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

July 14, 2022

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
Aiken, South Carolina 29802

EPA comments on the PERFORMANCE EVALUATION REPORT FOR THE A-AREA BURNING/RUBBLE PITS (731-A, -1A) AND RUBBLE PIT (731-2A) AND THE MISCELLANEOUS CHEMICAL BASIN/METALS BURNING PIT (731-4A, -5A) OPERABLE UNIT, JANUARY THROUGH DECEMBER 2021 (U) SEMS NUMBER: 28 SRNS-RP-2022-00178, REVISION 0, MAY 2022

Dear Mr. Hennessey,

The U.S. Environmental Protection Agency, Region 4 (EPA), has reviewed the SRS's Performance Evaluation Report for the A-Area Burning/Rubble Pits (731-A, -1A) and Rubble Pit (731-2A) and the Miscellaneous Chemical Basin/Metals Burning Pit (731-4A, -5A) Operable Unit, January through December 2021 from the report May 2022.

EPA comments are attached.

If you have any questions or require additional information, please contact me at (404) 562-8648.

Sincerely,

JON RICHARDS

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Date: 2022.07.14 09:47:33 -04'00'

Jon Richards
FFA Remedial Project Manager
Superfund & Emergency Management Division

ec: C.L. Bergren, SRNS-ACP
Susan Fulmer, SCDHEC

GENERAL COMMENTS

1. The PER indicates that in multiple subunits, no BaroBall™ samples were collected for the second quarter 2021 (2Q21) A-Area Burning/Rubble Pits and Rubble Pit and Miscellaneous Chemical Basin (ABRP/MCB) due to unfavorable atmospheric conditions (i.e., high barometric pressure); however, it is unclear why BaroBall™ samples could not be collected once the barometric pressure returned to atmospheric conditions that would allow for sampling. *Please revise the PER to discuss how samples will be obtained from BaroBall™ wells in the future during unfavorable atmospheric conditions to ensure samples can be collected when the subsurface vapor is exiting the well.*

2. It is unclear if the calculated mass of volatile organic compound (VOC) contamination removed in 2021 by the MicroBlower™ and BaroBall™ wells combined has been impacted by the 2Q21 sampling event where no BaroBall™ samples were collected at the ABRP/MCB. *Please revise the PER to discuss if the mass of VOCs removed from the ABRP/MCB is underestimated since no BaroBall™ samples were collected in 2Q21 at the ABRP/MCB.*

SPECIFIC COMMENTS

1. **Section 1.3, Groundwater, Page 2 of 48:** It is unclear if trichloroethylene (TCE) concentrations are below the groundwater maximum contaminant level (MCL) in the M-Area Aquifer Zone (MAAZ) water table aquifer wells near the ABRP source. The text states tetrachloroethylene (PCE) is below the MCL in all eight MAAZ wells, however, no discussion of TCE results is presented. As such, the effectiveness of the vadose zone remedial action (RA) on reducing TCE concentrations in the MAAZ is unclear. *Please revise the text to discuss the TCE results in the eight MAAZ wells located near the ABRP source as a line of evidence to support vadose zone RA effectiveness.*

2. **Section 4.2, MCB Vadose Zone Subunit Conclusion, Page 10 of 48:** It is unclear how an upward trend in VOC concentrations will be performed to determine when MCB BaroBall™ wells will be converted to MicroBlowers™. The text states, "If concentrations from any MCB BaroBall™ well indicate an upward trend for VOC concentrations, the well will be converted to MicroBlowers™ to ensure protection of underlying groundwater;" however, the text does not discuss whether an upward trend will be determined qualitatively based on visual observations or quantitatively by statistical analysis of trend. *Please revise Section 4.2 to discuss how upward and increasing trend in VOC concentrations will be determined to trigger when MCB BaroBall™ wells will be converted to MicroBlower™ wells.*

3. **Section 4.3, Overall Recommendations, Page 10 of 48:** The text indicates the total mass of VOCs removed from the ABRP in 2021 is 0.46 kilograms (kg) and 1.01 pounds (lbs), which is not consistent with the total mass presented in Section 2.1.4 and Section 2.2.4 (PSVE Results) which indicates 0.45 kg or 1 lb. *Please revise the PER to clarify the correct total mass of VOCs removed from the ABRP in 2021.*