Minor
OPERATION AND MAINTENANCE
Activity Plan

Exploratory Excavation and Repair of Process Water Leak at the Southeast Corner of Building 749-A
Site Index #387

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1. INTRODUCTION

This Operations and Maintenance (O&M) Plan is for excavation to explore and troubleshoot the process water line leak at the southeast corner of 749-A. The scope of work will include hand excavating to expose all known/unknown identified systems, commodities, or utilities (SCU's), continuation of hand digging or probing 6' on each side of the expected SCU or to the excavation buffer zone (whichever is less) and to a depth of 1 ft below the expected excavation or SCU, whichever is greater. Next, excavation will continue via mechanical means to uncover and identify the pipe and determine the deficiency. Once the source of the leak has been determined, a repair will be initiated. All work will be conducted while protecting human health and the environment and minimizing the impact to long term characterization and remediation efforts.

The Site Indices (SIs), also called RCRA/CERCLA Units, that are within 200 feet of the excavation has been identified as follows:

The excavation area on the southeast corner of 749-A is within 200 feet of SI #387 (Spill on 12/01/71 of 1000 Gal of Rad Water from SRNL), This SI is in the Assessment Phase.

This plan is characterized as "minor intrusive activity" based on the soil excavation meeting the definition of both "minor" and "intrusive" as defined in Reference 2.

2. AREA DESCRIPTION AND CONDITIONS

The area in which the activity will be conducted is in the northern drainage basin of NPDES-Permitted Industrial Wastewater Outfall A-01 which discharges to Tims Branch Creek. The location of the excavations is shown as the blue area in the drawing in Attachment 1, which also shows the nearby SIs as red areas. A photo of the physical location is provided in Attachment 4. There are numerous large structures in the A-01 drainage basin.

For a discussion of the SIs, see "Revision 0 for Appendix C for Fiscal Year 2021" of Reference 1. The location of the work is shown in the northern portion of the A-01 Outfall Map provided in Attachment 2 and on the aerial image in Attachment 3. The SIs listed above are identified in the, "WSRC-OS-94-42, Federal Facility Agreement" (FFA), because of possible radiological or chemical contamination from past releases from A-Area operations.

2. AREA DESCRIPTION AND CONDITIONS (cont.)

To date, there has been no remediation of the following units and the current status of the units is inactive. Per Appendix E of Reference 1, "Remedial Actions" (RA) are scheduled to begin in January 2040 for SI #387.

O & M ACTIVITY

A. O&M Activity Description

The scope of work will include hand excavating to expose all known/unknown identified systems, commodities, or utilities (SCU's), continuation of hand digging or probing 6' on each side of the expected SCU or to the excavation buffer zone (whichever is less) and to a depth of 1 ft below the expected excavation or SCU, whichever is greater. Next, construction will continue to excavate via mechanical means to uncover and identify the pipe and locate the source of the leak. Once the source of the leak has been determined, a repair will be initiated.

Work will be performed in accordance with the provisions of Asset Suite Work Order #01957870 - 01 (Reference 3) and Assisted Hazard Analysis (AHA) #AHA-SUD-20926, R0 (Reference 4). The activity is adjacent to one identified SI (#387). Work is expected to take no more than two weeks. A secondary AHA for repairs is TBD after commencement of the exploratory excavation.

Important Note:
Excavated soil will be used as backfill where possible. If excavated soils or if other material require disposal, they will be sent to Three Rivers Landfill after characterization and approval form the Site SME. If radiological contamination is identified during the soil sampling, the soil will be shipped to the Solid Waste Management Facility (SWMF) as Low-Level Waste (LLW) after characterization and subject to approval from SWMF.

B. O&M Activity Sampling and Monitoring for Health and Safety

The identified units are in the FFA because of possible radiological contamination from past releases from A-Area operations.

Radiological surveys will be required at the excavation site. If radiological contamination is encountered, Radiological Protection (RP) will determine if protective equipment and personnel access restrictions are required.

Worker health and safety will be directed and controlled as required in the Assisted Hazard Analysis (AHA).

C. Health and Safety Plan

The health and safety concerns involve worker exposure to potential radiological contamination. RP shall provide for radiological monitoring during the excavation activities.

The work will be completed in accordance with the requirements stated in the AHA. The safety requirements and personal protective equipment described in the AHA are appropriate for the potential hazards related to the RCRA/CERCLA units.

D. Characterization and Sampling Plan for the Affected Area within the Unit

A sampling plan for work in this area has been prepared, and RP will conduct sampling of the soil excavated during this activity. If unexpected contamination is found, the SRNS On-Scene Coordinator (OSC) may request additional work scope and sampling from soil disturbed by the activity.

E. Contaminated Materials Management and/or Disposal

Based on previous excavations in the vicinity, radiological contamination is not expected in the excavated soil. All waste will be disposed in accordance with guidance from RP, the Generation Certification Official (GCO), and the Environmental Compliance Authority (ECA).

F. Environmental Plans and Permit Modification Requests

This activity is not expected to involve other environmental plans / permits, required maintenance and inspections, or erosion control practices. Due to the nature of the activity, a Site Use permit is not required.

3. CONTINGENCY PLAN

During implementation of the activity, if the conditions change at any time such that the activity is no longer considered "Minor Activity" (as defined in Reference 2) or any other unanticipated event occurs, the Project Manager, the Project Construction Manager, or the ECA shall:

- Immediately notify the SRNS-OSC. If necessary, the SRNS-OSC will notify the DOE-OSC.
- Stop work, secure the area, contain, and stabilize the area, and determine any necessary change to the activity plan.
- Notify the SRNS-OSC of the findings and proposed path forward. The SRNS-OSC will communicate the information to the DOE-OSC and obtain concurrence on the path forward.

Minor Intrusive Operation and Maintenance Activity is defined as:
" Minor intrusive activities will have no (or minimal) impact to future investigation, characterization, or remediation, if required, of the unit, and impact less than 10% of the surface area, excluding structures. Examples include: excavating to repair a ruptured water main, excavating an area to accommodate service repairs or replacements, routing, or replacing a few pipelines or electrical services through a RCRA/CERCLA unit or SE area."

4. DOCUMENTATION & REPORTING

SRNL will transmit the following documentation to the SRNS-OSC within twenty days of the completion of the activity:

- The signed O&M plan
- Sampling and characterization data collected will be transmitted when completed.

The following information is not expected to be generated by this activity, but, if generated, will be forwarded to the SRNS-OSC:

- The quantity (if any) of any radioactively contaminated materials generated, and
- The disposal location of any radioactively contaminated material, if generated

Attachments

Attachment 1. Drawings Showing Approximate Locationof Excavations (Blue Area) and Nearby RCRA/CERCLA Units Site Indices (Red Areas)

Attachment 2. A-01 Outfall Drainage Map with location of 749-A

Attachment 3. Aerial Image Showing Location of Excavations (Red Outlined Area)

Attachment 4. Photo Showing Physical Location

References

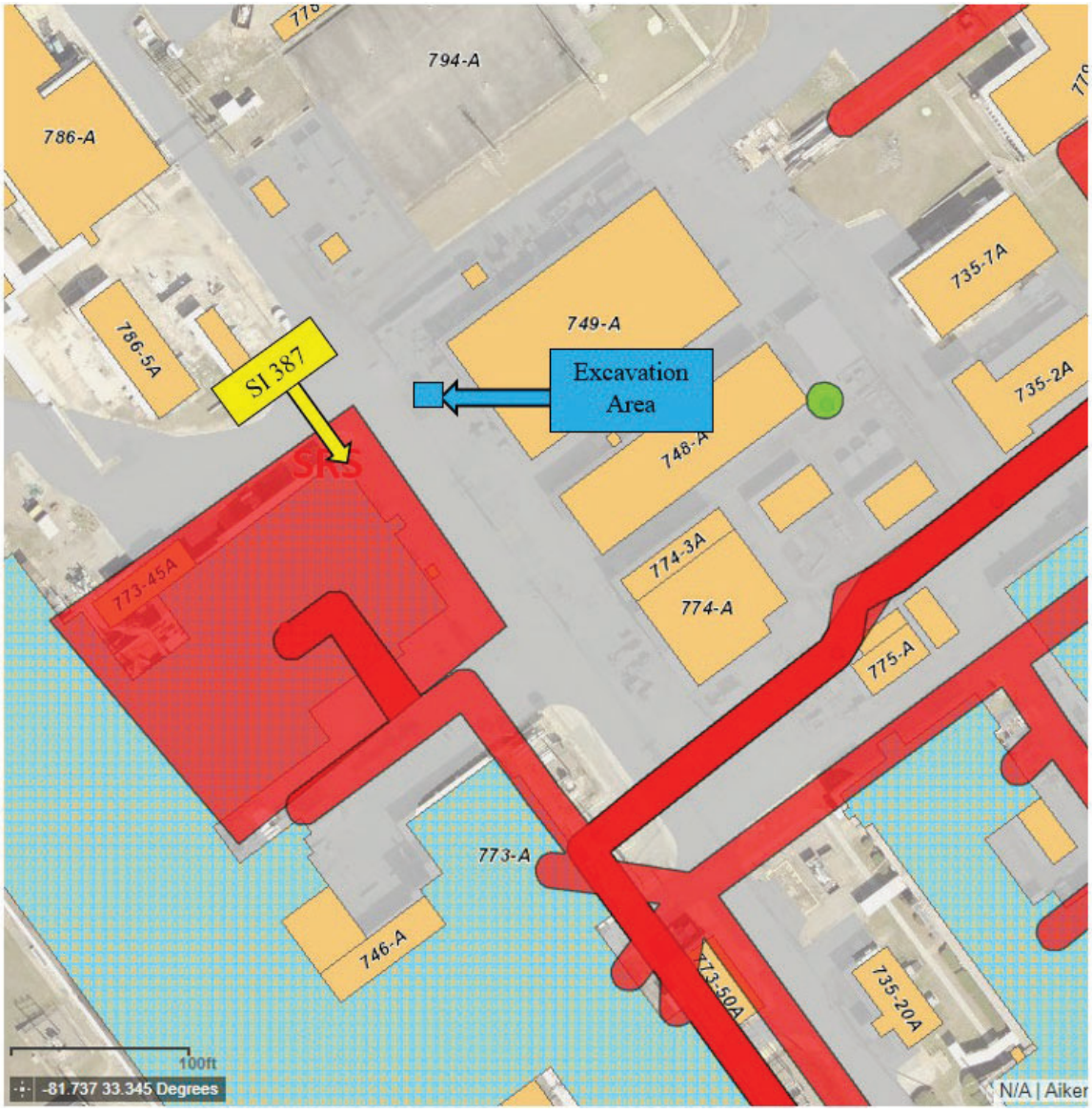
1. WSRC-OS-94-42, *Federal Facility Agreement for the Savannah River Site, Administrative Document Number 89-05-FF, effective August 16, 1993, Revision 0 of Appendix C and Revision 0 of Appendix E for Fiscal Year 2021.*

2. WSRC-RP-96-45, *Savannah River Site Plan for Performing Maintenance in Federal Facility Agreement Area (O&M) Plan (U), December 15, 1996.*

3. Assisted Hazard Analysis (AHA) # AHA-SUD-20928, R0, entitled "*Perform layout/GPR survey to support excavation needed to correct underground water leak Southeast of 749-A Maintenance Shop."* created by Wade Thomas, on 7/06/2022.

4. Asset Suite Work Order #01957870 - 01, entitled *"Exploratory Excavation to Troubleshoot Water Leak Near 749-A",* created by Wade Thomas, on 7/07/2022.

Attachment 1. Drawing Showing Approximate Location of Excavation (Blue Area)

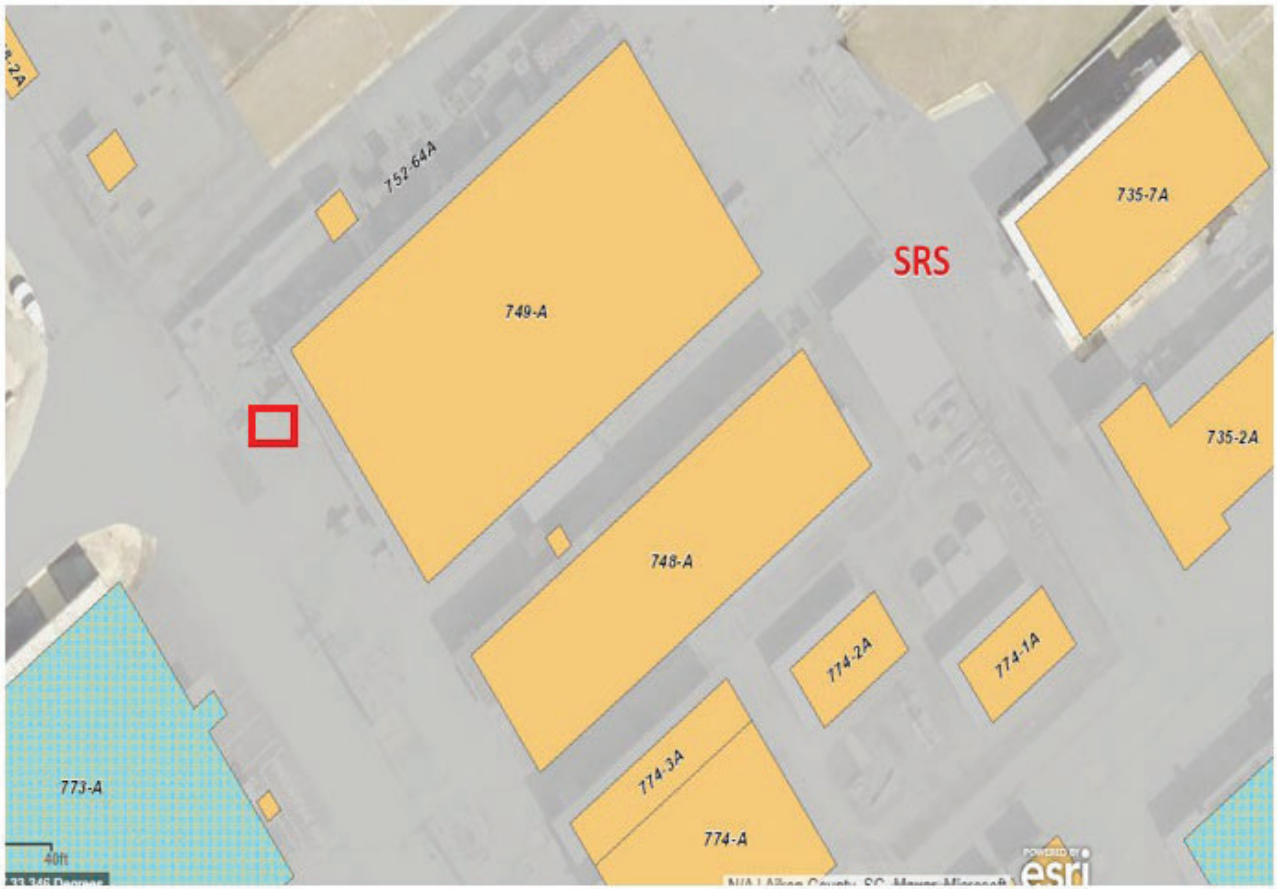


RCRA/CERCLA Units Indices (Red Areas). Labeled SI is within 200 feet of excavation.

Attachment 2. A-01 Outfall Drainage Map (yellow area)



Attachment 3. Aerial Image Showing Location of Excavations (Red Outline)



The map represents the approximate area to be excavated next to 749-A.

Attachment 4. Photo Showing Physical Location





Building 749-A and location of current leak