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

JAN - 9 2024

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 Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Mr. Jon Richards
Savannah River Site Remedial Project Manager
Superfund 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 2022 K-Area Burning/Rubble Pit and Rubble Pile (131-K and 631-20G) (KBRP) and P-Area Burning/Rubble Pit (131-P) (PBRP) Operable Units Combined Groundwater Monitoring Report (Sampling Summary) SEMS Numbers: 40 and 59

In accordance with the terms of the Federal Facility Agreement, the U.S. Department of Energy (DOE) is submitting the subject comment responses for your review. The U.S. Environmental Protection Agency (EPA) provided comments and the South Carolina Department of Health and Environmental Control (SCDHEC) approved the report on October 12, 2023, and October 17, 2023, respectively. The report will not be revised; however, all comment responses will be included and/or addressed in the next report, as applicable. Please review these responses and provide your approval thirty (30) days from receipt. The time and effort that the SCDHEC and the EPA have given on the subject operable unit are greatly appreciated.

Questions from you or your staff may be directed to me at (803) 952-7805, or DOE Operable Unit Manager, Mr. Philip Prater, at (803) 952-9333.

Sincerely,

AVERY HAMMETT
Digitally signed by AVERY HAMMETT
Date: 2024.01.08 13:55:01 -05'00'

Avery G. Hammett
FFA Project Manager, DOE-Savannah River
Remediation and Deactivation & Decommissioning Division

RDDD-24-114

JAN - 9 2024

Enclosure:
SRS Responses to United States Environmental Protection Agency Comments on the 2022 K-Area Burning/Rubble Pit and Rubble Pile (131-K and 631-20G) (KBRP) and P-Area Burning/Rubble Pit (131-P) (PBRP) Operable Units Combined Groundwater Monitoring Report (Sampling Summary), SEMS Numbers: 40 and 59

cc w/o encl:
J. Blalock, SCDHEC-Columbia
S. French, SCDHEC-Columbia
M. Reece, SCDHEC-Columbia
G. K. Taylor, SCDHEC-Columbia
G. Stewart, SCDHEC-Columbia
T. R. Fuss, SCDHEC-Aiken Environmental Affairs Office
G. O'Quinn, SCDHEC-Aiken Environmental Affairs Office
B. A. Cameron, SCDHEC-Aiken Environmental Affairs Office
K. L. Beatty, SCDHEC-Aiken Environmental Affairs Office
H. L. Herlong, SCDHEC-Aiken Environmental Affairs Office

SRS Responses to U.S. Environmental Protection Agency Comments on 2022 K-Area Burning/Rubble Pit and Rubble Pile (131-K And 631-20G) (KBRP) and P-Area Burning/Rubble Pit (131-P) (PBRP) Operable Units Combined Groundwater Monitoring Report (Sampling Summary), SEMS Numbers: 40 and 59, ARF-024225, Dated June 19, 2023

Comments Received October 12, 2023

SPECIFIC COMMENTS

1. **Table 2, K-Area Burning/Rubble Pit (KBRP) Operable Unit (OU) Monitoring Well Data for 2022, Page 5:** One well had elevated turbidity measured (i.e., 35.7 nephelometric turbidity units [NTU] at KRP 6) that is noted to exceed the GWPS (groundwater protection standard; i.e., red highlight) but the elevated turbidity reading is not discussed in the text. It is unclear if this well usually has elevated turbidity or if this is an anomalous reading since the other locations are all less than 4 NTU. Please revise the text to discuss the turbidity measured at KRP 6.

   Response: Clarification.

   The elevated turbidity in well KRP 6 does not affect the results of volatile organic compounds. Turbidity plays a key role in the concentrations of metals and radionuclides, which are not analyzed at the KBRP OU. In future reports if turbidity exceeds the recommendation of 15 NTUs a sentence similar to the following will be added to the discussion.

   "Turbidity was above the threshold of 15 NTUs at well KRP 6. Elevated turbidity is not known to affect the results of volatile organic compounds."

   No change to the current report is proposed.

   Responsible Party: Justin Steadman, (803) 952-7346, justin.steadman@srs.gov

2. **Figure 1, KBRP OU Monitoring Well Network, PCE and TCE Concentrations, and Water Elevation Measurements during 4Q22, Page 6:** The detection of trichloroethylene (TCE) at monitoring well KRP 9 is not shown on this figure to indicate a concentration greater than 1 microgram/liter (ug/L; i.e., light pink plume as noted in the legend). Table 2 (KBRP OU Monitoring Well Data) reports TCE detected at 2.2 ug/L at KRP 9 during the fourth quarter (October) of 2022. Therefore, the plume map for the AA aquifer should show the TCE at KRP 9. Please revise Figure 1 to include the detected TCE concentration at KRP 9.

   Response: Agree with Clarification.

   The TCE plume in Figure 1 was inadvertently left out. The plume that was drawn was for PCE concentrations. The revised figure is shown at the end of these responses which includes the plume for TCE concentrations greater than 1 µg/L and less than the GWPS of 5 µg/L. No change to the current report is proposed.

   Responsible Party: Justin Steadman, (803) 952-7346, justin.steadman@srs.gov

3. **P-Area Burning/Rubble Pit (PBRP) OU, Page 9:** The first paragraph states that Table 3 lists the currently approved PBRP monitoring wells, surface water stations, and additional monitoring wells from the P-Area Groundwater (PAGW) OU; however, Table 3 is not included in the GW Monitoring Report. Please revise the GW Monitoring Report to include the referenced Table 3.

   Response: Agree with clarification.

   Page 11, which included Table 3, was unintentionally omitted from the electronic copy of the report when it was scanned. The Administrative Record File has been updated to include this page and a screen shot of the page is included at the end of these responses. No changes to the current report are proposed.

   Responsible Party: Justin Steadman, (803) 952-7346, justin.steadman@srs.gov

4. **P-Area Burning/Rubble Pit (PBRP) OU, P-Area Burning/Rubble Pit (PBRP) OU, Pages 9 to 10:** The text discusses the use of Method 522 to achieve lower quantitation limits for 1,4-dioxane; however, it is unclear if the Quality Assurance Project Plan (QAPP) for PBRP annual groundwater monitoring includes this method. Please revise the text to state if Method 522 is included in the QAPP or if an addendum to the QAPP will be generated for the use of this method.

   Response: Clarification.

   Method 522 is included as part of the monitoring program to supplement results derived from method 8260BSIM. Additional information, with lower detection limits, is needed due to the inability of method 8260BSIM to achieve detection limits below the regional screening level (0.46 µg/L) for 1,4-dioxane. South Carolina Department of Environmental Control does not approve of the use of method 522 for regulatory determinations. Therefore, method 522 is not included in the QAPP. No change to the QAPP is proposed. For completeness, the results of both methods are shown on Table 4 in the report. Future reports will include language similar to the following:

   "Method 522 was analyzed to provide supplemental information due to the inability of method 8260BSIM to achieve results below the regional screening level for 1,4-dioxane."

   Responsible Party: Justin Steadman, (803) 952-7346, justin.steadman@srs.gov

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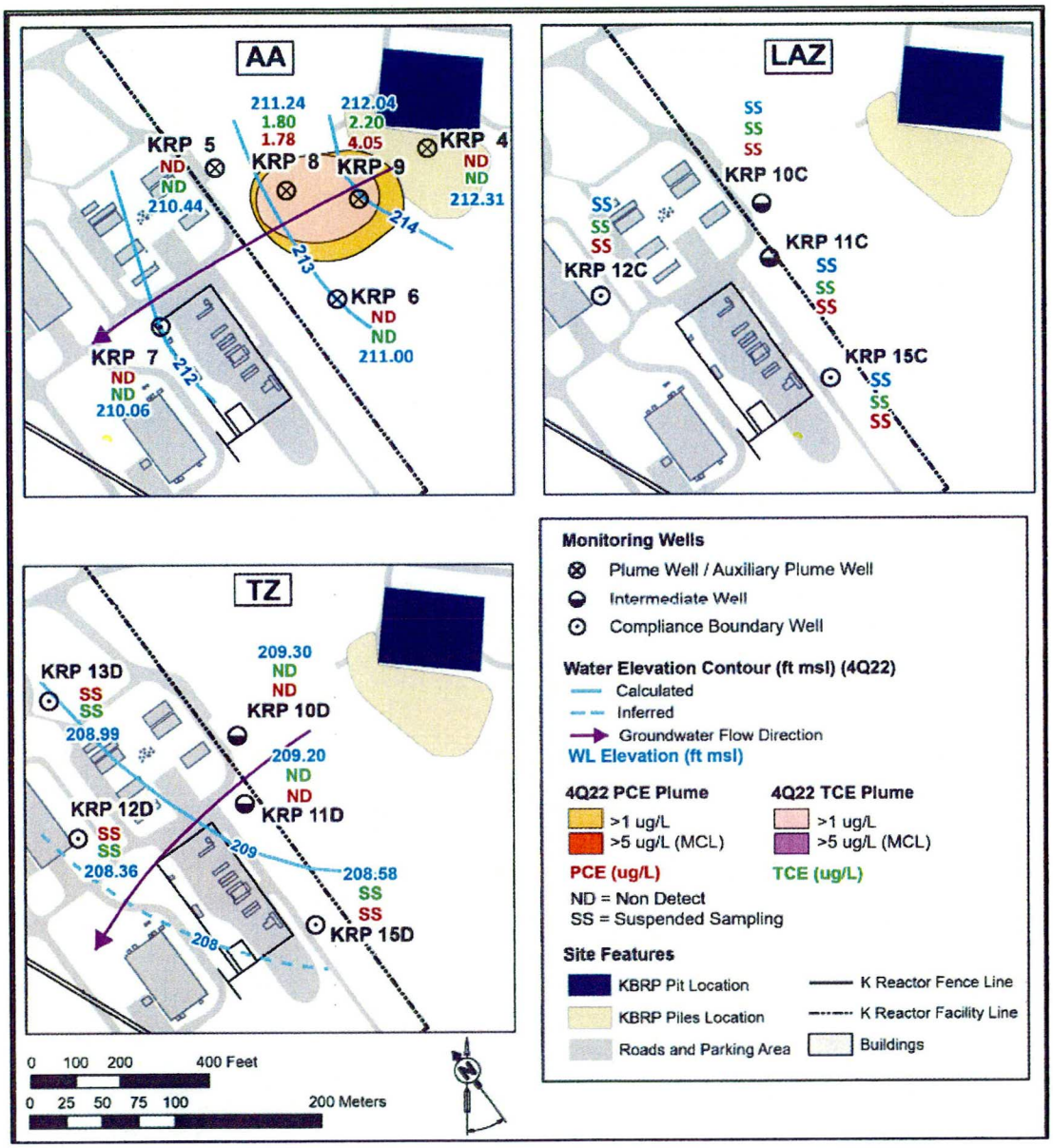

Figure 1. KBRP OU Monitoring Well Network, PCE and TCE Concentrations, and Water Elevation Measurements during 4Q22

SRS Responses to U.S. Environmental Protection Agency Comments on 2022 K-Area Burning/Rubble Pit and Rubble Pile (131-K And 631-20G) (KBRP) and P-Area Burning/Rubble Pit (131-P) (PBRP) Operable Units Combined Groundwater Monitoring Report (Sampling Summary), SEMS Numbers: 40 and 59, ARF-024225, Dated June 19, 2023

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Mr. Jon Richards

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Table 3. PBRP OU Well Network, PAGW OU Supplemental Wells, and Sampling Schedule

Station	Station Type	Operable Unit	Well Use	Sampling Frequency	Analytical and Field Sampling Event	Synchronous Water Level Event	Easting (UTM NAD 27)	Northing (UTM NAD 27)
PGW014DU	Monitoring Well	PAGW	Synchronous Water Elevation	Annual	NA	3Q	445264.8	3676551.7
PRP 1A	Monitoring Well	PBRP	Synchronous Water Elevation	Annual	NA	3Q	445122.9	3676625.5
PRP 2	Monitoring Well	PBRP	Synchronous Water Elevation	Annual	NA	3Q	445164.1	3676670.5
PRP 5	Monitoring Well	PBRP	Analytical, Field, and Water Elevation	Semi-Annual	4Q	3Q	445281.4	3676683.9
PRP 6	Monitoring Well	PBRP	Analytical, Field, and Water Elevation	Semi-Annual	4Q	3Q	445186.9	3676616.7
PRP 7	Monitoring Well	PBRP	Analytical, Field, and Water Elevation	Semi-Annual	4Q	3Q	445156.2	3676605.5
PSC002D1	Monitoring Well	PAGW	Synchronous Water Elevation	Semi-Annual	NA	3Q	445157.9	3676510.7
SC-02	Surface Water Station	PAGW	Analytical and Field	Annual	1Q	NA	445190.9	3676552.3
SC-03	Surface Water Station	PAGW	Analytical and Field	Annual	1Q	NA	445100.3	3676454.7
SC-04	Surface Water Station	PAGW	Analytical and Field	Annual	1Q	NA	444728.5	3676234.9

1Q = First Quarter of Calendar Year
3Q = Third Quarter of Calendar Year
4Q = Fourth Quarter of Calendar Year
NA = Not applicable

JUN 19 2023