

# Remove and Insert Instructions

ARF-024034

Document Number	Date
WSRC-OS-94-42	01/09/2023

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# 2022 High Level Waste Tank Milestones Agreement

On December 20, 2022, the United States Department of Energy (DOE) – Savannah River Operations Office (SR), the South Carolina Department of Health and Environmental Control (SCDHEC), and the United States Environmental Protection Agency, Region 4 (EPA) agreed to resolve all elements of the Savannah River Site (SRS) Federal Facility Agreement (FFA) Appendix L, Statement of Dispute Resolution, entered into in November 2007 and most recently revised in the Suspension Agreement (April 2019), with the exceptions of Paragraphs 9.b and 18 from the 2007 Statement of Dispute Resolution in Appendix L (incorporated below), by committing to implement the actions in this 2022 High Level Waste Tank Milestones Agreement (Agreement). This Agreement, including the schedule (Attachment B), will be incorporated into the FFA by modification pursuant to FFA XLIII (Modification to Agreement). These actions are consistent with and supportive of the joint SRS Liquid Waste Program Common Values and Goals, included as Attachment A, specifically, Goal 1: Reduce risk to the environment by removing waste and closing tanks with a goal of completion of the liquid waste program by 2037.

## Inclusion of FFA Milestones and Long-Term Projections

A. The Parties agree to include liquid waste milestones, which will supersede all current milestones in FFA Appendix L, except for paragraphs 9.b and 18 from the 2007 Statement of Dispute Resolution in Appendix L, incorporated into this Agreement.

Paragraphs 9.b and 18 from the 2007 Statement of Dispute Resolution in Appendix L:

Paragraph 9.b states, “The Parties agree to the following process concerning waste removal. For each tank, DOE shall involve SCDHEC and EPA throughout each stage of the bulk waste and heel removal processes to explain the activities undertaken, results of removal operations, challenges, and DOE’s next steps. DOE shall consider and openly discuss any feedback from participants prior to proceeding to the next stage. These interactions are anticipated to be frequent and informal meetings or conference calls as agreed to by the participating parties but shall occur no less than quarterly. When DOE considers waste removal to be complete, DOE shall notify EPA and SCDHEC and provide any supporting documentation to SCDHEC and EPA for review. DOE, SCDHEC and EPA shall mutually agree that waste removal activities may cease.”

Paragraph 18 states, “ In connection with the annual report on the status of tanks being removed from service due by March 9<sup>th</sup> of each year in accordance with Section IX.E.3 of the FFA, DOE shall report on the status of bulk waste and heel removal activities for F Area and H Area tanks, F Area and H Area Tank Farm Performance Assessments, F Area and H Area Tank Farm General Closure Plans, operational closure of groups of tanks in F and H Areas, and implementation of Section 3116(a) of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 with respect to F Area and H Area tanks.”

B. Milestones to be included:

- Preliminary Cease Waste removal for non-compliant Tanks<sup>1 2 3</sup>
  - See Attachment B
- Operational Closure Complete for non-compliant Tanks<sup>1</sup>
  - See Attachment B
- F-Area Diversion Boxes FDB-5 and -6 Explanation of Significant Difference (ESD) to the Interim Record of Decision, F-Area Tank Farm, Tanks 17 and 20
  - Submit Rev. 0 ESD by 9/30/2023
  - Issue ESD by 3/1/2024

C. With respect to the first addendum (September 9, 2010) to the 2007 dispute resolution and the current milestones related to bulk waste removal efforts being superseded by this Agreement, DOE will no longer be required to seek approval from SCDHEC and EPA for the reuse of a tank which had previously completed bulk waste removal efforts. This specifically applies to tanks 4F, 7F, 8F, 10H, 11H, and 15H.

D. The remaining tanks that are yet to be operationally closed and grouted, including the 27 compliant tanks (25-51), will follow the closure process outlined in the latest SCDHEC-approved revision of the Consolidated General Closure Plan for F-Area and H-Area Waste Tank Systems, SRR-CWDA-2017-00015. [As of the date of this Agreement, the latest approved revision is Revision 1 (dated April 2017).] While a schedule for closure of the compliant tanks is not part of this Agreement, it is the understanding of DOE, SCDHEC, and EPA that these tanks will be closed by the end of calendar year 2037.

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<sup>1</sup> “Non-compliant Tanks” are the remaining 16 tanks (Tanks 1-4, 7-11, 13-15, 21-24) that do not meet secondary containment standards of FFA Appendix B, Subsection C “Standards for Containment/Release Detection.”

<sup>2</sup> Although not anticipated, the addition of any sludge solids or contaminated liquids to a waste tank for which DOE, SCDHEC and EPA have reached a preliminary agreement that waste removal activities may cease, will require approval by SCDHEC and EPA.

<sup>3</sup> As described in the *Consolidated General Closure Plan for F-Area and H-Area Waste Tank Systems*, when DOE is satisfied that waste removal activities are sufficiently complete, a briefing will be provided to EPA and SCDHEC to present the preliminary waste removal data, the estimated remaining residuals volume, the plan to characterize the residuals, the initial isolation strategy, and whether the standard or alternate closure module preparation approach will be used. Following the briefing, DOE will submit a letter to SCDHEC and EPA requesting concurrence that further waste removal is not technically practicable from an engineering perspective. Preliminary Cease Waste Removal milestones will be considered met upon DOE’s submittal of the letter to SCDHEC and EPA, contingent upon concurrence by SCDHEC and EPA. Upon SCDHEC and EPA concurrence, SCDHEC and EPA will each provide a concurrence letter to DOE to suspend active waste removal activities and to proceed to the sampling and analysis phase. This agreement to proceed to the sampling and analysis phase is a non-binding preliminary decision and does not satisfy the requirement of FFA Appendix L, requirement 9.b for demonstrating that waste removal activities may cease.

Attachment A  
SRS Liquid Waste Program  
Common Values and Goals (2022 – 2037)

June 29, 2022

VALUES

1. Maintain transparency with open communication between regulators, DOE, and the contractor on program progress, and significant emerging issues.
2. Ensure DOE's strategy and plans are subject to stakeholder engagement and input, including SCDHEC permitting processes, and CERCLA, as appropriate.
3. Maximize the amount of curies (especially long-lived radionuclides) vitrified and ready for ultimate disposal out of state.
4. Limit disposal of curies onsite at SRS so that residual radioactivity is as low as reasonably achievable.

GOALS (in priority order)

1. Reduce risk to the environment by removing waste and closing tanks with a goal of completion of the liquid waste program by 2037.
2. Reduce operational and environmental risk by aggressively removing curies from the waste tanks.
3. Reduce operational and environmental risk by optimizing operations to minimize liquid waste program total life cycle.
4. Complete waste removal and subsequent grouting of all waste tanks and ancillary structures with a risk-based priority order: first to tanks in the water table, followed by F Tank Farm tanks, followed by remainder of waste tanks, followed by ancillary structures, recognizing the potential for future emergent conditions or opportunities.

## Attachment B

### Schedule for Remaining Non-Compliant Tanks

Milestone Date	Preliminary Cease Waste Removal (# of Tanks)	Operational Closure (# of Tanks)
12/31/2023	0	0
12/31/2024	1	0
12/31/2025	3	0
12/31/2026	2	0
12/31/2027	2	0
12/31/2028	0	3
12/31/2029	2	0
12/31/2030	1	2
12/31/2031	0	3
12/31/2032	0	1
12/31/2033	0	2
12/31/2034	1	0
12/31/2035	1	0
12/31/2036	1	1
12/31/2037	2	4
Total	16	16

Approved:

**James L. Folk**

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James L. Folk, Jr.  
Assistant Manager for Waste Disposition  
Savannah River Operations Office  
U.S. Department of Energy

Date



12-21-2022

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Henry J. Porter, Chief  
Bureau of Land and Waste Management  
S.C. Department of Health and Environmental Control

Date

**RANDALL  
CHAFFINS**

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CHAFFINS  
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Randall Chaffins  
Acting Director | Superfund & Emergency Management Division  
US Environmental Protection Agency | Region 4

Date

The following are synopses of the modifications made to the Agreement. Reference the Administrative Record File to view the entire modification.

<b>Date</b>	<b>Section or Appendix Affected by Modification</b>	<b>Modification</b>
02/18/2022	Appendix E	<p>Issuance of the SCDHEC and EPA approved Revision 1 Appendix E, Long-Term Projections for Fiscal Year (FY) 2022 (Print Date: 01/18/2022). The DOE submitted the Revision 0 Appendix E, Long-Term Projections for FY2022 (Print Date: 11/01/2021) on November 15, 2021. The SCDHEC's and EPA's comments on the Revision 0 Appendix E were received on December 20, 2021 and January 3, 2022, respectively. The DOE submitted the Revision 1 Appendix E, Long-Term Projections for FY2022 (Print Date: 01/18/2022) on January 24, 2022. The SCDHEC's and EPA's approval of the Revision 1 Appendix E were received on February 14, 2022 and February 16, 2022, respectively.</p>
06/28/2022	Appendices D and E	<p>Issuance of the SCDHEC and EPA approved Revision 0 Appendix D for Fiscal Year (FY) 2022 (Print Date: 06/17/2022). The DOE submitted the Revision 0 Appendix D on June 21, 2022. The SCDHEC and EPA approved the appendix on June 27, 2022.</p> <p>Issuance of the updated Revision 1 Appendix E: Fiscal Year 2022 Long-term Projections [Appendix E.1: Deliverable Commitment Dates and Milestone Commitment Dates for FY 2023 (Print Date: 01/18/2022, Updated 06/27/2022) and Appendix E.2: Deliverable Commitment Dates and Milestone Commitment Dates for FY 2024 (Print Date: 01/18/2022, Updated 06/27/2022)] to reflect discussions and agreements from the June 16, 2022, D-Area Groundwater Operable Unit Annual Reports Microsoft Teams Meeting. Appendix E.1 was updated to (1) add the "D-Area Groundwater Operable Unit (NBN) Groundwater Monitoring Report for Calendar Years 2021 and 2022 Submittal" with a due date of January 31, 2023, (2) add the "488-4D Ash Landfill Annual Groundwater Monitoring Report Submittal" with a due date of July 31, 2023, and (3) remove the "D-Area Groundwater Operable Unit (D-Area Upgradient Sources) Groundwater Monitoring Report Submittal" due on July 31, 2023. Appendix E.2 was updated to (1) add the "488-4D Ash Landfill Annual Groundwater Monitoring Report Submittal" with a due date of July 31, 2024 and (2) remove the "D-Area Groundwater Operable Unit (D-Area Upgradient Sources) Groundwater Letter Report Submittal" due on July 31, 2024.</p>

The following are synopses of the modifications made to the Agreement. Reference the Administrative Record File to view the entire modification.

<b>Date</b>	<b>Section or Appendix Affected by Modification</b>	<b>Modification</b>
10/05/2022	Appendices E and L	<p>Issuance of the updated Revision 1 Appendix E: Fiscal Year 2022 Long-term Projections (Print Date: 01/18/2022, Updated 10/05/2022) to reflect regulatory approval of the revised implementation schedule for the Early Construction and Operational Disposal Site (ECODS) L-3, L-Area Rubble Pit (131-1L), and L-Area Rubble Pit (131-4L) Operable Unit (IACD-22-161, dated July 21, 2022) and the <i>Preferred Remedial Action and Regulatory Strategy for Remaining Savannah River Site's Coal Ash and Coal Fines Operable Unit (U)</i> (IACD-22-166, dated July 21, 2022) (referred to as the ash strategy). The revised implementation schedule was approved by U.S. Environmental Protection Agency (EPA) and South Carolina Department of Health and Environmental Control (SCDHEC) in their letters dated July 25, 2022 and August 19, 2022, respectively. The ash strategy was approved by EPA and SCDHEC in their letters dated August 11, 2022 and September 22, 2022, respectively. The ash strategy modified the schedules for the A-Area Ash Pile (788-A), A-Area Coal Pile Runoff Basin (788-3A), D-Area Ash Basin Wetlands (NBN), F-Area Ash Landfill (288-F), H-Area Ash Basin (288-H), K-Area Ash Basin (188-K), L-Area Ash Basin (188-L), and Wetland Area at Dunbarton Bay (NBN).</p> <p>Appendix L was updated to include the modification of Paragraph C.7.b. for completion of the negotiation of Appendix L milestones (Items #6 - #8 and #12- #15) as specified in the <i>2019 Suspension Agreement - Federal Facility Agreement High Level Waste Tank Milestones</i> by November 30, 2022.</p>
11/30/2022	Appendices E and L	<p>Issuance of the updated Revision 1 Appendix E: Fiscal Year 2022 Long-term Projections (Print Date: 01/18/2022, Updated 11/30/2022) to reflect regulatory approval of the request to discontinue submittal of the Administrative Record File (ARF) Indices Annual Update (reference U. S. Department of Energy (DOE) submittal letter [IACD-23-104, dated October 26, 2022], South Carolina Department of Health and Environmental Control (SCDHEC) approval letter [SRNS-OS-2022-00338, dated November 1, 2022], and U. S. Environmental Protection Agency (EPA) approval letter [SRNS-OS-2022-00339, dated November 2, 2022]). ARF information is currently posted on the Savannah River Site external web page and periodic updates on the status of posted ARF documents will now be included in the Federal Facility Agreement Annual Progress Report.</p> <p>F-Area Operable Unit (FAOU) early action milestones associated with fourteen F-Area facility remnants/slabs were removed from Appendices E.1 and E.2. The actions associated with these slabs will be performed as part of the FAOU final action as reflected in Appendix E.3. These changes are in accordance with the DOE extension request (IACD-23-102, dated October 13, 2022) as approved by SCDHEC on October 18, 2022 (SRNS-OS-2022-00324) and EPA on November 3, 2022 (SRNS-OS-2022-00340).</p> <p>Appendix L was updated to include the modification of Paragraph C.7.b. for completion of the negotiation of Appendix L milestones (Items #6 - #8 and #12- #15) as specified in the <i>2019 Suspension Agreement - Federal Facility Agreement High Level Waste Tank Milestones</i> by December 22, 2022.</p>
01/09/2023	Appendix L	<p>Appendix L was updated to add the <i>2022 High Level Waste Tank Milestones Agreement</i> that was signed by DOE, SCDHEC, and EPA on 12/20/2022, 12/21/2022, and 12/27/2022, respectively.</p>