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

SEP 2 8 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 P-Area Groundwater (PAGW) Operable Unit Data Summary Tables for April 2024 through March 2025 (RDDD-26-130, February 2026) SEMS Number: 81

The U.S. Department of Energy (DOE) is submitting the subject comment responses for your review. The U.S. Environmental Protection Agency's (EPA) and South Carolina Department of Environmental Services' (SCDES) comments were received on June 2, 2026, and June 22, 2026, 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 response within thirty (30) days of receipt. The effort and time that the EPA and the SCDES have provided on this operable unit are greatly appreciated.

Questions from you or your staff may be directed to me at (803) 952-6211, or the DOE Operable Unit Manager, April Coffman, at (803) 952-7244.

Sincerely,

MATTHEW BAKER Digitally signed by MATTHEW BAKER
Date: 2026.09.28 09:35:32 -04'00'

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

RDDD-26-179

Ms. Susan Fulmer
Mr. Jon Richards

SEP 2 8 2026

Enclosures:
1. SRS Response to the South Carolina Department of Environmental Services' Comments on the P-Area Groundwater (PAGW) Operable Unit Data Summary Tables for April 2024 through March 2025 (RDDD-26-130, February 2026) SEMS Number: 81
2. SRS Responses to the U.S. Environmental Protection Agency's Comments on the P-Area Groundwater (PAGW) Operable Unit Data Summary Tables for April 2024 through March 2025 (RDDD-26-130, February 2026) SEMS Number: 81

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. Cathcart, SCDES-Columbia
M. McRae, TechLaw, Inc.

SRS Responses to South Carolina Department of Environmental Services Comments on the P-Area Groundwater (PAGW) Operable Unit Data Summary Tables for April 2024 through March 2025 SEMS NUMBER: 81; RDDD-26-130, Revision 0 February 2026 Savannah River Site, South Carolina

Comments Received June 22, 2026

GENERAL COMMENTS

1. The response to SCDES General Comment #2 on the 2025 PAGW OU Groundwater Report included a proposal from SRS to discuss FY2027 investigation regarding potential data gaps in the UAZ and LAZ tritium plumes in a Spring 2026 Core Team scoping meeting. The Department agrees with this proposal and would like to have this scoping meeting sometime before the 2027 full report submittal.

   Response: Agree.

   SRNS will schedule a scoping meeting before submission of the 2027 full report.

   Responsible Party: Adam Willey, (803) 646-4944, adam.willey@srs.gov

SPECIFIC COMMENTS

1. Tritium Results, pages 5 and 6. The last sentence of page 5 and ending on page 6 states that surface water station SC-03 continues to exhibit the maximum surface water concentration for tritium with a result of 78.9 pCi/mL. This statement is also presented in the Summary section. However, according to the tritium data presented in Enclosure 1, the listed concentration for SC-03 is 71.00 pCi/mL. Instead, surface water station SC-04 had the highest tritium concentration at 89.40 pCi/mL. This fact should be discussed in this section as well as in the Summary section.

   Response: Clarification.

   The text incorrectly states the tritium concentration for SC-03 as 78.9 pCi/mL, whereas Table 2 correctly lists the concentration as 71 pCi/mL. The text also incorrectly states that SC-03 continues to exhibit the maximum surface water concentration for tritium. SC-04 had the highest concentration at 89.4 pCi/mL. SRNS will try to ensure that maximum concentrations are reported accurately in future reports.

   Overall, the tritium surface water concentrations at Steel Creek monitoring stations have steadily decreased through 1Q24 (Figure 1). However, increases were observed in 1Q25 data at stations downstream of SC-03, most notably at SC-04 and SC-07. The downgradient shift in maximum tritium surface water concentrations to SC-04, along with the increase at SC-07, indicates that increased tritium mass flux is discharging farther downstream of SC-03. Detailed discussion of long-term trends and overall PAGW OU impacts will continue to be provided in the full biennial Groundwater Monitoring Report.

   No changes are proposed to the existing Data Summary Tables Report.

   Responsible Party: Heath McGregor, (803) 952-6043, heath.mcgregor@srs.gov

SRS Responses to South Carolina Department of Environmental Services
Comments on the
P-Area Groundwater (PAGW) Operable Unit Data Summary Tables for April 2024 through March 2025 SEMS NUMBER: 81; RDDD-26-130, Revision 0 February 2026
Savannah River Site, South Carolina

Comments Received June 22, 2026

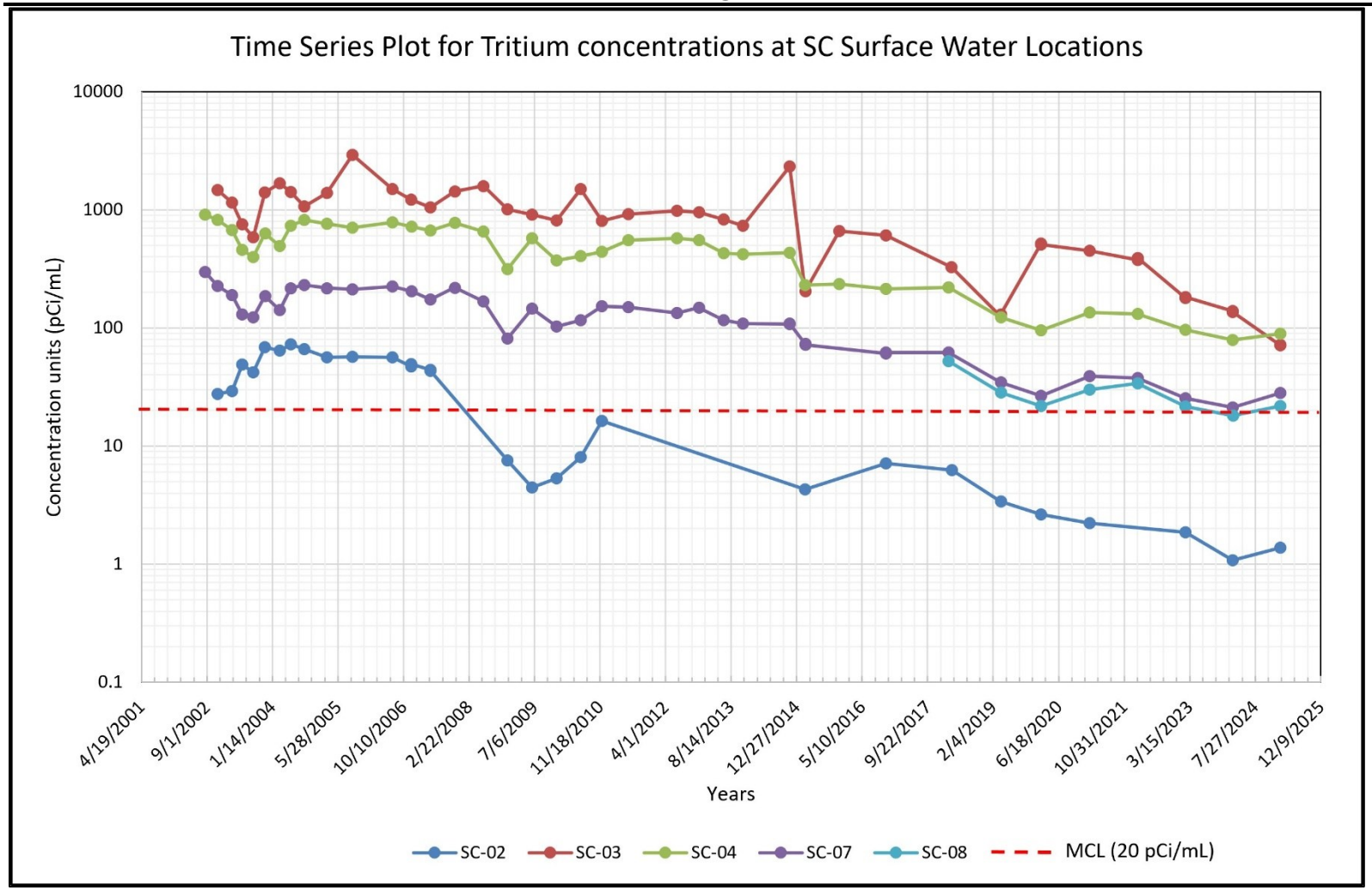


Figure 1. Tritium Time Series Plot for SC Surface Water Stations

SRS Responses to United States Environmental Protection Agency Comments on the P-Area Groundwater (PAGW) Operable Unit Data Summary Tables for April 2024 through March 2025 SEMS NUMBER: 81; RDDD-26-130, Revision 0 February 2026 Savannah River Site, South Carolina

Comments Received June 2, 2026

GENERAL COMMENTS

1. There are no figures included to illustrate the location of monitoring wells and sampling results discussed in the Report. The Report discusses increasing concentrations of tritium and trichloroethylene (TCE) at multiple monitoring wells and references the location of several surface water monitoring stations; however, a figure is not provided. While it is understood the Report serves as the biennial data summary table submission for 2025, a figure illustrating the monitoring well network and surface water discharge locations is recommended for perspective to evaluate if the monitoring network is adequate to monitor plume horizontal and vertical migration. Examples include, but are not limited to the below:

    - Monitoring Results, Page 3: The text states, "These other VOC [volatile organic compound] exceedances are from monitoring locations within the current extent of TCE groundwater plumes and are not ubiquitous throughout the PAGW OU." Without a figure, the relative location of wells with other VOC exceedances is unknown and it is unclear whether the monitoring well network is sufficient.

    - Tritium Results, Page 4: The text states, "Notably, at the PSB011B location (screened below the PSB011DL and downgradient to PSB002 well cluster), the tritium concentration has increased from a concentration of 276 pCi/mL [picocuries per milliliter] in 2Q19 [second quarter 2019] up to 872 pCi/mL in 1Q25 [first quarter 2025]. This increasing trend is reflective of lateral movement of tritium in the LAZ [Lower Aquifer Zone] towards Steel Creek as well as vertical movement of tritium from the UAZ [Upper Aquifer Zone] to the LAZ." However, without a figure, the relative location of the monitoring wells, the P-Reactor Disassembly Basin (PRDB), and the PAR Pond are unknown, and it is unclear whether the monitoring well network is sufficient to monitor plume migration.

    - Tritium Results, Page 5: The text states, "Although tritium continues to be detected above the MCL [Maximum Contaminant Level] in the GA [Gordon Aquifer], the data still suggests the plume area has not expanded and currently does not pose a threat to human health or the environment. The nearest surface water discharge for the GA is within the Savannah River and Floodplain Swamp, approximately 8.5 kilometers (5.3 miles) southwest of the PRSB [P-Reactor Seepage Basin]." Similar to the above, without a figure, the relative location of these wells that monitor the GA is unknown and it is unclear whether the monitoring well network is sufficient to monitor vertical plume migration. Additionally, the surface water discharge location for the GA within the Savannah River floodplain swamp relative to the PRSB location is not known.

It is noted the Report (Monitoring Results, Page 3) references figures provided under separate cover (i.e., the 2024 PAGW OU [Operable Unit] groundwater report [SRNS 2025]) which provide first quarter of 2024 (1Q24) results and plume extents. *Please revise the Report to state the relevant figures from the most recent full groundwater monitoring report will be included in future off year letter reports.*

Response: Agree.

The Data Summary Tables Report serves as a biennial summary table submission. SRNS agrees that excluding reference figures limits reader's ability to evaluate and verify statements related to spatial movement and concentrations of contaminants of concern within the PAGW OU. However, the inclusion of interpretive figures in the Data Summary Table Reports is outside the intended scope of the biennial summary table submittals.

To enhance clarity, while still maintaining alignment with the Data Summary Tables Report format, future Reports will incorporate references of the previous year's full groundwater report (citing specific page and figure numbers) to support statements of monitoring well locations, plume extent, data trends, and surface water discharge points.

No changes are proposed to the 2025 Data Summary Tables Report.

Responsible Party: Heath McGregor, (803) 952-6043, heath.mcgregor@srs.gov

SPECIFIC COMMENTS

1. **Tritium Results, Page 4:** It is unclear whether the tritium concentrations in the UAZ are continuing on a decreasing trend as stated in the text. For example, the third paragraph of the section states, "Tritium concentrations continue to decline at most UAZ monitoring locations with an exception where tritium has moved vertically from the upper UAZ to the lower UAZ." However, the text does not discuss the increase in tritium concentrations in respective UAZ wells between 1Q24 and 1Q25. According to Table 2 (Tritium Data Comparison [1Q24 and 1Q25], 16 of 61 UAZ monitoring wells sampled exhibited tritium concentration increases. As such, it is unclear whether the increases in tritium concentrations noted in UAZ monitoring wells between 1Q24 and 1Q25 support the assertion that tritium concentrations in the UAZ are continuing on a decreasing trend. *Please revise the text to provide discussion of the tritium increases from 1Q24 to 1Q25, and how these increases compare to long term trends, to support the assertion that tritium concentrations in the UAZ are continuing on a decreasing trend.*

Response: Clarification.

In 1Q25, 18 UAZ monitoring wells exhibited increases in reported tritium concentrations relative to 1Q24. Fifteen of these 18 locations showed increases of less than 1 pCi/mL, including four (4) estimated values. In contrast to the increases, 27 UAZ monitoring wells exhibited decreases in tritium concentrations relative to 1Q24. Twenty of these 27 locations showed decreases greater than 1 pCi/mL, including one (1) estimated value. Additionally, six (6) locations exhibited decreases in tritium of 226, 118, 110, 110, 81, 80.8, and 76 pCi/mL, all

of which were larger than the highest observed increase of 32 pCi/mL. These observations demonstrate that the distribution and magnitude of decreases across the UAZ remain consistent with the long-term decreasing trend described in the 2024 full Groundwater Report.

The Data Summary Tables Report submitted in the year between full biennial Groundwater Monitoring Reports are not intended to expand on long-term trend interpretations. If clarification is needed in response to regulator comments, SRS will expand statements from the Data Summary Tables Report as appropriate. Detailed discussion of long-term trends and overall PAGW OU impacts will continue to be provided in the full biennial Groundwater Monitoring Report.

No changes are proposed to the 2025 Data Summary Tables Report.

Responsible Party: Heath McGregor, (803) 952-6043, heath.mcgregor@srs.gov

2. **Tritium Results, Page 5:** The text in the last paragraph of the section lists 1Q25 tritium results, "(PSC005D1, 0.436 U pCi/mL and PSC005D2, 0.519 U pCi/mL)," and "(PSC006D1, 0.786 U pCi/mL and PSC006D2, 0.819 U pCi/mL); however, Table 2 notes the results for PSC005D1, PSC005D2, PSC006D1, and PSC006D2 as 0.17 U, 0.32 U, 0.79 J, and 0.82 J pCi/mL, respectively. *Please revise the Report to resolve the discrepancies.*

Response: Clarification.

The text incorrectly states the minimal detectable concentrations for PSC005D1 and PSC005D2. Table 2 contains the correct tritium concentrations. The text correctly states the tritium concentrations for PSC006D1 and PSC006D2 to three (3) decimal places, whereas Table 2 appropriately rounds the values to two (2) decimal places. In future reports, SRNS will try to ensure that values presented in the text match those listed in the tables.

No changes are proposed to the 2025 Data Summary Tables Report.

Responsible Party: Heath McGregor, (803) 952-6043, heath.mcgregor@srs.gov

3. **Tritium Results, Pages 5-6:** The text in the last paragraph of the section notes the surface water SC-03 location 1Q25 result as 78.9 pCi/mL; however, Table 2 notes the result as 71 pCi/mL. *Please revise the Report to resolve the discrepancy.*

Response: Clarification.

The text incorrectly states the tritium concentration for SC-03 as 78.9 pCi/mL, whereas Table 2 correctly lists the concentration as 71 pCi/mL. In future reports, SRNS will try to ensure that values presented in the text match those listed in the tables.

No changes are proposed to the 2025 Data Summary Tables Report.

Responsible Party: Heath McGregor, (803) 952-6043, heath.mcgregor@srs.gov

SRS Responses to United States Environmental Protection Agency Comments on the P-Area Groundwater (PAGW) Operable Unit Data Summary Tables for April 2024 through March 2025 SEMS NUMBER: 81; RDDD-26-130, Revision 0 February 2026 Savannah River Site, South Carolina

4. **Tritium Results, Page 6:** The text in the last paragraph of the section states, "Steel Creek surface water station SC-08 is the farthest location downstream of location SC-03 and is upstream of the Steel Creek confluence with L-Lake; where attenuation (dilution, dispersion, etc.) is expected to decrease detectable tritium concentrations below the MCL." However, discussion regarding the increase in tritium concentrations at SC-08 to above the MCL from 18.1 pCi/mL in 1Q24 to 21.8 pCi/mL in 1Q25 is missing from the text. *Please revise the Report to discuss the increase in concentration to above the MCL at SC-08 and the potential causes for the increase*.

Response: Clarification.

The 1Q25 tritium concentration at SC-08 increased slightly from the 1Q24 concentration, as noted, above the MCL. This increase is consistent with changes observed at upstream monitoring locations and is therefore expected (see Figure 1). Tritium concentrations above the MCL at SC-08 are common; with the exception of 1Q24, concentrations at SC-08 have historically exceeded the MCL. Expanded discussion of long-term trends and overall PAGW OU impacts will continue to be provided in the full biennial Groundwater Monitoring Report.

No changes are proposed to the 2025 Data Summary Tables Report.

Responsible Party: Heath McGregor, (803) 952-6043, heath.mcgregor@srs.gov

5. **TCE Results, Page 6:** The text in the last paragraph of the page notes the PGW026C TCE 1Q25 result as 6,600 micrograms per liter (µg/L); however, Table 3 (TCE Data Comparison [1Q24 and 1Q25]) notes the result as 6,660 µg/L. *Please revise the Report to resolve the discrepancy*.

Response: Clarification.

The text incorrectly states the TCE concentration for PGW026C as 6,600 µg/L, whereas Table 3 correctly lists the concentration as 6,660 µg/L. In future reports, SRNS will try to ensure that values presented in the text match those listed in the tables.

No changes are proposed to the 2025 Data Summary Tables Report.

Responsible Party: Heath McGregor, (803) 952-6043, heath.mcgregor@srs.gov

6. **Summary, Page 8:** The section should include text noting the increase of tritium concentrations at SC-08 to above the MCL from 18.1 pCi/mL in 1Q24 to 21.8 pCi/mL in 1Q25. *Please revise the summary section of the Report to discuss the increase in concentration to above the MCL at SC-08 and the potential causes for the increase.*

Response: Agree.

SRS Responses to United States Environmental Protection Agency Comments on the P-Area Groundwater (PAGW) Operable Unit Data Summary Tables for April 2024 through March 2025 SEMS NUMBER: 81; RDDD-26-130, Revision 0 February 2026 Savannah River Site, South Carolina

The text should have noted the 1Q25 tritium concentration at SC-08 increased slightly above the MCL. The trend at SC-08 and other SC surface water locations will be discussed in more detail in the next full Groundwater Monitoring Report.

No changes are proposed to the 2025 Data Summary Tables Report.

Responsible Party: Heath McGregor, (803) 952-6043, heath.mcgregor@srs.gov

7. **Table 1, Sampling Locations in Support of the PAGW OU Monitoring, Page 15:** There are several abbreviations used in the table that are not defined in the legend. *Please revise the legend of Table 1 to include text that defines "ft asml," "PRDB," and "UTM NAD27."*

Response: Clarification:

The abbreviations not identified in the legend are Universal Transverse Mercator (UTM), North American Datum 27 (NAD 27), feet above mean sea level (ft amsl), and P-Reactor Disassembly Basin (PRBD). In future reports, SRNS will try to ensure that all abbreviations are fully defined within the table legends.

No changes are proposed to the 2025 Data Summary Tables Report.

Responsible Party: Heath McGregor, (803) 952-6043, heath.mcgregor@srs.gov

8. **Enclosure 1, PAGW OU Analytical Data for 1Q25 Sampling Event, PDF Page 40:** The table includes the following undefined abbreviations/acronyms: "mg/L," "ND," "pCi/mL," "ug/L," "U," qualifier and "J" qualifier. *Please revise the legend of the table within Enclosure 1 to include text that defines all abbreviations/acronyms utilized.*

Response: Clarification:

The abbreviations not identified in the legend are milligrams per liter (mg/L), non-detect (ND), picocuries per milliliter (pCi/mL), micrograms per liter (µg/L), below detection limit result (U), and estimated result (J). In future reports, SRNS will try to ensure that all abbreviations are fully defined within the table legends.

No changes are proposed to the 2025 Data Summary Tables Report.

Responsible Party: Heath McGregor, (803) 952-6043, heath.mcgregor@srs.gov

SRS Responses to United States Environmental Protection Agency
Comments on the
P-Area Groundwater (PAGW) Operable Unit Data Summary Tables for April 2024 through March 2025 SEMS NUMBER: 81; RDDD-26-130, Revision 0 February 2026
Savannah River Site, South Carolina

Comments Received June 2, 2026

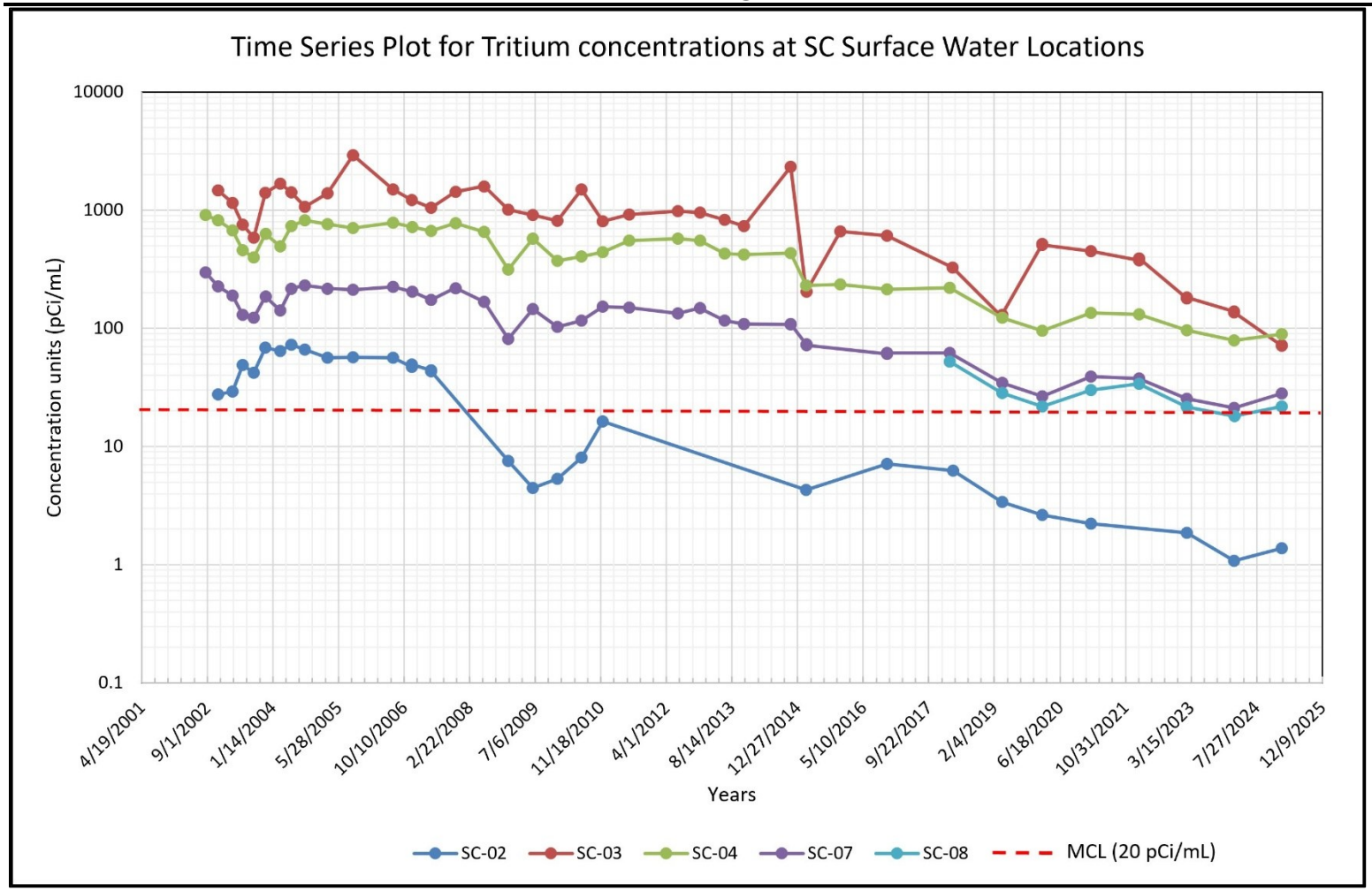


Figure 1. Tritium Time Series Plot for SC Surface Water Stations