



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

May 4, 2018

Mr. Brian T. Hennessey, 730-B  
SRS Remedial Project Manager  
Area Completion Project  
U.S. Department of Energy  
Savannah River Operations Office  
P.O. Box A  
Aiken, South Carolina 29802



RE: **EPA Comments on the Sampling and Analysis Plan Addendum for the P-Area Groundwater Operable Unit (U), CERCLIS Number: 81, SRNS-RP-2018-00261, Revision 0, dated February 2018, Savannah River Site, Aiken, South Carolina**

Dear Mr. Hennessey,

The U.S. Environmental Protection Agency, Region 4 (EPA), has reviewed the Sampling and Analysis Plan Addendum for the P-Area Groundwater Operable Unit (U), CERCLIS Number: 81, SRNS-RP-2018-00261, Revision 0, dated February 2018. EPA's comment to the Revision 0 document are attached.

If you have any questions or require additional information, please contact me at (404) 562-8513.

Sincerely,

**JENNIFER**  
**TUFTS**

Digitally signed by  
JENNIFER TUFTS  
Date: 2018.05.04  
16:26:30 -04'00'

Jennifer Tufts  
Remedial Project Manager  
Superfund Division

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

**EPA Comments on the Sampling and Analysis Plan Addendum for the  
P-Area Groundwater Operable Unit (U), CERCLIS Number: 81,  
SRNS-RP-2018-00261, Revision 0, dated February 2018, Savannah River Site,  
Aiken, South Carolina**

**I. SPECIFIC COMMENTS**

**1. Section 3.1.8, Develop the Plan for Obtaining the Data (Project Quality Objectives, Page 29 of 154):**

The first paragraph of Section 3.1.8 on Page 29 of 154 of the Draft Sampling and Analysis Plan Addendum for the P-Area Groundwater Operable Unit (Draft SAP Addendum) states, “To support long-term monitoring of plume migration, impact to surface water in Steel Creek, and development of concentration trends, existing surface water and groundwater monitoring wells will be sampled annually.” However, it is unclear from the Draft SAP Addendum if the proposed sampling frequency is a deviation from the original SAP and if it is appropriate for the purpose of long-term groundwater monitoring and trend analysis at the P-Area Groundwater Operable Unit (PAGW OU). For clarity and completeness, revise the Draft SAP Addendum to address these issues.

**2. Section 4.2, Groundwater Investigation, Page 31 of 154:**

The second paragraph of Section 4.2 of the Draft SAP Addendum states, “The extent of the VOC [volatile organic compound] groundwater plumes in the distal area is defined by limited groundwater monitoring well and previous CPT [cone penetrometer technology] data.” Additionally, the third paragraph in Section 4.2 states, “Characterization of the distal area of the VOC groundwater plumes, with primary focus in the elbow portion, will consist of performing headspace sampling on core collected from 21 m (70 ft) to 61 m (200 ft) bls [below land surface] or until the Gordon Confining Unit (Green Clay) is encountered at 26 borehole locations.” However, the Draft SAP Addendum does not clearly state how soil screening and soil analytical data will be used to determine the extent of VOC groundwater contamination in the distal area of the groundwater plumes. For clarity, revise the Draft SAP Addendum to address this issue.

**3. Section 4.2, Groundwater Investigation, Page 32 of 154:**

The first paragraph on Page 32 of 154 of Section 4.2 states, “Based on the results of the headspace data, two (2) wells, one in the UAZ [upper aquifer zone] and LAZ [lower aquifer zone], will be installed for long-term monitoring (Figure 26) in the elbow portion.” However, the decision criteria for where the two (2) proposed wells to be installed based on the results of the headspace data is not included in the Draft SAP Addendum. For clarity and completeness, revise the Draft SAP Addendum to include the decision criteria which will be used to determine the placement of the two (2) additional wells to be installed in the UAZ and LAZ.

**4. Section 4.3.2, Groundwater, Page 33 of 154:**

The first paragraph on Page 33 of 154 states, “The selected groundwater monitoring wells will be sampled annually in conjunction with Steel Creek surface water and shallow groundwater well sampling. Semi-annual synchronous water level measurements will also be collected.” Additionally, the third paragraph on Page 33 of 154 states, “A groundwater report will be prepared and submitted biennially (every two years) that provides at a minimum current location of the groundwater plumes, time-trends for key constituents (e.g., tritium and TCE [trichloroethylene]), hydrographs, data summary tables, and review of the impact to Steel Creek.” However, the Draft SAP Addendum does not state how annual sampling and semi-annual water level measurements will accurately capture potential seasonal variations typically observed during quarterly or semi-annual groundwater sampling events. Revise the Draft SAP Addendum to address this issue.

**II. MINOR COMMENTS****1. Section 2.1.4, Groundwater Monitoring, Page 13 of 154:**

The last sentence in Section 2.1.4 states “seven (5) radionuclides”. Revise Section 2.1.4 to address this discrepancy.

**2. Section 3.1.2, Identify the Goals of the Study, Page 20 of 154:**

The word “evaluation” is misspelled in the first sentence of Section 3.1.2 as “evaluatoin”. Revise Section 3.1.2 to correct this misspelling.