Minor
OPERATION AND MAINTENANCE
Activity Plan

Exploratory Excavation and Repair of Cooling Water Piping Near 285-H

Prepared by: ROCHELLE BEASLEY (Affiliate) Digitally signed by ROCHELLE BEASLEY (Affiliate) Date: 2022.10.06 21:35:04 -04'00'

Rochelle R. Beasley
ECA, H-Area Complex

Date

Approved by: James L. Hines Digitally signed by James L. Hines Date: 2022.10.07 07:35:41 -04'00'

James Hines
U&O WMC

Date

Approved by: JEFFERY HALL (Affiliate) Digitally signed by JEFFERY HALL (Affiliate) Date: 2022.10.07 07:41:00 -04'00'

Jefferey Hall
Utility Commodity Manager

Date

Approved by: ROCHELLE BEASLEY (Affiliate) Digitally signed by ROCHELLE BEASLEY (Affiliate) Date: 2022.10.06 21:35:38 -04'00'

Jewely Lenderman
Radiological Protection, H-Area Complex

Date

1. INTRODUCTION

This Operations and Maintenance (O&M) Plan is for an exploratory excavation west of the 285-H basin to identify the location and fix a leak in 285-H Cooling Tower discharge pipe.

These excavations will be within Site Index (SI) 591 (H-Area Process Sewer Lines as Abandoned, NBN) of the Federal Facility Agreement (FFA, Reference 1).

The soil excavation for these activities will not exceed 10 percent of the surface area, excluding structures, of the unit. The plan is characterized as a "minor intrusive activity" based on the soil excavation meeting the definition of both "minor" and "intrusive" as defined in Reference 2. Due to the size of SI 591 near where the excavation is located, it is not anticipated that this classification could change.

2. AREA DESCRIPTION AND CONDITIONS

The area in which the activity will be conducted is in the drainage basin of H-Canyon Wastewater Outfall H-08 (Attachment 1). The approximate location of the excavation in relation to SI 591 are shown on Attachment 2. The location of the work is shown on the Map provided in Attachment 3.

For a discussion of the SIs, see "Revision 1 for Appendix C for Fiscal Year 2018" of Reference 1. Due to size, SI 591 is located in the drainage basin of Four Mile Branch. The location of the work is shown as a yellow star on the portion of the H-08 Outfall Map provided in Attachment 1 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 status of the units is inactive. Per Appendix E of Reference 1, Remedial Actions are scheduled to begin in April 2043 for SI 591. 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 and repair a leak in the cooling water discharge pipe west of 254-H. Excavation is expected to be approximately 21'L x 24'W x 5'D. SRNS Site Utilities will perform the work in accordance with provision of Asset Suite Work Order #01976608-01 and AHA #SUD-21149. Asphalt surrounding the location will be cut as needed to gain access to the exploratory area. Excavations will be performed manually and mechanically. If excavation exceeds the above-mentioned dimensions, work will stop for additional scope review.

The trench will be backfilled with enough sand to cover the drainpipe(s) and Controlled Low-Strength Material (CLSM), or Crusher Run will be backfilled up to four inches from ground grade.

Rad Protection will sample the soil prior to excavation and adhere to Soil Contamination Area Posting Limits found in Manual 5Q, Chapter 2.

A GPR survey for underground interferences and an Excavation Checklist (OSR 18-125) was completed to determine extent of excavation.

Work is expected to take two weeks.

THE DISPOSAL OF ANY CONTAMINATED SOIL WILL BE PER THE ENVIRONMENTAL COMPLIANCE AUTHORITY (ECA), GENERATOR CERTIFICATION OFFICIAL (GCO), AND RADIOLOGICAL PROTECTION (RP) DIRECTION. IT IS ANTICIPATED EXCAVATED SOIL WILL BE RETURNED TO ITS ORIGINAL LOCATION UPON TASK COMPLETION.

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 Site operations.

Radiological surveys will be required at the excavation site within the buffer zone. If radiological contamination is encountered, Rad Protection will determine if protective equipment and/or 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 work package and Assisted Hazard Analysis (AHA).

C. Health and Safety Plan

The health and safety concerns involve worker exposure to unknown waste material that could be excavated. 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 excavation work.

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

Material removed as part of the excavation will be returned as backfill when the job is completed. If any unknown waste material is excavated as part of this repair, a Timeout will be taken and the Shift Operations Manager (SOM), ECA, and the Maintenance/Site Services Manager will be notified until the Timeout is resolved.

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 GCO, and the ECA. Clean soil will be returned to the excavation once the wall 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.

Stormwater and sediment control shall be managed per SRS Manual 3Q, Procedure 12.2.

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

Attachments

Attachment 1. H-08 Outfall Drainage Map with Approximate Location of 285-H Discharge Pipe Leak Shown as a Yellow Star

Attachment 2. Map showing Site Index 591, H-Area Process Sewer Lines as Abandoned, NBN

Attachment 3. Map Showing Location of 285-H Discharge Pipe Leak Shown as a Yellow Star

Attachment 4. Photo Showing Physical Location of Discharge Pipe Leak West of 285-H.

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 2022.

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. Manual 8Q, Procedure 34, Revision 11, *Excavations and Trenches*

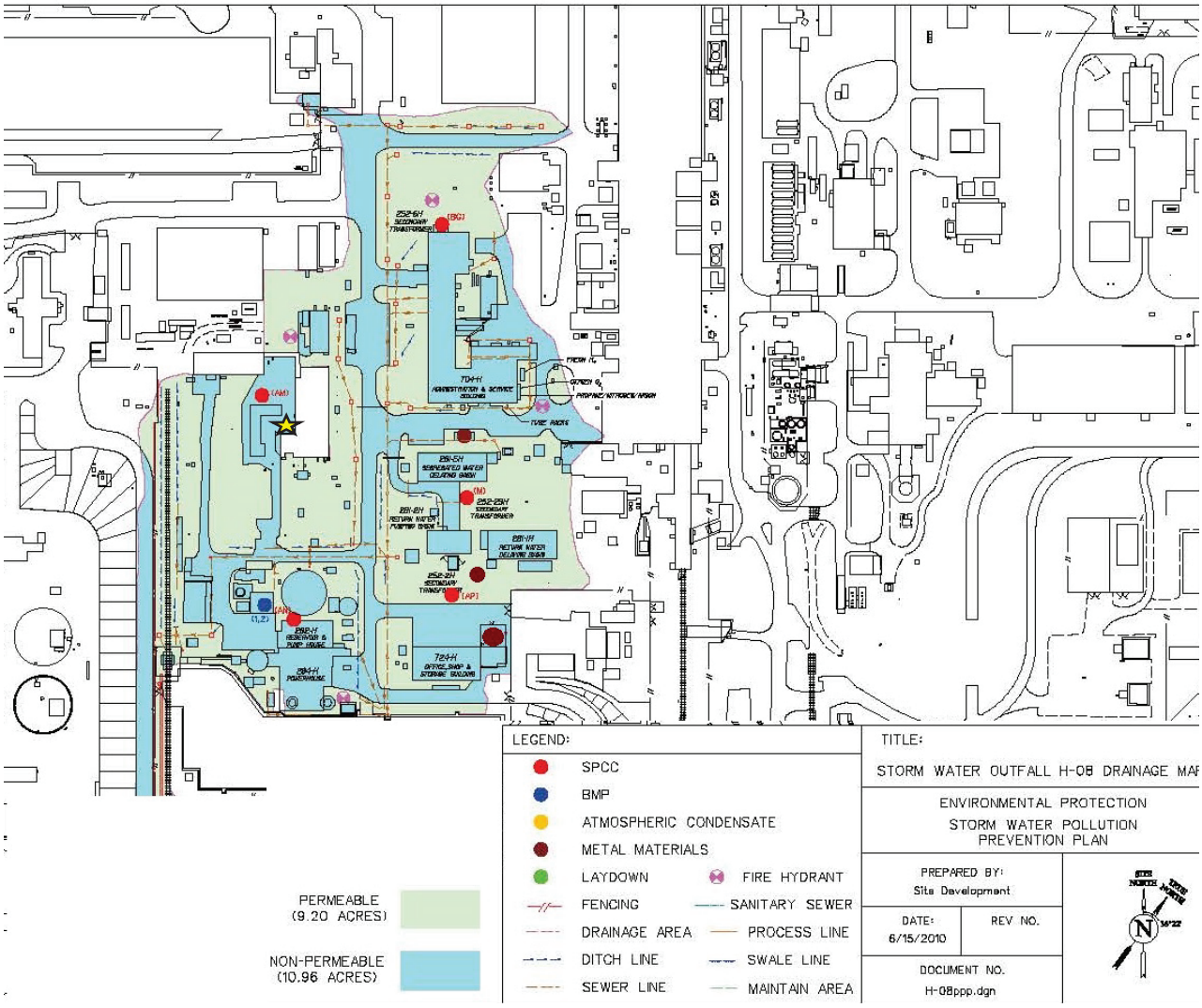
4. Work Order No: 01976608-01, *EXPLORATORY EXCAVATION FOR COOLING WATER LEAK WEST OF 285-H BASIN*

5. Manual 5Q, Chapter 2, Revision 17, Radiological *Standards*

ATTACHMENT 1

H-08 Outfall Drainage Map with Approximate Location of 285-H Discharge Pipe Leak Shown as a Yellow Star

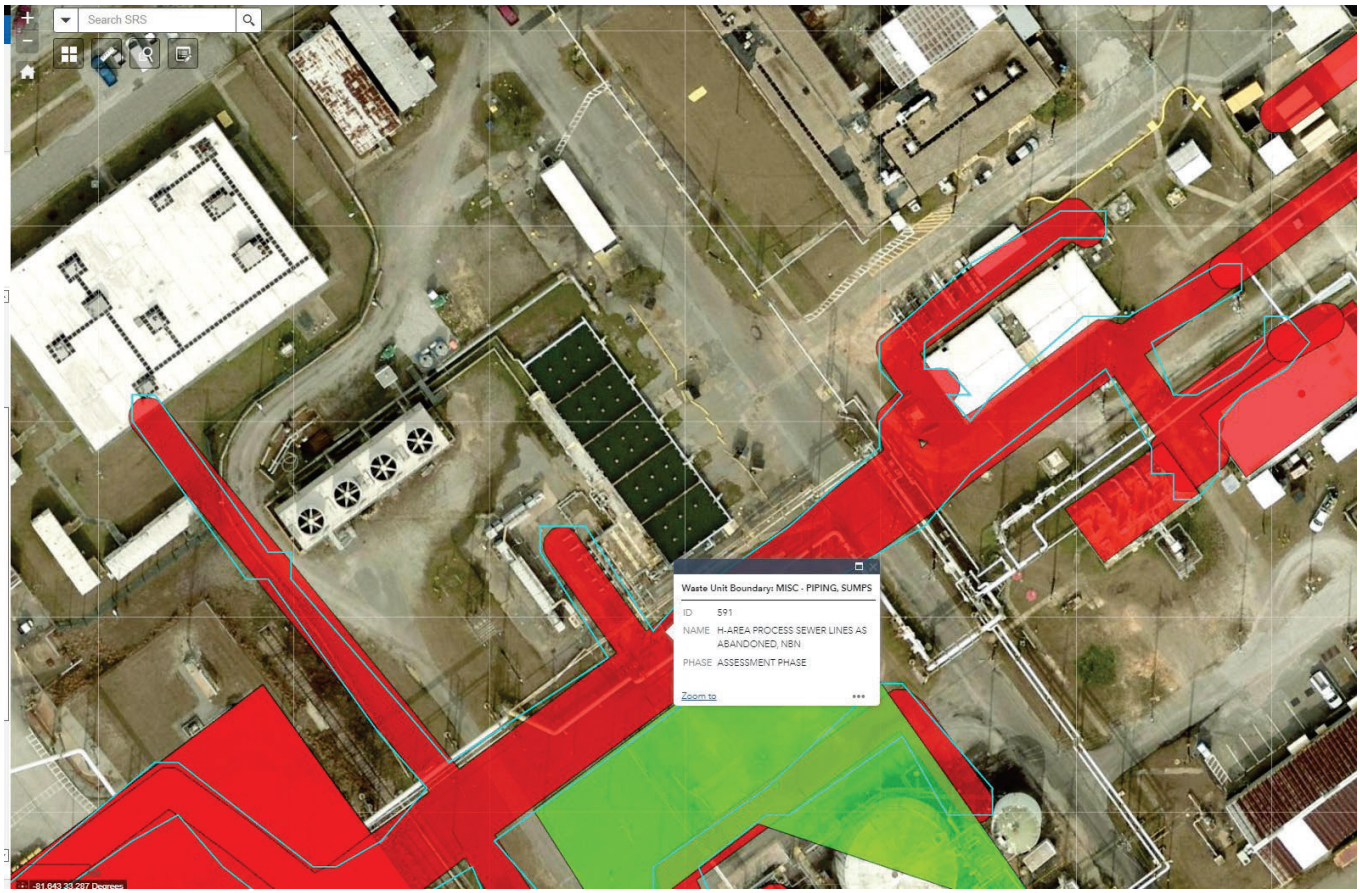
Page 1 of 1



ATTACHMENT 2

Map Showing Site Index 591, H-Area Process Sewer Lines as Abandoned, NBN

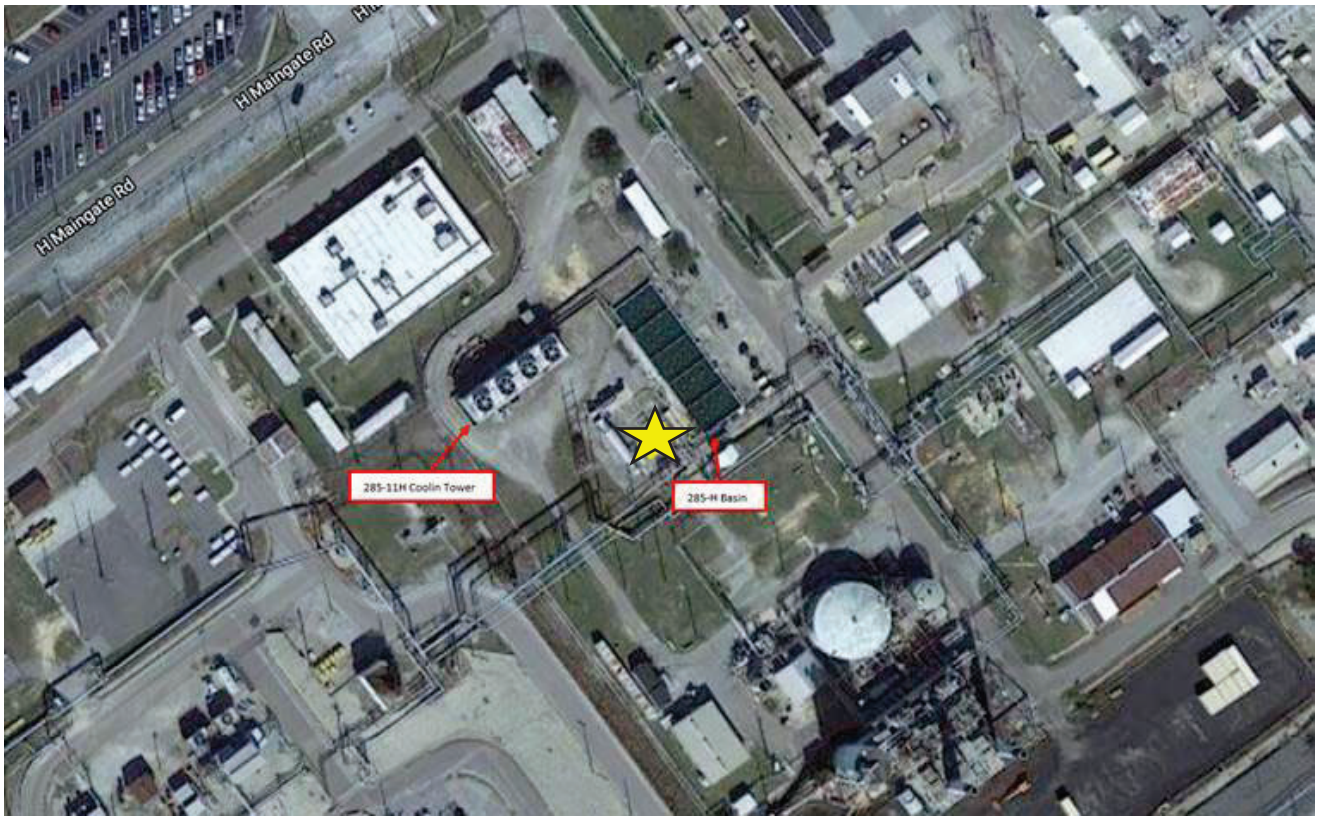
Page 1 of 1



ATTACHMENT 3

Map Showing Location of 285-H Discharge Pipe Leak Shown as a Yellow Star

Page 1 of 1



ATTACHMENT 4

Photo Showing Physical Location of Discharge Pipe Leak west of 285

Page 1 of 1

