



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

**JAN 16 2025**

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 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:** Savannah River Site's Responses to the Regulatory Comments on the 2023 Annual Comprehensive TNX Area Groundwater Monitoring and Remedial Action Effectiveness Interim Report (U) (SRNS-RP-2024-00682, Revision 0, June 2024) SEMS Numbers: 21, 29

In accordance with the terms of the Federal Facility Agreement (FFA), the U.S. Department of Energy (DOE) is submitting the subject comment responses for your review. The U.S. Environmental Protection Agency's (EPA) and South Carolina Department of Environmental Services' (SCDES) comments were received on September 4, 2024, and October 18, 2024, respectively. This report will not be revised; however, all comment responses will be included in the next report, as applicable. Please review the enclosures and provide your approval within thirty (30) days from receipt. The effort and time that the EPA and the SCDES have provided on this operable unit are greatly appreciated.

Questions from you or your staff may be directed to me at (803) 952-7805, or the DOE Operable Unit Manager, Mr. Philip Prater, at (803) 952-9333.

Sincerely,

**AVERY  
HAMMETT**

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Avery G. Hammett  
FFA Project Manager, DOE-Savannah River Operations Office  
Remediation, Deactivation, and Decommissioning Division

RDDD-25-115

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Ms. Susan Fulmer  
Mr. Jon Richards

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Enclosures:

1. SRS Responses to the South Carolina Department of Environmental Services' Comments on the 2023 Annual Comprehensive TNX Area Groundwater Monitoring and Remedial Action Effectiveness Interim Report (U) (SRNS-RP-2024-00682, Revision 0, June 2024) SEMS Numbers: 21, 29
2. SRS Responses to the U.S. Environmental Protection Agency's Comments on the 2023 Annual Comprehensive TNX Area Groundwater Monitoring and Remedial Action Effectiveness Interim Report (U) (SRNS-RP-2024-00682, Revision 0, June 2024) SEMS Numbers: 21, 29

cc w/o encl:

M. Reece, SCDES-Columbia  
H. J. Porter, SCDES-Columbia  
J. Blalock, SCDES-Columbia  
S. French, SCDES-Columbia  
R. G. Stewart, SCDES-Columbia  
G. K. Taylor, SCDES-Columbia  
T. G. Corley, SCDES-Midlands Aiken Environmental Affairs Office  
G. O'Quinn, SCDES-Midlands Aiken Environmental Affairs Office  
E. G. Downing, SCDES-Midlands Aiken Environmental Affairs Office  
H. L. Herlong, SCDES-Midlands Aiken Environmental Affairs Office

cc w/ encl:

H. Cathcart, SCDES-Columbia  
M. McRae, TechLaw, Inc.

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**SPECIFIC COMMENTS**

1. Section 3.1.4.3, Cis-1,2-Dichloroethylene (cis-1,2-DCE), page 23 of 62. The second paragraph states that during the 4Q2023, cis-1,2-DCE was detected in eight monitoring wells. However, Table B-3, Groundwater Monitoring Results for TNX Area Wells, Fourth Quarter, 2023, indicates cis-1,2-DCE was detected in a total of nine monitoring wells. Please correct this discrepancy between the paragraph and the table.

**Response: Agree**

**The text in Section 3.1.4.3 incorrectly states that cis-1,2-DCE was detected in eight monitoring wells. Table B-3 correctly displays the 4Q2023 data for cis-1,2-DCE, showing nine detections. SRS will ensure these discrepancies are corrected in future reports.**

**No change to the 2023 TNX Area annual report is proposed.**

**Responsible Party: Adam Willey, (803) 646-4944, [adam.willey@srs.gov](mailto:adam.willey@srs.gov)**

2. Appendix F, Interim Results from the 2023-2024 Evaluation of the Soil Vapor Extraction System at the TNX Operable Unit. According to Table F-1 of the 2021 TNX Area Groundwater Report, twelve specific VOCs would be analyzed for during all sampling of the SVE Evaluation. Tables F-2 through F-5 of this report, which contain sampling data during the initial baseline, post-shutdown and high frequency sampling events, list only five of these for each SVE well. 1,1,1-Trichloroethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane, 1,1-Dichloroethylene, Chloroform, Toluene, Trans-1,2-Dichloroethylene, and Trichlorofluoromethane were not listed in these tables. Please provide an explanation for the omission of these seven VOC analytes.

**Response: Agree with Clarification**

**The 20 SVE evaluation wells were sampled according to the 2021 TNX Area Groundwater Report. VOC analyses included all analytes from Table F-1 of the 2021 report. Data reported for the 2023-2024 interim results of the SVE evaluation were intended to only include detections of VOC constituents of interest (tetrachloroethylene [PCE], trichloroethylene [TCE], cis-1,2-DCE, vinyl chloride [VC], and carbon tetrachloride [CCl<sub>4</sub>]). PCE, TCE, and CCl<sub>4</sub> are groundwater refined constituents of concern for the TNX Area OU. Cis-1,2-DCE and VC are intermediate constituents from PCE and TCE degradation that are monitored. Of the seven VOCs not included in reporting, 1,1,1-trichloroethane, 1,1,2-trichloro-1,2,2-trifluoroethane, 1,1-dichloroethylene, chloroform, and trans-1,2-dichloroethylene were not detected in any of the 103 samples collected. Toluene and trichlorofluoromethane were the only detected VOCs that were not reported.**

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In the 2023-2024 data, toluene was detected in one sample of 103 samples collected . The result was 0.0161 ppmv at TVX-004-L, which is slightly higher than the minimum detection limit (MDL) of 0.0102 ppmv. Trichlorofluoromethane was detected in six of 20 SVE wells and in 25 of 103 samples. At wells with detected trichlorofluoromethane concentrations (TVM-002-V, TVX-002-L, TVX-002-U, TVX-004-U, TVX-005-U, and TVX-007-U), results followed trends seen for TCE results in Figure F-5 through F-7. The final SVE evaluation will include all detected constituents in the results tables and will clarify in the text if there were analytes not reported due to no detections during sampling.

No change to the 2023 TNX Area annual report is proposed.

Responsible Party: Adam Willey, (803) 646-4944, [adam.willey@srs.gov](mailto:adam.willey@srs.gov)

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## GENERAL COMMENTS

1. It is unclear whether the potential sources of adjusted gross alpha exceedances are due to burial ground former radiological sources and/or are naturally occurring. The Report states that the adjusted gross alpha and combined radium detections were sporadic and likely represent naturally occurring radionuclides; however, based on the discussion of adjusted gross alpha exceedances that have not been correlating with radium-226 and excludes uranium, which indicates other alpha emitting radionuclides are likely contributing to the adjusted gross alpha activity. It is noted that the Report states if adjusted gross alpha starts to be more common, SRS will expand analysis in the wetland monitoring wells to include thorium and other alpha emitting radionuclides. *Please revise the Report to discuss if the adjusted gross alpha exceedances may be potentially due to burial ground former radiological sources.*

### Response: Clarification

Under the TNX Burial Ground (TBG), the historical exceedances of adjusted gross alpha tend to be co-located with elevated combined radium and low pH (i.e., < 5). Uranyl nitrates, nitric acid, and chlorinated solvents were disposed of in the TBG. Most of the waste associated with the TBG was excavated and removed; however, some was left in place based on accessibility near existing infrastructure. The remaining waste could be a potential source of adjusted gross alpha with the alpha emitting decay products of uranium (i.e., radium-226). It is also likely the low pH conditions caused by the nitric acid were leaching naturally occurring radium-226 from the vadose and aquifer sediments. Since the introduction of a pH buffer during the edible oil injections at the TBG, radium activity has decreased to below the maximum contaminant limit (MCL). The correlation between low pH and elevated combined radium is not observed in the fluvial sediments of the wetlands. Therefore, the elevated adjusted gross alpha concentrations observed in the wetland monitoring wells must be coming from another naturally occurring alpha emitting radionuclide (e.g., thorium series). Adjusted gross alpha activity is not consistently exceeding the MCL under the TBG or in the wetlands and there are no discernible and consistent radiologically contaminated groundwater plumes present in either location. In the wetland monitoring wells, SRS is prepared to expand sampling for additional alpha emitting radionuclides when adjusted gross alpha activity more consistently exceeds the MCL.

No change to the 2023 TNX Area annual report is proposed.

Responsible Party: Adam Willey, (803) 646-4944, [adam.willey@srs.gov](mailto:adam.willey@srs.gov)

2. The Report states that there are no discernible and consistent radiologically contaminated groundwater plumes present and therefore no remedial action is needed to address radiological contamination in groundwater; however, it is noted that an overall objective of the groundwater remedial action is to return groundwater to beneficial use. The Report states that institutional controls (ICs) (i.e., land use controls) are the agreed remedial action for the radionuclide

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contaminated groundwater; however, ICs alone as a remedy may not restore radionuclide contaminated groundwater to beneficial use. As such, it appears that further remedial action in addition to ICs might be warranted to return radiologically contaminated groundwater to beneficial use. *Please revise the Report to discuss additional potential remedial action that may be necessary to restore radionuclide contaminated groundwater to beneficial.*

**Response: Clarification**

**SRS does not believe there are consistent detections of any radionuclide constituents above MCLs that result in a discernible groundwater plume that would require additional remedial action. However, radiological constituents in TNX Area groundwater will continue to be monitored and reported in the TNX Area annual reports and in the Five-Year Remedy Review for Savannah River Site Operable Units with Operating Equipment. Any significant changes in contaminant levels that would require a recommendation for additional remedial action will be evaluated in the five year remedy reviews including Core Team discussions as needed. The most recent Five-Year Remedy Review for Savannah River Site Operable Units with Operating Equipment was issued in December 2023.**

For clarification, the text in Section 2.4.5 of future annual reports will be revised as follows:

**“... There are no discernible and consistent radiologically contaminated groundwater plumes present; therefore, institutional controls continue to be an appropriate remedial action. Radiological constituents in TNX Area groundwater will continue to be monitored and reported in this report and in the Five-Year Remedy Review for Savannah River Site Operable Units with Operating Equipment. Any significant changes in radiological activity that would require a recommendation for additional remedial action will be evaluated in the five year remedy reviews including Core Team discussions, as needed.”**

**No change to the 2023 TNX Area annual report is proposed.**

**Responsible Party: Adam Willey, (803) 646-4944, [adam.willey@srs.gov](mailto:adam.willey@srs.gov)**

3. The Report does not discuss the groundwater sampling process or procedure and how the samples were collected. In addition, the Report does not provide supporting documentation that would include sample collection procedures. *Please revise the Report to include text that discusses the process in which the groundwater samples were collected and provide the sampling procedures that were used.*

**Response: Clarification**

**Groundwater, surface water, and vapor sample collection from monitoring stations at the TNX Area are performed in accordance with the *ACP Programmatic Quality***

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*Assurance Project Plan for Environmental Data Collection and Management (ERD-AG-2005-00001) and administrative procedures (e.g., WSRC-C1, Administrative Procedure).* The sampling method details discussed in the programmatic quality assurance plan and validation process are normally referenced but not repeated in monitoring report documentation. For clarification, the text in future annual reports will include the above mentioned references as follows.

### “3.0 MONITORING AND REPORTING

All data reported in the TNX Area annual report conform to the approved *Area Completion Projects Programmatic Quality Assurance Project Plan for Environmental Data Collection and Management (SRNS 2012c)*. Groundwater, surface water, and vapor data is collected in support of monitoring at the TNX Area and is sent to SCDES certified laboratories for analyses. The data quality level for all monitoring stations and field duplicate samples is Verified and Validated (V&V) level data (SRNS 2012c and SRNS 2012d).”

The following reference documents will be added to future TNX Area annual reports.

“SRNS, 2012c. *Area Completion Projects Programmatic Quality Assurance Project Plan for Environmental Data Collection and Management, ERD-AG-2005-00001, Revision 5, Savannah River Nuclear Solutions, LLC, Savannah River Site, Aiken, SC*

SRNS, 2012d. *Analytical Data Validation Report (U), Area Completion Projects Administrative Procedures Manual C1, ER-AP-303, Revision 4, Savannah River Nuclear Solutions, LLC, Savannah River Site, Aiken, SC*”

No change to the 2023 TNX Area annual report is proposed.

Responsible Party: Adam Willey, (803) 646-4944, [adam.willey@srs.gov](mailto:adam.willey@srs.gov)

4. The current locations of the five MicroBlowers™ connected to TVM 1V, TVM 3V, TVM 4V, TVX004U, and TVX007U are not specifically identified on Figure A-10, Location of TNX Area SVE [Soil Vapor Extraction] Monitoring Well System. Although the wells are shown on the figure, the figure legend identifies these five MicroBlowers™ wells as soil vapor extraction (SVE) wells. *Please revise the Annual Report to identify the five current locations of the MicroBlowers™ on Figure A-10.*

#### Response: Agree with Clarification

MicroBlowers™ are connected to soil vapor extraction (SVE) wells at the TNX Area OU and are co-located (TVM 1V, TVM 3V, TVM 4U, TVX004U, and TVX007U). For clarification, a new symbol will be added to Figure A-10 in future annual reports to identify the SVE wells which are connected to MicroBlowers™. An example of the revised map is provided as Figure CR-1.

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No change to the 2023 TNX Area annual report is proposed.

Responsible Party: Adam Willey, (803) 646-4944, [adam.willey@srs.gov](mailto:adam.willey@srs.gov)

5. The Report does not discuss the data validation process or protocols. The Report does not provide supporting documentation that would include data validation procedure and validation packages. The text does not indicate percentage of data that was validated and the level of validation. Additionally, Section 3.2 (Evaluation of Field and Analytical Results) should briefly summarize the results of the data validation (e.g., whether there were rejections of any data, or significant data qualifications). *Please revise the Report to define the data validation process, include data validation packages as supporting documentation and revise Section 3.2 to briefly summarize the results of data validation.*

**Response: Agree with Clarification**

**Groundwater monitoring data reported for the TNX Area since 2005 have been Verified and Validated level data. A summary of the regular sample data collected during the reporting period for each annual report is provided in Appendix B Table B-1 through Table B-4. Field duplicate groundwater samples have also been collected. For ease of reporting the data, data qualifiers are presented on the table as color-coded cells with an explanation provided at the bottom of the table and further explanation of the data tables in Appendix C.**

**All data collected in support of monitoring at the TNX Area conform to the Savannah River Site Area Completion Projects Quality Assurance Project Plan for Environmental Data Collection and Management (ERD-AG-2005-00001). This document was developed in agreement with United States Environmental Protection Agency and South Carolina Department of Environmental Services to integrate all technical and quality aspects of environmental data collection and management to provide consistent data objectives and document the comprehensive set of standard operating procedures for sampling, analysis, quality assurance/quality control, and data review. Validation reports are typically not submitted with groundwater effectiveness monitoring reports. Additionally, the Environmental Compliance and Area Completion Projects (EC&ACP) organization has a series of administrative procedures (e.g., WSRC-C1, *Administrative Procedures*, ER-AP-125, *Soil and Groundwater Closure Projects Quality Assurance Program*) and technical memorandums that further define the requirements and responsibilities within the EC&ACP organization for implementation of the quality program.**

**SRS agrees that the annual reports should reference the programmatic quality assurance plan and validation process. For clarification, text will be added to future TNX Area annual reports as described in USEPA General Comment #3.**

No change to the 2023 TNX Area annual report is proposed.

Responsible Party: Adam Willey, (803) 646-4944, [adam.willey@srs.gov](mailto:adam.willey@srs.gov)

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**SPECIFIC COMMENTS**

1. **Section 2.4.2 Soil Vapor Extraction, Page 9 of 62:** The “U” and “L” horizon identifiers are defined in this section; however, the “V” identifier is not defined. In addition, the wells on Figure A-10 (Location of TNX Area SVE Monitoring Well System) have “V”, “U” and “L” in the identifications, but the definition of those identifiers are not provided in the figure. *Please revise the text to define all the screen horizons identifiers used in the SVE wells nomenclature as well as update Figure A-10 to define the identifiers in the legend.*

**Response: Agree with Clarification**

The 20 SVE wells are composed of two different well series, TVM and TVX. The TVM series of SVE wells were originally installed to monitor the airlift recirculation well TVR 1A but were converted for use as SVE wells. In the TVM series there are four screen designations used V, U, M, and L. The V and U screen designations are in the vadose zone while the M and L screen designations are in the aquifer. The M and L screen designations are not used for SVE. An exception is TVM 2L and TVM 4L, which were mistakenly connected to MicroBlowers™ between 2010 to 2014, so they will remain listed on Table 3-3. The “V” and “U” screen designations do not have consistent horizon designations, as the V screens are shallower than the U screens at TVM 2, TVM 3, and TVM 4 while it is reversed at TVM 1. Table 3-3 includes the total depth and screen length for each well.

The TVX series were installed specifically for SVE and have “U” and “L” screen designations which designate the upper and lower vadose zone horizons, respectively. TVX001 and TVX003 only have an “L” designation.

Text in the third paragraph of Section 2.4.2 will be revised in future TNX Area annual reports to provide this detail with a description of the screen designations. Figure A-10 will include a footnote to reference Section 2.4.2 screen designation descriptions.

No change to the 2023 TNX Area annual report is proposed.

Responsible Party: Adam Willey, (803) 646-4944, [adam.willey@srs.gov](mailto:adam.willey@srs.gov)

2. **Section 3.1.4.2 Trichloroethylene (TCE), Page 23 of 62:** The second paragraph states that the TCE concentration for well TNX 27D was 8.86 micrograms per liter (ug/L) during the fourth quarter 2023 (4Q2023), however Table B-3 Groundwater Monitoring Results for TNX Area Wells, Fourth Quarter, 2023 lists the TCE concentration for well TNX 27D as 6.33 ug/L. *Please revise the Report with the accurate TCE concentration for well TNX 27D for 4Q2023.*

**Response: Agree**

The TCE concentrations reported in the text was from 4Q2022 at monitoring well TNX 28D. The correct value for 4Q2023 at TNX 27D is 6.33 ug/L. SRS will ensure these

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discrepancies are corrected in future reports.

No change to the 2023 TNX Area annual report is proposed.

Responsible Party: Adam Willey, (803) 646-4944, [adam.willey@srs.gov](mailto:adam.willey@srs.gov)

3. **Section 3.1.4.11 Nitrate-Nitrite as Nitrogen (NO<sub>3</sub>/NO<sub>2</sub> as Nitrogen), Page 25 of 62:** The first paragraph states that Nitrate-Nitrite as Nitrogen results for samples TNX 28D and TNX 75D were above the maximum contaminant level (MCL) and the results were estimated, 25.8 milligrams per liter (mg/L) and 10.8 mg/L, respectively; however, the basis for the Nitrate-Nitrite as Nitrogen estimated results are unclear as they appear to be positive detections. According to Table B-1 (Groundwater Monitoring Results for TNX Area Wells, Second Quarter, 2023) all samples for Nitrate-Nitrite as Nitrogen (NO<sub>3</sub>/NO<sub>2</sub> as Nitrogen) for the second quarter 2023 (2Q2023) were estimated (i.e., J qualifier was applied to the result). *Please provide text that explains why all sample results were J qualified, estimated and how this impacts the data quality for the two positive results for samples TNX 28D and TNX 75D.*

**Response: Agree**

The nitrate-nitrite as nitrogen data was incorrectly qualified as estimated (“J” qualified) for multiple detections. Table CR-1 provides the correct nitrate-nitrite as nitrogen data and qualifiers for the 2Q2023 sampling event. The results at TNX 28D and TNX 75D were positive detections of 25.8 mg/L and 10.8 mg/L, respectively. SRS will ensure data is qualified correctly in future reporting.

No change to the 2023 TNX Area annual report is proposed.

Responsible Party: Adam Willey, (803) 646-4944, [adam.willey@srs.gov](mailto:adam.willey@srs.gov)

4. **Section 3.1.5.1 Dissolve Oxygen, Page 27 of 62:** The fifth bullet of the second paragraph presents dissolved oxygen (DO) sample results for TRW 4R that appear to be reversed for the 2Q2023 and 4Q2023 sample events. The text states in the 2Q2023 the DO concentration was 4.2 mg/L and was 4.1 mg/L in 4Q2023. However Table B-1 (Groundwater Monitoring Results for TNX Area Wells, Second Quarter, 2023) lists the DO result as 4.1 mg/L and Table B-3 Groundwater Monitoring Results for TNX Area Wells, Fourth Quarter, 2023 has the DO result listed as 4.2 mg/L. *Please revise the Report with the correct DO results for 2Q2023 and 4Q2023 for TRW 4R.*

**Response: Agree**

The text of the 2023 TNX Area annual report reversed the 2Q2023 and 4Q2023 results. The correct results for dissolved oxygen at TRW 4R were 4.1 mg/L in 2Q2023 and 4.2 mg/L in 4Q2023. SRS will ensure these discrepancies are corrected in future reports.

No change to the 2023 TNX Area annual report is proposed.

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Responsible Party: Adam Willey, (803) 646-4944, [adam.willey@srs.gov](mailto:adam.willey@srs.gov)

5. **Section 3.1.5.2 Nitrate, Page 28 of 62:** The fourth bullet of the first paragraph does not contain a well sample identification for the listed nitrate results. *Please revise the Report to include the well identification for the nitrate results presented in the bullet.*

**Response: Agree**

The nitrate data in the fourth bullet is for monitoring well TVM 1M, which was not in the text of the 2023 TNX Area annual report. SRS will ensure all monitoring wells are called out appropriately when reporting data in future TNX Area annual reports.

No change to the 2023 TNX Area annual report is proposed.

Responsible Party: Adam Willey, (803) 646-4944, [adam.willey@srs.gov](mailto:adam.willey@srs.gov)

6. **Section 3.1.5.2 Nitrate, Page 28 of 62:** There are inconsistencies with the years presented in the first 3 bullets of the first paragraph as they reference second and fourth quarters of the year 2024. *Please revise this section and bullets to correct the year from 2024 to 2023.*

**Response: Agree**

The bullets in this section incorrectly refer to quarters 2Q2024 and 4Q2024. The correct quarters are 2Q2023 and 4Q2023, respectively. SRS will ensure the correct quarters are referenced in future TNX Area annual reporting.

No change to the 2023 TNX Area annual report is proposed.

Responsible Party: Adam Willey, (803) 646-4944, [adam.willey@srs.gov](mailto:adam.willey@srs.gov)

7. **Section 3.1.5.3 Sulfate, Page 28 of 62:** The fourth bullet states that the concentration of Sulfate at well TRW 3 in 2Q2023 was 1.3 mg/L, however Table B-1 (Groundwater Monitoring Results for TNX Area Wells, Second Quarter, 2023) lists the concentration for TRW 3 as 55.1 mg/L. *Please revise the report with the correct 2Q2023 Sulfate concentration for well TRW 3.*

**Response: Agree**

The fourth bullet incorrectly reports the 2Q2023 sulfate concentration at TRW 3 as 1.3 mg/L. The correct result is 55.1 mg/L, as reported in Table B-1. SRS will ensure the correct data is reported appropriately in future TNX Area annual reports.

No change to the 2023 TNX Area annual report is proposed.

Responsible Party: Adam Willey, (803) 646-4944, [adam.willey@srs.gov](mailto:adam.willey@srs.gov)

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8. **Section 3.1.5.5 Oxidation Reduction Potential, Page 29 of 62:** The first paragraph states that since 2015, oxidation reduction potential (ORP) results at well TRW 3 have remained low [ $< 0$  millivolts (mV)], however the 2Q2023 ORP result for well TRW 3 was listed as 31 mV. *Please revise the Report to address this discrepancy that the ORP results have remained low ( $< 0$  mV) in well TRW 3.*

**Response: Agree**

ORP results at the five wells called out have remained below 0 mV for most samples since 2015, with a few sporadic exceptions. In the 2Q2023 sampling event, the only monitoring well with an ORP results above 0 mV was TRW 3 with an ORP of +31 mV. SRS will ensure the statements about ORP results are correct in future TNX Area annual reporting.

No change to the 2023 TNX Area annual report is proposed.

Responsible Party: Adam Willey, (803) 646-4944, [adam.willey@srs.gov](mailto:adam.willey@srs.gov)

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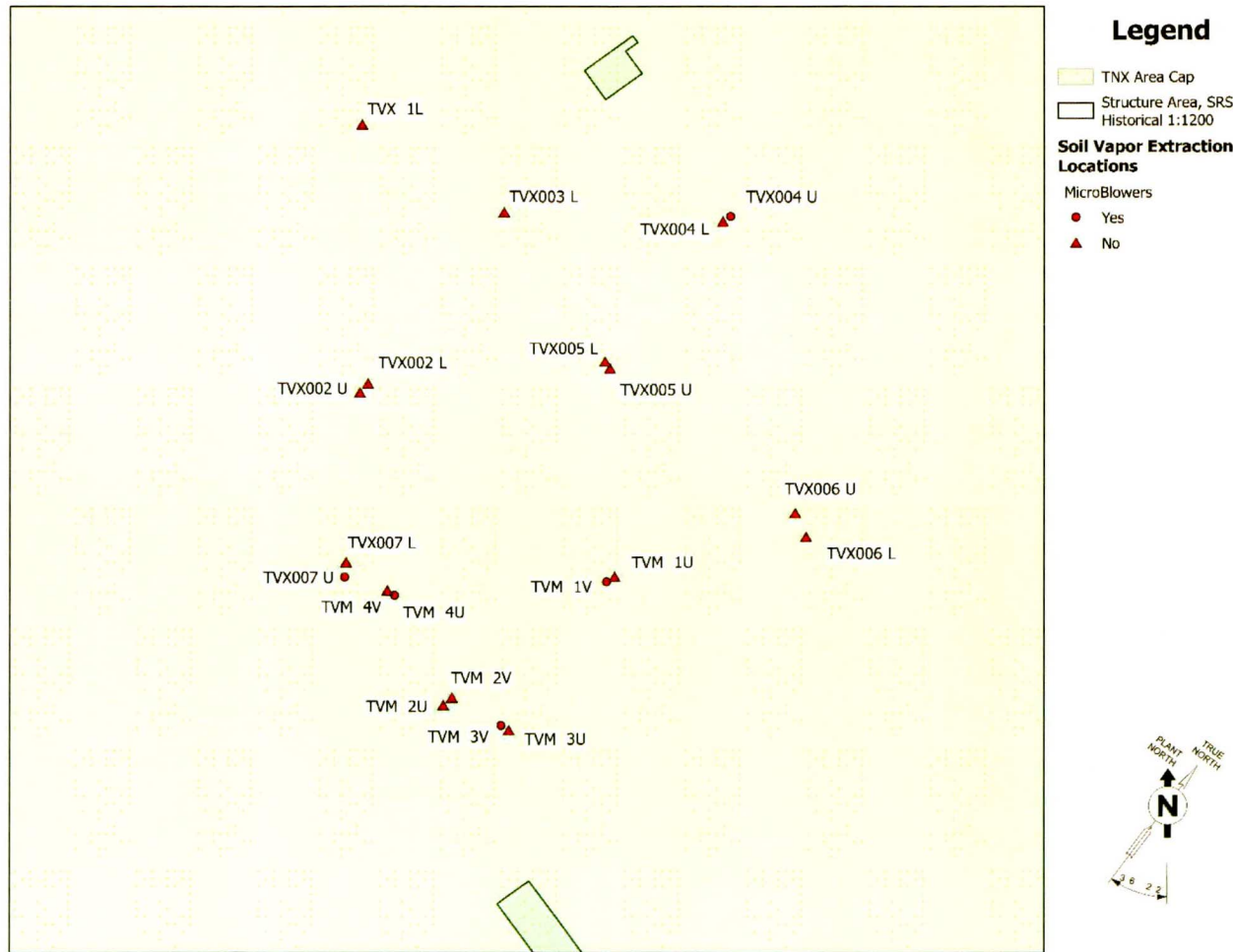


Figure CR-1. Revised Figure A-10 Showing SVE Well Locations and Connections to MicroBlowers™

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**Table CR-1. Corrected Nitrate-Nitrite as Nitrogen Results for 2Q2023**

Station ID	Sample Date	Result <sup>A</sup> [mg/L]	PQL [mg/L]	MDL [mg/L]	Qualifier <sup>B</sup>	Reason Code <sup>C</sup>
P 26A	5/24/2023	0.289	0.25	0.085		
P 26B	5/24/2023	0.32	0.25	0.085		
P 26D	5/24/2023	0.325	0.25	0.085		
TBG 3	5/22/2023	0.25	0.25	0.085	U	
TBG 4	5/22/2023	0.05	0.05	0.017	U	
TBG 5	5/22/2023	0.05	0.05	0.017	U	
TCM 5	5/25/2023	2.07	0.5	0.17		
TIR 1L	5/25/2023	0.25	0.25	0.085	U	
TIR 1M	5/25/2023	2	0.5	0.17		
TIR 1U	5/25/2023	2.97	0.5	0.17		
TNX 1D	5/25/2023	0.625	0.25	0.085		
TNX 3D	5/25/2023	0.25	0.25	0.085	U	
TNX 5D	5/25/2023	0.456	0.25	0.085		
TNX 8D	5/25/2023	0.25	0.25	0.085	U	
TNX 9D	5/25/2023	0.25	0.25	0.085	U	
TNX 11D	5/25/2023	0.25	0.25	0.085	U	
TNX 12D	6/4/2023	0.25	0.25	0.085	U	
TNX 13D	5/31/2023	0.316	0.25	0.085		
TNX 15D	5/31/2023	1.04	0.25	0.085		
TNX 16D	5/31/2023	0.227	0.05	0.017		
TNX 20D	5/31/2023	0.75	0.25	0.085		
TNX 22D	5/31/2023	0.094	0.05	0.017		
TNX 24D	6/4/2023	0.187	0.25	0.085	J	21
TNX 27D	6/4/2023	1.84	0.5	0.17		
TNX 28D	5/31/2023	25.8	5	1.7		

**SRS Responses to USEPA Comments on the 2023 Annual Comprehensive TNX Area Groundwater Monitoring and Remedial Action  
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Station ID	Sample Date	Result <sup>A</sup> [mg/L]	PQL [mg/L]	MDL [mg/L]	Qualifier <sup>B</sup>	Reason Code <sup>C</sup>
TNX 30D	5/31/2023	1.2	0.5	0.17		
TNX 35D	5/31/2023	0.0403	0.05	0.017	J	21
TNX 37D	6/4/2023	0.104	0.25	0.085	J	21
TNX 72D	5/22/2023	0.05	0.05	0.017	U	
TNX 72M	5/22/2023	0.125	0.05	0.017	J	V
TNX073D	5/24/2023	0.25	0.25	0.085	U	
TNX074D	5/24/2023	0.25	0.25	0.085	U	
TNX075D	5/24/2023	10.8	0.5	0.17		
TRW 1	5/31/2023	2.28	0.5	0.17		
TRW 2	5/31/2023	0.05	0.05	0.017	U	
TRW 3	5/31/2023	0.0293	0.05	0.017	J	21
TRW 4R	5/31/2023	0.0317	0.05	0.017	J	21
TVM 1M	5/31/2023	0.51	0.25	0.085		
TVM 2M	5/31/2023	0.419	0.25	0.085		
TVM 4M	5/31/2023	0.59	0.25	0.085		
TVR 1A	5/31/2023	0.0187	0.05	0.017	J	21
X-008-DW1	6/1/2023	0.685	0.25	0.085		
X-008-DW2	6/5/2023	0.342	0.05	0.017		
X-008-DW3	6/5/2023	0.259	0.05	0.017		
XSB006R	6/4/2023	3.17	0.5	0.17		

<sup>A</sup> Nitrate-nitrite as nitrogen results for second quarter of 2023.

<sup>B</sup> Qualifiers applied to the data are "U" for non-detected results and "J" for estimated results. Estimated Results have corresponding reason codes.

<sup>C</sup> Reason Code:

- 21 - Result is above detection but below PQL.
- V - The analyte was detected in the lab method blank.

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<b>Station ID</b>	<b>Sample Date</b>	<b>Result <sup>A</sup> [mg/L]</b>	<b>PQL [mg/L]</b>	<b>MDL [mg/L]</b>	<b>Qualifier <sup>B</sup></b>	<b>Reason Code <sup>C</sup></b>
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mg/L - milligram per liter  
PQL - practical quantitation limit  
MDL - minimum detection limit