



Department of Energy
Savannah River Operations Office
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NOV -1 2018

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Division of Site Assessment, Remediation and Revitalization
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control
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Mr. Jon Richards
Acting 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 2018

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) 2018 [October 1, 2017 through September 30, 2018], the following removal actions [Non-Time Critical Removal (NTCR) and Time Critical] were active:

- 221-1F – A-Line and Ancillary Structure, SEMS Number 88:** 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 (AM) was issued for the NTCR Action for Decommissioning of A-Line, 221-1F and Ancillary Structures. The responses to the EPA's and SCDHEC's comments accompanied the AM. 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.

- **D Area Operable Unit (DAOU), SEMS Number 63:** This unit is listed on Appendix C of the FFA for the SRS. There are seven removal actions associated with the DAOU. The removal action activities associated with the Bubble Tower subunit were completed in FY2011. The removal action activities associated with the Moderator Processing Subunit and the D-006 Outfall (Petroleum Release Site) were completed in FY2012. The removal action activities for the 489-D Coal Pile Runoff Basin (CPRB) (Northern 25%) and the soils surrounding the 484-10D Waste Oil Facility were completed in FY2013. Therefore, only four DAOU removal action activities [488-2D Ash Basin, 488-4D Ash Landfill, 489-D CPRB (Southern 75%) and 488-1D Ash Basin] are discussed for FY2018.

The *Confirmation Sampling and Analysis Plan for Coal and/or Ash Removal at the Savannah River Site* (SRNS-RP-2013-00332, Revision 0, July 2013), *Field Sampling Plan for the D-Area 488-1D Inlet Basins* (SRNS-RP-2013-00342, Revision 0, July 2013), and the *Field Sampling Plan for the D-Area Coal Storage Area (484-17D)* (SRNS-RP-2013-00343, Revision 0, July 2013) were submitted to the SCDHEC and EPA for their review and comment on July 11, 2013. The purpose of the programmatic sampling and analysis plan (SAP) is to provide sampling information that is common to all SRS waste units containing coal and/or ash to eliminate the duplication of effort inherent with multiple document submittals. The field sampling plans (FSPs) are waste unit specific plans that will be used in conjunction with the generic plan. The SCDHEC and EPA provided comments on the 488-1D Inlet Basins FSP on November 7, 2013 and December 13, 2013, respectively. The SCDHEC and EPA provided comments on the SAP and 484-17D FSP on November 7, 2013 and February 3, 2014, respectively. The SAP (SRNS-RP-2013-00332, Revision 1 Redline, June 2014), 488-1D Inlet Basins FSP (SRNS-RP-2013-00342, Revision 1 Redline, June 2014), and the SRS' responses to the regulatory comments on the Revision 0 documents were submitted to the SCDHEC and EPA on June 3, 2014. In addition, the SRS' responses to the regulatory comments on the Revision 0 484-17D FSP were submitted to the SCDHEC and EPA on June 3, 2014. However, the 484-17D FSP was not revised and submitted to the SCDHEC and EPA because it is outside the scope of the D-Area Ash Basin closure. The SCDHEC and EPA provided comments on the Redline Revision 1 SAP on June 26, 2014 and July 2, 2014, respectively. The SCDHEC approved and the EPA provided comments on the 488-1D Inlet Basins FSP on June 26, 2014 and July 3, 2014, respectively. The DOE submitted the *Confirmation Sampling and Analysis Plan for Coal and/or Ash Removal at the Savannah River Site* (SRNS-RP-2013-00332, Revision 1.1, July 2014) (clean copy and redline pages), *Field Sampling Plan for the D-Area 488-1D Inlet Basins* (SRNS-RP-2013-00342, Revision 1.1, July 2014) (clean copy and redline pages), and SRS' responses to the regulatory comments on the Revision 1 Redline documents on July 28, 2014. The SCDHEC and EPA approved the Revision 1.1 documents in their letters dated August 25, 2014 and September 2, 2014, respectively.

The *Removal Site Evaluation Report (RSER) for the D-Area Ash Basin (488-2D) (U)* (SRNS-RP-2013-00825, Revision 0, January 2014) and Draft Action Memorandum were submitted to the SCDHEC and EPA on February 3, 2014. The SCDHEC and EPA provided comments on the submittal in their letters dated March 5, 2014 and March 12, 2014, respectively. The RSER (Revision 1 Redline), Revised Draft Action Memorandum, and SRS' responses to the regulatory comments on the Revision 0 document were submitted to the SCDHEC and EPA on September 15, 2014. Based on discussions among DOE, EPA, and SCDHEC on July 16, 2014, the submittal of the Revision 1 RSER meets the FFA milestone for the submittal of the D-Area Ash Basin (488-2D) Revision 0 RSER/EE/CA (FFA milestone/submittal date: February 26, 2015). Likewise, the submittal of the final 488-2D Ash Basin Action Memorandum and the removal action start associated with the 488-2D time critical removal action will constitute early completion of the 488-2D FFA milestones. The SCDHEC conditionally approved and the EPA approved the Revision 1 Redline RSER in their letters dated October 14, 2014 and October 20, 2014, respectively. DOE submitted the *Action Memorandum for the Time Critical Removal Action for the D-Area Ash Basin (488-2D) and the Removal Site Evaluation Report for the D-Area Ash Basin (488-2D) (SRNS-RP-2013-00825, Revision 1, September 2014) CERCLIS Number: 63* on October 28, 2014 (IACD-15-101). This version of the RSER incorporated the items from the SCDHEC conditional approval letter for the Redline Revision 1 RSER. The Action Memorandum was public noticed on November 11, 2014. The DOE submitted the *Notification of the Removal Action Start Date for the D-Area Ash Basin (488-2D) CERCLIS Number: 63* on October 28, 2014 (IACD-15-102). The submittal letter stated that the removal action start for the 488-2D Ash Basin was met on October 14, 2014, ahead of the FFA milestone date of October 1, 2015. The removal action start was met with the land survey of the ash basin to determine the extent and quantity of ash and to establish the excavation zone for the removal action.

The *Field Sampling Plan for the 488-2D Ash Basin* (SRNS-RP-2014-00442, Revision 0, September 2014) was submitted to the SCDHEC and EPA on September 15, 2014. The EPA and SCDHEC provided comments on the Revision 0 FSP in their letters dated October 14, 2014 and October 20, 2014, respectively. The DOE submitted the *Field Sampling Plan for the 488-2D Ash Basin (SRNS-RP-2014-00442, Revision 1, January 2015) (Clean and Redline Copies) and the Savannah River Site's Responses to the Regulatory Comments on the Revision 0 Document, CERCLIS Number: 63* on January 15, 2015 (IACD-15-124). The SCDHEC and EPA approved the Revision 1 FSP in their letters dated February 13, 2015 and February 23, 2015, respectively.

The *Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis (RSER/EE/CA) for the D-Area Ash Landfill (488-4D) (U)* (SRNS-RP-2014-00001, Revision 0, February 2014) was submitted to the SCDHEC and EPA on February 25, 2014. The SCDHEC and EPA provided comments on the Revision 0 RSER/EE/CA on April 23, 2014 and April 30, 2014, respectively. On May 30, 2014, the SCDHEC provided two additional comments that were inadvertently omitted from their April 23, 2014 letter. The *Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis (RSER/EE/CA) for the D-Area Ash Landfill (488-4D) (U)* (SRNS-RP-2014-00001, Revision 1, June 2014) (clean copy), SRS' responses to the regulatory comments on the Revision 0 document, and Draft Action Memorandum were submitted to the SCDHEC and EPA on June 12, 2014 (ACP-14-164). EPA's

conditional approval of the RSER/EE/CA (SRNS-RP-2014-00001, Revision 1, June 2014) was received on July 14, 2014.

The Revision 1 RSER/EE/CA was made available for public review and comment from June 24, 2014 to July 24, 2014. On August 11, 2014, the DOE submitted the *Action Memorandum and Responsiveness Summary for the Non-Time Critical Removal Action for the D-Area Ash Landfill (488-4D) CERCLIS Number: 63 (ACP-14-181)* to the EPA and SCDHEC. Comments that were received during the Revision 1 RSER/EE/CA public comment period were addressed in the responsiveness summary. The Action Memorandum and Responsiveness Summary were public noticed on August 20, 2014. The removal action start for the D-Area Ash Landfill (488-4D) was met on September 2, 2014 (ahead of the FFA milestone date of October 1, 2014) with the abandonment of the approved groundwater monitoring wells located within the facility boundary (IACD-14-189, dated September 9, 2014).

The *Removal Action Design Plan (RADP) for the 488-4D Ash Landfill and 488-2D Ash Basin (U) (SRNS-RP-2014-00459, Revision 0, June 2014)* was submitted to the SCDHEC and EPA on June 18, 2014. The SCDHEC and EPA provided comments on the Revision 0 RADP in their respective letters dated July 18, 2014. The DOE submitted the *Removal Action Design Plan (RADP) for the 488-4D Ash Landfill and 488-2D Ash Basin (SRNS-RP-2014-00459, Revision 1 Redline, December 2014)*, *Savannah River Site's Responses to the Regulatory Comments on the Revision 0 RADP*, *the White Paper on the Hydrologic Evaluation of Landfill Performance (HELP) Model Evaluation for the 488-4D Ash Landfill Cover System (ERD-EN-2014-0049, Revision 0, December 2014)*, and *the White Paper on the Source of Groundwater Contamination and the Hydrologic Separation Study for the D-Area Ash Basins and Ash Landfill (ERD-EN-2014-0025, Revision 0, August 2014) CERCLIS Number: 63* on December 18, 2014 (IACD-15-114). The SCDHEC and EPA provided comments on the Revision 1 Redline RADP and the White Paper on the Source of Groundwater Contamination and the Hydrologic Separation Study for the D-Area Ash Basins and Ash Landfill (ERD-EN-2014-0025, Revision 0, August 2014) in their letters dated January 15, 2015 and January 20, 2015, respectively. The SCDHEC provided comments on the White Paper on the HELP Model Evaluation for the 488-4D Ash Landfill Cover System (ERD-EN-2014-0049, Revision 0, December 2014) in their letter dated January 15, 2015. The EPA found the document acceptable and had no comment in their letter dated January 20, 2015.

The DOE submitted the *Removal Action Design Plan (RADP) for the 488-4D Ash Landfill and 488-2D Ash Basin (SRNS-RP-2014-00459, Revision 1.1, March 2015)(Redline Pages and Professional Engineer Stamped Copy)*, *Savannah River Site (SRS) Responses to the Regulatory Comments on the Revision 1 RADP*, *SRS Responses to the Regulatory Comments on the White Paper on the Hydrologic Evaluation of Landfill Performance (HELP) Model Evaluation for the 488-4D Ash Landfill Cover System (ERD-EN-2014-0049, Revision 0, December 2014)*, and *SRS Responses to the Regulatory Comments on the White Paper on the Source of Groundwater Contamination and the Hydrologic Separation Study for the D-Area Ash Basins and Ash Landfill (ERD-EN-2014-0025, Revision 0, August 2014) CERCLIS Number: 63* on April 1, 2015 (IACD-15-136). The SCDHEC and EPA

approved the Revision 1 RADP in their letters dated April 29, 2015 and May 10, 2015, respectively. The SCDHEC and EPA approved the SRS Responses to the Regulatory Comments on the White Paper documents in their letters dated April 29, 2015 and May 6, 2015, respectively.

The DOE submitted the *Human Health and Ecological Evaluation for Confirmation Sampling at the 488-2D Ash Basin (ERD-EN-2015-0053, Revision 0, January 2016) and Notification of the Completion of Construction Activities for the Time Critical Removal Action for the D-Area Ash Basin (488-2D) CERCLIS Number: 63* on January 12, 2016 (IACD-16-116). The SCDHEC submitted comments in their letter dated February 11, 2016. The EPA submitted a thirty (30) day extension notification in their letter dated March 4, 2016. The EPA submitted comments in their letter dated March 9, 2016. The DOE submitted the *Human Health and Ecological Evaluation for Confirmation Sampling at the 488-2D Ash Basin (ERD-EN-2015-0053, Revision 1, October 2016) (Redline and Clean Copies) and Savannah River Site's Responses to Regulatory Comments on the Revision 0 Document, CERCLIS Number: 63* on October 26, 2016 (IACD-17-105). The SCDHEC and EPA approved the report in their letters dated November 21, 2016 and January 22, 2017, respectively.

The closure activities for the D-Area Ash Basin (488-2D) and D-Area Ash Landfill (488-4D) were completed on September 22, 2016 and August 31, 2016, respectively. SRS, DOE, EPA, and SCDHEC personnel participated in a walk down on November 3, 2016 to observe the completion of the activities at the D-Area Ash Basin (488-2D) and D-Area Ash Landfill (488-4D) (IACD-17-111, dated November 22, 2016). Upon conclusion of the removal action activities at these units, a single Removal Action Report (RAR) that summarizes the work on both units was prepared and submitted to the SCDHEC and EPA. The DOE submitted the *Removal Action Report for the 488-2D Ash Basin and 488-4D Ash Landfill (U) (SRNS-RP-2017-00057, Revision 0, March 2017) CERCLIS Number: 63* on March 30, 2017 (IACD-17-127). The SCDHEC and EPA provided comments in their letters dated May 25, 2017 and June 13, 2017, respectively. The DOE submitted the *Removal Action Report for the 488-2D Ash Basin and 488-4D Ash Landfill (U) (SRNS-RP-2017-00057, Revision 1 Redline, September 2017) (Redline Pages Only) and Savannah River Site's Responses to the Revision 0 Document, CERCLIS Number: 63* on October 4, 2017 (IACD-17-161). The SCDHEC provided comments, which were editorial in nature, on November 2, 2017. The EPA approved the redline revision 1 document on November 17, 2017. The responses to the editorial comments were incorporated into the Professional Engineer stamped clean copy, which was submitted on February 14, 2018 (IACD-18-115). The SCDHEC approved the PE stamped clean copy on March 14, 2018. Since EPA had previously approved the report, an additional approval was not required.

The DOE submitted the *Field Sampling Plan for the 489-D Coal Pile Runoff Basin (U) (SRNS-RP-2014-01048, Revision 0, February 2015)* for SCDHEC and EPA review and comment on February 18, 2015 (IACD-15-128). The SCDHEC and EPA provided comments on the Revision 0 document in their letters dated March 19, 2015 and April 1, 2015, respectively. The DOE submitted the *Field Sampling Plan for the 489-D Coal Pile Runoff Basin (U) (SRNS-RP-2014-01048, Revision 1, May 2015) (Redline Pages and Clean Copy) and the Savannah River Site's Responses to the Regulatory Comments on the Revision 0 Document* for SCDHEC and EPA review and approval on April 27, 2015

(IACD-15-140). The SCDHEC and EPA approved the Revision 1 FSP in their letters dated May 27, 2015 and June 7, 2015, respectively.

Based on decisions reached among the DOE, SCDHEC, and EPA during a January 6, 2015 conference call to discuss the regulatory documents associated with the closure of the remaining 75% of the 489-D CPRB, the DOE submitted the *Request to Revise the D-Area Coal Pile Runoff Basin (489-D) Removal Action Federal Facility Agreement Milestones, CERCLIS Number: 63* (IACD-15-125, dated January 15, 2015). The SCDHEC and EPA approved the request in their letters dated January 23, 2015 and February 5, 2015, respectively. These approvals included the deletion of the submittal of the Revision 1 RSER/EE/CA from the FFA and an agreement that only the submittal of the Revised Action Memorandum and a Removal Action Start milestone are necessary to address the remaining portion of the 489-D CPRB (Southern 75%). The DOE submitted a *Draft Revision 3 Action Memorandum for the Non-Time Critical Removal Action for the D-Area Coal Pile Runoff Basin (489-D) CERCLIS Number: 63* (IACD-15-138, dated April 6, 2015) to the SCDHEC and EPA for their review and comment. The SCDHEC provided comments on the Draft Action Memorandum in their letter dated May 4, 2015. The EPA submitted a 30-day extension notification for the submittal of their comments in their letter dated May 7, 2015. The EPA provided comments on the Draft Action Memorandum in their letter dated June 2, 2015. The DOE submitted responses to the regulatory comments on the Draft Action Memorandum on June 30, 2015 (IACD-15-160). The final *Revision 3 Action Memorandum for the Non-Time Critical Removal Action for the D-Area Coal Pile Runoff Basin (489-D), CERCLIS Number: 63* (IACD-15-168) was submitted to the SCDHEC and EPA on August 11, 2015 (IACD-15-168). The Revision 3 Action Memorandum was public noticed on August 31, 2015. The DOE submitted the *Notification of the Removal Action Start Date for the D-Area Coal Pile Runoff Basin (489-D) CERCLIS Number: 63* on September 15, 2015 (IACD-15-176). The submittal letter stated that the removal action start for the 489-D CPRB was met on September 10, 2015, ahead of the FFA milestone date of September 28, 2015. The removal action start date was met with the initiation of the site land-survey of the 489-D CPRB.

The DOE submitted the *Field Sampling Plan for the 488-1D Ash Basin (U)* (SRNS-RP-2015-00096, Revision 0, May 2015) for SCDHEC and EPA review and comment on May 27, 2015 (IACD-15-150). The SCDHEC and EPA provided comments on the Revision 0 document in their letters dated June 25, 2015 and July 7, 2015, respectively. The DOE submitted the *Field Sampling Plan for the 488-1D Ash Basin (U)* (SRNS-RP-2015-00096, Revision 1, December 2015) (Redline and Clean Copies) and the SRS' responses to the regulatory comments on the Revision 0 document on December 21, 2015 (IACD-16-111). The SCDHEC conditionally approved the Revision 1 Redline document in their letter dated January 19, 2016. The EPA approved the Revision 1 document in their letter dated February 5, 2016. The DOE submitted the SRS' response to the SCDHEC's conditional approval comment on February 25, 2016 (IACD-16-123). The SCDHEC approved the SRS' response in their letter dated March 25, 2016.

The DOE submitted the *Removal Action Design Plan (RADP) for the 488-1D Ash Basin and the 489-D Coal Pile Runoff Basin (SRNS-RP-2015-00196, Revision 0, November 2015) CERCLIS Number: 63* on November 15, 2015 (IACD-16-105). The SCDHEC's and EPA's comments on the Revision 0 RADP were documented in their letters dated December 22, 2015 and January 21, 2016, respectively. The DOE submitted the *Removal Action Design Plan (RADP) for the 488-1D Ash Basin and the 489-D Coal Pile Runoff Basin (SRNS-RP-2015-00196, Revision 1 Redline, May 2016) and the Savannah River Site's Responses to the Regulatory Comments on the Revision 0 Document, CERCLIS Number: 63* on May 23, 2016 (IACD-16-139). The SCDHEC and EPA conditionally approved the Redline Revision 1 document in their letters dated June 7, 2016 and June 26, 2016. The DOE submitted the *Professional Engineer (PE) Stamped Removal Action Design Plan (RADP) for the 488-1D Ash Basin and 489-D Coal Pile Runoff Basin (U) (SRNS-RP-2015-00196, Revision 1, May 2016) CERCLIS Number: 63* on July 18, 2016 (IACD-16-152). The July 18, 2016 submittal included the responses to the SCDHEC's and EPA's conditional approval comments. On September 14, 2017, the DOE submitted a *Minor Design Change to the Removal Action Design Plan (RADP) for the 488-1D Ash Basin and 489-D Coal Pile Runoff Basin (U) (SRNS-RP-2015-00196, Revision 1, May 2016) CERCLIS Number: 63* (IACD-17-159). The minor design change included a MicroDrain® Option as part of the 488-1D Ash Basin cover system in lieu of the Geosynthetic Clay Liner/Geosynthetic Drainage Layer (GCL/GDL) cover system specified in the RADP. The MicroDrain® Option equals (or exceeds) the performance of the GCL/GDL cover system. The SCDHEC-Solid Waste Permitting Section determined that the design of the landfill cap meets the requirements of a Class 3 Landfill per the regulations (see ARF-021290, dated October 18, 2017).

The DOE submitted the *Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis (RSER/EE/CA) for the D-Area Ash Basin (488-1D) (SRNS-RP-2015-00490, Revision 0, February 2016) CERCLIS Number: 63* on February 24, 2016 (IACD-16-124). The SCDHEC and EPA provided comments on the Revision 1 RSER/EE/CA in their letters dated April 21, 2016 and April 25, 2016, respectively. The DOE submitted the *Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis (RSER/EE/CA) for the D-Area Ash Basin (488-1D) (SRNS-RP-2015-00490, Revision 1, June 2016) (Clean Copy), Savannah River Site's Responses to Regulatory Comments on the Revision 0 Document, and Draft Action Memorandum, CERCLIS Number: 63* on June 8, 2016 (IACD-16-144). The 30-day public comment period for the RSER/EE/CA began on June 15, 2016 and ended on July 14, 2016. The SRS received comments from two members of the public during the public comment period.

The SCDHEC and EPA provided comments on the draft Action Memorandum in their letters dated July 11, 2016 and July 20, 2016, respectively. The DOE submitted responses to the regulatory comments on the draft Action Memorandum on August 3, 2016 (IACD-16-158). The DOE submitted the final *Action Memorandum and Responsiveness Summary for the Non-Time Critical Removal Action for the D-Area Ash Basin (488-1D), CERCLIS Number: 63* on August 17, 2016 (IACD-16-160). The comments received during the RSER/EE/CA public comment period were addressed in the Responsiveness Summary. The Action Memorandum and Responsiveness Summary were public noticed on August 31, 2016.

The DOE submitted the *Notification of the Removal Action Start Date for the D-Area Ash Basin (488-1D) CERCLIS Number: 63* on September 19, 2016 (IACD-16-167). The submittal letter stated that the removal action start for the 488-1D Ash Basin was met on August 24, 2016, ahead of the FFA milestone date of October 3, 2016. The removal action start was met with the subcontractor's initiation of site development of the new D-Area borrow pit. The new borrow pit will be the primary source of common fill and topsoil required for the construction of the D-Area Ash Basin (488-1D) cover system.

On February 7, 2017, the SRS submitted a request to SCDHEC to use the 488-1D Inlet Basins storm water for the irrigation of the 488-4D Ash Landfill and 488-D Ash Basin covers until an alternate solution for longer term water management is agreed upon (see ARF-020982). On February 16, 2017, the SCDHEC provided approval to proceed with the irrigation through August 15, 2017, with some additional requirements (see ARF-020979). On July 17, 2017, DOE requested SCDHEC concurrence to continue utilization of the 488-1D Inlet Basins storm water for the irrigation of the 488-4D Ash Landfill and 488-D Ash Basin covers through February 2018 in support of the 488-1D Ash Basin removal action (IACD-17-148). On July 20, 2017, SCDHEC granted approval to continue with irrigation through February 28, 2018 (see ARF-021219). On February 6, 2018, DOE submitted an extension request for the utilization of the D-Area Ash Basin (488-1D) Inlet Basin water for irrigation purposes through June 30, 2018 (IACD-18-129). SCDHEC approved the request in their letters dated February 8, 2018 (ARF-021384) and May 17, 2018 (ARF-021653). The February 8, 2018 letter granted approval through May 2018. The May 17, 2018 letter granted approval through June 2018. On June 25, 2018, SRS requested an extension through August 31, 2018 (ARF-021693). SCDHEC approved the extension on June 26, 2018 (SRNS-OS-2018-00093 [ARF-021701]).

The DOE submitted the *Human Health and Ecological Evaluation for Confirmation Sampling at the 489-D Coal Pile Runoff Basin (ERD-EN-2017-0027, Revision 0, April 2017) CERCLIS Number: 63* on April 26, 2017 (IACD-17-135). The SCDHEC and EPA submitted comments in their letters dated June 22, 2017 and July 24, 2017, respectively. On October 24, 2017, DOE submitted the *Human Health and Ecological Evaluation for Confirmation Sampling at the 489-D Coal Pile Runoff Basin (ERD-EN-2017-0027, Revision 1, October 2017) (Redline and Clean Copy)* and Savannah River Site's Responses to the Regulatory Comments on the Revision 0 Document, CERCLIS Number: 63 (IACD-18-100) to SCDHEC and EPA. SCDHEC and EPA approved the report in their letters dated November 21, 2017 (ARF-021309) and December 19, 2017 (ARF-021339), respectively.

The DOE submitted the *Human Health and Ecological Evaluation for Confirmation Sampling at the 488-1D Ash Basin and Inlet Basins (U) (ERD-EN-2018-0007, Revision 0, October 2018) SEMS Number: 63* on October 2, 2018 (IACD-18-182). The report will be finalized in FY2019.

The closure completion for the D-Area Ash Basin (488-1D) and D-Area CPRB (489-D) (Southern 75%) is currently scheduled for FY2019. Upon conclusion of the removal action activities at these units, a single RAR that summarizes the work on both units will be prepared and submitted to the SCDHEC and EPA. The RAR is currently scheduled for submittal during FY2019.

- **C Area Groundwater Operable Unit, SEMS Number 82:** This unit is listed on Appendix C of the FFA for the SRS.

On May 11, 2017, DOE submitted the *Sampling and Analysis Plan Addendum for the C-Area Groundwater (CAGW) Operable Unit (OU) (U) (SRNS-RP-2017-00100, Revision 0, April 2017) CERCLIS Number: 82 (IACD-17-136)*. The SCDHEC and EPA provided comments on the Revision 0 report in their letters dated July 6, 2017 (ARF-021207) and July 19, 2017 (ARF-021215), respectively. The DOE submitted the redline Revision 1 document (SRNS-RP-2017-00100, Revision 1 Redline, March 2018) and SRS' responses to the regulatory comments on the Revision 0 document on March 22, 2018 (IACD-18-142). The SCDHEC approved and the EPA provided comments on the Redline Revision 1 document in their letters dated April 19, 2018 (ARF-021481) and May 4, 2018 (ARF-021627), respectively. The DOE submitted the Revision 1.1 document (SRNS-RP-2017-00100, Revision 1.1, June 2018) (redline pages and clean copy) and SRS' responses to the regulatory comments on the Revision 1 document on July 11, 2018 (IACD-18-163). The SCDHEC and EPA approved the Revision 1 document in their letters dated August 9, 2018 (SRNS-OS-2018-00145 [ARF-021736]) and July 20, 2018 (SRNS-OS-2018-00119 [ARF-021714]), respectively.

On September 28, 2017, the DOE submitted the *Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis (RSER/EE/CA) for C-Area Groundwater Operable Unit (SRNS-RP-2017-00365, Revision 0, September 2017) and the Scoping Summary for the C-Area Groundwater Operable Unit (ERD-EN-2001-0146, July 2017) CERCLIS Number: 82 (IACD-17-160)* for regulatory review and comment. The SCDHEC and EPA provided comments on the Revision 0 RSER/EE/CA on November 27, 2017 (ARF-021312) and December 5, 2017 (ARF-021326), respectively. The DOE submitted the Revision 1 RSER/EE/CA (SRNS-RP-2017-00365, Revision 1, February 2018), SRS' responses to the regulatory comments on the Revision 0 document, and the draft action memorandum on February 22, 2018 (IACD-18-131). The 30-day public comment period for the RSER/EE/CA began on March 13, 2018 and ended on April 11, 2018. The SRS received no comments from the public during the public comment period. However, one comment was received from the EPA during the public comment period.

The SCDHEC approved and EPA provided comments on the draft Action Memorandum in their letters dated March 21, 2018 (ARF-021442) and April 18, 2018 (ARF-021483), respectively. The DOE submitted the final *Action Memorandum and Responsiveness Summary for the Non-Time Critical Removal Action for the C-Area Groundwater Operable Unit (U), SEMS Number: 82* on May 18, 2018 (IACD-18-150). The comments received during the RSER/EE/CA public comment period were addressed in the Responsiveness Summary. The Action Memorandum and Responsiveness Summary were public noticed on May 30, 2018.

The removal action activities at the C-Area Groundwater OU are scheduled to start in FY2019.

- **P Area Groundwater Operable Unit, SEMS Number 81:** This unit is listed on Appendix C of the FFA for the SRS.

On October 30, 2017, the DOE submitted the *Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis (RSER/EE/CA) for Trichloroethylene Plume Discharging to Steel Creek in P-Area Groundwater Operable Unit (NBN) (U) (SRNS-RP-2017-00372, Revision 0, October 2017) and the Scoping Summary for the P-Area Groundwater Operable Unit (ERD-EN-2013-0009, May 2017) CERCLIS Number: 81 (IACD-18-101)* for regulatory review and comment. The SCDHEC and EPA provided comments on the Revision 0 RSER/EE/CA in their letters dated December 13, 2017 (ARF-021328 and ARF-021329). The DOE submitted the Revision 1 RSER/EE/CA (SRNS-RP-2017-00372, Revision 1, March 2018), SRS' responses to the regulatory comments on the Revision 0 document, and the draft action memorandum on March 27, 2018 (IACD-18-139). The 30-day public comment period for the RSER/EE/CA began on April 10, 2018 and ended on May 10, 2018. The SRS received no comments from the public during the public comment period. However, comments were received from the SCDHEC and EPA during the public comment period.

The EPA and SCDHEC provided comments on the draft Action Memorandum in their letters dated April 25, 2018 (ARF-021486) and April 26, 2018 (ARF-021487), respectively. DOE submitted the final *Action Memorandum and Responsiveness Summary for the Non-Time Critical Removal Action for the P-Area Groundwater Operable Unit (U), SEMS Number: 81* on May 29, 2018 (IACD-18-151). The SCDHEC's comment resulted in an editorial change to the Action Memorandum. The EPA's comments were addressed in the Responsiveness Summary. The Action Memorandum and Responsiveness Summary were public noticed on June 6, 2018.

On March 27, 2018, DOE submitted the *Sampling and Analysis Plan Addendum for the P-Area Groundwater Operable Unit (U) (SRNS-RP-2018-00261, Revision 0, February 2018) CERCLIS Number: 81 (IACD-18-140)*. The EPA and SCDHEC provided comments on the Revision 0 report in their letters dated May 4, 2018 (ARF-021626) and May 24, 2018 (ARF-021662), respectively. The DOE submitted the Revision 1 document (SRNS-RP-2017-00100, Revision 1, August 2018) (redline pages and clean copy) and SRS' responses to the regulatory comments on the Revision 0 document on September 10, 2018 (IACD-18-173). The Sampling and Analysis Plan Addendum will be finalized in FY2019.

The removal action activities at the P-Area Groundwater OU are scheduled to start in FY2019.

Ms. Susan B. Fulmer
Mr. Jon Richards

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NOV -1 2018

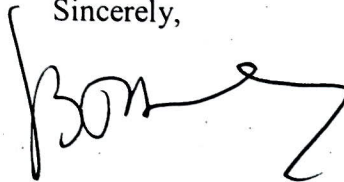
There were twenty-three (23) maintenance activities initiated within Site Evaluation and RCRA/CERCLA Areas in FY2018. There were sixteen (16) maintenance activities carried over from previous years. Of the thirty-nine (39) activities identified in this report, eleven (11) have been completed; twenty-four (24) are in progress, in design, or planning phases, four (4) have been placed on hold and zero (0) were cancelled.

All but one of 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) is currently in progress.

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
SRS Remedial Project Manager
Infrastructure and Area Completion Division

IACD-19-104

cc:

G. K. Taylor, SCDHEC - Columbia
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J. Tufts, EPA - Atlanta

Table 1. Fiscal Year 2018 Maintenance Activity Summary

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

18-001	H Area Underground Domestic Water Leak	142, 591
18-003	H Area Fire Water Leak	549, 591, 346
18-004	H Area Domestic Water Leak	294, 295, 549, 591
18-005	L Area Water Leak	584
18-006	Set up the Ameresco solar system enclosure at the 284 □H abatement sump	294, 295, 549, 591
18-007	Repair Fire Water Line Between 292/292-2H and 294-H	346, 549, 591
18-009	Repair underground well water leak near 241-13F	283
18-010	Excavate underground cooling water return line east of 221-H	344, 549, 591
18-013	Work Order 01636598 "Implement E-DCF-H-17005 SRNL Off Gas Monitoring"	344, 549, 591
17-008	TK3-7 Excavate to repair underground transfer line	N/A
17-012	Repair domestic water line Southeast of 281-2H	294, 295, 549, 591

Table 1. Fiscal Year 2018 Maintenance Activity Summary (Continued)

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

07-009*	L Area Disassembly Basin and Sand Filter Supply and Return Line Replacement	303, 479
08-008	Excavate and Backfill for Tank 10 Chromate Leak Under Work Order 00695186, H Tank Farm	262, WHM-006
10-016*	299-H Limited Area Security Fence Modification	SPH-002, CMH-002
12-011	WO 1176996 – Excavation to Support Design of New Footers for Tank 24 at H Tank Farm	WMN-003
12-019	Incorporation of Additional Ash in the 288-F Ash Basin Landfill	276
14-012*	Laydown Pad Installation Outside L Area Inner Fence ¹	479, 560
14-014	Excavate and Isolate the Transfer Line from Tank 12 to HBD2 in H Tank Farm	262, WHN-006
16-004	Repair Steam Condensate Leaks West of Tanks 25/26	283
16-005	Relocate Plant Air to Above Ground Location	262
16-008*	Replace PIV 2111	591
16-009	Install Additional Shielding Tank 21 S Riser	WMH-003, WMH-005
17-009	F-Area Utility Pole Treatment Project	308
17-010	Excavation Activities to Investigate, Identify and Repair Water Intrusion into LAD/HAD Cells C&D, 772-F Courtyard	SPF-008, 563
17-011	Replacement of Two Post Indicator Valves (PIVs) near 281-2H	294, 295, 549, 591
18-002	254-5H ROADWAY REPAIR	591
18-008	Utility Pole Inspections L Area	584
18-011	Reroute Steam Trap Drain & Establish a New French Drain near 236-H per M-DCF-H-13309	591
18-012	Replace Storm Water Piping West of 772-F	563
18-014	Repair PIV 2134 near 704-55H	344, 374, 549, 591
18-015	Perform air gap of domestic water feed to 607-1F	563, 283
18-016	“Inspection and Treatment of Power and Steam Poles within K-Area Operable Units 476 and 572”.	476, 572
18-017	“Tank 27 Excavate for Transfer Line Tie in Per m-dcp-f-17003.” WO Task # 01654082-03	591

Table 1. Fiscal Year 2018 Maintenance Activity Summary (Continued/End)

<u>O&M Plan #</u>	<u>Description</u>	<u>O&M Manual ID #</u>
<u>In Process/Hold/Cancelled Activities</u>		
18-018	Back fill sink hole North of 2F Evaporator WO # 01664708-01	591
18-019	Investigate Sinkhole West of 105-1K, K Area Site Evaluation Area 514	514
18-020	H-Area E3S Replacement & ARGUS Implementation	549, 344
18-021	F Area Inspection of Steam Poles	162, 199, 227, 270, 277
18-022	WO # 01671568 excavation in H Area	TBD
18-023	Repair Domestic Water Line near 281-15H	TBD

*On Hold

N/A – Not Applicable

TBD – To Be Determined