



United States Government

Department of Energy

# memorandum

 Carlsbad Field Office  
 Carlsbad, New Mexico 88221

DATE: JUN 13 2012

REPLY TO  
ATTN OF: CBFO:OQA:CF:CC:12-1424:UFC 2300.00

SUBJECT: Recertification Audit A-12-12 of the LANL/CCP

TO: Lee Bishop, Los Alamos Site Office



Please be advised that an audit team from the Carlsbad Field Office (CBFO) will conduct Waste Isolation Pilot Plant Hazardous Waste Facility Permit Attachment C6 Audit A-12-12 of the Los Alamos National Laboratory (LANL) site and services of the Washington TRU Solutions, Central Characterization Project (CCP), for the recertification of contact-handled transuranic waste characterization activities. The audit, which is scheduled for June 24-26, 2012, will be conducted in accordance with the attached audit plan. Representatives from the New Mexico Environment Department may be present to observe the audit.

Your representatives are requested to coordinate with the audit team and provide them access to the LANL/CCP facilities and appropriate space to conduct meetings. Also, please make cognizant personnel available to support the audit as well as provide access to appropriate documentation and records.

If you have any questions, please contact me at (575) 234-7548.

Courtland G. Fesmire, P.E.  
Quality Assurance Engineer

## Attachment

cc: w/attachment

R. Unger, CBFO	*ED	J. Kieling, NMED	ED
J.R. Stroble, CBFO	ED	T. Kliphuis, NMED	ED
N. Castaneda, CBFO	ED	S. Holmes, NMED	ED
M. Sensibaugh, WTS/CCP	ED	R. Maestas, NMED	ED
V. Cannon, WTS/CCP	ED	T. Kesterson, NMED/DOE OB	ED
A.J. Fisher, WTS/CCP	ED	J. Marple, NMED/DOE OB	ED
I. Quintana, WTS/CCP	ED	D. Winters, DNFSB	ED
M. Walker, WTS/CCP	ED	P. Gilbert, LANL-CO	ED
Y. Salmon, WTS CCP	ED	G. Lyshik, LANL-CO	ED
J. Carter, WTS/CCP	ED	G. Knox, CTAC	ED
G. Rael, LASO	ED	M. Mager, CTAC	ED
T. Peake, EPA	ED	G. White, CTAC	ED
M. Eagle, EPA	ED	WIPP Operating Record	ED
E. Feltcorn, EPA	ED	CBFO QA File	
R. Joglekar, EPA	ED	CBFO M&RC	
S. Ghose, EPA	ED	*ED denotes electronic distribution	
R. Lee, EPA	ED		



**CARLSBAD FIELD OFFICE AUDIT PLAN**

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

**Organization to be Audited:** Los Alamos National Laboratory (LANL), Washington TRU Solutions, LLC (WTS) Central Characterization Project (CCP)

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

**Date and Location:** July 24 – 26, 2012  
Los Alamos, New Mexico  
Carlsbad, New Mexico

**Audit Team:**

Courtland Fesmire	Audit Team Management Representative Carlsbad Field Office (CBFO)
Greg Knox	Audit Team Leader, CBFO Technical Assistance Contractor (CTAC)
Rick Castillo	Auditor, CTAC
Earl Bradford	Auditor, CTAC
Cindy Castillo	Auditor, CTAC
Berry Pace	Auditor, CTAC
Tammy Bowden	Auditor, CTAC
Tommy Putnam	Auditor, CTAC
Katie Martin	Auditor, CTAC
Porf Martinez	Auditor/Technical Specialist, CTAC
Dick Blauvelt	Technical Specialist, CTAC
Paul Gomez	Technical Specialist, CTAC
Mavis Lin	Technical Specialist, CTAC
Rhett Bradford	Technical Specialist, CTAC
James Oliver	Technical Specialist, CTAC
B. J. Verret	Technical Specialist, CTAC
Joe Willis	Technical Specialist, WTS

**Audit Scope:**

The audit team will evaluate the continued adequacy, implementation, and effectiveness of the CCP quality assurance (QA), technical, and transportation activities performed at LANL for characterization, certification, and transportation of contact-handled (CH) Summary Category Group (SCG) S3000 homogeneous solids waste and SCG S5000 debris waste. See the attachment, "Processes and Equipment to be Evaluated During Audit A-12-12 of the LANL/CCP," for additional details.

In addition to recertification of existing processes, the CBFO Office of the National TRU Program (NTP) has requested initial certification of retrievably stored CH SCG S4000 soils/gravel waste, and evaluation for calibration extension of the certified High-Efficiency

Neutron Counter #1 to assay a population of lead-lined 55-gallon drums and evaluation for extension of the calibration range of the certified Super High-Efficiency Neutron Counter with high resolution gamma spectrometry measurement to 2.5 g/cc.

### **Governing Documents/Requirements**

Overall program adequacy and effectiveness of the LANL/CCP processes will be based on the current revisions of the following documents.

- DOE/CBFO-94-1012, *Quality Assurance Program Document (QAPD)*
- Hazardous Waste Facility Permit Waste Isolation Pilot Plant, EPA No. NM4890139088-TSDF, the New Mexico Environment Department
- DOE/WIPP-02-3122, *Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant*
- *Contact-Handled Transuranic Waste Authorized Methods for Payload Control (CH-TRAMPAC)*

Programmatic and technical checklists will be developed from 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*
- CCP-PO-003, *CCP Transuranic Authorized Methods for Payload Control (CCP CH-TRAMPAC)*
- CCP-PO-012, *CCP/LANL Interface Document*
- Related 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 and C6-3 and General Quality Assurance Program Elements**

- Personnel Qualification and Training
- Nonconformances
- Records
- Identification and Control of Items
- Documents/Records Control (notebooks/logbooks)

#### **Technical**

- Acceptable Knowledge (AK)
- Generation and Project-Level Data Validation and Verification (V&V)
- Headspace Gas (HSG) Sampling
- Visual Examination (VE)
- Visual Examination Technique (VET), Off-Site Source Recovery Program

- Real-time Radiography (RTR)
- Nondestructive Assay (NDA) and participation in the Performance Demonstration Program (PDP)
- WIPP Waste Information System (WWIS)/Waste Data System (WDS)
- Waste Certification (e.g., Waste Stream Profile Form)

**Transportation**

- Flammable Gas Analysis
- Waste Certification
- Load Management
- Payload Assembly and Loading
- Packaging Operations
- Leak Testing
- Shipping Documentation
- Shipping
- Container Management

**Schedule of Audit Activities:**

A pre-audit conference will be scheduled for Tuesday, July 24, 2012, at 8:30 a.m.

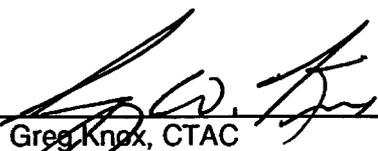
Audit team caucus meetings will be held Tuesday, July 24 and Wednesday July 25, at 3:30 p.m., and Thursday, July 26, 2012, at 2:00 p.m.

The audit team will brief appropriate LANL and CCP management on Wednesday, July 25, and Thursday, July 26, 2012, at 8:30 a.m.

A post-audit conference is scheduled for Thursday, July 26, 2012, at 4:00 p.m.

All meetings will take place at designated LANL and CBFO locations to be determined by LANL/CCP management.

Prepared by:

  
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Greg Knox, CTAC  
Audit Team Leader

Date: 5 JUN 2012

Concurrence:

  
\_\_\_\_\_  
Randy Unger, CBFO  
Director, Office of Quality Assurance

Date: 12 Jun 12

**Processes and Equipment to be Evaluated During Audit A-12-12 of the LANL/CCP**

WIPP #	Process/Equipment Description	Applicable to the Following Waste Streams/Groups of Waste Streams	Currently Approved by NMED	Currently Approved by EPA
<b>PROCESSES TO BE EVALUATED FOR INITIAL CERTIFICATION</b>				
11RR2	Real-Time Radiography (RTR) Procedure(s) – CCP-TP-053 and CCP-TP-028 Description – Real-Time Radiography (RTR) Mobile Characterization System [built by VJ Technologies] 55-gallon drums	Soils/Gravel (S4000)	NO	NO
11HERTR3	High Energy Real Time Radiography (HERTR) Procedures CCP-TP-053 and CCP-TP-028 Description – High Energy Real-Time Radiography (RTR) [built by VJ Technologies] 55-gallon drums and SWBs	Soils/Gravel (S4000)	NO	NO
11HC1	Nondestructive Assay Procedure – CCP-TP-064 Description – Canberra Industries High-Efficiency Neutron Counter (HENC) mounted in a transportation container	Soils/Gravel (S4000)	N/A	NO
11HC2	Nondestructive Assay Procedure – CCP-TP-064 Description – Canberra Industries High-Efficiency Neutron Counter (HENC) mounted in a trailer	Soils/Gravel (S4000)	N/A	NO
11SHC1	Nondestructive Assay Procedure – CCP-TP-059 and CCP-TP-103 Description – Super High-Efficiency Neutron Counter mounted in a trailer, SWBs	Soils/Gravel (S4000)	N/A	NO

## Processes and Equipment to be Evaluated During Audit A-12-12 of the LANL/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	WWIS/WDS Procedure – CCP-TP-030 Description – CH TRU Waste Characterization and WWIS Data Entry	Soils/Gravel (S4000)	NO	NO
N/A	Quality Assurance Program	Soils/Gravel (S4000)	N/A	NO
<b>PREVIOUSLY APPROVED PROCESSES OR EQUIPMENT</b>				
N/A	Headspace Gas Sampling Procedure – CCP -TP-093 Description – Headspace Gas Sampling (HSG)	Debris (S5000)	YES	N/A
11RR1	Real-Time Radiography (RTR) Procedure(s) – CCP-TP-053 and CCP-TP-028 Description – Real-Time Radiography (RTR) Mobile Characterization System [built by VJ Technologies] 55-gallon drums	Solids (S3000) Debris (S5000)	YES	YES
11RR2	Real-Time Radiography (RTR) Procedures – CCP-TP-053 and CCP-TP-028 Description – Real-Time Radiography (RTR) Mobile Characterization System [built by VJ Technologies] 55-gallon drums	Solids (S3000) Debris (S5000)	YES	YES
11HERTR3	High Energy Real-Time Radiography (HERTR) Procedures CCP-TP-053 and CCP-TP-028 Description – High Energy Real-Time Radiography (RTR) [built by VJ Technologies] 55-gallon drums and SWBs	Solids (S3000) Debris (S5000)	YES	YES

## Processes and Equipment to be Evaluated During Audit A-12-12 of the LANL/CCP

WIPP #	Process/Equipment Description	Applicable to the Following Waste Streams/Groups of Waste Streams	Currently Approved by NMED	Currently Approved by EPA
11VE1	CH Visual Examination Procedure – CCP-TP-113 Description – CH Characterization performed utilizing Visual Examination (VE) and Acceptable Knowledge (AK)	Solids (S3000) Debris (S5000)	YES	YES
11VE2	Off-Site Source Recovery Program Procedure(s) – CCP-TP-069 and CCP-TP-101 Description – Characterization performed utilizing Visual Examination (VE) and Acceptable Knowledge (AK)	Debris (S5000)	YES	YES
N/A	Acceptable Knowledge Procedure – CCP-TP-005 Description – Acceptable Knowledge (AK)	Solids (S3000) Debris (S5000)	YES	YES
N/A	Data Verification and Validation Procedure(s) – CCP-TP-001, CCP-TP-002, CCP-TP-003, CCP-TP-103, CCP-TP-162	Solids (S3000) Debris (S5000)	YES	YES
11HC1	Nondestructive Assay Procedure – CCP-TP-064 Description – Canberra Industries High Efficiency Neutron Counter (HENC) mounted in a transportation container	Solids (S3000) Debris (S5000)	N/A	YES
11HC2	Nondestructive Assay Procedure – CCP-TP-064 Description – Canberra Industries High Efficiency Neutron Counter (HENC) mounted in a trailer	Solids (S3000) Debris (S5000)	N/A	YES

**Processes and Equipment to be Evaluated During Audit A-12-12 of the LANL/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>
11SHC1	Nondestructive Assay Procedure – CCP-TP-059 and CCP-TP-103 Description – Super High-Efficiency Neutron Counter mounted in a trailer, SWBs	Solids (S3000) Debris (S5000)	N/A	YES
N/A	WWIS/WDS Procedure – CCP-TP-030 Description – CH TRU Waste Characterization and WWIS Data Entry	Solids (S3000) Debris (S5000)	YES	YES
N/A	Transportation Procedure(s) – CCP-TP-054, CCP-TP-055, CCP-TP-086, DOE/WIPP-02-3184, DOE/WIPP-02-3220, DOE/WIPP-02-3183	Solids (S3000) Debris (S5000)	N/A	N/A
11HG2	Flammable Gas Analysis Procedure – DOE/WIPP-06-3345 Description – Flammable Gas Analysis (FGA)	Solids (S3000) Debris (S5000)	N/A	N/A
N/A	Headspace Gas Sampling Procedure – CCP-TP-093 Description – Summa Sampling only	Debris (S5000)	N/A	N/A
N/A	Quality Assurance Program	Solids (S3000) Debris (S5000)	N/A	YES