REGION 4
ATLANTA, GA 30303

ENVIRONMENTAL COMPLIANCE &
MAY 04 2026
AREA COMPLETION PROJECTS

April 30, 2026

Mr. Matthew Baker
Acting FFA Remedial Project Manager
Remediation, Deactivation, and Decommissioning Division
U.S. Department of Energy
Savannah River Operations Office
P.O. Box A
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EPA Comments: Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis for the D-Area Groundwater Operable Unit Per- and Polyfluoroalkyl Substances Plume (U) (SRNS-RP-2025-01764, Revision 0, January 2026) SEMS Number: 63

Dear Mr. Baker,

The U.S. Environmental Protection Agency, Region 4 (EPA) has reviewed and provided comments on the Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis for the D-Area Groundwater Operable Unit Per- and Polyfluoroalkyl Substances Plume (U) (SRNS-RP-2025-01764, Revision 0, January 2026) SEMS Number:63

If you have any questions or require additional information, please contact Brianne Martin at (404) 683-2220.

Sincerely,

BRIANNE MARTIN Digitally signed by BRIANNE MARTIN
Date: 2026.04.30 14:51:39 -04'00'

Brianne Martin, RPM
Federal Facilities Branch
Superfund and Emergency Management Division

cc: C.L. Bergren, SRNS-ACP
Susan Fulmer, SCDES

GENERAL COMMENTS

1. The EPA Tap Water regional screening levels (RSLs) listed in Table 1 (USEPA Standards for Six PFAS [Per- and Polyfluoroalkyl Substances] and Removal Action Cleanup Levels) (except for perfluorooctanoic acid (PFOA)) are based on a hazard quotient (HQ) equal to 1.0; however, since there are multiple PFAS detected at the site, the RSLs should be set at a HQ equal to 0.1 so the exceedance of RSLs and risks can be fully assessed. For example, the Report indicates that perfluorobutanesulfonic acid (PFBS) did not exceed the RSL of 6,000 nanograms per liter (ng/L) set to a HQ of 1.0; however, the maximum concentration observed for PFBS is 600 ng/L, which is equal to the RSL at a HQ of 0.1 and less than the 6,000 ng/L RSL listed in Table 1. Please revise Table 1 to present the RSLs based on a HQ equal to 0.1, and revise the Report as necessary based on the updated RSLs.

2. It is unclear why the Report presents depths in meters below ground surface (bgs), while the figures and tables report depths in feet bgs. Related information conveyed between the text, tables and figures should be consistently presented. Please revise the text to report depths in feet bgs.

SPECIFIC COMMENTS

1. **Section 2.1, Site Description and Background, Operable Unit Description, Page 3 of 66; and Figure 3, D Area Waste Units and Facilities, Page 36 of 66:** This section describes multiple waste units and facilities in D Area; however, several waste units and facilities shown on Figure 3 are not discussed in this section. For example, the Maintenance Shop (717-D), 488-4D Ash Landfill, 288-2D Ash Basin, 488-1D Ash Basin, 484-D Powerhouse, and D-Area Ash Basin Wetlands waste units are shown on Figure 3 but are not discussed in Section 2.1. Please revise the text to include descriptions for all applicable waste units and facilities shown on Figure 3.

2. **Section 2.1, Site Description and Background, Operable Unit Description, Page 3 of 66; and Figure 3, D Area Waste Units and Facilities, Page 36 of 66:** The sixth bullet point on Page 3 of Section 2.1 identifies 421-2D as "Moderator Handling and Storage Building;" however, Figure 3 identifies 421-2D as "Drum Storage Facility." Additionally, the Report appears to use interchangeably both "Drum Storage Facility" and "Moderator Handling and Storage Building" terminology when discussing 421-2D. Please revise the report to use consistent terminology when discussing the 421-2D facility.

3. **Section 2.5, Geology and Hydrogeology, Page 8 of 66; and Figure 4, Lithostratigraphic and Hydrostratigraphic Units at SRS, Page 37 of 66:** The first paragraph indicates that the Fourmile Branch Formation constitutes the main portion of the Gordon Aquifer (GA); however, Figure 4 shows the Congaree Formation as the main unit of the GA, with the Fourmile Branch Formation at the base of the GA and top of the Couch Branch Confining Unit. Please revise the report to resolve this apparent discrepancy.

4. **Section 5.1, Effectiveness, Alternative 2b, In-situ PAB [Permeable Adsorptive Barrier] (GAC [Granulated Activated Carbon] Trench), Page 18 of 66:** It is unclear if a new trench barrier will be installed for the reapplication of GAC and how this affects the long-term effectiveness of Alternative 2b. The second paragraph states, "reapplication of absorptive material can extend the barrier lifetime for ongoing effectiveness;" however, the GAC barrier will be installed via trenching, and reapplication of the GAC would require additional trenching potentially along the entire treatment length to extend its lifetime and potentially impact long-term effectiveness. Please revise the text to clarify whether reapplication of GAC would require the installation of a new trench barrier rather than recharging the original barrier and discuss how reapplication affects the long-term effectiveness of Alternative 2b.

5. **Section 5.2, Implementability, Alternative 2a, In-Situ PAB (CAC [Colloidal Activated Carbon] Injections), Page 22 of 66; and Section 5.2, Implementability, Alternative 2b, In-Situ PAB (GAC Trench), Page 22 of 66: :** These section state that Alternative 2a and Alternative 2b "could be implemented with one-time material placement;" however, Section 5.1 (Effectiveness) indicates that reapplication may be used to extend the barrier lifetime, and the potential for reapplication should be discussed in Section 5.2. Please revise Section 5.2 to discuss the potential for CAC and GAC reapplication.

6. **Section 5.4, Comparison of Removal Action Alternatives, Page 25 of 66:** The second paragraph states, "Alternative 2a and Alternative 2b can be implemented with one-time material placement;" however, Section 5.1 (Effectiveness) indicates that reapplication may be used to extend the barrier lifetime and it is unclear how this

affects the relative effectiveness ranking. Appendix B (Cost Estimate) also includes reapplication of carbon material. Please revise the text to account for the potential for reapplication and relative effectiveness ranking, as appropriate.

7. **Appendix B, Cost Estimates, Page B-7 of B-10:** The cost estimate for Alternative 2b includes a line item for "Barrier Maintenance - Reinjection of CAC;" however, Alternative 2b involves the installation of a GAC trench, not CAC injections. Please revise this cost estimate to include the barrier maintenance of a GAC trench.

MINOR COMMENT

1. **Section 2.1, Site Description and Background, Operable Unit Description, Page 3; and Figure 3, D Area Waste Units and Facilities, Page 36 of 66:** The Second bullet point describes the D-Area heavy water facility as containing units 411-D, 411-1D, 412-D, 412-1D, 413-D, and 413-1D; however, Figure 3 identifies the D-Area Heavy Water Facility as "411-D, 412-D, 412-1D, and 413-D" and does not include 411-1D or 413-1D. Please revise the report as necessary to resolve this apparent discrepancy.