REGION 4
ATLANTA, GA 30303

ENVIRONMENTAL COMPLIANCE &

JUN 02 2026

AREA COMPLETION PROJECTS

June 2, 2026

Mr. Matthew Baker, SRS Remedial Project Manager
Remediation and Deactivation & Decommissioning Division
U.S. Department of Energy
Savannah River Operations Office
P.O. Box A
Aiken, South Carolina 29802

EPA Comments: P-AREA GROUNDWATER (PAGW) OPERABLE UNIT DATA SUMMARY TABLES FOR APRIL 2024 THROUGH MARCH 2025 SEMS NUMBER: 81; RDDD-26-130, REVISION 0 FEBRUARY 2026, SAVANNAH RIVER SITE

Dear Mr. Baker,

The U.S. Environmental Protection Agency, Region 4 (EPA), has reviewed the data summary report for P GW tables for April 2024 through March 2025, dated Feb.24, 2026. Our comments are attached.

If you have any questions or require additional information, please contact me at (404) 431-1340.

Sincerely,

JON RICHARDS

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Date: 2026.06.02 15:20:40 -04'00'

Jon Richards
FFA Remedial Project Manager
Superfund & Emergency Management Division

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

GENERAL COMMENT

1. There are no figures included to illustrate the location of monitoring wells and sampling results discussed in the Report. The Report discusses increasing concentrations of tritium and trichloroethylene (TCE) at multiple monitoring wells and references the location of several surface water monitoring stations; however, a figure is not provided. While it is understood the Report serves as the biennial data summary table submission for 2025, a figure illustrating the monitoring well network and surface water discharge locations is recommended for perspective to evaluate if the monitoring network is adequate to monitor plume horizontal and vertical migration. Examples include, but are not limited to the below:

    - Monitoring Results, Page 3: The text states, "These other VOC [volatile organic compound] exceedances are from monitoring locations within the current extent of TCE groundwater plumes and are not ubiquitous throughout the PAGW OU." Without a figure, the relative location of wells with other VOC exceedances is unknown and it is unclear whether the monitoring well network is sufficient.

    - Tritium Results, Page 4: The text states, "Notably, at the PSB011B location (screened below the PSB011DL and downgradient to PSB002 well cluster), the tritium concentration has increased from a concentration of 276 pCi/mL [picocuries per milliliter] in 2Q19 [second quarter 2019] up to 872 pCi/mL in 1Q25 [first quarter 2025]. This increasing trend is reflective of lateral movement of tritium in the LAZ [Lower Aquifer Zone] towards Steel Creek as well as vertical movement of tritium from the UAZ [Upper Aquifer Zone] to the LAZ." However, without a figure, the relative location of the monitoring wells, the P-Reactor Disassembly Basin (PRDB), and the PAR Pond are unknown and it is unclear whether the monitoring well network is sufficient to monitor plume migration.

    - Tritium Results, Page 5: The text states, "Although tritium continues to be detected above the MCL [Maximum Contaminant Level] in the GA [Gordon Aquifer], the data still suggests the plume area has not expanded and currently does not pose a threat to human health or the environment. The nearest surface water discharge for the GA is within the Savannah River and Floodplain Swamp, approximately 8.5 kilometers (5.3 miles) southwest of the PRSB [P-Reactor Seepage Basin]." Similar to the above, without a figure, the relative location of these wells that monitor the GA is unknown and it is unclear whether the monitoring well network is sufficient to monitor vertical plume migration. Additionally, the surface water discharge location for the GA within the Savannah River floodplain swamp relative to the PRSB location is not known.

    It is noted the Report (Monitoring Results, Page 3) references figures provided under separate cover (i.e., the 2024 PAGW OU [Operable Unit] groundwater report [SRNS 2025]) which provide first quarter of 2024 (1Q24) results and plume extents. *Please revise the Report to state the relevant figures from the most recent full groundwater monitoring report will be included in future off year letter reports.*

SPECIFIC COMMENTS

1. **Tritium Results, Page 4:** It is unclear whether the tritium concentrations in the UAZ are continuing on a decreasing trend as stated in the text. For example, the third paragraph of the section states,

"Tritium concentrations continue to decline at most UAZ monitoring locations with an exception where tritium has moved vertically from the upper UAZ to the lower UAZ." However, the text does not discuss the increase in tritium concentrations in respective UAZ wells between 1Q24 and 1Q25. According to Table 2 (Tritium Data Comparison [1Q24 and 1Q25], 16 of 61 UAZ monitoring wells sampled exhibited tritium concentration increases. As such, it is unclear whether the increases in tritium concentrations noted in UAZ monitoring wells between 1Q24 and 1Q25 support the assertion that tritium concentrations in the UAZ are continuing on a decreasing trend. *Please revise the text to provide discussion of the tritium increases from 1Q24 to 1Q25, and how these increases compare to long term trends, to support the assertion that tritium concentrations in the UAZ are continuing on a decreasing trend.*

2. **Tritium Results, Page 5:** The text in the last paragraph of the section lists 1Q25 tritium results, "(PSC005D1, 0.436 U pCi/mL and PSC005D2, 0.519 U pCi/mL)," and "(PSC006D1, 0.786 U pCi/mL and PSC006D2, 0.819 U pCi/mL); however, Table 2 notes the results for PSC005D1, PSC005D2, PSC006D1, and PSC006D2 as 0.17 U, 0.32 U, 0.79 J, and 0.82 J pCi/mL, respectively. *Please revise the Report to resolve the discrepancies.*

3. **Tritium Results, Pages 5-6:** The text in the last paragraph of the section notes the surface water SC-03 location 1Q25 result as 78.9 pCi/mL; however, Table 2 notes the result as 71 pCi/mL. *Please revise the Report to resolve the discrepancy.*

4. **Tritium Results, Page 6:** The text in the last paragraph of the section states, "Steel Creek surface water station SC-08 is the farthest location downstream of location SC-03 and is upstream of the Steel Creek confluence with L-Lake; where attenuation (dilution, dispersion, etc.) is expected to decrease detectable tritium concentrations below the MCL." However, discussion regarding the increase in tritium concentrations at SC-08 to above the MCL from 18.1 pCi/mL in 1Q24 to 21.8 pCi/mL in 1Q25 is missing from the text. *Please revise the Report to discuss the increase in concentration to above the MCL at SC-08 and the potential causes for the increase.*

5. **TCE Results, Page 6:** The text in the last paragraph of the page notes the PGW026C TCE 1Q25 result as 6,600 micrograms per liter (µg/L); however, Table 3 (TCE Data Comparison [1Q24 and 1Q25]) notes the result as 6,660 µg/L. *Please revise the Report to resolve the discrepancy.*

6. **Summary, Page 8:** The section should include text noting the increase of tritium concentrations at SC-08 to above the MCL from 18.1 pCi/mL in 1Q24 to 21.8 pCi/mL in 1Q25. *Please revise the summary section of the Report to discuss the increase in concentration to above the MCL at SC-08 and the potential causes for the increase.*

7. **Table 1, Sampling Locations in Support of the PAGW OU Monitoring, Page 15:** There are several abbreviations used in the table that are not defined in the legend. *Please revise the legend of Table 1 to include text that defines "ft asml," "PRDB," and "UTM NAD27."*

8. **Enclosure 1, PAGW OU Analytical Data for 1Q25 Sampling Event, PDF Page 40:** The table includes the following undefined abbreviations/acronyms: "mg/L," "ND," "pCi/mL," "ug/L," "U," qualifier and "J" qualifier. *Please revise the legend of the table within Enclosure 1 to include text that defines all abbreviations/acronyms utilized.*