



Department of Energy
Savannah River Operations Office
P.O. Box A
Aiken, South Carolina 29802

DEC 13 2023

Ms. Susan B. Fulmer, P. G., Manager
Federal Remediation Section
Division of Site Assessment, Remediation and Revitalization
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Mr. Jon Richards
Savannah River Site Remedial Project Manager
Superfund Division
U. S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303

Dear Ms. Fulmer and Mr. Richards:

SUBJECT: Federal Facility Agreement Annual Removal Action Report for Fiscal Year 2023

In accordance with Section XIV.B of the Federal Facility Agreement (FFA) for the Savannah River Site (SRS), the U. S. Department of Energy (DOE) is submitting this letter as the subject report for your files. In Fiscal Year (FY) 2023 [October 1, 2022 through September 30, 2023], the Non-Time Critical Removal actions discussed below were active or pending.

- **221-1F – A-Line and Ancillary Structure, SEMS Number 88:** Action is pending; status is unchanged since FY2006. In February 2006, the Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis (RSER/EE/CA) was completed and submitted for review by the U. S. Environmental Protection Agency (EPA) and South Carolina Department of Health and Environmental Control (SCDHEC). On May 30, 2006 the Action Memorandum was issued for the Non-Time Critical Removal Action for Decommissioning of A-Line, 221-1F and Ancillary Structures. The responses to the EPA's and SCDHEC's comments accompanied the Action Memorandum. The future removal action will demolish the buildings to the ground or first floor slabs. Sumps and basements will be filled with appropriate material to grade. The slabs will be covered with either a six-inch or an eight-inch concrete cap resulting in a maximum risk to the industrial worker of 2.9E-06. Due to changes in F-Area resulting from the pause of F-Canyon deactivation and shifts in priority, this action has been postponed. This alternative is expected to be implemented no later than F-Area Completion. Since the facility is structurally intact and hazards are currently contained, postponement of this action poses no immediate threat. Surveillance and maintenance will be performed to ensure conditions within the facility remain protective of human health and the environment.

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- **235-F – F-Area Material Storage Area:** This facility is listed on Appendix K of the FFA for the SRS.

On August 26, 2021, the DOE submitted the *Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis (RSER/EE/CA) for F-Area Material Storage Building (235-F) (SRNS-RP-2021-00001, Revision 0, August 2021)* and the *Scoping Summary for the F-Area Material Storage Building (235-F) (SRNS-RP-2020-00444, April 2021)* (IACD-21-154) for regulatory review and comment. The SCDHEC and EPA submitted comments on the Revision 0 RSER/EE/CA on October 25, 2021 and November 8, 2021, respectively (SRNS-OS-2021-00304 and SRNS-OS-2021-00317). EPA submitted additional comments on the report on January 14, 2022 (SRNS-OS-2022-00018). DOE submitted the Revision 1 RSER/EE/CA (Clean Copy and Redline), SRS' responses to the regulatory comments, and the Draft Action Memorandum on February 28, 2022 (IACD-22-130). SCDHEC provided concurrence of the submittal on March 16, 2022 (SRNS-OS-2022-00094). EPA provided concurrence of the Revision 1 RSER/EE/CA and comment responses on March 21, 2022 (SRNS-OS-2022-00094). The Revision 1 RSER/EE/CA was made available for public review and comment from April 5, 2022 through May 4, 2022. No comments were received on the Revision 1 RSER/EE/CA during the public comment period.

EPA provided comments on the Draft Action Memorandum on March 23, 2022 (SRNS-OS-2022-00103). DOE submitted the responses to the comments on the Draft Action Memorandum on April 13, 2022 (IACD-22-141). SCDHEC approved the responses to the comments on May 12, 2022 (SRNS-OS-2022-00168). The final Action Memorandum was submitted to SCDHEC and EPA on May 19, 2022 (IACD-22-145) and issued to the public on June 1, 2022.

Project planning activities and evaluation of other field activities continues. The preferred non-time critical removal action for 235-F is In-Situ Decommissioning of First and Second Level Process Areas/Engineered Roof. Upon conclusion of the non-time critical removal action, a Removal Action Report that summarizes the work and describes the end-state condition of Building 235-F will be prepared and submitted to SCDHEC and EPA to document completion of the removal action.

- **D Area Coal Storage Area (484-17D), SEMS Number: 63:** This unit is listed on Appendix C.5 of the FFA for the SRS as a sub-unit of the D-Area Operable Unit.

The *Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis (RSER/EE/CA) for the D-Area Coal Storage Area (484-17D) (U)* (SRNS-RP-2018-00813, Revision 0) was initially scheduled for submittal on September 30, 2018. However, due to additional work agreed to by DOE, EPA, and SCDHEC, DOE submitted an extension request for regulatory approval (IACD-18-183, dated September 25, 2018). Additional time was needed to refine the cost estimates associated with the removal action alternatives identified in the RSER/EE/CA. The design and constructability of the removal action alternatives revealed additional scope and costs that needed to be considered in the estimate. The SCDHEC and EPA approved the extension request on September 27, 2018 and September 25, 2018 (via email), respectively (SRNS-OS-2018-00190 and SRNS-OS-2018-00188). EPA's official approval was received on October 22, 2018 (SRNS-OS-2018-002015). Based on the regulatory approval of the extension request, the submittal date for the Revision 0 RSER/EE/CA was

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revised from September 30, 2018 to November 30, 2018. The submittal date for the Action Memorandum was also revised from March 31, 2019 to May 31, 2019.

The *Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis (RSER/EE/CA) for the D-Area Coal Storage Area (484-17D) (U) (SRNS-RP-2018-00813, Revision 0, November 2018) and the Scoping Summary for the D-Area Coal Storage Area (484-17D) (ERD-EN-2018-0041, August 2018) SEMS Number: 63* were submitted for regulatory review on November 28, 2018 (IACD-18-177). The SCDHEC provided comments on the Revision 0 RSER/EE/CA on January 24, 2019 (SRNS-OS-2019-00018). Due to the partial federal government shutdown that lasted from December 22, 2018 to January 25, 2019, the EPA submitted a thirty-day extension notification in their letter dated February 19, 2019 (SRNS-OS-2019-00053). On March 4, 2019, the EPA submitted their comments on the Revision 0 RSER/EE/CA (SRNS-OS-2019-00053). On March 28, 2019, DOE submitted a thirty-day extension notification for submittal of the Revision 1 RSER/EE/CA and SRS' responses to the regulatory comments to allow additional time to resolve the comments on the Revision 0 document (IACD-19-136). This changed the Revision 1 submittal date from April 3, 2019 to May 3, 2019. On April 30, 2019, DOE submitted an extension request for the submittal of the Revision 1 RSER/EE/CA, SRS' responses to the regulatory comments, and subsequent milestones (IACD-19-147). The additional time was required because the responses to the EPA's comments were not resolved during the thirty-day notification time period. The extension request was emailed to SCDHEC and EPA on April 29, 2019. The SCDHEC and EPA (via email) approved the extension request on May 1, 2019 and April 29, 2019, respectively (SRNS-OS-2019-00046 and SRNS-OS-2019-00119). Based on the regulatory approvals, the Revision 1 RSER/EE/CA (including SRS' responses to the regulatory comments) and Action Memorandum due dates were revised to May 3, 2019 and July 30, 2019, respectively. There was no change to the Removal Action start date of April 30, 2020.

The *Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis (RSER/EE/CA) for the D-Area Coal Storage Area (484-17D) (U) (SRNS-RP-2018-00813, Revision 1, June 2019) (Clean Copy), Savannah River Site's Responses to Regulatory Comments on the Revision 0 Document, and Draft Action Memorandum, SEMS Number: 63* were submitted on June 6, 2019 (IACD-19-154). The 30-day public comment period for the RSER/EE/CA began on June 13, 2019 and ended on July 13, 2019. The SRS received no comments from the public during the public comment period. On July 2, 2019, the SCDHEC provided conditional approval of the draft Action Memorandum (SRNS-OS-2019-00193). DOE submitted the final *Action Memorandum and Responsiveness Summary for the Non-Time Critical Removal Action for the D-Area Coal Storage Area (484-17D), SEMS Number: 63* on July 24, 2019 (IACD-19-174). The SCDHEC's conditional approval comment resulted in an editorial change to the Action Memorandum. The Action Memorandum and Responsiveness Summary were public noticed on August 7, 2019. In their letter dated August 15, 2019, EPA provided clarification / concurrence on the Action Memorandum (SRNS-OS-2019-00254).

On April 8, 2020, DOE submitted an *Extension Request for the Removal Action Start of the D-Area Coal Storage Area (484-10D) SEMS Number: 63* (IACD-20-143). DOE proposed to extend the removal action start from April 30, 2020 to August 28, 2020 as a result of COVID-19 work restrictions. SCDHEC and EPA approved the extension request on April 8, 2020 (SRNS-OS-2020-00173) and April 9, 2020 (SRNS-OS-2020-00175), respectively.

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On May 7, 2020, DOE notified EPA and SCDHEC that the removal action start was met on May 5, 2020 with the installation of the stormwater pollution prevention controls along the perimeter of the excavation area. The preferred removal action is the addition of soil neutralization amendments to raise the pH of the vadose zone soils to reduce the acidic leachate that contributes to low pH and metals plumes in groundwater. Excavation and addition of soil amendment began on May 12, 2020. Based on the results of several pH soil samples, SRS has verified the effectiveness of the amendment. The construction activities for the removal action were completed on December 15, 2020 (IACD-21-122, dated February 3, 2021).

On June 28, 2022, DOE submitted the *Removal Action Report for the 484-17D Coal Storage Area (U) (SRNS-RP-2022-00071, Revision 0, June 2022) SEMS Number: 63 (IACD-22-152)* for regulatory review and comment. On August 25, 2022, EPA submitted a thirty (30)-day extension notification for submittal of its comments on the Revision 0 report (SRNS-OS-2022-00262). The SCDHEC and EPA provided comments on the Revision 0 report on August 25, 2022 and September 28, 2022, respectively (SRNS-OS-2022-00261 and SRNS-OS-2022-00303). On December 6, 2022, DOE submitted the *Removal Action Report for the 484-17D Coal Storage Area (U) (SRNS-RP-2022-00071, Revision 1, November 2022) (Redline and Clean Copies) and Savannah River Site's Responses to the Regulatory Comments on the Revision 0 Document, SEMS Number: 63 (IACD-23-108)*. EPA and SCDHEC approved the submittal on December 16, 2022, and January 5, 2023, respectively (SRNS-OS-2022-00377 and SRNS-OS-2023-00006).

This completes the discussion of the removal action activities for the D Area Coal Storage Area (484-17D) in this report.

Table 1 summarizes the FY2023 maintenance activities. There were twenty-four maintenance activities initiated within Site Evaluation and RCRA/CERCLA Areas in FY2023. There were twenty-five maintenance activities carried over from previous years. Of the forty-nine activities identified in this report, twenty-four have been completed, twenty-two are in progress, in design, or planning phases, two are on hold, and one was cancelled.

All the operation and maintenance (O&M) activities were minor activities.

The effort and time that the EPA and SCDHEC have given on the operable units and information discussed in this letter are greatly appreciated.

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Questions from you or your staff may be directed to me at (803) 952-7805.

Sincerely,

AVERY HAMMETT Digitally signed by AVERY
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Date: 2023.12.12 17:55:42 -05'00'

Avery G. Hammett
FFA Project Manager, DOE-Savannah River
Remediation and Deactivation & Decommissioning Division

RDDD-24-110

c:

G. K. Taylor, SCDHEC-Columbia
J. Blalock, SCDHEC-Columbia
S. French, SCDHEC-Columbia
M. Reece, SCDHEC-Columbia
R. G. Stewart, SCDHEC-Columbia
T. R. Fuss, SCDHEC-Aiken Environmental Affairs Office
G. N. O'Quinn, SCDHEC-Aiken Environmental Affairs Office
B. A. Cameron, SCDHEC-Aiken Environmental Affairs Office
K. L. Beatty, SCDHEC-Aiken Environmental Affairs Office
H. L. Herlong, SCDHEC-Aiken Environmental Affairs Office
J. Dawson, EPA-Atlanta
B. Martin, EPA-Atlanta

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Table 1. Fiscal Year 2023 Maintenance Activity Summary**Completed Activities**

<u>O&M Plan #</u>	<u>Description</u>	<u>O&M Manual ID #</u>
20-006	Excavation for the Electrolytic Dissolver Transformer Pad	344, 549, 591
21-001	Expansion of 234-7H	549, 591
22-002	Excavation to Repair Underground Well Water Leak South of 285-H Basin	549, 591
22-009	Excavation on 16-Inch Steam Line near K-Area Stack	476
22-010	Dismantle and Remove 107-2K Pad	476
22-011	Disconnecting Domestic Water Lines Associated with 235-F	563
22-015	FM-1C Flow Monitoring Equipment Replacement Project	27, 80, 274, 549, 591
22-016	Exploratory Excavation Near 218-2H	142, 549, 591
22-018	Exploratory Excavation Near 221-H	591
22-021	Exploratory Excavation near General Purpose Evaporator	344
22-022	782-1M Fire Water Pump House Deactivation	189, M-Area LUCIP
23-001	Exploratory Excavation and Repair of Piping near 285-H	591
23-002	K-Area Soil Disturbance for Domestic Water Line Leak East of the 717-16K Craft Building	476
23-003	K-Area Soil Disturbance for Windssock Pole Placement South of 108-2K	476
23-004	218-1H Excavation	142, 591
23-005	Exploratory Dig to Check for Interferences for Setting a New Pole for Feeder F3B	563
23-006	Additional Excavation near 725-2N	354
23-009	221-F Fire Water Leak Repair Project	343, 394, 563
23-011	Excavate/Replace Defective PIV 2072 in Front of 772-1F	141, 200, 343, 394, 435, 563, 575
23-013	Isolation of Communication Cables from 235-F	563
23-014	Excavation to Correct Fire Water Leak in F Area	141, 343, 394, 563
23-016	Excavation to Repair Water Leak near 773-8A	131, 562
23-021	Relocate High Rad Temporary Storage Area Fence and Gate	592
23-023	Excavation for Collecting Fluids near 772-F	200, 308, 343, 394, 414, 510, 563

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Table 1. Fiscal Year 2023 Maintenance Activity Summary (Continued)

In Process / On Hold / Cancelled Activities

<u>O&M Plan #</u>	<u>Description</u>	<u>O&M Manual ID #</u>
19-014	L-Area PIDAS Enhancements	303, 305, 479, 560
19-019	F- & H-Area Lab Cell C & D Water Intrusion Removal	SPF-008, 308, 429, 563
20-005	901-H Segregation Valve Pit Raceway Installations	294, 295, 549, 591
20-009 *	Isolate Domestic Water Supply Line to 238/238-1H for D&R	531, 549, 591
20-010	Replace Conduit on the East Side of 221-H at Section 3 Stairs	344, 549, 591
20-011	Placement of New Concrete Pad for Repairing Domestic Water Lines South of 254-19H	549, 591
21-005 *	Install Concrete Pad and Metal Walkway to 794-A Sandfilter	387, 562
21-006	K-Area Entry Control Facility and Support Diesel in Site Evaluation Area 476, Southeast Corner of K-Area Protected Area	476
21-008	Spent Material Clean-up in the 725-1N Abrasive Blasting Operations Area	354
22-006	Excavation to Repair Domestic Water Leak Near 247-19F	563
22-007	Excavation to Repair Domestic Water Leak North of 772-1F	563
22-013	K-Area Entry Control Facility Soil Disturbance for Duct Banks, Bollards, HVAC Pad, Transformer Pad, Fence and Security Poles	476
22-014	K-Area Soil Disturbance for Project Associated with the Materials Access Area Entry Control Facility Restroom Trailer, Duct Banks, Poles, etc.	476
22-020	K-Area Soil Disturbance for Electrical Installations to/from the New Entry Control Facility (ECF-3) Diesel Generator E-House, etc. via Pole Installations and Duct Banks	476
23-007	PAR Pond Emergency Spillway Restoration	110, 152
23-008	Excavation to Correct Leaking Pipe near 735-A	562
23-010 +	Excavation to Install Power to Air Surveillance Station	563
23-012	Fiber Installation from Forestry to ATTA	208
23-015	Grout Manhole P5 near 704-55H	344, 591
23-017	Fiber Installation from A Area to B Area and F Area	236, 270, 563, 575
23-018	Excavation for Steam Pole	549, 591
23-019	K-Area Soil Disturbance for Surplus Plutonium Disposition (SPD) Project Construction Personnel Trailers	476, 302
23-020	Fiber Installation from 702-2A to Barricade 9	562
23-022	K-Area SPD Project Construction Island	476, 301, 572

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Table 1. Fiscal Year 2023 Maintenance Activity Summary (*Continued/End*)

In Process / On Hold / Cancelled Activities (*Continued/End*)

<u>O&M Plan #</u>	<u>Description</u>	<u>O&M Manual ID #</u>
23-024	Grouting of Manhole P34	563

* On Hold
+ Cancelled