REGION 4
ATLANTA, GA 30303

ENVIRONMENTAL COMPLIANCE &

MAR 16 2026

AREA COMPLETION PROJECTS

March 16, 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: GROUNDWATER MONITORING REPORT FOR THE C-AREA GROUNDWATER (CAGW) OPERABLE UNIT (OU) JULY 2024 THROUGH JUNE 2025 SEMS NUMBER: 82; SRNS-RP-2025-00992, REVISION 0 OCTOBER 2025

Dear Mr. Baker,

The U.S. Environmental Protection Agency, Region 4 (EPA), has reviewed the CAGW report for July 2024 through June 2025, and our comments are attached.

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

Sincerely,

JON RICHARDS Digitally signed by JON RICHARDS
Date: 2026.03.16 10:24:04 -04'00'

Jon Richards
FFA Remedial Project Manager
Superfund & Emergency Management Division

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

GENERAL COMMENTS

1. The GMR does not discuss whether the completeness goals and other data usability requirements were met. Section 5.0 (CAGW OU Groundwater Sample Results) notes that four wells and two seepline stations were not sampled, but completeness goals are not discussed. In addition, Appendix A (CAGW OU Analytical Data 2024-2025 Tables) indicates tritium and 1,2-dichloroethylene (DCE) were not sampled in well CRP 8D, but the GMR does not explain why only these two analytes were not sampled at this monitoring well and whether there were any data validation or usability concerns due to the lack of results. In addition, it is unclear why the oxidation-reduction potential (ORP) and dissolved oxygen field measurements are listed as not sampled or zero, when Section 4.3 (Groundwater Sampling and Analyses) identifies these parameters as collected during the groundwater sampling event. *Please revise the GMR to explain why CRP 8D was not sampled for all proposed analytes and certain field measurements appear to have not been collected and include a discussion of the data validation and usability for the reported results.*

2. The locations of the monitoring wells shown on Figure 6 (CAGW OU Monitoring Stations) and the figures in Appendix D (TCE and Tritium Plume Maps) are not clearly labeled. For example, Section 5.1 (TCE [Trichloroethylene]) discusses the TCE concentrations in Upper Aquifer Zone (UAZ) monitoring well CRW021DR as 23.9 micrograms/liter (µg/L), but this well is not identified on Figure 6. In Appendix D, Figure D-1 (4Q24 TCE Plume for the UAZ) lists the TCE concentration for well CRW021DR (i.e., 23.9 ug/L) under the identification for well CRW020D. It is noted that the TCE concentration for well CRW020D (i.e., 66.9 µg/L) is not listed on this figure. *Please revise the GMR figures to clearly label the locations of the wells and their contaminant concentrations.*

3. The different types of monitoring stations are inconsistently presented in Section 4.1 (Groundwater Monitoring Network) and Table 1 (CAGW OU Monitoring Stations). The text lists four monitoring stations in groundwater contamination source areas, but Table 1 identifies seven wells as source area wells. In addition, Section 4.1 states that there are eight seepline and 16 surface water stations, but Table 1 lists FMT 01 and FMT 02 as both surface water and seepline stations. This distinction is not described in the text. It is also unclear how the total of 64 monitoring stations in the mid and distal portions of the plumes was determined in Section 4.1, as only 61 stations are identified within mid or distal plume areas in Table 1. *Please revise Section 4.1 and Table 1 to provide consistent lists of the different types of monitoring stations.*

4. The numbering of the figures is inconsistent with the figure numbers referenced in the text. For example, Section 5.6 (Tritium) references Figure 12 for the trend of tritium concentrations in the monitoring wells found in the distal part of the plume near Castor Creek, but this figure number is identified as Figure 52 (Distal Well Tritium Plume Trends) in the GMR. *Please ensure the GMR figures are accurately numbered and referenced in the text.*

SPECIFIC COMMENTS

1. **Section 4.3, Groundwater Sampling and Analyses, Page 7 of 44:** The note for total petroleum hydrocarbons (TPH) states that only one well (CRW022D) was analyzed for TPH diesel range organics because it monitors a remediated diesel storage tank site, but it is unclear where the TPH results are reported as they are not included in Appendix A (CAGW OU Analytical Data 2024-2025 Tables). *Please revise the GMR to clarify where and how the TPH results are reported.*

2. **Section 5.6, Tritium, Page 14 of 44:** The section discussing the UAZ plume notes that only three wells had exceedances of the maximum contaminant level (MCL), so it is unclear how the

downgradient extent of the plume shown on Figure D-4 (4Q24 Tritium Plume for the UAZ) was determined. The plume is shown to extend farther southwest than CSB020D, but there are no wells located south or west of this well or well CSB02D in the UAZ. *Please revise the text to discuss how the downgradient extent of the plume shown on Figure D-4 was determined.*

3. **Section 5.6, Tritium, Page 15 of 44:** The section for the Middle Aquifer Zone (MAZ) wells does not discuss the trends in concentrations of tritium for all of the monitoring wells. Although the distal plume wells are noted to show a decreasing trend, it is unclear why the tritium concentration in well CSB 3C increased above the MCL in 2018 and remains above the MCL (Appendix C, Figure C-109, Time Series Plot for Tritium Station for CSB 3). Based on the groundwater elevations shown on Appendix E, Figure E-2 (4Q24 Potentiometric Contours for the MAZ), there is a groundwater mound in the MAZ at the location, such that the direction of groundwater flow is unclear. *Please revise this section to discuss the trends in tritium concentrations for CSB 03C and discuss whether the groundwater flow in the MAZ at this location may require further evaluation.*

4. **Section 6.2, Tritium, Page 19 of 44:** The discussion of the Lower Aquifer Zone (LAZ) states that increasing concentrations of tritium are noted in the western part of the plume and the part nearer to the Fourmile Branch as tritium moves vertically from the UAZ to the MAZ, but well CSB017B in the eastern part of the plume (see Appendix D, Figure D-6, 4Q24 Tritium Plume for the LAZ) shows the largest increase (i.e., concentrations increased from 10 picocurie per milliliter [pCi/mL] in 2013 to 451 pCi/mL in 2024 as shown on Appendix C, Figure C-115, Time Series Plot for Tritium Station for CSB017). It is noted that UAZ well CSB017D shows a similar decrease in tritium, indicating vertical movement from the UAZ to the LAZ. In addition, it is unclear if additional wells should be sampled in the LAZ in the vicinity of CSB017B to track the movement of this increasing tritium concentration. *Please revise Section 6.2 to discuss the increasing concentration of tritium at CSB017B, the vertical movement of tritium to the LAZ, and whether additional monitoring wells in the LAZ should be sampled to track these increases.*

5. **Section 6.4, Recommendations, Page 20 of 44:** The text recommends additional wells to be analyzed for per- and polyfluoroalkyl substances (PFAS), but these wells are not shown on a figure. For example, some of the proposed wells are not shown on the current GMR figures (i.e., CRW 3D, CRW 3C, CRW 3A, CSB 7D, CSB 1C, and CSB 10D). In addition, it is unclear why wells located downgradient from the fire training exercise location (e.g., CSB 9D, CRP 6 DR, CRW010CU, CRP 5C, etc.) were not included in the list of proposed wells. *Please revise the GMR to include a figure that shows the proposed well locations in addition to the locations already sampled for PFAS and ensure downgradient wells from both potential sources are proposed.*

6. **Table 3, CAGW OU 4Q24 Maximum Concentrations, Page 43 of 44:** The historical maximum concentrations for vinyl chloride (VC) are indicated to be less than the method detection limit (MDL), but Section 5.5 (VC) states that surface water station TL-03 included a detection of VC in 2004 at 2.56 ug/L. It is unclear why this concentration was not identified as the highest historical maximum concentration. *Please revise Table 3 to include VC detected at surface water station TL-03 as the historical maximum concentration of VC or clarify why it should not be listed.*