



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

August 29, 2022

ENVIRONMENTAL COMPLIANCE &

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

AUG 29 2022**AREA COMPLETION PROJECTS**

EPA Comments: 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, SRNS-RP-2022-00253, REVISION 0, JUNE 2022 *slm 8/29/2022*

Dear Mr. Hennessey,

The U.S. Environmental Protection Agency, Region 4 (EPA), has reviewed the 6/29/22 KBRP and PBRP GM Reports and has the following comments attached below.

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

Sincerely,

JON
 RICHARDS

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 JON RICHARDS
 Date: 2022.08.28
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Jon Richards
 FFA Remedial Project Manager
 Superfund & Emergency
 Management Division

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

GENERAL COMMENTS

1. It is unclear whether trichloroethylene (TCE) is being sufficiently monitored at surface-water stations in the P-Area Burning/Rubble Pits Operable Unit (PBRP OU). For example, Section 3.2.5 (Lateral and Vertical Extent of Contamination at the PBRP OU) states that “SRS believes that any impact to Steel Creek from the PBRP OU is insignificant, as evidenced by years of no detections of 1,1-DCE within Steel Creek” and Table 5 (Steel Creek Surface-Water Station Data) is referenced for results of 1,1-dichloroethylene (DCE) at surface-water stations SC-02, SC-03 and SC-04. Additionally, Section 3.2.1 (PBRP OU Background) states “Groundwater was determined to be contaminated with 1,1-DCE and TCE only in the area adjacent to the south side of the PBRP and not farther south towards Steel Creek.” However, this statement contradicts the text in Section 3.2.5 (Lateral and Vertical Extent of Contamination at the PBRP OU) which states, “Surface-water station SC-03 has traditionally exhibited elevated levels of TCE and is currently the primary area where the PAGW OU [P-Area Groundwater Operable Unit] VOC [volatile organic compound] plume is discharging.” Therefore, as TCE concentrations appear to be increasing at monitoring well PRP 6, and the water table aquifer discharges to Steel Creek, downstream surface-water stations should be monitored. *Please revise the text to indicate whether TCE is currently being monitored at surface-water stations and if so, include available historical data in the Report as an additional line of evidence to support no surface-water impacts.*
2. It is unclear whether there is potential for infiltration through the low permeable soil cover and leaching of contaminants to groundwater at the PBRP OU. Figure 7 (PRP 6 Water Elevation vs Concentration Trend Plot) shows concentration values of both TCE and 1,1-DCE increasing slowly after periods of higher water availability in recent years which may indicate leaching of contaminants. Section 3.2.4 (Groundwater Sampling Results at the PBRP OU) states, “the significant increase in 1,1-DCE and TCE concentrations in the last two sampling events may be related to the increased water levels over the last few years;” however, this section does not discuss the potential for leaching of contaminants to be contributing to groundwater contamination. *Please revise the Report to discuss the potential of infiltration through the soil cover and leaching of contaminants as the cause of the recent increases and elevated TCE and 1,1-DCE concentrations in groundwater.*

SPECIFIC COMMENTS

1. **Section 3.2.2, PBRP OU Monitoring Requirements; Page 12 of 36:** The text states that in response to comments received on the 2020 Combined Groundwater Monitoring Report, “SRS has agreed to sample two new surface-water stations, SC-02 and SC-03, for 1-4 [sic] dioxane (Figure 6)”; however, it is not clear if additional monitoring of 1,4-dioxane at surface-water stations has already begun or when 1,4-dioxane will be added to the monitoring plan. In addition, since there is historic data for surface-water stations SC-02 and SC-03, please clarify the reference to “new” (e.g., the stations have been moved or the reference is to a “new” analyte). *Please revise the Report to clarify the planned year for implementing monitoring of 1,4-dioxane and whether the surface-water stations are in a new location or being observed for a “new” analyte.*
2. **Section 3.2.4, Groundwater Sampling Results at the PBRP OU, Page 13 of 36:** This section outlines the additional sampling frequency that would be followed if “1,1-DCE or TCE exceed the recent 2020 maximums” in the 2022 sampling event; however, it is unclear whether an exceedance of the regional screening level (RSL) for 1,4-dioxane would also increase the sampling frequency of wells PRP 6 and PRP 7. All contaminants of interest should include an action-plan for continuous exceedances. *Please revise the Report to include the action-plan should 1,4-dioxane concentrations continue to exceed the RSL.*

3. **Section 3.2.4, Groundwater Sampling Results at the PBRP OU, Page 13 of 36:** The report does not consistently identify contaminant migration constituents of concern (CMCOCs). Section 3.2.1 (PBRP OU Background) identifies TCE as a CMCOc and Section 3.2.4 (Groundwater Sampling Results at the PBRP OU) states that TCE exceeded the MCL in 2021; however, the Report later concludes that all CMCOCs were either non-detects or substantially below the MCLs. *Please revise the Report address the discrepancy.*
4. **Section 3.2.6, PBRP OU Summary and Conclusions, Page 14 of 36:** The text does not clearly identify the sampling schedule. The text states that surface-water sampling is conducted during the first quarter of the year “during the P Area Groundwater (PAGW) sampling events”; however, the following text states “all water elevations will be collected in the third quarter of the year during the PAGW sampling event.” Additionally, it is indicated throughout the text that samples are taken in the fourth quarter. Furthermore, Table B-1 (2021 KBRP Monitoring Data, Page B-5 of B-10) and Table B-2 (2021 PBRP Monitoring Data, Page B-9 of B-10) indicates the groundwater samples and elevation data were collected on October 21, 2021, and November 3, 2021, respectively. *Please revise the text to clarify the noted discrepancies with the sampling schedule.*
5. **Appendix B, Groundwater and Surface-Water Monitoring Results (2021), Table B-1, 2021 KBRP Monitoring Data, Page B-5 of B-10:** The table explanation states for Sample KRP 6 flow rate, “Requested to be sampled but was not. See comments as to why not;” however, no comment regarding the reason was found in the Report. Comments should be made on all changes to planned sampling regime. *Please revise the text to include comments on the missing flow rate data for KRP 6.*
6. **Appendix B, Groundwater and Surface-Water Monitoring Results (2021), Table B-2, 2021 PBRP Monitoring Data, Page B-9 of B-10:** The table contains additional 1,4-dioxane results without explanation for wells PRP 5, PRP 6, and PRP 7. The table lists a second value for 1,4-dioxane, however, no description of this second result is included (e.g., laboratory duplicate, field duplicate). *Please revise the text to include a description of the second 1,4-dioxane result for each well.*