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October 31, 2018

Mr. Brian T. Hennessey, SRS Remedial Project Manager
Infrastructure and Area Completion Division
U. S. Department of Energy
Savannah River Operations Office
Post Office Box A
Aiken, South Carolina 29802

Re: Feasibility Study for the Lower Three Runs Integrator Operable Unit (U), SEMS Number: 35 (SRNS-RP-2018-00199, Revision 0, July 2018) received August 6, 2018.

Dear Mr. Hennessey:

The Department has completed its review of the above referenced document pursuant to the Savannah River Site Federal Facility Agreement. The attached comments were generated as a result of this review. These comments must be addressed prior to final approval of the above referenced document. As specified in Section XXII, Review/Comment on Documents, the appropriate technical staff will be available to participate in a joint DOE/EPA/DHEC comment resolution meeting to discuss these comments, if necessary.

To schedule a meeting to resolve the attached comments or to obtain further information, please contact me at (803) 898-4331.

Sincerely,

Susan B. Fulmer, P.G., Manager
Federal Remediation Section
Division of Site Assessment, Remediation, Revitalization
Bureau of Land and Waste Management

cc: C. L. Bergren, SRNS-ACP (Signed Original)
Travis Fuss, Aiken Environmental Affairs Office (via email)
Jon Richards, EPA Region IV
Heather Cathcart, BLWM

South Carolina Department of Health and Environmental Control Comments on:
Feasibility Study for the Lower Three Runs Integrator Operable Unit (U), SEMS Number: 35
(SRNS-RP-2018-00199, Revision 0, July 2018) received August 6, 2018.

General Comments

1. According to the Feasibility Study, "none of the alternatives apply a treatment technology. Therefore, no reduction of toxicity, mobility, or volume through treatment is accomplished from any alternative evaluated for the Upper subunit of the LTR IOU." However, it was discussed during the February 2018 scoping meeting for the Feasibility Study that the in situ capping on PTSM sediment/soil (i.e. hybrid cap) could be considered treatment through reduction of mobility. Please revise the document accordingly and in particularly Tables 4.1, 4.3, 4.5, and 4.11 to account for this active treatment.

2. The estimates provided for the Baseline Dam Program and Minor Maintenance for PAR Pond, Pond B, and Pond C appear to be undervalue. According to the Key Agreements made during the Feasibility Study scoping meetings (February 14, 2018 and March 5, 2018), the Core Team "agreed that maintaining water levels addresses the general exposure to contaminated media, not just PTSM." Therefore, the cost estimates should be adjusted to reflect the time needed for PAR Pond, Pond B, and Pond C to meet their respective remedial goals (205 years, 260 years, and 200 years, respectively).

   Also, it should be noted that an earthen dam lifespan is 50 to 100 years. Consideration of this fact should be incorporated into the revised estimates. Will the dam need to be reconstructed during the time it takes to meet the remedial goals? Does the cost include minor maintenance activities (i.e., mowing, tree removal, and repairs from animal burrowing) and major maintenance activities (i.e., replacement of the internal drainage system every 50 years and repair or replacement of the spillway every 50 to 100 years)? Does the cost estimate take into account catastrophic events such as dam failure? The revised document should include explicit details on how these new costs were derived and provide any referenced worksheets (i.e., the worksheet from SI).

3. The first sentence of the last paragraph of page 69 states: "Alternatives A-3, A-5 and A-6 each include LUCs with MNR as part of the remedy." The only other sections of the document that appear to indicate that Alternative A-2: LUCs with MNR is included with each of the other remedial alternatives are Table ES-2 and the cost estimates in Appendix A. The discussions for each remedial alternative in Sections 3.1 and 4.1.2 do not clearly state the inclusion of LUCs with MNR. Furthermore, these discussions state that five-year remedy reviews will be required for each alternative; however, according to the cost estimates for A-3, A-5 and A-6, there are no five-year review costs associated with these specific alternatives. Instead, for each of these alternatives there is a note stating that LUCs and remedy reviews are included in A-2. Sections 3 and 4 should be revised to include LUCs with MNR as a component for each remedial alternative discussion. Additionally, the cost estimates for each

remedial alternative should be revised to include the five-year review costs associated with LUCs with MNR in addition to the separate costs applicable to each remedial alternative.

4. Several sections in the referenced document discuss the implementability for Alternatives A-3 and A-5 in EA3. Section 4.2 Comparative Analysis under the Implementability Section, page 71, first paragraph states that "all of the alternatives evaluated are implementable." However, Table 4-3, Detailed Analysis of EA3 Pond B Including Canal to Pond C, page 89, under columns A-3 and A-5, the Implementability portion of the table states "mobilization of a barge to this interior pond within a remote area may hinder availability of equipment and contractors," and "mobilization to this remote area may hinder availability of equipment and contractors." Please consider rewording these statements and confirm that while these alternatives may be difficult to implement, the alternatives are viable remedial options.

Specific Comments

1. Section 2.0, Identification and Screening of Technologies, Table 2-3 Summary of the Screening Technologies, page 37. Under the "Effectiveness" column for the No Action General Response Action, it states that short-term and long-term exposure to contaminated sediment/soil is eliminated with this technology. Please correct this statement by rewording the statement to "...contaminated sediment/soil is **not** eliminated...".

2. Section 2.1.3, Development of Remedial Goals, pages 28 and 29. Please include a statement using background concentrations as a possible basis for selecting the most likely remedial goal option.