



Department of Energy
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NOV 30 2022

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Federal Remediation Section
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Mr. Jon Richards
Savannah River Site Remedial Project Manager
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U. S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW
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Dear Ms. Fulmer and Mr. Richards:

SUBJECT: Federal Facility Agreement Annual Removal Action Report for Fiscal Year 2022

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) 2022 [October 1, 2021 through September 30, 2022], 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.

- **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 will occur in FY2023. 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 K of the FFA for the SRS.

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

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.

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) (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). The Removal Action Report will be finalized in FY2023.

Table 1 summarizes the FY2022 maintenance activities. There were twenty-four maintenance activities initiated within Site Evaluation and RCRA/CERCLA Areas in FY2022. There were nineteen maintenance activities carried over from previous years. Of the forty-three activities identified in this report, seventeen have been completed, twenty-three 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 major maintenance activity (O&M 12-019, Incorporation of Additional Ash in the 288-F Ash Basin Landfill) was completed in FY2022.

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

Questions from you or your staff may be directed to me at (803) 952-8365.

Sincerely,

Brian T. Hennessey

Digitally signed by Brian T.
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Date: 2022.11.29 16:34:48 -05'00'

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SRS Remedial Project Manager
Infrastructure and Area Completion Division

Ms. Susan B. Fulmer
Mr. Jon Richards

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Table 1. Fiscal Year 2022 Maintenance Activity Summary

<u>O&M Plan #</u>	<u>Description</u>	<u>O&M Manual ID #</u>
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Completed Activities

12-019	Incorporation of Additional Ash in the 288-F Ash Basin Landfill	276
21-009	Excavate to Repair a Well Water Leak	WMF-005
21-012	Tritium Area Paving	142, 531, 549, 591
21-014	Replace Fire Water Line on West Side of 704-H	294, 295, 391, 591
21-016	H-17 Liquid Effluent Station Solar Panel Replacement and Ground Rod Installation Project	293, 549, 591
21-017	Tank 3 Excavate for Foundations	WMF-004, WMF-005, WMF-008
21-018	K-Area Excavation for the Installation of Electrical Power to a Handi-House West of the K-Area Settler Tank	572
21-019	L-Area Fence Installation	479
22-001	Tank 3 GRM Excavate and Install Conduit Footers per J-DCP-F-2001	WMF-004, WMF-005, WMF-008
22-003	Excavation to Repair 232-H Sinkhole	549, 591
22-004	246-H NNSA Sign Installation	531, 549
22-005	Excavation to Repair Domestic Water Leak Near 241-19F	563
22-008	Excavation to Install Power Poles for 725-2N	354
22-012	Excavation to Repair Domestic Water Leak Near 607-1F	563
22-017	Excavation for P-6 Manhole	142, 549, 591
22-023	Exploratory Excavation and Repair of Process Water Leak near 749-A	387
22-024	Deactivation of 282-H Switchgear	549, 591

Table 1. Fiscal Year 2022 Maintenance Activity Summary (Continued)

<u>O&M Plan #</u>	<u>Description</u>	<u>O&M Manual ID #</u>
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In Process / On Hold / Cancelled Activities

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
20-006	Excavation for the Electrolytic Dissolver Transformer Pad	344, 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
21-001	Expansion of 234-7H	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
22-002	Excavation to Repair Underground Well Water Leak South of 285-H Basin	549, 591
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
22-009	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
22-013	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
22-015	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
22-019 +	Installation of Perimeter Fencing in F-Area Complex	Multiple

Table 1. Fiscal Year 2022 Maintenance Activity Summary (*Continued/End*)

<u>O&M Plan #</u>	<u>Description</u>	<u>O&M Manual ID #</u>
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In Process / On Hold / Cancelled Activities (*Continued/End*)

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
22-021	Exploratory Excavation near General Purpose Evaporator	344
22-022	782-1M Fire Water Pump House Deactivation	189, M-Area LUCIP

* On Hold
 + Cancelled