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

June 01, 2020

Mr. Brian Hennessey, 730-B
SRS Remedial Project Manager
Savannah River Operations Office
Area Completion Projects
Post Office Box A
Aiken, South Carolina 29802

Dear Mr. Hennessey:

The U.S. Environmental Protection Agency (EPA) has reviewed the Department of Energy-Savannah River Site (DOE-SRS) on the Second Early Action Record of Decision Remedy Selection for the D-Area Operable Unit, SEMS #63, Rev. 0, dated February 2020.

EPA can't approve the above mentioned document until the comments below have been addressed. Should you have any questions or concerns, please feel free to call me at on my cell number 404-229-9500.

Sincerely,

Diedre Lloyd

Diedre Lloyd
Remedial Project Manager
Restoration & Sustainability Branch
Superfund & Emergency Management Division

cc: Angelia Holmes, DOE-SRS, Brian Hennessey, DOE-SRS, Phil Prater, DOE-SRS, Karen Adams, DOE-SRS, Chris Bergren, SRNS-ACP (Signed Original), Susan Fulmer, SCDHEC

EPA COMMENTS ON THE

SECOND EARLY ACTION RECORD OF DECISION
REMEDIAL ACTION SELECTION FOR THE D-AREA OPERABLE UNIT

SEMS NUMBER: 63
REVISION 0
DATED FEBRUARY 2020

SAVANNAH RIVER SITE
AIKEN, SOUTH CAROLINA

EPA GENERAL COMMENT:

1. The Second Early Action (EA) Record of Decision (ROD) Remedial Action Selection for the D-Area Operable Unit (U), SEMS Number: 63, SRNS-RP-2018-00461, Revision 0, dated February 2020 (EA ROD) presents conflicting information regarding the unrestricted land use designation proposed for the 489-D Coal Pile Runoff Basin (CPRB) (Southern 75%) and the Inlet Basins portion of the 488-1D Ash Basin. For example, the EA ROD indicates in their current state the 489-D CPRB (Southern 75%) and the Inlet Basins subunits pose no unacceptable risk requiring a response action to human health and the environment and support unrestricted land use. However, the EA ROD also indicates although groundwater is not included as part of this operable unit (OU), the use of groundwater will continue to be restricted until the final ROD for the D-Area Groundwater (DAGW) OU is completed. As such, while it is noted the results of confirmatory samples collected from the inlet basins and the Southern 75% of the CPRB were below residential soil cleanup goals, the subunits would not be eligible for unlimited land use (i.e., residential) due to the presence of underlying contaminated groundwater that is part of the DAGW OU. The unlimited land use/unrestricted exposure (UU/UE) use designation is generally applicable to the level of cleanup for which all pathways present an acceptable risk for all land uses. As such, under a hypothetical future residential exposure scenario, the use of D-Area Groundwater at the inlet basins and the Southern 75% of the CPRB subunits would be limited and exposure restricted for as long as the groundwater is contaminated.
    a. Revise the EA ROD to address this issue and ensure the preferred remedy will be protective of human health and the environment for all land uses and exposure scenarios for the DAOU subunits being addressed.

EPA SPECIFIC COMMENTS:

2. **Figure 3 Layout of the DAOU, Page 55 of 70 and Figure 4 D-Area Project Site Phase 1 and Phase 2, Page 56 of 70:** The D-Area Coal Storage Area (484-17D) subunit where coal was excavated and placed into the 488-4D Ash Landfill for disposal is discussed in EA ROD; however, the location of the subunit is not defined in any of the site figures. Revise the figures as appropriate to ensure the location of the D-Area Coal Storage Area subunit relative to the Ash Basin 488-D, Ash Landfill 488-4D, Ash Basin 488-2D, Ash Basin 488-1D and the CPRB is clearly documented and understood.

3. **Figure 5. D-Area Ash Basins Waste Water Flow Pattern During Operations, Page 57 of 70:** The northern and southern D-Area inlet basins are not defined in the figure. Revise the figure as appropriate to ensure the flow patterns depicted relative to the location of the inlet basins are clearly documented and understood.
4. **Page 11 and Page 22, first full para, states that:** *"In 2010, characterization of the coal ash from the 484-4D Powerhouse indicated that arsenic levels would exceed the regulatory threshold for a Class Two Solid Waste Landfill."* Please identify where the coal ash from "484-4D Powerhouse" was disposed of if the levels were above the regulatory threshold? Was it placed in the class Two solid waste 488-4D Ash Landfill?
5. **Pages 20 to 25, Summary of characterization/confirmation sampling in the following subunits: Inlet Basins, Ash landfills, CPRB and surface water:** Page 20 begins with discussion of the potential COCs as including 24 metals and 6 radionuclides. The following pages then go on to summarize characterization/confirmation sampling results for TCLP testing of metals and, in some subunits also for VOCs and pesticides/PCBs.
    a. Please identify what subunits and media included sampling of radionuclides and what standards the radionuclides results were compared against.
    b. Summarize the results for radionuclides.
    c. If a particular subunit, or specific media within a particular subunit, was not sampled for radionuclides, please indicate why radionuclide sampling was not necessary.
6. **Page 24, second paragraph, and page 28, first paragraph** both state that the residential threshold for hexavalent chromium is "0.3" mg/kg.
    a. Page 25 states an RSL = 0.29 mg/kg, presumably also for hexavalent chromium? Is this correct?
    b. EPA recommends not rounding the number, so the standard is identified in a consistent manner throughout the document, (e.g., "0.29" instead of "0.3").
7. **Page 25 states:** "The technical evaluation concluded that the basin soil results were indeterminate with regard to meeting the acceptance criteria of unrestricted land use because the residential threshold level (RSL = 0.29 mg/kg) is at (or very near) the method detection limit . . . ." This sentence should identify the COC for which the RSL has been identified.
    a. Should this be for hexavalent chromium? Please provide the requested information and make the requested revisions to this document.
8. **Page 25**: Section subheading currently reads: 489-D "CPRP" and needs to be corrected to read 489-D "CPRB"
9. **Page 32**: Section subheading currently reads: 489-D "CBRB" and needs to be corrected to read 489-D "CPRB"
10. **Page 35:**
    a. EPA's recommends revising 488-1D Ash Basin RAO to include the human health and ecological risk thresholds as was done in the other RAOs. For example, include the following added underlined text: *"Maintain the engineered cover system (eastern end) to eliminate or control all routes of exposure to contaminants beneath the cover exceeding <u>1E-06 risk</u> to future industrial workers and exceeding <u>HQ> 1</u> to ecological receptors and/or presenting a CM concern."*
11. **Page 39, last paragraph:**
    a. EPA recommends revising this paragraph to include the added underlined text: *"LUCs, <u>in combination with the previously implemented removal actions in D-Area OU</u>, meet the threshold and balancing criteria requirements."*
12. **Page 41, first paragraph:**
    a. EPA recommends revising this paragraph to include the added underlined text: *"Alternative 2 (LUCs), <u>in combination with the previously implemented removal actions</u>*

in D-Area OU, is protective of human health and the environment and address the buried coal-related contamination and residual contamination at the DAOU subunits with land use restrictions."

13. **Page 41:**
    a. Please add statement describing how LUCs aid in achieving "short-term" and "long-term" remedy protectiveness. For example, describe how LUCs protect remedy integrity, prevent or minimize exposure, eliminate pathways, etc.
    b. Please include a statement describing how LUCs can be readily implemented.
14. **Page 43, LUC objectives:** Please include a LUC objective to prevent construction of facilities or structures on/above the engineered cover systems.
15. **Page 44, last paragraph:** Revise to state that "land use restrictions are required as long as waste remains in place at levels above those allowing unrestricted use to keep the selected remedy fully protective of human health and the environment."