-TP-198	Debris (S5000) Solids (S3000)	NO	NO
18SHENC	Super High Efficiency Neutron Counter “A” Platform (SHENC) Procedure – CCP-TP-0137	Debris (S5000) Solids (S3000)	N/A	NO
<b>NEW PROCESSES</b>				
<b>CONTACT-HANDLED (CH) S3000 SOLIDS WASTE</b>				
N/A	Acceptable Knowledge Procedure – CCP-TP-002 and CCP-TP-005	Solids (S3000)	NO	NO
N/A	Data Generation and Project Level Validation & Verification (V&V) Procedure – CCP-TP-001	Solids (S3000)	NO	NO
N/A	Solids Sampling and Analysis <sup>1</sup>	Solids (S3000)	NO	NO
18GEAA	Radiological Characterization by NDA – Hanford Gamma Energy Assay System Unit A – 55-gallon drums Procedure – CCP-TP-071	Solids (S3000)	N/A	NO
18GEAB	Radiological Characterization by NDA – Hanford Gamma Energy Assay System Unit B – 55-gallon drums Procedure – CCP-TP-071	Solids (S3000)	N/A	NO

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18HERTR	High-Energy Real-Time Radiography System – 55/85-gallon drums and SWBs Procedure – CCP-TP-053	Solids (S3000)	NO	NO
18RTRA	Real-Time Radiography System – 55-gallon drums Procedure – CCP-TP-053	Solids (S3000)	NO	NO
18RTRB	Real-Time Radiography System – 55-gallon drums Procedure – CCP-TP-053	Solids (S3000)	NO	NO
N/A	WIPP Waste Information System (WWIS)/Waste Data System (WDS) Procedure – CCP-TP-030	Solids (S3000)	YES	YES
<b>PREVIOUSLY APPROVED PROCESSES OR EQUIPMENT</b>				
N/A	Acceptable Knowledge Procedure – CCP-TP-002 and CCP-TP-005	Debris (S5000)	YES	YES
18RTRA	Real-Time Radiography System – 55-gallon drums Procedure – CCP-TP-053	Debris (S5000)	YES	YES
18RTRB	Real-Time Radiography System – 55-gallon drums Procedure – CCP-TP-053	Debris (S5000)	YES	YES

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N/A	Headspace Gas Sampling Procedure – CCP-TP-093	Debris (S5000)	YES	YES
N/A	Data Generation and Project Level Validation & Verification (V&V) Procedure – CCP-TP-001	Debris (S5000)	YES	YES
N/A	WIPP Waste Information System (WWIS)/Waste Data System (WDS) Procedure – CCP-TP-030	Debris (S5000)	YES	YES
18GEAA	Hanford Gamma Energy Assay System Unit A – 55-gallon drums Procedure –CCP-TP-071	Debris (S5000)	N/A	YES
18GEAB	Hanford Gamma Energy Assay System Unit B – 55-gallon drums Procedure –CCP-TP-071	Debris (S5000)	N/A	YES
18RLVE	Visual Examination Process – SWB and 55-gallon drums Procedure –CCP-TP-113	Debris (S5000)	YES	YES
N/A	Quality Assurance	Debris (S5000)	N/A	YES

<sup>1</sup> Solids Sampling and Analysis - Coring is performed by AMWTP, core samples are analyzed by INL/CCP Labs

<sup>2</sup> Headspace Gas Sample Analysis is performed by INL/CCP Labs