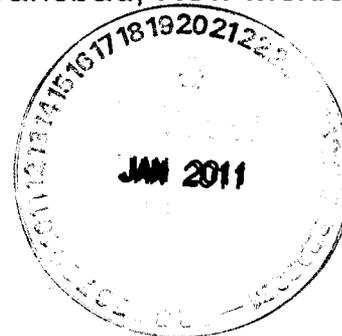


United States Government

Department of Energy

memorandum

Carlsbad Field Office
Carlsbad, New Mexico 88221

DATE: JAN 20 2011

REPLY TO
ATTN OF: CBFO:NTP:JRS:GS:11-0102:UFC 5900.00

SUBJECT: Hanford-CCP Initial Certification Audit A-10-07

TO: Larry Romine, DOE-Richland
Farok Sharif, General Manager, WTS

The Carlsbad Field Office (CBFO) has completed the initial certification audit of the Central Characterization Project (CCP) TRU waste program deployed at the Hanford Site (hereinafter referred to as Hanford-CCP) to certify Summary Category Group (SCG) debris (S5000) waste. Audit A-10-07 conducted April 6-8, 2010 at Hanford Site, near Richland, Washington. The quality assurance program and TRU waste characterization and certification activities were determined to be adequate, satisfactorily implemented and effective.

The audit team determined that the Hanford-CCP TRU programs were in compliance with the "Waste Analysis Plan" (WAP) of the *WIPP Hazardous Waste Facility Permit* (HWFP), DOE/WIPP-02-3214, the *Quality Assurance Program Document* (QAPD), and the *Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant* (WIPP WAC).

CBFO Surveillance S-10-19 of the Hanford/CCP transportation activities Surveillance S-10-19 was evaluated at the Hanford Site facility on March 30-31, 2010. The Hanford/CCP transportation activities were found to be adequate, satisfactorily implemented and effective.

CBFO Surveillance S-10-32 of the Hanford/CCP Headspace Gas Waste Sampling activities was performed at the Hanford Site facility on July 13, 2010. The Hanford/CCP Headspace Gas Waste Sampling activities were found to be adequate, satisfactorily implemented and effective.

CBFO Surveillance S-10-35 of the Hanford/CCP Visual Examination Follow-Up Activities was performed on July 13, 2010. The Hanford/CCP Visual Examination activities were found to be adequate, satisfactorily implemented and effective.

The CCP Quality Assurance Program (QAP) was audited during Audit A-10-11 on March 2-4, 2010 in Carlsbad, New Mexico. The evaluation was found to be adequate, satisfactorily implemented and effective.

Based on the result of Audits A-10-07, A-10-11, S-10-32, S-10-35 and S-10-19, conditions and limitations provided by the New Mexico Environment Department (NMED) and the U.S. Environmental Protection Agency (EPA), the CBFO is granting authority at the Hanford-CCP for TRU waste characterization, certification and transportation activities as identified in Table 1 of this memo.

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Based on further discussions with EPA on their December 21, 2010 letter, CBFO is granting authority at the Hanford-CCP on the condition that CBFO, EPA, NMED and CCP work together to resolve an EPA concern with documentation of calculations. EPA expressed a concern in their baseline inspection at Hanford about documentation of calculations. Upon agreement of the methods to be used in NDE for reporting liquids, this certification letter will be updated, if necessary.

Table 1 – Hanford-CCP CH Approved Waste Characterization Processes		
Characterization Process	CH S5000 Debris	
	Newly generated	Retrievably-Stored
Acceptable Knowledge	Approved	Approved
Load Management	N/A	N/A
Data Validation & Verification (V&V)	Approved	Approved
Visual Examination	Approved	Approved
Solids Sampling & Analysis	N/A	N/A
Headspace Gas Sampling (Summa [®]) ¹	Approved	Approved
Nondestructive assay (NDA)	Approved	Approved
Real-time Radiography (RTR)	Approved	Approved
Dose-to-Curie (DTC)	N/A	N/A
WIPP Waste Information System (WWIS)	Approved	Approved

¹ Analysis is performed by the Idaho National Laboratory, which is approved under a separate certification.

TRU waste characterization, certification, or transportation activities using significantly revised or new processes, procedures, or systems must be evaluated by the CBFO prior to their implementation. Included in this memo are the following attachments:

- *Attachment 1* describes the CCP certification program status,
- *Attachment 2* contains the list of equipment certified at the site,
- *Attachment 3* contains the list of CCP certified procedures, and
- *Attachment 4* describes specific CCP waste characterization process elements that must be reported. These process elements are identified as Tier 1 changes and Tier 2 changes. The Hanford-CCP shall not ship for disposal at WIPP any wastes affected by a Tier 1 process element change without prior CBFO approval, and CCP shall report Tier 2 changes to CBFO on a quarterly basis.


Edward Ziemianski (for)
Acting Manager

Attachment(s)

cc: w/attachments

- J. R. Stroble, CBFO ED
- C. Fesmire, CBFO ED
- N. Castaneda, CBFO ED
- D. Miehl, CBFO ED
- M. Navarrete, CBFO ED
- G. Basabilvazo, CBFO ED
- S. McCauslin, CBFO ED
- J. Edwards, EPA ED
- T. Peake, EPA ED
- E. Feltcorn, EPA ED
- R. Joglekar, EPA ED
- R. Lee, EPA ED
- S. Zappe, NMED ED
- F. Sharif, WTS ED
- D. Haar, WTS ED
- D. Ploetz, WTS ED
- M. Percy, WTS ED
- M. Sensibaugh, WTS ED
- R. Reeves, WTS ED
- V. Waldram, WTS ED
- R. Chatfield, WTS ED
- J. Harvill, WTS ED
- D. Hofer, WTS ED
- C. Kirkes, WTS ED
- D. Kump, WTS ED
- D. Speed, WTS ED
- D. Standiford, WTS ED
- M. Strum, WTS ED
- P. Martinez, CTAC ED
- C. Riggs, CTAC ED
- P. Gilbert, LANL ED
- G. Lyshik, LANL ED

CTAC Controlled Document Coordinator
RCRA Operating Record
CBFO M&RC

*ED denotes electronic distribution

**CENTRAL CHARACTERIZATION PROJECT DEPLOYMENT AT
HANFORD
CERTIFICATION PROGRAM STATUS**

The CBFO Director of the Office of the National TRU Program and the CBFO Director of Quality Assurance have evaluated the documentation supporting the compliance of the Central Characterization Project (CCP) TRU waste program deployed at the Hanford site (hereinafter referred to as Hanford-CCP), Attachments 2 and 3 provide complete lists of certified processes, procedures, documents, and systems deployed at the Hanford-CCP. Attachment 4 is the CH Tiering of TRU Waste Characterization Processes Implemented by the CCP at Hanford.

STATUS

- All program elements remain complete.
- The following site documents are current and demonstrate how the CCP complies with the CBFO requirements.
 - **CCP-PO-001, CCP Transuranic Waste Characterization Quality Assurance Project Plan**
 - **CCP-PO-002, CCP Transuranic Waste Certification Plan QAP – Section 4.0 of CCP-PO-002**
 - **CCP-PO-003, CCP Transuranic Authorized Methods For Payload Control (CCP CH-TRAMPAC)**
- Certified Systems – see Attachment 2 for the complete list of certified systems used by the CCP at the Hanford.
- Standard Operating Procedures – see Attachment 3 for the complete list of certified procedures used by the CCP at the Hanford.
- Tiering of the CH TRU Waste Characterization Processes – see Attachment 4 for the implementation by CCP at Hanford (based on EPA Baseline Inspections).

- CCP participated in the following performance demonstration program (PDP) for Audit A-10-07:
 - **HSG PDP (CCP-INL)** - SUMMA sampling is performed by CCP, analysis is performed by the Idaho National Laboratory, which is approved under a separate certification.
 - **NDA PDP Cycle 17A** - Approved for using the GEA-A (HA01/HAG1) and GEA-B (HA02/HAG2).
- The Final Audit Report on A-10-07 initial certification was issued on July 23, 2010.
 - CAR 10-019, CAR 10-020, and CAR 10-021 were issued on April 20, 2010.
 - CAR 10-019 was closed on July 20, 2010.
 - CAR 10-020 was closed on June 18, 2010.
 - CAR 10-021 was closed on June 18, 2010.
 - Surveillance S-10-35 Report was issued on July 20, 2010 evaluating CAR10-019 implementation and effectiveness.
 - The Interim Audit Report was issued on May 5, 2010.
 - NMED approval on Audit A-10-07 was issued on September 2, 2010.
 - EPA approval of the Baseline Report was issued on December 21, 2010.
- Surveillance Report S-10-19 for transportation at the Hanford Site under CCP was issued on April 8, 2010.
- Surveillance Report S-10-32 of the Hanford/CCP Headspace Gas Waste Sampling was issued on July 20, 2010.
- The Final Audit Report for A-10-11 for the CCP Quality Assurance Program (QAP) was issued on March 16, 2010.
- The EPA concurred on the initial certification memo on January 20, 2011.

RECOMMENDATION

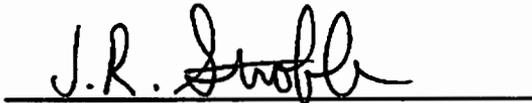
The recommendation to the CBFO Manager is to grant CCP-Hanford the authority for TRU waste characterization, certification, and transportation activities of contact-handled (CH) (S5000) debris waste. Attachments 2, 3 and 4 list the systems and procedures that constitute the bounds of this authority.

CONCURRENCE



Martin P. Navarrete, Acting Director
CBFO Quality Assurance

1-5-11
Date



J. R. Stroble, Director
Office of the National TRU Program

1-5-11
Date

CENTRAL CHARACTERIZATION PROJECT LIST OF EQUIPMENT AND PROCESSES AT HANFORD					
WIPP WWIS #	Site Equipment # or Title	Description	Components	Software	NDA Operating Range
Nondestructive Assay					
18GEAA	Hanford GEA Unit A	Gamma Energy Assay– 55 gallon drums Procedure CCP-TP-071	<input type="checkbox"/> Coaxial detectors <input type="checkbox"/> LEGe detectors <input type="checkbox"/> Canberra Digital Signal Processor	<input type="checkbox"/> NDA 2000 <input type="checkbox"/> Genie 2000	≈0.01-325g Total Weapons Grade Pu
18GEAB	Hanford GEA Unit B	Gamma Energy Assay– 55 gallon drums Procedure CCP-TP-071	<input type="checkbox"/> Coaxial detectors <input type="checkbox"/> LEGe detectors <input type="checkbox"/> Canberra Digital Signal Processor	<input type="checkbox"/> NDA 2000 <input type="checkbox"/> Genie 2000	≈0.01-325g Total Weapons Grade Pu
Nondestructive Examination					
18RTRA	Hanford RTR Unit A	Real-Time Radiography System – 55 gallon drums Procedure CCP-TP-053	<input type="checkbox"/> Shielded x-ray enclosure <input type="checkbox"/> Drum manipulation equipment <input type="checkbox"/> X-ray imaging system including x- ray tube, image intensifier, and video camera <input type="checkbox"/> Video/audio recording equipment	<input type="checkbox"/> N/A	N/A
18RTRB	Hanford RTR Unit B	Real-Time Radiography System – 55 gallon drums Procedure CCP-TP-053	<input type="checkbox"/> Shielded x-ray enclosure <input type="checkbox"/> Drum manipulation equipment <input type="checkbox"/> X-ray imaging system including x- ray tube, image intensifier, and video camera <input type="checkbox"/> Video/audio recording equipment	<input type="checkbox"/> N/A	N/A
Visual Examination					
18RLVE		CCP-TP-113 CCP Standard Contact-Handled Waste Visual Examination – SWB and 55-gallon drums	<input type="checkbox"/> None	N/A	N/A
Headspace GAs					
N/A	HSG	Summa Sampling process on selected waste containers from waste stream lots. Analysis is performed by the Idaho National Laboratory (INL), which is approved under a separate certification	As defined in CCP-TP-093	As defined in CCP-TP-093	N/A

**CENTRAL CHARACTERIZATION PROJECT
LIST OF PROCEDURES AT HANFORD SITE**

#	Procedure No.	Procedure Title
1.	CCP-PO-001	CCP Transuranic Waste Certification Quality Assurance Project Plan
2.	CCP-PO-002	CCP Transuranic Waste Certification Plan
3.	CCP-PO-003	CCP TRUPACT-II Authorized Method for Payload Control (CH-TRAMPAC)
4.	CCP-PO-005	CCP Conduct of Operations
5.	CCP-PO-008	CCP Quality Assurance Interface with the WTS Quality Assurance Program
6.	CCP-PO-011	CCP/CH2M-HILL Plateau Remediation Company Interface Document
7.	CCP-QP-001	CCP Graded Approach
8.	CCP-QP-002	CCP Training and Qualification Plan
9.	CCP-QP-004	CCP Corrective Action Management
10.	CCP-QP-005	CCP TRU Nonconforming Item Reporting and Control
11.	CCP-QP-006	CCP Corrective Action Reporting and Control
12.	CCP-QP-008	CCP Records Management
13.	CCP-QP-010	CCP Document Preparation, Approval, and Control
14.	CCP-QP-011	CCP Notebooks and Logbooks
15.	CCP-QP-014	CCP Data Analysis and Trending
16.	CCP-QP-015	CCP Procurement
17.	CCP-QP-016	CCP Control of Measuring, Testing, and Data Collection Equipment
18.	CCP-QP-017	CCP Identification and Control of Items
19.	CCP-QP-018	CCP Management Assessment
20.	CCP-QP-019	CCP Quality Assurance Reporting to Management
21.	CCP-QP-021	CCP Surveillance Program
22.	CCP-QP-022	CCP Software Quality Assurance Plan
23.	CCP-QP-023	CCP Handling, Storage and Shipping
24.	CCP-QP-026	CCP Inspection Control
25.	CCP-QP-027	CCP Test Control
26.	CCP-QP-028	CCP Records Filing, Inventorying, Scheduling, and Dispositioning
27.	CCP-QP-030	CCP Written Practice for the Qualification of CCP Helium Leak Detection Personnel
28.	CCP-TP-001	CCP Project Level Data Validation and Verification
29.	CCP-TP-002	CCP Reconciliation of DQOs and Reporting Characterization Data
30.	CCP-TP-003	CCP Data Analysis for S3000, S4000, and S5000 Characterization
31.	CCP-TP-005	CCP Acceptable Knowledge Documentation
32.	CCP-TP-028	CCP Radiographic Test and Training Drum Requirements
33.	CCP-TP-030	CCP CH TRU Waste Certification and WWIS Data Entry
34.	CCP-TP-053	CCP Standard Real-Time Radiography (RTR) Inspection Procedure
35.	CCP-TP-068	CCP Container Management at Idaho National Laboratory (INL)
36.	CCP-TP-070	CCP Gamma Energy Assay (GEA) Calibration, Confirmation and Verification Procedure
37.	CCP-TP-071	CCP Gamma Energy Assay (GEA) Operating Procedure
38.	CCP-TP-072	CCP Gamma Energy Assay (GEA) Data Review, Validation and Reporting Procedure
39.	CCP-TP-082	CCP Preparing and Handling Waste Containers for Headspace Gas Sampling
40.	CCP-TP-093	CCP Sampling of TRU Waste Containers
41.	CCP-TP-106	CCP Headspace Gas Sampling Batch Data Report Preparation
42.	CCP-TP-113	CCP Standard Contact-Handled Waste Visual Examination
43.	CCP-TP-162	CCP Random Selection of Containers for Solid and Headspace Gas Sampling and Analysis
44.	CCP-TP-180	CCP Analytical Sample Management

Table 1. Tiering of TRU Waste Characterization Processes Implemented by Hanford-CCP Based on April 27-29, 2010 Site Baseline Inspection as issued on December 15, 2010		
Process Elements	Hanford-CCP T1 Changes Needing EPA Review and Approval	Hanford-CCP T2 Changes^a
Acceptable Knowledge (AK)	Implementation of load management Implementation of AK for wastes other than retrievably-stored debris (i.e., retrievably-stored soil/gravel and/or solids)	Notification to EPA upon completion of new versions or updates/ substantive changes ^b of the following: <ul style="list-style-type: none"> - Modification of CCP-TP-005, Revision 18 - Availability of modifications to the AKSR - Availability of all final WSPF with related attachments (AK 9) - Availability of all AK Accuracy Reports - Availability of successful training records - Availability of the AK-NDA memorandum
Non Destructive Assay (NDA)	New equipment or physical modifications to approved equipment ^c Extension or changes to approved calibration range for approved equipment	Notification to EPA upon completion of changes to software for approved equipment, operating range(s), and site procedures that require CBFO approval
Real-Time Radiography (RTR)	There are no T1 changes at this time	Notification to EPA upon the following: <ul style="list-style-type: none"> - Modification^c to approved equipment, RTR units A and B - Completion of changes to site RTR procedures requiring CBFO approvals - Addition of new SCG to the RTR processes that are subject to this approval Implementation of a different type of RTR equipment
Visual Examination (VE)	Performance of VE by any method other than using two trained operators to perform actual VE at the time of packaging	Notification to EPA upon the following: <ul style="list-style-type: none"> - Completion of changes to site VE procedure(s) requiring CBFO approvals - Addition of new SCG to the VE processes that are subject to this approval
Waste Data System (WDS)	There are no T1 changes at this time	Notification to EPA upon the following: <ul style="list-style-type: none"> - Completion of changes to WDS procedure(s) requiring CBFO approvals - Changes to the Excel spreadsheet titled WDS Master Template.xls, Revision 2, Addendum #2, SCO #1065
<p>^a Upon receiving EPA approval, Hanford-CCP will report all T2 changes to EPA at the end of each fiscal quarter. Note: EPA may request specific T2 change items before the end of a fiscal quarter.</p> <p>^b "Substantive changes" are changes with the potential to impact the site's waste characterization activities or documentation thereof, excluding changes that are solely related to ES&H, nuclear safety, or RCRA, or that are editorial in nature.</p> <p>^c Modifications to approved equipment include all changes with the potential to affect NDA data relative to waste isolation and exclude minor changes, such as the addition of safety-related equipment.</p>		