MINOR OPERATION AND MAINTENANCE ACTIVITY PLAN

Excavation to Correct Underground Domestic Water Leak Southeast of 221-H – Site Indices 591, 142, 344, 262, & 298

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Environmental Compliance Authority

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Site Services Planner
Utilities and Operating Services

1. INTRODUCTION

This Operation and Maintenance (O&M) Plan is for the excavation and repair of the domestic water leak near 221-H. The work will protect human health and the environment and minimize the impact to long term characterization and remediation efforts.

This activity is within Site Index (SI) 591 (H-Area Process Sewer Lines as Abandoned, NBN), (SI) 142 (H-Area Inactive Process Sewer Lines From Building to the Security Fence, 081-H), (SI) 344 (Sandblast Area CHM-001, NBN), (SI) 262 (Combined Spills From 241-H, NBN), and (SI) 298 (H-Area Tank Farm, 241-H) of the Federal Facility Agreement (FFA, Reference 1). SIs are also called RCRA/CERCLA Units.

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 an approximant 10 ft x 10 ft square in the Southeast portion of building 221-H. The location of the repair to be completed is shown as a green dot on Attachments 1 and 2. These SIs are in the FFA because of possible radiological or chemical contamination from past releases from H-Area operations. To date, there has been no remediation of these units; the current status of the units is inactive.

Contaminants of interest near the work area include:

H-Area Tank Farm, 241-H, including: H-Area Tank Farm, 241-H [H-Area Tank Farm Groundwater Operable Unit; Tank 37 Steam Line Contamination Area; Tank 37 to HDB-6 Capped Transfer Line; Concentrate Transfer System Contamination Area; 242-H Evaporator Contamination Area; Rock Bank Contamination Area; Diversion Box 5 Contamination Area; Tanks 9-12 Contamination Area; Tanks 13-16 Contamination Area; Pump Pits 5 and 6 Contamination Area]; Combined Spills from 241-H, NBN [Spill on 12/29/83 Piping Leak Top of Tank 13; Spill on 09/13/91 of Chromated Water from Underground Line; Spill on 01/06/81 of 10 gal Water from Cesium Removal Column]; Combined Spills from 242-H, NBN [Spill on 06/14/82 of 600-800 gal from Evaporator; Spill on 07/14/82 of 600-800 gal from Evaporator Overhead; Spill from Tank 13 Leak Detection Box; Spill on 02/01/69 of Unknown Waste Tank Spill, NBN]; Diversion Box - Rad from 907-1H, NBN; Spill on 01/19/80 of Unknown of Chromated Water from H-Area Pump House, NBN; Spill on 11/10/81 of 500 gal of Chromated Water from 243-H, NBN; Spill on 04/18/80 of Unknown of Chromated Water from Valve House 3, NBN; Spill on 03/28/87 of <15,000 gal Chromated Water from 241-24H, NBN; Spill on 05/02/85 of 10 gal Cooling Water from Tank Farm, NBN.

3. O & M ACTIVITY

A. O&M Activity Description

The O&M activity involves:

The scope of the activity is to correct or replace domestic water isolation valve DW-V-007 located Southeast of 221-H. SRNS Site Utilities forces will perform the work in accordance with the provisions of Asset Suite Work Order # 02104764-01 (Reference 4) and AHA # SUD- 22864 Rev. 0 (Reference 3). The activity occurs within a general SI and adjacent to several identified SIs. Work is expected to take no more than 10 days.

ALL EXCAVATED SOILS WILL BE RETURNED TO THE ORIGINAL LOCATION OF SOIL DISTURBANCE. THE DISPOSAL OF ANY SOIL WILL BE PER THE ENVIRONMENTAL COMPLIANCE AUTHORITY (ECA), GENERATOR CERTIFICATION OFFICIAL (GCO), AND RADIOLOGICAL PROTECTION (RP) DIRECTION.

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 H-Area operations.

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

The work area will be barricaded with rope or rigid handrail to ensure that access is controlled for personnel safety around the work area.

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

C. Health and Safety Plan

The health and safety concerns involve worker exposure to contaminants of interest listed in section 2 above.

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

RP may prepare a sampling plan for work in this area and 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. Material removed as part of the excavation will be returned as backfill when the activity is completed.

E. Contaminated Materials Management and/or Disposal

Any waste materials generated during this activity will be disposed of as appropriate. If media (pipe and other waste materials is determined to be "clean," normal work practices would occur. This waste will be managed as appropriate per facility Waste Management and ECA guidance and handled in accordance with existing SRNS waste guidance procedures. Clean soil can be put back in place once the leak repair is complete.

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.

4. CONTINGENCY PLAN

If at any time during the implementation of the activity, the conditions change, such that the activity is no longer considered "minor" (greater than 10% of a waste unit area impacted or disturbed), the Shift Operations Manager (SOM) shall be notified and the Facility Manager (or designee) or the ECA shall:

• Immediately notify the SRNS-OSC. The SRNS-OSC will notify the DOE-OSC.

• Contain and stabilize the area, investigate as necessary to determine the necessary change in the activity plan, secure the area, and stop work.

• Update the SRNS-OSC as to the findings and the requested path forward. The SRNS-OSC will communicate the information to the DOE-OSC and obtain concurrence on the path forward.

5. DOCUMENTATION & REPORTING

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

- The signed O&M plan
- Any sampling and characterization data collected

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 contaminated materials generated, and
- The disposal location of any contaminated material, if generated.

Attachments

Attachment 1. H-Area Outfall Drainage Map with Approximate Location of Water Leak Southeast of 221-H.
Attachment 2. Drawing Showing Approximate Location Southeast of 221-H (Green Dot) and Specific Site Indices (Red Areas)
Attachment 3. Aerial Image Showing Location Southeast of 221-H (Green Dot)

References

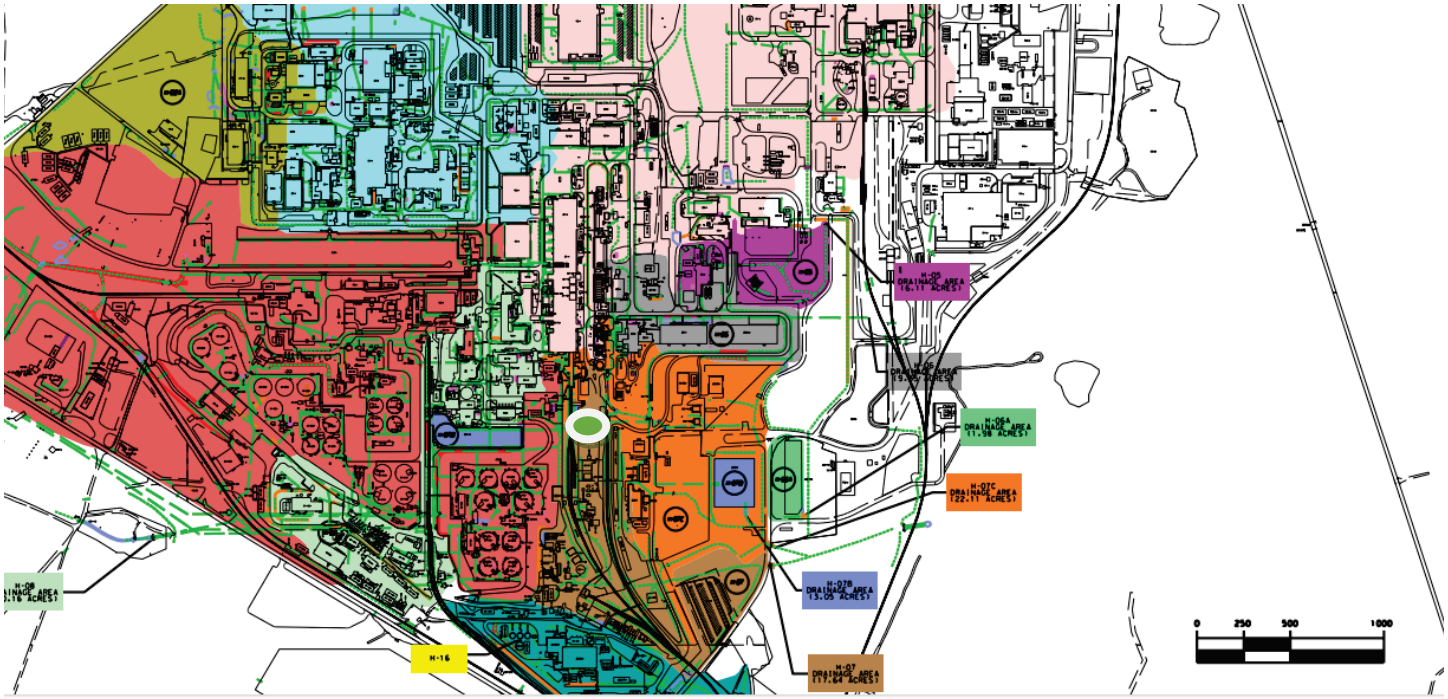
1. SRNS-OS-94-42, Federal Facility Agreement for the Savannah River Site, Administrative Document Number 89-05-FF, effective August 16, 1993, Revision 1 of Appendix C and Revision 0 of Appendix E for Fiscal Year 2018.

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

3. AHA # SUD- 22864 R0: Excavate and correct an underground domestic water piping leak at domestic water isolation valve DW-V-007 located Southeast of 221-H. Backfill will be performed per engineering guidance.

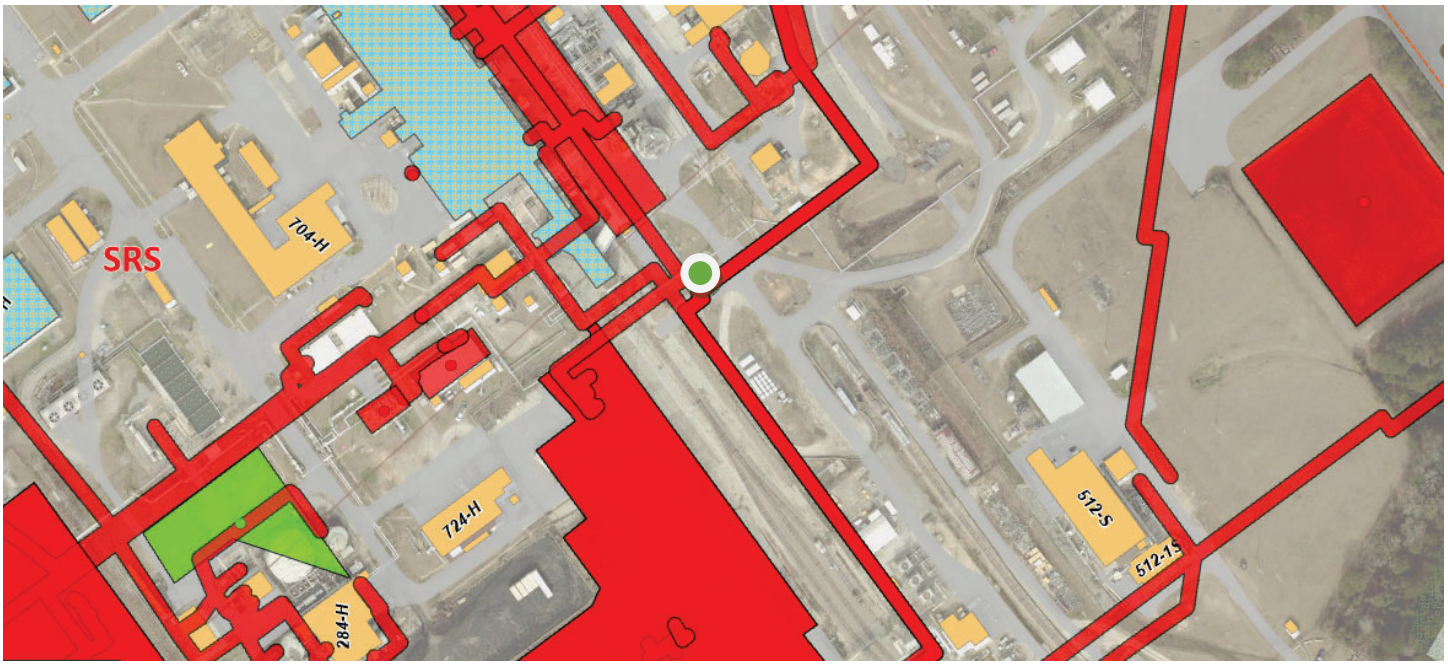
4. WO# 02104764-01: "Excavation to Correct Underground Domestic Water Leak near 221-H."

Attachment 1. H-Area Outfall Drainage Map with Approximate Location of Water Leak Southeast of 221-H.



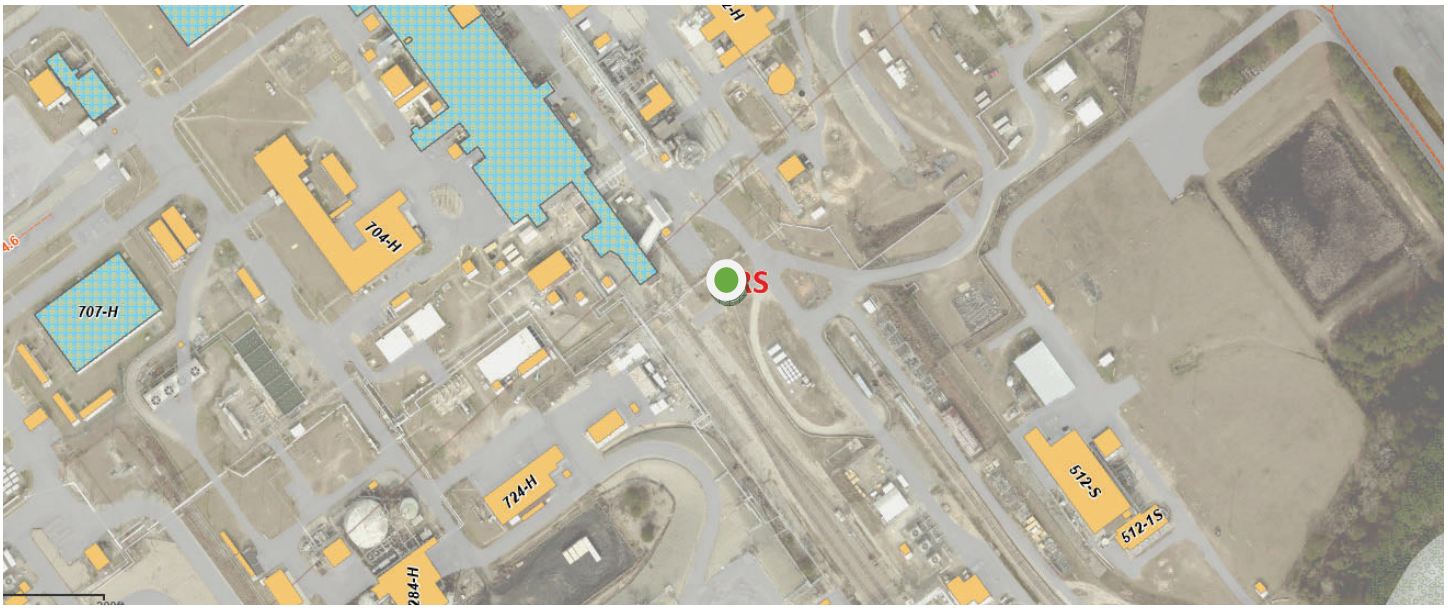
Approximate Repair Site

Attachment 2. Drawing Showing Approximate Location Southeast of 221-H (Green Dot) and Specific Site Indices (Red Areas)



Repair Site

Attachment 3. Aerial Image Showing Location Southeast of 221-H Leak (Green Dot)



Repair Site