Department of Energy
Savannah River Operations Office
P.O. Box A
Aiken, South Carolina 29802

APR 15 2026

Ms. Susan B. Fulmer, P. G., Manager
Federal Remediation Section
Division of Site Assessment, Remediation and Revitalization
Bureau of Land and Waste Management
South Carolina Department of Environmental Services
2600 Bull Street
Columbia, South Carolina 29201

Mr. Jon Richards
Savannah River Site Remedial Project Manager
Superfund and Emergency Management Division
U. S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303

Dear Ms. Fulmer and Mr. Richards:

SUBJECT: Savannah River Site's Responses to the Regulatory Comments on the Treatability Study Data Report for Groundwater Injection and Discharge Canal Neutralization at the D-Area Groundwater Operable Unit (OU) (U) 2024 Data and Information (SRNS-TR-2025-00218, Revision 0, May 2025) SEMS Number: 63

The U.S. Department of Energy (DOE) is submitting the subject comment responses for your review. The South Carolina Department of Environmental Services' (SCDES) and U.S. Environmental Protection Agency's (EPA) comments were received on September 25, 2025, and October 23, 2025, respectively. This report will not be revised; however, all comment responses will be included in the next report, as applicable. Please review the enclosures and provide your approval within thirty (30) days of receipt. The effort and time that the EPA and the SCDES have provided on this operable unit are appreciated.

Comments or questions from you or your staff may be directed to me at (803) 522-6427.

Sincerely,

MATTHEW BAKER

Digitally signed by MATTHEW BAKER
Date: 2026.04.14 14:51:22 -04'00'

Matthew R. Baker
Acting FFA Remedial Project Manager
DOE-Savannah River Operations Office
Remediation, Deactivation, and Decommissioning Division

RDDD-26-138

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Ms. Susan Fulmer
Mr. Jon Richards 2

Enclosures:
1. SRS Responses to the South Carolina Department of Environmental Services' Comments on the Treatability Study Data Report for Groundwater Injection and Discharge Canal Neutralization at the D-Area Groundwater Operable Unit (OU) (U) 2024 Data and Information (SRNS-TR-2025-00218, Revision 0, May 2025) SEMS Number: 63
2. SRS Responses to the U.S. Environmental Protection Agency's Comments on the Treatability Study Data Report for Groundwater Injection and Discharge Canal Neutralization at the D-Area Groundwater Operable Unit (OU) (U) 2024 Data and Information (SRNS-TR-2025-00218, Revision 0, May 2025) SEMS Number: 63

c w/o encl:
M. Reece, SCDES-Columbia
H. J. Porter, SCDES-Columbia
J. Blalock, SCDES-Columbia
S. French, SCDES-Columbia
R. G. Stewart, SCDES-Columbia
M. Mehta, SCDES-Columbia
G. O'Quinn, SCDES-Midlands Aiken Environmental Affairs Office
T. G. Corley, SCDES-Midlands Aiken Environmental Affairs Office
C. L. Robertson, SCDES-Midlands Aiken Environmental Affairs Office
E. G. Downing, SCDES-Midlands Aiken Environmental Affairs Office
H. L. Herlong, SCDES-Midlands Aiken Environmental Affairs Office

c w/encl:
H. H. Cathcart, SCDES-Columbia
B. Martin, EPA-Atlanta
M. McRae, TechLaw, Inc.

SRS Responses to South Carolina Department of Environmental Services Comments on the Treatability Study Data Report for Groundwater Injection and Discharge Canal Neutralization at the D-Area Groundwater Operable Unit (OU) (U) – 2024 Data and Information, SEMS Number: 63 (SRNS-TR-2025-00218, Revision 0, May 2025)

Comments received September 25, 2025.

SCDES General Comments

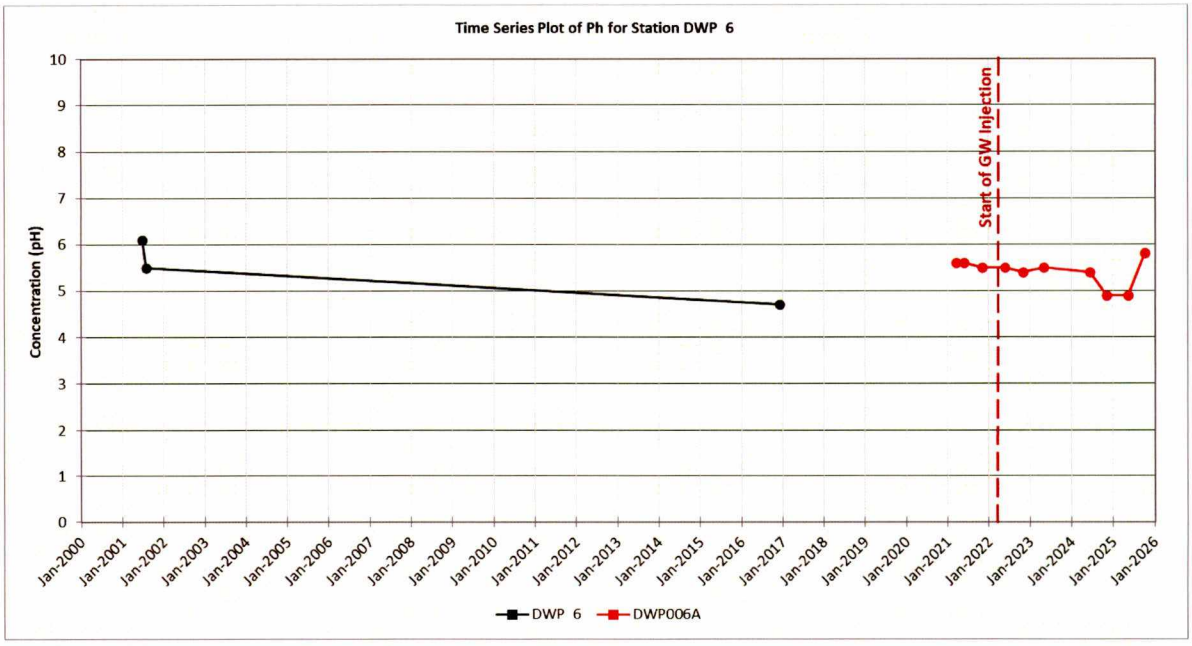
1. When comparing Figure 2, D-Area Groundwater 2Q2024 pH and Beryllium Plume, and Figure 3, D-Area Groundwater 2Q2020 pH and Beryllium Plume, it appears as though the field pH and beryllium plumes in the Upper Three Runs Aquifer (UTRA) have shown a western migration between 2020 and 2024. Regarding pH, there are notable decreases in pH observed between 2020 and 2024 at monitoring wells DWP 8 (5.3 to 3.3), DWP 9 (4.9 to 4.3) and, DWP009A (5.6 to 4.7). Regarding beryllium, the western boundary of the beryllium plume is observed to have moved west of the monitoring wells DWP 2 and DWP 8 between 2020 and 2024. Based on the figures, there are no groundwater monitoring wells located west and downgradient of DWP 9 and DWP009A; therefore, there appears to be no way to confirm the western extent of the field pH of less than 4.5 or monitor the beryllium plume if it also continues to migrate west towards the Savannah River. Please clarify if there is a plan to address or monitor the potential western migration of the field pH and beryllium plumes, as this Treatability Study is ongoing, and if there could be a potential impact to the Savannah River.

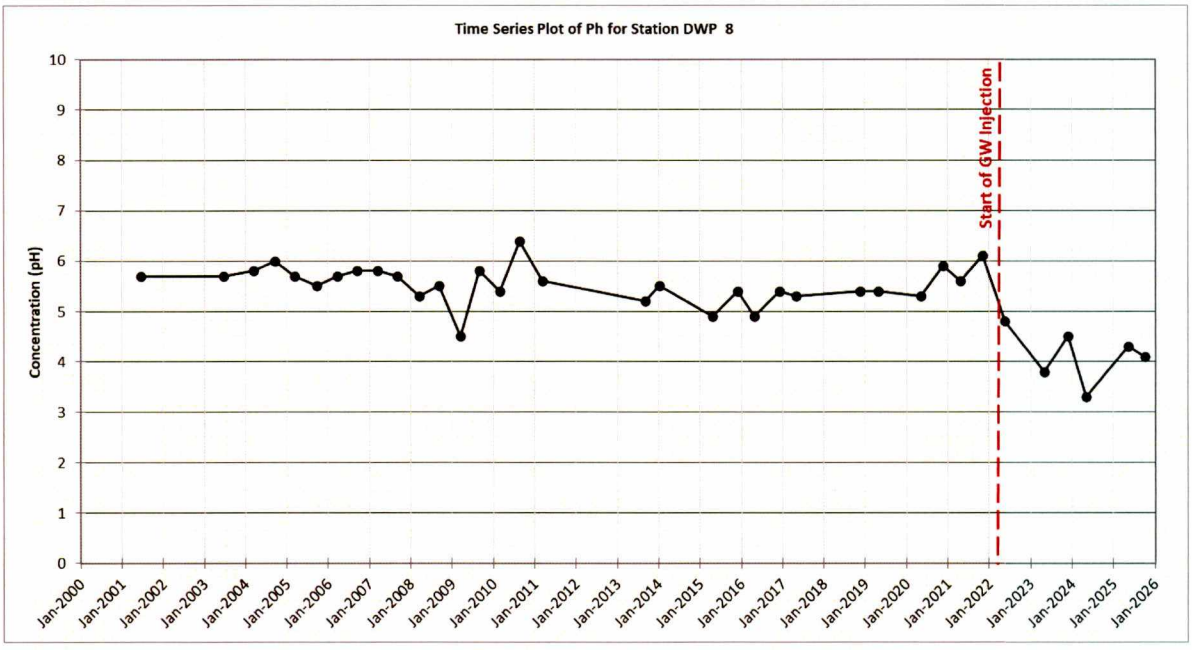
   Response: Clarification

   SRS has further reviewed trends of pH and metals at wells across D Area, including the DWP-series wetland wells. Although comparisons between the 2024 and 2020 low-pH and beryllium plume maps (Figures 2 and 3) may infer a connection between the DAG OU Treatability study groundwater injections and the increases seen at DWP 8 and DWP 9, the trends indicate that it's likely unrelated. Wells included in the DAG OU Treatability Study near and downgradient of the groundwater injections (e.g., DCB 23A/B/C, DCB 36 A/C, and DCB087A/C/D) have not shown a change in groundwater conditions attributable to the groundwater injections. Decreases in pH and/or increases in metals (including beryllium) occurred before or at the same time as groundwater injections began (March 21, 2022). Groundwater flow rates in the Upper Three Runs Aquifer (approximately 78 feet per year) and groundwater modeling has indicated that groundwater transport from the injection area to the wetlands wouldn't occur for over 20 years. An immediate effect 4,000 – 5,000 feet away from injections would not occur. Below are time-series plots of pH and beryllium for wetland wells DWP 6/6A, DWP 8, and DWP 9/9A:

SRS Responses to South Carolina Department of Environmental Services Comments on the Treatability Study Data Report for Groundwater Injection and Discharge Canal Neutralization at the D-Area Groundwater Operable Unit (OU) (U) – 2024 Data and Information, SEMS Number: 63 (SRNS-TR-2025-00218, Revision 0, May 2025)

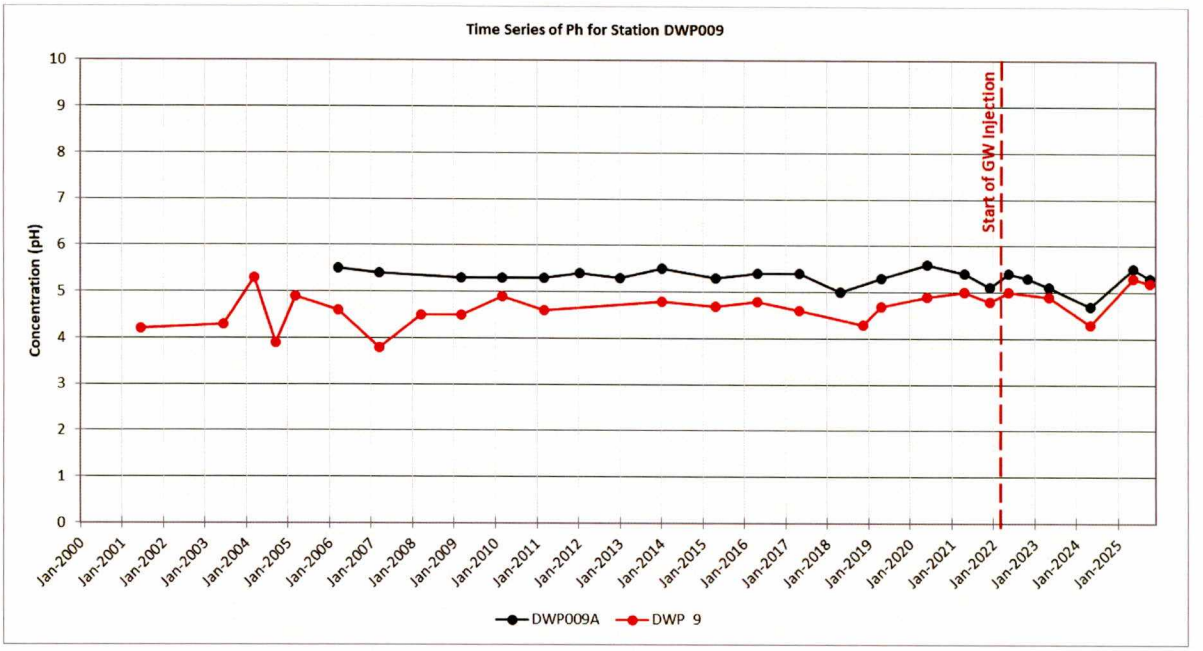
Comments received September 25, 2025.

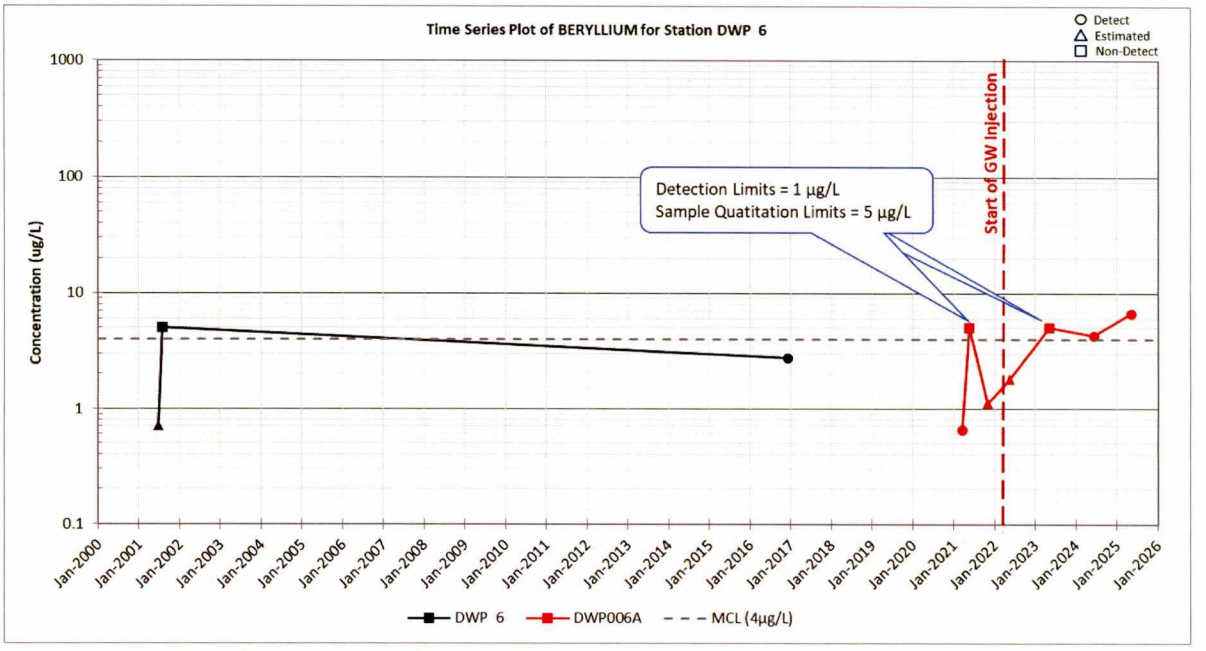




SRS Responses to South Carolina Department of Environmental Services Comments on the Treatability Study Data Report for Groundwater Injection and Discharge Canal Neutralization at the D-Area Groundwater Operable Unit (OU) (U) – 2024 Data and Information, SEMS Number: 63 (SRNS-TR-2025-00218, Revision 0, May 2025)

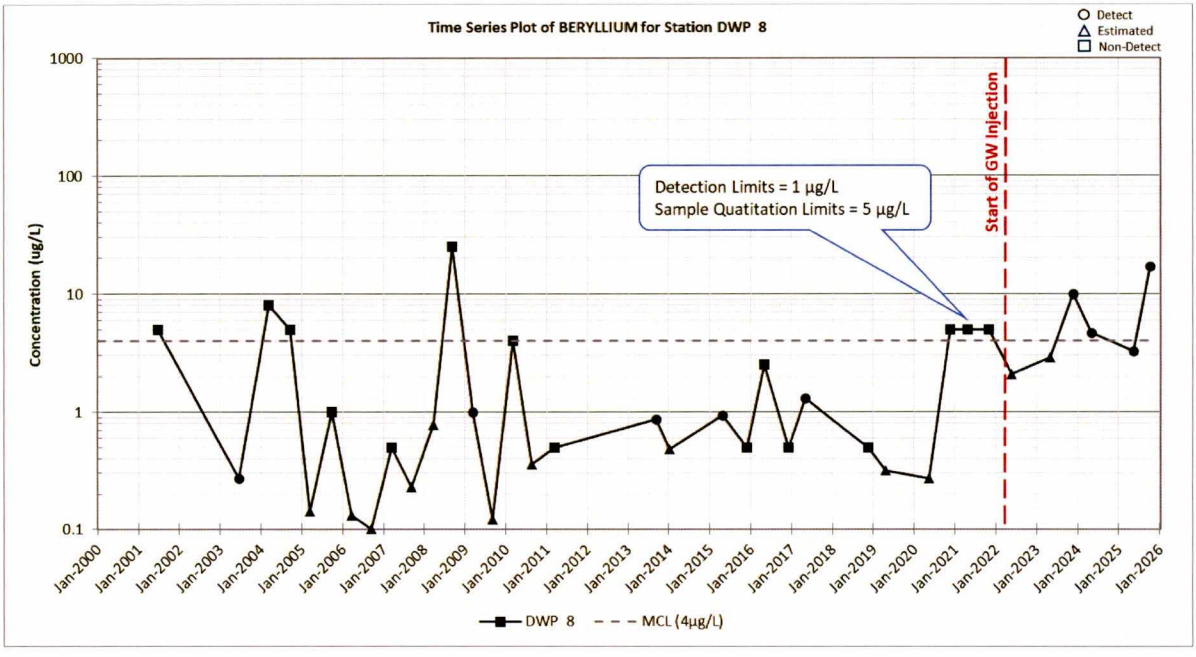
Comments received September 25, 2025.
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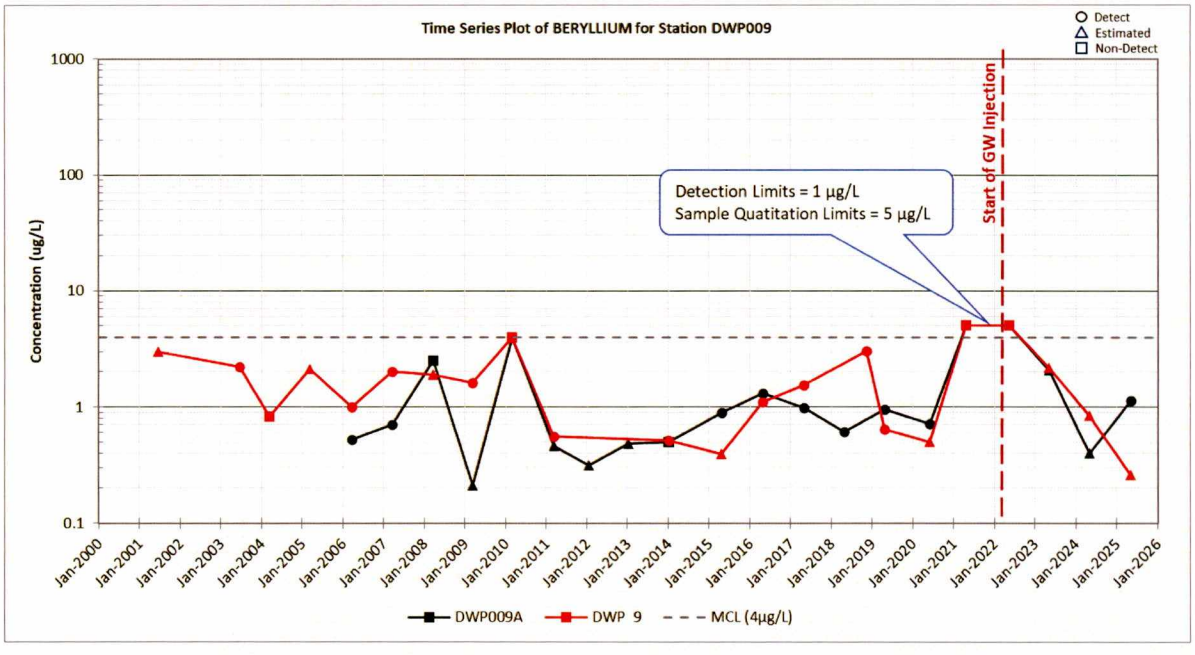




SRS Responses to South Carolina Department of Environmental Services Comments on the Treatability Study Data Report for Groundwater Injection and Discharge Canal Neutralization at the D-Area Groundwater Operable Unit (OU) (U) – 2024 Data and Information, SEMS Number: 63 (SRNS-TR-2025-00218, Revision 0, May 2025)

Comments received September 25, 2025.





Additional groundwater wells are not planned to be installed to the west/southwest of the current monitoring network due to the area being located on the lower river terrace of the Savannah River floodplain/swamp, which is prone to frequent flooding, and lack of accessibility to install monitoring wells. SRS monitors the existing wetland wells for metals on an annual or semiannual basis and will continue to do so per the RFI/RI

Second Work Plan Addendum for the DAG OU (SRNS-RP-2025-01503, Rev 0, January 2026 [Table 17]).

Although it is not believed that the lower pH measurements and increases in metals at a few of the wetland monitoring wells is attributed to the DAG OU Treatability Study, SRS proposes to discontinue groundwater injections at this time. The data collected as part of the DAG OU Treatability study will be used to further evaluate remedial alternatives for the DAG OU metals plume in the CMS/FS.

SRS proposes to keep the $CaCO_3$ reactive structures in place and continue monthly pH monitoring in the D-Area Effluent Discharge Canal. Groundwater and surface water sampling will be conducted annually as prescribed in the DAG OU monitoring plan as presented in the recent RFI/RI Second Work Plan Addendum for the DAG OU (SRNS-RP-2025-01503, Rev 0, January [Table 17]). Monitoring and activities associated with the $CaCO_3$ reactive structures will be included in the annual DAG OU data reports. No future DAG OU Treatability Study reports will be submitted after the upcoming May 2026 Treatability Study report.

A discussion of the discontinuation of groundwater injections and future sampling and reporting will be included in the 2025 DAG OU Treatability Study data and information report to be submitted by May 31, 2026. No changes to the May 2025 Report are proposed.

Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

SCDES Specific Comments

1. Section 4.0, Sampling and Analysis, page 6 and Table 1, D-Area Treatability Study 2024 Monitoring Network and Sampling Schedule, pages 21 and 22. The second paragraph of Section 4.0 states that there are 41 monitoring wells included in the treatability study network. Then in the next couple of sentences, it is indicated that 23 wells include sampling for metals, sulfate, pH and other routine field analyses and 17 wells are sampled for water elevation measurements, totaling 40 monitoring wells. Figure 10 depicts monitoring well DCB 45C in blue font, indicating it is a monitoring well in the treatability study network that is monitoring water elevation. This well is not listed in Table 1 which includes all of the treatability study network monitoring wells. Please clarify the discrepancies between Section 4.0, Table 1, and Figure 10 regarding the total number of wells and the status of well DCB 45C.

   Response: Clarification

   Section 4.0 should have stated a total of 40 monitoring wells, not 41; the list of wells in Table 1 is correct. Additionally, well DCB 45C should not be color coded as blue in Figure 10. DCB 45C is only visited semiannually as part of the normal DAG OU

monitoring. Figure 10 will be corrected in future data reports. No changes to the May 2025 Report are proposed.

Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

2. Section 5.1.1, Groundwater Injection Observations, page 10. The fourth paragraph states, "Injection wells DGI011 and DGI012 accept less than 2 gpm and continue to underperform." When reviewing Figure 17, Graph of Injection Well Flow Rates for 2022 and 2024, it appears as though the flow rate for both wells DGI011 and DGI012 has decreased from ~3gpm in 2022 to less than 2 gpm in 2024. If all injection well isolation valves have been fully opened (except DGI016 at ~80%), please clarify if there has been any cause determined as to why these wells have lower flow rate trends compared to the other installed injection wells and if there is any way to improve the performance from these wells.

   Response: Clarification

   The low injection rates at wells DGI011 and DGI012 are mostly caused by the abundance of extremely fine sediments, including fine grained sands and often silts and clays. Aggressive redevelopment, including intensive surging, swabbing, and pumping may somewhat improve injection rates into the two individual wells, although it is highly likely that the total injection rate (sum of all injection wells) would minimally change as the piping system is a limiting factor in the overall achievable injection rates. Redevelopment of injection wells DGI011 and DGI012 is not being considered at this time as the groundwater injections are proposed to be discontinued (See responses to SCDES general comment #1 and USEPA general comment # 1).

   Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

3. Table 1, D-Area Treatability Study 2024 Monitoring Network and Sampling Schedule (continued/end), page 22. In Section 4.0, Sampling and Analysis, the fourth sentence of the second paragraph states that the wells added to the water elevation monitoring starting second quarter (2Q)2024 were DCB 54, DCB079, and DCB080. However, upon review of Table 1, the wells added in 2Q2024 are listed as DCB 54, DCB078, and DCB079. Please clarify which list of wells added in 2Q2024 is correct.

   Response: Clarification

   The text in Section 4.0, Sampling and Analysis, is correct in stating that wells DCB 54, DCB079, and DCB080 were added to water level monitoring in 2Q2024. Table 1 incorrectly identifies well DCB078 instead of DCB080. Well DCB078 has been included in water level monitoring since 2022. No changes to the May 2025 Report are proposed.

   Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

SRS Responses to South Carolina Department of Environmental Services Comments on the Treatability Study Data Report for Groundwater Injection and Discharge Canal Neutralization at the D-Area Groundwater Operable Unit (OU) (U) – 2024 Data and Information, SEMS Number: 63 (SRNS-TR-2025-00218, Revision 0, May 2025)

Comments received September 25, 2025.

4. Figure 22, Location of Reworked CaCO3 Reactive Structures, page 69. The figure does not include the location of the newly installed stream gauge, DSWM-8B, located downgradient of the downstream reactive structure. Please include the location of DSWM-8B on the figure.

   Response: Clarification

   The stream gauge location is identified on Figure 10, D-Area Treatability Study Monitoring Locations. No changes to the May 2025 Report are proposed.

   Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

SRS Responses to the United States Environmental Protection Agency's Comments on the Treatability Study Data Report for Groundwater Injection and Discharge Canal Neutralization at the D-Area Groundwater Operable Unit (OU) (U) – 2024 Data and Information, SEMS Number: 63 (SRNS-TR-2025-00218, Revision 0, May 2025)

Comments received October 23, 2025.

USEPA General Comments

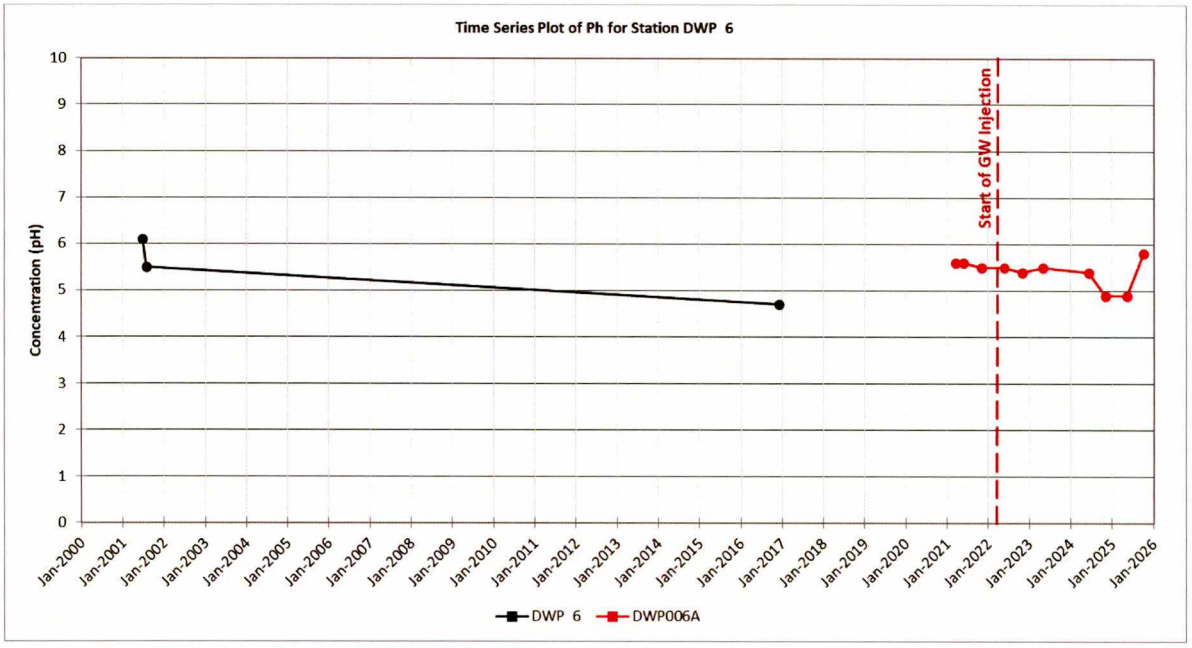
1. It is unclear whether operation of the treatability study is impacting and facilitating expansion and migration of contaminated groundwater at the D-Area Groundwater OU (DAG OU). A review of the plume maps prepared for beryllium and pH (acidity) between second quarter of 2020 (2Q20) and second quarter 2024 (2Q24) (see Figure 2, D-Area Groundwater 2Q24 pH and Beryllium Plume and Figure 3, D-Area Groundwater 2Q20 pH and Beryllium Plume) show that the plumes have expanded and migrated since 2Q20. It is noted that a remedial facility investigation/remedial investigation (RFI/RI) is currently underway at the DAG OU to determine the nature and extent of groundwater contamination that includes tritium, volatile organic compounds (VOCs) (primarily trichloroethylene [TCE]), metals, and per- and polyfluoroalkyl substances (PFAS). According to the Report it's likely to take at least 10 to 110 years of injection to substantially change the aquifer conditions over the originally estimated three years of groundwater injection based on the further reevaluation of the hydrological properties and data collected to date. As such, the Report recommends that the Savannah River Site (SRS) will continue to operate the DAG OU Treatability Study for at least another year; however, it appears that the operation of the treatability study should be placed on hold until the RFI/RI has been completed and the groundwater contamination has been sufficiently delineated laterally and vertically. Also, reevaluation for further operation of the treatability study at the DAG OU should be performed as it is unclear whether it may interfere with future remedial actions planned for groundwater. Please revise the Report to include a discussion on the potential expansion and migration of contaminated groundwater at the DAG OU and recommend the operation of the treatability study be placed on hold until the RFI/RI has been completed.

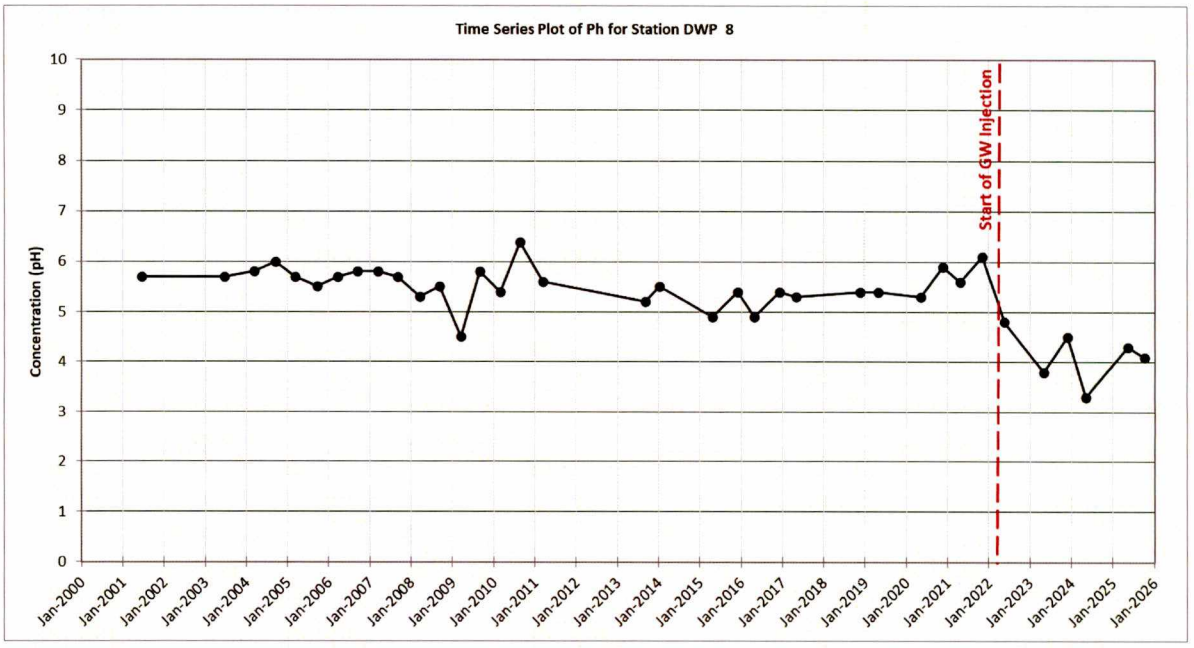
   Response: Agree/Clarification

   SRS has further reviewed trends of pH and metals at wells across D Area, including the DWP-series wetland wells. Although comparisons between the 2024 and 2020 low-pH and beryllium plume maps (Figures 2 and 3) may infer a connection between the DAG OU Treatability study groundwater injections and the increases seen at DWP 8 and DWP 9, the trends indicate that it's likely unrelated. Wells included in the DAG OU Treatability Study near and downgradient of the groundwater injections (e.g., DCB 23A/B/C, DCB 36 A/C, and DCB087A/C/D) have not shown a change in groundwater conditions attributable to the groundwater injections. Decreases in pH and/or increases in metals (including beryllium) occurred before or at the same time as groundwater injections began (March 21, 2022). Groundwater flow rates in the Upper Three Runs Aquifer (approximately 78 feet per year) and groundwater modeling has indicated that groundwater transport from the injection area to the wetlands wouldn't occur for over 20 years. An immediate effect 4,000 – 5,000 feet away from injections would not occur. Below are time-series plots of pH and beryllium for wetland wells DWP 6/6A, DWP 8, and DWP 9/9A:

SRS Responses to the United States Environmental Protection Agency's Comments on the Treatability Study Data Report for Groundwater Injection and Discharge Canal Neutralization at the D-Area Groundwater Operable Unit (OU) (U) – 2024 Data and Information, SEMS Number: 63 (SRNS-TR-2025-00218, Revision 0, May 2025)

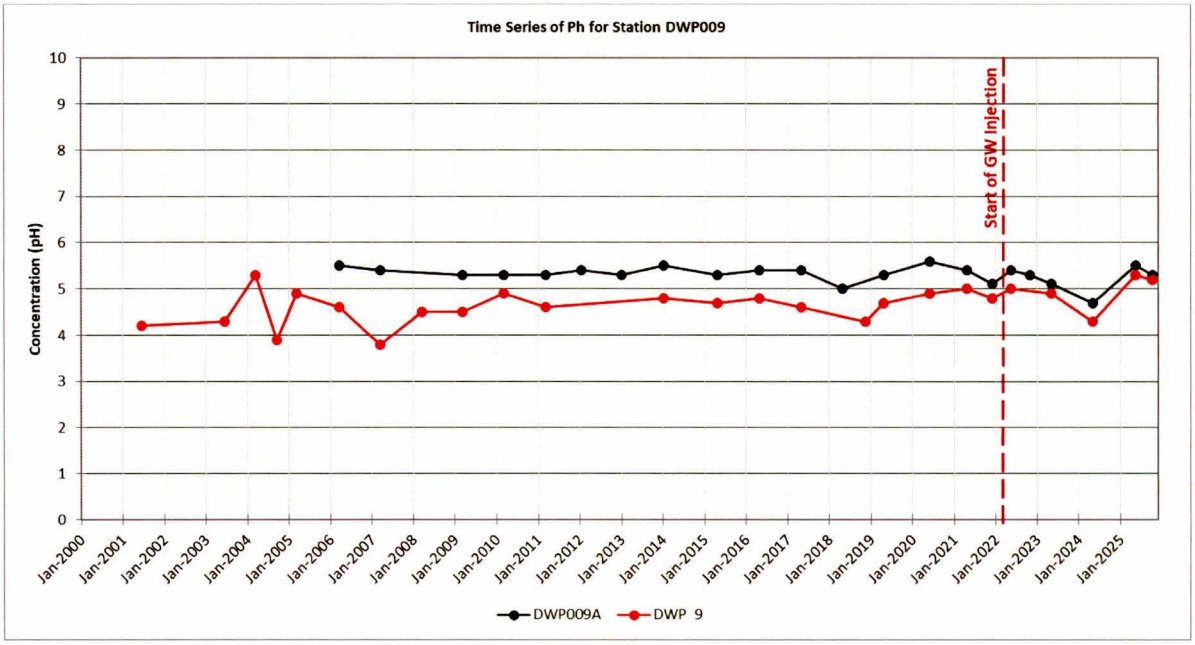
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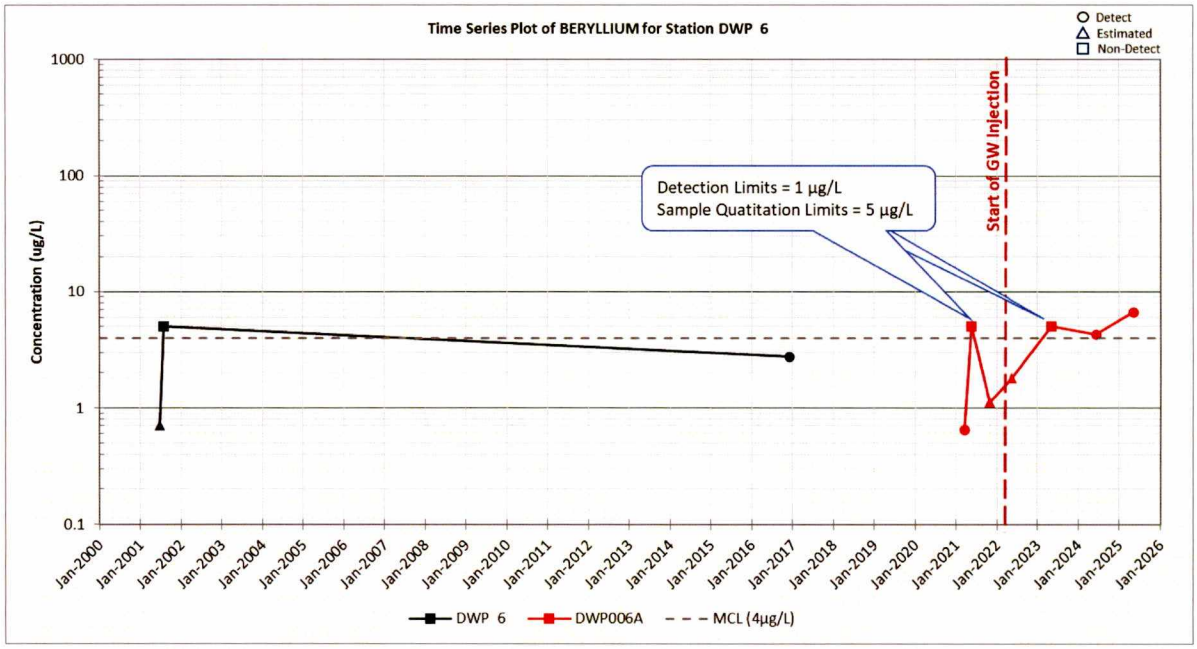


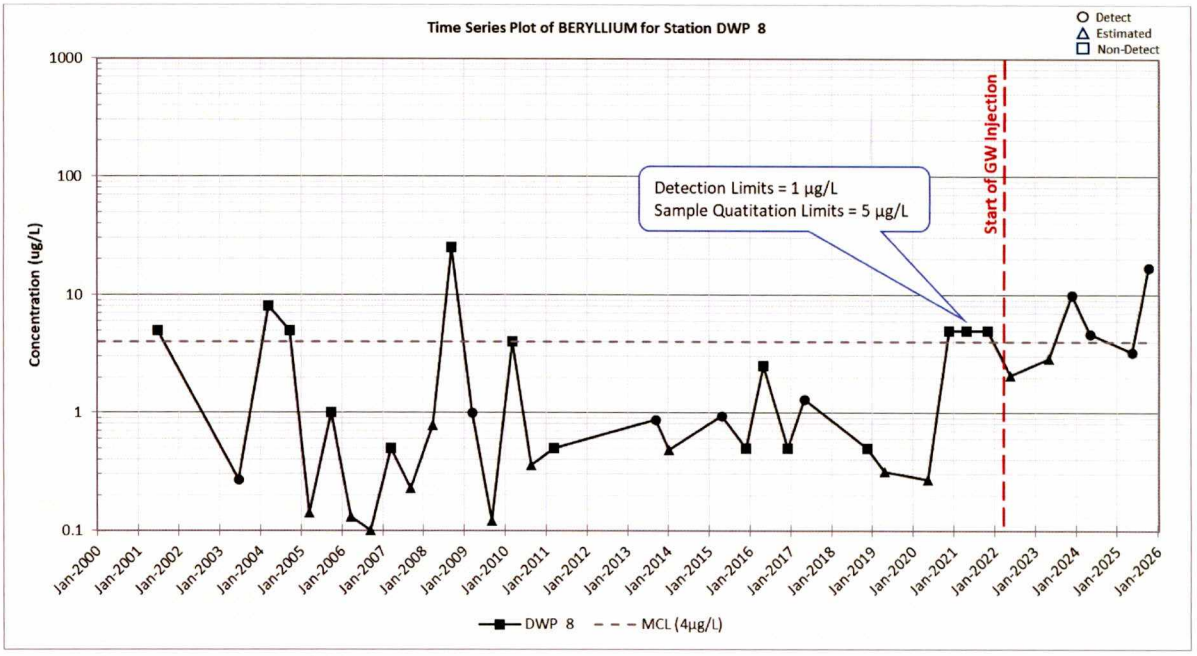


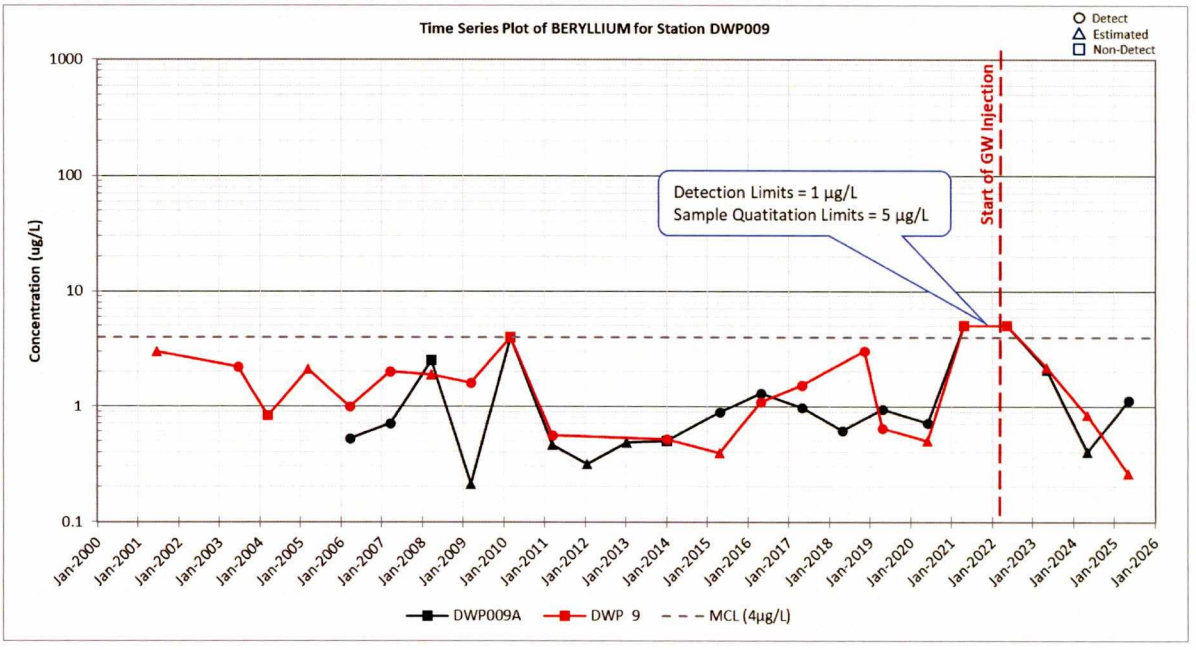
SRS Responses to the United States Environmental Protection Agency's Comments on the Treatability Study Data Report for Groundwater Injection and Discharge Canal Neutralization at the D-Area Groundwater Operable Unit (OU) (U) – 2024 Data and Information, SEMS Number: 63 (SRNS-TR-2025-00218, Revision 0, May 2025)

Comments received October 23, 2025.
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Additional groundwater wells are not planned to be installed to the west/southwest of the current monitoring network due to the area being located on the lower river terrace of the Savannah River floodplain/swamp, which is prone to frequent flooding, and lack of accessibility to install monitoring wells. SRS monitors the existing wetland wells for metals on an annual or semiannual basis and will continue to do so per the RFI/RI

Second Work Plan Addendum for the DAG OU (SRNS-RP-2025-01503, Rev 0, January 2026 [Table 17]).

Although it is not believed that the lower pH measurements and increases in metals at a few of the wetland monitoring wells is attributed to the DAG OU Treatability Study, SRS proposes to discontinue groundwater injections at this time. The data collected as part of the DAG OU Treatability study will be used to further evaluate remedial alternatives for the DAG OU metals plume in the CMS/FS.

SRS proposes to keep the $CaCO_3$ reactive structures in place and continue monthly pH monitoring in the D-Area Effluent Discharge Canal. Groundwater and surface water sampling will be conducted annually as prescribed in the DAG OU monitoring plan as presented in the recent RFI/RI Second Work Plan Addendum for the DAG OU (SRNS-RP-2025-01503, Rev 0, January [Table 17]). Monitoring and activities associated with the $CaCO_3$ reactive structures will be included in the annual DAG OU data reports. No future DAG OU Treatability Study reports will be submitted after the upcoming May 2026 Treatability Study report.

A discussion of the discontinuation of groundwater injections and future sampling and reporting will be included in the 2025 DAG OU Treatability Study data and information report to be submitted by May 31, 2026. No changes to the May 2025 Report are proposed.

Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

2. The text states, in Section 2.0 (Project Description), that the refined estimate of approximately 154.2 million gallons needed to raise the water elevation by 5 feet subsequently raised the number of pore volumes needed for the study; however Section 5.1.1 (Groundwater Injection Observations) states that, "It can be observed that 80% of the early 2024 refined estimate of one pore volume (approximately 154.2 million gallons) of water, has been injected into the 10 injection wells in about 1,000 days." This contradicts the previous statement that indicates an increase in the number of pore volumes needed (e.g., ten pore volumes). Please clarify the number of pore volumes that were injected into injection wells.

Response: Clarification

At the end of 2024 a total of 124 million gallons had been injected into the injection wells. This is 0.8 pore volumes (80% of one pore volume). A total of 10 pore volumes (1.542 billion gallons) may need to be injected to significantly displace the existing groundwater and raise the pH levels in the aquifer. This is why the revised estimated timeframe to see effects in the UTRA (i.e., raising pH levels and lowering metals concentrations) increased. No changes to the May 2025 Report are proposed.

Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

3. There are inconsistencies with the information presented in Table 1 (D-Area Treatability Study 2024 Monitoring Network and Sampling Schedule). Various samples (e.g., DCB 3A) which were only scheduled for water elevation measurements, have analytical results as shown in Table A-1 (D-Area Groundwater Treatability Study Data Table (2024)) and associated time-series plots. Further, there are monitoring stations (e.g., DSWM-8) with analytical data and time-series plots that are missing from Table 1. Please revise the text including tables, figures, and/or appendices to include accurate monitoring locations and indicate which measurements were conducted.

Response: Clarification

Table 1 lists the required water elevation measurements and sampling as part of the DAG OU Treatability Study. Many of the wells are also included in the DAG OU and DAG OU PFAS groundwater and surface water monitoring, and therefore additional field measurements or sampling results may be present at a higher frequency than is required as part of the DAG OU Treatability Study. All 2024 field measurements and metals sample results collected at the DAG OU Treatability Study stations are included in Table A-1 and are displayed in the hydrographs and time-series plots for completeness. In Table A-1, additional field measurements and sample results that are not required as part of the DAG OU Treatability Study are color coded in blue text as noted in the table legend; however, field measurements and analytical results at well DCB 3A were mistakenly not color coded with blue text.

Surface water station DSWM-8 should have been included for 1Q2024 sampling only as it was previously used to monitor upgradient of the reactive structures and was sampled in 1Q2024 before the reactive structures were rebuilt. Additional monitoring stations that are part of a well cluster for DAG OU, but not part of the D-Area Treatability Study monitoring network, are also provided in the time-series plots for completeness (e.g., such as Gordon Aquifer well DCB035D on the graph with wells DCB 35A and DCB 36C).

Future reports will change the title of Table 1 to "Required D-Area Treatability Study 2024 Monitoring Network and Sampling Schedule" for clarification. Any additional field measurements or sample results that were not required as part of the DAG OU Treatability Study will correctly be color coded as blue in Table A-1.

No changes to the May 2025 Report are proposed.

Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

4. Several of the figures do not have north arrows. North arrows are missing from Figures 6 (D-Area Treatability Study Injection Wells, Reactive Structures, and Projected Water Table Elevation), 7 (D-Area Injection Wells Installed and Production Well Piping), 10 (D-Area Treatability Study Monitoring Locations), and 11 (D-Are Groundwater OU UTRA Potentiometric Surface (2Q2024)). Please revise these figures to include a north arrow.

   Response: Clarification

   North arrows were mistakenly left off Figures 6, 7, 10, and 11. All planar figures are oriented in the same UTM true north orientation. Figures in future reports will ensure north arrows are present in all planar figures. No changes to the May 2025 Report are proposed.

   Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

USEPA Specific Comments

1. Section 4.0 Sampling and Analysis, Page 6 of 76: The second paragraph of the text does not account for all the monitoring stations. The text states, "Seventeen (17) wells are only visited for water elevations, including 4 that were added to water elevation monitoring starting in first quarter (1Q)2024 (DCB 51D) or second quarter (2Q)2024 (DCB 54, DCB079, and DCB080)." However, according to Figure 10 (D-Area Treatability Study Monitoring Locations) eighteen (18) wells are used for water elevation monitoring (including DCB 45C). In addition, it is unclear which wells were added to water level elevation monitoring starting in the first or second quarter of 2024. Contrary to the text, Table 1 (D-Area Treatability Study 2024 Monitoring Network and Sampling Schedule) only shows three stations which were added to water elevation monitoring (i.e., DCB 51D, DCB 54, and DCB079) instead of four. Further, the section does not discuss monitoring station DCB078 which was added to water elevation monitoring and sampling in the second quarter of 2024. Please revise the text to account for all of the 41 monitoring locations and reconcile the discrepancies.

   Response: Clarification

   The text in section 4.0 is correct. Well DCB078 has been used for water levels and for sampling since the beginning of the DAG OU Treatability Study and should not have had the note in Table 1 that states it was added in 2Q24; Well DCB080 should have included the note instead. Additionally, Well DCB 45C was mistakenly colored blue in Figure 10. It is not part of the DAG OU Treatability Study and should be colored black.

   Future reports will ensure the text, Table 1, and Figure 10 are correct and match. No changes to the May 2025 Report are proposed.

   Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

2. Section 4.0 Sampling and Analysis, Page 7 of 76: The fourth paragraph of the text is missing a discussion of stream flow measurements at monitoring station DSWM-10 which includes monitoring and sampling (see Table 1, D-Area Treatability Study 2024 Monitoring Network and Sampling Schedule). Please revise the text to include monitoring station DSWM-10 in the discussion.

   Response: Clarification

   As stated in the second paragraph of page 7, stream flow measurements in 2024 were measured quarterly at DSWM-4, DSWM-4A, DSWM-4B, and DSWM-5 and monthly at DSWM-4C, DSWM-6, DSWM-7 and DSWM-9. Stream flow measurements were previously taken with a handheld flow meter where personnel must wade in the stream. Stream flow measurements were not taken at station DSWM-10 due to inaccessibility as the stream is flanked by 10-15 ft steep banks. Starting in 2025 manual stream flow measurements will cease and be replaced by the continuous monitoring stream gauge DSWM-8B as described in section 5.2.

   Table 1 in future reports will list the field parameters in the footnote M as

   "M = Metals and field parameters ~~including pH~~(oxidation/reduction potential, dissolved oxygen, specific conductance, total alkalinity [as CaCO3], turbidity, water temperature, and water elevation [at wells]".

   No changes to the May 2025 Report are proposed.

   Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

3. Section 5.1.1, Groundwater Injection Observations, Page 9 of 76: It is unclear how the target injection flow rate was calculated ranging from 5 gallons per minute (gpm) to 18 gpm. The text should provide a rationale for arriving at the target injection flow rate and include calculations associated with the flow rates. Please revise the text to include calculations for the target injection flow rate.

   Response: Clarification

   The target injection flow rate was not calculated. They were determined qualitatively based on the artesian flow of the production well and capabilities of the individual injection wells to receive water, with general goals to balance the flows across the injection field and not have breakthrough at ground surface. As a ~100gpm injection total volume ceiling was observed, individual rate targets were scaled up to allow more permeable wells to receive greater flow as 4 wells were observed to receive lower (<10 gpm) maximum flow rates. Some wells were able to achieve the target injection rate while others were not as described in section 5.1.1, Groundwater Injection

Observations and shown in Figure 17. No changes to the May 2025 Report are proposed.

Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

4. Section 5.2, CaCO3 Reactive Structures, Page 14 of 76: It is unclear if the proposed semi-annual maintenance activities to remove and reduce debris (e.g., sediment buildup and leaf drop litter) will be sufficient. The text does not mention whether supplemental maintenance activities will be coordinated with the occurrence of major weather events (e.g., heavy or prolonged rain events) as seen in the past when Hurricane Helene made landfall. The text should consider supplemental maintenance activities aside from the semi-annual activities during major weather events to ensure upkeep of the two reactive structures. Please revise Section 5.2 to include supplemental maintenance activities if weather events warrant the need.

   Response: Clarification

   The reactive structures are inspected at least on a monthly basis and after large natural events (such as hurricanes). If damage is observed, maintenance will be planned, either by a shifting of semiannual maintenance or by conducting additional maintenance. However, maintenance may not occur immediately depending on the work required and personnel availability. The following text will be added to Section 5.2, $CaCO_3$ Reactive Structures to future reports:

   > **"… semi-annual maintenance activities are planned to remove and reduce debris that limits water flow through the structures. Additional maintenance activities may be conducted due to heavy storms/weather events."**

   No changes to the May 2025 Report are proposed.

   Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

5. Table 1, D-Area Treatability Study 2024 Monitoring Network and Sampling Schedule, Page 22 of 76: The table is missing the monitoring station DCB 45C (monitoring well). Based on the text, DCB 45C was monitored monthly for water levels and is depicted on Figures 10 through 12. Please revise the table to include DCB 45C.

   Response: Clarification

   DCB 45C is not part of the DAG OU Treatability Study and therefore not included in Table 1. DCB 45C was mistakenly color coded as blue (used for water elevations) in Figure 10. However, DCB 45C is part of the regular DAG OU semiannual monitoring and is used in the water elevation contour maps for D Area (Figures 11 and 12). Also see response to USEPA Specific Comment #1. No changes to the May 2025 Report are proposed.

Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

6. Appendix B, Water Level Hydrographs, Pages B-1 through B-32: It is unclear why several monitoring stations are included in the hydrographs that were not part of the 2024 schedule, as outlined in Table 1. For example, on Page B-8, the hydrograph shows water levels for stations DCB 8 and DCB 8C, however DCB 8C was not included in the monitoring network schedule. The text and/or appendix should include a rationale for monitoring station selection as it differs from the proposed schedule. In addition, there is no hydrograph for station DCB 54 to illustrate the change in water levels over time. Further, the hydrograph on Page B-28 includes monitoring stations DCB 078 and DCB 47C; however, DCB 47C is not depicted in the text, figures, or tables. Please revise the Report to include a rationale for the selection of water level monitoring stations and reconcile the discrepancies.

   Response: Clarification

   Additional monitoring stations that are part of a well cluster for DAG OU, but not part of the D-Area Treatability Study monitoring network, are also provided in the hydrographs for completeness (e.g., such as lower Upper Three Runs Aquifer well DCB 8C on the graph with well DCB 8). Also see response to USEPA General Comment #3.

   A hydrograph for well DCB 54 was provided on page B-25.

   DCB078 is the replacement well for DCB 47C which was abandoned prior to the 488-4D Ash Landfill and 488-2D Ash Basin removal action activities. Future reports will include a footnote for the DCB078 hydrograph and time-series plots stating DCB078 is a replacement well for DCB 47C.

   No changes to the May 2025 Report are proposed.

   Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

7. Appendix C, Times-Series Plots of pH, Aluminum, Beryllium, Cobalt, Iron, Nickel, and Sulfate, Page C-3: It is unclear why monitoring station DCB 3A, which was only visited for water elevation measurements, is included in Appendix C (Times-Series Plots of pH, Aluminum, Beryllium, Cobalt, Iron, Nickel, and Sulfate). In addition, Appendix C includes a times series plot for pH for monitoring station DSWM 8; however, this monitoring station is not included in the sampling schedule. The text should clarify which monitoring locations identified in Table 1 required field measurements and update the table if necessary. Please revise the text to clarify which locations required field measurements.

   Response: Clarification

   The pH time-series plot for DCB 3A was mistakenly included in Appendix C. The data plotted is collected under the normal DAG OU sampling activities and is not required as part of the DAG OU Treatability Study as shown in Table 1.

Time-series plots for surface water station DSWM-8 were included as the station was previously used to monitor upgradient of the reactive structures and was sampled in 1Q2024 before the reactive structures were rebuilt. Additionally, DSWM-8 should have been included in Table 1 for 1Q2024 sampling only.

No changes to the May 2025 Report are proposed.

Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

USEPA Minor Comments

1. Section 5.1.3, Groundwater pH and Analytical Observations, Page 12 of 76: The last sentence does not define the term GA, as stated "Results from new well DCB087C do show higher pH levels and lower metal concentrations than other lower UTRA well clusters and results are more similar to the GA well (DCB087D) results." Please define the term GA in the section and/or acronyms list.

   Response: Agree

   GA is an abbreviation for the Gordon Aquifer. The text in future reports will define all acronyms used. In this instance, it is the only time that GA is used and therefore should just state Gordon Aquifer instead of GA. No changes to the May 2025 Report are proposed.

   Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov

2. Appendix A, D-Area Groundwater Treatability Study Data Tables: Appendix A is missing page numbers for Pages A-3 through A-5. Also, the appendix incorrectly lists a total of two pages (A-1 through A-2). Please revise the text to include page numbers for all pages of the appendix.

   Response: Agree

   Future reports will list page numbers for the larger poster-sized tables, such as in the PDF version of the document for Tables A-1, D-Area Groundwater Treatability Study Data Table (2024) and A-2, D-Area Groundwater Treatability Data Table (2020). No changes to the May 2025 Report are proposed.

   Responsible Party: Ashley Shull, (803) 952-7090, ashley.shull@srs.gov