Department of Energy
Savannah River Operations Office
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MAR - 5 2026

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Federal Remediation Section
Division of Site Assessment, Remediation and Revitalization
Bureau of Land and Waste Management
South Carolina Department of Environmental Services
2600 Bull Street
Columbia, South Carolina 29201

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

Dear Ms. Fulmer and Mr. Richards:

SUBJECT: Remedial Investigation Report with Baseline Risk Assessment for the Automotive Repair Shop (716-A) Operable Unit (U) (SRNS-RP-2025-00719, Revision 1, March 2026) (Redline Pages) and Savannah River Site's Responses to the Regulatory Comments on the Revision 0 Document, SEMS Number: 62

In accordance with the terms of the Federal Facility Agreement (FFA), the U. S. Department of Energy (DOE) is submitting the subject information for your review. The *Remedial Investigation Report with Baseline Risk Assessment for the Automotive Repair Shop (716-A) Operable Unit (U)* (SRNS-RP-2025-00719, Revision 0, September 2025) was submitted to the South Carolina Department of Environmental Services (SCDES) and the U. S. Environmental Protection Agency (EPA) on September 10, 2025. The EPA's and SCDES' comments were received on November 20, 2025, and December 9, 2025, respectively. The Redline Revision 1 pages incorporate the Savannah River Site's responses to the regulatory comments on the Revision 0 document.

Please review the enclosures and provide your response within thirty (30) days of receipt. The time and effort that the South Carolina Department of Environmental Services and the U. S. Environmental Protection Agency have given on the subject operable unit are greatly appreciated.

Ms. Susan Fulmer
Mr. Jon Richards

MAR - 5 2026

Questions from you or your staff may be directed to me at (803) 952-6211, or the DOE Program Manager, Charles Bryan, at (803) 952-7505

Sincerely,

MATTHEW BAKER

Digitally signed by MATTHEW BAKER
Date: 2026.03.05 08:48:44 -05'00'

Matthew R. Baker
Acting FFA Remedial Project Manager
DOE-Savannah River Operations Office
Remediation, Deactivation, and Decommissioning Division

RDDD-26-133

Enclosures:
1. Remedial Investigation Report with Baseline Risk Assessment for the Automotive Repair Shop (716-A) Operable Unit (U) (SRNS-RP-2025-00719, Revision 1, March 2026) (Redline Pages) SEMS Number: 62
2. SRS Responses to South Carolina Department of Environmental Services Comments on the Remedial Investigation Report with Baseline Risk Assessment for the Automotive Repair Shop (716-A) Operable Unit (U) (SRNS-RP-2025-00719, Revision 0, September 2025) SEMS Number: 62
3. SRS Responses to U. S. Environmental Protection Agency Comments on the Remedial Investigation Report with Baseline Risk Assessment for the Automotive Repair Shop (716-A) Operable Unit (U) (SRNS-RP-2025-00719, Revision 0, September 2025) SEMS Number: 62

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cc w/encl:
B. Martin, EPA-Atlanta
H. H. Cathcart, SCDES-Columbia
M. McRae, TechLaw, Inc.

GENERAL COMMENTS

1. It is unclear whether the soil sampling conducted beneath drain lines and/or sewer lines was sufficient to determine whether there has been a release to the environment. According to Section 3.2 (Site Characterization and Data Usability), at the soil boring beneath the Washing 101 area remnant concrete slab located at the southern end of Building 716-A (i.e., ARS-006-SB), four samples could not be collected from the first 21 feet (ft) below ground surface (bgs) of core. Based on Figure 2-2 (South End Floor Plan of Building 716-A), at least four floor drains appear to have been located in the Washing 101 area. It is noted that the activities that occurred in the Washing 101 area could have contributed contaminants to subsurface soils if there was a leak, and the nearest soil sample collected from approximately 0 to 21 ft bgs is 40 ft to the north under the lubrication pit. Therefore, it is unclear whether additional investigation in the Washing 101 area is necessary to determine whether contamination is present. It is recommended that the RI/BRA provide additional discussion to address the potential data gap from 0 to 21 ft bgs at ARS-006-SB, or to support that characterization is sufficient. For example, the RI/BRA should specifically discuss as a line of evidence how the results of the soil samples collected from 21 to 57 ft bgs at ARS-006-SB were used in the contaminant migration (CM) analysis to confirm that the contaminants at the Automotive Repair Shop (Building 716-A) are not a potential source for groundwater contamination. Please revise the RI/BRA to address the potential for soil contamination to be present to a depth of 21 feet in the southern area of Building 716-A.

   Response: Agree.

   SRS does not believe the lack of samples from 0 to 6 m (0 to 21 ft) at ARS-006-SB is a potential data gap. There is no indication from previous characterization activities that the Washing 101 area was a potential source of contamination. If the sewer lines and drains associated with the Washing 101 area had leaked, any soil contamination would be expected in all soil samples from ARS-006-SB, including the soils at 6 to 17 m (21 to 57 ft) below grade. The lack of contamination present in the soil samples collected from 6 to 17 m (21 to 57 ft) below grade at ARS-006-SB supports the conclusion that the sewer lines beneath the Washing 101 area were not a source of contamination at ARS-006-SB. In addition, all the soil results were utilized to evaluate potential contaminant migration (CM) and principal threat source material (PTSM) constituents of concern (COC). No Tier 1 CM COCs (Appendix B) or PTSM COCs (Appendix D) were identified. Therefore, contaminants at the Automotive Repair Shop (716-A) are not a potential source for groundwater contamination and characterization conducted beneath drain lines and/or sewer lines is sufficient.

   The text in third paragraph of Section 3.2 will be revised to support that the

characterization is sufficient as follows:

"…The four samples that could not be collected from the first 6 m (21 ft) of core were distributed throughout the remaining core. Soil core and samples were successfully collected from 6 to 17 m (21 to 57 ft) at ARS-006-SB. Any contaminants present at this location would be expected to migrate through the loosely compacted soil into the deeper soil. The lack of contamination present in the soil samples collected from 6 to 17 m (21 to 57 ft) below grade at ARS-006-SB supports the conclusion that contamination is not present in this area. In addition, soil core and soil samples were collected from approximately 0 to 6 m (0 to21 ft) at ARS-005-SB (i.e., nearest soil boring located 12 m (40 ft) to the north) and the other four soil borings (i.e., ARS-001-SB through ARS-004-SB) with no results exceeding limits. SRS believes that the soil samples collected from 6 to 17 m (21 to 57 ft) at ARS-006-SB and the soil samples from the other five soil borings provide adequate coverage to eliminate any perceived data gap. Figure 3-2 presents a cross-section of the Automotive Repair Shop (716-A) OU soil beneath the remnant concrete slab. All of the soil results were utilized to assess the CM and PTSM constituents of concern (COCs). There were no Tier 1 CM COCs (Appendix B) or PTSM COCs (Appendix D) identified. Therefore, the contaminants at the Automotive Repair Shop (716-A) are not a potential source for groundwater contamination.

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

2. The RI/BRA should clearly describe how all of the areas where potential releases could have occurred have been addressed or characterized. Based on Section 1.3 (Operable Unit History), there were many vehicle lifting systems and a waste oil underground storage tank (UST) on the southeast side of the building. Section 2.3.1 (Primary Sources of Contamination) states that motor oil stains were found in the maintenance areas, lubrication pit (Room 103), side trench, hydraulic lifts, cylinders, and narrow trenches, but Section 1.3.1 (Previous Actions) indicates that only the concrete slab in the former Spray Paint Room was sampled. It is noted that the penetrations greater than five centimeters in diameter and pits associated with the hydraulic lift systems were grouted, but it is unclear if these pits were inspected to ensure there were no releases beneath the slab. Also, Section 3.8.1 (Automotive Repair Shop (716-A) Description) notes that the trenches and sumps were sampled, but this is not discussed in Section 1.3.1. Please revise the RI/BRA to clearly and consistently describe the characterization of areas of potential releases at the Automotive Repair Shop (716-A).

   Response: Agree.

   The first paragraph of Section 1.3.1 Previous Action will be revised to more fully describe characterization activities for the areas of potential releases as follows:

"The Facility Decommissioning Evaluation (FDE) for the Automotive Repair Shop (716-A) categorized the building as an "other Industrial' Hazard Category facility and identified the Integrated Sampling Model (ISM) as the appropriate decommissioning model for this potentially contaminated facility (WSRC 2005b). As documented in the Decommissioning Project Final Report (DPFR) for the Automotive Repair Shop (716-A), fluid/oil stains in the maintenance areas, lubrication pit, side trench, hydraulic lifts, cylinders, and narrow trenches were cleaned and removed using strong surfactants and hydro/power washed (WSRC 2005a). The trenches and sumps were sampled following removal of the fluid/oil stains, and the sampling results were verified to be less than the applicable Savannah River National Laboratory (SRNL) Derived Concentration Guideline Levels (DCGLs) and CM thresholds. The DPFR concluded the building structure decommissioning activities had been completed and there were no contaminants of concern in these areas. The building structure was demolished to the foundation and penetrations greater than 5 centimeters (cm) (2 inches [in]) in diameter were grouted, including all pits associated with the automotive hydraulic lift systems. The clean concrete slab remains on its original footprint." ~~**The Decommissioning Project Final Report (DPFR) for the Automotive Repair Shop (716-A) concluded the building structure decommissioning activities had been completed using the ISM in 2005. The building structure was demolished to the foundation. The clean concrete slab remains on its original footprint and penetrations greater than 5 centimeters (cm) (2 inches [in]) in diameter were grouted, including all pits associated with the automotive hydraulic lift systems.**~~

The first paragraph of Section 3.8.1 Automotive Repair Shop (716-A) Description will be revised for consistency with Section 1.3.1 as follows:

"The Automotive Repair Shop (716-A) was decommissioned using the D&D ISM. Fluid/oil stains were removed during decommissioning, and the trenches and sumps were sampled and verified that results were less than DCGLs and CM threshold levels ~~**the applicable threshold levels**~~**. As documented in the DPFR, the post-decommissioning final verification survey of the Spray Paint Room remnant concrete slab concluded there was no residual contamination that exceeded the risk threshold or threshold levels that could impact groundwater. Therefore, the DPFR for the Automative Repair Shop (716-A) concluded the building structure decommissioning activities had been completed, including waste disposal in accordance with federal and state regulations. The building structure was demolished to the foundation. The DPFR documented that the remnant concrete slab was free of hazards and warranted no further action.** ~~**The DPFR for the Automative Repair Shop (716-A) concluded the building structure decommissioning activities had been completed, including waste disposal in accordance with federal and state regulations. The building structure was demolished to the foundation.**~~ **The clean concrete slab remains on its original 55 m by 110 m (180 ft by 360 ft) footprint."**

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

3. It is unclear what values were used for the source zone concentrations in the Appendix B (Contaminant Fate and Transport Modeling) Tier I screen as shown in Table B-5 (Tier I Screening Results for the Automotive Repair Shop [716-A] OU). Section B.2.2 (Screening Methods) states that the Tier I screen compares the maximum concentration of all detected constituents to the EPA default soil screening limits (SSLs); however, Sections B.2.1 (Background) and B.2.4 (Modeling Parameters) indicate the 95% upper confidence level (UCL) was used to represent the soil concentration. Please revise Appendix B to clarify the values used for the source zone concentrations in the Tier I screening.

   Response: Agree

   The source concentrations used in the modeling exercise were the 95% upper confidence level (UCL). However, in cases where the 95% UCL were not available (or could not be ascertained), the maximum detected concentrations were used. The following text will be added to Appendix B, Section B.2.1, Background as the 2nd sentence in the last paragraph and as a footnote for Table B-5:

   "<u>The maximum detected concentrations were used when the 95% UCL could not be estimated for certain constituents.</u>"

   Text will also be added to Appendix B, Section B.2.2, Screening Methods, as the third sentence of the second paragraph:

   "<u>USEPA default SSLs are calculated for the Tier I screen, which are then compared to the 95% UCL or maximum concentrations of all detected constituents.</u>"

   Responsible Party: Rohit Goswami, (803) 989-5383, Rohit.goswami@srs.gov

4. The specific Regional Screening Levels (RSLs) used to screen for constituents of potential concern (COPCs) are not discussed in the RI/BRA. For example, it is unclear which target hazard quotient (THQ) was used for the RSLs (i.e., 0.1 or 1). As shown in Appendix B (Contaminant Fate and Transport Modeling) Table B-1 (Chemical Parameters Used for Screening), the RSL for di-n-butyl phthalate uses the RSL with a THQ of 1.0 (i.e., 900 micrograms/liter [ug/L] instead of 90 ug/L), but this is not explained in Appendix B. In addition, Section B.2.5 (Results of the Tier I and Tier II Analyses) and Table B-1 indicate that di-n-octyl phthalate does not have a RSL or Maximum Contaminant Level (MCL), but there is a Tapwater RSL for this compound in the November 2024 RSL tables. It is also noted that the RSLs for butylbenzyl phthalate and diethyl phthalate as presented in Table B-1 are inconsistent with the November 2024 Tapwater RSLs. Please revise the RI/BRA to discuss the specific RSLs used for all screening procedures and ensure the RSLs for di-n-octyl

phthalate, butylbenzyl phthalate, and diethyl phthalate are consistent with the most recent Tapwater RSLs.

Response: Agree

Contaminant migration (CM) analyses are completed at SRS using the VZCOMML© spreadsheet model following Protocol CM-1, *Contaminant Migration Vadose Zone Contaminant Migration Multi-Layered Model*, of the EC&ACP Regulatory Document Handbook. For CM analyses, the maximum contaminant level (MCL) is used for screening and the regional screening level (RSL) with a target hazard quotient (THQ) of 1.0 is used when an MCL is not available. A note will be added to Table B-1 as shown at the end of these comment responses and the following text will be added to Section B.2.4, Modeling Parameters, last paragraph as the 3rd sentence:

"The RSLs used were for the resident tap water with a target hazard quotient (THQ) of 1.0."

The intent of the CM analysis is to use the most up to date published USEPA RSL values at the time of document preparation. For the Automotive Repair Shop (716-A) CM analysis, the November 2024 revision of USEPA RSLs were used in the VZCOMML© spreadsheet model, which are the latest values published by USEPA. However, after reviewing the November 2024 USEPA RSL Generic Summary Table for THQ of 1.0, there were four discrepancies noted in the VZCOMML© CM analysis. The four constituents are butylbenzyl phthalate, diethyl phthalate, di-n-octyl phthalate, and lead. Table B-1 was revised with the correct values and is provided at the end of these responses. The VZCOMML© spreadsheet model was rerun with the correct values to verify there are no changes to the CM analysis conclusions. Based on the rerun results that are provided in the updated Table B-5, there were no impacts to the CM analysis conclusions. The updated Table B-5 is shown at the end of this document. Table B-6 *Travel Time and Groundwater Concentrations for Analytes without MSL/RSL* will be removed from the Revision 1 document.

Responsible Party: Rohit Goswami, (803) 989-5383, Rohit.goswami@srs.gov

5. The results of the human health risk assessment (HHRA) presented on Table C-1 (Preliminary Human Health Risk/Hazard Calculation for Spray Paint Room Remnant Concrete Slab) have not been calculated properly. The issues are as follows: 1) arsenic is not evaluated as a noncarcinogen, leading to an underestimate of site hazards; and 2) lead is not screened or assessed correctly. The average soil lead concentration should be screened against the Regional Screening Level (RSL) of 200 milligrams per kilogram (mg/kg) and if lead is found to be in exceedance, then modeling (using the Integrated Exposure Uptake Model (IEUBK) for the residential scenario and the Adult Lead Model (ALM) for the

industrial exposure) should be performed to determine whether the blood lead level (BLL) is increased above background. Please revise the HHRA to add the noncarcinogenic hazard calculation for arsenic and report the correct hazard index (HI), remove lead from the hazard index, and perform modeling as discussed, if warranted.

Response: Clarification.

As discussed in Appendix C-1, the risk assessment for the remnant concrete slab was performed in the Decommissioning Project Final Report (DPFR) and concluded there were no problems warranting remedial action to human receptors. As agreed to by the USEPA, SCDES and USDOE at the June 2025 scoping meeting, the strategy for the RI/BRA was not to conduct a new baseline risk assessment with preliminary screening, but rather, use the information and conclusions from the DPFR and provide a risk update by applying current EC&ACP risk evaluation protocols and methodology to verify that the conclusion of the DPFR risk assessment are still valid.

The conclusions of the human health risk evaluation reported in the DPFR were verified in the RI/BRA document by applying the approved EC&ACP risk protocols and November 2024 USEPA RSLs to the maximum detected concentration of each constituent in the Spray Paint Room (Appendix B of the DPFR; WSRC 2005a). Per the SRS protocol (HH-1, *Sources of Human Health Screening Values*), RSLs for concrete media are adjusted to ten times (10x) the soil RSLs. SRS agrees that arsenic was not evaluated as a noncarcinogen in the DPFR so only the carcinogenic risk for arsenic was verified in the RI/BRA. However, the contribution of the noncarcinogenic hazard estimate for arsenic based on the November 2024 RSLs would still result in an HI <1 for the Spray Paint Room remnant slab for both the residential and industrial receptors.

In accordance with the EC&ACP protocols, the November 2024 residential RSL for lead of 2.00E+02 was adjusted to 2.00+03 for concrete media. The updated residential scenario had a noncarcinogenic HI = 0.95 and cancer TCR = 4.1E-07. It is important to note that the maximum concentration of lead (1.54E+1 mg/kg) does not exceed either the soil or adjusted concrete RSL and further modeling is not warranted.

There were no substantive changes for arsenic or lead that would impact the conclusion of the HHRA. The updated risk evaluation confirmed the conclusions of the DPFR that there are no problems warranting action for human receptors at the Automotive Repair Shop (716-A) OU remnant concrete slab.

No changes to the document are proposed.

Responsible Party: Sadika O'Quinn, (803) 952-6697, sadika.oquinn@srs.gov

6. The HHRA is not a baseline risk assessment. EPA defines "baseline" risks as risks that might exist if no remediation or institutional controls were applied at a site (RAGS; EPA 1989). For this Automotive Repair Shop (716-A) OU site, the concrete slab data underpinning the HHRA were final verification data post-decommissioning samples. Further, the HHRA does not consider risks from exposure to the subsurface soil collected beneath the Automotive Repair Shop storm sewer lines or soils collected from the 103 Lubrication Pit Area to which receptors could potentially be exposed. Therefore, please rename this evaluation as an HHRA Update and not a Baseline Risk Assessment and revise the name wherever it appears.

   Response: Clarification.

   The title of the document that includes the baseline risk assessment term is part of the Federal Facility Agreement appendices and will not be changed. However, the 1st paragraph in Appendix C, Baseline Risk Assessment, Section C-1 will be revised to explain that the evaluation is an update to the risk assessment reported in the DPFR as follows:

   "The human health risk assessment (HHRA) in support of the Remedial Investigation Report with Baseline Risk Assessment (BRA) for the Automotive Repair Shop (716-A) Operable Unit (OU) ~~is~~ presented in this appendix~~. The evaluation contained herein assesses~~ is not the initial baseline risk assessment for the Spray Paint Room remnant concrete slab. Rather, this evaluation provides an update to the human health risk assessment reported in the *Decommissioning Project Final Report 716-A, Automotive Repair Shop* (WSRC 2005a) to assesses the risks of contamination to human receptors to identify the problems warranting action from a human health standpoint and support subsequent remediation as deemed necessary."

   Responsible Party: Sadika O'Quinn, (803) 952-6697, sadika.oquinn@srs.gov

7. The EPA guidance documents which underpin the HHRA are not presented in either the text or the references section. Please revise the HHRA accordingly.

   Response: Clarification.

   The guidance documents for conducting the update to the human health risk are provided in the *Environmental Compliance and Area Completion Projects Regulatory Document Handbook*, SRNS-RP-2022-00330, Revision 0, which is included in the list of references in Section 7.0 References and Appendix C, Human Health Risk Assessment.

   No changes to the document are proposed.

   Responsible Party: Sadika O'Quinn, (803) 952-6697, sadika.oquinn@srs.gov

8. The data used for the HHRA (i.e., concrete slab data) are not reproduced in the HHRA with summary tables. As a result, the concentration data shown on Table C-1 (Preliminary Human Health Risk Calculations for Spray Paint Room Remnant Concrete Slab) cannot be verified. Please revise Appendix C to include pertinent data tables.

   Response: Clarification.

   As documented in Table C-1, footnote 1, the maximum detected concentrations used in the update to the human health risk assessment were obtained directly from the Decommissioning Project Final Report (DPFR), Appendix B. The intent of the risk assessment update was not to reproduce the original data set, but rather to update the risk conclusions of the DPFR.

   No changes to the document are proposed.

   Responsible Party: Sadika O'Quinn, (803) 952-6697, sadika.oquinn@srs.gov

9. The risk management range of 1E-06 to 1E-04 from the National Contingency Plan (NCP), by which risk assessments are determined to be within acceptable limits, is not mentioned in Appendix C. Please revise the HHRA to discuss the NCP risk management range, and also include it in Section C-4, References.

   Response: Agree.

   The following sentence will be added as the 2nd sentence in Section C-3, Summary/Conclusion of the Human Health Risk Assessment:

   "The risk from the updated HHRA are within acceptable limits and did not exceed the risk management range of 1E-06 to 1E-04 from the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300.430(e)(2)(i)(A)(*2*))."

   The following reference will be added to Appendix C:

   USEPA, 1990 (and subsequent amendments). U.S. Environmental Protection Agency, *National Oil and Hazardous Substances Pollution Contingency Plan*, 40 CFR 300.430(e)(2)(i)(A)(*2*), https://www.ecfr.gov/current/title-40/part-300#p-300.430(e)(2)(i)(A)(2)

   Responsible Party: Sadika O'Quinn, (803) 952-6697, sadika.oquinn@srs.gov

10. The chromium species evaluated in the HHRA is not identified. It is standard practice to calculate risks based on the more toxic chromium species, Chromium VI (CrVI), and then apply a weight of evidence approach to evaluate whether CrVI is present on the site. Please

revise the HHRA to first calculate risks for chromium based on CrVI, and then recalculate the risks based on the less toxic form of chromium (i.e., CrIII), as appropriate.

Response: Agree.

Table C-1 was revised to use Chromium VI and a footnote was added denoting chromium VI was the chromium species used in the evaluation. Using the chromium VI RSL, the HH risks for the resident and industrial worker were recalculated accordingly and Table C-1 was revised. The updated hazard indexes for the resident and the industrial worker are HI=0.95 and HI=0.047, respectively. Text in section C-2.2 was revised. The revisions did not change the conclusions of the HHRA.

Responsible Party: Sadika O'Quinn, (803) 952-6697, sadika.oquinn@srs.gov

11. Cumulative carcinogenic risks were not presented as one significant figure. The use of limited significant figures is a standard practice that properly conveys the significant uncertainties involved in these estimates. Please revise text and tables to present individual pathway risks as two significant figures but cumulative risk as only one significant figure.

Response: Agree.

Table C-1, individual pathway risk will be revised to two significant figures, while cumulative risk will be revised to one significant figure. Revised Table C-1 is included at the end of this document and has also been revised in the Revision 1 document.

Responsible Party: Sadika O'Quinn, (803) 952-6697, sadika.oquinn@srs.gov

SPECIFIC COMMENTS

1. **Executive Summary, Page ES-3 of ES-6:** According to this section, the RI and the baseline human health risk assessment (BRA) determined, "…there is no risk to human health and the environment at the Automotive Repair Shop (716-A) Operable Unit. There are no human health, ecological, principal threat source material, or contaminant migration constituents of concern, and the Automotive Repair Shop (716-A) supports unrestricted land use;" however, human health risks were not evaluated for the 103 Lubrication Pit Area soils in the event that the remnant concrete slab is removed, and therefore, unrestricted land use is not supported. Additionally, although not part of the OU and being addressed under a Resource Conservation and Recovery Act (RCRA) permit, the groundwater is contaminated, which also precludes the unrestricted land use designation. Please revise the Executive Summary to remove the reference to unrestricted land use.

Response: Clarification.

Please see Response to General Comment #5. While the groundwater beneath the OU is contaminated, the source of the groundwater contamination is upgradient of the Automotive Repair Shop (716-A) OU. As stated in the document, groundwater for the area is being addressed by the A/M Groundwater OU. Therefore, in terms of land use specific to the Automotive Repair Shop (716-A) OU, unrestricted land use remains appropriate for the source unit based on the sampling results and risk assessment evaluation.

The following text will be added to the Executive Summary to explain why a human health risk assessment was not warranted for the 103 Lubrication Pit Area soils per agreement with the Core Team at the June 2025 scoping meeting:

"As agreed to by the Core Team during the June 2025 scoping meeting, the deactivation and decommissioning final verification survey data was sufficient to support the update of the risk evaluation and no additional data was needed. The investigative data collected beneath the Automotive Repair Shop (716-A) for subsurface soils (all depths) per the Work Plan characterization supports the contaminant migration and principal threat source material analyses."

Responsible Party: Sadika O'Quinn, (803) 952-6697, sadika.oquinn@srs.gov

2. **Section 2.3.7, Potential Receptors (Human Health), Page 2-6 of 2-16:** There are two issues associated with this section. First, this section states, "Complete exposure pathways to potential human receptors for evaluation in this document are potentially [sic] industrial workers exposed to deep soil (Figure 2-8);" however, the HHRA does not evaluate any risks from exposure to soil, only concrete. Further, it is uncertain why an industrial worker described in this scenario would be exposed to deep soils (according to Section 2.3.5, Exposure Media, these are soils down to a depth of 167 feet below ground surface). The HHRA states in Appendix C, Section C-1.3 (Receptors) that the future industrial worker evaluated in the HHRA is referred to as a "composite worker" by EPA, yet EPA defines the composite worker as, "…a long-term receptor exposed during the work day who is a full-time employee working on-site and spends most of the workday conducting maintenance activities outdoors. The activities for this receptor (e.g., moderate digging, landscaping) typically involve on-site exposure to surface soils." Thus, this statement is contradictory to the HHRA. Additionally, Figure 2-8 (Preliminary Conceptual Site Model [CSM]) does not depict any complete exposure pathways from any exposure medium for industrial workers. Please revise this section to correct these errors by removing any discussion of exposure to soils so that the text matches what is shown on the CSM.

   Response: Clarification

Since the SRS risk assessment protocols do not evaluate human receptor exposure to subsurface soils, further evaluation was needed to account for potentially highly toxic source material (i.e., principal threat source material [PTSM] at depth that would result in unacceptable risk should exposure occur. In accordance with EC&ACP protocols and discussed in further detail in Appendix D, a quantitative determination of whether contamination exists above PTSM levels in the soil in all depths is performed for the industrial worker. For clarity, the last sentence in Section 2.3.7 will be revised as follows:

"Complete exposure pathways to potential human receptors for evaluation in this document are potentially industrial workers exposed to ~~deep~~ all soils should excavation activities occur. The PTSM evaluation addresses exposure to potentially highly toxic source material at all depths (Figure 2-8)."

In addition, Figure 2-8 (Preliminary Conceptual Site Model) will be corrected to show a complete exposure pathway for the industrial worker at all depths.

Responsible Party: Sadika O'Quinn, (803) 952-6697, sadika.oquinn@srs.gov

3. **Figure 2-8, Preliminary Conceptual Site Model for the 716-A Automotive Repair Shop, Page 2-14 of 2-16, and Figure 3-3, Refined Conceptual Site Model for the 716-A Automotive Repair Shop, Page 3-13 of 3-14:** There are several issues associated with these two CSM figures, as follows:
    - Figure 2-8: The legend shows two different symbols that are both representative of incomplete exposure pathways (dash = "Incomplete exposure pathway" and cross/filled circle at the center = "Incomplete exposure pathway for quantitative evaluation");
    - Figure 2-8: The concrete slab does not have an arrow connecting it to a secondary release mechanism;
    - Figure 3-3: As mentioned previously, the excavation of deep soils is not a relevant pathway for an industrial worker; and
    - Figure 3-3: There is a gap between the under building soil Secondary Source arrow and the arrow to the Exposure Route (i.e., there is no secondary release mechanism or exposure medium shown – if these categories are not relevant, then the arrows should be joined).

    Please revise these figures to remove one of the symbols for incomplete exposure pathways, include an arrow from the concrete pad (secondary source) to the concrete slabs (secondary release mechanism) in Figure 2-8, and correct Figure 3-3 as described.

    Response: Agree.

Figure 2-8 will be modified as follows:

- **The footnote for "Incomplete exposure pathway for quantitative evaluation" will be deleted.**
- **An arrow from Concrete Pad to Concrete Slabs will be added to the CSM.**

Additionally, the extra arrows will be removed in Figures 2-8 and 3-3.

The corrected CSMs are included at the end of this document.

Since the SRS risk assessment protocols do not evaluate human receptor exposure to subsurface soils, further evaluation was needed to account for potentially highly toxic source material (i.e., PTSM at depth that would result in unacceptable risk should exposure occur. In accordance with EC&ACP protocols and discussed in further detail in Appendix D, a quantitative determination of whether contamination exists above PTSM levels in the soil in all depths is performed for the industrial worker and included in Figure 3-3.

Responsible Party: Sadika O'Quinn, (803) 952-6697, sadika.oquinn@srs.gov

4. **Section 3.8.2, Automotive Repair Shop (716-A) Characterization and Data Summary, Page 3-7 of 3-14:** The text does not discuss the deviation from the RI Work Plan at boring ARS-006-SB, where samples could not be collected from the first 21 feet of the boring. The text states that the five locations beneath the drain lines and/or sewer lines that include ARS-006-SB were continuously cored to a depth of 57 feet and samples collected every 5 feet; however, no soil samples were collected from the first 21 feet at ARS-006-SB and the four samples were distributed throughout the remaining core as indicated in Section 3.2 (Site Characterization and Data Usability). Please revise Section 3.8.2 to note this deviation in the samples collected at ARS-006-SB.

   Response: Agree.

   The following text will be added as the 5th sentence in the 1st paragraph in Section 3.8.2:

   "…Samples were collected from continuous soil cores from each boring, and lithologic descriptions were recorded. <u>The one exception was at location ARS-006-SB, where no samples were collected from the first 6 m (21 ft) of the boring due to poor soil core recovery.</u> Rotosonic sample collection was used …"

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

5. **Section 3.8.3, Automotive Repair Shop (716-A) Nature and Extent of Contamination, Page 3-7 of 3-14, and Appendix A, Investigation Data/Data Summary Tables, Table A.2-2, Unit Specific Constituent Screening Table Automotive Repair Shop (716-A) OU Soil**

(All Depths), Page A-8 of A-8: One of the unit-specific constituents (USCs) in Section 3.8.3 is listed as "butyl(2-ethylhexyl)phthalate" but Table A.2-2 does not include this compound and identifies butyl benzyl phthalate instead. Please revise Section 3.8.3 and Table A.2-2 to consistently identify the USCs.

Response: Agree.

In section 3.8.3, Automotive Repair Shop (716-A) Nature and Extent of Contamination, 1st paragraph, 5th sentence, "butyl (2-ethylhexyl) phthalate" will be replaced with "butyl benzyl phthalate". Tables A.2-1 and A.2-2 list the contaminants correctly.

Responsible Party: Sadika O'Quinn, (803) 952-6697, sadika.oquinn@srs.gov

6. **Appendix A, Investigation Data/Data Summary Tables, Table A.2-1, Data Summary Table Automotive Repair Shop (716-A) OU Soil (All Depths) and Table A.2-2, Unit Specific Constituent Screening Table Automotive Repair Shop (716-A) OU Soil (All Depths), Pages A-7 to A-8 of A-8:** It is unclear why the 95% UCLs listed in each table are inconsistent. For example, the 95% UCL for arsenic is 7.39 milligrams/kilogram (mg/kg) in Table A.2-1 and 6.52 mg/kg in Table A.2-2. Please revise Appendix A to consistently present the 95% UCLs or explain the difference in values presented in each table, including justification for which values should be used in the contaminant migration analysis.

   Response: Agree

   A draft version of the Table A.2-1 was inadvertently placed in the document. The correct Table A.2-1 will be added to the document and is included at the end of this document.

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

7. **Appendix B, Contaminant Fate and Transport Modeling, Table B-5, Tier I Screening Results for the Automotive Repair Shop (716-A) OU, Page B-31 of B-34:** It is unclear why antimony and cadmium are included in this table. Section B.2.1 (Background) states that only the 31 USCs are included in the contaminant migration analysis (i.e., those identified in Table A.2-2, Unit Specific Constituent Screening Table Automotive Repair Shop [716-A] OU Soil [All Depths]). According to Table A.2-2, the antimony and cadmium results were less than two times the SRS mean background value. Please revise Appendix B to clarify why antimony and cadmium are included in Table B-5 or remove these constituents from the Tier I screening.

   Response: Agree

   Antimony and Cadmium have been excluded from the Tier I screening and removed from both Tables B-1 and B-5.

Responsible Party: Rohit Goswami, (803) 989-5383, Rohit.goswami@srs.gov

8. **Appendix B, Contaminant Fate and Transport Modeling, Table B-5, Tier I Screening Results for the Automotive Repair Shop (716-A) OU, Pages B-31 to B-32 of B-34:** Multiple contaminants exceed the Tier I Mass Limit SSL (e.g., benzo[b]fluoranthene, aluminum, etc.), but this is not noted or discussed in the text. Please revise the text of Appendix B to discuss these exceedances.

   Response: Clarification

   Tier I screening criteria is stated in Section B.2.4: *An analyte was retained as a Tier I CM COPC if the source zone concentration was greater than both the Tier I Source-Specific SSL and the Tier I MLSSL*. Even though some constituents exceed the MLSSL, they do not exceed the Source-Specific SSL. Therefore, no Tier I CM COPCs were identified in the analysis.

   No changes to this document are proposed.

   Responsible Party: Rohit Goswami, (803) 989-5383, Rohit.goswami@srs.gov

9. **Appendix C, Human Health Risk Assessment, Section C-1.2, Data, Page C-9 of C-20:** This section states that sixteen sample locations were obtained and analyzed for RCRA metals, and nine samples were collected for volatile organic compound (VOCs) analysis, and the references given for the data are Figures 1-3 and 1-4, respectively; however, these two figures are photographs of the site, and it is uncertain whether the references in text are intended to be sample locations (Figures 1-5 and 1-6) or another type of figure (e.g., aerial site maps containing data tables). Please revise this section to provide the correct figures and/or references.

   Response: Agree.

   The reference to Figures 1-3 and 1-4 will be modified to Figures 1-5 and 1-6 in Section C-1.2. Data, 1st paragraph, 2nd and 3rd sentence.

   Responsible Party: Sadika O'Quinn, (803) 952-6697, sadika.oquinn@srs.gov

10. **Appendix C, Human Health Risk Assessment, Table C-1, Preliminary Human Health Risk/Hazard Calculation for Spray Paint Room Remnant Concrete Slab, Page C-15 of C-20:** This table does not cite the concentration units (i.e., mg/kg or micrograms per kilogram (µg/kg), as appropriate). Please revise the table accordingly.

    Response: Agree.

The units (mg/kg) for Table C-1 will be added to the table. Table C-1 is included at the end of this document.

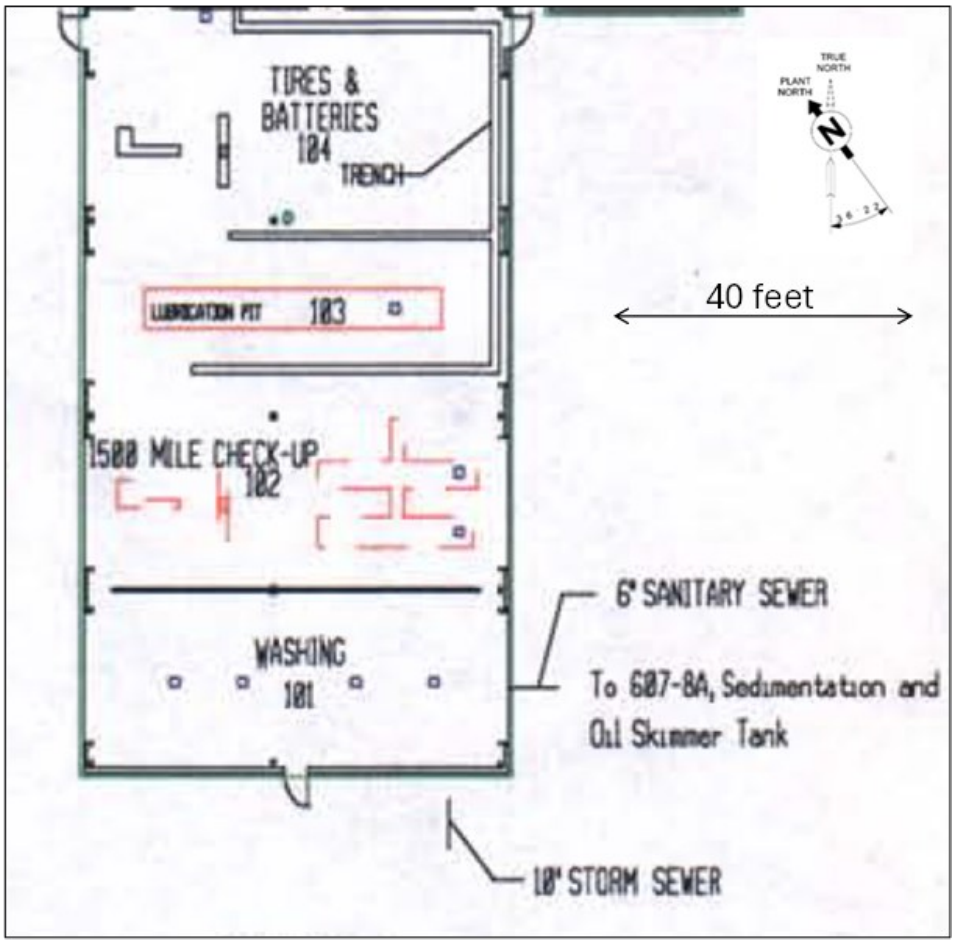
Responsible Party: Sadika O'Quinn, (803) 952-6697, sadika.oquinn@srs.gov

MINOR COMMENTS

1. **Figure 2-2, South End Floor Plan of Building 716-A, Page 2-8 of 2-16:** This figure is missing a north arrow and scale measurement. Please revise Figure 2-2 to include a north arrow and scale.

   Response: Agree.

   A north arrow and scale measurement will be added to Figure 2-2.

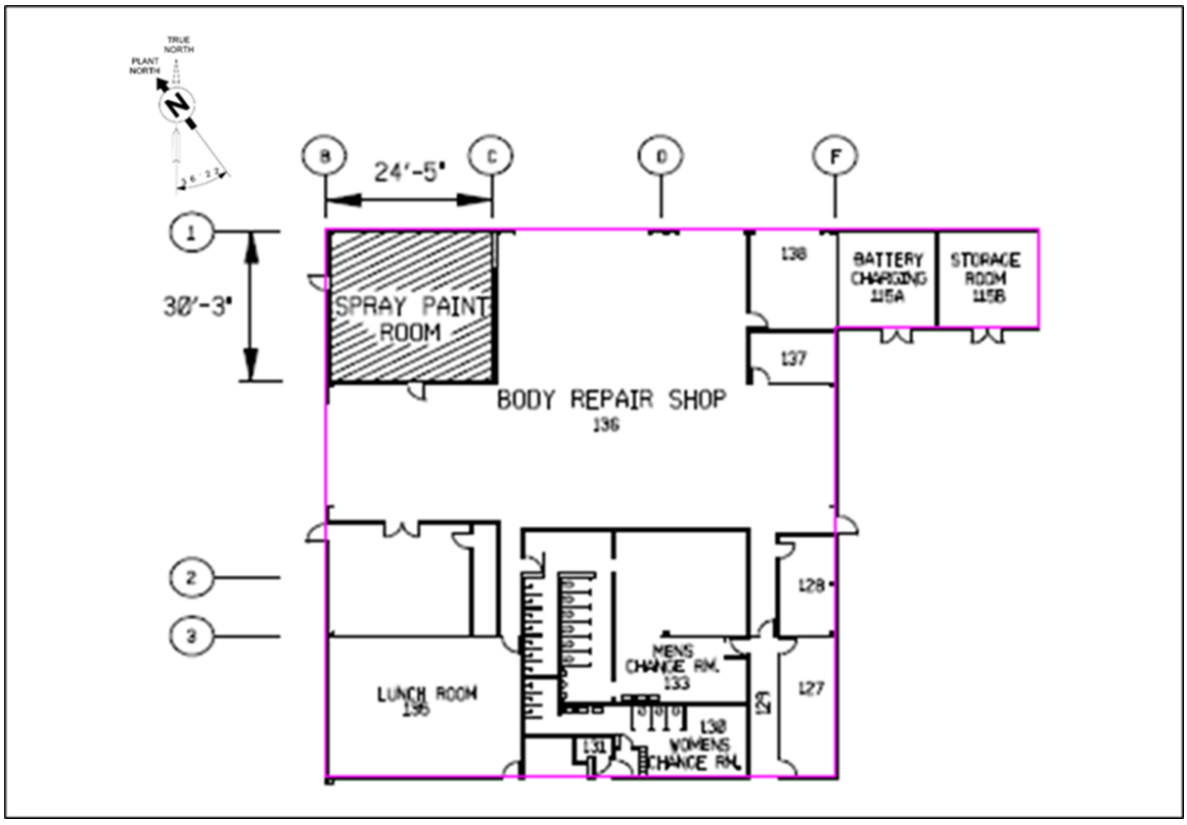


Responsible Party: Bryce Garner, (803) 952-7801, bryce.garner@srs.gov

2. **Figure 2-3, Northwest Corner Floorplan of Building 716-A, Page 2-9 of 2-16:** The north arrow direction shown on this figure is inconsistent with the true north as shown on the other figures. Please revise Figure 2-3 to clarify the north direction shown is the northern end of the plant and depict the directional north to be consistent with the other figures.

Response: Agree.

A north arrow, consistent with other figures, will be added to Figure 2-3.



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

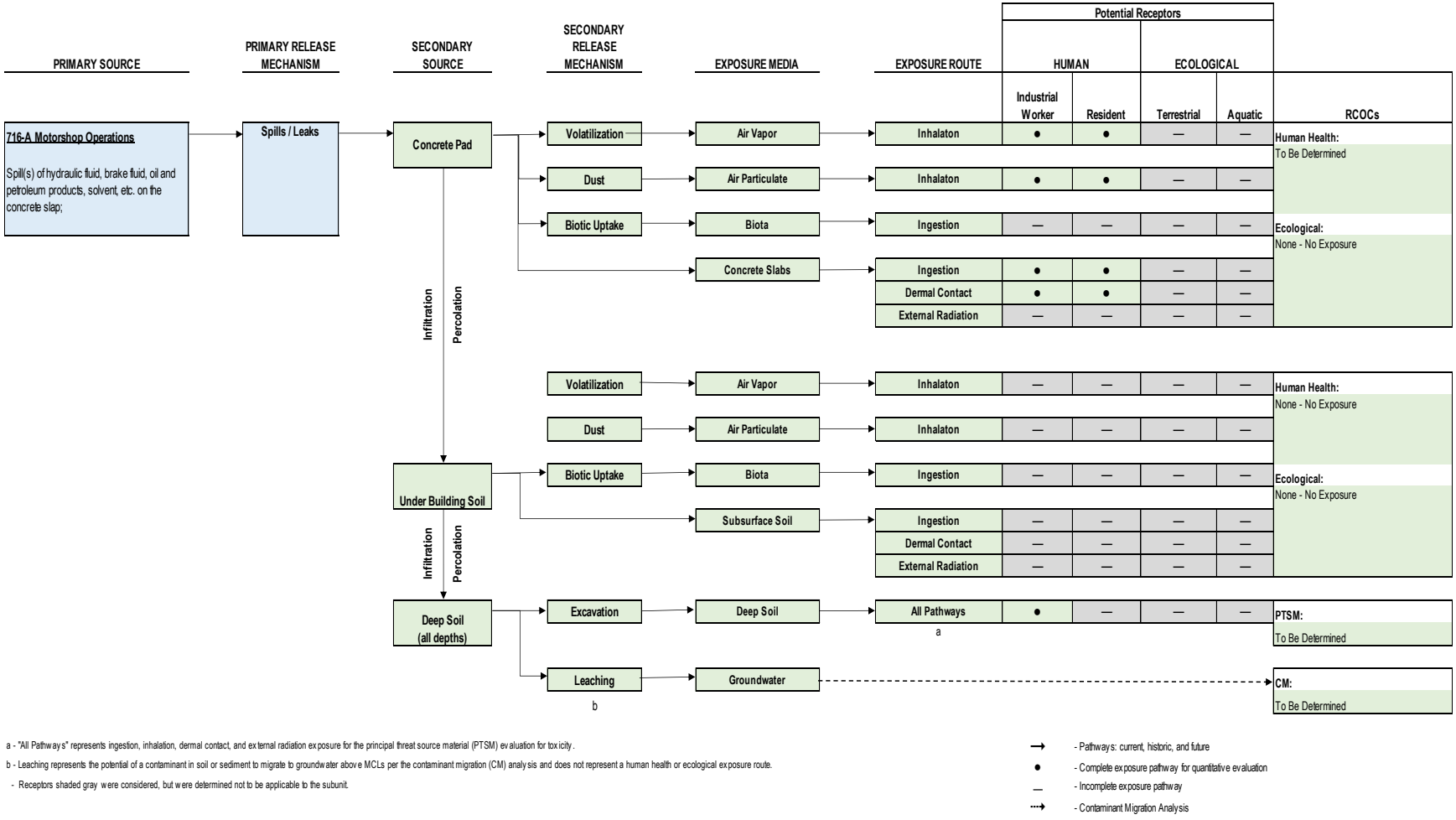


Figure 2-8. Preliminary Conceptual Site Model for the 716-A Automotive Repair Shop

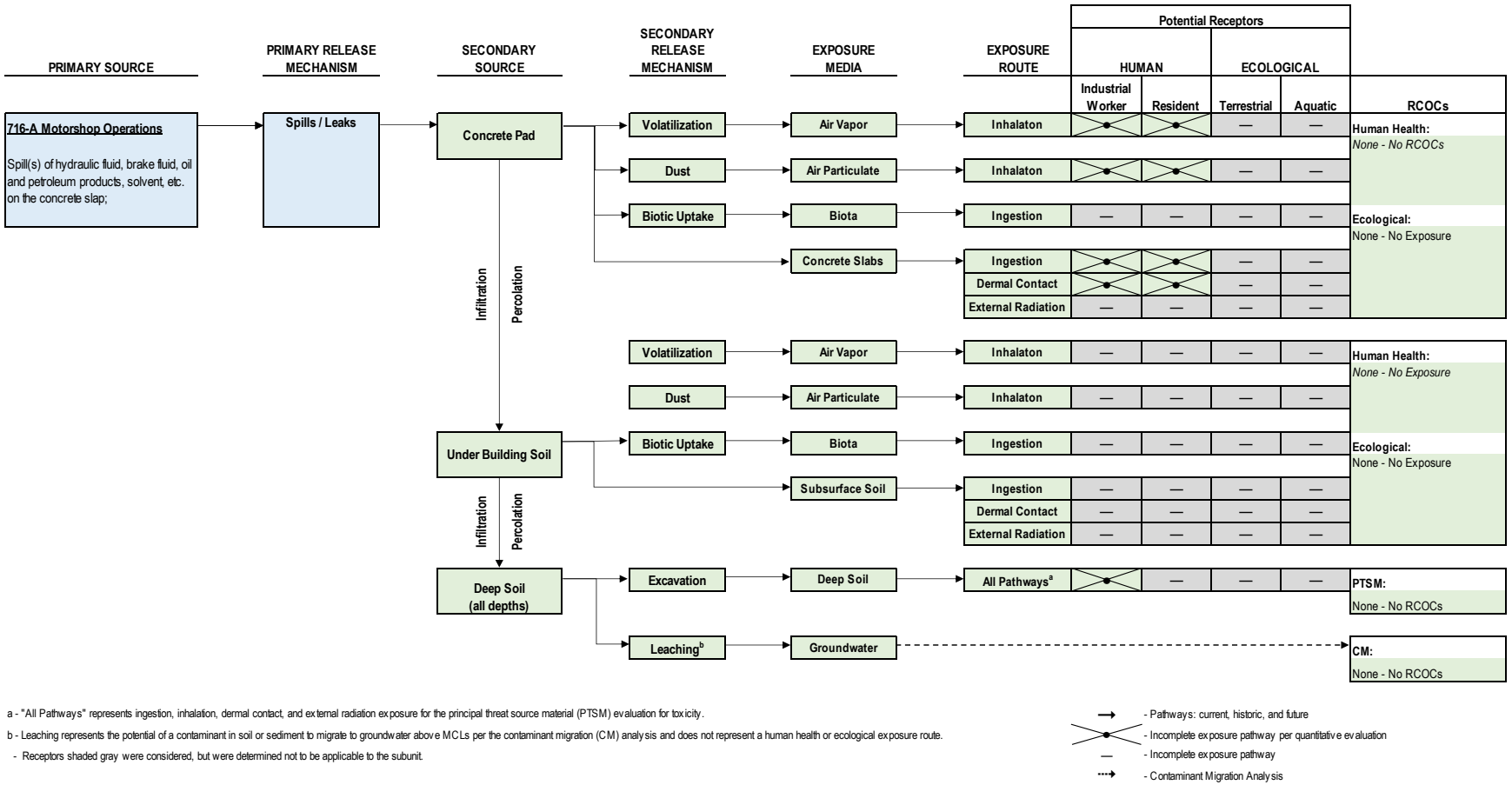


Figure 3-3. Refined Conceptual Site Model for the 716-A Automotive Repair Shop

SRS Responses to U.S. Environmental Protection Agency
Comments on the
Remedial Investigation with Baseline Risk Assessment for the Automotive Repair Shop (716-A) Operable Unit (U),
SEMS Number: 62, SRNS-RP-2025-00719, Revision 0, September 2025
Savannah River Site, South Carolina

Comments Received: November 20, 2025

Table A.2-1. Data Summary Table Automotive Repair Shop (716-A) OU Soil (All Depths)

Analyte Name	Units	Sample #	Detects	Non-Detects	J-Detects	Distr. Code	UCL Method	Mean	95%UCL	Max Result	Min	RME	Max Location	Qualifier of Max	Max Sample Date
Inorganics															
ALUMINUM	mg/kg	70	70	--	--	N	1	4.08E+03	4.82E+03	1.59E+04	4.78E+02	4.82E+03	ARS-005-SB		12/10/24
ANTIMONY	mg/kg	70	20	50	20	N	2	8.26E-01	5.20E-01	1.70E+00	3.47E-01	5.20E-01	ARS-004-SB	J	12/03/24
ARSENIC	mg/kg	70	60	10	20	N	2	6.40E+00	6.52E+00	2.30E+01	6.37E-01	6.52E+00	ARS-005-SB	J	12/10/24
BARIUM	mg/kg	70	70	--	7	N	1	1.14E+01	2.15E+01	4.16E+02	4.12E-01	2.15E+01	ARS-005-SB		12/09/24
BERYLLIUM	mg/kg	70	36	34	31	N	2	3.20E-01	2.62E-01	1.50E+00	1.05E-01	2.62E-01	ARS-005-SB		12/09/24
CADMIUM	mg/kg	70	4	66	4	N	2	1.19E-01	9.37E-02	1.47E-01	1.03E-01	9.37E-02	ARS-005-SB	J	12/09/24
CALCIUM	mg/kg	70	69	1	14	N	2	1.37E+02	2.03E+02	2.50E+03	1.04E+01	2.03E+02	ARS-006-SB		12/04/24
CHROMIUM	mg/kg	70	70	--	1	G	4	1.56E+01	1.87E+01	6.51E+01	7.78E-01	1.87E+01	ARS-004-SB		12/02/24
COBALT	mg/kg	70	36	34	28	N	2	8.12E-01	8.18E-01	1.40E+01	1.62E-01	8.18E-01	ARS-005-SB		12/09/24
COPPER	mg/kg	70	68	2	41	N	2	2.05E+00	2.26E+00	7.61E+00	3.43E-01	2.26E+00	ARS-005-SB		12/09/24
IRON	mg/kg	70	70	--	--	N	1	1.45E+04	1.65E+04	3.79E+04	1.01E+03	1.65E+04	ARS-003-SB		11/20/24
LEAD	mg/kg	70	69	1	11	N	2	4.98E+00	5.53E+00	1.66E+01	9.16E-01	5.53E+00	ARS-005-SB		12/09/24
MAGNESIUM	mg/kg	70	62	8	30	G	4	5.48E+01	6.60E+01	6.69E+02	8.95E+00	6.60E+01	ARS-005-SB		12/10/24
MANGANESE	mg/kg	70	70	--	2	G	8	2.22E+01	2.69E+01	7.53E+01	7.06E-01	2.69E+01	ARS-005-SB		12/09/24
MERCURY	mg/kg	70	29	41	25	N	2	2.23E-01	1.60E-01	9.77E-02	1.02E-02	9.77E-02	ARS-001-SB		11/21/24
NICKEL	mg/kg	70	60	10	28	N	2	9.31E-01	1.02E+00	6.40E+00	1.70E-01	1.02E+00	ARS-005-SB		12/09/24
POTASSIUM	mg/kg	70	55	15	24	G	8	4.63E+01	5.24E+01	3.82E+02	7.56E+00	5.24E+01	ARS-005-SB		12/10/24
SELENIUM	mg/kg	70	35	35	32	L	9	1.42E+00	1.24E+00	7.37E+00	5.17E-01	1.24E+00	ARS-005-SB	J	12/10/24
SILVER	mg/kg	70	27	43	23	L	9	2.91E-01	2.16E-01	1.11E+00	1.05E-01	2.16E-01	ARS-003-SB		11/20/24
SODIUM	mg/kg	70	21	49	19	N	2	1.67E+01	1.14E+01	7.42E+01	7.66E+00	1.14E+01	ARS-006-SB		12/04/24
THALLIUM	mg/kg	70	50	20	28	N	2	2.27E+00	2.06E+00	4.72E+00	6.42E-01	2.06E+00	ARS-004-SB		12/02/24
VANADIUM	mg/kg	70	70	--	--	G	8	3.59E+01	4.20E+01	1.06E+02	4.53E+00	4.20E+01	ARS-003-SB		11/20/24
ZINC	mg/kg	70	56	14	36	N	4	1.90E+00	2.00E+00	7.97E+00	3.89E-01	2.00E+00	ARS-005-SB	J	12/10/24
Organics															
ACETONE	mg/kg	70	23	47	15	N	4	4.04E-03	2.48E-03	8.76E-03	1.50E-03	2.48E-03	ARS-003-SB		11/20/24
BENZO[B]FLUORANTHENE	mg/kg	70	1	69	1	--	--	5.59E+00	--	1.17E-02	1.17E-02	1.17E-02	ARS-005-SB	J	12/09/24
BIS(2-ETHYLHEXYL)PHTHALATE (DEHP)	mg/kg	70	3	67	3	N	4	2.02E-02	1.13E-02	2.67E-02	1.66E-02	1.13E-02	ARS-005-SB	J	12/09/24
BUTYL BENZYL PHTHALATE	mg/kg	70	1	69	1	--	--	5.59E+00	--	1.46E-02	1.46E-02	1.46E-02	ARS-005-SB	J	12/09/24
DICHLOROMETHANE (METHYLENE CHLORIDE)	mg/kg	70	1	69	1	--	--	6.71E-01	--	1.89E-03	1.89E-03	1.89E-03	ARS-002-SB	J	11/19/24
DIETHYL PHTHALATE	mg/kg	70	1	69	1	--	--	5.59E+00	--	1.33E-02	1.33E-02	1.33E-02	ARS-005-SB	J	12/05/24
DI-N-BUTYL PHTHALATE	mg/kg	70	2	68	2	N	2	1.34E-02	1.05E-02	1.35E-02	1.32E-02	1.05E-02	ARS-005-SB	J	12/09/24
N-DIOCTYL PHTHALATE	mg/kg	70	1	69	1	--	--	5.59E+00	--	1.54E-02	1.54E-02	1.54E-02	ARS-005-SB	J	12/09/24
TOLUENE	mg/kg	70	1	69	1	--	--	1.34E-01	--	5.35E-04	5.35E-04	5.35E-04	ARS-002-SB	J	11/19/24
TRICHLOROETHYLENE (TCE)	mg/kg	70	1	69	--	--	--	1.34E-01	--	1.20E-03	1.20E-03	1.20E-03	ARS-005-SB		12/10/24

Distribution Code:
N - Normal Distribution G - Gamma Distribution
L - Lognormal Distribution X - Non-Parameric

UCL Method Code: (as determined by ProUCL)
1) Student's t UCL 2) Kaplan-Meier (KM) t UCL 3) Adjusted Gamma UCL
4) KM Approximate Gamma UCL 5) Hall's Bootstrap UCL 6) Land's H-Statistic (H) UCL
7) KM Adjusted Gamma UCL 8) 95% Approximate Gamma UCL 9) 95% H-UCL (KM-log)

ND: Non-Detect
RME: Reasonable Maximum Exposure
UCL: Upper Confidence Limit

Table B-1. Chemical Parameters Used for Screening

Analyte	K_{OC} *[L/kg]*	K_d *[L/kg]*	$T_{1/2}$ *[yr]*	H' *[-]*	S *[mg/L]*	Action Level[A] *[µg/L or pCi/L]*
Volatile Organic Analytes						
Acetone	2.20E+00	4.40E-03	1.90E-02	1.59E-03	1.00E+06	1.80E+04
Dichloromethane (Methylene chloride)	1.00E+01	2.00E-02	3.07E-01	8.98E-02	1.30E+04	5.00E+00
Toluene	1.40E+02	2.80E-01	6.00E-02	2.72E-01	5.26E+02	1.00E+03
Trichloroethylene	1.66E+02	3.32E-01	1.00E+01	4.22E-01	1.10E+03	5.00E+00
Semivolatile Analytes						
Benzo(b)fluoranthene	1.23E+06	2.46E+03	1.67E+00	4.55E-03	1.50E-03	2.50E-01
Bis(2-ethylhexyl) phthalate	1.11E+05	2.22E+02	6.30E-02	4.18E-06	3.40E-01	6.00E+00
Butylbenzyl phthalate	1.37E+04	2.74E+01	1.90E-02	5.17E-05	2.69E+00	~~3.5~~1.60E+01
Diethyl phthalate	8.22E+01	1.64E-01	1.54E-01	1.85E-05	6.80E+02	~~2.90~~1.5E+04
Di-n-butyl phthalate	1.57E+03	3.14E+00	6.30E-02	3.85E-08	1.12E+01	9.00E+02
Di-n-octyl phthalate	8.32E+07	1.66E+05	7.70E-02	2.74E-03	3.40E-01	2.0E+02~~NA~~
Metal Analytes						
Aluminum	NA	1.00E+03	Infinite	NA	NA	2.00E+04
~~Antimony (metallic)~~	~~NA~~	~~3.00E+03~~	~~Infinite~~	~~NA~~	~~NA~~	~~6.00E+00~~
Arsenic, Inorganic	NA	1.50E+02	Infinite	NA	NA	1.00E+01
Barium	NA	1.90E+01	Infinite	NA	NA	2.00E+03
Beryllium and compounds	NA	7.90E+02	Infinite	NA	NA	4.00E+00
~~Cadmium~~	~~NA~~	~~2.50E+01~~	~~Infinite~~	~~NA~~	~~NA~~	~~5.00E+00~~
Calcium	NA	1.25E+01	Infinite	NA	NA	NA
Chromium, Total	NA	7.00E+02	Infinite	NA	NA	1.00E+02
Cobalt	NA	7.00E+01	Infinite	NA	NA	6.00E+00
Copper, Total	NA	6.00E+01	Infinite	NA	NA	1.30E+03
Iron	NA	3.00E+02	Infinite	NA	NA	1.40E+04
Lead and compounds	NA	3.50E+03	Infinite	NA	NA	1.0~~5~~0E+01
Magnesium	NA	No Kd available	Infinite	NA	NA	NA
Manganese	NA	1.10E+02	Infinite	NA	NA	4.30E+02
Mercury (elemental)	NA	9.00E+02	Infinite	NA	NA	2.00E+00
Nickel Soluble Salts	NA	1.85E+01	Infinite	NA	NA	3.90E+02

Table B-1. Chemical Parameters Used for Screening *(continued/end)*

Analyte	K_{OC} *[L/kg]*	K_d *[L/kg]*	$T_{1/2}$ *[yr]*	H' *[-]*	S *[mg/L]*	Action Level[A] *[µg/L or pCi/L]*
Metal Analytes (continued/end)						
Potassium	NA	1.75E+01	Infinite	NA	NA	NA
Selenium	NA	1.00E+03	Infinite	NA	NA	5.00E+01
Silver	NA	2.00E+01	Infinite	NA	NA	9.40E+01
Sodium, total recoverable	NA	1.75E+01	Infinite	NA	NA	NA
Thallium Soluble Salts	NA	5.00E+01	Infinite	NA	NA	2.00E+00
Vanadium, total recoverable	NA	1.00E+03	Infinite	NA	NA	8.60E+01
Zinc (metallic)	NA	2.50E+01	Infinite	NA	NA	6.00E+03

A Action Level – The USEPA Regional Screening Level (RSL) was used when a MCL was not available. The RSLs used were for the resident tap water with a THQ of 1.0.
NA = Not Available; Red = MCL; Black = RSL Table on **www.epa.gov** website (November 2024 revision; accessed February 2025)

Table B-5. Tier I Screening Results for the Automotive Repair Shop (716-A) OU

Analyte	Source Zone Concentration[1]	Tier I Source-Specific SSL	Tier I Mass Limit SSL	Failing Analytes
	[mg/kg]			
Acetone	2.48E-03	5.90E+01	3.30E+01	
Dichloromethane (Methylene chloride)	1.89E-03	1.88E-02	9.15E-03	
Toluene	5.35E-04	9.19E+00	1.83E+00	
Trichloroethylene	1.20E-03	5.25E-02	9.15E-03	
Benzo(b)fluoranthene	1.17E-02	1.20E+01	4.58E-04	
Bis(2-ethylhexyl) phthalate	1.13E-02	2.60E+01	1.10E-02	
Butylbenzyl phthalate	1.46E-02	8.61E+00	3.27E-02	
Diethyl phthalate	1.33E-02	9.60E+01	3.06E+01	
Di-n-butyl phthalate	1.05E-02	5.81E+01	1.65E+00	
Di-n-octyl phthalate	1.54E-02	NA	NA	NA
Aluminum	4.82E+03	3.91E+05	3.66E+01	
~~Antimony (metallic)~~	~~5.20E-01~~	~~4.69E-02~~	~~1.1E-02~~	
Arsenic, Inorganic	6.52E+00	2.93E+01	1.83E-02	
Barium	2.15E+01	7.49E+02	3.66E+00	
Beryllium and compounds	2.62E-01	6.17E+01	7.32E-03	
~~Cadmium~~	~~9.37E-02~~	~~7.34E+00~~	~~9.15E-03~~	
Calcium	2.03E+02	NA	NA	NA
Chromium, Total	1.87E+01	1.37E+03	1.83E-01	

Table B-5. Tier I Screening Results for the 716-A OU *(continued/end)*

Analyte	Source Zone Concentration[1]	Tier I Source-Specific SSL	Tier I Mass Limit SSL	Failing Analytes
	[mg/kg]			
Copper, Total	2.26E+00	1.53E+03	2.38E+00	
Iron	1.65E+04	8.21E+04	2.56E+01	
Lead and compounds	5.53E+00	1.03E+03	2.75E-02	
Magnesium	6.60E+00	NA	NA	NA
Manganese	2.69E+01	9.25E+02	7.87E-01	
Mercury (elemental)	1.60E-01	3.52E+01	3.66E-03	
Nickel Soluble Salts	1.02E+00	1.42E+02	7.14E-01	
Potassium	5.24E+01	NA	NA	NA
Selenium	1.24E+00	9.77E+02	9.15E-02	
Silver	2.16E-01	1.66E+02	1.72E-01	
Sodium, total recoverable	1.14E+00	NA	NA	NA
Thallium Soluble Salts	2.60E+00	2.78E+00	3.66E-03	
Vanadium, total recoverable	4.20E+01	1.68E+03	1.57E-01	
Zinc (metallic)	2.00E+00	2.95E+03	1.10E+01	

1 - The maximum detected concentrations were used when the 95% UCL could not be estimated for certain constituents.

NA – Not Available, due to absence of Action Level as noted in Table B-1.

SRS Responses to U.S. Environmental Protection Agency
Comments on the
Remedial Investigation with Baseline Risk Assessment for the Automotive Repair Shop (716-A) Operable Unit (U),
SEMS Number: 62, SRNS-RP-2025-00719, Revision 0, September 2025
Savannah River Site, South Carolina

Comments Received: November 20, 2025

Table C-1. Preliminary Human Health Risk/Hazard Calculation for Spray Paint Room Remnant Concrete Slab

Analyte	Maximum Concentration[1]	Residential Scenario					Industrial Worker Scenario				
		Residential Soil RSL[2]	Noncarcinogenic Hazard Estimate		Carcinogenic Risk Estimate		Industrial Soil RSL[2]	Noncarcinogenic Hazard Estimate		Carcinogenic Risk Estimate	
			Residential Concrete RSL[3]	Residential HQ Estimate[4]	Residential Concrete RSL[3]	Residential Risk Estimate[5]		Industrial Concrete RSL[3]	Industrial HQ Estimate[4]	Industrial Concrete RSL[3]	Industrial Risk Estimate[5]
Arsenic	2.82E+00	6.80E-01	--	--	6.80E+00	4.1E-07	3.00E+00	--	--	3.00E+01	9.4E-08
Barium	4.87E+01	1.50E+04	1.5E+05	3.2E-04	--	--	2.20E+05	2.2E+06	2.2E-05	--	--
Cadmium	8.47E-01	7.10E+00	7.1E+01	1.2E-02	--	--	1.00E+02	1.0E+03	8.5E-04	--	--
Chromium	8.78E+00	9.50E-01	**9.5E+00**	**9.2E-01**	--	--	2.00E+01	**2.0E+02**	**4.4E-02**	--	--
Lead	1.54E+01	2.00E+02	2.0E+03	7.7E-03	--	--	8.00E+02	8.0E+03	1.9E-03	--	--
Mercury	1.73E-02	7.10E+00	7.1E+01	2.4E-04	--	--	3.00E+01	3.0E+02	5.8E-05	--	--
Selenium	4.21E+00	3.90E+02	3.9E+03	1.1E-03	--	--	5.80E+03	5.8E+04	7.3E-05	--	--
Silver	5.20E-02	3.90E+02	3.9E+03	1.3E-05	--	--	5.80E+03	5.8E+04	9.0E-07	--	--
2-Hexanone	1.64E-02	2.00E+02	2.0E+03	8.2E-06	--	--	1.30E+03	1.3E+04	1.3E-06	--	--
Acetone	7.03E-02	7.00E+04	7.0E+05	1.0E-07	--	--	1.10E+06	1.1E+07	6.4E-09	--	--
Benzene	6.81E-04	1.20E+00	--	--	1.20E+01	5.7E-11	5.10E+00	--	--	5.10E+01	1.3E-11
Ethylbenzene	3.03E-03	5.80E+00	--	--	5.80E+01	5.2E-11	2.50E+01	--	--	2.50E+02	1.2E-11
Methyl ethyl ketone	2.88E-02	2.70E+04	2.7E+05	1.1E-07	--	--	1.90E+05	1.9E+06	1.5E-08	--	--
Methyl isobutyl ketone	1.10E-02	3.30E+04	3.3E+05	3.3E-08	--	--	1.40E+05	1.4E+06	7.9E-09	--	--
Styrene	2.57E-03	6.00E+03	6.0E+04	4.3E-08	--	--	3.50E+04	3.5E+05	7.3E-09	--	--
Toluene	4.49E+00	4.90E+03	4.9E+04	9.2E-05	--	--	4.70E+04	4.7E+05	9.6E-06	--	--
Xylenes	8.67E-03	5.80E+02	5.8E+03	1.5E-06	--	--	2.50E+03	2.5E+04	3.5E-07	--	--
			Hazard Index (HI)	**9E-01**	Cumulative Risk	**4E-07**		Hazard Index (HI)	**5E-02**	Cumulative Risk	**9E-08**

1 – Maximum detected concentration from DPFR 716-A, Automotive Repair Shop, V=PCOR-A-00043, Appendix B (WSRC 2005).
2 – RSLs are default resident or industrial worker soil values from the *EPA Regional Screening Levels Table*, dated November 2024.
3 – RSLs for concrete media are ten time (10x) the soil RSLs.
4 – Hazard Estimate (HQ) = maximum concentration / concrete RSL concentration.
5 – Risk Estimate = (maximum concentration / concrete RSL concentration) x 1E-06.
6 – RSL for Chromium VI was used.

SPECIFIC COMMENTS

1. **Section 1.3.1, Previous Actions, pages 1-4 and 1-5 and Section 7.0, References, page 7-1.** There are some discrepancies/omissions of references between these two sections. The first paragraph of Section 1.3.1 mentions the FDE and DPFR for the Automotive Repair Shop, but no references to these documents are provided here. Section 7.0 lists a reference for the DPFR, but not for the FDE. Additionally, the second paragraph lists "WSRC 2005b" as a reference for the post-decommissioning final verification survey. This reference is not listed in Section 7.0. Finally, the last paragraph of Section 1.3.1 lists "SRNS 2024" as a reference to the approved RI Work Plan for the Automotive Repair Shop; however, Section 7.0 lists the reference to this document as "SRNS 2023a". Please correct these discrepancies.

   Response: Agree.

   The first paragraph of Section 1.3.1 will be revised to include the references for the FDE (WSRC 2005b) and the DPFR (WSRC 2005a).

   Section 7.0 will be revised to include a reference for the FDE and the Final Verification Survey. The references will be as follows:

   WSRC, 2005b. *Facility Decommissioning Evaluation Automotive Repair Shop, 716-A*, G-FDE-A-00039, Revision 1, Westinghouse Savannah River Company, Savannah River Site, Aiken, SC

   WSRC, 2005c. *Final Verification Survey for 716-A*, SDD-SAP-2005-00004, Revision 0, Westinghouse Savannah River Company, Savannah River Site, Aiken, SC

   Additionally, the titles of Figures 1-5 and 1-6 will be revised to reference "WSRC 2005c" instead of "WSRC 2005b".

   The reference to the approved RI Work Plan for the Automotive Repair Shop in Section 1.3.1 is correct. The reference to the approved RI Work Plan in Section 7.0 will be revised as follows:

   SRNS, ~~2023b~~2024. *Remedial Investigation Work Plan for the Automotive Repair Shop (716-A) Operable Unit*, SRNS-RP-2023-01234, Revision 1, Savannah River Nuclear Solutions, LLC, Savannah River Site, Aiken, SC

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

2. **Section 6.0, Implementation Schedule, page 6-1.** Please clarify if the last two deliverable items listed in the implementation schedule would be necessary with a "No Further Action" determination for this operable unit.

Response: Agree.

For a "No Further Action" determination, the last two deliverable items listed in the implementation schedule will not be required. The implementation schedule in Section 6.0 will be revised as follows:

Deliverable	Submittal Date
Submit Rev. 0, PP	July 14, 2026
Submit Rev. 0, ROD	January 10, 2027
Issuance of the ROD	September 21, 2027
~~Submit Rev. 0, Land Use Control Implementation Plan~~	~~June 22, 2028~~
~~Remedial Action Start~~	~~December 28, 2028~~

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

3. **Appendix A, Investigation Data/Data Summary Tables, Tables A.2-1 and A.2-2.** The 95% UCL values listed for most of the analytes in both of these tables differ from each other. It should be noted that the Contaminant Fate and Transport Modeling discussed in Appendix B uses the 95% UCL values listed in Table A.2-2. Please explain this discrepancy, and the reasoning for using the values listed in Table A.2-2 as opposed to those listed in Table A.2-1.

Response: Agree

A draft version of the Table A.2-1 was inadvertently placed in the document. The correct Table A.2-1 will be added to the document and is included at the end of this document.

The source concentrations used in the modeling exercise were the 95% upper confidence level (UCL). However, in cases where the 95% UCL were not available (or could not be ascertained), the maximum detected concentrations were used. The following text has been added to Appendix B, Section B.2.1, Background, last paragraph:

"<u>The maximum detected concentrations were used when the 95% UCL could not be estimated for certain constituents.</u>"

Responsible Party: Rohit Goswami, (803) 989-5383, rohit.goswami@srs.gov

4. **Appendix B, Contaminant Fate and Transport Modeling, Section B.2.1, Background.** The last sentence of this section discusses the use of VZCOMML as the method of completion for the CM analysis, but the following reference does not appear to exist or has not been cited properly. Please clarify the reference in question; and if one is determined to be needed, include it in Section 7.0 with the other references.

Response: Agree

A reference to the VZCOMML software (WSRC 2007) has been added to Appendix B, Section B.4 References, as shown below. Additionally, callouts to this reference have also been added to various sections in Appendix B as appropriate.

WSRC, 2007. *Vadose Zone Contaminant Migration Model- Multi-Layered Software© (VZCOMML©) Calculation Note and Documentation*, Q-CLC-G-00068, Washington Savannah River Company LLC, Savannah River Site, Aiken, SC

Responsible Party: Rohit Goswami, (803) 989-5383, rohit.goswami@srs.gov

SRS Responses to South Carolina Department of Environmental Services
Comments on the
Remedial Investigation with Baseline Risk Assessment for the Automotive Repair Shop (716-A) Operable Unit (U), SEMS Number: 62, SRNS-RP-2025-00719, Revision 0, September 2025
Savannah River Site, South Carolina

Comments Received: December 9, 2025

Table A.2-1. Data Summary Table Automotive Repair Shop (716-A) OU Soil (All Depths)

Analyte Name	Units	Sample #	Detects	Non-Detects	J-Detects	Distr. Code	UCL Method	Mean	95%UCL	Max Result	Min	RME	Max Location	Qualifier of Max	Max Sample Date
Inorganics															
ALUMINUM	mg/kg	70	70	--	--	N	1	4.08E+03	4.82E+03	1.59E+04	4.78E+02	4.82E+03	ARS-005-SB		12/10/24
ANTIMONY	mg/kg	70	20	50	20	N	2	8.26E-01	5.20E-01	1.70E+00	3.47E-01	5.20E-01	ARS-004-SB	J	12/03/24
ARSENIC	mg/kg	70	60	10	20	N	2	6.40E+00	6.52E+00	2.30E+01	6.37E-01	6.52E+00	ARS-005-SB	J	12/10/24
BARIUM	mg/kg	70	70	--	7	N	1	1.14E+01	2.15E+01	4.16E+02	4.12E-01	2.15E+01	ARS-005-SB		12/09/24
BERYLLIUM	mg/kg	70	36	34	31	N	2	3.20E-01	2.62E-01	1.50E+00	1.05E-01	2.62E-01	ARS-005-SB		12/09/24
CADMIUM	mg/kg	70	4	66	4	N	2	1.19E-01	9.37E-02	1.47E-01	1.03E-01	9.37E-02	ARS-005-SB	J	12/09/24
CALCIUM	mg/kg	70	69	1	14	N	2	1.37E+02	2.03E+02	2.50E+03	1.04E+01	2.03E+02	ARS-006-SB		12/04/24
CHROMIUM	mg/kg	70	70	--	1	G	4	1.56E+01	1.87E+01	6.51E+01	7.78E-01	1.87E+01	ARS-004-SB		12/02/24
COBALT	mg/kg	70	36	34	28	N	2	8.12E-01	8.18E-01	1.40E+01	1.62E-01	8.18E-01	ARS-005-SB		12/09/24
COPPER	mg/kg	70	68	2	41	N	2	2.05E+00	2.26E+00	7.61E+00	3.43E-01	2.26E+00	ARS-005-SB		12/09/24
IRON	mg/kg	70	70	--	--	N	1	1.45E+04	1.65E+04	3.79E+04	1.01E+03	1.65E+04	ARS-003-SB		11/20/24
LEAD	mg/kg	70	69	1	11	N	2	4.98E+00	5.53E+00	1.66E+01	9.16E-01	5.53E+00	ARS-005-SB		12/09/24
MAGNESIUM	mg/kg	70	62	8	30	G	4	5.48E+01	6.60E+01	6.69E+02	8.95E+00	6.60E+01	ARS-005-SB		12/10/24
MANGANESE	mg/kg	70	70	--	2	G	8	2.22E+01	2.69E+01	7.53E+01	7.06E-01	2.69E+01	ARS-005-SB		12/09/24
MERCURY	mg/kg	70	29	41	25	N	2	2.23E-01	1.60E-01	9.77E-02	1.02E-02	9.77E-02	ARS-001-SB		11/21/24
NICKEL	mg/kg	70	60	10	28	N	2	9.31E-01	1.02E+00	6.40E+00	1.70E-01	1.02E+00	ARS-005-SB		12/09/24
POTASSIUM	mg/kg	70	55	15	24	G	8	4.63E+01	5.24E+01	3.82E+02	7.56E+00	5.24E+01	ARS-005-SB		12/10/24
SELENIUM	mg/kg	70	35	35	32	L	9	1.42E+00	1.24E+00	7.37E+00	5.17E-01	1.24E+00	ARS-005-SB	J	12/10/24
SILVER	mg/kg	70	27	43	23	L	9	2.91E-01	2.16E-01	1.11E+00	1.05E-01	2.16E-01	ARS-003-SB		11/20/24
SODIUM	mg/kg	70	21	49	19	N	2	1.67E+01	1.14E+01	7.42E+01	7.66E+00	1.14E+01	ARS-006-SB		12/04/24
THALLIUM	mg/kg	70	50	20	28	N	2	2.27E+00	2.06E+00	4.72E+00	6.42E-01	2.06E+00	ARS-004-SB		12/02/24
VANADIUM	mg/kg	70	70	--	--	G	8	3.59E+01	4.20E+01	1.06E+02	4.53E+00	4.20E+01	ARS-003-SB		11/20/24
ZINC	mg/kg	70	56	14	36	N	4	1.90E+00	2.00E+00	7.97E+00	3.89E-01	2.00E+00	ARS-005-SB	J	12/10/24
Organics															
ACETONE	mg/kg	70	23	47	15	N	4	4.04E-03	2.48E-03	8.76E-03	1.50E-03	2.48E-03	ARS-003-SB		11/20/24
BENZO[B]FLUORANTHENE	mg/kg	70	1	69	1	--	--	5.59E+00	--	1.17E-02	1.17E-02	1.17E-02	ARS-005-SB	J	12/09/24
BIS(2-ETHYLHEXYL)PHTHALATE (DEHP)	mg/kg	70	3	67	3	N	4	2.02E-02	1.13E-02	2.67E-02	1.66E-02	1.13E-02	ARS-005-SB	J	12/09/24
BUTYL BENZYL PHTHALATE	mg/kg	70	1	69	1	--	--	5.59E+00	--	1.46E-02	1.46E-02	1.46E-02	ARS-005-SB	J	12/09/24
DICHLOROMETHANE (METHYLENE CHLORIDE)	mg/kg	70	1	69	1	--	--	6.71E-01	--	1.89E-03	1.89E-03	1.89E-03	ARS-002-SB	J	11/19/24
DIETHYL PHTHALATE	mg/kg	70	1	69	1	--	--	5.59E+00	--	1.33E-02	1.33E-02	1.33E-02	ARS-005-SB	J	12/05/24
DI-N-BUTYL PHTHALATE	mg/kg	70	2	68	2	N	2	1.34E-02	1.05E-02	1.35E-02	1.32E-02	1.05E-02	ARS-005-SB	J	12/09/24
N-DIOCTYL PHTHALATE	mg/kg	70	1	69	1	--	--	5.59E+00	--	1.54E-02	1.54E-02	1.54E-02	ARS-005-SB	J	12/09/24
TOLUENE	mg/kg	70	1	69	1	--	--	1.34E-01	--	5.35E-04	5.35E-04	5.35E-04	ARS-002-SB	J	11/19/24
TRICHLOROETHYLENE (TCE)	mg/kg	70	1	69	--	--	--	1.34E-01	--	1.20E-03	1.20E-03	1.20E-03	ARS-005-SB		12/10/24

Distribution Code:
N - Normal Distribution G - Gamma Distribution
L - Lognormal Distribution X - Non-Parameric

UCL Method Code: (as determined by ProUCL)
1) Student's t UCL 2) Kaplan-Meier (KM) t UCL 3) Adjusted Gamma UCL
4) KM Approximate Gamma UCL 5) Hall's Bootstrap UCL 6) Land's H-Statistic (H) UCL
7) KM Adjusted Gamma UCL 8) 95% Approximate Gamma UCL 9) 95% H-UCL (KM-log)

ND: Non-Detect
RME: Reasonable Maximum Exposure
UCL: Upper Confidence Limit