



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

June 22, 2023

ENVIRONMENTAL COMPLIANCE &

JUN 22 2023

Mr. Brian T. Hennessey
SRS Remedial Project Manager
Infrastructure and Area Completion Division
U.S. Department of Energy
Savannah River Operations Office
P.O. Box A
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AREA COMPLETION PROJECTS

**2022 ANNUAL GROUNDWATER MONITORING REPORT FOR THE F- AND
H-AREA RADIOACTIVE LIQUID WASTE TANK FARMS (U), SEMS
NUMBER: 23 & 89, SRNS-RP-2022-01106, REVISION 0, MARCH 2023**

Dear Mr. Hennessey:

The U.S. Environmental Protection Agency, Region 4 (EPA), has reviewed the Annual Groundwater Monitoring Report for the F- and H-Areas. Attached are our comments.

If you have any questions or require additional information, please contact me at (404) 562-8329.

Sincerely,

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GENERAL COMMENTS

1. The Groundwater Monitoring Report Section 3.0 (Groundwater Monitoring at F-Area Tank Farm, Nonvolatile Beta, Page 5 of 34) describes elevated nonvolatile beta, identified as attributable to Technitium-99, observed at groundwater wells FTF 28, FTF 19, and FTF 12R, with a noted increasing trend in non-volatile beta at FTF 28 over the last few years. It is also noted that Section 5.0 of the report states that the source is believed to be the FIPSL, as depicted on Figure 10 (Nonvolatile Beta Results (pCi/L) for the FTF in 2022) and Figure 11 (Nonvolatile Beta Results for General Separations Area Western Groundwater Operable Unit); however there is only one main line of the F-Area Inactive Process Sewer Line (FIPSL) depicted. If possible, please revise the report to include a figure that depicts all, or as many as possible of the FIPSL lines in order to provide additional evidence as to the source of the non-volatile beta plume at well FTF 19 as well as the detections at FTF 12R. Such additional information may also be useful in supporting the assumption that the decrease in Tc-99 at FTF 19 and simultaneous increase at FTF 28, as well as source of the recent detection of I-129 at well FTF 12R is indicative of plume migration rather than a continued release. It is understood that installation of additional wells may not be feasible due to on-going operations at the FTF however if the location of additional FIPSL lines cannot be identified, and concentrations of Tc-99 continue to increase at FTF-28 and concentrations of I-129 continue to increase at FTF-12R, additional discussion about potential action may be warranted.

SPECIFIC COMMENTS

1. **Section 3.0, Groundwater Monitoring at F-Area Tank Farm, Page 3 of 34:** Section 3.0 states, “In 2022, Savannah River Site (SRS) installed a new well (FBG002D) to monitor background water concentrations in the Upper Aquifer Zone (UAZ) at the F-Area Tank Farm (FTF);” however, it does not describe how it was determined that FBG002D will sufficiently fill the data gap from FBG001D as a background well since it is located on the opposite side of the Upper Three runs Aquifer (UTRA) Groundwater Divide, according to Figure 8, compared to location of FBG001D. Please revise the text to include a discussion on how it was determined that the location of FBG002D will sufficiently fill the data gap as a background well based on the current location across the groundwater divide.
2. **Section 4.0, Groundwater Monitoring at H-Area Tank Farm, Cadmium and Chromium, Page 9 of 34:** The number of cadmium results is unclear. The text in the Cadmium and Chromium subsection states, “Out of 100 samples, 97 results for cadmium were non-detect. The five remaining results were qualified as ‘J’;” however, the total number of samples do not add up to 100. As stated, if there are 100 samples and 97 are non-detect, then three samples should be remaining. Please revise this section to include the correct number of non-detect and remaining samples for cadmium results.