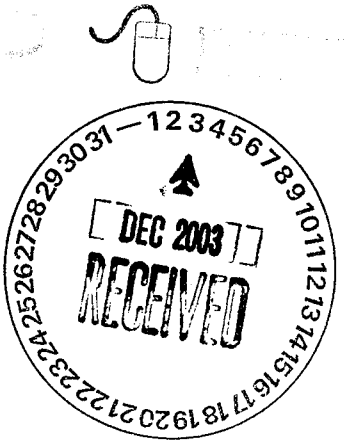
Department of Energy
Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221
December 2, 2003



Mr. Steve Zappe, Project Leader
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Bldg. 1
Santa Fe, New Mexico 87505-6303

RE: Transmittal of the Certification Audit Report for the Hanford Site, Central Characterization Project (A-03-25)

Dear Mr. Zappe:

This letter transmits the Hanford Site, Central Characterization Project (CCP) Certification Audit Report for the processes performed to characterize and certify contact handled debris waste (summary category group S5000) as required by Section II.C.2.c of the WIPP Hazardous Waste Facility Permit. The report contains the results of the certification audit performed for the processes for the characterization and certification of retrievably stored debris waste. The audit was conducted September 8-11, 2003.

I certify under penalty of law that this document and all enclosures were prepared under my direction or supervision in accordance with 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 fines and imprisonment for knowing violations.

Please contact the CBFO Quality Assurance Manager, Ava L. Holland, at (505) 234-7423 should you have any questions concerning this audit report.

Sincerely,

Harold Johnson for

Dr. Ines R. Triay
Manager

Enclosure

031204

CBFO:QA:MPN:GS:03-2966:UFC 2300.00

cc: w/o enclosure
K. Watson, CBFO *ED
A. Holland, CBFO *ED
D. Miehls, CBFO *ED
M. Navarrete, CBFO *ED
S. Martin, NMED *ED
M. French, DOE-RL *ED
D. Winter, DNFSB *ED
R. Joglekar, EPA *ED
E. Feltcorn, EPA *ED
B. Walker, EEG *ED
S. Webb, EEG *ED
D. Haar, WTS *ED
L. Greene, WRES *ED

cc: w/enclosure
C. Walker, Techlaw *ED
K. Dunbar, WRES
CBFO QA File
CBFO M&RC

*ED denotes electronic distribution
CBFO:QA:MPN:GS:03-2966:UFC 2300.00

U.S. DEPARTMENT OF ENERGY
CARLSBAD FIELD OFFICE

FINAL AUDIT REPORT
OF THE
HANFORD SITE
UTILIZING THE
CENTRAL CHARACTERIZATION PROJECT

Richland, Washington

AUDIT NUMBER A-03-25
September 8-11, 2003

FINAL AUDIT REPORT OF WASTE CHARACTERIZATION IN ACCORDANCE WITH THE HAZARDOUS WASTE FACILITY PERMIT

Prepared by: _____ **Date:** 11/26/03
Earl Bradford, CTAC
Audit Team Leader

Approved by: _____ **Date:** 12/1/03
Ava L. Holland, CBFO
Quality Assurance Manager

1.0 EXECUTIVE SUMMARY

The Central Characterization Project (CCP) was developed by Washington TRU Solutions (WTS) to provide transuranic (TRU) waste characterization, certification, and transportation services, including the necessary management and administrative functions to ensure the acceptability of these processes in accordance with regulatory requirements. The CCP provides these services under contract to those waste generator sites that request support or lack the expertise, program infrastructure, or equipment to characterize TRU waste for shipment to and disposal at the Waste Isolation Pilot Plant (WIPP). Fluor Hanford has entered into an agreement with the CCP to characterize Hanford TRU waste. The contracted services include overall management of the characterization processes, with the exception of the visual examination (VE) process, the HSG sampling and analysis process, and transportation services, which will be performed by Fluor Hanford under the Fluor Hanford approved program.

Carlsbad Field Office (CBFO) Audit A-03-25 was the initial certification audit and was conducted to evaluate the adequacy, implementation, and effectiveness of the Hanford/CCP waste characterization activities relative to the requirements detailed in the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit (HWFP). The audit was conducted at the Hanford facilities September 8-11, 2003.

The scope of the audit included assessing the adequacy, implementation, and effectiveness of the Waste Analysis Plan (WAP)-related quality assurance (QA) activities and WAP technical processes for characterization and certification of Summary Category Group S5000 debris waste (in particular, retrievably stored contact-handled debris waste).

The audit scope also included an assessment of the CCP programmatic interfaces established with Fluor Hanford, the CCP administrative controls needed to manage the characterization activities, and the physical characterization processes and activities being conducted at Fluor Hanford. Mobile real-time radiography (RTR) equipment characterization activities were evaluated, as well as, the process for developing the acceptable knowledge (AK) documentation. In addition to the CCP characterization activities, the audit team observed a demonstration of the Fluor Hanford headspace gas (HSG) dart sampling system, including the processes for insertion of the drum sampling port.

The audit team concluded that the Hanford/CCP technical and QA programs, as applicable to the audited activities, met the requirements contained in the HWFP. The deficiencies identified in the corrective action reports (CARs) discussed in Section 6 have been corrected. The audit team also concluded that the defined QA and technical processes for the audited activities were being implemented in accordance with the *CCP Transuranic Waste Characterization Quality Assurance Project Plan* (CCP QAPjP), and related CCP implementing procedures. The audited processes were found to be adequate, satisfactorily implemented and effective.

The audit team identified two conditions adverse to quality resulting in the issuance of two CBFO CARs that required corrective action in the following areas: 1) the need for additional supporting documentation in the AK summary document to demonstrate the determination that the waste was generated from defense activities; and 2) An RTR operator was coached by the subject matter expert (SME) while examining the test drum. Five Observations were identified, and seven Recommendations are being offered for CCP management consideration. The CARs are described in Section 6.0, and the Observations and Recommendations are discussed in Section 7.0.

2.0 SCOPE AND PURPOSE

2.1 Scope

The audit team evaluated the adequacy, implementation, and effectiveness of the Hanford/CCP TRU waste characterization processes for retrievably stored debris waste to ensure compliance with the requirements contained in the WIPP HWFP, Attachments B through B6. Compliance was documented by completing the appropriate B6 checklists, Attachments B6-1, B6-3 and B6-5 for the applicable Hanford/CCP activities.

The following program elements were evaluated in accordance with the HWFP.

Quality Assurance

Organization/Program Interfaces
Nonconformance/Corrective action
Personnel Qualification and Training
Documents and Records
Sample Control
Software Control

Technical

Data Validation and Verification (V&V)
AK
RTR
WIPP Waste Information System (WWIS)

The evaluation of Hanford CCP TRU waste activities and documents was based on current revisions of the following documents:

Waste Isolation Pilot Plant Hazardous Waste Facility Permit

Quality Assurance Program Document, DOE/CBFO-94-1012

Contact-Handled Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant Project, DOE/WIPP-02-3122

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

CCP/Fluor Hanford and WTS Statement of Work (SOW)

CCP Transuranic Waste Certification Plan, CCP-PO-002

CCP/Fluor Hanford Interface Document, CCP-PO-017

Related CCP technical and quality assurance implementing procedures

2.2 Purpose

Audit A-03-25 was conducted to assess whether the Hanford/CCP retrievably stored contact handled waste characterization and certification activities for Summary Category Group S5000 debris waste complied with the WIPP HWFP requirements.

3.0 AUDIT TEAM AND OBSERVERS

AUDITORS/TECHNICAL SPECIALISTS

Annabelle Axinn	Audit Team Leader, CBFO Technical Assistance Contractor (CTAC)
Steve Calvert	QA Manager, CTAC
Amy Arceo	Auditor, CTAC
Earl Bradford	Auditor, CTAC
Prissy Dugger	Auditor, CTAC
Jim Schuetz	Auditor, CTAC
Jack Walsh	Auditor, CTAC
Jimmy Wilburn	Auditor, CTAC
Dick Blauvelt	Technical Specialist, CTAC
Karen Gaydosh	Technical Specialist, CTAC
Patrick Kelly	Technical Specialist, CTAC
B.J. Verret	Technical Specialist, CTAC
Melissa Rojo	Administrative Support, CTAC

INSPECTORS

Ed Feltcorn	Environmental Protection Agency (EPA)
Don Hammer	ICF Consulting, Inc. (EPA)
Jim Oliver	Trinity Engineering (EPA)
Dave Stuenkel	Trinity Engineering (EPA)
Bob Thielke	Trinity Engineering (EPA)
Connie Walker	Trinity Engineering (New Mexico Environment Department [NMED]/EPA)

OBSERVERS

Steve Holmes	NMED
Kevin Krause	NMED
Scott Webb	Environmental Evaluation Group (EEG)

4.0 AUDIT PARTICIPANTS

Fluor Hanford and Hanford/CCP individuals involved in the audit process are identified in Attachment 1. A pre-audit meeting was held at 2420 Stevens Center Dr., Room #153, on September 8, 2003. Daily meetings were held with Fluor Hanford and Hanford/CCP management and staff to discuss issues and potential deficiencies. The audit was concluded with a post-audit meeting held at 345 Hills Street, Richland, WA, on September 11, 2003.

5.0 SUMMARY OF AUDIT RESULTS

5.1 Program Adequacy and Implementation

This audit was performed to assess the ability to characterize retrievably stored debris waste from Summary Category Group S5000 in accordance with the requirements specified in the WIPP WAP. The audit team assessed AK and RTR characterization methods, as well as, data review, validation, data quality objectives (DQO) reconciliation, WWIS data entry, and the preparation of the waste stream profile forms (WSPFs).

The audit team concluded that the applicable TRU waste characterization activities, as described in the associated Hanford/CCP implementing procedures, satisfactorily meet the requirements contained in the HWFP. The deficiencies identified in Section 6.0 have been corrected. The supporting documentation for the closure of the CARs is contained in Attachment 2. Details of audit activities, including specific objective evidence reviewed, are described below and are documented in the attached B6 checklist. The B6 checklist identifies the Hanford/CCP program documents and procedures in which the WAP requirements are met. Attachment 3 contains examples of the objective evidence reviewed during the audit. A list of Hanford CCP procedures evaluated during the audit is provided in Attachment 4.

5.2 Technical Activities

Each technical area audited is discussed in detail in the following sections. The objective evidence used to assess compliance with the WAP is cited briefly (and in detail on the checklist), and the assessment results are provided.

Objective evidence was selected and reviewed to evaluate the implementation of the associated characterization activities. Batch data reports, sampling records, and training documentation for TRU Waste Characterization Program (TWCP) personnel were included in the evaluation. The audit included direct observation and/or a demonstrated walk-through of waste characterization activities such as RTR, and WWIS data entry. Each characterization process involves:

- Collecting raw data
- Collecting quality assurance/quality control (QA/QC) samples or information
- Reducing the data to a useable format, including a standard report

- Review of the report by the data generation facility and the site project office (SPO)
- Comparing the data against program DQOs
- Reporting the final waste characterization information to the WIPP

Each checklist question that could not be satisfactorily answered resulted in an audit deficiency. A CAR was prepared to document those items not adequately addressed during the audit. A CAR allows CBFO to track Hanford/CCP efforts to remediate the identified deficiency. CBFO CARs #03-081 and #03-082 are addressed in Section 6.1. All WAP-related CARs have been satisfactorily closed.

5.2.1 Table B6-1 WAP Checklist

The B6-1 WAP checklist addresses program requirements from an overall management perspective and the validation of the data at the site project level. It documents the verification that the waste characterization strategy, as defined in the WAP, is implemented by using controlled procedures. Table B6-1 documents the site project-level reviews of the data collected as a result of the waste characterization implementing procedures. This audit was performed to assess the ability of Hanford/CCP to characterize Summary Category Group S5000 debris waste. Objective evidence was reviewed as part of this assessment and utilized in the completion of the table. The objective evidence included completed batch data reports (completed through the Site Project Office (SPO) review), sampling records, and training documentation for Hanford/CCP personnel. In addition, procedures and objective evidence were reviewed to ensure that Hanford/CCP could adequately perform data reconciliation and properly prepare a WSPF.

Objective evidence was reviewed to make a determination of the adequacy of the SPO V&V procedures. Evidence included batch data reports from each of the waste characterization activities.

The flow of data from the point of generation to inclusion in the WSPF for each characterization technique was reviewed to ensure that all applicable requirements were captured in the site operating procedures. The material in this section is also addressed in more detail in the following checklists, where the specific procedures audited and the objective evidence reviewed are identified.

Compliance with the characterization requirements of the WAP was demonstrated through documentation and by demonstrating the characterization activities. The following batch data reports (included in Attachment 4) were reviewed as objective evidence of completion of characterization activities: BDR RLRTR0006, BDR RLRTR0007, BDR RLRTR0018, BDR RLRTR0021, and BDR RLRTR0022.

The project-level data V&V process was evaluated by reviewing batch data reports BDR WSCF-030820R0, BDR RLRTR0005, and BDR VE-TB-2003-133 (included in Attachment 4).

The AK process and the AK auditable record were reviewed in detail for Summary Category Group S5000 waste stream. The AK record was reviewed to demonstrate that the required information was present and correctly interpreted. The batch data reports cited above were used to demonstrate the confirmation of AK, the reconciliation of DQOs, the preparation of a WSPF, and the transmittal of data to WIPP using the WWIS.

A draft WSPF #RLMKMD.001and the summarized characterization information related to it was reviewed to establish the objective evidence for reporting waste characterization information to WIPP. The forms were completed using information from current characterization processes. As required, an actual WSPF will be prepared and submitted to CBFO prior to waste shipment. The form will be sent to CBFO for review and approved when the waste stream has been fully characterized and Hanford/CCP is approved to ship waste.

The audit team made an observation related to the need to provide more detail in a procedure to address the use of a Qualification Card Addendum that is being implemented to describe site-specific training requirements (Observation 2) and an observation related to editorial changes needed to correct and clarify the CCP training procedure (Observation 3).

The following four Recommendations were presented for management consideration. Form numbers and appropriate page references should be added to the table of contents for forms that are referenced in the body of Procedure CCP-QP-002 (Recommendation 4). The period of qualification should be defined for positions that are not defined in QAPD/HWFP requirements (e.g., define the term of qualification for the AK Expert (AKE) or give evidence of continued satisfactory performance (Recommendation 5). Back-up evidence of education and experience, evaluated by CCP to appoint applicants, should be obtained from an applicant's or subcontractor's employer (Recommendation 6). Documentation used for CAR closure should be referenced in the CAR (Recommendation 7).

The audit team concluded that these areas were adequate, satisfactorily implemented and effective.

5.2.2 Table B6-2 Solids and Soils/Gravel Sampling Checklist

Soils/gravel waste streams were not included in the audit scope; therefore, no Summary Category Group S4000 waste will be characterized for disposal at WIPP. A B6-2 Checklist is not included in this report.

5.2.3 Table B6-3 Acceptable Knowledge Checklist

This audit was performed to assess the ability of Hanford/CCP to characterize Summary Category Group S5000 retrievably stored debris waste streams. Items on the AK checklist are intended to ensure that Hanford/CCP has an AK process in place to:

- Train data collection personnel
- Assemble data into a coherent narrative that describes the waste generation process and constituents of the waste
- Segregate the waste into like waste streams
- Provide Resource Conservation and Recovery Act (RCRA) characterization for the waste streams
- Confirm characterizations using testing and sampling and analysis
- Provide an auditable set of records to support characterization

The following procedures related to the AK process were evaluated:

- CCP-TP-001,*CCP Project Level Data Validation and Verification*
- CCP-TP-002, *CCP Reconciliation of DQOs and Reporting Characterization Data*
- CCP-TP-003, *CCP Sampling Design and Data Analysis for RCRA Characterization Data*
- CCP-TP-005, *CCP Acceptable Knowledge Documentation*
- CCP-TP-005, *CCP TRU Waste Certification and WWIS Data Entry*

AK summary documentation contained in the auditable record and container-specific information were reviewed. Traceability of the AK documentation was accomplished by a review of CCP-AK-RL-001. The summary documents and supporting documentation identify the waste stream and point of generation for the containers.

Several of the references were selected to ensure that they are included in the auditable record and to ascertain if the source documents support AK determinations. These sources include such items as published reports, process flow diagrams, interviews with site personnel concerning the use of hazardous materials, and reports of previous waste characterization sampling and analysis efforts. The review of these references resulted in a determination that limitations of the AK documentation have been documented as required by the WAP.

The AK process was evaluated by reviewing AK summaries CCP-AK-RL-001. The auditable record was searched to ensure that the cited references were available and that the reviewer could reach the same hazardous waste determination as presented in the AK Summary document. Information from the debris waste stream was selected, and the AK information was traced from the summary through the AK source document reviews to the original records. The information for containers 6501-7-35, 6000-3-9, 6501-7-33, and 6501-1-21 was traced to verify characterization as determined by the AK. The information was available in the record files and supported the AK determination. However, Observation 4 notes that the AK source document references should be expanded throughout the collection of supplemental AK to support: Pu isotopes in Table 4 of the Kerr-McGee AK Summary and accompanying text including

Pu/U/Am percentages, and assignment of D007 and D008 to Kerr-McGee waste due to paint chips. The AK process includes provisions to identify and resolve any waste stream information that conflicts with what is expected (confirmation processes).

Additional documentation supporting AK summary documents and AK source document review summaries are contained in Attachment 3 to support the entries in Table B6-3.

Draft copies of a WSPF, a characterization information summary, and a DQO, an AK confirmation checklist, and an AK accuracy report were prepared. Examples of the resolution of discrepancies were also reviewed as objective evidence of the process for reporting characterization information to the WIPP.

The procedures used by Hanford/CCP to assemble, evaluate, document, and reconcile testing, sampling and analysis results were reviewed for adequacy and implementation during the audit. The specific AK criteria evaluated included AK procedure content, the specific requirements relative to retrievably stored debris waste, and evaluation of the AK summary to ensure inclusion of all mandatory information required by the WAP.

The audit team evaluated reports and records used to document the basis of the AK process. The reports were determined to be satisfactory and the QA records were properly maintained. The AK documentation reviewed and copies of pages used for objective evidence are included in Attachment 3.

The A-03-25 audit team identified one deficiency related to the defense determination of the waste that resulted in the issuance of CAR 03-081. In addition, two Observations were noted which include the need to expand the AK source document references through the collection of supplemental AK (Observation 4), and the insufficient number of drums completely through confirmatory testing to reconcile the AK record at the time of the audit; however, documentation for additional drums was reviewed prior to completion of this audit report and found to be acceptable (Observation 5). The audit team offered two Recommendations for improvement: substituting an adhesive for sealing drum lids that does not generate toluene during headspace gas sampling (Recommendation 2); and including a direct reference to the AK source document in the AK summary (Recommendation 3).

The audit team concluded that the Hanford CCP AK process is adequate and satisfactorily implemented, and the process is effective.

5.2.4 Table B6-4 Headspace Gas Checklist

HGS sampling and analysis will be performed by Fluor Hanford under the umbrella of their CBFO certified program. Fluor Hanford will perform these functions and perform generation level data verification and validation. The results of the analysis will be provided to the CCP for project level data verification and validation. A B6-4 Checklist is not included in this report.

5.2.5 Table B6-5 Radiography Checklist

This audit was performed to assess the ability of Hanford/CCP to characterize Summary Category Group S5000 retrievably stored debris waste. CCP radiography operations are performed using real-time systems, which meet the system specifications identified in the WAP. Hanford/CCP operations are performed using a mobile RTR system. This system has controls to allow the operator to enhance the image quality of the radiograph, provide narration with the video, rotate the drum as it is imaged, enlarge the image, and pan up and down the container. This system allows personnel to view drums while recording the examination on audio/videotape.

The Table B6-5, Radiography Checklist, was completed by assessing the following operating procedures:

- CCP-TP-028, *CCP Radiographic Test and Training Drum Requirements*
- CCP-TP-099, *CCP Radiography Inspection Operating Procedure*

During audit team activities, RTR operations were observed, videotapes were reviewed, the RTR of drums RHZ-105-A15014 and RHZ-111-A15824 was observed, and the documentation resulting from these activities was evaluated. RTR testing batch data reports RLRTR0018, RLRTR0006, RLRTR0024and RLRTR0007 were reviewed and are included in Attachment 3.

The batch data reports were reviewed to evaluate Hanford/CCP's compliance with the WAP and with CCP-TP-099, *CCP Radiography Inspection Operating Procedure*. These procedures control the data generation-level independent technical review, the technical supervisor review, and the QA officer review. The batch data reports reviewed to the requirements of these procedures were found to be in compliance with the WAP requirements for data generation-level review.

Radiography equipment maintenance and daily checks were evaluated in accordance with WAP requirements, and the RTR procedures were found to be acceptable and properly implemented. Radiographic results are being properly reported on standard forms and reviewed, as required by the WAP. Copies of the forms are included in the batch data reports in Attachment 3.

Training course materials and the RTR test drums were reviewed to ensure they are in accordance with WAP requirements. Training records for six RTR operators were also evaluated. As a result, three concerns were identified. The audit team issued a CAR (CAR 03-082) for violation of CBFO QAPD, Section 1.2.2; the CCP QAPjP, Section B1-3b(2); and the CCP Training and Qualification Plan, Section 4.2.2[C.3]. This CAR was related to the apparent coaching of an operator during examination of a test drum. One Observation was identified concerning the electronic copying of waste inventories on data sheets that should have been completed independently (Observation 1). One Recommendation included advising RTR Operators not to pause tapes during the scanning of test drums (Recommendation 1).

The audit team concluded that the Hanford CCP radiography processes are adequate and satisfactorily implemented, and the process is effective.

5.2.6 Table B6-6 VE Checklist

VE will be performed by Fluor Hanford under the umbrella of their CBFO certified program. The results of the VE will be provided to the CCP for project level data verification and validation and calculation of the miscertification rate. A B6-6 Checklist is not included in this report.

6.0 SUMMARY OF DEFICIENCIES

6.1 Corrective Action Reports

During the audit, the audit team may identify conditions adverse to quality (CAQ) and document such conditions on corrective action reports (CARs).

Condition Adverse to Quality (CAQ) – Term used in reference to failures, malfunctions, deficiencies, defective items, and nonconformances.

Significant Condition Adverse to Quality – A condition which, if uncorrected, could have a serious effect on safety, operability, waste confinement, TRU waste site certification, compliance demonstration, or the effective implementation of the QA program.

6.1.1 CBFO CAR 03-081

The defense determination in the Kerr-McGee AK summary document needs additional supporting documentation to demonstrate that the waste was generated from or by defense activities, or is commingled with defense waste.

6.1.2 CBFO CAR 03-082

A videotape documenting the training examination of a RTR test drum revealed that a Subject Matter Expert (SME) coached the operator during the examination, thereby placing in question the operator's ability to independently identify required elements.

7.0 SUMMARY OF OBSERVATIONS AND RECOMMENDATIONS

During the audit, the audit team may identify potential problems or suggestions for improvement that should be communicated to the audited organization. The audit team member, in conjunction with the ATL, evaluates these conditions and classifies them as Observations or Recommendations using the following definitions:

Observation – A condition that, if not controlled, could result in a CAQ.

Recommendations – Suggestions that are directed toward identifying opportunities for improvement and enhancing methods of implementing requirements.

Once a determination is made, the audit team member, in conjunction with the ATL, categorizes the condition appropriately.

7.1 Observations

The following Observations were provided to CCP management:

Observation 1

Waste inventories appear to be electronic copies from the original Radiography Data Sheet to the Independent Observation Radiography Data Sheet, and to the Replicate Scan Radiography Data Sheet. Also, waste inventories have been electronically copied between operators when documenting examination of the test drum results.

Observation 2

The CCP should have sufficient detail in its procedure to explain the process of using a Qualification Card Addendum that is currently being implemented to describe site-specific training requirements.

Observation 3

Some minor editorial changes should be made to procedure CCP-QP-002:

- Re-number Section 2-4.1, Acceptance Criteria.
- Add a sentence after the heading in Section 4-3.4, Reviewers, that details reviewer responsibilities.
- In the Production Software Information Listing Summary, change references in section (VAR.) to "Software Code Management/Code Information Summary" and delete the former from Section 5.0, Records.

Observation 4

The AK source document references should be expanded through the collection of supplemental AK to support the following:

- Pu isotopes in Table 4 of the Kerr-McGee AK Summary and accompanying text including Pu/U/Am percentages
- Assignment of D007 and D008 to Kerr-McGee waste due to paint chips

Observation 5

An insufficient number of drums of Kerr-McGee waste had been processed completely through confirmatory testing to reconcile the AK record.

7.2 Recommendations

The WAP-related Recommendations provided to CCP management during the audit are discussed below.

Recommendation 1

RTR Operators should not pause the tape during the scanning of test drums.

Recommendation 2

Hanford should find an adhesive for sealing lids that does not generate toluene during HSG sampling.

Recommendation 3

The AK Summary for the Kerr-McGee waste should provide a direct reference to the AK Source Document that supports the information relevant to WAP or WAC DQOs.

Recommendation 4

Form numbers and appropriate page references should be added to the table of contents for forms that are referenced in the body of Procedure CCP-QP-002.

Recommendation 5

The period of qualification should be defined for positions that are not defined in QAPD/HWFP requirements (for example, give the AKE a term of qualification or give evidence of continued satisfactory performance).

Recommendation 6

Back-up evidence of education and experience, evaluated by CCP to appoint applicants, should be obtained from an applicant's or subcontractor's employer.

Recommendation 7

Reference to closure documentation should be included in the CAR record.

8.0 LIST OF ATTACHMENTS

Attachment 1: Personnel Contacted During the Audit
Attachment 2: Corrective Action Supporting Documentation
Attachment 3: Objective Evidence
Attachment 4: List of Audited Documents

PERSONNEL CONTACTED DURING THE AUDIT				
NAME	**TITLE/ORG**	**PRE-AUDIT MEETING**	**CONTACTED DURING AUDIT**	**POST AUDIT MEETING**
Fisher, Albert J.	CCP QA Manager	X	X	X
Stroble, J.R.	CCP/WCO	X	X	
Freeze, Deborah	CCP Trainer	X	X	X
Haar, Dave	CCP Program Manager	X	X	X
McDonald, Kent	FH/STR	X	X	X
Jennings, Mike	CH2M Hill/Planning	X		X
Van Meighem, Jeff	WTS/CCP VPM	X	X	X
Doherty, Mark	CCP SPM	X	X	X
Peters, Kevin	CCP AKE	X	X	X
DeRosa, Dave	FH TRU Project	X		X
French, Mark	DOE-RL Team Lead	X		
McKenney, Dave	FH/Deputy-WM	X		
Maupin, Jim	CCP SPQAO	X		X
Kover, Karola	FH/WCO Headspace Lead	X	X	
Roberts, Kay	TRU Program Secretary	X		X
Klover, Steve	CCP SPQAO	X	X	X
Dunn, Rick	FH/SPM	X		
Hasselstrom, Thao	MCS/Operator/ITR		X	
Lamb, Larry	MCS/Operator/ITR		X	
Chandler, Aaron	MCS/Operator		X	
Pennala, Eric	MCS/General Manager	X		X
Sharif, Farok	CCP Manager	X	X	X

PERSONNEL CONTACTED DURING THE AUDIT				
NAME	**TITLE/ORG**	**PRE-AUDIT MEETING**	**CONTACTED DURING AUDIT**	**POST AUDIT MEETING**
Stepzinski, Charles	L&M/Technical Writer	X	X	X
Bickerstaff, Sheila	L&M/Records Custodian	X	X	X
Franco, Joe	CCP Project Manager	X	X	X
Crawford, Bev	CCP/LANL AKE			X
Shrader, Todd	DOE-AMCP/TRU Projects			X
Becker, David	LANL/CCP AKE			X
Kirkes, Billy	CCP SPM		X	X
Heath, N.M.	FH/Records Specialist			X
Dunnum, Cathy	L&M/Facility Records Custodian		X	
Williams, Andy	FH/Container Mgmt.		X	
Hackney, Leanne	CCP WWIS/WCO	X	X	
Bisping, Scott	FFS/AKE		X	
McGuffey, J.C.	T-Plant Sampler		X	
Colley, Briana	WSCF/Sampler		X	
Pingel, Leonard	WSCF/Sampler		X	
Dudley, J.B.	T-Plant Sampler		X	
Rowlette, Jason	T-Plant Sampler		X	
Smith, Douglas A.	T-Plant Sampler		X	

LIST OF AUDITED DOCUMENTS

Item	Document No.	Document Title
		Program Documents
1	CCP-PO-001	CCP Transuranic Waste Characterization Quality Assurance Project Plan
2	CCP-PO-002	CCP Transuranic Waste Certification Plan
3	CCP-PO-017	CCP/Flour Hanford Interface Document
4	Flour Hanford/WTS Contract, Appendix B	Statement of Work for Characterization of Hanford TRU Waste
5	CCP-PO-008	CCP Quality Assurance Administrative Program
		Quality Assurance Procedures
6	CCP-QP-002	CCP Training and Qualification Plan
7	CCP-QP-004	CCP Corrective Action Management
8	CCP-QP-005	CCP TRU Nonconforming Item Reporting and Control
9	CCP-QP-006	CCP Corrective Action Reporting and Control
10	CCP-QP-008	CCP Records Management
11	CCP-QP-009	CCP Work Control Process
12	CCP-QP-010	CCP Document Preparation and Approval
13	CCP-QP-011	CCP Notebooks and Logbooks
14	CCP-QP-018	CCP Management Assessments
15	CCP-QP-019	CCP Quality Assurance Reporting to Management
16	CCP-QP-021	CCP Surveillance Program
17	CCP-QP-022	CCP TRU Software Quality Assurance
18	CCP-QP-028	CCP Records Filing, Inventorying, Scheduling, and Dispositioning
		Technical Procedures
19	CCP-TP-001	CCP Project Level Data Validation and Verification
20	CCP-TP-002	CCP Reconciliation of DQOs and Reporting Characterization Data
21	CCP-TP-003	CCP Sampling Design and Data Analysis for RCRA Characterization
22	CCP-TP-005	CCP Acceptable Knowledge Documentation
23	CCP-TP-028	CCP Radiographic Test and Training Drum Requirements
24	CCP-TP-030	CCP TRU Waste Certification and WWIS Data Entry
25	CCP-TP-050	CCP Mobile Segmented Gamma Scanner Calibration Procedure
26	CCP-TP-051	CCP Mobile Segmented Gamma Scanner Operation
27	CCP-TP-052	CCP Mobile Segmented Gamma Scanner Data Reviewing, Validating, and Reporting
28	CCP-TP-058	CCP-NDA-Performance Demonstration Program
29	CCP-TP-099	CCP Radiography Inspection Operating Procedure
30	CCP-TP-100	CCP Container Management at Hanford
31	DO-080-009	Obtain Headspace Gas Samples of TRU Waste Containers