Shelia Mcfalls

From: Heather Cathcart <Heather.Cathcart@des.sc.gov>
Sent: Friday, January 17, 2025 9:12 AM
To: Caleb Jones; Jon Richards (richards.jon@epa.gov); Susan B. Fulmer
Cc: Brianne Martin; Steeple, Sarah M.; William F. Taylor; MORROW, KAREN D; HAMMETT, AVERY G; BELL, KHARI R; DEMASS, JAMES G; JENKINS, BERNICE M; ENGLAND, THOMAS F; Chris Bergren; Kelsey Holcomb; Thelesia Oliver; Amy Meyer; Regina Marquez; J Ross; Katie Davis; Ryan Mcdaniel; Terry Killeen; Ashley Shull; Bette Ross; Shelia Mcfalls; Dena Brett; Mtesa Wright; Travis R. Fuss; Gregory N. O'Quinn; Downing, Emma G.; Hannah L. Herlong; Mac McRae (mmcrae@techlawinc.com)
Subject: [EXTERNAL] Re: Submittal of D-Area Groundwater Operable Unit (OU) Annual Data Summary Report – 2023 Data (U) (SRNS-RP-2024-01267, Revision 0, November 2024) and Associated Scoping Summary (ERD-EN-2019-0022, Final, November 2023)

Caleb,

SCDES has reviewed the Data Summary Report and has the following comments.

General Comments

1. SCDES requests a Core Team meeting to further discuss the rationale for the proposed optimized sampling of PFAS. During this meeting, a Core Team decision should be made that adds all PFAS constituents officially to the DAG monitoring plan.

2. There are a few inconsistencies between Section 2.0 and Tables 1, 2 and 3. The first sentence of Section 2.0 states that 109 groundwater wells and 16 surface water stations are sampled at least annually during either 2Q or 4Q. Table 1 lists a total of 114 wells of various types, and Table 2 lists a total of 18 surface water stations that are actively being sampled, with DSWM-8A being the only well with a designation of not being sampled. It is unclear which 109 groundwater wells and 16 surface water stations are being addressed in this statement. Furthermore, of the 114 wells listed in Table 1, five (5) are designated as piezometers. According to the sampling parameters listed in this table as well as designations provided in Table 3, the following wells appear to be piezometers as well: DBP 1, DCB 1A, DCB 2A, DCB 9, DCB 49 and DCB 50. Please correct the discrepancy between the number of piezometers listed in Tables 1 and 3, and revise Section 2.0 and/or Tables 1 and 2 to clearly indicate the number of groundwater wells and surface water stations that are included in the DAG OU network.

Specific Comments

1. Section 3.2, Results Above Regulatory Threshold Limits, Page 3 of 41. The first sentence of the paragraph states that analytical results from the 2023 sampling show 13 metals/sulfate constituents. However, the list following the paragraph and Section 3.2.1, Low-pH and Metals Plume, contain 14 instead of 13 metals/sulfate constituents that were detected at concentrations above their applicable regulatory threshold level in at least one monitoring well. Please correct this discrepancy between the list and the number in the first sentence.

2. Section 3.2, Results Above Regulatory Threshold Limits, Page 3 of 41. Table 3 data shows that antimony (23 µg/L at DCB 080) and hexavalent chromium (3.02 µg/L at DCB 21B) exceeded a regulatory threshold limit and should be included in this section and Section 3.2.1 as well.

3. Section 3.2.1, Low-pH and Metals Plume, Page 4 of 41. In the list of maximum concentrations of metals and sulfate that were detected above regulatory limits in groundwater and the associated groundwater wells, the maximum concentration for arsenic is 30.9 µg/L at DCB085A. Upon review of Table 3, DAG OU 2023 Monitoring Results, the highest concentration of arsenic was detected in monitoring well, DWP 8 at 58 µg/L. Please revise the list to reflect the results of the highest concentration of arsenic, as per Table 3.

4. Section 3.2.4, PFAS Plume, Page 6 of 41. The fifth sentence of the first paragraph states, "Additionally, some wells (DRW 1, DUT001, DWP003A, and DWP009A) were also sampled via HydraSleeve as a comparison to the normal pumped sample." However, there is no reasoning stated within the report that explains why these select wells were sampled via HydraSleeve as a comparison to the normal pumped sample. Please elaborate on the reasoning for use of sampling via HydraSleeve on the select wells.

5. Section 3.2.4, PFAS Plume, Page 8 of 41. The list of the maximum PFAS constituent concentrations that were detected above groundwater regulatory limits in surface water and the associated surface water stations shows that the highest concentration of PFOA was 14 µg/L at DSWM-4. Upon review of Table 4, 4Q23 DAG OU PFAS Results Summary, the highest concentration of PFOA (14 µg/L) was detected at surface sample location DSWM-8 and not DSWM-4. Please revise the list with the correct sampling location for the highest concentration of PFOA, as per Table 4.

6. Section 3.2.4, PFAS Plume, Page 8 of 41. The third paragraph states, "SRS proposes to continue PFAS groundwater and surface water monitoring at an optimized 36 stations." After review of the proposed listed stations in Table 1 and 2 and Figures 13 and 14, it was observed that monitoring wells DCB 60 and DCB 61 were not on the list. The second paragraph in Section 3.2.4 (PFAS Plume), states, "It is suspected that samples between station DCB 60 (located to the northeast of the FFTA) and DCB 61 (northwest of D Area) were interchanged as 2023 results for DCB 61 show PFAS contamination similar to what the previous concentrations were observed at DCB 60, and results for DCB 60 were mainly all non-detect. These wells will be sampled again in 2024." While it is suspected that the 2023 sampling results for DCB 61 and DCB 60 were interchanged, additional data would need to be collected to verify the PFAS constituent concentrations at both locations. As stated in the report, both wells will be sampled in 2024. However, until the additional sampling results for these locations are provided and reviewed, DCB 60 and DCB 61 should be included in the list of proposed PFAS sampling locations for 2025. Please revise the list accordingly.

7. Table 1, Groundwater Samples Analyte List and Sample Frequency, Page 38 of 41. The monitoring well DCB 33D is listed as a UTRA aquifer well. Upon review of Table 3, DAG OU 2023 Monitoring Results, and the GA aquifer associated figures within the report, DCB 33D in Table 1 should be updated to a GA aquifer well. Please revise.

8. Table 3, GAG OU 2023 Monitoring Results. In the table, the May 18, 2023, sampling results for monitoring well DCD 080 lists the concentration of antimony as [23] µg/L and highlighted purple. According to the legend provided below Table 3, the value [##] highlighted purple has the following explanation: "EPA Functional Guideline Code of 'J' was applied to the result, indicating an estimated quantity." The NPDWS (MCL) of antimony provided within the table is 6 µg/L. When comparing the antimony concentration value of [23] µg/L to the MCL, the value exceeds the applicable limit. As per legend, the value should be highlighted red instead of purple. Please revise.

    1. Based on the antimony concentration results discussed above, the sections Results Above Regulatory Threshold Limits (Section 3.2) and Low-pH and Metals Plume (Section 3.2.1) should be updated to include antimony as one of the metals detected above regulatory limits in groundwater. Please revise.

1. The following monitoring wells show estimated results above regulatory threshold limits but were listed in this table with a purple label instead of the more appropriate and applicable red label which indicates an exceedance: DCB 6 (iron), DCB 65A (lead), DCB 080 (antimony, arsenic and beryllium), DCB 082 (arsenic) and DCB 090C (arsenic).

Editorial Comments

1. Table 3, GAG OU 2023 Monitoring Results. "Results" is misspelled in the title (Reslults).

If you have any questions or require comment clarification, please contact the SCDES project lead, Sarah Steeple, at sarah.steeple@des.sc.gov or 803-898-0832. Otherwise, please contact me to set up the requested Core Team meeting.

Thanks,
Heather

Heather H. Cathcart
Federal Remediation Coordinator
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SC DEPARTMENT of ENVIRONMENTAL SERVICES

Please note my new email address with the South Carolina Department of Environmental Services (SCDES), which launched as a new state agency on July 1, 2024. While my old DHEC email will direct to me for a while, please update your address book with my new SCDES contact information.

From: caleb.jones@srs.gov <caleb.jones@srs.gov>
Sent: Wednesday, November 20, 2024 4:10 PM
To: Jon Richards (richards.jon@epa.gov) <richards.jon@epa.gov>; Susan B. Fulmer <Susan.Fulmer@des.sc.gov>
Cc: Brianne Martin <martin.brianne@epa.gov>; Heather Cathcart <Heather.Cathcart@des.sc.gov>; Steeple, Sarah M. <Sarah.Steeple@des.sc.gov>; William F. Taylor <Duke.Taylor@des.sc.gov>; Karen.Morrow@srs.gov <Karen.Morrow@srs.gov>; avery.hammett@srs.gov <avery.hammett@srs.gov>; Khari.Bell@srs.gov <Khari.Bell@srs.gov>; jim.demass@nnsa.srs.gov <jim.demass@nnsa.srs.gov>; Bernice.Jenkins@srs.gov <Bernice.Jenkins@srs.gov>; Thomas.England@srs.gov <Thomas.England@srs.gov>; chris.bergren@srs.gov <chris.bergren@srs.gov>; Kelsey.Holcomb@srs.gov <Kelsey.Holcomb@srs.gov>; thelesia.oliver@srs.gov <thelesia.oliver@srs.gov>; Amy.meyer@srs.gov <Amy.meyer@srs.gov>; regina.marquez@srs.gov <regina.marquez@srs.gov>; j.ross@srs.gov <j.ross@srs.gov>; Katie.Davis@srs.gov <Katie.Davis@srs.gov>; ryan.mcdaniel@srs.gov <ryan.mcdaniel@srs.gov>; terry.killeen@srs.gov <terry.killeen@srs.gov>; Ashley.Shull@srs.gov <Ashley.Shull@srs.gov>; bette.ross@srs.gov <bette.ross@srs.gov>; Shelia.Mcfalls@srs.gov <Shelia.Mcfalls@srs.gov>; dena.brett@srs.gov <dena.brett@srs.gov>; mtesa.wright@srs.gov <mtesa.wright@srs.gov>; Travis R. Fuss

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Subject: RE: Submittal of D-Area Groundwater Operable Unit (OU) Annual Data Summary Report – 2023 Data (U) (SRNS-RP-2024-01267, Revision 0, November 2024) and Associated Scoping Summary (ERD-EN-2019-0022, Final, November 2023)

To all,
I am resending due to the total file sizes exceeding the limit for SCDES and to include the Excel file for Tables 3 to 5. The attachments will be sent in two emails. The first email will contain the Data Summary Report and the Excel file. The second email will contain the Scoping Summary.

-Caleb

From: Caleb Jones
Sent: Wednesday, November 20, 2024 10:08 AM
To: Jon Richards (richards.jon@epa.gov) <richards.jon@epa.gov>; Susan Fulmer <susan.fulmer@des.sc.gov>
Cc: Brianne Martin <martin.brianne@epa.gov>; Heather Cathcart <Heather.Cathcart@des.sc.gov>; Sarah Steeple <sarah.steeple@des.sc.gov>; Duke Taylor <duke.taylor@des.sc.gov>; MORROW, KAREN D <Karen.Morrow@srs.gov>; HAMMETT, AVERY G <avery.hammett@srs.gov>; BELL, KHARI R <Khari.Bell@srs.gov>; DEMASS, JAMES G <jim.demass@nnsa.srs.gov>; JENKINS, BERNICE M <Bernice.Jenkins@srs.gov>; ENGLAND, THOMAS F <Thomas.England@srs.gov>; Chris Bergren <chris.bergren@srs.gov>; Kelsey Holcomb <Kelsey.Holcomb@srs.gov>; Thelesia Oliver <thelesia.oliver@srs.gov>; Amy Meyer <Amy.Meyer@srs.gov>; Regina Marquez <regina.marquez@srs.gov>; J Ross <j.ross@srs.gov>; Katie Davis <Katie.Davis@srs.gov>; Ryan Mcdaniel <ryan.mcdaniel@srs.gov>; Terry Killeen <terry.killeen@srs.gov>; Ashley Shull <Ashley.Shull@srs.gov>; Bette Ross <bette.ross@srs.gov>; Shelia Mcfalls <Shelia.Mcfalls@srs.gov>; Dena Brett <dena.brett@srs.gov>; Mtesa Wright <mtesa.wright@srs.gov>; Travis R. Fuss <Travis.Fuss@des.sc.gov>; Gregg O'Quinn <Gregory.OQuinn@des.sc.gov>; Emma G. Downing <emma.downing@des.sc.gov>; Hannah Herlong <Hannah.Herlong@des.sc.gov>; Mac McRae (mmcrae@techlawinc.com) <mmcrae@techlawinc.com>
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SRNS-J2000-2024-00855

Jon and Susan,

In accordance with the discussion and agreements reached by the Core Team (U.S. Department of Energy, U.S. Environmental Protection Agency [EPA], and South Carolina Department of Environmental Services [SCDES] personnel) at the November 30, 2023, D-Area Groundwater Operable Unit Post-Characterization Scoping Meeting, Savannah River Site is submitting the *D-Area Groundwater Operable Unit (OU) Annual Data Summary Report – 2023 Data (U)* for your review. This report also includes an optimized per- and polyfluoroalkyl substances (PFAS) sampling strategy. The report contains PDFs of the D-Area Groundwater Operable Unit 2023 Monitoring Results (Table 3), PFAS Results Summary (Table 4), and PFAS Data (Table 5). The data for these tables are also contained in the attached Excel file. As agreed during the meeting, the data summary report will be shared annually via email until submittal of the RCRA Facility Investigation/Remedial Investigation Report with Baseline Risk Assessment in December 2026. In addition, the *Scoping Summary for the D-Area Groundwater Operable Unit (U) – Post-Characterization Scoping Phase* (ERD-EN-2019-0022, Final, November 2023), which documents the discussions and agreements from the scoping meeting, is attached for your files.

Please review the document and provide your comments or approval within sixty (60) days of receipt. The effort and time that the SCDES and the EPA have given on the subject operable units are appreciated.

Attachments:

1. D-Area Groundwater Operable Unit (OU) Annual Data Summary Report – 2023 Data (U) (SRNS-RP-2024-01267, Revision 0, November 2024)
2. Scoping Summary for the D-Area Groundwater Operable Unit (U) – Post-Characterization Scoping Phase (ERD-EN-2019-0022, Final, November 2023)

Please contact me if you have any questions, comments, or concerns.

Caleb Jones|EC&ACP
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