UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

December 16, 2022

ENVIRONMENTAL COMPLIANCE &

Mr. Brian Hennessey, 730-B
SRS Remedial Project Manager
Savannah River Operations Office
Area Completion Projects
Post Office Box A
Aiken, South Carolina 29802

DEC 16 2022

AREA COMPLETION PROJECTS

Dear Mr. Hennessey:

The U.S. Environmental Protection Agency (EPA) has reviewed the Department of Energy, Savannah River Site (DOE-SRS) 2021 Groundwater Mixing Zone Letter Report for the D-Area Oil Seepage Basin (631-G), SEMS Number 27, dated July 2022.

EPA cannot provide approval for this report until the below comments are addressed. If you have any concerns, please contact me at (404) 229 -9500.

Sincerely,

DIEDRE LLOYD
Digitally signed by DIEDRE LLOYD
Date: 2022.12.16 13:01:13 -05'00'

Diedre Lloyd
Remedial Project Manager
Restoration and Sustainability Branch
Superfund & Emergency Management Division
61 Forsyth Street, Region 4
Atlanta, GA 30303

cc: Angelia Holmes, DOE-SRS; Phil Prater, DOE-SRS; Karen Adams, DOE-SRS; C. L. Bergren, SRNS-ACP (Signed Original); Susan Fulmer, SCDHEC

EPA COMMENTS ON THE
2021 GROUNDWATER MIXING ZONE REPORT
FOR THE D-AREA OIL SEEPAGE BASIN

SEMS NUMBER: 27

JULY 2022

SAVANNAH RIVER SITE
AIKEN, SOUTH CAROLINA

EPA COMMENTS:

1. **Section 3.3, Natural Attenuation, Pages 8 through 10:** The third paragraph states that trends for pH, alkalinity, oxidation reduction potential (ORP), and dissolved oxygen (DO) sampled between 2000 and 2006 were compared to 2022 data for evaluation; however, according to the following paragraphs the trends between 2000 and 2006 were compared with 2021 data. Please revise the text to address this discrepancy.

2. **Section 4.4.6, Trend Analysis, Page 15 of 30:** The text states that periods of high water levels may correlate with increased contaminant concentrations; however, a figure graph of water level data compared with contaminant concentrations over time was not provided as an additional line of evidence. Please include a separate figure that depicts groundwater elevation data in comparison to contaminant concentration data at all monitor wells.

3. **Appendix A, Figure A-1. DOSB Groundwater Monitoring Results, 2Q2021, Page A-11 of A-12:** Table A-1 (DOSB Groundwater Monitoring Results, 2021) appears to be blurry and, thus, is difficult to read / interpret. Please revise Table A-1 to be clearly legible.

4. **Appendix B, Figure B-5. DOSB Potentiometric Data – AQ1/2, 3 and GAU AQ1, 2021, Page B-12 of B-24:** The groundwater elevations were not contoured for GA AQ1 and the southwest flow direction shown in the figure is not supported groundwater elevations. For, example, the groundwater elevation in well DOB 15PZ is 135.88 feet (ft) relative to mean sea level (msl) and is lower than the surrounding groundwater elevations recorded in Gordan Aquifer (GA) wells; however, the figure legend does not identify the water elevation in DOB 15PZ as suspect and not used for the determination of groundwater flow direction. Please revise the figure to address this issue to clarify the flow direction in the GA and provide discussion within report context.