



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

JAN 28 2021

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
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: Savannah River Site's (SRS) Responses to Regulatory Comments on Performance Evaluation Report for the A-Area Miscellaneous Rubble Pile (731-6A) Operable Unit – April 2019 through April 2020 (U) (SRNS-RP-2020-00279, Revision 0, July 2020) and the Post-Construction Report Addendum for the A-Area Miscellaneous Rubble Pile (731-6A) Operable Unit (U) (SRNS-RP-2018-00942, Revision 1 Redline, January 2021) SEMS Number: 30

In accordance with the terms of the Federal Facility Agreement (FFA), the U. S. Department of Energy (DOE) is submitting the subject comment responses for your review. Comments on the Revision 0 Performance Evaluation Report (PER) were received from the South Carolina Department of Health and Environmental Control (SCDHEC) and the U. S. Environmental Protection Agency (EPA) on November 20, 2020 and December 14, 2020, respectively.

This submittal also includes the *Post-Construction Report Addendum for the A-Area Miscellaneous Rubble Pile (731-6A) Operable Unit (U)* (SRNS-RP-2018-00942, Revision 1 Redline, January 2021). The revision to the post-construction report (PCR) was agreed to during the Core Team meeting held on December 16, 2020 to discuss the permanent shutdown of the passive soil vapor extraction (SVE) system at the A-Area Miscellaneous Rubble Pile (731-6A) (ARP) Operable Unit (OU). The Core Team agreed to the following path forward to cease operation of the ARP passive SVE system.

- The *Savannah River Site's (SRS) Responses to the Regulatory Comments on the Performance Evaluation Report for the A-Area Miscellaneous Rubble Pile (731-6A) Operable Unit, April 2019 through April 2020 (U) (SRNS-RP-2020-00279, Revision 0, July 2020) SEMS Number: 30* will include the soil vapor data from May 2020 to December 2020. In addition, the comment responses will identify proposed existing groundwater monitoring wells whose data will be reported and discussed in the next Five-Year Remedy Review Report for the ARP OU. (Refer to Enclosures 1 and 2 for this information.)

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- SRS will revise the *Post-Construction Report Addendum for the A-Area Miscellaneous Rubble Pile (731-6A) Operable Unit (U)* (SRNS-RP-2018-00942, Revision 0, October 2018) with the Core Team agreement to cease operation of the passive SVE system based on modeling and empirical data from the system. Also, the revisions include the existing groundwater monitoring wells identified in the PER comment responses whose data will be reported and discussed in the next Five-Year Remedy Review Report for the ARP OU (Refer to Enclosure 3 - the revised document is attached for your review.)
- Beginning in 2021, future ARP OU PERs will not be required. Appendices D and E of the FFA will be revised to reflect this Core Team agreement.
- The remedial goals for trichloroethylene and tetrachloroethylene and the soil cover and land use controls remedy components established in the Record of Decision (WSRC-RP-2001-4197, Revision 1.3, April 2003) will remain unchanged at this time.

Please review the enclosures and provide your comments and/or approval thirty (30) days from receipt. The time and effort that the SCDHEC and the EPA have given on the subject operable unit are greatly appreciated.

Questions from you or your staff concerning this matter may be directed to me at (803) 952-8365, or the DOE Federal Project Director, Ms. Karen Adams, at (803) 952-7871.

Sincerely,
Brian T.
Hennessey

Digitally signed by Brian T.
Hennessey
Date: 2021.01.26 10:22:07 -05'00'

Brian T. Hennessey
SRS Remedial Project Manager
Infrastructure and Area Completion Division

IACD-21-120

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Enclosures:

1. SRS Responses to U.S. Environmental Protection Agency Comments on the Performance Evaluation Report for the A-Area Miscellaneous Rubble Pile (731-6A) Operable Unit – April 2019 through April 2020 (U) (SRNS-RP-2020-00279, Revision 0, July 2020) SEMS Number: 30
2. SRS Responses to SCDHEC Comments on the Performance Evaluation Report for the A-Area Miscellaneous Rubble Pile (731-6A) Operable Unit – April 2019 through April 2020 (U) (SRNS-RP-2020-00279, Revision 0, July 2020) SEMS Number: 30
3. Post-Construction Report Addendum for the A-Area Miscellaneous Rubble Pile (731-6A) Operable Unit (U) (SRNS-RP-2018-00942, Revision 1 Redline, January 2021) SEMS Number: 30

cc w/o encl:

J. Blalock, SCDHEC-Columbia
S. French, SCDHEC-Columbia
M. Reece, SCDHEC-Columbia
G. K. Taylor, SCDHEC-Columbia
T. Fuss, SCDHEC–Aiken Environmental Affairs Office
G. N. O’Quinn, SCDHEC - Aiken Environmental Affairs Office
B. Cameron, SCDHEC–Aiken Environmental Affairs Office
R. H. Pope, EPA-Atlanta

cc w/encl:

J. Tufts, EPA-Atlanta
M. McRae, TechLaw, Inc.

**SRS Response to
South Carolina Department of Health and Environmental Control
Comment on the
Performance Evaluation Report for the A-Area Miscellaneous Rubble Pile (731-6A) Operable Unit (U)
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SEMS Number: 30, SRNS-RP-2020-00279, Revision 0, July 2020
Savannah River Site, Aiken, South Carolina**

Comment Received: November 20, 2020

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1. Section 3.0, Conclusions/Recommendations, page 8. The last paragraph of this section states that a Core Team meeting is recommended for the Fall 2020 to discuss the information in the Performance Evaluation Report and the updated remedial goals. SCDHEC requests that this meeting be scheduled prior to the end of CY2020.

Response: Agree. Based upon the Core Team meeting held December 16, 2020, operation of the passive SVE system will be discontinued upon approval of the response to comment. The unreported soil vapor data from May 2020 to December 2020 is included with this response to comment. Data from groundwater monitoring wells AOB1 and MSB31C will be reported and discussed in the Five-Year Remedy Review for the ARP OU. Beginning in 2021, future ARP OU Performance Evaluation Reports will not be submitted. Appendices D and E of the Federal Facility Agreement will be revised accordingly to reflect this Core Team agreement. The Remedial Goals established in the Record of Decision (WSRC-RP-2001-4197, Revision 1.3, April 2003) for trichloroethylene and tetrachloroethylene will not be revised at this time but revising them in the future may be considered. The Soil Cover and Land Use Controls remedy components remain unchanged.

No change to the current document is proposed.

Responsible Party: John Bradley, 803-952-2301, john02.bradley@srs.gov

**SRS Response to
South Carolina Department of Health and Environmental Control
Comment on the
Performance Evaluation Report for the A-Area Miscellaneous Rubble Pile (731-6A) Operable Unit (U)
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Passive SVE Wells – PCE and TCE Concentrations

Sample Location	Laboratory GC (ppmv)		
	11/12/2020		
	PCE	TCE	Flow (scfm)
AMP001VEW	0.0132	0.01 (U)	5
AMP002VEW	0.0388	0.0737	2
AMP003VEW	0.289	0.248	2
AMP004VEW	0.0099 (U)	0.01 (U)	2
AMP005VEW	0.019	0.0114	5
AMP006VEW	0.0284	0.01 (U)	9
AMP007VEW	0.0099 (U)	0.01 (U)	1
AMP008VEW	0.0099 (U)	0.01 (U)	4
AMP009VEW	0.0099 (U)	0.01 (U)	5
AMP010VEW	0.132	0.101	7
AMP011VEW	0.0099 (U)	0.01 (U)	3
AMP012VEW	0.0722	0.0669	8
AMP013VEW	0.0271	0.0119	5
AMP014VEW	0.384	0.428	8
AMP015VEW	0.0258	0.0344	6
AMP016VEW	0.0099 (U)	0.01 (U)	5
AMP017VEW	0.109	0.119	6
AMP018VEW	0.0099 (U)	0.01 (U)	8
AMP019VEW	0.145	0.1	6

Notes:

- GC = Gas Chromatography
- ppmv = part per million by volume
- scfm = standard cubic feet per minute
- U = non-detect

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Passive SVE Wells – Vacuum

Date	Vacuum (inches water)																		
	AMP001VEW	AMP002VEW	AMP003VEW	AMP004VEW	AMP005VEW	AMP006VEW	AMP007VEW	AMP008VEW	AMP009VEW	AMP010VEW	AMP011VEW	AMP012VEW	AMP013VEW	AMP014VEW	AMP015VEW	AMP016VEW	AMP017VEW	AMP018VEW	AMP019VEW
05/06/20	3.5	3.0	4.5	7.3	4.0	13.5	1.0	7.3	5.0	2.6	14.0	2.2	6.8	2.5	6.5	2.5	3.0	6.5	1.5
06/01/20	3.5	3.5	3.5	6.5	3.5	13.0	1.0	7.0	4.0	3.0	OOS	2.0	6.0	3.5	5.5	1.0	4.0	5.5	1.5
07/01/20	3.0	2.5	4.5	7.0	3.0	13.0	1.0	7.0	4.5	2.0	13.5	1.5	6.0	4.0	5.5	1.0	2.5	5.5	1.5
08/06/20	3.0	7.0	4.5	6.0	2.5	11.5	0.5	5.5	3.5	2.5	12.0	1.5	5.5	2.0	5.5	1.0	2.0	4.5	1.5
09/02/20	3.5	7.0	4.0	6.5	3.0	11.0	0.5	5.5	4.0	3.0	13.0	1.5	3.5	2.0	5.0	2.0	2.5	5.0	1.5
10/05/20	3.5	11.5	4.0	8.5	8.0	13.0	0.5	6.0	2.5	3.5	14.5	2.0	3.5	2.0	6.5	1.0	3.0	6.0	2.0
11/12/20	3.0	9.0	4.0	6.0	6.0	11.0	0.5	4.5	2.0	1.5	11.5	1.0	3.0	1.5	4.0	0.5	2.0	4.0	2.0
12/10/20	4.0	3.5	4.6	6.4	9.8	14.0	0.5	6.4	2.5	3.0	14.8	2.3	3.9	2.4	5.0	1.5	3.0	6.0	2.9

OOS = Out of Service

SRS Response to
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 Savannah River Site, Aiken, South Carolina

Comment Received: November 20, 2020

Passive SVE Wells – Flow

Date	Flow (scfm)																		
	AMP001VEW	AMP002VEW	AMP003VEW	AMP004VEW	AMP005VEW	AMP006VEW	AMP007VEW	AMP008VEW	AMP009VEW	AMP010VEW	AMP011VEW	AMP012VEW	AMP013VEW	AMP014VEW	AMP015VEW	AMP016VEW	AMP017VEW	AMP018VEW	AMP019VEW
05/06/20	6	2	2	14	5	17	2	7	6	6	10	9	10	6	14	8	8	8	1
06/01/20	6	1	1	5	2	2	1	7	6	8	OOS	10	10	10	7	1	2	10	1
07/01/20	6	1	3	4	3	2	1	8	6	10	3	12	7	12	8	2	9	11	1
08/06/20	5	5	3	8	2	5	1	7	5	7	2	8	6	9	7	5	7	7	6
09/02/20	5	7	4	3	1	9	1	10	4	7	4	8	6	9	8	5	6	9	7
10/05/20	6	5	2	5	7	4	1	8	6	9	4	10	3	10	7	6	8	9	8
11/12/20	5	2	2	2	5	9	1	4	5	7	3	8	5	8	6	5	6	8	6
12/10/20	5	2	5	4	4	5	1	6	3	3	15	2	4	2	5	2	3	6	3

OOS = Out of Service
 scfm = standard cubic feet per minute

**SRS Response to
United States Environmental Protection Agency
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Comment Received: December 14, 2020

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GENERAL COMMENT

The Performance Evaluation Report (PER) for the A-Area Miscellaneous Rubble Pile (731-6A) Operable Unit, April 2019 through April 2020 (U), SEMS Number: 30, SRNS-RP-2020-00279, Revision 0, July 2020 (2020 PER) recommends that the remedial goals (RGs) for trichloroethylene (TCE) and tetrachloroethylene (PCE) be revised to reflect current conditions and, if appropriate, discontinue operation of the passive SVE system. Since SVE concentrations have been non-detect or very low and have been steady for years, EPA is not opposed to discontinuing operation of the passive SVE system. However, it is premature to modify soil RGs without groundwater data that supports the current soil concentrations are protective of groundwater. It is recommended that historical AMRP groundwater concentration data collected through the RCRA program be reviewed and continue to be reviewed/presented once the passive SVE system is discontinued to ensure that current soil concentrations remain protective.

Response: Agree. Based upon the Core Team meeting held December 16, 2020, operation of the passive SVE system will be discontinued, upon approval of the response to comments. The unreported soil vapor data from May 2020 to December 2020 is included with this response to comment. Data from groundwater monitoring wells AOB1 and MSB31C will be reported and discussed in the Five-Year Remedy Review for the ARP OU. Beginning in 2021, future ARP OU Performance Evaluation Reports will not be submitted. Appendices D and E of the Federal Facility Agreement will be revised accordingly to reflect this Core Team agreement. The Remedial Goals established in the Record of Decision (WSRC-RP-2001-4197, Revision 1.3, April 2003) for trichloroethylene and tetrachloroethylene will not be revised at this time but revising them in the future may be considered. The Soil Cover and Land Use Controls remedy components remain unchanged.

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Passive SVE Wells – Vacuum

Date	Vacuum (inches water)																		
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05/06/20	3.5	3.0	4.5	7.3	4.0	13.5	1.0	7.3	5.0	2.6	14.0	2.2	6.8	2.5	6.5	2.5	3.0	6.5	1.5
06/01/20	3.5	3.5	3.5	6.5	3.5	13.0	1.0	7.0	4.0	3.0	OOS	2.0	6.0	3.5	5.5	1.0	4.0	5.5	1.5
07/01/20	3.0	2.5	4.5	7.0	3.0	13.0	1.0	7.0	4.5	2.0	13.5	1.5	6.0	4.0	5.5	1.0	2.5	5.5	1.5
08/06/20	3.0	7.0	4.5	6.0	2.5	11.5	0.5	5.5	3.5	2.5	12.0	1.5	5.5	2.0	5.5	1.0	2.0	4.5	1.5
09/02/20	3.5	7.0	4.0	6.5	3.0	11.0	0.5	5.5	4.0	3.0	13.0	1.5	3.5	2.0	5.0	2.0	2.5	5.0	1.5
10/05/20	3.5	11.5	4.0	8.5	8.0	13.0	0.5	6.0	2.5	3.5	14.5	2.0	3.5	2.0	6.5	1.0	3.0	6.0	2.0
11/12/20	3.0	9.0	4.0	6.0	6.0	11.0	0.5	4.5	2.0	1.5	11.5	1.0	3.0	1.5	4.0	0.5	2.0	4.0	2.0
12/10/20	4.0	3.5	4.6	6.4	9.8	14.0	0.5	6.4	2.5	3.0	14.8	2.3	3.9	2.4	5.0	1.5	3.0	6.0	2.9

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SRS Responses to
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Date	Flow (scfm)																		
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06/01/20	6	1	1	5	2	2	1	7	6	8	OOS	10	10	10	7	1	2	10	1
07/01/20	6	1	3	4	3	2	1	8	6	10	3	12	7	12	8	2	9	11	1
08/06/20	5	5	3	8	2	5	1	7	5	7	2	8	6	9	7	5	7	7	6
09/02/20	5	7	4	3	1	9	1	10	4	7	4	8	6	9	8	5	6	9	7
10/05/20	6	5	2	5	7	4	1	8	6	9	4	10	3	10	7	6	8	9	8
11/12/20	5	2	2	2	5	9	1	4	5	7	3	8	5	8	6	5	6	8	6
12/10/20	5	2	5	4	4	5	1	6	3	3	15	2	4	2	5	2	3	6	3

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