

Shelia Mcfalls

From: Lloyd, Diedre <Lloyd.Diedre@epa.gov>
Sent: Tuesday, September 03, 2019 4:31 PM
To: Joseph Burch; HENNESSEY, BRIAN
Cc: Shelia Mcfalls; Fulmer, Susan; Cathcahe (dhec.sc.gov); pope.robert (epa.gov); Richards, Jon M.; Chris Bergren; ADAMS, KAREN; HENNESSEY, BRIAN; James Kubar; Dena Brett; Joao Cardoso-Neto; John02 Bradley; Bryce Garner; VanTrees, Craig; HOLMES, ANGELIA A
Subject: RE: EPA 2nd Comment Responses to DRAFT SRS Responses to Reg Com on the MIPS SAP

Joe and Brian,

That sounds reasonable. Would you please add this level of detail to the report and EPA can approve the document with the additional language below that provides additional clarity. Thanks much, D

Diedre Lloyd
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Superfund Emergency Management Division
Environmental Protection Agency
61 Forsyth Street
Atlanta, Georgia 30303
Mobile: 404-229-9500
Desk: 404-562-8855

From: joseph.burch@srs.gov <joseph.burch@srs.gov>
Sent: Tuesday, September 3, 2019 2:49 PM
To: Lloyd, Diedre <Lloyd.Diedre@epa.gov>
Cc: brian.hennessey@srs.gov; Shelia.Mcfalls@srs.gov; Fulmer, Susan <fulmersb@dhec.sc.gov>; Cathcahe@dhec.sc.gov; Pope, Robert <Pope.Robert@epa.gov>; Richards, Jon M. <Richards.Jon@epa.gov>; chris.bergren@srs.gov; karen-m.adams@srs.gov; brian.hennessey@srs.gov; james.kubar@srs.gov; dena.brett@srs.gov; joao.cardoso-neto@srs.gov; John02.Bradley@srs.gov; Bryce.Garner@srs.gov; VanTrees, Craig <vantrees.craig@epa.gov>; angelia.holmes@srs.gov
Subject: RE: EPA 2nd Comment Responses to DRAFT SRS Responses to Reg Com on the MIPS SAP

Diedre,

To answer your question below, SRS provides the following answer:

Question:

Do you propose to change a previous baseline value and/or what is the anticipated future use for this newly proposed baseline? Please provide additional clarification/rationale and any anticipated impacts with regard to the italicized red font in this sentence

Response:

SRS is not proposing to change a baseline value defined in the approved Record of Decision. After the soil sampling is complete, the analytical results will be compared to the RG values. If analytical results are above these approved RG values, a contaminant migration model will be completed to evaluate the new analytical

results as compared to the baseline RG values. Once the modeling work has been completed, a report will be released, and a request to discuss the results with the Core Team will be proposed. Any future recommendation to revise the RG values based on the contaminant migration model results will be discussed with and agreed to by the Core Team.

If you have any questions regarding this answer, please contact me at 803-952-6660 or Bryce Garner at 803-952-7801.

Thanks

Joseph Burch
Savannah River Nuclear Solutions, LLC
Environmental Compliance Authority
Area Completion Projects
Building 730-4B, 3018
Phone: 803-952-6660; Pager: 803-725-7243, #20477

From: Lloyd, Diedre <Lloyd.Diedre@epa.gov>
Sent: Thursday, August 22, 2019 6:00 PM
To: HENNESSEY, BRIAN <brian.hennessey@srs.gov>
Cc: Shelia Mcfalls <Shelia.Mcfalls@srs.gov>; Fulmer, Susan <fulmersb@dhec.sc.gov>; Cathcahe (dhec.sc.gov) <Cathcahe@dhec.sc.gov>; pope.robert (epa.gov) <pope.robert@epa.gov>; Richards, Jon M. <Richards.Jon@epa.gov>; HOLMES, ANGELIA A <angelia.holmes@srs.gov>; Chris Bergren <chris.bergren@srs.gov>; Adams, Karen <karen-m.adams@srs.gov>; HENNESSEY, BRIAN <brian.hennessey@srs.gov>; James Kubar <james.kubar@srs.gov>; Dena Brett <dena.brett@srs.gov>; Joao Cardoso-Neto <joao.cardoso-neto@srs.gov>; John02 Bradley <John02.Bradley@srs.gov>; Bryce Garner <Bryce.Garner@srs.gov>; VanTrees, Craig <vantrees.craig@epa.gov>; Joseph Burch <joseph.burch@srs.gov>
Subject: RE: EPA 2nd Comment Responses to DRAFT SRS Responses to Reg Com on the MIPS SAP

Good Evening Brian and All,

EPA is ready to provide approval for the Sampling and Analysis Plan for MIPS SAP, Revision 1 Redline with the understanding that one last question denoted below is addressed as indicated below:

Last remaining Question:

Page 5 of 25 in the above mentioned document (SAP Redline Rev 1), 2nd paragraph, last sentence –“The characterization results for this SAP will be used to verify the efficiency of the current SVE system *and used as a baseline for the project as it relates to meeting the RG values agreed to in the ROD.*”

- Do you propose to change a previous baseline value and/or what is the anticipated future use for this newly proposed baseline? Please provide additional clarification/rationale and any anticipated impacts with regard to the italicized red font in this sentence

Please include your answer/clarification in a revised redline revision (just this paragraph in an email would be sufficient or whatever you deem the most expedient format).

EPA appreciates your efforts to date with the MIPS SAP. Thanks, D

Diedre Lloyd

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From: joseph.burch@srs.gov <joseph.burch@srs.gov>
Sent: Wednesday, June 26, 2019 2:01 PM
To: Lloyd, Diedre <Lloyd.Diedre@epa.gov>
Cc: Shelia.Mcfalls@srs.gov; Fulmer, Susan <fulmersb@dhec.sc.gov>; Cathcahe@dhec.sc.gov; Pope, Robert <Pope.Robert@epa.gov>; Richards, Jon M. <Richards.Jon@epa.gov>; angelia.holmes@srs.gov; chris.bergren@srs.gov; karen-m.adams@srs.gov; brian.hennessey@srs.gov; james.kupar@srs.gov; dena.brett@srs.gov; joao.cardoso-neto@srs.gov; John02.Bradley@srs.gov; Bryce.Garner@srs.gov
Subject: RE: EPA 2nd Comment Responses to DRAFT SRS Responses to Reg Com on the MIPS SAP

Diedre,

The attached set of draft comment responses have been updated to address your additional comments provided in the e-mail below. The project team will discuss these responses with you at the Thursday, June 27, 2019 comment resolution conference call.

Since this is not a Webcast meeting, please have a copy of the attachment with you during the call.

Thanks. We look forward to the meeting.

Joe

From: Lloyd, Diedre <Lloyd.Diedre@epa.gov>
Sent: Friday, May 24, 2019 10:46 AM
To: HENNESSEY, BRIAN <brian.hennessey@srs.gov>
Cc: Joseph Burch <joseph.burch@srs.gov>; Shelia Mcfalls <Shelia.Mcfalls@srs.gov>; Fulmer, Susan <fulmersb@dhec.sc.gov>; Cathcahe (dhec.sc.gov) <Cathcahe@dhec.sc.gov>; pope.robert (epa.gov) <pope.robert@epa.gov>; Richards, Jon M. <Richards.Jon@epa.gov>; HOLMES, ANGELIA A <angelia.holmes@srs.gov>; Chris Bergren <chris.bergren@srs.gov>; ADAMS, KAREN <karen-m.adams@srs.gov>
Subject: EPA 2nd Comment Responses to DRAFT SRS Responses to Reg Com on the MIPS SAP

Brian,

Any comments denoted below with approved/agreed and noted in green font are considered adequate and do not require further attention.

However, comments denoted in red font with additional clarification indicate the need for further attention and indicative of continued EPA concerns specific to the MIPS SAP and are included below for your consideration and submission of additional responses/clarification. EPA cannot approve this document until the below concerns have been addressed.

Hope all have a good holiday weekend and I will continue to work on remaining outstanding documents today and throughout the weekend. Thanks, Diedre

EPA 2nd Comment Responses to DRAFT SRS Responses to Regulatory Comments on the MIPS L OU SAP:

1) According to the Savannah River Site (SRS) Area Completion Projects (ACP) Programmatic Quality Assurance Project Plan for Environmental Data Collection and Management, ERD-AG-2005-00001 (Program Level QAPP), the development of individual waste unit Sampling and Analysis Plans (SAPs) and appropriate Data Usability Reports (DURs) should be used in conjunction with the Program Level QAPP to provide quality assurance for waste unit specific data collected objectives. The Sampling and Analysis Plan for the M-Area Inactive Process Sewer Lines (MIPSL) (081-M) Operable Unit (U) (SAP) does not include all of the information that is required to be included by the Program Level QAPP. As such, the SAP requires augmentation to include the following items, organized according to the Worksheets provided in the Uniform Federal Policy for Quality Assurance Program Plans (UFP-QAPP):

- **Worksheet #1 – Lead Organization:** The Lead Organization is not identified in the SAP. **Below SRS Response Approved for this item**
- **Worksheet #4 - Project Personnel Sign-Off Sheet: Identifies key project personnel and specifies technical disciplines:** The key project personnel and their technical disciplines are not identified. **Below SRS Response Approved for this item**
- **Worksheet #10 - Clearly states the particular environmental problem to be solved, decision to be made, or outcome to be achieved. Includes sufficient background information to provide a historical, scientific, and regulatory perspective for this particular project:** The information regarding the extent of contamination at the MIPSL is not sufficient to describe the problem at the MIPSL OU. **Please provide requested data**
- **Worksheet #11 - Provides the Data Quality Objectives in accordance and compliance with EPA's Data Quality Objective Process (EPAQA/G-4) document, must provide a list of decisions and alternative actions (remediation, removal, further assessments, no further action:** The SAP has not provided sufficient descriptions needed to identify the goal of the study, and has not provided a list of decisions and alternative actions. **Please provide requested data**
- **Worksheet #12 - Identifies the data quality indicators, measurement performance criteria, and quality control (QC) sample and/or activity used to assess the measurement performance for both the sampling and analytical measurement systems.** The SAP does not include measurement performance criteria for analytical measurements. **Please provide the requested data**
- **Worksheet #16 – 1) Provides work schedule for all tasks including report preparation, response to comments, etc.; 2) Identifies all required reports, records, data reports, quality assurance (QA) reports/documents:** The SAP does not include a schedule of tasks for the sampling and analysis at the MIPSL OU and does not identify all required reports, records, data reports, and QA reports/documents, including data quality assessments. **Please provide the requested data**
- **Worksheet # 17 - Provides an extensive discussion regarding the rationale for the sampling design:** The SAP does not include an extensive discussion regarding the rationale for the sampling design. **Please provide the requested data**
- **Worksheet #21 – Includes sampling equipment; on-site support facilities; lists key personnel in charge of sampling; describes decontamination procedures:** The SAP does not include this information. **Below SRS Response Approved for this item**
- **Worksheet #22 – Includes a list of field equipment; testing and acceptance criteria; supplies, and personnel responsible for supplying and testing such equipment:** The SAP does not provide this information. **Below SRS Response Approved for this item**

- **Worksheet #28 - Identifies the type, number and frequency of procedures and frequency of QA/QC sample collection along with the required QC statistically derived limits for each analyte (for spike samples, internal standards, surrogate spikes):** The SAP does not provide the statistically-derived limits for all analytical QC spikes and standards. **Below SRS Response Approved for this item**
- **Worksheet #29 – Describes data handling procedures:** The SAP does not provide this information. **Below SRS Response Approved for this item**
- **Worksheet #34 - Identifies the guidance documents or SOPs governing the data review, verification and validation processes:** The SAP has not provided information about the guidance documents or standard operating procedures (SOPs) that will be used for data verification and validation. **Below SRS Response Approved for this item**

Please revise the SAP to address these items to ensure the SAP adequately documents the data collection plan and all required quality control measures in accordance with the Program Level QAPP. **EPA requires the above requested data indicated by red font above which is site specific and is necessary for the evaluation of the MIPSLS SAP.**

Response: Clarification. The SAP for the M-Area Inactive Process Sewer Lines Operable Unit was prepared based on an agreed upon template with program level information removed. In 2010, it was determined that a SAP Design Team (SAPDT) should be formed to reach agreement on the details and information that will be included in the SAP template. The SAPDT consisted of the following individuals with their respective agencies:

**Brian Hennessey, USDOE Rob Pope, USEPA
Tom Gaughan, SRS-ACP Martha Berry, USEPA
Cathy Lewis, SRS-ACP Jana Dawson, TechLaw
Bob Van Pelt, SRS-ACP Heather Cathcart, SCDHEC-Columbia
Greg Rucker, SRS-ACP Duke Taylor, SCDHEC-Columbia
Dena Brett, SRS-ACP Patricia Hydrick, SCDHEC-Columbia
Shelia McFalls, SRS-ACP Leigh Beatty, SCDHEC-Aiken
Winston Moore, SRS-ACP**

In 2012, the SAP template was accepted by the USEPA and SCDHEC. The agreement is described in full detail in the *Scoping Summary for the Development of Area Completion Projects Sampling and Analysis Plans (U)*, ERD-EN-2010-0090, Final, Savannah River Site, Aiken, SC (SRNS, 2012).

No Change to the current document is proposed.

Responsible Party: Bryce Garner, 803-952-7801, bryce.garner@srs.gov

2) SAP Section 3.1.1 (State the Problem) does not provide a sufficient description of the site conditions or the extent of contamination being addressed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedial response action. Section 3.1.1 states that a soil vapor extraction treatment of soils at the M-Area Inactive Process Sewer Lines (MIPSL) has reduced the concentration of Trichloroethylene (TCE) and Tetrachloroethylene (PCE), but does not include information about the location and extent of the lateral and vertical soil contamination originally identified below the ground surface at this Operable Unit (OU). Therefore, it is unclear how the proposed sampling scheme is sufficient to bound the extent of TCE and PCE contamination, especially laterally. In accordance with EPA document *Guidance on Systematic Planning Using the Data Quality Objectives Process* (EPA/240/B-06/001) dated February 2006 which states that Step 1 of the seven step data quality objective (DQO) process is to define the problem that necessitated the remedial action, such information is necessary to ensure the objectives of the project are sufficiently addressed. Please revise Section 3.1.1 to provide a more complete description of the extent of contamination within the MIPSL OU, and the problems originally identified as warranting action.

Response: Clarification. The objective of this SAP is not to ascertain the extent of contamination. Following the agreed upon SAP template, SRS did not provide a complete description of the extent of contamination with the MIPSL OU within the SAP, but rather referenced a document which described the extent of

contamination as formed in 2005. The vertical and horizontal extent of contamination is completely described in the *RCRA Facility Investigation/Remedial Investigation (RFI/RI) Work Plan, RFI/RI Report with Baseline Risk Assessment, and Corrective Measures Study/Feasibility Study (CMS/FS) for the M-Area Inactive Process Sewer Lines (081-M) (U)*, WSRC-RP-2004-4214, Revision 1.1 (WSRC, 2005).

No Change to the current document is proposed.

Responsible Party: Bryce Garner, 803-952-7801, bryce.garner@srs.gov

EPA Response: As indicated in the initial comment, EPA does not request an investigation of the contamination extent, merely a description of previously investigated contamination ensure that adequate lateral and vertical sampling scenarios have been proposed. Inclusion of a figure and tables from a previous report would be acceptable in an appendix or insertion into the MIPSLS report wherever deemed appropriate. This is also requested site specific information required to evaluate the MIPSLS SAP. Please provide this information.

3) Section 3.1.2 (Identify Goals of the Study) defines the goal of the proposed sampling as identifying whether soils below the existing MIPSLS pipeline infrastructure have met the Remedial Goals (RGs), however the sampling design does not appear to support such a goal. For example, the SAP Table 2 (Data Quality Objectives Worksheet for Soil Media) states the conditions at this area included the discharge of contamination from the MIPSLS to subsurface soils. Section 3.1.3 (Identify Information Inputs) states three soil borings near MH-1, one soil boring near MH-11, two soil borings near MH-12, and one soil boring near MH-13 will be advanced to a depth of 100 feet for collection of soil samples every five feet. However, the SAP does not state how it was determined such a small number of borings will provide sufficient data to bound the lateral extent of TCE and PCE concentrations in soils at the MIPSLS OU. Information which documents how the number and location of samples proposed is sufficient to characterize the soils which are subject to compliance with the MIPSLS Record of Decision (ROD) remedial goals (RGs) needs to be provided. Please revise the SAP to provide additional information about how the proposed sampling scheme is sufficient to meet the data needs for identifying if MIPSLS soils meet the ROD RGs.

Response: Clarification. The sampling scheme was designed to obtain current concentration levels to compare to those encountered during the remedial investigation characterization. The *RCRA Facility Investigation/Remedial Investigation (RFI/RI) Work Plan, RFI/RI Report with Baseline Risk Assessment, and Corrective Measures Study/Feasibility Study (CMS/FS) for the M-Area Inactive Process Sewer Lines (081-M) (U)*, WSRC-RP-2004-4214, Revision 1.1 (WSRC 2005) states, "Soil samples were collected near manholes, near the junctions of feeder lines with the main sewer pipes, and where total soil-gas VOC (PCE + TCE) exceeded 5 ppmv." The SAP corresponds to the original strategy/findings in order to meet the data needs for identifying if MIPSL soils meet the ROD RG's. The placement of the SVE wells was as agreed, and the borings will be near these wells.

No change to the current document is proposed.

Responsible Party: Bryce Garner, 803-952-7801, bryce.garner@srs.gov

The SRS Comment does NOT address this question. Please provide additional data/clarification that address EPA concerns that the sampling design does NOT support the goal of sampling to identify whether the soils below the existing MIPSL pipeline infrastructure have met the RGs. The SAP does NOT state how a small number of borings will provide sufficient data to bound the lateral extent of solvent contamination within the MIPSL OU. Please refer to previously supplied EPA Comment and this comment when providing additional data/clarification which is needed to evaluate the MIPSL SAP.

4) The scale of the SAP figures appears to apply to the distance between manholes and is not representative of the size of the sample locations. For example, in Figure 3 (Proposed Sample Locations for the MIPSL OU, 2018), Page 15 of 22, the circles used to represent the sample locations are sized such that, according to the scale of the figure, would represent 75 feet in diameter. As such, the figure appears to depict sampling locations covering more land area which is not accurate or realistic. Please revise Figure 3 to provide more accurate scaling of sample locations in comparison to the size of the OU.

Response: Clarification. The yellow circles representing the proposed sample locations in Figure 3 are not meant to be to scale. The proposed sample locations in Figure 3 are meant to capture the general locations near the manholes and near the junctions of feeder lines with the main sewer pipes. The program plan will provide more precise locations.

No change to the current document is proposed.

Responsible Party: Bryce Garner, 803-952-7801, bryce.garner@srs.gov

Please make the requested changes to the figure – the depiction is confusing and misleading instead of providing information and clarity.

Diedre Lloyd
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 Restoration & Sustainability Branch
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 Desk: 404-562-8855

From: Lloyd, Diedre

Sent: Tuesday, May 21, 2019 2:16 PM

To: joseph.burch@srs.gov

Subject: Re: DRAFT SRS Responses to Regulatory Comments on the Sampling and Analysis Plan for the MIPSL (081-M) Operable Unit (U), (SRNS-RP-2018-01053, Revision 0)

Hey Joe,

Some are fine but when I get Zach back and pick up meds and get him settled - I'll shoot you back an email about which ones are still of concern. Thanks for reminder. D

Diedre Lloyd

On May 21, 2019, at 2:00 PM, "joseph.burch@srs.gov" <joseph.burch@srs.gov> wrote:

They were sent to your correct e-mail address. They are attached to the message I forwarded to you this morning. Did you not see the pdf attachment?

Let me know. Thanks.

From: Lloyd, Diedre <Lloyd.Diedre@epa.gov>
Sent: Tuesday, May 21, 2019 1:58 PM
To: Joseph Burch <joseph.burch@srs.gov>
Subject: [EXTERNAL] Re: DRAFT SRS Responses to Regulatory Comments on the Sampling and Analysis Plan for the MIPSL (081-M) Operable Unit (U), (SRNS-RP-2018-01053, Revision 0)

Hey Joe,

I'm out with my son today who is sick.

Can you forward the draft responses to me now? I'll review at docs office while waiting.

I think these responses may have gotten sent to wrong email? Anyway - it'll be a while - so I can look over while waiting. D

Diedre Lloyd

On May 21, 2019, at 11:33 AM, "joseph.burch@srs.gov" <joseph.burch@srs.gov> wrote:

Diedre,

How is the review of the draft SRS comment responses progressing?

Thanks

From: Joseph Burch
Sent: Wednesday, May 01, 2019 11:15 AM
To: Cathcart, Heather E. <cathcahe@dhec.sc.gov>; Lloyd, Diedre <Lloyd.Diedre@epa.gov>
Cc: Richards, Jon M. <Richards.Jon@epa.gov>; 'pope.robert (epa.gov)' <pope.robert@epa.gov>; Brian Hennessey <brian.hennessey@srs.gov>; ADAMS, KAREN <karen-m.adams@srs.gov>; Chris Bergren <chris.bergren@srs.gov>; fulmersb@dhec.sc.gov; Mike Griffith <mike.griffith@srs.gov>; Thomas Gaughan

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Subject: DRAFT SRS Responses to Regulatory Comments on the Sampling and Analysis Plan for the MIPSL (081-M) Operable Unit (U), (SRNS-RP-2018-01053, Revision 0)

Attached are the Draft SRS Responses to the Regulatory Comments on the M-Area Inactive Process Sewer Lines (081-M) Operable Unit (U), (SRNS-RP-2018-01053, Revision 0, November 2018). EPA's comments were received on 03/28/2019 and SCDHEC's approval was received on 1/25/2019.

Please review the draft responses and reply through e-mail by COB, May 15, 2019 whether the responses are acceptable or if a comment resolution conference call will be required. Once we receive your input on the draft responses, we will submit the final version of the responses by official DOE letter.

Please call me if you have any questions.

Thanks

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<DRAFT SRS CR to SRNS-RP-2018-01053.pdf>