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

MAR 13 2025

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 Environmental Services
2600 Bull Street
Columbia, South Carolina 29201

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

Dear Ms. Fulmer and Mr. Richards:

SUBJECT: Post-Construction Report for the Lower Three Runs Integrator Operable Unit Upper Subunit (U) (SRNS-RP-2023-00109, Revision 1, January 2025) (Redline) and Savannah River Site's Responses to the Regulatory Comments on the Revision 0 Document, SEMS Number: 35

In accordance with the terms of the Federal Facility Agreement (FFA), the U. S. Department of Energy (DOE) is submitting the subject document for your review. The U.S. Environmental Protection Agency's (EPA) and South Carolina Department of Environmental Services' (SCDES) comments were received on November 13, 2024, and December 2, 2024, respectively. The final responses were incorporated into the Redline Revision 1 pages. Please review the enclosures and provide your approval within thirty (30) days from receipt. The effort and time that the EPA and the SCDES have provided on this operable unit are greatly appreciated.

Questions from you or your staff may be directed to me at (803) 952-6211.

Sincerely,

MATTHEW BAKER
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Date: 2025.03.13 11:26:21 -04'00'

Matthew R. Baker
Acting FFA Remedial Project Manager
DOE-Savannah River Operations Office
Remediation, Deactivation, and Decommissioning Division

RDDD-25-121

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Enclosures:
1. SRS Responses to the South Carolina Department of Environmental Services' Comments on the Post-Construction Report for the Lower Three Runs Integrator Operable Unit Upper Subunit (U) (SRNS-RP-2023-00109, Revision 0, August 2024) SEMS Number: 35
2. SRS Responses to the U.S. Environmental Protection Agency's Comments on the Post-Construction Report for the Lower Three Runs Integrator Operable Unit Upper Subunit (U) (SRNS-RP-2023-00109, Revision 0, August 2024) SEMS Number: 35
3. Post-Construction Report for the Lower Three Runs Integrator Operable Unit Upper Subunit (U) (SRNS-RP-2023-00109, Revision 1, January 2025) (Redline) SEMS Number: 35

cc w/o encl:
M. Reece, SCDES-Columbia
H. J. Porter, SCDES-Columbia
J. Blalock, SCDES-Columbia
S. French, SCDES-Columbia
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H. L. Herlong, SCDES-Midlands Aiken Environmental Affairs Office

cc w/encl:
H. H. Cathcart, SCDES-Columbia
M. McRae, TechLaw, Inc.

GENERAL COMMENT

1. The PCR provides insufficient documentation to support that the remedial action (RA) construction activities were completed in accordance with the approved Remedial Action Implementation Plan (RAIP, 2022). The examples include but are not limited to the following:

   a. The PCR (see Section 6.1, Verification of Construction Completion) does not provide a discussion of how construction activities required for the RA have met the acceptance criteria established in the approved RAIP. If applicable, a summary of the results of the analytical sampling and testing should be discussed and the data either included in an appendix or text should be included to indicate that the records are being maintained at SRS.

      Response: Agree with clarification.

      Section 6.1 incorrectly referred to Section 4.0 in the Revision 0 document and should have correctly referenced *Section 5.0 Verification, Sampling, Testing, and Analysis Performance Standards, and Construction Quality Control*. For clarity, the text in Section 6.1 will be revised as follows:

      "Per Section ~~4.0~~ 5.0, construction activities have met the acceptance criteria established in the RAIP (SRNS 2022a). A chronology of the construction activities completed to meet the RA are provided in Table 1. Confirmation sample results required by the RAIP are provided in Table 5. All confirmation samples were below the Cs-137 PTSM threshold (144 pCi/g) confirming that the acceptance criteria were met by the RA."

   b. The PCR does not mention a quality assurance/quality control **(**QA/QC) Plan for the topographical site survey, most notably coordinate locations of sample data points, removal areas and signage. In lieu of a previous location error mentioned in the RAIP (see Section 1.3 Nature and Extent of Contamination) it is important to verify location coordinates are accurate. The PCR should discuss the quality control documents used to perform aspects of the topographical site survey, including control points and datum used.

      Response: Agree.

      Section 2.0 second paragraph text will be revised as follows:

"The minimum excavation area was expanded beyond the TSE-01 sample location, the southeastern corner, for a total area of approximately 46.5 m2 (500 ft2) (Figure 9). SRNS site survey ~~staked~~ performed the surveying of the boundaries of the expanded excavation area and the boundaries of the LUC boundaries and sign locations. The boundaries of the expanded area were staked with PVC pipe and wood posts. Temporary benchmarks for vertical and horizontal control within the project site were established, as necessary for execution of the specified tasks. The survey activities were performed in accordance with the SRNS Layout/Survey Measurement and Equipment Control Program Procedure. A Third Order/Class I survey accuracy as specified in Federal Geographic Data Committee (FGDC) STD-007.4 was used. The area of disturbance was less than 0.4 ha (1 acre), and a Storm Water Pollution Prevention Plan was not required."

c. The PCR does not specifically address permits outlined in the RAIP (see Sec.3.0, Permitting Requirements) specifically the SRS Site Clearance Permit. Clarification stating this permit was secured as well as any other pertinent state/local/government permits required should be presented.

Response: Agree.

Section 2.0 Pre-Construction Activities first paragraph will be revised as follows:

"A SRS Site Clearance Permit was obtained prior to the start of any construction or sampling activities. Sediment sampling was conducted in the R-Area Discharge Canal to delineate the extent of PTSM per the Field Sampling Plan (FSP) provided as Appendix B of the RAIP (SRNS 2022a)…"

d. The PCR does not specifically address if a Storm Water Pollution Prevention Plan (SWPPP) was required for the work as discusses in the RAIP (see Section 2.1.2, Design Strategy for Excavation, Treatment, and Disposal of PTSM Sediment/Soil). Although the area of disturbance was likely less than 1 acre, and likely a SWPPP was not required, the PCR should verify as such.

Response: Agree.

A Storm Water Pollution Prevention Plan was not required. Please see the response to EPA General Comment 1b.

e. The PCR does not include an overall site specific **Quality Assurance Project Plan** as specified in the RAIP (see Section 4.5, Quality Assurance Project Plan).

Please revise the PCR to include this information.

Response: Agree.
Section 5.0 text will be revised as follows:

"To ensure the performance requirements and standards were achieved, project team personnel comprised of SRNS Engineering, Project Management, Safety, and Subcontract Technical Representatives performed routine monitoring/surveillance activities. In lieu of a project-specific Quality Assurance Project Plan, the subcontractor provided their company Quality Assurance Manual (QAM). The QAM addressed the key elements of Document Control, Personnel Qualification and Training, Procurement of Items and Services, and Document and Records, and was in compliance with EPA QA/R-5 and SRNS 1Q Manual, Procedure 21-1 as determined by the EC&ACP Cognizant Quality Function. SRNS Engineering performed routine field oversight, verification of confirmation sampling results, sampling data management, and evaluation and acceptance of the analytical result."

Responsible Party: Eric Schiefer, eric.schiefer@srs.gov, 803-952-6273

SPECIFIC COMMENT

1. **Section 3.3.1 , Pre-Mobilization and Mobilization Activities, Page 11 of 52:** The report states that Radiological Protection Department personnel surveyed all equipment prior to entering and leaving the site; however, no detail on the type of equipment or procedure used to conduct this survey was discussed. *Please revise the text to include more detail on the procedure used as well as documentation of the QA/QC plan for this survey.*

Response: Agree.

Following completion of excavation activities, equipment used in completion of the work was broom cleaned and radiologically screened/cleared by SRNS personnel. Cleaned,

cleared equipment was removed from the work area and staged for full demobilization from the work site.

Section 3.3.1 fifth paragraph text will be revised as follows:

"SRNS Radiological Protection Department (RPD) personnel surveyed all equipment prior to entering and leaving the site. ~~Radiological surveys were performed as needed when~~ Following completion of excavation activities, equipment ~~of personnel~~ that came in contact with the sediment within or along the bank of the R-Area Discharge Canal was broom cleaned and radiologically screened/cleared by SRNS personnel in accordance with approved radiological control operations procedures, using standard radiological survey instrumentation. The survey results showed that the equipment meets the radiological release criteria for total and removable contamination, as defined in Table 2-2 of the WSRC 5Q, Radiological Control Manual."

Responsible Party: Eric Schiefer, eric.schiefer@srs.gov, 803-952-6273

SPECIFIC COMMENT

1. **Section 1.3.2.1, LUCs with MNR, page 7:** The Joyce Branch discussion following the bullets listed on page 7 refers to barrier gates as part of the more robust LUCs at EA5. Elsewhere in the document (Section 3.3.3 and Figures 5 and 19), these locations are referred to as access gates. Please revise the PCR to be consistent with the nomenclature for these LUCs.

   Response: Agree.

   For consistency with the Land Use Control Implementation Plan for the LTR IOU subunit (SRNS-RP-2023-00109, August 2024), the term access gates will be used. Section 1.3.2.1 text will be revised as follows:

   "For Joyce Branch (EA5), PTSM is present in two locations (Figure 5). EA5 is located interior to the site ~7.2-km (4.5-mi) from the SRS boundary, remotely located from site operations, and is not accessible to the public (i.e., trespassers). To address the PTSM in these locations, more robust LUCs were applied at EA5 in the form of additional signage along the bank near the PTSM locations and the installation of ~~barrier~~access ~~-~~gates across roads leading to the two PTSM locations. For Pond B (EA3), the two PTSM locations (Figure 5) are covered by 5.2-m (17-ft) and 9.1-m (30-ft) of water; therefore, no additional signage or ~~barrier~~ access gates were needed to prevent exposure."

   Responsible Party: Eric Schiefer, eric.schiefer@srs.gov, 803-952-6273

2. **Section 3.3.2.1, R-Area Discharge Canal Dewatering Activities, page 14:** The second sentence of the second paragraph states that filter socks were used on the discharge lines to mitigate sediment migration during dewatering. The referenced figure is Figure 13, which is not related to the text. In Figure 14, Dewatering of Excavation Area and Treatment of Sediments, an example of a filter sock is shown. Please revise the second sentence to reference the correct figure.

   Response: Agree.

   The Section 3.3.2.1 text will be revised to correctly reference Figure 14 as follows:

   "Once the aqua barriers were fully inflated, the excavation area was dewatered by pumping water from the interior of the cofferdam to the canal outside of the aqua barriers, but upstream of the turbidity barrier. Filter socks were used on the discharge lines to mitigate sediment migration during dewatering (see Figure ~~13~~14)."

Responsible Party: Eric Schiefer, eric.schiefer@srs.gov, 803-952-6273