



ENVIRONMENTAL COMPLIANCE &amp;

January 17, 2023

JAN 17 2023

Mr. Brian T. Hennessey, SRS Remedial Project Manager  
Infrastructure and Area Completion Division  
U. S. Department of Energy  
Savannah River Operations Office  
Post Office Box A  
Aiken, South Carolina 29802

AREA COMPLETION PROJECTS

Re: Effectiveness Monitoring Report (EMR) for the C-Area Groundwater (CAGW) Operable Unit Removal Action (U) – July 2021 through June 2022, SEMS Number: 82 (SRNS-RP-2022-00530, Revision 0, September 2022) received September 21, 2022.

Dear Mr. Hennessey:

The Department has completed its review of the above referenced document pursuant to the Savannah River Site Federal Facility Agreement. The attached comments were generated as a result of this review. These comments must be addressed prior to final approval of the above referenced document. As specified in Section XXII, Review/Comment on Documents, the appropriate technical staff will be available to participate in a joint DOE/EPA/DHEC comment resolution meeting to discuss these comments, if necessary.

To schedule a meeting to resolve the attached comments or to obtain further information, please contact me at (803) 898-4331.

Sincerely,

**Susan B. Fulmer**

Digitally signed by Susan B.  
Fulmer  
Date: 2023.01.17 10:21:46 -05'00'

Susan B. Fulmer, P.G., Manager  
Federal Remediation Section  
Division of Site Assessment, Remediation, Revitalization  
Bureau of Land and Waste Management

cc: C. L. Bergren, SRNS-ACP (Signed Original)  
Travis Fuss, Aiken Environmental Affairs Office (via email)  
Jon Richards, EPA Region IV  
Heather Cathcart, BLWM

**South Carolina Department of Health and Environmental Control Comments on:  
Effectiveness Monitoring Report (EMR) for the C-Area Groundwater (CAGW) Operable Unit  
Removal Action (U) – July 2021 through June 2022, SEMS Number: 82  
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General Comments

1. SCDHEC generally agrees with the interpretation presented in the document of the effectiveness of the injections performed under the NTCRA. Monitoring well CRW026C has shown the most positive influence from the injections, while most other wells have shown minimal long-term improvement of parameters that would indicate reductive dechlorination of TCE. Based on Figures 3 and 4, the downgradient edge of the distal TCE plume adjacent to Castor Creek has decreased in concentrations but remains above the MCL, while the distal plume upgradient of the wetlands area has shown minimal improvement. Please discuss whether any additional actions may need to be taken to ensure the RAOs for the NTCRA are met.
2. Please include separate tables listing all monitoring stations for the CAGW OU monitoring program and the NTC RA monitoring program.

Specific Comments

1. Figures 3, CAGW OU NTC RA Area (2019 Baseline Conditions), page 35 and Figure 4, CAGW OU NTC RA Area (4Q21), page 36. For figures with groundwater elevation contours, please add numbers next to the contour lines indicating the groundwater elevation represented.
2. Figure 19, Post-RA TOC Surface Water Trends, page 52. The x-axis of the figure is labeled "Tributary TOC Groundwater Concentrations," but should apparently be revised to "Tributary TOC Surface Water Concentrations." Please correct.
3. Table 3, CAGW OU and CAGW OU NTC RA Maximum Concentrations, page 80. There are several discrepancies between the station IDs, well types and maximum detections listed in Table 3, Appendix A, and Appendix F.
  - a. Table 3 lists a maximum PCE detection of 0.77 µg/L at CRW010CU for the CAGW OU monitoring program; Appendix F shows a detection of 1.44 µg/L at this well. Appendix F also shows a detection of 2.49 µg/L at CRW010C, which appears to be the true maximum for PCE.
  - b. Table 3 lists a maximum cis- 1,2-dichloroethylene detection of 0.88 µg/L at surface water station CCT 03 for the NTC RA monitoring program. The maximum detection listed in Appendix A appears to be at seepline station CCSL-11 (1.82 µg/L).
  - c. Table 3 lists a maximum PCE detection of 0.85 µg/L at seepline station CCSL-14 for the CAGW OU monitoring program; however, Appendix A indicates a detection below the EQL for this station. The maximum detection listed in Appendix A appears to be at monitoring well CRW030C (0.86 µg/L).
  - d. Table 3 lists surface water station CCT 03 as a monitoring well twice.

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- e. Table 3 lists a maximum TCE detection of 38.4 µg/L at CSB020C. According to Appendix A, this detection occurred at CSB15D.

These were just a few discrepancies that were noted and may not be comprehensive. Please correct and revise any sections that require revision based on the corrections.