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

August 30, 2018

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

RE: **EPA Comments: Field Sampling Plan for the Wetland Area at Dunbarton Bay in Support of Steel Creek Integrator Operable Unit (U), SEMS Number: 71 (SRNS-RP-2018-00480, Revision 0, June 2018**

Dear Mr. Hennessey,

The U.S. Environmental Protection Agency, Region 4 (EPA), has reviewed the Field Sampling Plan for the Wetland Area at Dunbarton Bay in Support of Steel Creek Integrator Operable Unit. Attached are our comments:

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

Sincerely,

Jon Richards, Acting FFA
Remedial Project Manager
Superfund Division

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

TECHNICAL COMMENTS

1. **Section 1.1, Purpose for Sampling, Page 1 of 16:**

   Section 1.1 states, "The reason for sampling per this FSP [Field Sampling Plan for the Wetland Area at Dunbarton Bay in Support of Steel Creek Integrator Operable Unit (U), SEMS Number: 71, SRNS-RP-2018-00480, Revision 0, dated June 2018] is to ensure remedial goals (RGs) have been achieved upon completion of the remedial action at the WADB [Wetland Area at Dunbarton Bay]." This section should clarify that the remedial action only applies to the ash and contaminated soil media from the boundary of the P-Area Ash Basin to the edge of the buffer at Dunbarton Bay. Revise this section to clarify this.

2. **Section 1.4, Statement of Broad Objectives for the Sampling, Page 4 of 16, and Table 1, Summary of the RGs for the Wetlands Area at Dunbarton Bay, Page 13 of 16:**

   The FSP refers to the selected RGs as the "most likely" RGs. For clarity, it is recommended that the term "most likely" be changed to "selected." In addition, Section 1.4 should be revised to clarify that the selected RG is the most restrictive risk-based RG if it is greater than background concentrations; if the most restrictive risk-based RG is less than the background concentration, then the RG defaults to a SRS background value. Revise the FSP accordingly.

3. **Section 2.0, Analytical Plan, Page 5 of 16:**

   This section states that a visual inspection will be conducted to confirm that all ash has been removed. It is unclear what specific inspection procedures will be followed (e.g., walking of transects, perimeter), as inspection procedures, if any, are not discussed. Similarly, it is unclear who will be responsible for conducting the inspection (e.g., the removal equipment operator, construction oversight team), and what constitutes visual detection of ash (e.g., specific coloring). This is of particular concern given that this site is proposed for unrestricted use following the removal action. Revise this section to clarify the visual inspection procedures, the party responsible for implementing them, and what constitutes visual detection of ash.

4. **Section 2.0, Analytical Plan, Page 5 of 16:**

   This section states that the *Confirmation Sampling and Analysis Plan for Coal and/or Ash Removal at the Savannah River Site (U), Rev. 1.1, SRNS-RP-2013-00332, Savannah River Nuclear Solutions, LLC, Savannah River Site, Aiken, SC, dated 2014* establishes a "general rule" of collection of one confirmation sample per acre. It is unclear if this sampling program is sufficient for the WADB as this is not discussed in the FSP. For example, it is unclear if collection of side-wall samples in addition to excavation floor samples is warranted at the WADB, based on site-specific conditions and the known extent of contamination (or lack thereof). Similarly, it is unclear if collection of excavation floor samples at a greater frequency than one per acre may be appropriate based on known contaminant distribution (or lack thereof). Revise this section to provide rationale for the selected confirmation sample frequency and type.

5. **Section 2.0, Analytical Plan, Page 5 of 16:**

According to Section 1.3, Sampling Unit Characterization History, the elevation of the powerline road across which the ash historically flowed has been raised, and culverts have been installed beneath the road. It is unclear if and how the presence of the road will impact the ability to visually confirm that all ash has been removed and the collection of representative confirmation samples, as this is not discussed in the FSP. Revise Section 2.0 to clarify if and how the presence of the road will impact the ability to visually confirm that all ash has been removed and the collection of representative confirmation samples.

6. **Section 2.0, Analytical Plan, Page 5 of 16:**

In the event that confirmation samples contain concentrations of contaminants that do not meet the RGs, the contingency sampling plan is unclear, as it is not specified in the FSP. For example, it is unclear if additional sampling will be conducted on a per-acre basis, or at a greater frequency, etc. Revise this section to clarify the contingency sampling plan (e.g., number of samples and depths) should confirmation sample concentrations not meet RGs.

7. **Section 2.2, Sample Location Map, Page 6 of 16:**

This section states, "If the limits of excavation differ from what is shown in Figure 4, the Northing and Easting grid lines will determine inclusion of additional area(s) into a particular grid. A sample location, if deemed appropriate by the STR [subcontract technical representative], may be designated outside the boundaries as shown in Figure 4, but in an excavation area determined necessary during field work." Based on this, it is unclear what criteria will be used to determine if collection of additional confirmation samples is warranted. For example, it is unclear if additional confirmation samples will be collected only if a minimum of an additional acre requires excavation. Revise this section to clarify the criteria that will be used to determine if collection of additional confirmation samples is warranted.

8. **Figure 4, WADB Sampling Grid Locations, Page 12 of 16:**

Review of this figure indicates that a large area of excavation is proposed to the east of grid square N-06; however, no confirmation sample is proposed in this area. To ensure that contamination is sufficiently removed from this area, it appears that collection of an additional confirmation sample in this area is warranted. Revise the FSP to propose the collection of an additional confirmation sample from the grid square located east of grid square N-06, or justify why this is not necessary.

9. **Table 1, Summary of the RGs for the Wetlands Area at Dunbarton Bay, Page 13 of 16:**

The notes at the bottom of this table indicate that RGs were calculated for each applicable receptor population; however, it is unclear how the RGs were calculated, as no supporting equations or input parameters are provided. Therefore, the RGs are not supported. Revise Table 1 to clarify how the RGs were calculated or provide reference to the supporting document where these calculations can be found.