



Department of Energy
Savannah River Operations Office
P.O. Box A
Aiken, South Carolina 29802

JUL 11 2018

Ms. Susan B. Fulmer, P. G., Manager
Federal Remediation Section
Division of Site Assessment, Remediation and Revitalization
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Mr. Jon Richards
Acting Savannah River Site Remedial Project Manager
Superfund Division
U. S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303

Dear Ms. Fulmer and Mr. Richards:

SUBJECT: Sampling and Analysis Plan Addendum for the C-Area Groundwater (CAGW) Operable Unit (OU) (U) (SRNS-RP-2017-00100, Revision 1.1, June 2018) (Redline Pages and Clean Copy) and Savannah River Site's Response to the Regulatory Comment on the Revision 1 Document, CERCLIS Number 82

The U. S. Department of Energy (DOE) is submitting the subject document for your review and approval. The South Carolina Department of Health and Environmental Control (SCDHEC) approved the Revision 1 document on April 19, 2018, and the U. S. Environmental Protection Agency (EPA) provided a comment on the Revision 1 document on May 4, 2018. Please review the enclosures and provide your comments or approval within thirty (30) days of receipt. The effort and time that the SCDHEC and the EPA have given on the subject operable unit are greatly appreciated.

Questions from you or your staff may be directed to me at (803) 952-8365, or the DOE Federal Project Director, Ms. Karen Adams, at (803) 952-7871.

Sincerely,

A handwritten signature in blue ink, appearing to read "BH", with a long horizontal stroke extending to the right.

Brian T. Hennessey
SRS Remedial Project Manager
Infrastructure and Area Completion Division

Ms. Susan Fulmer
Mr. Jon Richards

2

JUL 11 2018

Enclosures:

1. Sampling and Analysis Plan Addendum for the C-Area Groundwater (CAGW) Operable Unit (OU) (U) (SRNS-RP-2017-00100, Revision 1.1, June 2018) CERCLIS Number: 82 (Redline Pages)
2. Sampling and Analysis Plan Addendum for the C-Area Groundwater (CAGW) Operable Unit (OU) (U) (SRNS-RP-2017-00100, Revision 1.1, June 2018) CERCLIS Number: 82 (Clean Copy)
3. SRS Response to the U.S. Environmental Protection Agency Comment on the Sampling and Analysis Plan Addendum for the C-Area Groundwater (CAGW) Operable Unit (OU) (U) (SRNS-RP-2017-00100, Revision 1 Redline, March 2018) CERCLIS Number: 82

cc w/o encl:

D. Scaturo, SCDHEC-Columbia
S. French, SCDHEC-Columbia
M. D. Wilson, SCDHEC-Columbia
G. K. Taylor, SCDHEC-Columbia
T. Fuss, SCDHEC–Aiken Environmental Affairs Office
R. Pope, EPA-Atlanta

cc w/encl:

J. Tufts, EPA-Atlanta
M. McRae, TechLaw, Inc.

SRS Response to the EPA Comment on the Sampling and Analysis Plan Addendum for the C-Area Groundwater (CAGW) Operable Unit (OU) (U), CERCLIS Number: 82, SRNS-RP-2017-00100, Revision 1 Redline, dated March 2018, Savannah River Site, Aiken, South Carolina

Comment Received: May 7, 2018

Page 1 of 1

- 1. EPA comment on SRS's response to EPA's original Comment #2.** The response indicates that the Savannah River National Laboratory (SRNL) is in the process of developing a method for analyzing heptane, nonane, decane, undecane, and dodecane with detection limits for each of 1,000 micrograms per Liter (ug/L). According to Table 4 of the CAGW Scoping Summary, n-nonane, n-decane, n-undecane, n-dodecane are considered medium weight compounds. Of these compounds, those with 10 to 28 carbons (i.e., decane, undecane, and dodecane) are found in the diesel range organics. Therefore, only heptane is considered a low molecular weight aliphatic compound and the remaining compounds that will be analyzed at the SRNL are medium weight. The medium weight compounds decane, undecane, and dodecane, are considered part of the diesel range organics. Section 2.1 (Vadose Zone Subunit) of the Sampling and Analysis Plan Addendum For Monitoring the C-Area Groundwater Operable Unit (Addendum) states that diesel fuel was used in the emergency generators at the C-Area and that at the Fuel Unloading Facilities Power (108-3C), spills or leaks resulted in soil being contaminated with petroleum. Since the majority of the compounds listed as potential contaminants in groundwater are medium weight (diesel range organics), it is unclear how the objective to detect these compounds will be met by the method being developed by SRNL which will have a detection limit of 1,000 ug/L when the EPA RSL for diesel range organics is 100 ug/L. Please provide a response to address this concern. It is recommended that SRS consider contracting with a commercial laboratory that can analyze samples for Gasoline Range Organics (GRO) and Diesel Range Organics (DRO) with an achievable detection limit of 100 ug/L for DRO.

Response: Clarification.

SRNL screening level R&D methodology for aliphatic compounds was unable to detect medium weight compounds because of the higher MDL (1,000 µg/L). SRS will remove the SRNL R&D method from the SAP. The SAP will retain the Total Petroleum Hydrocarbons - Diesel Range Organics (TPH-DRO) method (EPA 8015), which has an MDL of 100 µg/L or less, the volatile organic compound (VOC) method (EPA 8260), and the semi-volatile organic compound (SVOC) method (EPA 8270) for the Fuel Unloading Facilities Power (108-3C) groundwater samples. Therefore, TPH-DRO will be used as the surrogate for medium weight aliphatic compounds. Including the TPH-GRO method does not provide additional value because the BTEX compounds are already analyzed for as part of the EPA method (EPA 8260) for VOCs. The SAP Addendum will be modified accordingly.

Contact: Terry Killeen, 803-952-6850 (terry.killeen@srs.gov)