



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

MAY 5 2014

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Mr. John E. Kieling, Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

NMED
Hazardous Waste Bureau

Subject: Transmittal of CBFO Responses to NMED on the Final Audit Report for Recertification Audit A-14-03 of the ORNL/CCP

Dear Mr. Kieling:

This letter transmits the Carlsbad Field Office (CBFO) responses to the New Mexico Environment Department (NMED) comments on the Final Audit Report for Recertification Audit A-14-03 of the Oak Ridge National Laboratory Central Characterization Program (ORNL/CCP). The CBFO's responses include revisions to the Final Audit Report, revised C6-1 Checklist, and revised Content Map, where appropriate.

I certify under penalty of law that this document and all attachments 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 fine and imprisonment for knowing violations.

If you have any questions, please contact Mr. Michael R. Brown, Director of the CBFO Office of Quality Assurance, at (575) 234-7476.

Sincerely,


Jose R. Franco, Manager
Carlsbad Field Office

Enclosures

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HMED
Hazardous Waste Bureau

Mr. John E. Kieling

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cc: w/Report Narrative

D. Bryson, CBFO	*ED
M. Brown, CBFO	ED
M. Navarrete, CBFO	ED
D. Miehl, CBFO	ED
T. Kliphuis, NMED	ED
S. Holmes, NMED	ED
R. Maestas, NMED	ED
C. Smith, NMED	ED
V. Daub, CTAC	ED
R. Allen, CTAC	ED
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cc: w/enclosures

WIPP Operating Record	*EF
CBFO QA File	EF
CBFO M&RC	EF

*EF denotes electronic file format

**RESPONSES TO NMED COMMENTS ON THE OAK RIDGE NATIONAL
LABORATORY/CENTRAL CHARACTERIZATION PROGRAM (ORNL/CCP)
FINAL AUDIT REPORT A-14-03**

NMED's review indicated that the body of the Audit Report and the C6 checklists generally appear to address the applicable elements. NMED provides the following comment for the Permittees' consideration:

1. *Question 56 of the C6 Checklist indicates that the citation given, CCP-TP-002, Section 4.3 answers the question. CCP-TP-002, Attachment 2, in addition to Section 4.3 would be a more complete answer to the question.*

Response: Attached is a revised C6-1 Checklist adding Att. 2, "CCP Waste Steam Profile Form (Example)," to the citation for question #56.

2. *Questions 56a and 58 of the C6 Checklist indicate that the citation given, CCP-TP-002, Section 4.4 answers the question. CCP-TP-002, Attachment 3, in addition to Section 4.4 would be a more complete answer to the question.*

Response: Attached is a revised C6-1 Checklist adding Att. 3, "CCP Characterization Information Summary Cover Page (Example)," to the citation for questions #56a and #58.

3. *The Final Audit Report does not include a section for Observations and Recommendations as all past reports do.*

Response: The Final Report has been revised to include the sections for Observations and Recommendations.

4. *The Content Map erroneously mentions "SRS/CCP Implementing Procedures" in both the introduction and the list of color coded folders.*

Response: The revised Content Map is attached.

REVISED

**Table C6-1 Waste Analysis Plan (WAP) Checklist
ORNL/CCP Audit A-14-03
January 14-16, 2014**

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Waste Analysis Plan (WAP) General Checklist for use at DOE's Generator/Storage Sites

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
WASTE STREAM IDENTIFICATION						
1	Does the generator/storage site define "waste stream" as waste materials that have common physical form, that contain similar hazardous constituents, and that are generated from a single process or activity? (Attachment C Section C-0a)	CCP-PO-001, S. C-0a CCP-TP-005, S. 4.4.11 NOTE above	Y	CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1 (AK-1) CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8 (AK-2) CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3 (AK-3)	Y	
2	Are procedures in place to ensure that the generator/storage site assigns one of the Summary Category Groups (S3000-homogeneous solids, S4000-soils/gravel, S5000-debris waste) to each waste stream? (Section C-1b)	CCP-TP-005, S. 4.4.14 S. 4.4.15 CCP-TP-002, S. 4.3 Att. 2	Y	CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1, S2.0 (AK-1) CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8, S2.2, 2.3 (AK-2) CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				REDC-RH-HET, CCP-AK-ORNL-500 R3, S2.0 (AK-3) Waste Stream Profile Form and attachments for Waste Stream OR-ISTP-CH-HET (AK-4) Draft Waste Stream Profile Form and attachments for waste stream OR-NFS-CH-HOM-A (AK-5) Waste Stream Profile Form and attachments for waste stream OR-NFS-CH-SOIL (AK-6) Waste Stream Profile Form and attachments for waste stream OR-REDC-RH-HET (AK-7)		
3	Are procedures in place to ensure that the generator/storage site assigns Waste Matrix Code Groups (e.g., solidified inorganics, solidified organics, salt waste, soils, combustible waste, filters, graphite, heterogeneous debris waste, inorganic nonmetal waste, lead/cadmium metal, uncategorized metal) to each waste stream? (Section C-0a)	CCP-TP-005, S. 4.4.13 NOTE Above CCP-TP-002, S. 4.3 Att. 2	Y	CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1, S2.0 (AK-1) CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8, S2.2, 2.3 (AK-2) CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				REDC-RH-HET, CCF AK-ORNL-500 R3, S2.0 (AK-3) Waste Stream Profile Form and attachments for Waste Stream OR-ISTP-CH-HET (AK-4) Draft Waste Stream Profile Form and attachments for waste stream OR-NFS-CH-HOM-A (AK-5) Waste Stream Profile Form and attachments for waste stream OR-NFS-CH-SOIL (AK-6) Waste Stream Profile Form and attachments for waste stream OR-REDC-RH-HET (AK-7)		
4	Are procedures in place to ensure that the generator/storage site assigns a Waste Stream WIPP Identifier (ID) to each waste stream? (Section C3-6b(1))	CCP-TP-002, S. 4.3 Att. 2	Y	Waste Stream Profile Form and attachments for Waste Stream OR-ISTP-CH-HET (AK-4) Draft Waste Stream Profile Form and attachments for waste stream OR-NFS-CH-HOM-A (AK-5) Waste Stream Profile Form and attachments for waste stream OR-NFS-CH-SOIL (AK-6)	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				Waste Stream Profile Form and attachments for waste stream OR-REDC-RH-HET (AK-7)		
4a	<p>Are procedures in place for generator/storage sites to submit an AK Sufficiency Determination (Determination Request) to the Permittees to meet all or part of the waste characterization requirements including:</p> <ul style="list-style-type: none"> All information specified in Permit Attachment C4, Section C4-3d Identification of relevant hazardous constituents, and correctly identifies all toxicity characteristic and listed hazardous waste numbers All hazardous waste number assignments must be substantiated by supporting data and, if not, whether this lack of substantiation compromises the interpretation Resolution of data discrepancies between different AK sources must be technically correct and documented The AK Summary includes all the identification of waste material parameter weights by percentage of the material in the waste stream, and determinations are technically correct All prohibited items specified in the TSDF-WAC should be addressed, and conclusions drawn are technically adequate and substantiated by supporting information If the AK record includes process control information specified in Permit Attachment C4, Section C4-3b, the information should include procedures, waste manifests, or other documentation demonstrating that the controls were adequate and sufficient. The site must provide the supporting information necessary to substantiate technical conclusions within the Determination Request, and this information must be correctly interpreted. <p>(Section C-0b, Section C4-3d)</p>	CCP-TP-005, S. 4.7	Y	N/A	N/A	An AK Sufficiency Determination is not being sought for any ORNL waste streams examined during this audit
4b	<p>If a generator/storage site does not submit a Determination Request or if the Determination Request is not approved, are procedures in place for the generator/storage site to perform radiography or VE on 100% of the containers in a waste stream as specified in Permit Attachment C1?</p> <p>(Section C-0b)</p>	<p>CCP-TP-001, S. 3.1, 4.2</p> <p>CCP-TP-002, (ALL)</p> <p>CCP-TP-500, S. 3.4, 4.4, & Att. 3</p>	Y	<p>OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-1)</p> <p>ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)</p>	Y	No determination request has been submitted since the last audit

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
4c	Are procedures in place to ensure that the generator/storage sites complete a Waste Stream Profile Form (WSPF) and Characterization Information Summary (CIS) as specified in Permit Attachment C3, Sections C3-6b(1) and C3-6b(2)? (Section C-0c)	CCP-TP-002, S. 4.0	Y	OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3) OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4) Draft OR-NFS-CH-HOM-A/CIS, Lot 1 (GEN-5) OR-NFS-CH-SOIL/CIS, Lot 12 (GEN-6)	Y	
6	Are procedures in place to ensure that the generator/storage site assigns EPA hazardous waste numbers associated with the waste? If so, do these assigned EPA hazardous waste numbers correspond to the permitted EPA hazardous waste numbers in Table C-5? Are there any assigned EPA hazardous waste numbers that are not permitted EPA hazardous waste numbers on the Table C-5? If so, did the generator/storage site reject the waste for shipment to and disposal at WIPP? Did the generator assign a state hazardous waste codes or numbers? If so, is it assigned to waste that is permitted at WIPP? (Section C-1b)	CCP-TP-005, S. 4.4.16- 4.4.21 Att. 5	Y	CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1, S5.4.3, Tables 5-4, 5-5 (AK-1) CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8, S6.4.3, 7.4.3, Table 7-5 (AK-2) CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3, S5.4.2, Tables 5-2, 5-3 (AK-3) AK Att. 5, Hazardous Constituents for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET (AK-15)	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
<u>7</u>	<p>Are procedures in place to ensure that Summary Category Groups are defined as follows:</p> <p>S3000- Homogeneous solids are solid material, inorganic process residues, inorganic sludges, salt waste, and pyrochemical salt waste excluding soils, that do not meet NMED criteria for classification as debris and are at least 50 percent by volume homogeneous solids or comprise the majority of the waste stream</p> <p>S4000- Waste streams that are at least 50 percent by volume soil/gravel, or comprise the majority of the waste stream</p> <p>S5000- Waste streams that are at least 50 percent volume materials that meet the NMED criteria for debris, or comprise the majority matrix of materials. The criteria for debris are solid materials intended for disposal that exceed 2.36 inch particle size and is a manufactured object, plant or animal matter, or natural geologic material. Particles smaller than 2.36 inches in size may be considered debris if the debris is a manufactured object and if it is not a particle of S3000 or S4000 material.</p> <p>(Section C-0a)</p>	CCP-TP-005, S. 4.4.14	Y	<p>CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1, S2.0 (AK-1)</p> <p>CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8, S2.2, 2.3 (AK-2)</p> <p>CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3, S2.0 (AK-3)</p> <p>Waste Stream Profile Form and attachments for Waste Stream OR-ISTP-CH-HET (AK-4)</p> <p>Draft Waste Stream Profile Form and attachments for waste stream OR-NFS-CH-HOM-A (AK-5)</p> <p>Waste Stream Profile Form and attachments for waste stream OR-NFS-CH-SOIL (AK-6)</p> <p>Waste Stream Profile Form and attachments for waste stream OR-REDC-RH-HET (AK-7)</p>	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
B	<p>Does the generator/storage facility have procedures in place to ensure that the following waste characterization parameters will be obtained:</p> <ul style="list-style-type: none"> Determination whether TRU mixed waste streams comply with the applicable provisions of the TSDF-WAC Determination whether TRU mixed wastes exhibit a hazardous characteristic per 20.4.1.200 NMAC (incorporating 40 CFR 261 Subpart C) Determination whether TRU mixed wastes are listed per 20.4.1.200 NMAC (incorporating 40 CFR 261 Subpart D) Estimation of waste material parameter weights <p>(Section C-2)</p>	<p>CCP-TP-005, S. 4.4.16 S. 4.4.17 S. 4.4.26 S. 4.4.27[A] S. 4.4.30 S. 4.4.33[k], [L] & [M]</p> <p>CCP-TP-500, S. 4.0</p> <p>CCP-TP-001, S. 4.2</p> <p>CCP-TP-002, S. 4.0</p> <p>CCP-TP-500, S. 3.4, 4.4, & Att. 3</p>	Y	<p>B1- CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1, S5.4.3.5, 5.4.3.6, 5.5 (AK-1)</p> <p>CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8, S6.4.3.5, 6.4.3.6, 6.4.4, 7.4.3.5, 7.4.3.6, 7.4.4 (AK-2)</p> <p>CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3, S5.4.2.3, 5.4.5, 5.4.6 (AK-3)</p> <p>NCRs for prohibited items (AK-23)</p> <p>AK Att. 6, Waste Form, Waste Material Parameters, Prohibited Items and Packaging for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET (AK-16)</p> <p>ORNLRHVE13004 (AK-36)</p> <p>B2&3- CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-</p>	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				CH-HET, CCP-AK-ORNL-008 R1, S5.4.3, Tables 5-4, 5-5 (AK-1) CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8, S6.4.3, 7.4.3, Table 7-5 (AK-2) CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3, S5.4.2, Tables 5-2, 5-3 (AK-3) AK Att. 5, Hazardous Constituents for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET (AK-15) B4- CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1, S5.4.1.2, Table 5-1 (AK-1) CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8, S6.4.1.2, 7.4.1.2, Tables 6-1, 7-1 (AK-2)		

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3, S5.4.1.2, table 5-1 (AK-3) Memos attached to AK Att. 6, Waste Form, Waste Material Parameters, Prohibited Items and Packaging for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET (AK-16) OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3) OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4) Draft OR-NFS-CH-HOM-A/CIS, Lot 1 (GEN-5) OR-NFS-CH-SOIL/CIS, Lot 12 (GEN-6) OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-1) ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)		
9	Are procedures in place to ensure that waste streams identified to contain incompatible materials or materials incompatible with waste containers cannot be	CCP-TP-005, S. 4.4.27[A],	Y	AK Att. 6, Waste Form, Waste Material	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
	shipped unless treated to remove the incompatibility? (Section C-1c)	4.4.30 & 4.4.33[K] CCP-TP-001, S. 2.7 & 4.1, 4.2 CCP-TP-500, S. 4.0 CCP-TP-068 S. 4.1, 4.4.4[G], 4.5.4, Att. 2 & 3		Parameters, Prohibited Items and Packaging for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET (AK-16) NCRs for prohibited items (AK-23) IDC database with "reject" field (AK-20) Container inspection reports (AK-24) "Hold" tag (AK-25) ORNLRHVE13004 (AK-36)		
10	Are procedures in place to ensure that the generator/storage site uses acceptable knowledge and, as necessary, radiography and visual examination analysis as specified in Table C-1? (Section C-3)	CCP-TP-005, S. 4.4 S. 4.5 CCP-TP-001, S. 4.2 CCP-TP-005, S. 4.5 CCP-TP-002, S. 4.2 CCP-TP-500, S. 3.4, 4.4, & Att. 3	Y	CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1 (AK-1) CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8 (AK-2) CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3 (AK-3)	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				BDRS OR-RTR6-0092 (AK-29) OR-RTR6-0342 (AK-30) OR-RTR6-0353 (AK-31) OR-RTR6-0437 (AK-32) OR-RTR6-0438 (AK-33) OR-RTR7-0002 (AK-34) OR-RTR7-0003 (AK-35) ORNLRHVE13004 (AK-36) OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3) OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4) Draft OR-NFS-CH-HOM- A/CIS, Lot 1 (GEN-5) OR-NFS-CH-SOIL/CIS, Lot 12 (GEN-6) OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-1) ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)		
UNACCEPTABLE WASTE						
12	Are procedures in place to ensure that the generator/storage site ensures, through administrative and operational procedures and characterization techniques, that waste containers do not include the following unacceptable waste: <ul style="list-style-type: none"> • liquid waste is not acceptable at WIPP. Liquid in the quantities delineated below is acceptable <ul style="list-style-type: none"> • Observable liquid shall be no more than 1 percent by volume of the outermost container at the time of radiography or visual 	CCP-TP-001, S. 4.2 CCP-TP-002, Att. 1 & 2 CCP-TP-500, S. 3.4, 4.4, & Att. 3	Y	OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3) OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4)	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
	<p>examination</p> <ul style="list-style-type: none"> Internal containers with more than 60 milliliters or 3 percent by volume observable liquid, whichever is greater, are prohibited Containers with Hazardous Waste number U134 assigned shall have no observable liquid Overpacking the outermost container that was examined during radiography or visual examination or redistributing untreated liquid within the container shall not be used to meet the liquid volume limits non-radionuclide pyrophoric materials hazardous wastes not occurring as co-contaminants with TRU wastes (non-mixed hazardous wastes) wastes incompatible with backfill, seal and panel closures materials, container and packaging materials, shipping container materials, or other wastes wastes containing explosives or compressed gases (continued below) 			<p>Draft OR-NFS-CH-HOM-A/CIS, Lot 1 (GEN-5)</p> <p>OR-NFS-CH-SOIL/CIS, Lot 12 (GEN-6)</p> <p>OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-1)</p> <p>ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)</p>		
12a	<ul style="list-style-type: none"> wastes with polychlorinated biphenyls (PCBs) not authorized under an EPA PCB waste disposal authorization wastes exhibiting the characteristic of ignitability, corrosivity, or reactivity (EPA Hazardous Waste Numbers of D001, D002, or D003) waste that has ever been managed as high-level waste and waste from tanks specified in Table C-4, unless specifically approved through a Class 3 permit modification any waste container from a waste stream (or waste stream lot) which has not undergone either radiographic or visual examination of a statistically representative subpopulation of the wastes stream in each shipment pursuant to Permit Attachment C7 any waste container from a waste stream which has not been preceded by an appropriate, certified Waste Stream Profile Form (see Section C-1d) <p>(Section C-1c)</p>	<p>CCP-TP-001, S. 4.2</p> <p>CCP-TP-002, Att. 1 & 2</p> <p>CCP-TP-500, S. 3.4, 4.4, & Att. 3</p>	Y	<p>OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3)</p> <p>OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4)</p> <p>Draft OR-NFS-CH-HOM-A/CIS, Lot 1 (GEN-5)</p> <p>OR-NFS-CH-SOIL/CIS, Lot 12 (GEN-6)</p> <p>OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-1)</p> <p>ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)</p>	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
WASTE ACCEPTANCE CONTROL						
14	Are procedures in place to ensure that the generator/storage site uses a Waste Stream Profile Form (WSPF) which includes, at a minimum, the information indicated on the attached WSPF found in Figure C-1 and a Characterization Information Summary (CIS) prior to waste disposal at the WIPP? (Section C-1d)	CCP-TP-002, (ALL)	Y	OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3) OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4) Draft OR-NFS-CH-HOM-A/CIS, Lot 1 (GEN-5) OR-NFS-CH-SOIL/CIS, Lot 12 (GEN-6)	Y	
16	Are procedures in place to ensure that additional WSPFs are provided to WIPP and NMED for waste streams or portions of waste streams that are reclassified based upon waste characterization information? (Section C-1d)	CCP-TP-002, (ALL)	Y	OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3) OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4) Draft OR-NFS-CH-HOM-A/CIS, Lot 1 (GEN-5) OR-NFS-CH-SOIL/CIS, Lot 12 (GEN-6)	Y	
16a	Are criteria in place to determine the specific circumstances under which a WSPF is revised versus when a new WSPF is required? (Section C-1d)	CCP-TP-002, S. 4.7	Y	N/A	N/A	There were no examples of revisions to WSPFs for the waste streams examined during this audit
GENERAL CHARACTERIZATION REQUIREMENTS						
25	Are procedures in place to ensure that Acceptable Knowledge is used in waste characterization activities to delineate TRU mixed waste streams, to assess whether TRU mixed wastes comply with the TSDF-WAC, to assess whether TRU mixed waste exhibits a hazardous characteristic (20.4.1.200 NMAC, incorporating 40 CFR 261 Subpart C), and to assess whether TRU wastes are listed (20.4.1.200 NMAC, incorporating 40 CFR 261 Subpart D), and to estimate waste material parameter weights? (Section C-3a)	CCP-TP-005, S. 4.11 S. 4.4.16 S. 4.4.17 S. 4.4.26 S. 4.4.27[A] S. 4.4.30 S. 4.4.33[K], [L] & [M]	Y	CCP AK Summary Report for ORNL Isopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1, S2.0 (AK-1)	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
		CCP-TP-500, S. 4.0		<p>CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8, S2.2, 2.3 (AK-2)</p> <p>CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3, S2.0 (AK-3)</p> <p>CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1, S5.4.3.5, 5.4.3.6, 5.5 (AK-1)</p> <p>CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8, S6.4.3.5, 6.4.3.6, 6.4.4, 7.4.3.5, 7.4.3.6, 7.4.4 (AK-2)</p> <p>CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3, S5.4.2.3, 5.4.5, 5.4.6 (AK-3)</p> <p>NCRs for prohibited items (AK-23)</p> <p>AK Att. 6, Waste Form, Waste Material</p>		

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				Parameters, Prohibited Items and Packaging for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET (AK-16) ORNLRHVE13004 (AK-36) CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1, S5.4.3, Tables 5-4, 5-5 (AK-1) CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8, S6.4.3, 7.4.3, Table 7-5 (AK-2) CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3, S5.4.2, Tables 5-2, 5-3 (AK-3) AK Att. 5, Hazardous Constituents for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET (AK-15) CCP AK Summary Report for ORNL		

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1, S5.4.1.2, Table 5-1 (AK-1) CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8, S6.4.1.2, 7.4.1.2, Tables 6-1, 7-1 (AK-2) CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3, S5.4.1.2, Table 5-1 (AK-3) Memos attached to AK Att. 6, Waste Form, Waste Material Parameters, Prohibited Items and Packaging for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET (AK-16)		
26	Are procedures in place to ensure that radiography and/or visual examination are used as necessary to: <ul style="list-style-type: none"> Examine a waste container to determine the physical form Identify observable liquid in excess of TSDF-WAC limits and containerized gases Verify the physical form matches the waste stream description (Section C-3b)	CCP-TP-053, S. 1.0, Table 1 & Att. 2 CCP-TP-500 Att. 1	Y	RTR BDRs: OR-RTR6-0433 OR-RTR6-0437 OR-RTR6-0439 OR-RTR6-0440 OR-RTR7-0001 OR-RTR7-0003 OR-RTR7-0008 OR-RTR7-0009 (RTR-1)	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				<u>BDRc</u> ORNLRHVE13001 ORNLRHVE13002 ORNLRHVE13003 ORNLRHVE13004 ORNLRHVE13005 ORNLRHVE13006 (VE-1)		
28	Are procedures in place to ensure that the following characterization activities shall occur: <ul style="list-style-type: none"> • Acceptable Knowledge for all wastes, with testing as necessary to augment AK including: <ul style="list-style-type: none"> - Visual examination or radiography for all waste containers 	CCP-TP-005, S. 4.4 S. 4.5 CCP-TP-001, S. 4.2 CCP-TP-002, (ALL) CCP-TP-500, S. 3.4, 4.4, & Att. 3	Y	CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1 (AK-1) CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8 (AK-2) CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3 (AK-3) <u>BDRS</u> OR-RTR6-0092 (AK-29) OR-RTR6-0342 (AK-30) OR-RTR6-0353 (AK-31) OR-RTR6-0437 (AK-32) OR-RTR6-0438 (AK-33) OR-RTR7-0002 (AK-34) OR-RTR7-0003 (AK-35) ORNLRHVE13004 (AK-36) Waste Stream Characterization Checklists and AK Data Reconciliation (AK-28)	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3) OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4) Draft OR-NFS-CH-HOM- A/CIS, Lot 1 (GEN-5) OR-NFS-CH-SOIL/CIS, Lot 12 (GEN-6) OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-1) ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)		

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
DATA GENERATION, VERIFICATION, VALIDATION, DOCUMENTATION, AND QUALITY ASSURANCE						
30	<p>Are procedures in place to ensure that the following Data Quality Objectives are met:</p> <ul style="list-style-type: none"> Use Acceptable Knowledge to delineate TRU mixed waste streams, assess whether TRU mixed wastes comply with the applicable requirements of the TSDF-WAC, assess whether TRU mixed wastes exhibit a hazardous characteristic, assess whether TRU mixed wastes are listed and to estimate waste material parameter weights Use radiography or visual examination to verify the physical form of the waste matches its waste stream description as determined by AK and to verify the absence of prohibited items <p>(Section C-4a(1))</p>	<p>CCP-TP-005, S. 4.11 S. 4.4.16 S. 4.4.17 S. 4.4.26 S. 4.4.27[A] S. 4.4.30 S. 4.4.33[K], [L] & [M]</p> <p>CCP-TP-500, S. 4.4</p> <p>CCP-TP-001, S. 4.2</p> <p>CCP-TP-002, (ALL)</p> <p>CCP-TP-500, S. 3.4, 4.4, & Att. 3</p>	Y	<p>CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1, S2.0 (AK-1)</p> <p>CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8, S2.2, 2.3 (AK-2)</p> <p>CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3, S2.0 (AK-3)</p> <p>CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1, S5.4.3.5, 5.4.3.6, 5.5 (AK-1)</p> <p>CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8, S6.4.3.5, 6.4.3.6, 6.4.4, 7.4.3.5, 7.4.3.6, 7.4.4 (AK-2)</p> <p>CCP AK Summary Report for ORNL REDC</p>	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3, S5.4.2.3, 5.4.5, 5.4.6 (AK-3) NCRs for prohibited items (AK-23) AK Att. 6, Waste Form, Waste Material Parameters, Prohibited Items and Packaging for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET (AK-16) ORNLRHVE13004 (AK-36) CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1, S5.4.3, Tables 5-4, 5-5 (AK-1) CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8, S6.4.3, 7.4.3, Table 7-5 (AK-2) CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3, S5.4.2, Tables 5-2, 5-3 (AK-3)		

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				<p>AK Att. 5, Hazardous Constituents for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET (AK-15)</p> <p>CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1, S5.4.1.2, Table 5-1 (AK-1)</p> <p>CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, CCP-AK-ORNL-001 R8, S6.4.1.2, 7.4.1.2, Tables 6-1, 7-1 (AK-2)</p> <p>CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, CCP-AK-ORNL-500 R3, S5.4.1.2, Table 5-1 (AK-3)</p> <p>Memos attached to AK Att. 6, Waste Form, Waste Material Parameters, Prohibited Items and Packaging for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET (AK-16)</p>		

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3) OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4) Draft OR-NFS-CH-HOM- A/CIS, Lot 1 (GEN-5) OR-NFS-CH-SOIL/CIS, Lot 12 (GEN-6) OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-1) ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)		
31	<p>Are procedures in place to ensure that the following Quality Assurance Objectives are adequately defined and assessed for each characterization method:</p> <ul style="list-style-type: none"> Precision as a measure of the mutual agreement among multiple measurements. Accuracy as the degree of agreement between a measurement result and a true or known value. Completeness is a measure of the amount of valid data obtained from a method compared to the total amount of data obtained that is expressed as a percentage. Comparability is the degree to which one data set can be compared to another data set. Representativeness as an expression of the degree to which data represent characteristics of a population. <p>(Section C-4a(2))</p>	CCP-TP-500, Att. 2 & 3 CCP-TP-053, Att. 3	Y	BDRs ORNLRHVE13001 ORNLRHVE13002 ORNLRHVE13003 ORNLRHVE13004 ORNLRHVE13005 ORNLRHVE13006 (VE-1) <u>RTR BDRs:</u> OR-RTR6-0433 OR-RTR6-0437 OR-RTR6-0439 OR-RTR6-0440 OR-RTR7-0001 OR-RTR7-0003 OR-RTR7-0008 OR-RTR7-0009 (RTR-1)	Y	
32	With respect to data generation, are procedures in place to ensure that the generator/storage site's waste characterization program meets the following general	CCP-TP-500, Att. 1 & 2	Y	BDRs ORNLRHVE13001 ORNLRHVE13002	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
	<p>requirements:</p> <ul style="list-style-type: none"> Testing data packages and batch data reports must be reported accurately in a pre-approved format, must be maintained in permanent files, and must be traceable? All data must receive a technical review by another qualified operator? <p>(Section C3-4a)</p>	CCP-TP-053, S. 4.9, 4.10, 5.0, Att. 2 & 3		ORNLRHVE13003 ORNLRHVE13004 ORNLRHVE13005 ORNLRHVE13006 (VE-1) <u>RTR BDRs:</u> OR-RTR6-0433 OR-RTR6-0437 OR-RTR6-0439 OR-RTR6-0440 OR-RTR7-0001 OR-RTR7-0003 OR-RTR7-0008 OR-RTR7-0009 (RTR-1)		
33	<p>Are procedures in place to ensure that the generator/storage site performs validation of waste characterization data for each waste container?</p> <p>(Section C-4)</p>	CCP-TP-500, Att. 1,2, & 3 CCP-TP-053, S. 4.10 & Att. 3 CCP-TP-001, S. 4.2 CCP-TP-500, S. 3.4, 4.4, & Att. 3	Y	BDRs ORNLRHVE13001 ORNLRHVE13002 ORNLRHVE13003 ORNLRHVE13004 ORNLRHVE13005 ORNLRHVE13006 (VE-1) <u>RTR BDRs:</u> OR-RTR6-0433 OR-RTR6-0437 OR-RTR6-0439 OR-RTR6-0440 OR-RTR7-0001 OR-RTR7-0003 OR-RTR7-0008 OR-RTR7-0009 (RTR-1) OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-1) ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
34	Are procedures in place to ensure that the generator/storage site has a pre-approved format for reporting waste characterization data? (Section C-4a(3))	CCP-TP-500 Att. 1 & 2 CCP-TP-053, (ALL) CCP-TP-001, S. 4.2 CCP-TP-500, S. 3.4, 4.4, & Att. 3	Y	BDRs ORNLRHVE13001 ORNLRHVE13002 ORNLRHVE13003 ORNLRHVE13004 ORNLRHVE13005 ORNLRHVE13006 (VE-1) RTR BDRs: OR-RTR6-0433 OR-RTR6-0437 OR-RTR6-0439 OR-RTR6-0440 OR-RTR7-0001 OR-RTR7-0003 OR-RTR7-0008 OR-RTR7-0009 (RTR-1) OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-1) ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)	Y	
35	Are procedures in place to ensure that the generator/storage site prepares testing batch data reports to meet the requirements of their own site-specific QAPJP and/or SOPs? (Section C-4a(3))	CCP-TP-500, S. 4.3.2 CCP-TP-053, (ALL) CCP-TP-001, S. 4.2 CCP-TP-500, S. 3.4, 4.4, & Att. 3	Y	BDRs ORNLRHVE13001 ORNLRHVE13002 ORNLRHVE13003 ORNLRHVE13004 ORNLRHVE13005 ORNLRHVE13006 (VE-1) RTR BDRs: OR-RTR6-0433 OR-RTR6-0437 OR-RTR6-0439 OR-RTR6-0440 OR-RTR7-0001 OR-RTR7-0003 OR-RTR7-0008	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				OR-RTR7-0009 (RTR-1) OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-1) ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)		
36	<p>Are procedures in place to ensure that all raw data is collected and managed at the data generation level in accordance with the following criteria:</p> <ul style="list-style-type: none"> All raw data shall be signed and dated in reproducible ink by the individual collecting the data, or signed and dated using electronic signatures All data shall be recorded clearly, legibly, and accurately in field records All changes to original data shall be lined out, initialed, and dated by the individual making the change. Original data may not be obliterated or otherwise be made unreadable All data shall be transferred and reduced from field records completely and accurately All field records shall be maintained as specified in Table C-2 of Attachment C Data shall be organized into standard reporting formats for reporting purposes All electronic and video data must be stored to ensure that waste container and QC data are readily retrievable <p>(Section C3-4a)</p>	<p>CCP-TP-500, S. 5.0 & Att. 2</p> <p>CCP-TP-053, S. 5.0, Att. 2 & 3</p>	Y	<p>BDRs ORNLRHVE13001 ORNLRHVE13002 ORNLRHVE13003 ORNLRHVE13004 ORNLRHVE13005 ORNLRHVE13006 (VE-1)</p> <p><u>RTR BDRs:</u> OR-RTR6-0433 OR-RTR6-0437 OR-RTR6-0439 OR-RTR6-0440 OR-RTR7-0001 OR-RTR7-0003 OR-RTR7-0008 OR-RTR7-0009 (RTR-1)</p>	Y	
37	<p>Are procedures in place to ensure that 100 % of batch data reports are subject to independent technical review by an individual qualified to review the data who was not involved in the generation or recording of the data under review. The reviewer shall release the data through signature with an associated review checklist prior to characterization of the associated waste and shipment to the WIPP. The review shall ensure the following, as applicable:</p> <ul style="list-style-type: none"> Data generation and reduction were conducted according to the methods used and reported in the proper units and significant figures Calculations have been verified by a valid calculation program, a spot check of verified calculation programs, and/or a 100 percent check of all 	<p>CCP-TP-500, Att. 2 S. 3.2.2 S. 4.3.2[C]</p> <p>CCP-TP-053, S. 4.6, 4.10, Att. 2 & 3</p>	Y	<p>BDRs ORNLRHVE13001 ORNLRHVE13002 ORNLRHVE13003 ORNLRHVE13004 ORNLRHVE13005 ORNLRHVE13006 (VE-1)</p> <p><u>RTR BDRs:</u> OR-RTR6-0433 OR-RTR6-0437</p>	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
	<p>hand calculations</p> <ul style="list-style-type: none"> The data have been reviewed for transcription errors The testing QA documentation for BDRs is complete and includes, as applicable, raw data, calculation records, calibration records Radiography tapes are reviewed on a waste container basis at a minimum of once per testing batch or once per day of operation, whichever is less frequent. The radiography tape will be reviewed against the data on the radiography form to ensure that data are complete and correct QAOs have been met <p>(Section C3-4a(1))</p>			<p>OR-RTR6-0439 OR-RTR6-0440 OR-RTR7-0001 OR-RTR7-0003 OR-RTR7-0008 OR-RTR7-0009 (RTR-1)</p>		
40	<p>Are procedures in place to ensure that 100 percent of all batch data reports receive a Site Project Manager signature release with an associated review checklist prior to characterization of the associated waste and shipment to the WIPP. This release shall ensure the following:</p> <ul style="list-style-type: none"> Testing batch QC checks were properly performed. Radiography data are complete and acceptable based on evidence of videotape review of one waste container per day or once per testing batch, whichever is less frequent Data generation level independent technical review, validation, and verification have been performed as evidenced by the completed review checklists and appropriate signature releases. Independent technical reviewers were not involved in the generation or recording of the data under review. Batch Data review checklists are complete Batch Data Reports are complete and data properly reported Verify that data are within established data assessment criteria and meet all applicable QAOs <p>(Section C3-4b(1))</p>	<p>CCP-TP-001, S. 4.2 CCP-TP-500, S. 3.4, 4.4, & Att. 3</p>	Y	<p>OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-1)</p> <p>ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)</p>	Y	
42	<p>Are procedures in place to ensure that a repeat of the data review process at the data generation level will be performed on a minimum of one randomly chosen waste container every quarter to determine if the verification and validation is performed according to documented procedures?</p> <p>(Section C3-4b)</p>	<p>CCP-TP-001, S. 4.3</p>	Y	<p>CP:13:01443, CP:13:01444, CP:13:01447 (GEN-7)</p> <p>CP:14:01010 (GEN-8)</p>	Y	
43	<p>Are procedures in place and checklists are available to prepare a Site Project Manager (SPM) Summary and a Data Validation Summary (the summaries may be in the same document)? The SPM Summary includes a validation checklist for each</p>	<p>CCP-TP-001, S. 3.1.6, 3.1.8, & 4.2</p>	Y	<p>OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009,</p>	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
	batch that is of sufficient detail to document all aspects of a batch data report that could affect data quality. The Data Validation Summary must identify each Batch Data Report reviewed, describe how the validation was performed, identify all problems, and identify all acceptable and unacceptable data. Summaries must include release signatures. (Section C3-4b(2))	CCP-TP-500, S. 3.4, 4.4, & Att. 3		OR-RTR6-0435 (GEN-1) ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)		
44	Are procedures in place to ensure that non-administrative, WAP-related nonconformances first identified at the site project manager level are reported to the Permittees within seven calendar days of identification, that nonconformance reports are prepared within 30 calendar days, and that corrective action is implemented prior to waste shipment? (Section C3-7)	CCP-QP-005, S.4.4	Y	NCRs evaluated (none of these were reportable): NCR-ORNL-0249-14, R0; NCR-ORNL-0250-14, R0; NCR-ORNL-0251-14, R0; NCR-ORNL-0252-14, R0; NCR-ORNL-0253-14, R0; NCR-ORNL-0254-14, R0; NCR-ORNL-0255-14, R0; NCR-ORNL-0256-14, R0; NCR-ORNL-0838-13, R0; NCR-ORNL-0843-13, R0; NCR-ORNL-0845-13, R0; NCR-ORNL-0846-13, R0; NCR-ORNL-0872-13, R0; NCR-ORNL-0898-13, R0; NCR-ORNL-0903-13, R0; NCR-ORNL-0904-13, R0; (GEN-9) CH Non-conformance Report Logs for Project Level (PL) and Data Generation Level (DGL); both dated 01/14/2014 (GEN-10)	Y	There were no CH or RH NCRs reportable to CBFO since the previous recertification audit. The RH Non-conformance Report Logs, for DGL and PL are not provided because there have been no RH related NCRs written since the previous recertification audit.
45	Are procedures in place to ensure that any waste container for which a nonconformance report (NCR) has been written will not be shipped to the WIPP facility unless the condition that led to the NCR for that container is appropriately identified, reconciled, corrected, and documented? Are nonconformance reports prepared for nonconformances identified? Are nonconformances identified and tracked, and does the Site Project Manager oversee the nonconformance report process? (Section C3-7)	CCP-QP-005, (ALL)	Y	Records packages for the following NCRs were evaluated: NCR-ORNL-0249-14, R0; NCR-ORNL-0250-14, R0; NCR-ORNL-0251-14, R0; NCR-ORNL-0252-14, R0; NCR-ORNL-0253-14, R0; NCR-ORNL-0254-14, R0; NCR-ORNL-0255-14, R0; NCR-ORNL-0256-14, R0; NCR-ORNL-0838-13, R0;	Y	There were no CH or RH NCRs reportable to CBFO since the previous recertification audit. The RH Non-conformance Report Logs, for DGL and PL are not provided because there have been no RH related NCRs written since the previous recertification audit.

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				NCR-ORNL-0843-13, R0; NCR-ORNL-0845-13, R0; NCR-ORNL-0846-13, R0; NCR-ORNL-0872-13, R0; NCR-ORNL-0898-13, R0; NCR-ORNL-0903-13, R0; NCR-ORNL-0904-13, R0; (GEN-9) CH Non-conformance Report Logs for Project Level (PL) and Data Generation Level (DGL); both dated 01/14/2014 (GEN-10)		
DATA TRANSMITTAL						
48	Are procedures in place to ensure that the generator/storage site transmits data by hard copy or electronic copy from the data generation level to the site project level? If electronic, does the generator/site have a hard copy available on demand? (Section C-4a(5))	CCP-TP-001, S. 4.2 CCP-TP-500, S. 3.4, 4.4, & Att. 3	Y	OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-1) ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)	Y	
50	Are procedures in place to ensure that the generator/storage site inputs the data into the WWIS manually or electronically? (Section C-4a(5))	CCP-TP-030, (ALL) CCP-TP-530, (ALL)	Y	CH Waste Characterization Case Files for the containers X10C0506150B, X10C0506150C, X10C9311454A, and X10C9313063A. (GEN-11) RH Waste Characterization Case Files for the containers ORRH00019, ORRH00649, and ORRH00650; and RH loading file for canister OR0073 that is loaded with the three RH containers listed above. (GEN-12)	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
51	Are procedures in place to ensure that the generator/storage site enters the data into the WWIS in the exact format required by the database? (Section C-4a(5))	CCP-TP-030, (ALL) CCP-TP-530, (ALL)	Y	CH Waste Characterization Case Files for the containers X10C0506150B, X10C0506150C, X10C9311454A, and X10C9313063A. (GEN-11) RH Waste Characterization Case Files for the containers ORRH00019, ORRH00649, and ORRH00650; and RH loading file for canister OR0073 that is loaded with the three RH containers listed above. (GEN-12)	Y	
52	Are procedures in place to ensure all of the data presented on Table C-3 of the Permit is transmitted to the WWIS? (Table C-3)	CCP-TP-030, (ALL) CCP-TP-530, (ALL)	Y	CH Waste Characterization Case Files for the containers X10C0506150B, X10C0506150C, X10C9311454A, and X10C9313063A. (GEN-11) RH Waste Characterization Case Files for the containers ORRH00019, ORRH00649, and ORRH00650; and RH loading file for canister OR0073 that is loaded with the three RH containers listed above. (GEN-12)	Y	
RECORDS AND RECORD MANAGEMENT						
55	Are procedures in place to ensure that the generator/storage site's hard copy and/or electronic data reports follow the Permittees' format requirements? (Section C-4a(3))	CCP-TP-001, S. 4.2 CCP-TP-500, S. 3.4, 4.4, Att. 3	Y	OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-11)	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)		
56	<p>Are procedures in place to ensure that hard copy or electronic Waste Stream Profile Form will include the following:</p> <ul style="list-style-type: none"> • Generator/storage site name • Generator/storage site EPA ID • Date of audit report approval by NMED (if obtained) • Original generator of waste stream • Whether waste is Contact-Handled or Remote-Handled • Waste Stream WIPP Identification Number • Summary Category Group • Waste Matrix Code Group • Waste Material Parameter Weight Estimates per unit of waste • Waste stream name • A description of the waste stream • Applicable EPA hazardous waste codes numbers • Applicable TRUCON codes • A listing of acceptable knowledge documentation used to identify the waste stream • The waste characterization procedures used and the reference and date of the procedure • Certification signature of Site Project Manager, name, title, and date signed (Section C3-6b(1)) 	CCP-TP-002, S. 4.3 Att. 2	Y	OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3) OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4) Draft OR-NFS-CH-HOM- A/CIS, Lot 1 (GEN-5) OR-NFS-CH-SJL/CIS, Lot 12 (GEN-6)	Y	
56a	<p>Are procedures in place to ensure that hard copy or electronic Characterization Information Summary will include the following:</p> <ul style="list-style-type: none"> • Data reconciliation with DQOs • Radiography and visual examination summary to document that all prohibited items are absent in the waste and to verify that the physical form of the waste matches its waste stream description as determined by AK (if applicable) 	CCP-TP-002, S. 4.4 Att. 3	Y	OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3) OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4)	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
	<ul style="list-style-type: none"> A complete listing of all container identification numbers used to generate the Waste Stream Profile Form, cross-referenced to each Batch Data Report Complete AK summary, including stream name and number, point of generation, waste stream volume (current and projected), generation dates, TRUCON codes, Summary Category Group, Waste Matrix Code(s) and Waste Matrix Code Group, other TWBIR information, waste stream description, areas of operation, generating processes, RCRA determinations, radionuclide information, all references used to generate the AK summary, and any other information required by Permit Attachment C4, Section C4-2b. Method for determining Waste Material Parameter Weights per unit of waste. List of any AK Sufficiency Determinations requested for the waste stream Certification through acceptable knowledge or testing that any waste assigned the hazardous waste number of U134 (hydrofluoric acid) no longer exhibits the characteristic of corrosivity. This is verified by ensuring that no liquid is present in U134 waste. A justification for the selection of radiography and/or VE as an appropriate method of characterizing the waste. <p>(Section C3-6b(2))</p>			Draft OR-NFS-CH-HOM-A/CIS, Lot 1 (GEN-5) OR-NFS-CH-SOIL/CIS, Lot 12 (GEN-6)		
56b	<p>Are procedures in place to assure that ongoing container characterization results are cross referenced to Batch Data Reports?</p> <p>(Section C3-6b)</p>	CCP-TP-002, S. 4.4	Y	OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3) OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4) Draft OR-NFS-CH-HOM-A/CIS, Lot 1 (GEN-5) OR-NFS-CH-SOIL/CIS, Lot 12 (GEN-6) OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-1)	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)		
58	Are procedures in place to ensure that project level reports are compiled into Characterization Information Summaries? (Section C3-6b)	CCP-TP-002, S. 4.4 Att. 3	Y	OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3) OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4) Draft OR-NFS-CH-HOM- A/CIS, Lot 1 (GEN-5) OR-NFS-CH-SOIL/CIS, Lot 12 (GEN-6)	Y	
59	Are procedures in place to ensure that the generator/storage site uses forms for data reporting that are pre-approved forms in site-specific documentation? (Section C3-6)	CCP-TP-500, Att. 1 & 2 CCP-TP-053, Att. 1, 2, 3, 4 & 5	Y	BDRs ORNLRHVE13001 ORNLRHVE13002 ORNLRHVE13003 ORNLRHVE13004 ORNLRHVE13005 ORNLRHVE13006 (VE-1) <u>RTR BDRs:</u> OR-RTR6-0433 OR-RTR6-0437 OR-RTR6-0439 OR-RTR6-0440 OR-RTR7-0001 OR-RTR7-0003 OR-RTR7-0008 OR-RTR7-0009 (RTR-1)	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
60	Are procedures in place to ensure that the generator/storage site's site project manager submits to the WIPP facility a summary of the waste stream information and reconciliation with data quality objectives (DQOs) once a waste stream is characterized? (Section C-4a(5))	CCP-TP-002, S. 4.6	Y	OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3) OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4) Draft OR-NFS-CH-HOM-A/CIS, Lot 1 (GEN-5) OR-NFS-CH-SOIL/CIS, Lot 12 (GEN-6) OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-1) ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)	Y	
61	Are procedures in place to ensure that the generator/storage site project office completes a WSPF based on the Batch Data Reports? (C3-6b)	CCP-TP-002, S. 4.3	Y	OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3) OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4) Draft OR-NFS-CH-HOM-A/CIS, Lot 1 (GEN-5) OR-NFS-CH-SOIL/CIS, Lot 12 (GEN-6) OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, OR-RTR6-0435 (GEN-1)	Y	

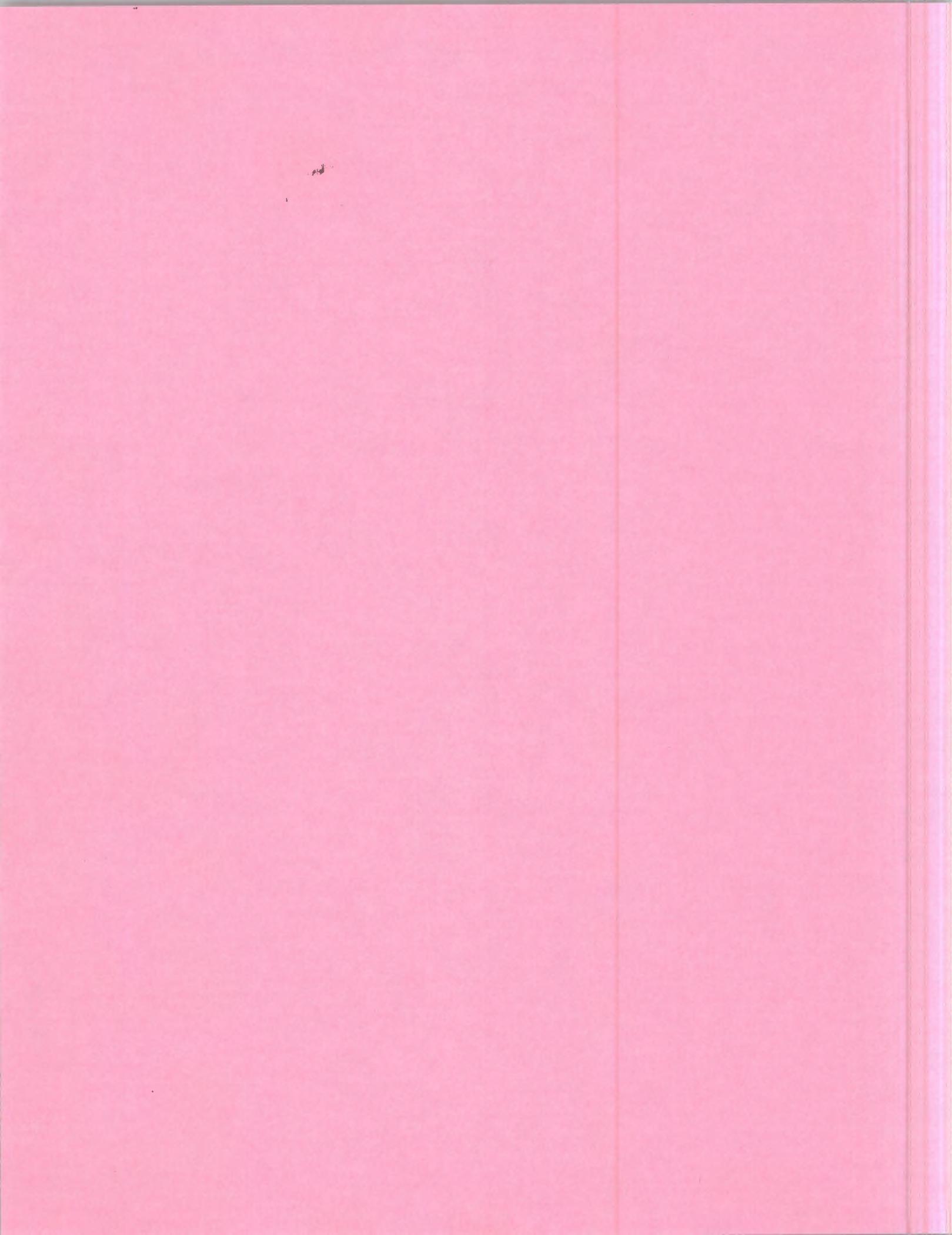
	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				ORNLRHVE13005, ORNLRHVE13006, ORNLRHVE13001 (GEN-2)		
62	Are procedures in place to ensure that the generator/storage Site Project Manager submits the WSPF to the Permittees for DOE's approval along with the accompanying Characterization Information Summary for that waste stream? (Section C-4a(5))	CCP-TP-002, S. 4.6	Y	OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29 (GEN-3) OR-NFS-CH-HET-A/CIS, Lot 8 (GEN-4) Draft OR-NFS-CH-HOM- A/CIS, Lot 1 (GEN-5) OR-NFS-CH-SOIL/CIS, Lot 12 (GEN-6)	Y	
63	Are procedures in place to ensure that the generator/storage site maintains records related to waste characterization testing activities in the testing facility files, or site project files for those facilities located on-site? (Section C-4a(6))	CCP-QP-008, (ALL) CCP-QP-028, (ALL)	Y	CH Records Inventory and Disposition Schedule (RIDS) dated 08/01/2013 (GEN-13) RH Records Inventory and Distribution Schedule (RIDS) dated 07/23/2013 (GEN-14)	Y	
64	Are procedures in place to ensure that the appropriate documented training and indoctrination is performed for all individuals and that procedures are documented in site specific QAPjPs and procedures? (Section C3-8)	CCP-PO-001, (ALL) CCP-QP-002, S. 4.0	Y	Qualification records for selected CCP personnel (GEN-15) NPTC – Oak Ridge National Labs (ORNL) List of Qualified Individuals dated 1/6/2014 (GEN-16) RH Program – ORNL List of Qualified Individuals dated 1/6/2014 (GEN-17)	Y	
66	Are procedures in place to ensure that the generator/storage site has an appropriate records inventory and disposition schedule (RIDS) or equivalent that was prepared and approved by appropriate site personnel? (Section C-4a(6))	CCP-QP-008, S.3.1.2 CCP-QP-028, S.3.1.1	Y	CH Records Inventory and Disposition Schedule (RIDS) dated 08/01/2013 (GEN-13)	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
				RH Records Inventory and Distribution Schedule (RIDS) dated 07/23/2013 (GEN-14)		
67	Are procedures in place to ensure that the generator/storage site maintains all records relevant to an enforcement action, regardless of disposition, until they are no longer needed for enforcement action, and then dispositioned per the approved RIDS? (Section C-4a(6))	CCP-QP-008, S.4.15.1 (NOTE) CCP-QP-028, (ALL)	Y	CH Records Inventory and Disposition Schedule (RIDS) dated 08/01/2013 (GEN-13) RH Records Inventory and Distribution Schedule (RIDS) dated 07/23/2013 (GEN-14)	Y	
68	Are procedures in place to ensure that the generator/storage site maintains records that are designated as Lifetime Records for the life of the waste characterization program plus six years or that the records have been transferred to the WIPP Records Archive facility? Lifetime Records include: <ul style="list-style-type: none"> • Test facility Batch Data Reports, • Waste Stream Characterization Package, • Data reduction, validation, and reporting documentation, • Acceptable knowledge documentation, • WSPF and Characterization Information Summary (Section C-4a(6), Table C-2)	CCP-PO-001, S.C-4a(6) TABLE C-2 CCP-PO-002, S.5.5 CCP-QP-008, (ALL) CCP-QP-028, (ALL)	Y	CH Records Inventory and Disposition Schedule (RIDS) dated 08/01/2013 (GEN-13) RH Records Inventory and Distribution Schedule (RIDS) dated 07/23/2013 (GEN-14)	Y	
69	Are procedures in place to ensure that the generator/storage site maintains records that are designated as Non-Permanent Records for ten years from the date of record generation, and then dispositioned according per the approved RIDS or transferred to the WIPP Records Archive facility? Non-Permanent Records include: <ul style="list-style-type: none"> • Nonconformance documentation, • Variance documentation, • Assessment documentation, • Calculations and related software documentation, • Training/qualification documentation, • QAPJP documentation (all revisions), • Calibration documentation, • Procurement documentation, 	CCP-PO-001, S. C-4a(6), C-7, TABLE C-2 CCP-PO-002, S.5.5 CCP-QP-008, (ALL) CCP-QP-028, (ALL)	Y	CH Records Inventory and Disposition Schedule (RIDS) dated 08/01/2013 (GEN-13) RH Records Inventory and Distribution Schedule (RIDS) dated 07/23/2013 (GEN-14)	Y	

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
	<ul style="list-style-type: none"> QA procedures (all revisions), Technical implementing procedures (all revisions), and Audio/video recording (radiography, visual, etc.). (Section C-4a(6), Table C-2)					
70	Are procedures in place to ensure that the generator/storage site has raw data that is identifiable and legible, and provides documentary evidence of quality? (Section C-4a(6))	CCP-TP-500, Att. 1 & 2 CCP-TP-053, Att. 1, 2, & 3	Y	BDRs ORNLRHVE13001 ORNLRHVE13002 ORNLRHVE13003 ORNLRHVE13004 ORNLRHVE13005 ORNLRHVE13006 (VE-1) RTR BDRs: OR-RTR6-0433 OR-RTR6-0437 OR-RTR6-0439 OR-RTR6-0440 OR-RTR7-0001 OR-RTR7-0003 OR-RTR7-0008 OR-RTR7-0009 (RTR-1)	Y	
71	Are procedures in place to ensure that if the generator/storage site ceases to operate, that all records be transferred before closeout? (Section C-4a(6))	CCP-QP-008 S.4.10.2	Y	N/A	N/A	This site has not ceased operations.
SHIPMENT						
72	Are procedures in place to ensure that the generator/storage site accurately completes an EPA Hazardous Waste Manifest prior to shipping the waste to WIPP that contains the following information: <ul style="list-style-type: none"> Generator/storage site name and EPA ID Generator/storage site contact name and phone number Quantity of waste List of up to six state and/or federal hazardous waste numbers in each line item Listing of all container IDs Signature of authorized generator representative (Section C-5b)	CCP-TP-033, (ALL) CCP-TP-507, (ALL)	Y	N/A	N/A	CCP/ORNL has not produced any Hazardous Waste Manifests as of this audit.

	WAP Requirement ¹ CCP/ORNL Audit A-14-03 Table C6-1 Waste Analysis Plan (WAP) Checklist ¹	Procedure Documented		Example of Implementation/Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
73	<p>Are procedures in place to ensure that the generator/storage site accurately completes the following container specific information:</p> <ul style="list-style-type: none"> • Waste stream identification number • List of hazardous waste numbers per container • Certification data • Shipping data <p>(Section C-5b)</p>	<p>CCP-TP-030, (ALL)</p> <p>CCP-TP-033, (ALL)</p> <p>CCP-TP-507, (ALL)</p> <p>CCP-TP-530, (ALL)</p>	Y	N/A	N/A	CCP/ORNL has not produced any Hazardous Waste Manifests as of this audit.

1. The WAP requirements should be presented in documents, such as procedures. Each of the questions posed under WAP requirements is meant to ask whether procedures are in place or whether documents are evident which demonstrate that the specific WAP requirement is or can be met.



REVISED

**U.S. DEPARTMENT OF ENERGY
CARLSBAD FIELD OFFICE**

FINAL AUDIT REPORT

OF THE

**OAK RIDGE NATIONAL LABORATORY
CENTRAL CHARACTERIZATION PROGRAM**

**OAK RIDGE, TENNESSEE
and CARLSBAD, NEW MEXICO**

AUDIT NUMBER A-14-03

JANUARY 14 – 16, 2014

TRU WASTE CHARACTERIZATION AND CERTIFICATION



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Date: 5/1/14

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CBFO Office of Quality Assurance

Date: 5-2-14

1.0 EXECUTIVE SUMMARY

U.S. Department of Energy (DOE) Carlsbad Field Office (CBFO) Audit A-14-03 was performed to evaluate the adequacy, implementation, and effectiveness of established programs for transuranic (TRU) waste characterization activities performed for the Oak Ridge National Laboratory (ORNL) by the Nuclear Waste Partnership LLC (NWP) Central Characterization Program (CCP). The audit team evaluated the programs, procedures, and processes for characterizing contact-handled CH and remote-handled RH SCG S5000 debris waste, CH SCG S3000 homogeneous solids waste, and CH SCG S4000 soils/gravel waste. The audit was conducted relative to the requirements of the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit (HWFP) and the *CBFO Quality Assurance Program Document (QAPD)*.

Audit activities were conducted at ORNL TRU Waste Processing Center (TWPC) facilities in Oak Ridge, Tennessee, and at the Skeen-Whitlock Building in Carlsbad, New Mexico, January 14 – 16, 2014. Overall, the audit team concluded that the ORNL/CCP technical and quality assurance (QA) programs evaluated were adequately established for compliance with applicable upper-tier requirements, satisfactorily implemented, and effective in achieving the desired results.

The audit team identified five concerns during the audit, as described in the interim audit report. No HWFP Waste Analysis Plan (WAP)-related deficiencies were identified.

2.0 SCOPE AND PURPOSE

2.1 Scope

The following general areas were audited, as required by Attachment C6, Section C6-3 of the WAP:

- Results of Previous Audits
- Changes in Programs or Operations
- New Programs or Activities Being Implemented
- Changes in Key Personnel

The following WAP-related QA elements were audited:

- Personnel Qualification and Training
- Nonconformances
- Records

The following WAP-related waste characterization technical elements were audited:

- Acceptable Knowledge (AK) (including waste certification, e.g., Waste Stream Profile Form)
- Project-Level Data Validation and Verification (V&V)

- Real-time Radiography (RTR)
- Visual Examination (VE)
- WIPP Waste Information System (WWIS)/Waste Data System (WDS)

Evaluation of adequacy of ORNL/CCP documents was based on the current revisions of the following documents:

- *CBFO Quality Assurance Program Document*, DOE/CBFO-94-1012
- Waste Isolation Pilot Plant Hazardous Waste Facility Permit NM4890139088-TSDF

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

- *CCP Transuranic Waste Characterization Quality Assurance Project Plan* (QAPjP), CCP-PO-001
- Related ORNL/CCP technical and QA implementing procedures

2.2 Purpose

Audit A-14-03 was conducted to determine the degree of adequacy and effective implementation of program requirements for the characterization and certification of CH and RH SCG S5000 debris waste, CH SCG S3000 homogeneous solids waste, and CH SCG S4000 soils/gravel waste at the ORNL. The audit team also evaluated specific QA elements relating to HWFP WAP requirements.

3.0 AUDIT TEAM AND OBSERVERS

AUDITORS/TECHNICAL SPECIALISTS

Martin Navarrete	Management Representative, CBFO Office of Quality Assurance
Dennis Miehl	QA Representative, CBFO
Berry Pace	Audit Team Leader, CBFO Technical Assistance Contractor (CTAC)
Rick Castillo	Audit Team Co-Leader, CTAC
Cindi Castillo	Auditor, CTAC
Katie Martin	Auditor, CTAC
Prissy Martinez	Auditor, CTAC
Jim Schuetz	Auditor, CTAC
Dick Blauvelt	Technical Specialist, CTAC
Rhett Bradford	Technical Specialist, CTAC
Kirk Kirkes	Technical Specialist, CTAC
Porf Martinez	Technical Specialist, CTAC
Charleen Roberts	Technical Specialist, CTAC

OBSERVERS

Trais Kliphuis	New Mexico Environment Department (NMED)
Steve Holmes	NMED
Connie Walker	NMED Contractor
Tom Morgan	CBFO Office of the National TRU Program (NTP)
Norma Castaneda	CBFO NTP
Kenneth Licklitter	CBFO NTP
Patsy Gilbert	Los Alamos National Laboratory-Carlsbad Office (LANL-CO)

4.0 AUDIT PARTICIPANTS

The ORNL/CCP personnel contacted during the audit process are identified in Attachment 1. A pre-audit meeting was held on January 14, 2014, at the TWPC in Oak Ridge, Tennessee, and at the Skeen-Whitlock Building in Carlsbad, New Mexico. Daily management briefings were conducted to update ORNL/CCP management and staff on audit progress and identified concerns. A post-audit meeting was held on January 16, 2014, at the TWPC in Oak Ridge, Tennessee, and at the Skeen-Whitlock Building in Carlsbad, New Mexico.

Attachment 2 lists the ORNL/CCP personnel contacted during the audit by subject area, Attachment 3 identifies the objective evidence compiled (provided in boxes), Attachment 4 lists the audited documents, and Attachment 5 lists the processes and equipment evaluated.

5.0 SUMMARY OF AUDIT RESULTS

5.1 Program Adequacy, Implementation, and Effectiveness

The characterization methods assessed were AK, VE, and RTR. Other areas evaluated were data generation and project-level data V&V, WWIS/WDS data entry, data quality objective (DQO) reconciliation, container management, and the preparation of Waste Stream Profile Forms (WSPFs).

The audit team concluded that, based on personnel interviews, observance of operations, and review of associated documentation and records, the ORNL/CCP TRU waste characterization program activities for characterizing CH and RH SCG S5000 debris waste, CH SCG S3000 homogeneous solids waste, and CH SCG S4000 soils/gravel waste are adequately established, satisfactorily implemented, and effective in achieving the desired results.

5.2 General Activities

5.2.1 Results of Previous Audits

The audit team examined the results of the previous CBFO audit of the ORNL/CCP (A-13-12). The audit team verified that no waste characterization activities had been performed. Accordingly, since no concerns were identified, the need to conduct follow-up evaluations was deemed unnecessary.

5.2.2 Changes in Programs or Operations

No waste characterization activities have been performed by the ORNL/CCP since the previous audit. The most significant change in programs and operations for waste characterization at ORNL was the elimination of chemical sampling and analysis with the modification of the HWFP on March 13, 2013. Additionally, ORNL/CCP has added RTR Unit #7 for performing RTR, which was evaluated during this audit.

5.2.3 New Programs or Activities Being Implemented

At the request of NTP, this audit evaluated programs and processes for the characterization of CH SCG S3000 homogeneous solids waste. In addition, RTR Unit #7 was introduced for the processing of CH SCG S3000 homogeneous solids waste, SCG S4000 soils/gravel waste, and SCG S5000 debris waste.

5.2.4 Changes in Key Personnel

Changes in key personnel included the appointment of Mr. Andrew Stallings as the Vendor Project Manager (VPM) and Ms. Beverly Schrock as the Site Project Manager (SPM).

5.3 WAP-related Quality Assurance Activities

The audit team evaluated the applicable QA elements for personnel qualification and training, nonconformances, and records for compliance with requirements in the HWFP WAP. The evaluation results for each area audited are described below.

5.3.1 Personnel Qualification and Training

The audit team conducted interviews with responsible personnel and reviewed implementing procedure CCP-QP-002, Rev. 35, *CCP Training and Qualification Plan*, to determine the degree to which the procedure adequately addresses upper-tier requirements. Results of the review indicate that the procedure adequately addresses upper-tier requirements.

Personnel training records associated with VE, RTR, AK, and SPMs were examined to verify compliance with associated requirements and to confirm that personnel were

appropriately trained/qualified. Record reviews included qualification cards and other pertinent qualification documentation, including attendance sheets/briefings on newly-revised AK summaries for RTR and VE operators, capability demonstration tests, training container documentation, VE expert (VEE) appointment letters, and eye exams.

No WAP-related deficiencies regarding personnel qualification and training were identified. The procedures reviewed and objective evidence assembled provided evidence to confirm that the applicable requirements for personnel qualification and training are adequately established for compliance with upper-tier requirements, satisfactorily implemented, and effective in achieving the desired results.

5.3.2 Nonconformances

The audit team conducted interviews with responsible personnel and reviewed implementing procedure CCP-QP-005, Rev. 23, *CCP TRU Nonconforming Item Reporting and Control*, to determine the degree to which the procedure adequately addresses upper-tier requirements. Results of the review indicate that the procedure adequately addresses upper-tier requirements.

The audit team interviewed the CCP project office QA engineer and randomly selected the following nonconformance reports (NCRs) for review:

NCR-ORNL-0838-13	NCR-ORNL-0249-14
NCR-ORNL-0843-13	NCR-ORNL-0250-14
NCR-ORNL-0845-13	NCR-ORNL-0251-14
NCR-ORNL-0846-13	NCR-ORNL-0252-14
NCR-ORNL-0872-13	NCR-ORNL-0253-14
NCR-ORNL-0898-13	NCR-ORNL-0254-14
NCR-ORNL-0903-13	NCR-ORNL-0255-14
NCR-ORNL-0904-13	NCR-ORNL-0256-14

The team concluded that deficiencies are being appropriately documented and tracked through resolution as required. Two of the NCRs selected (NCR-ORNL-0903-13 and NCR-ORNL-0904-13) documented non-administrative deficiencies first identified at the SPM level. These NCRs were verified as having been reported to the Permittees within seven days, as required by the Permit. All the NCRs examined were verified to have been entered, managed, and tracked in both the CCP Integrated Data Center (IDC) and the NCR 2013 and 2014 Logs, and through the required reconciliation reporting mechanism.

No WAP-related deficiencies regarding NCRs were identified. The procedures reviewed and objective evidence assembled provided evidence to confirm that the applicable requirements for nonconformances are adequately established for compliance with upper-tier requirements, satisfactorily implemented, and effective in achieving the desired results.

5.3.3 Records

The audit team conducted interviews with responsible personnel and reviewed implementing procedures CCP-QP-008, Rev. 21, *CCP Records Management*, and CCP-QP- 028, Rev. 15, *CCP Records Filing, Inventorying, Scheduling, and Dispositioning*, to determine the degree to which the procedures adequately address upper-tier requirements. Results of the review indicate that the procedures adequately address upper-tier requirements.

Control of records was verified through review of the CH Records Inventory and Disposition Schedule (RIDS) dated August 1, 2013, and the RH RIDS dated July 23, 2013.

The audit team evaluated a sample of transmittal forms used to document submittal of records from the ORNL/CCP host site location to the records center in Carlsbad, New Mexico. The audit team determined that the completed forms adequately described the records being transmitted, and that the transmittal process was performed in accordance with procedure requirements. The audit team verified the maintenance of records in paper files and in the electronic reference system. Records that are maintained in paper copy in the Carlsbad records center are placed in locked fire-resistant cabinets. Access to these file cabinets is controlled. Files that require control of access, such as those determined to be Unclassified Controlled Nuclear Information (UCNI), Official Use Only (OUO), Internal Use Only (IUO), and No Foreign National (NFORN) documents are maintained on separate electronic servers where access is controlled by restriction of computer user access. Paper copies of these restricted access documents are stored separate from non-restricted documents. The audit team witnessed a demonstration of the electronic control of access performed by the National TRU Program Certification (NTPC) Records Manager. The audit team determined that access to all records is adequately controlled.

No WAP-related deficiencies regarding records were identified. The procedures reviewed and objective evidence assembled provided evidence that the applicable requirements for records are adequately established for compliance with upper-tier requirements, satisfactorily implemented, and effective in achieving the desired results.

5.4 Technical Activities

Each technical area audited is discussed in detail in the following sections. The method used to select objective evidence is discussed, the objective evidence used to assess compliance with the HWFP is cited briefly, and the result of the assessment is provided.

5.4.1 Table C6-1, WAP Checklist

The C6-1 WAP Checklist addresses general program requirements from an overall management perspective. The general requirements checklist addresses both technical requirements and specific WAP-related QA programmatic requirements that, when

collectively implemented, ensure effective overall management of TRU waste characterization activities. Requirements are integrated into controlled documents to ensure the waste characterization strategy, as defined in the WAP, is accomplished and documented in accordance with controlled processes and procedures.

Technical activities evaluated for characterization activities consisted of data generation and project-level data V&V, AK, RTR, VE, and preparation of WSPFs. Objective evidence was selected and reviewed to evaluate the implementation of the associated characterization activities. Batch data reports (BDRs), sampling records, and personnel qualification and training documentation were included in the evaluation. Where possible, the audit included direct observation of actual waste characterization activities. Each characterization process involves:

- Collecting raw data
- Collecting quality assurance/quality control 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
- Comparing the data against program DQOs
- Reporting the final waste characterization information to the WIPP

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. Specific procedures audited and the objective evidence reviewed are described in the following sections.

During the audit, ORNL/CCP demonstrated compliance with the waste characterization requirements of the WAP through documentation and by performing characterization activities.

Project-Level Data Validation and Verification (V&V)

The audit team conducted interviews with responsible personnel and reviewed implementing procedures CCP-TP-001, Rev. 21, *CCP Project Level Data Validation and Verification*; CCP-TP-002, Rev. 26, *CCP Reconciliation of DQOs and Reporting Characterization Data*; CCP-TP-500, Rev. 13, *CCP Remote-Handled Waste Visual Examination*; and CCP-TP-005, Rev. 26, *CCP Acceptable Knowledge Documentation*, to determine the degree to which the procedures address upper-tier requirements. Results of the review indicate that the procedures adequately address upper-tier requirements.

The audit team evaluated the following BDRs in support of both CH and RH waste characterization activities completed at the ORNL to verify that project-level data V&V activities are performed in compliance with applicable procedural requirements.

RTR

OR-RTR6-0438 OR-RTR7-0002 OR-RTR7-0009 OR-RTR6-0435

VE

ORNLRHVE13005 ORNLRHVE13006 ORNLRHVE13001

The audit team reviewed four WSPFs for the following waste streams: OR-NFS-CH-HET-A, OR-NFS-CH-SOIL, OR-REDC-RH-HET, and draft OR-NFS-CH-HOM-A. The WSPFs were properly completed with characterization information summaries (CISs).

ORNL did not start waste characterization activities until November 2013; therefore, quarterly repeat reviews for the last quarter of 2013 had not been completed at the time of the audit. Although container characterization data has been generated and reviewed since November 2013, there are currently no new approved CISs/Shipping Lots associated with the waste streams audited.

WIPP Waste Information System (WWIS)/Waste Data System (WDS)

The audit team conducted interviews with responsible personnel and reviewed implementing procedures CCP-TP-030, Rev. 33, *CCP CH TRU Waste Certification and WWIS/WDS Data Entry*, and CCP-TP-530, Rev. 11, *CCP RH TRU Waste Certification and WWIS/WDS Data Entry*, to determine the degree to which the procedures address upper-tier requirements. Results of the review indicate that the procedures adequately address upper-tier requirements.

The audit team evaluated the implementation of the WWIS/WDS data entry procedures for manual data entry and electronic data transfer into the WWIS/WDS software application. The evaluation included review of records of data population of the spreadsheet, review of data entry by a waste certification assistant (WCA), and waste certification by the waste certification official (WCO). Other records reviewed included container information summaries, pages from BDRs showing analyses values, WWIS/WDS Waste Container Data Reports, and submittals for WWIS/WDS review/approval. Records for data entry of both CH- and RH-type waste characterization data were reviewed and determined to be compliant with applicable requirements.

The audit team reviewed the CH waste characterization case files for four CH waste containers: X10C0506150B and X10C0506150C from the CH SCG S5000 debris waste stream OR-ISTP-CH-HET, and X10C9311454A and X10C9313063A from the CH SCG S3000 homogeneous solids waste stream OR-NFS-CH-SOIL. The audit team reviewed files for the RH waste canister OR0073, which was loaded with three internal containers (ORRH00019, ORRH00649, and ORRH00650). The RH waste containers were from the RH SCG S5000 debris waste stream OR-REDC-RH-HET. The RH loading file for the loaded canister and the RH waste characterization case files for the individual RH waste containers were reviewed. In all cases the files reviewed were determined to be complete and acceptable.

CH and RH waste characterization case files included CIS excerpts, Waste Certification Data Entry Form signed spreadsheet copies, supporting forms and data, and WWIS/WDS Waste Container Data Reports. The RH loading file for the RH canister included the canister container summary, supporting forms and data, and the WWIS/WDS Waste Container Data Report.

The case files reviewed covered analytical data and the data entry process for work that was performed prior to suspension of characterization activities at ORNL. The data entry packages that were reviewed provide evidence of the ability of CCP WCA and WCO personnel to perform data entry and waste certification for ORNL waste containers. All of the files reviewed were determined to be accurate and complete.

No WAP-related deficiencies regarding Table C6-1 were identified. The procedures reviewed and objective evidence assembled and evaluated during the audit provided evidence that Table C6-1 requirements are adequately established, satisfactorily implemented, and achieving the desired results.

5.4.2 Table C6-2, Acceptable Knowledge Checklist

The audit team conducted interviews with responsible personnel and reviewed implementing procedures CCP-TP-002, Rev. 26, *CCP Reconciliation of DQOs and Reporting Characterization Data*; CCP-TP-005, Rev. 26, *CCP Acceptable Knowledge Documentation*; CCP-TP-506, Rev. 4, *CCP Preparation of the Remote-Handled Transuranic Waste Acceptable Knowledge Characterization Reconciliation Report*; and CCP-QP-021, Rev. 9, *CCP Surveillance Program*, to determine the degree to which the procedures address upper-tier requirements. Results of the review indicate that the procedures adequately address upper-tier requirements.

In addition, the audit team reviewed the latest revisions to the AK summary reports for four distinct waste streams representing the waste subject to the scope of this audit. The AK summary reports and respective waste stream designations reviewed included: CCP-AK-ORNL-001, Rev. 8, for CH SCG S3000 homogenous solids waste stream OR-NFS-CH-HOM-A and CH SCG S4000 soils/gravel waste stream OR-NFS-CH-SOIL; CCP-AK-ORNL-008, Rev. 1, for CH SCG S5000 debris waste stream OR-ISTP-CH-HET; and CCP-AK-ORNL-500, Rev. 3, for RH SCG S5000 debris waste stream OR-REDC-RH-HET. These AK summary reports were reviewed with respect to the information related to specific WAP requirements and were determined to be compliant. In addition, WSPFs or draft WSPFs and attachments were examined for each audited waste stream. Numerous AK source documents were reviewed to establish support for the waste stream descriptions and parameters noted in the AK summaries, particularly with respect to the assignment of hazardous waste numbers and the historical management of the containers in the waste streams. The audit team also examined the respective AK documentation checklists from CCP-TP-005 consisting of Attachment 1, *CCP Acceptable Knowledge Documentation Checklist*; Attachment 4, *Acceptable Knowledge Information List*; Attachment 5, *Hazardous Constituents*; Attachment 6, *Waste Form, Waste Material Parameters, Prohibited Items, and Packaging*; and

Attachment 8, Waste Containers List. The audit team also examined the justification memoranda for waste material parameter weight estimates, and the Add-Containers documentation that assures that the parameters of containers added to a waste stream are examined to confirm that the assignment is appropriate.

Examples of the resolution of AK discrepancies in the AK record and discrepancy resolution at characterization along with AK reevaluation forms were reviewed and added to the AK objective evidence. WAP-compliant AK accuracy reports and the most recent internal surveillance information was collected and examined. Requisite training records were reviewed for AK experts (AKEs) and SPMs. With regard to non-compliant waste containers, the audit team examined NCRs dealing with prohibited items and compiled objective evidence of container inspection prior to characterization activities. The WAP-required container traceability exercise was conducted by the AK audit team for a total of eight waste containers from the four waste streams evaluated. Additional traceability documentation was collected through IDC database screenshots, AK tracking spreadsheet data, waste container lists, and waste container input forms. Several waste stream characterization checklists and supporting data were also examined to verify reconciliation of characterization data with the AK record.

No WAP-related deficiencies regarding Table C6-2 were identified during the audit. The procedures reviewed and objective evidence assembled and evaluated during the audit provided evidence that Table C6-2 requirements are adequately established, effectively implemented, and achieving the desired results.

5.4.3 Table C6-3, Radiography Checklist

The audit team conducted interviews with responsible personnel and reviewed implementing procedures CCP-QP-002, Rev. 35, *CCP Training and Qualification Plan*; CCP-TIP-028, Rev. 8, *CCP Radiographic Test Drum and Training Container Construction*; CCP-TP-053, Rev. 14, *CCP Standard Real-Time Radiography (RTR) Inspection Procedure*; CCP-TP-164, Rev. 0, *CCP Real-Time Radiography #7 Operating Procedure*; and CCP-TP-165, Rev. 3, *CCP Real-Time Radiography #6 Operating Procedure*, to determine the degree to which the procedures address upper-tier requirements. Results of the review indicate that the procedures adequately address upper-tier requirements.

The audit team examined the following CH RTR BDRs generated from characterization scans of containers characterized with RTR Units #6 and #7:

OR-RTR6-0433
OR-RTR6-0437
OR-RTR6-0439
OR-RTR6-0440
OR-RTR7-0001
OR-RTR7-0003
OR-RTR7-0008

OR-RTR7-0009

The audit team also reviewed a sampling of audio/video media recordings of containers characterized in the referenced BDRs. The audio/video recordings reviewed consisted of containers representing CH SCGs S3000 homogeneous solids waste, S4000 soils/gravel waste, and S5000 debris waste.

The audit team performed a walk-down of the RTR Unit #6 in building 7880J. The audit team interviewed the RTR operators and verified the availability and use of current AK summaries and RTR operating procedures. The audit team also examined RTR Unit #6 operational logbook CCP-ORNL-RTR-002, 2014, ORNL-TWPC-RTR6, 7880J and verified logbook entries were reviewed by the VPM as required. The audit team witnessed the image (lines/pair) test and the RTR characterization scan on container X10C9400031A performed with RTR Unit #6. The RTR unit contained the components required by the WAP to effectively characterize the CH SCG wastes subject to the scope of the audit.

During the audit, no RTR waste characterization activities were being performed with RTR Unit #7. The audit team conducted a walk-down of RTR Unit #7 in building 7880ZZ and verified the RTR unit contained the required components to effectively characterize CH SCGs S3000 homogeneous solids waste, S4000 soils/gravel waste, and S5000 debris waste. The audit team interviewed RTR operators, reviewed CCP standing orders, and verified the availability of current AK summaries and RTR operating procedures. The audit team also examined RTR operational logbook CCP-ORNL-RTR-007-001, 2013, ORNL-TWPC, 7880ZZ and verified entries were logged correctly and reviewed by the VPM as required. Although RTR Unit #7 was not operational at the time of the audit, the audit team concluded through personnel interviews, evaluations of completed BDRs, examination of operational logbooks, and verification of RTR operator qualifications, that waste characterization activities performed using RTR Unit #7, are effective for characterizing CH SCGs S3000 homogeneous solids waste, S4000 soils/gravel waste, and S5000 debris waste.

The audit team evaluated RTR operator required test and training drum audio/video media for four RTR operators. Records of RTR operator training and qualification, including test and training drum documentation, eye exams, and waste stream training were examined. The audit team verified that RTR operators were appropriately trained and qualified as required.

No WAP-related deficiencies regarding Table C6-3 were identified during the audit. The procedures reviewed and objective evidence assembled and evaluated during the audit provided evidence that Table C6-3 requirements are adequately established, effectively implemented, and achieving the desired results.

5.4.4 Table C6-4, Visual Examination Checklist

The audit team conducted interviews with responsible personnel and reviewed implementing procedures CCP-TP-500, Rev. 13, *CCP Remote-Handled Waste Visual Examination*, and CCP-QP-002, Rev. 35, *CCP Training and Qualification Plan*, to determine the degree to which the procedures adequately address upper-tier requirements. Results of the review indicate that the procedures adequately address upper-tier requirements.

ORNL/CCP uses the two-operator method when performing VE characterization. The two qualified operators visually examine the waste and place into containers. The audit team interviewed VE operators and the VEE. The audit team also examined the VE operational logbook (CCP-RH-ORNL-VE-002) and verified logbook entries were logged correctly and reviewed by the VPM as required. The audit team toured the TWPC Hot Cell Facility and observed VE being performed on container ORRH00685.

The audit team examined the following RH VE BDRs generated from operations performed in the TWPC Hot Cell Facility to verify implementation and compliance with the requirements in CCP-TP-500:

- ORNLRHVE13001
- ORNLRHVE13002
- ORNLRHVE13003
- ORNLRHVE13004
- ORNLRHVE13005
- ORNLRHVE13006

The audit team examined training records for three VE operators/independent technical reviewers (ITRs), and confirmed the appointment of one ORNL/CCP VEE. The audit team verified that VE operators, ITRs, and the VEE were appropriately trained and qualified as required.

No WAP-related deficiencies regarding Table C6-4 were identified during the audit. The procedures reviewed and objective evidence assembled and evaluated during the audit provided evidence that Table C6-4 requirements are adequately established, effectively implemented, and achieving the desired results.

6.0 CORRECTIVE ACTIONS

6.1 Corrective Action Reports

During the audit, the audit team may identify conditions adverse to quality, as defined below, 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.

No WAP-related deficiencies necessitating a CAR were identified during the audit.

6.2 Deficiencies Corrected During the Audit

During the audit, the audit team may identify CAQs. Audit team members, the audit team leader (ATL), and the CBFO QA representative evaluate the CAQs to determine if they are significant. Once a determination is made that the CAQ is not significant, the audit team member, in conjunction with the ATL and the CBFO QA representative, determines if the CAQ is an isolated case requiring only remedial action and therefore can be corrected during the audit. Upon determination that the CAQ is isolated, the audit team member, in conjunction with the ATL and the CBFO QA representative, evaluates/verifies any objective evidence/actions submitted or taken by the audited organization and determines if the condition was corrected in an acceptable manner. Once it has been determined that the CAQ has been corrected, the CBFO QA representative categorizes the condition as corrected during audit (CDA) according to the definition below:

CDAs – Isolated deficiencies that do not require a root cause determination or actions to preclude recurrence. Correction of the deficiency can be verified prior to the end of the audit. Examples include one or two minor changes required to correct a procedure (isolated), one or two forms not signed or not dated (isolated), and one or two individuals that have not completed a reading assignment.

No WAP-related deficiencies were corrected during the audit.

6.3 Observations

During the audit, the audit team may identify potential problems that should be communicated to the audited organization. The audit team members, in conjunction with the ATL, evaluate these conditions and classify them as Observations using the following definition:

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

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

No WAP-related observations were identified during the audit.

6.4 Recommendations

During the audit, the audit team may identify suggestions for improvement that should be communicated to the audited organization. The audit team members, in conjunction with the ATL, evaluate these conditions and classify them as Recommendations using the following definition:

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.

Two WAP-related Recommendations were identified during the audit.

Recommendation 1

It is recommended that the following changes be made to the AK summaries reviewed during this audit for clarification and/or consistency.

AK Summary CCP-AK-ORNL-001, Rev. 8

1. Section 2.2: Delete the reference to stainless-steel bands. They are an unacceptable closure device but were not used for repackaging the soil waste stream.
2. Section 4.4.2: Include a brief discussion of the process/activity of Building 110
3. Section 6.3.1.3: Correct the date for the soil excavation project from 2011-2012 to 2011-2018.
4. Adjust the waste material parameter weight table 6-1 for soil as needed to account for the inorganic matrix noted in section 6.4.1.2 for "Solid-A-Sorb" absorbent material. Correct spelling of "Soli-A-Sorb."
5. Add a bullet to section 6.4.3 indicating that the results of sampling and analysis of soil packaged by NFS during the current final phase of soil removal will be compiled and added to the AK record as appropriate.
6. Section 6.5: Move the second paragraph to the end of this section to clarify chronology.

AK Summary CCP-AK-ORNL-008, Rev. 1

1. Add a discussion of building 3030 as a subsection to section 5.3 to provide the building information noted in section 4.4.1.3.

2. Revise section 5.5 as follows: "Therefore, to ensure radionuclide pyrophorics are completely reacted before disposal at WIPP, inner containers (regardless of size) in all drums in waste stream OR-ISTP-CH-HET are examined during waste repackaging, RTR fast scan, or VE to determine if they contain a potentially pyrophoric or other reactive material."

AK Summary CCP-AK-ORNL-500, Rev. 3

1. Revise the definition of "waste stream" in section 2.0, page 11, last paragraph. This is an artifact of earlier drafts and the definition is correctly stated elsewhere in this document. The AKE has identified this error and has drafted an appropriate freeze file.

Recommendation 2

The audit team recommended that the statements in CCP-TP-500, sections 4.1.2 [I] and 4.2.4, be revised to address when a determination for packaging limits is necessary.

7.0 LIST OF ATTACHMENTS

- Attachment 1: Personnel Contacted During the Audit
- Attachment 2: Personnel Contacted During the Audit by Subject Area
- Attachment 3: Objective Evidence Reviewed During the Audit (provided in boxes)
- Attachment 4: Table of Audited Documents
- Attachment 5: List of Processes and Equipment Evaluated During the Audit

PERSONNEL CONTACTED DURING THE AUDIT

PERSONNEL CONTACTED DURING AUDIT				
NAME	ORG/TITLE	PREAUDIT MEETING	CONTACTED DURING AUDIT	POST-AUDIT MEETING
Randall Allen	CTAC QA Manager	X		X
Cheryl Armijo	NWP/CCP Training Records Clerk		X	
Michele Billett	NWP/CCP NTPC Training Coordinator		X	
Daphne Brothers	NWP/CCP RTR Operator		X	
Michael R. Brown	CBFO QA Director			X
W. P. Byrd	WAI TWPC QA	X		X
Norma Castaneda	CBFO/NTP Waste Certification Manager	X		X
Robert Ceo	MCS EA		X	
Dan E. Coffey	TWPC PK/Characterization Support	X		X
Daniel Crosby	MCS NDA Operator-In-Training		X	
Neil Dickes	NWP/CCP NDA Support	X		X
Kevin D. East	TWPC RH Procurement Specialist	X		
A.J. Fisher	NWP/CCP Support Group Manager	X	X	
Joe Franco	CBFO Manager			X
James Gaenslen	RH PAR Operator		X	
Chad Gerlock	MCS NDA Operator		X	
Patsy Gilbert	LANL-CO Site Docs Administrator/Observer	X		
Ed Gulbransen	NWP/CCP NTP Certification Manager			X
Anthony Harley	NWP/CCP VEE	X	X	
LaTrana Harmon	NWP/CCP QA	X		X

PERSONNEL CONTACTED DURING AUDIT				
NAME	ORG/TITLE	PREAUDIT MEETING	CONTACTED DURING AUDIT	POST-AUDIT MEETING
Jeff Harrison	NWP/CCP AK Expert	X	X	X
Fred Heacker	WAI TWPC Deputy General Manager	X		X
Steve Holmes	NMED/HWB Observer	X		
Laura Jones	NWP/CCP QAE		X	
Martin Jones	TWPC RH Floor Supervisor	X	X	
Irene Joo	NWP/CCP RH Manager	X	X	X
Creta Kirkes	NWP/CCP WCO		X	
Trais Kliphuis	NMED/HWB Observer	X		
Scott Kranker	TWPC STR	X		X
Wayne Ledford	NWP/CCP QA Specialist	X		X
Ronnie Lee	NWP/CCP Waste Certification Manager	X	X	X
Kenneth Licklitter	CBFO/CTAC/NTP Observer	X		X
Eric Lyles	NWP/CCP RTR Operator		X	
Ricardo Maestas	NMED Observer			X
R.C. McKay	WAI TWPC General Manager	X		
Kevin Meyer	MCS EA		X	
Dennis Miehls	CBFO Sr. QA Specialist	X		X
David Moody	NWP/CCP SPM	X	X	X
Tom Morgan	CBFO/NTP Certification Manager	X		X
Martin Navarrete	CBFO QA Representative	X		X
Fred Oney	NWP/CCP RTR Operator	X	X	
Jose Payanes	NWP/CCP Document Services Manager		X	
Mark Percy	NWP/CCP SPM	X		
Sheila Percy	NWP/CCP NTPC Records Manager	X	X	

PERSONNEL CONTACTED DURING AUDIT				
NAME	ORG/TITLE	PREAUDIT MEETING	CONTACTED DURING AUDIT	POST-AUDIT MEETING
Kevin Peters	NWP/CCP AK Expert	X	X	X
Mike Ramirez	NWP/CCP Certification Manager	X		X
Steve Redmond	NWP/CCP RTR Operator		X	
Jeremy Robinson	NFT FGA Lead Operator	X	X	
Beverly Schrock	NWP/CCP SPM	X	X	X
Patrick Smith	NWP/CCP Records Lead	X	X	
Andrew Stallings	NWP/CCP VPM	X	X	X
Brett Stockdale	DOE/UCOR Support			X
Shawn Treadway	NWP/CCP Container Manager		X	
Joe Wachter	MCS Technical Director	X	X	
Daniel Wade	NWP/CCP SPM	X		X
Connie Walker	NMED Contractor/Observer	X	X	
Wade Weyerman	LANL MLU Manager	X		
Ronald Whitson	MCS Operator/ITR	X	X	

PERSONNEL CONTACTED DURING THE AUDIT BY SUBJECT AREA

Personnel Qualification and Training	Cheryl Armijo Michele Billett AJ Fisher
Control of Nonconforming Items	Laura Jones
Records	Sheila Pearcy
WIPP Waste Information System (WWIS Data Entry)	Creta Kirkes
Waste Certification/Project Level Data V&V	Irene Joo David Moody Beverly Schrock
Acceptable Knowledge	Michelle Billet Trey Greenwood Jeff Harrison Laura Jones Shiela Pearcy Kevin Peters
Real-Time Radiography	Steve Redmond Fred Oney Eric Lyles
Visual Examination	James Gaenslen Anthony Harley Martin Jones

TABLE OF AUDITED DOCUMENTS

TABLE OF AUDITED DOCUMENTS			
NUMBER	PROCEDURE NUMBER	REV	PROCEDURE TITLE
1.	CCP-PO-001	21	CCP Transuranic Waste Characterization Quality Assurance Project Plan
2.	CCP-PO-002	27	CCP Transuranic Waste Certification Plan
3.	CCP-QP-002	35	CCP Training and Qualification Plan
4.	CCP-QP-005	23	CCP TRU Nonconforming Item Reporting and Control
5.	CCP-QP-008	21	CCP Records Management
6.	CCP-QP-021	9	CCP Surveillance Program
7.	CCP-QP-028	15	CCP Records Filing, Inventorying, Scheduling, and Dispositioning
8.	CCP-TP-001	21	CCP Project Level Data Validation and Verification
9.	CCP-TP-002	26	CCP Reconciliation of DQOs and Reporting Characterization Data
10.	CCP-TP-005	26	CCP Acceptable Knowledge Documentation
11.	CCP-TP-028	8	CCP Radiographic Test Drum and Training Container Construction
12.	CCP-TP-030	33	CCP CH TRU Waste Certification and WWIS/WDS Data Entry
13.	CCP-TP-033	20	CCP Shipping of CH TRU Waste
14.	CCP-TP-053	14	CCP Standard Real-Time Radiography (RTR) Inspection Procedure
15.	CCP-TP-068	11	CCP Standardized Container Management
16.	CCP-TP-164	0	CCP Real-Time Radiography #7 Operating Procedure
17.	CCP-TP-165	3	CCP Real-Time Radiography #6 Operating Procedure
18.	CCP-TP-500	13	CCP Remote-Handled Waste Visual Examination
19.	CCP-TP-506	4	CCP Preparation of the Remote-Handled Transuranic Waste Acceptable Knowledge Characterization Reconciliation Report
20.	CCP-TP-507	8	CCP Shipping of Remote-Handled Transuranic Waste
21.	CCP-TP-530	11	CCP RH TRU Waste Certification and WWIS/WDS Data Entry
22.	WP 13-QA.03	22	Quality Assurance Independent Assessment Program

List of Processes and Equipment Evaluated During the Audit

WIPP #	Process/Equipment Description	Applicable to the Following Waste Streams/Groups of Waste Streams
PREVIOUSLY APPROVED PROCESSES OR EQUIPMENT		
N/A	Acceptable Knowledge Procedures – CCP-TP-002, CCP-TP-005, & CCP-TP-506	Solids (S3000) Soils/Gravel (S4000) Debris (S5000)
N/A	Data Generation and Project Level Validation & Verification (V&V) Procedures – CCP-TP-001, CCP-TP-002, CCP-TP-500	Solids (S3000) Soils/Gravel (S4000) Debris (S5000)
N/A	WIPP Waste Information System (WWIS) Procedures – CCP-TP-030, CCP-TP-033, & CCP-TP-530	Solids (S3000) Soils/Gravel (S4000) Debris (S5000)
16VE1	Visual Examination (VE) Procedures – CCP-TP-113	Debris (S5000)
16RHVE1	Visual Examination (VE) Procedures – CCP-TP-500	Debris (S5000)
16RR1	Real-Time Radiography Mobile Characterization System (MCS) RTR #6 Procedures – CCP-TP-053 & CCP-TP-165	Solids (S3000) Soils/Gravel (S4000) Debris (S5000)
N/A	Quality Assurance Program	Solids (S3000) Soils/Gravel (S4000) Debris (S5000)
NEW PROCESSES OR EQUIPMENT		
16RR2	Real-Time Radiography Mobile Characterization System (MCS) RTR #7 Procedures – CCP-TP-053 & CCP-TP-164	Solids (S3000) Soils/Gravel (S4000) Debris (S5000)
DEACTIVATED PROCESSES OR EQUIPMENT		
NONE		

U.S. Department of Energy
Carlsbad Field Office

(REVISED)
CONTENT MAP

**Final Audit Report of Audit A-14-03 of the
Oakridge National Laboratory (ORNL)
Central Characterization Program (CCP)
Waste Characterization and Certification
Program**



**Audit Number A-14-03
January 14 – 16, 2014**

CONTENT MAP

This box contains the Final Audit Report of CBFO Audit A-14-03 of the ORNL/CCP Quality Assurance Program and the ORNLCCP (TRU) Waste Characterization and Certification Program conducted January 14 - 16, 2014. The box also contains a list of objective evidence used to conduct the audit. The documents have been organized into color-coded folders, one each for the **SRS-ORNL** CCP Implementing Procedures (purple folder), Final Audit Report (manila folder), the C-6 Checklist (brown folder), General Information (green folder), Acceptable Knowledge (blue folder), Real-Time Radiography (red folder), and Visual Examination (yellow folder). The list below identifies each document by name and number and indicates where each may be found.

CONTENT MAP	Black Folder
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Final Audit Report	Manila Folder
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Final Audit Report	
Attachment 1: Personnel Contacted During the Audit	
Attachment 2: Personnel Contacted During the Audit by Subject Area	
Attachment 3: Objective Evidence Compiled During the Audit (provided in boxes)	
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C6 Checklist	March 13, 2013	Brown Folder
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C6-1	Waste Analysis Plan (WAP) Checklist
C6-2	Acceptable Knowledge (AK) Checklist
C6-3	Radiography (RTR) Checklist
C6-4	Visual Examination (VE) Checklist

SRSORNL/CCP Program Implementing Procedures Audited	Purple Folder
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See Final Report Attachment 4 for List of Audited **SRS-ORNL** CCP Procedures

Attachment 3 - Objective Evidence
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General Information (Checklist C6-1) Waste Analysis Plan (WAP)	Green Folder
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GEN1	Batch Data Reports - OR-RTR6-0438, OR-RTR7-0002, OR-RTR7-0009, And OR-RTR6-0435
GEN2	Batch Data Reports - ORNLRHVE13005, ORNLRHVE13006, and ORNLRHVE13001
GEN3	OR-REDC-RH-HET/CIS, Lot 28, Draft Lot 29
GEN4	OR-NFS-CH-HET-A/CIS, Lot 8
GEN5	Draft OR-NFS-CH-HOM-A/CIS, Lot 1
GEN6	OR-NFS-CH-SOIL/CIS, Lot 12
GEN7	CH Quarterly Repeats
GEN8	RH Quarterly Repeats
GEN9	Nonconformance Reports
GEN10	CH Non-conformance Report Logs for Project Level (PL) and Data

GEN11	Generation Level (DGL) CH Waste Characterization Case Files for the containers X10C0506150B, X10C0506150C, X10C9311454A, and X10C9313063A.
GEN12	RH Waste Characterization Case Files for the containers ORRH00019, ORRH00649, and ORRH00650; and RH loading file for canister OR0073 that is loaded with the three RH containers listed above
GEN13	CH Records Inventory and Disposition Schedule (RIDS) dated 08/01/2013
GEN14	RH Records Inventory and Distribution Schedule (RIDS)
GEN15	Qualification records for selected CCP personnel
GEN16	NPTC – Oak Ridge National Labs (ORNL) List of Qualified Individuals
GEN17	RH Program – ORNL List of Qualified Individuals
GEN18	Acceptable Knowledge Expert (AKE) and Site Project Manager (SPM) Training files

Acceptable Knowledge (Checklist C6-2)		Blue Folder
AK1	CCP AK Summary Report for ORNL Isotopes Programs CH TRU Waste, OR-ISTP-CH-HET, CCP-AK-ORNL-008 R1	
AK2	CCP AK Summary Report for NFS CH TRU Waste Stored at ORNL, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and CCP-AK-ORNL-001 R8	
AK3	CCP AK Summary Report for ORNL REDC RH TRU Waste, OR-REDC-RH-HET, and CCP-AK-ORNL-500 R3	
AK4	Waste Stream Profile Form and attachments for Waste Stream OR-ISTP-CH-HET	
AK5	Draft Waste Stream Profile Form and attachments for waste stream OR-NFS-CH-HOM-A	
AK6	Waste Stream Profile Form and attachments for waste stream OR-NFS-CH-SOIL	
AK7	Waste Stream Profile Form and attachments for waste stream OR-REDC-RH-HET	
AK8	Q&MIS Approvals for AK Summaries CCP-AK-ORNL-001 R8, CCP-AK-ORNL-008 R1 and CCP-AK-ORNL-500 R3	
AK9	AK Source Document Summaries for waste stream OR-ISTP-CH-HET	
AK10	AK Source Document Summaries for waste stream OR-NFS-CH-HOM-A	
AK11	AK Source Document Summaries for waste stream OR-NFS-CH-SOIL	
AK12	AK Source Document Summaries for waste stream OR-REDC-RH-HET	
AK13	AK Documentation Checklist, Attachment 1, for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET	
AK14	AK Information List for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET	
AK15	AK Att. 5, Hazardous Constituents for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET	
AK16	AK Att. 6, Waste Form, Waste Material Parameters, Prohibited Items and Packaging for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET	
AK17	AK Waste Containers List Att. 8 for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET	
AK18	AK Discrepancy Resolutions in the AK Record	

AK19	AK Discrepancy Resolutions at Characterization and AK Reevaluations
AK20	IDC database with "reject" field
AK21	AK CH and RH Tracking Spreadsheets for waste streams OR-ISTP-CH-HET, OR-NFS-CH-HOM-A, OR-NFS-CH-SOIL, and OR-REDC-RH-HET
AK22	Container Input Forms for traceability containers
AK23	NCRs for prohibited items
AK24	Container inspection reports
AK25	"Hold" tag
AK26	Internal Audit
AK27	AK Accuracy Reports for waste streams OR-ISTP-CH-HET, OR-NFS-CH-SOIL, and OR-REDC-RH-HET
AK28	Waste Stream Characterization Checklists and AK Data Reconciliation
AK29	Batch Data Report - OR-RTR6-0092
AK30	Batch Data Report - OR-RTR6-0342
AK31	Batch Data Report - OR-RTR6-0353
AK32	Batch Data Report - OR-RTR6-0437
AK33	Batch Data Report - OR-RTR6-0438
AK34	Batch Data Report - OR-RTR7-0002
AK35	Batch Data Report - OR-RTR7-0003
AK36	Batch Data Report - ORNLRHVE13004
Real-Time Radiography (Checklist C6-3) Red Folder	
RTR1	Batch Data Reports - OR-RTR6-0433, OR-RTR6-0437, OR-RTR6-0439, OR-RTR6-0440, OR-RTR7-0001, OR-RTR7-0003, OR-RTR7-0008, and OR-RTR7-0009
RTR2	Training and Qualification Records for four RTR Operators
Visual Examination (Checklist C6-4) Yellow Folder	
VE1	Batch Data Reports - ORNLRHVE13001, ORNLRHVE13002, ORNLRHVE13003, ORNLRHVE13004, ORNLRHVE13005, and ORNLRHVE13006
VE2	VE Training Records for 3 Operators
VE3	VEE Appointment Letter