Minor
OPERATION AND MAINTENANCE
Activity Plan

Repair of Site Infrastructure Fire Water Line Located West of 221-H South Dock - Site Indices 294, 391, 549 and 591

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1. INTRODUCTION

This Operations and Maintenance (O&M) Plan is for the excavation, isolation, and repair of a failed fire water line located west of the 221-H South Dock. The work will isolate the damaged line and repair it while protecting human health and the environment and minimizing the impact to long term characterization and remediation efforts. When the line failed, it caused a sink hole. A bollard next to the hydrant fell into the hole and broke an abandoned 2-inch diesel fuel line, causing residual diesel to be released with the fire water.

This activity is within Site Index (SI) 549 (General Separations Area Eastern Groundwater Operable Unit, No Building Number (NBN)) of the Federal Facility Agreement (FFA, Reference 1). It is also within 200 feet of SI 294 (H-Area Retention Basin, 281-1H), SI 391 (Spill on 02/01/83 of 50 Gallons of Oil - Rad, NBN) and SI 591 (H-Area Process Sewer Lines as Abandoned, NBN). 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 in the northern portion of the drainage basin of Site Infrastructure Storm Water Outfall H-08. The location of the line to be repaired is shown as a green dot in the drawing in Attachment 1 which also shows the nearby SIs as red areas. The following large structures are located in this portion of the drainage basin:

- 221-H Canyon Building
- 704-H Administrative Building
- 281-1H, 281-2H and 281-5H H Canyon Basins

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For a discussion of the SIs, see "Revision 0 for Appendix C for Fiscal Year 2019" of Reference 1. Due to size, SI 549 is located in the drainage basins of both Upper Three Runs Creek and Four Mile Branch. SIs 294, 295, 391, and 591 are located in the drainage basin of Four Mile Branch. The location of the work is shown as a green dot on the portion of the H-08 Outfall Map provided in Attachment 2 and on the aerial image in Attachment 3. 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. Per Appendix E of Reference 1, Remedial Actions are scheduled to begin in April 2043 for SIs 294, 295, 391, and 591 and May 2047 for SI 549. A photo of the actual location is provided in Attachment 4.

3. O & M ACTIVITY

A. O&M Activity Description

The scope of the activity is to excavate, isolate, and repair the failed fire water line located to the west of the 221-H South Dock. Excavation is expected to be approximately 5 feet in depth. SRNS Site Utilities forces will perform the work in accordance with the provisions of Asset Suite Work Order #01725394-01 (Reference 3) and AHA #SUD-13021 Rev. 3 (Reference 4). The activity occurs within a general SI and adjacent to several identified SIs. Work is expected to take no more than two weeks.

DUE TO THE DIESEL FUEL RELEASE, ALL EXCAVATED SOILS WILL BE REMOVED AND SENT TO THREE RIVERS LANDFILL FOR DISPOSAL. WATER REMOVED FROM THE EXCACATION WILL NEED TO BE PROCESSED AT THE OIL-WATER SEPARATOR IN A AREA AND THEN SENT TO THE CENTRAL SANITARY TREATMENT FACILITY AS SCAVENGER WASTEWATER. IF RADIOLOGICAL CONTAMINATION IS IDENTIFIED DURING THE SOIL SAMPLING, THE SOIL WILL BE SHIPPED TO THE SOLID WASTE MANAGEMENT FACILITY AS LOW LEVEL WASTE.

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.

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

RP has prepared 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. New backfill will be brought in to fill the excavation following completion of the repair.

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 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.

4. CONTINGENCY PLAN

During implementation of the activity, if the conditions change at any time such that the activity is no longer considered "minor" (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.

5. DOCUMENTATION & REPORTING

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

Attachments

Attachment 1. Drawings Showing Approximate Location of Failed Fire Water Line (Green Dot) and Nearby Site Indices (Red Areas)
Attachment 2. H-08 Outfall Drainage Map with Approximate Location of Failed Water Line shown as a Green Dot
Attachment 3. Aerial Image Showing Location of Failed Fire Water Line (Green Dot)
Attachment 4. Photo Showing Physical Location

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 0 of Appendix C and Revision 0 of Appendix E for Fiscal Year 2019.

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

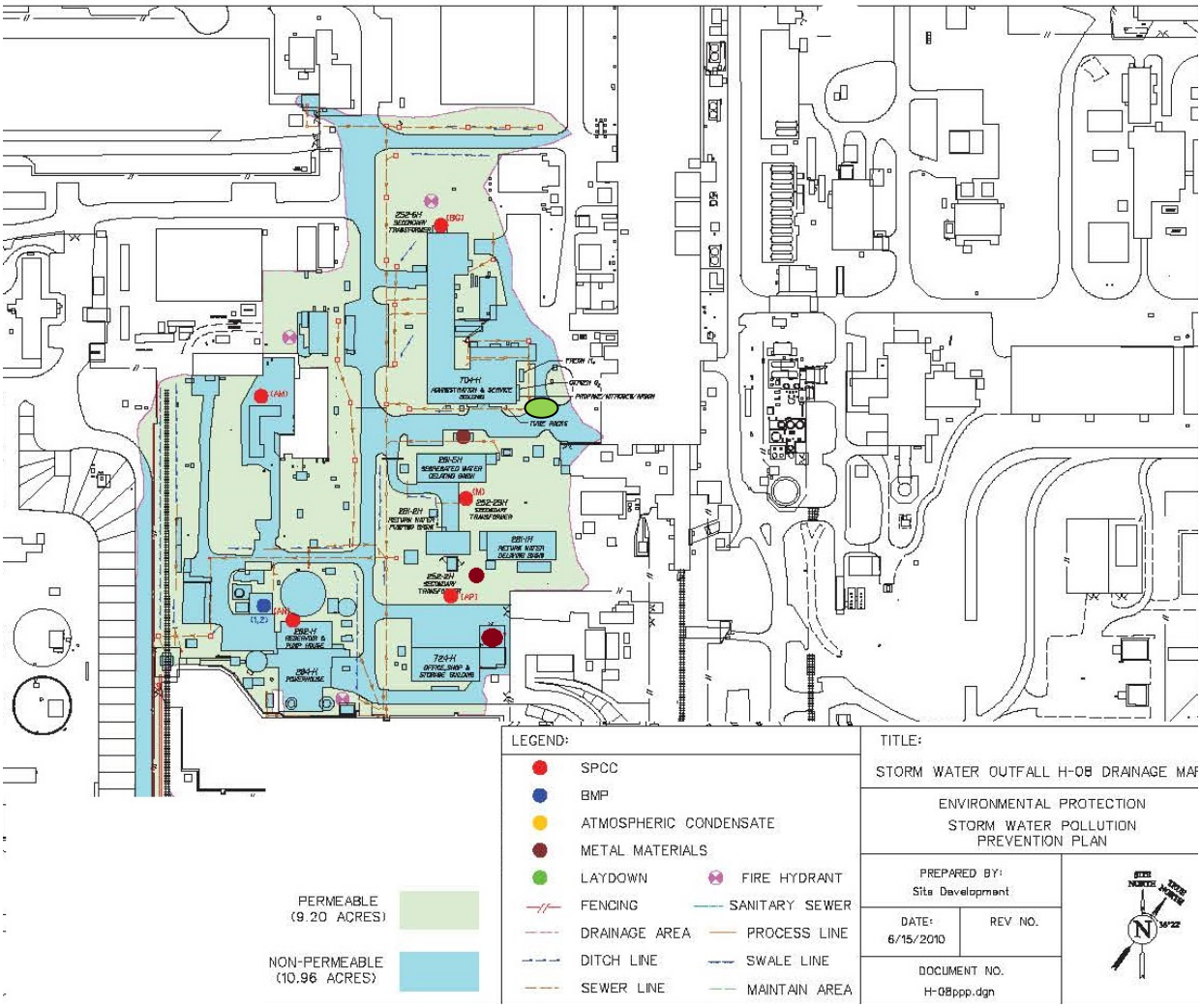
3. Assisted Hazard Analysis (AHA) #SUD-13021 Rev. 3, entitled "*Correct Underground Water Leaks, Underground Commodities, Perform Core Sampling, Etc. in Areas with and without Radiological Concerns,"* revised by William T. Stillinger, on 4/29/2019.

4. Asset Suite Work Order #01725394-01, created by William T. Stillinger, on 5/6/2019.

Attachment 1. Drawing Showing Approximate Location of Failed Fire Water Line (Green Dot) and Nearby Site Indices (Red Areas)

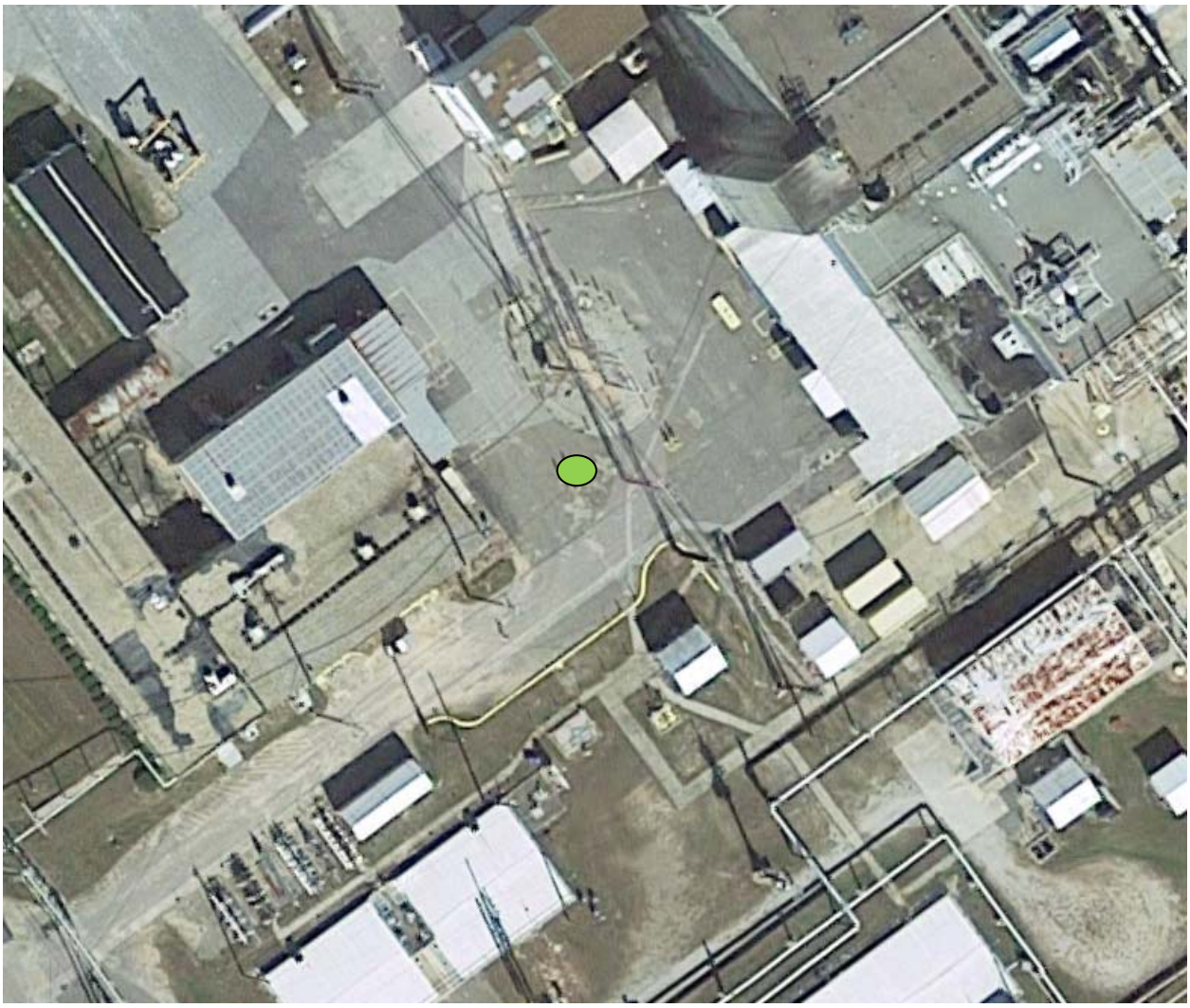


Attachment 2. H-08 Outfall Drainage Map with Approximate Location of Failed Fire Water Line shown as a Green Dot



Line Location

Attachment 3. Aerial Image Showing Location of Failed Fire Water Line (Green Dot)



Attachment 4. Photo Showing Physical Location

