



Department of Energy
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NMED
Hazardous Waste Bureau

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

Subject: Transmittal of CBFO Responses to NMED Comments on the Final Audit Report for Recertification Audit A-13-02 of the SRS/CCP

Dear Mr. Kieling:

This letter transmits Carlsbad Field Office (CBFO) responses to New Mexico Environment Department (NMED) comments on the Final Audit Report for Recertification Audit A-13-02 of the Savannah River Site/Central Characterization Program (SRS/CCP), as well as the revised C6-4 checklist. The applicable C6 checklist was revised to address the issue identified in a letter from the NMED dated May 2, 2012.

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 concerning these responses, please contact Mr. Oba L. Vincent, Acting Director, CBFO Office of Quality Assurance, at (575) 234-7525.

Sincerely,

Jose R. Franco
 Jose R. Franco, Manager
 Carlsbad Field Office

Enclosures

cc: w/o enclosures

O. Vincent, CBFO *ED
 J. R. Stroble, CBFO ED
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cc: w/enclosures
 WIPP Operating Record ED
 CTAC QA File ED
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*ED denotes electronic distribution



Appendix A
Response to Comment

**RESPONSES TO NMED COMMENTS ON THE SAVANNAH RIVER SITE/CENTRAL
CHARACTERIZATION PROGRAM FINAL AUDIT REPORT A-13-02**

1. Responses to question 228 of the C6 Checklist were left blank.

Response: Revised C6-4 checklist question 228 to reference CCP-TP-002, *CCP Reconciliation of DQOs and Reporting Characterization Data*, Att. 1. Procedure CCP-TP-002, Att. 1, instructs to ensure that sampling completeness shall be expressed as the number of valid samples collected as a percent of the total number of samples collected for each waste stream, where a valid sample is defined as a sample collected in accordance with approved sampling methods and the drum was properly prepared for sampling.

Appendix B
Revised C6 Checklist

Revised Table C6-4 Headspace Gas Checklist
SRS CCP Recertification Audit A-13-02
November 6 - 8, 2012

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Headspace Gas Checklist

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
HEADSPACE GAS SAMPLING FREQUENCY						
182	Are procedures in place to ensure that randomly selected retrievably stored and newly generated waste containers will undergo headspace gas sampling and analysis as required to augment AK? (Section C-3a)	CCP-TP-106, (All) CCP-TP-093, (All) CCP-TP-162, (All)	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1) Random Selection Memos (HSG-2) SRHSG1107 ECL12001M SRHSG1206 ECL12010M SRHSG1217 ECL12030M SRHSG1218 ECL12031M SRHSG1219 ECL12035M (GEN-4) Savannah River Site Central Characterization Project Waste Stream Profile Form Number SR- 221H-PuOx CP:11:01610 – Transmittal of Savannah River Site Waste Stream Profile Form for Waste Stream SR-W027-HBL- BOX and Change Notice #1 CP:12:01502 - Transmittal of Savannah	Y	Random selection activity is performed at PL.

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
				River Site Waste Stream Profile Form for Waste Stream SR-W027-235F-HOM CP:12:01504 - Transmittal of Savannah River Site Waste Stream Profile Form for Waste Stream SR-DWPF-HET (GEN-5)		
183	Are procedures in place to ensure that randomly selected containers will be allowed to equilibrate to sampling room temperature for 72 hours prior to sampling (18° C or higher) and that the drum ages specified in accordance with Section C1-1a(1) are met? All information necessary to determine drum age criteria must be determined, including but not limited to: Scenario Determination Packaging Configuration Filter Diffusivity Liner/Lid Opening Diameter (Section C1-1a)	CCP-TP-093, S. 4.3.1 S. 4.3.2 CCP-TP-106, Att. 3	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1) Random Selection Memos (HSG-2)	Y	
HEADSPACE GAS SAMPLING GENERAL REQUIREMENTS						
184	Are procedures in place to ensure all containers of waste are vented through filters to ensure that gases are adequately vented preventing over pressurization or development of conditions that would lead to the development of ignitable, corrosive, reactive, or other characteristic waste? (Section C-1c)	CCP-TP-082, S. 4.1	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1)	Y	
186	Are procedures in place to ensure that the following gas sample container and holding time requirements are met: The minimum sample volume for VOC. sample collection is 250 mL. (Note: a single 100 mL sample may be collected if the headspace is limited) Holding temperatures shall be between 0° C and 40°C (Table C1-1)	CCP-TP-093, S. 2.3.1[A] S. 4.7.1 CCP-TP-106, Att. 3	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1)	Y	SRS/CCP only performs HSG sampling. HSG analysis is performed by the INL/CCP analytical laboratory at the INL. This program is audited and approved separately.

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
187	Are procedures in place to ensure that all sampling is performed in an appropriate radiation containment area? (Section C1-1a)	CCP-TP-093, S. 2.4.1[A]	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1)	Y	Sampling activity was performed at PAD-4 of the SRS facility.
188	Are procedures in place to ensure that headspace gases is analyzed for the analytes listed in Table C3-2 of the Attachment C3? (Section C1-1a(1))	N/A	N/A	N/A	N/A	SRS/CCP only performs HSG sampling. HSG analysis is performed by the INL/CCP analytical laboratory at the INL. This program is audited and approved separately.
189	Are procedures in place to ensure that all headspace gas analyses utilize either SUMMA® or equivalent canisters or on-line integrated sampling/analysis systems? (Section C1-1a(1))	CCP-TP-093, S. 2.3	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1)	Y	SRS/CCP only performs HSG sampling using Summa supplied by INL Lab. HSG analysis is performed by the INL/CCP analytical laboratory at the INL. This program is audited and approved separately.
MANIFOLD SAMPLING						
190	Are procedures, processes, and equipment in place to ensure that the following sampling procedures are implemented: <ul style="list-style-type: none"> The sampling equipment is leak checked and cleaned upon first use and as needed The manifold and sample canisters are evacuated to 0.1 mm Hg prior to sample collection Cleaned and evacuated sample canisters are attached to the evacuated manifold before the manifold inlet valve is opened The manifold inlet valve is attached to a changeable filter connected to either a side port needle sampling head capable of forming an airtight seal (for penetrating a filter or rigid poly liner when necessary), a drum punch sampling head capable of forming an airtight seal (capable of punching through the metal lid of a drum while maintaining an airtight seal for 	N/A	N/A	N/A	N/A	SRS/CCP does not perform manifold sampling.

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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>sampling through the drum lid), or a sampling head with an airtight fitting for sampling through a pipe overpack container filter vent hole. Refer to Section C1-1a(4) for descriptions of these sampling heads.</p> <p>Field blanks are collected using samples of room air collected in the sampling area in the immediate vicinity of the waste container. (Note: field blanks for SUMMA® canisters are collected directly into the canister without the use of the manifold.)</p> <p>Manifold equipped with purge assembly that allows QC samples to be collected through all sampling components that affect compliance with QAOs</p> <p>The manifold internal volume is calculated and documented in a field logbook</p> <p>The total volume of headspace gas collected is calculated by adding the canister volume and internal manifold volume and should be less than 10 percent of the available headspace volume when a volume estimate is available</p> <p>(Section C1-1a(2))</p>					
191	<p>Are procedures, processes, and equipment in place to ensure that the following manifold sample side conditions are met:</p> <p>The sampling head forms a leak-tight connection with the sampling manifold</p> <p>A flexible hose allowing movement from the purge assembly to the waste container</p> <p>Pressure sensors that are pneumatically connected to the manifold and must be able to measure absolute pressure from 0.05 mm Hg to 1000 mm Hg with a resolution of that must be 0.01 mm Hg at 0.05 mm of Hg. The pressure sensors shall have an operating range of 15° C to 40° C.</p> <p>Sufficient canister ports shall be available to allow simultaneous collection of headspace gas samples and duplicates for VOC analysis.</p> <p>Ports not occupied with sample canisters require a plug to prevent ambient air from entering the system</p> <p>Ports shall have VCR® fittings for connection to the sample canisters to prevent degradation of the fitting on the canister and manifold.</p> <p>Sample canisters are leak-free, stainless steel pressure vessels, with a Cr-NiO SUMMA® passivated interior surface or canisters with equivalently inert surfaces, bellows valve, and a pressure/vacuum gauge. All canisters shall have VCR ® fittings to sampling and analytical equipment</p> <p>The pressure/vacuum gauge must be mounted on each manifold and shall be helium-leak tested to 1.5×10^{-7} cc/s, have all stainless steel construction, and be capable of operating at temperatures to 125° C</p>	N/A	N/A	N/A	N/A	SRS/CCP does not perform manifold sampling.

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
191a	<p>A dry vacuum pump capable of reducing the manifold pressure to 0.05 mm Hg. (Note: If an oil vacuum pump is used precautions such as a molecular sieve or cryogenic trap shall be used to prevent diffusion of oil vapors back into the manifold)</p> <p>A minimum distance between the needle and the valve that isolates the pump from the manifold in order to minimize the dead volume in the manifold.</p> <p>If real time equipment blanks are not available, the manifold shall be equipped with an OVA capable of detecting all analytes listed in Table C3-2 and is capable of measuring total VOC concentrations below the lowest headspace gas PRQL</p> <p>(Section C1-1a(2))</p>	N/A	N/A	N/A	N/A	SRS/CCP does not perform manifold sampling.
192	<p>Are procedures, processes, and equipment in place to ensure that the following manifold standard side conditions are met:</p> <p>A cylinder of compressed zero air, helium, argon, or nitrogen that is hydrocarbon and CO₂ free air (only hydrocarbon and CO₂-free gases required for FTIRS) and certified by the manufacturer to contain less than one ppm VOCs. The gas is used to clean the manifold between samples and to provide gas for the collection of equipment and on-line blanks</p> <p><i>(Note: a zero air or nitrogen generator may be used, provided a sample of air is collected and found to contain less than 1 ppm total VOCs and the air is humidified)</i></p> <p>Cylinders of reference gas with known concentrations of analytes from Table C3-2 certified by the manufacturer to provide gases for evaluating the accuracy of the headspace gas sampling process</p> <p>All cylinders of reference gases and zero air shall be connected to flow regulating devices</p> <p>A humidifier filled with ASTM Type I or II water, connected, and opened to the standard side of the manifold between the compressed gas cylinders and the purge assembly shall be used, if the Fourier Transform Infrared System (FTIRS) is not used. No humidifier if the FTIRS is used <i>(Note: Compressed gas may include water vapor between 1000 and 10000 ppmv in lieu of a humidifier)</i></p> <p>The humidifier is off-line during system evacuation to prevent manifold flooding</p>	N/A	N/A	N/A	N/A	SRS/CCP does not perform manifold sampling.
192a	<p>A purge assembly that allows the sampling head to be connected to the standard side of the manifold.</p> <p>A flow indicating device or pressure regulator that is connected downstream of the purge assembly to monitor the flow rate or pressure of gases through the purge assembly to ensure that excess flow is available to prevent ambient air from contaminating the QC samples and allow sample of gas</p>	N/A	N/A	N/A	N/A	SRS/CCP does not perform manifold sampling.

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
	from the compress gas cylinders to be collected near ambient pressure. (Section C1-1a(2))					
193	Do procedures ensure that NIST Certified (or equivalent) ambient pressure sensors maintained in the sampling area must have a sufficient measurement range for the expected ambient barometric pressures and a resolution shall be 1.0 mm Hg or less? (Section C1-1a(2))	N/A	N/A	N/A	N/A	SRS/CCP does not perform manifold sampling.
194	Do procedures ensure that the NIST traceable (or equivalent) temperature sensor in the sampling location shall have a sufficient measurement range for the ambient temperatures (18° to 50°C)? (Section C1-1a(2))	N/A	N/A	N/A	N/A	SRS/CCP does not perform manifold sampling.
DIRECT CANISTER SAMPLING						
195	<p>Are procedures, processes, and equipment in place to ensure that the following operating conditions are in place for direct canister sampling:</p> <p>Canisters are evacuated to 0.1 mm Hg prior to use and attached to a changeable filter connected to the sampling head</p> <p>Sampling heads are capable of either punching through the metal lid of the drums while maintaining an airtight seal for sampling through the drum lid, penetrating a filter or the septum in the orifice of a self-tapping screw, or maintaining an airtight seal for sampling through a pipe overpack container filter vent hole.</p> <p>Field duplicates are collected in the same manner and at the same time and using the same type of sampling apparatus as used for headspace gas sample collection.</p> <p>Field blanks shall be samples of room air collected in the immediate vicinity of the waste drum sampling area prior to removal of the drum lid.</p> <p>Equipment blanks and field reference standards shall be collected using a purge assembly equivalent to the standard side of the manifold</p> <p>Less than 10 percent of the headspace is withdrawn when a headspace estimate is available <i>(Note: The total volume withdrawn is can be determined by adding the canister volume and the internal volume of the sampling head)</i></p> <p>Each sample canister is shall be equipped with a pressure/vacuum gauge capable of indicating leaks and sample collection volumes. The gauge shall be helium leak tested to 1.5×10^{-7} cc/s, have all stainless steel construction and be capable of tolerating temperatures to 125° C</p> <p>Summa® canisters or equivalent are used to collect samples (Section C1-1a(3))</p>	<p>CCP-TP-093, S. 4.4.3 [A] S. 4.5.2[A] Figs. 1 & 2</p> <p>S. 4.4.1 S. 4.4.2</p> <p>S. 4.5.4</p> <p>S. 4.5.3 & 2nd NOTE</p> <p>S. 4.5.6</p> <p>S. 2.3.1[A] S. 4.3.1[A.18]</p> <p><u>Bullet 7:</u> N/A</p> <p>S. 2.3.1[A]</p>	Y	<p>SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1)</p>	Y	<p>SRS/CCP only performs HSG sampling. Canister prep is performed by the INL/CCP analytical laboratory at the INL. This activity is audited and approved separately.</p> <p>Bullet 5: SRS/CCP does not perform manifold sampling.</p> <p>Bullet 7: Canisters provided by INL/CCP and tested by them</p>

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
SAMPLING HEADS UNDER DRUM LIDS: SAMPLING THROUGH A CARBON FILTER						
196	<p>Are procedures, process, and equipment adequate to ensure that samples collected through a filter meet the following requirements:</p> <p>The lid of the drum's 90-mil rigid poly liner shall contain a hole for venting to the drum</p> <p>That non-vented drums are not sampled until an internal nonconformance report is prepared, submitted, and resolved in order to obtain a representative sample</p> <p>The filter shall be sealed to prevent outside air from entering the drum</p> <p>The sampling head for collecting drum headspace gas shall consist of a side-port needle, a filter to prevent particle contamination of the sample, and an adapter to connect the side-port needle to the filter</p> <p>The sampling head is cleaned or replaced after each use</p> <p>The housing of the filter shall allow insertion of the sampling needle through the filter element or a sampling port with septum that bypasses the filter element into the drum headspace</p> <p>The side port needle shall be used to reduce the potential for plugging</p> <p>The purge assembly shall be modified for compatibility with the side port needle.</p> <p>(Section C1-1a(4)(i))</p>	<p>CCP-TP-093, S. 4.2.1</p> <p>S. 4.2.1[B]</p> <p>S. 4.5.4[B]</p> <p>S. 2.3.1[B] Figs.1 and 2</p> <p>S. 4.5.4[N] S. 4.5.5 (M)</p> <p>CCP-TP-082, S. 4.1</p> <p>CCP-TP-093, S. 2.3.1[B] Figs.1 and 2</p> <p>Bullet 8: N/A</p>	Y	<p>SRHSG1203</p> <p>SRHSG1206</p> <p>SRHSG1217</p> <p>SRHSG1218</p> <p>(HSG-1)</p>	Y	Bullet 8: No purge assembly used.
SAMPLING HEADS UNDER DRUM LIDS: SAMPLING THROUGH THE DRUM LID						
197	<p>Are procedures in place to establish the criteria for sampling through the drum lid as opposed to sampling through a filter?</p> <p>(Section C1-1a(4)(ii))</p>	N/A	N/A	N/A	N/A	SRS/CCP does not sample through drum lids.
197a	<p>If sampling through a pipe overpack container filter vent hole with an airtight device is used, are procedures in place to ensure that a sampling head with an airtight seal for sampling through a pipe overpack container filter vent hole are available?</p> <p>(Section C1-1a(4)(iii))</p>	N/A	N/A	N/A	N/A	SRS/CCP does not perform HSG sampling for pipe over-packs.
197b	<p>If sampling through a pipe overpack container filter vent hole is used, are the following criteria met:</p> <p>The seal between the pipe overpack container surface and sampling apparatus shall be designed to minimize intrusion of ambient air.</p>	N/A	N/A	N/A	N/A	SRS/CCP does not perform HSG sampling for pipe over-packs.

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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>The filter shall be replaced as quickly as is practicable with the airtight sampling apparatus to ensure that a representative sample can be taken.</p> <p>All components of the sampling system that come into contact with sample gases shall be cleaned according to requirements for direct canister sampling or manifold sampling, whichever is appropriate, prior to sample collection.</p> <p>Equipment blanks and field reference standards shall be collected through all the components of the sampling system that contact the headspace-gas sample.</p> <p>During sampling, openings in the pipe overpack container shall be sealed to prevent outside air from entering the container.</p> <p>A flow-indicating device shall be connected to sampling system and operated according to the direct canister or manifold sampling requirements, as appropriate.</p> <p>(Section C1-1a(4)(iii))</p>					
197c	<p>If sampling through a pipe overpack container filter vent hole is used, are the following criteria met?</p> <p>The site has documentation that demonstrates that they have determined through testing the appropriate length of time for exchanging the filter with the sampling device to assure representative samples are collected.</p> <p>(Section C1-1a(4)(iii))</p>	N/A	N/A	N/A	N/A	SRS/CCP does not perform HSG sampling for pipe over-packs.
198	<p>Are procedures, process, and equipment adequate to ensure that samples collected through the drum lid by punching meet the following requirements:</p> <p>The lid of the drum's 90-mil rigid poly liner shall contain a hole for venting to the drum. If the DAC for Scenario 1 is met, a sample may be collected from inside the 90-mil rigid poly liner.</p> <p>If headspace gas samples are collected from the drum headspace prior to venting the 90-mil rigid poly liner, the sample is not acceptable and a nonconformance report shall be prepared, submitted, and resolved.</p> <p>The drum lid shall be breached using a punch that forms an airtight seal between the drum lid and the manifold or canister</p> <p>The seal between the drum lid and the sampling head shall be designed to minimize the intrusion of ambient air</p> <p>All components of the sampling system that come in contact with sample gases shall be purged with humidified zero air, nitrogen, or helium prior to sample collection</p> <p>Equipment blanks and field reference standards shall be collected through all</p>	N/A	N/A	N/A	N/A	SRS/CCP does not sample through drum lids.

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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>components of the punch that contact the headspace gas sample</p> <p>Pressure shall be applied to the punch until the drum lid has been breached</p> <p>Provisions shall be made to relieve excessive drum pressure increases during drum punch operations; potential pressure increases may occur during sealing of the drum punch to the drum lid</p> <p>The filter is sealed to prevent outside air from entering the drum</p> <p>(Section C1-1a(4)(ii))</p>					
198a	<p>A flow indicating device or pressure regulator to verify flow of gases shall be pneumatically connected to the drum punch and operated in the same manner as the flow indicating device</p> <p>Equipment are used to secure the drum punch sampling system to the drum lid</p> <p>If the headspace gas sample is not taken at the time of drum punching, the presence and diameter of the rigid liner vent hole is documented during the punching operation for use in determining an appropriate Scenario 2 DAC.</p> <p>(Section C1-1a(4)(ii))</p>	N/A	N/A	N/A	N/A	SRS/CCP does not sample through drum lids.
QUALITY CONTROL SAMPLE COLLECTION						
199	<p>Are procedures in place to ensure that the following QC sample requirements are met:</p> <p>Field QC samples are collected on per sample batch basis for manifold and direct canister sampling. A sampling batch is defined as up to 20 samples collected within 14 days of the first sample</p> <p>Field samples are collected and analyzed on a per on-line batch basis for on-line sampling/analysis systems. An on-line batch is defined as the number of headspace gas samples that are collected within a 12 hour period from the same on-line integrated analysis system</p> <p>For the manifold sampling method, field blanks, equipment blanks, field duplicates, and field reference samples are collected prior to sample collection on a per sampling batch basis or one per day, whichever is more frequent</p> <p>For the direct canister sampling method field blanks and field duplicates are collected on a per sampling batch basis prior to sample collection; while equipment blanks and field reference samples are collected after equipment purchase, cleaning, and assembly</p>	<p>CCP-TP-093, S. 2.6.4</p> <p>CCP-TP-106, Att. 3</p> <p><u>Bullet 2:</u> N/A</p> <p><u>Bullet 3:</u> N/A</p> <p>CCP-TP-093, S. 4.4.5 (EB) S. 4.5.3 (FB) S. 4.5.4 (DUP)</p>	Y	<p>SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1)</p> <p>Field Reference (HSG-3)</p>	Y	<p>Bullet 2: SRS/CCP does not perform online sampling and analysis.</p> <p>Bullet 3: SRS/CCP does not perform manifold sampling.</p> <p>Bullet 4: Equipment blanks are collected by INL/CCP and are audited separately.</p>

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
		S. 4.5.6 (FRS)				
199a	For the On-line sampling method, field blanks, equipment blanks, field duplicates, and field reference samples are collected on a per on-line batch basis. (Note: The on-line blank replaces the laboratory and equipment blanks, the on-line duplicate replaces the field duplicate and the laboratory duplicate, and the on-line sample control replace the field reference standard and the laboratory control sample.) (Section C1-1b, C1-1b(1), C1-1b(2), C1-1b(3), C1-1b(4))	N/A	N/A	N/A	N/A	SRS/CCP does not use online sampling and analysis.
200	Do procedures adequately assign the site project QA manager with the responsibility of monitoring field QC results and initiate the nonconformance report process in the event the following acceptance criteria are not met or sample collection frequencies are not met: Field and equipment blanks shall be less than 3 times the detection limits specified in Table C3-2 and equipment blank results determined by FTIR shall be less than the PRQL specified in Table C3-2 (Section C1-1b(1) and C1-1b(2)) Field reference standards shall have a recovery of between 70 and 130% (Table C1-3) Field Duplicates shall have an RPD of less than or equal to 25 (Sections C1-1b and C1-1b(4); Table C1-3)	CCP-TP-001, S. 4.2 Att. 10	Y	SRHSG1107 ECL12001M SRHSG1206 ECL12010M SRHSG1217 ECL12030M SRHSG1218 ECL12031M SRHSG1219 ECL12035M (GEN-4) CP:08:00484 – Report of Field Reference Standard for Central Characterization Project – Savannah River Site (GEN-11)	Y	
201	Are procedures in place to ensure that field reference standards meet the following criteria: Field reference standards shall contain a minimum of 6 analytes listed in Table C3-2 at a range of between 10 and 100 ppmv and at concentrations greater than the MDL Field reference standards shall be traceable to a nationally recognized standard, if available If commercial gases are used, they shall be accompanied by a Certificate of Analysis and all field reference standards are traceable to certificates. Commercial gases are not used past the manufacturer specified shelf life. Field reference samples are submitted blind to the laboratory at a frequency of one per sampling batch. (Note: Field reference standards may be	<u>Bullets 1–3:</u> CCP-TP-093, S. 2.6.3 S. 2.3.1.[H] <u>Bullet 4:</u> CCP-TP-106, Att. 3, #15 <u>Bullet 5:</u> CCP-TP-093,	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1) Field Reference (HSG-3)	Y	

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
	discontinued for direct canister method if QAO accuracy objectives are met) (Section C1-1b(3))	S. 2.6.3 S. 4.5.6 CCP-TP-106, Att. 3, #7				
202	Are procedures in place to ensure that field duplicate samples are collected sequentially and in accordance with Table C1-1? (Section C1-1b(4))	CCP-TP-093, S. 4.5.4 (DUP)	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1)	Y	
SAMPLE EQUIPMENT TESTING, INSPECTION AND MAINTENANCE						
203	Are procedures in place to ensure that sample containers are cleaned in accordance with the following specifications: <p>All sampling components that contact sample gases are constructed of inert materials such as stainless steel or Teflon®</p> <p>The sampling manifold and canisters are properly cleaned and leak checked prior to each sampling event in accordance to or equivalent with TO-14A or TO-15 methodology</p> <p>SUMMA® canisters or equivalent are cleaned on an equipment cleaning batch basis. An equipment cleaning batch is defined as the number of canisters that can be cleaned together at one time using the same cleaning method</p> <p>The cleaning system consists of an optional oven and a vacuum manifold which uses a dry vacuum pump or a cryogenic trap backed by an oil sealed pump</p> <p>Prior to cleaning a 24 hour leak check shall be performed (+/- 2 psig) on all canisters</p> <p>Canisters that shall be checked for leaks, repaired, and reprocessed</p> <p>One canister per equipment cleaning batch is filled with humid zero air or humid high purity nitrogen and analyzed for VOCs</p> <p>A batch is considered clean if VOC concentrations are less than 3 times the MDLs specified in Table C3-2</p> <p>Certified leak-free canisters are evacuated to 0.1 mm Hg or less for storage</p> <p>Canister cleaning certification documentation is available at the cleaning facility</p>	N/A	N/A	N/A	N/A	SRS/CCP only performs HSG sampling. Canister prep and cleaning are performed by the INL/CCP analytical laboratory at the INL. This activity is audited and approved separately.

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
	and the cleaning facility initiates canister tags. (Section C1-1c, C1-1c(1))					
204	Are procedures in place to ensure that manifold pressure sensors and ambient air temperature sensors are certified prior to initial use and annually using NIST traceable standards? In addition OVAs if used shall be calibrated daily using known calibration gases and the balance of the OVA calibration is consistent with the manifold purge gas? (Section C1-1d)	N/A	N/A	N/A	N/A	SRS/CCP only performs HSG sampling. Canister prep and cleaning are performed by the INL/CCP analytical laboratory at the INL. This activity is audited and approved separately.
205	Are procedures in place to ensure that sampling equipment are cleaned and leak checked using the following specifications: Surfaces of all sampling equipment that will come in contact with sample gases are thoroughly inspected and cleaned prior to assembly Manifolds and sampling heads shall be purged with humidified zero air, nitrogen, or helium and leak checked after assembly The cleaning shall be repeated if routine system cleaning is inadequate Manifolds and sampling heads which are reused shall be cleaned and leak checked according to procedures in the EPA's Compendium Method TO-14A or TO-15 after sample collection, field duplicate collection, field blank collection, and after the additional cleaning require for field reference samples. All manifold ports shall be capped or closed with valves (sample canisters may be attached as well) Manifolds are cleaned by heating the sample side of the manifold to 150° C and periodically evacuated and flushed with humidified zero air, nitrogen, or helium Manifolds not in use are demonstrated as clean before storage with a positive pressure of humidified zero air, nitrogen, or helium gas in the sampling and standard sides Sampling is suspended when the analysis of an equipment blank indicated the if VOC limits have been exceeded or if a leak test fails Sampling systems are cleaned after field reference standard collection by installing a gas tight connector in place of the sampling head, between the flexible hose and purge assembly. This allows the sample and standard side to be flushed with humidified zero air, nitrogen, or helium in conjunction with heated pneumatic lines Needles, airtight fitting or seal, adapters, and filters are cleaned in accordance with the EPA Method TO-14A or TO-15 procedures. Sample heads shall be discarded or cleaned according to Method TO-15. In addition, the needle, the airtight fitting and seal, and the filter should be purged with	N/A	N/A	N/A	N/A	SRS/CCP only performs HSG sampling. Canister prep and cleaning are performed by the INL/CCP analytical laboratory at the INL. This activity is audited and approved separately.

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
	zero air, nitrogen, or helium and capped for storage (Section C1-1c(2) , Section C1-1c(3), Section C1-1c(4), and Section C1-c(5))					
SAMPLE HANDLING AND CUSTODY						
207	Do formats for field logs and custody records specify documentation of the following information: Name of sampling facility Waste container identification number Sample identification number of each sample referenced to waste container Sample matrix Time and date of sample collection Type/number and size of sample container(s) Method of sample preservation Requested analyses Sampler(s) name through signature	CCP-TP-093, S. 4.4.5[O] S. 4.5.3[L] & [M] S. 4.5.4[S] S. 4.5.5[S] S. 4.5.6[N] Att. 1	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1)	Y	
	Signatures of custodians relinquishing and receiving custody of samples including date and time of transfer until time of final disposition Analytical laboratory Off-site shipping information (date, time, shipper, mode, air bill or lading number) (Section C1-5)					
208	Are procedures are in place to ensure that samples and sampling equipment are identified with unique identification numbers? (Section C1-5)	CCP-TP-093, S. 4.5.3[J] S. 4.5.4[O] S. 4.5.5[N] S. 4.5.6[M] Att. 1	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1)	Y	Canisters are provided by INL/ CCP and audited separately.
209	Do sample tags or labels contain the following information: Sample Description	CCP-TP-093, Att. 1	Y	SRHSG1203 SRHSG1206	Y	

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
	Ambient temperature and pressure Sample identification number Analyses requested Date/Time of collection QC Designation (if applicable) Sampler's initials and organization (Section C1-5)			SRHSG1217 SRHSG1218 (HSG-1) M&TE (HSG-4)		
210	All sampling equipment, canisters, and samples are identified with unique identification numbers that are traceable to equipment cleaning batches? (Section C1-5)	CCP-TP-093, Att. 1	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1)	Y	
211	Are procedures in place to ensure samples are sealed with intact custody seals and that one or more of the following custody conditions are met: It is in the possession of an authorized individual It is in the view of an authorized individual, after being in the possession of that individual It was in the possession of an authorized individual and access to the sample was controlled by locking or placement of signed custody seals that prevent undetected access It is in a designated secure area, such as a controlled access location with complete documentation of personnel access or a radiological containment area (hot cell or glove box) (Section C1-5)	CCP-TP-093, §. 4.6 NOTE §. 4.6.1	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1) LOQI (HSG-5) Operational log book (HG-6)	Y	
212	Are procedures in place to ensure that discrepant sample information, indications of damage, or indications of tampering are documented? (Section C1-5)	CCP-TP-093, Att. 1	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1)	Y	SRS/CCP only performs HSG sampling. Analysis is performed at INL/CCP Lab.

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
214	Are procedures in place to ensure that sample custody is maintained until the sample is released by the site project manager or expended? (Section C1-5)	CCP-TP-093, Att. 1	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1) CP:10:01373 – Delegation of Authority to Release Central Characterization Project Headspace Gas Samples (GEN-12)	Y	SRS/CCP only performs HSG sampling. Analysis is performed at INL/CCP Lab. COC forms have "Disposition" block for samples.
215	Are procedures in place to ensure that SUMMA® canisters are packaged to prevent damage to the pressure gauge or associated connections by packaging in metal boxes with separate compartments or cardboard boxes with foam inserts? (Section C1-6)	CCP-TP-093, S. 4.7	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1) M & TE (HSG-4)	Y	
216	Are procedures in place to ensure that samples are packaged to prevent damage to the sample container and maintain preservation temperature? (Section C1-6)	CCP-TP-093, S. 4.7.1 S. 4.7.2	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1) M & TE (HSG-4)	Y	

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
217	Are procedures in place to ensure that adequate cold packs are included in the DOT approved sample shipping container to ensure that all temperature requirements are met? (Section C1-6)	CCP-TP-093, S. 4.7.1 S. 4.7.4	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1) M & TE (HSG-4)	Y	
218	Are procedures in place to ensure that sample COC forms are secured for shipment to the inside of the sealed or locked shipping container lid and that samples and shipping containers are affixed with tamper proof seals or devices? (Section C1-6)	CCP-TP-093, S. 4.7.9	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1)	Y	
LABORATORY OPERATIONS						
220	Are procedures in place to ensure that all VOC analyses are evaluated using the following criteria: Precision is assessed by analyzing of laboratory duplicates, Laboratory Control Sample (LCS), and PDP blind-audit samples in comparison to Table C3-2 Accuracy is as %R shall be assessed by analyzing LCS samples and PDP blind audit samples in comparison to criteria in Table C3-3 MDLs are expressed in nanograms for VOCs and must be less than or equal to those listed in Table 3-2 Laboratory completeness shall be expressed as the number of samples analyzed with valid results as a percent of the total number of samples submitted for analysis. A composited sample is treated as one sample for the purposes of completeness, because only one sample is run through the analytical instrument Comparability shall be achieved through the use of standardized methods, traceable standards by requiring successful participation in the PDP program	N/A	N/A	N/A	N/A	SRS/CCP only performs HSG sampling. HSG analysis is performed by the INL/CCP analytical laboratory at the INL. This program is audited and approved separately.

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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>Representativeness will be achieved by collecting sufficient numbers of samples using clean sampling equipment that does not introduce sample bias.</p> <p>All method detection limits and program required detection limits shall be less than the Program Required Detection Limits listed in Table C3-2 and the detection limit study procedures shall be documented in laboratory SOPs. In addition, the laboratory shall demonstrate that they are capable of meeting the Program Required Detection Limits by analyzing at least one calibration standard below the PRQL</p> <p>(Section C3-5)</p>					
<u>221</u>	Are procedures in place to ensure that only laboratories that are qualified through participation in the Performance Demonstration Program are eligible to analyze waste samples? (Section C-3a(3))	N/A	N/A	N/A	N/A	SRS/CCP only performs HSG sampling. HSG analysis is performed by the INL/CCP analytical laboratory at the INL. This program is audited and approved separately.
<u>222</u>	Are procedures in place to ensure that Tentatively Identified Compounds shall be added to the target compound list if they are reported in 25% of the waste containers sampled from a given waste stream and if they appear in the 20 NMAC 4.1.200 (incorporating 40 CFR 261) Appendix VIII list? (Section C-3a(1))	CCP-TP-003, S. 4.3	Y	SRHSG1107 ECL12001M SRHSG1206 ECL12010M SRHSG1217 ECL12030M SRHSG1218 ECL12031M SRHSG1219 ECL12035M (GEN-4) Savannah River Site Central Characterization Project Waste Stream Profile Form Number SR-221H-PuOx CP:11:01610 – Transmittal of Savannah River Site Waste Stream Profile Form for Waste Stream SR-W027-HBL- BOX and Change Notice #1 CP:12:01502 - Transmittal of Savannah River Site Waste Stream	Y	

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
				Profile Form for Waste Stream SR-W027-235F-HOM CP:12:01504 - Transmittal of Savannah River Site Waste Stream Profile Form for Waste Stream SR-DWPF-HET (PL-5)		
222a	<p>Are procedures documented to ensure that the following criteria are met with regard to the recognition and reporting of TICs for GC/MS Methods for headspace gas sampling:</p> <ul style="list-style-type: none"> Relative intensities of major ions in the reference spectrum (ions greater than 10% of the most abundant ion) should be present in the sample spectrum. The relative intensities of the major ions should agree within ± 20 percent. Molecular ions present in the reference spectrum should be present in the sample spectrum. Ions present in the sample spectrum but not in the reference spectrum should be reviewed for possible background contamination or presence of coeluting compounds. Ions present in the reference spectrum but not in the sample spectrum should be reviewed for possible subtraction from the sample spectrum because of background contamination or coeluting peaks. The reference spectra used for identifying TICs shall include, at minimum, all of the available spectra for compounds that appear in the 20.4.1.200 NMAC (incorporating 40 CFR 261) Appendix VIII list. The reference spectra may be limited to VOCs when analyzing headspace gas samples. TICs for headspace gas analyses that are performed through FTIR analyses shall be identified in accordance with the specifications of SW-846 Method 8410. <p>(Section C3-1)</p>	N/A	N/A	N/A	N/A	SRS/CCP only performs HSG sampling. HSG analysis is performed by the INL/CCP analytical laboratory at the INL. This program is audited and approved separately.
222b	<p>Are procedures in place to assure that TICs are reported as part of the analytical batch data reports for GC/MS Methods in accordance with the following minimum criteria:</p> <ul style="list-style-type: none"> a TIC in an individual container headspace gas or solids sample shall be reported in the analytical batch data report if the TIC meets the SW-846 identification criteria listed above and is present with a minimum of 10% of the area of the nearest internal standard. a TIC in a composited headspace gas sample that contains 2 to 5 individual container samples shall be reported in the analytical batch data report if the TIC meets the SW-846 identification criteria listed above and is 	N/A	N/A	N/A	N/A	<p>SRS/CCP only performs HSG sampling. TIC evaluation is performed at PL.</p> <p>HSG analysis is performed by the INL/CCP analytical laboratory at the INL. This program is audited and approved separately.</p>

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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>present with a minimum of 2% of the area of the nearest internal standard.</p> <p>a TIC in a composited headspace gas sample that contains 6 to 10 individual container samples shall be reported in the analytical batch data report if the TIC meets the SW-846 identification criteria listed above and is present with a minimum of 1% of the area of the nearest internal standard.</p> <p>a TIC in a composited headspace gas sample that contains 11 to 20 individual container samples shall be reported in the analytical batch data report if the TIC meets the SW-846 identification criteria listed above and is present with a minimum of 0.5% of the area of the nearest internal standard.</p> <p>(Section C3-1)</p>					
QUALITY ASSURANCE OBJECTIVES						
224	Are procedures in place to ensure that the precision of the headspace gas sampling and analysis must be assessed by the sequential collection of field duplicates for manifold sampling operations or simultaneous collection of field duplicates for direct canister sampling operations for VOCs? (Section C3-2)	CCP-TP-093, S. 4.5.4	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218	Y	SRS/CCP only performs HSG sampling. Analysis is performed at INL/CCP Lab and audited separately.
225	Are procedures in place to ensure that corrective action will be taken if the duplicate RPD exceeds 25% for any analyte found greater than the PRQL in both of the duplicate samples? (Section C3-2)	CCP-TP-001, S. 4.2 Att. 10	Y	SRHSG1107 ECL12001M SRHSG1206 ECL12010M SRHSG1217 ECL12030M SRHSG1218 ECL12031M SRHSG1219 ECL12035M (GEN-4)	Y	SRS/CCP only performs HSG sampling. Analysis is performed at INL/CCP Lab and audited separately. RPD is performed at project level (PL) after data from INL Lab is received. Performed at project level (PL) after data from INL Lab is received.
226	Are procedures in place to ensure that the accuracy of headspace gas sampling is assessed through the collection of field reference standards and at a frequency of one field response standard for every 20 containers sampled or per sampling batch and through the collection of equipment blanks at the frequency of one for every equipment cleaning batch ? (Section C3-2)	CCP-TP-093, S. 4.4.5 (EB) S. 4.5.3 (FB) S. 4.5.6 (FRS)	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218	Y	SRS/CCP only performs HSG sampling. Analysis is performed at INL/CCP Lab and audited separately.

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
				(HSG-1)		
<u>227</u>	Are procedures in place to ensure that corrective actions are taken if the field reference standard is less than 70% recovery or greater than 130% and that if the blank concentration for any blank exceeds 3 times the MDL listings in Table B3-2? (Section C3-2)	CCP-TP-001, S. 4.2 Att. 10	Y	SRHSG1107 ECL12001M SRHSG1206 ECL12010M SRHSG1217 ECL12030M SRHSG1218 ECL12031M SRHSG1219 ECL12035M (GEN-4) CP:08:00484 – Report of Field Reference Standard for Central Characterization Project – Savannah River Site (GEN-11)	Y	SRS/CCP only performs HSG sampling. Analysis is performed at INL/CCP Lab and audited separately. TIC is performed at project level (PL).
<u>228</u>	Are procedures in place to ensure that sampling completeness shall be expressed as the number of valid samples collected as a percent of the total number of samples collected for each waste stream, where a valid sample is defined as a sample collected in accordance with approved sampling methods and the drum was properly prepared for sampling? (Section C3-2)	CCP-TP-002 Att. 1	Y	<ul style="list-style-type: none"> • SRHSG1107 ECL12001M SRHSG1206 ECL12010M SRHSG1217 ECL12030M SRHSG1218 ECL12031M SRHSG1219 ECL12035M • (PL-4) • Savannah River Site Central Characterization Project Waste Stream Profile Form Number SR-221H-PuOx 	Y	

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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"> • CP:11:01610 – Transmittal of Savannah River Site Waste Stream Profile Form for Waste Stream SR-W027-HBL-BOX and Change Notice #1 • CP:12:01502 - Transmittal of Savannah River Site Waste Stream Profile Form for Waste Stream SR-W027-235F-HOM • CP:12:01504 - Transmittal of Savannah River Site Waste Stream Profile Form for Waste Stream SR-DWPF-HET (PL-5) 		
229	Are procedures in place to ensure that the minimum sampling completeness percentage for any waste stream is 90 percent? (Section C3-2)	CCP-TP-002, Att. 1	Y	SRHSG1107 ECL12001M SRHSG1206 ECL12010M SRHSG1217 ECL12030M SRHSG1218 ECL12031M SRHSG1219 ECL12035M (GEN-4) Savannah River Site Central Characterization Project Waste Stream Profile Form Number SR-221H-PuOx CP:11:01610 – Transmittal of Savannah River Site Waste Stream Profile Form for Waste Stream SR-W027-HBL-BOX and Change Notice #1 CP:12:01502 - Transmittal of Savannah	Y	

	WAP Requirement ¹ SRS/CCP Recertification Audit A-13-02 Table C6-4 Headspace Gas Checklist	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	
				River Site Waste Stream Profile Form for Waste Stream SR-W027-235F-HOM CP:12:01504 - Transmittal of Savannah River Site Waste Stream Profile Form for Waste Stream SR-DWPF-HET (GEN-5)		
230	Are procedures in place to ensure that sample comparability is assured through the use and application of uniform procedures and equipment and application of data usability criteria, and that corrective action is taken if the uniform procedures and equipment are not used without approved and justified deviations? (Section C3-2)	CCP-TP-106, Att. 3	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1) Operational Log Book (HSG-6)	Y	SRS/CCP only performs HSG sampling. HSG analysis is performed by the INL/CCP analytical laboratory at the INL. This program is audited and approved separately.
231	Are procedures in place to ensure that sample representativeness is maintained? (Section C3-2)	CCP-TP-106, Att. 3	Y	SRHSG1203 SRHSG1206 SRHSG1217 SRHSG1218 (HSG-1)	Y	SRS/CCP only performs HSG sampling. HSG analysis is performed by the INL/CCP analytical laboratory at the INL. This program is audited and approved separately.

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.