Minor
OPERATION AND MAINTENANCE
Activity Plan

Excavation/Replacement of 218-H Cooling Tower Make-up Isolation Valve HQ-234000-DW-V-80.018

Prepared by: TAYLOR STOW (Affiliate) Digitally signed by TAYLOR STOW (Affiliate) Date: 2022.10.20 12:02:51 -04'00'

Taylor M. Stow
Environmental Compliance Authority
SRTE

Approved by: GEORGE ALEXANDER (Affiliate) Digitally signed by GEORGE ALEXANDER (Affiliate) Date: 2022.10.20 12:08:39 -04'00'

Jack Alexander
Environmental & Waste Management Compliance
Manager, SRTE

Approved by: TEKILA HAMILTON (Affiliate) Digitally signed by TEKILA HAMILTON (Affiliate) Date: 2022.10.20 13:13:21 -04'00'

Tekila Hamilton
234-H Operations Manager
SRTE

Approved by: Taylor Stow per telecon 10/24/22

Charles Covington
234-H Radiological Protection Manager
SRTE

1. INTRODUCTION

This Operations and Maintenance (O&M) Plan is for an excavation South of 218-1H and East of 218-2H to replace the 218-H Cooling Tower Make-up Isolation Valve HQ-234000-DW-V-80.018 per Work Order 01891256 – 01 and EEC OBU-H-2022-01009.

This excavation will be within Site Index (SI) 549 (General Separations Area Eastern Groundwater Operable Unit, No Building Number (NBN)), SI 591 (H-Area Process Sewer Lines as Abandoned, NBN), and SI 142 (H-Area Inactive Process Sewer Lines from Building to the Security Fence (081-H)) 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 549, 591, and 142 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 SRTE Industrial Wastewater Outfall H-02 (Attachment 3). The approximate location of the excavation in relation to SI 591 and SI 142 are shown on Attachment 2 and 5 respectively.

For a discussion of the SIs, see "Revision 0 for Appendix C for Fiscal Year 2022" of Reference 1. The location of the work is shown on the Map provided in Attachment 1. SI 549, 591, and 142 are in the FFA because of possible radiological or chemical contamination from past releases from Site operations. To date there has been no remediation of these units, and the status of the units is inactive. Per Appendix E of Reference 1, Remedial Actions are scheduled to begin in May 2047 for SI 549 and April 2043 for SI 591 and SI 142.

3. O & M ACTIVITY

A. O&M Activity Description

The scope of the activity is to use mechanical means to excavate to a maximum depth of seven feet, width of 12 feet and length of 12 feet to expose the area in need of repair. Workers will adhere to a one-foot buffer zone rule when using mechanical means to excavate. Workers will then hand excavate in compliance with Manual 8Q Procedure 34.

The trench will be backfilled per the instruction of Civil Design Authority Engineer, Kelsey Cox. The concrete and metal access ports will be replaced on top of the ground for valve access.

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) have been completed per Work Order 01891256 (Reference 4).

THE DISPOSAL OF ANY CONTAMINATED SOIL WILL BE PER THE ENVIRONMENTAL COMPLIANCE AUTHORITY (ECA) 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.

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), Environmental Compliance Authority (ECA) and the Maintenance/Site Services Manager will be notified until the Timeout is resolved.

E. Contaminated Materials Management and/or Disposal

Radiological contamination could be present in the excavated soil. All waste will be disposed in accordance with guidance from Rad Protection, the Generation Certification Official (GCO), and the ECA. Clean soil will be returned to the excavation once the work is complete.

F. Environmental Plans and Permit Modification Requests

There were no new permits identified.

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

SRTE 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. Drawing Showing Excavation Location

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

Attachment 3. H-02 Outfall Drainage Map with Excavation Location

Attachment 4. Map showing the Site Index 549, General Separations Area Eastern Groundwater Operable Unit

Attachment 5. Map showing Site Index 142, H-Area Inactive Process Sewer Lines from Building to the Security Fence, 081-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.

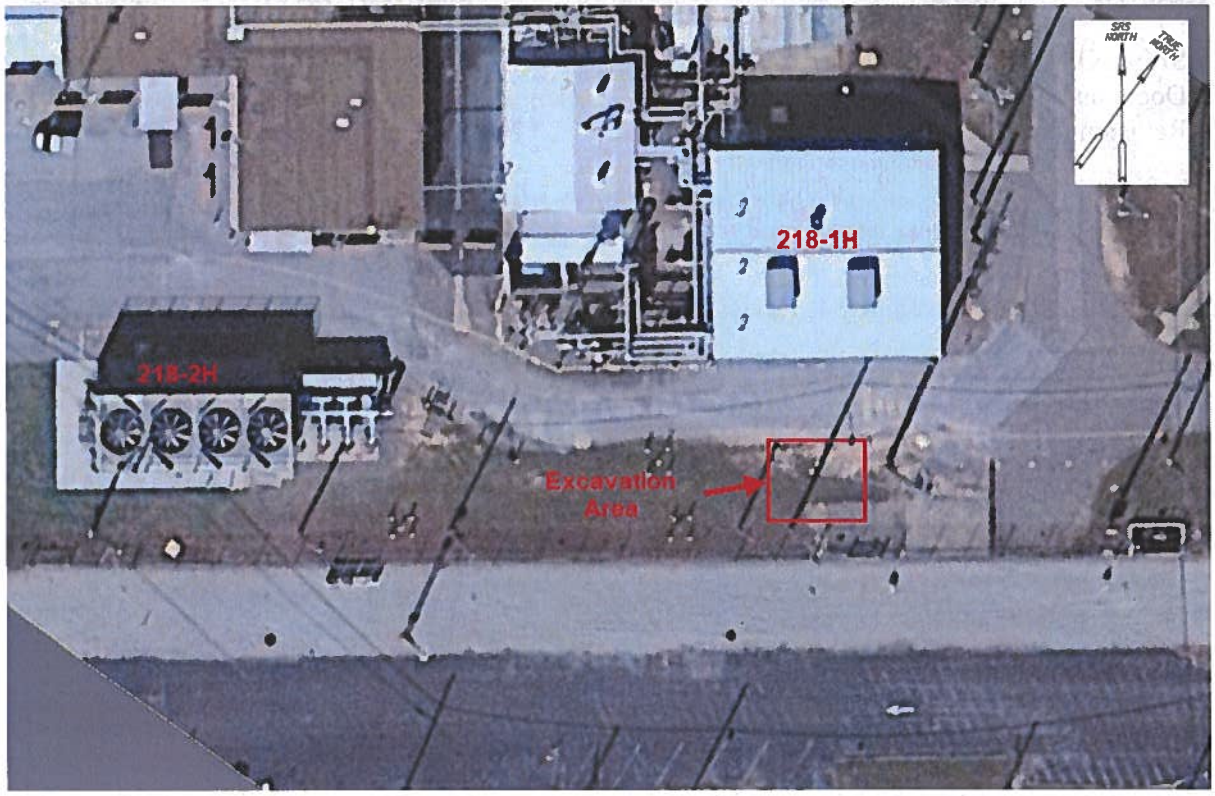
2. WSRC-RP-96-45, *Savannah River Site Plan for Performing Maintenance in Federal Facility Agreement Area (O&M Plan) (U)*, December 15, 1996.

3. SRS Manual 8Q Procedure 34, Revision 13 "Excavations and Trenches"

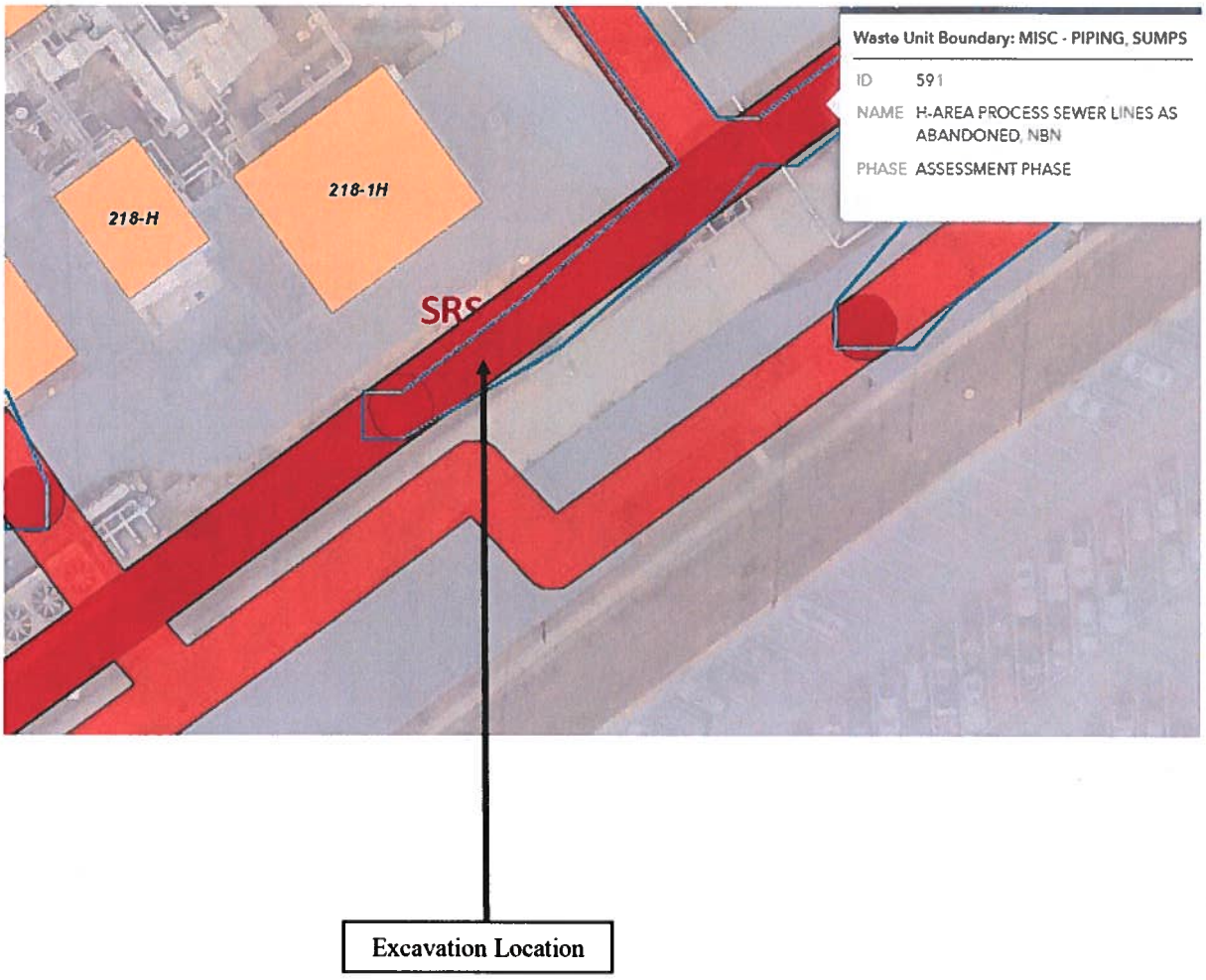
4. Work Order No: 01891256-01 "EXCAVATE, CORRECT/REPLACE VALVE H-218-2-DW-V-80.001"

5. SRS Manual 5Q, Chapter 2, Revision 18 "Radiological Standards."

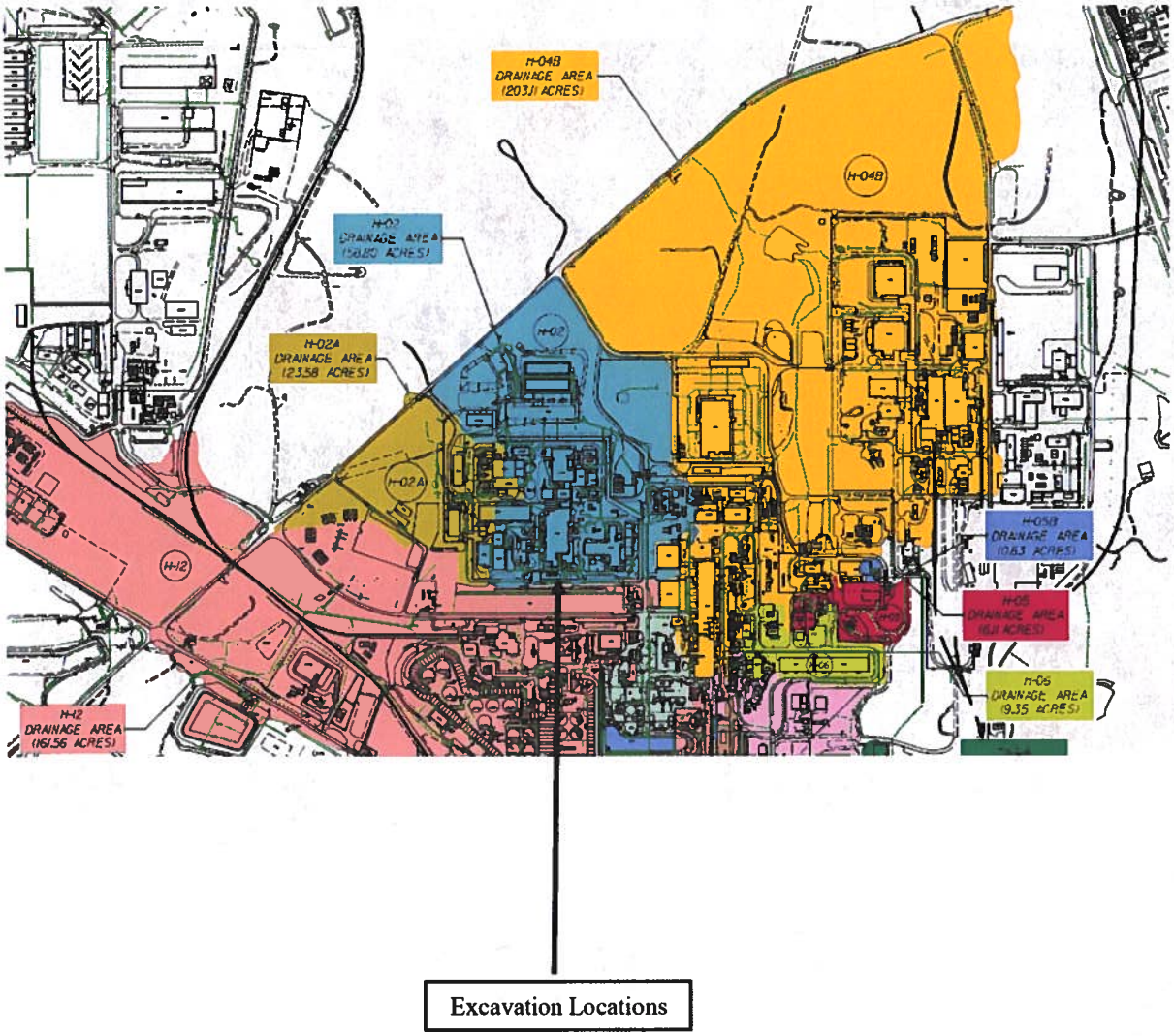
Attachment 1. Drawing Showing Exploratory Excavation Locations



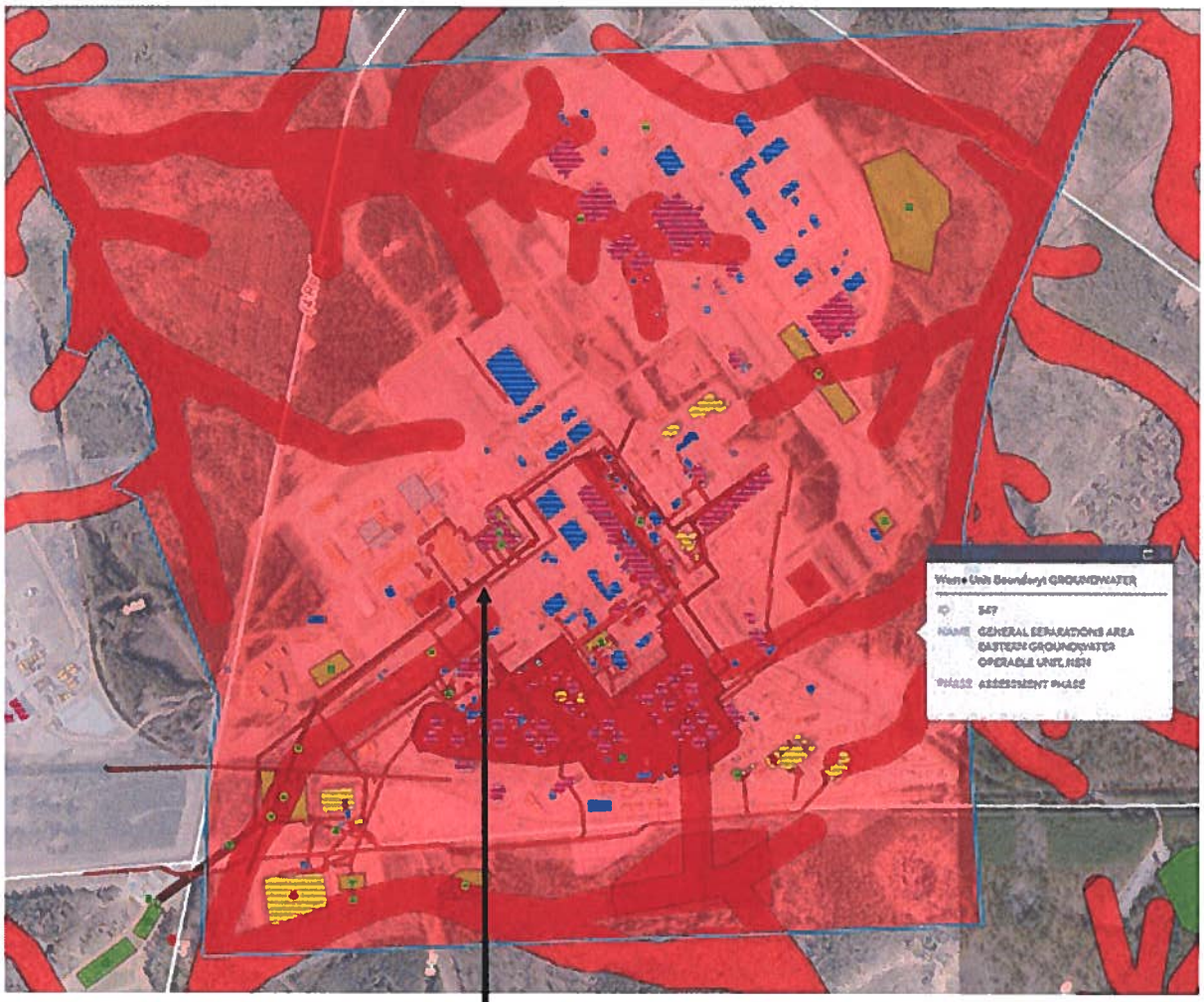
Attachment 2. Map showing Site Index 591, H-Area Process Sewer Lines as Abandoned, NBN



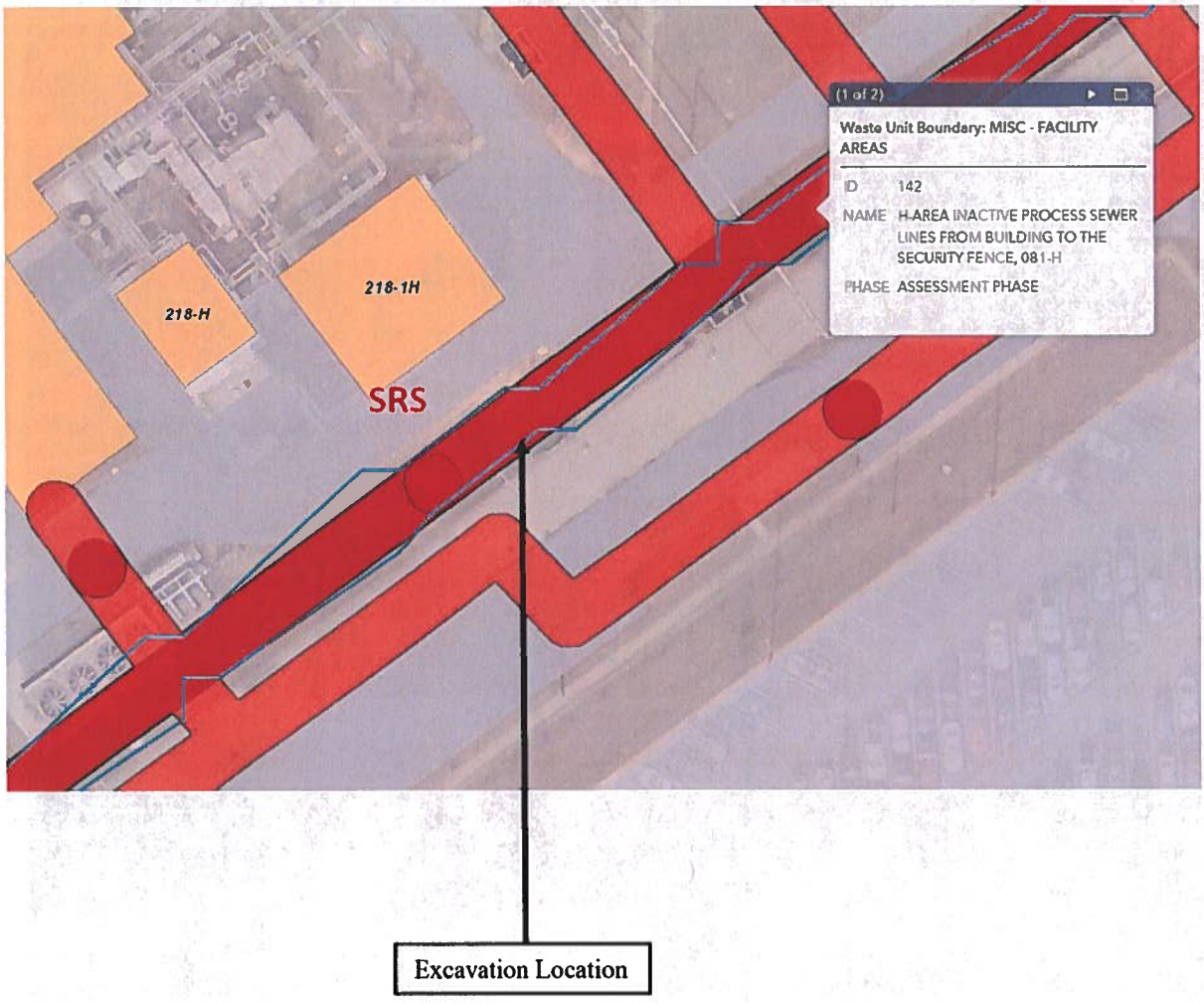
Attachment 3. H-02 Outfall Drainage Map with Approximate Location of Excavation



Attachment 4. Map showing the Site Indices 549, General Separations Area Eastern Groundwater Operable Unit



Attachment 5. Map showing Site Index 142, H-Area Inactive Process Sewer Lines from Building to the Security Fence, 081-H



From: Charles Covington
To: Taylor Stow
Subject: Re: Signature Needed for O&M Plan for Excavation/Replacement of 218-H Cooling Tower Make-up Isolation Valve HQ-234000-DW-V-80.018
Date: Monday, October 24, 2022 8:41:50 AM

That works for me. Thank you

Get Outlook for iOS

From: Taylor Stow <taylor.stow@srs.gov>
Sent: Monday, October 24, 2022 8:36:46 AM
To: Charles Covington <charles.covington@srs.gov>
Subject: RE: Signature Needed for O&M Plan for Excavation/Replacement of 218-H Cooling Tower Make-up Isolation Valve HQ-234000-DW-V-80.018

Do you mind if I sign it for you per telecon?

Taylor M. Stow
Savannah River Nuclear Solutions
Environmental Compliance Authority
Office: (803) 208-8118
Pager: (803) 725-7243 #14517



From: Charles Covington <charles.covington@srs.gov>
Sent: Monday, October 24, 2022 8:31 AM
To: Taylor Stow <taylor.stow@srs.gov>
Subject: Re: Signature Needed for O&M Plan for Excavation/Replacement of 218-H Cooling Tower Make-up Isolation Valve HQ-234000-DW-V-80.018

I thought I did. Will be back to work tomorrow. If you need today send to Jeremy King.
Thanks, Charles

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From: Taylor Stow <taylor.stow@srs.gov>
Sent: Monday, October 24, 2022 8:18:04 AM
To: Charles Covington <charles.covington@srs.gov>
Subject: RE: Signature Needed for O&M Plan for Excavation/Replacement of 218-H Cooling Tower Make-up Isolation Valve HQ-234000-DW-V-80.018

Hey Charles,

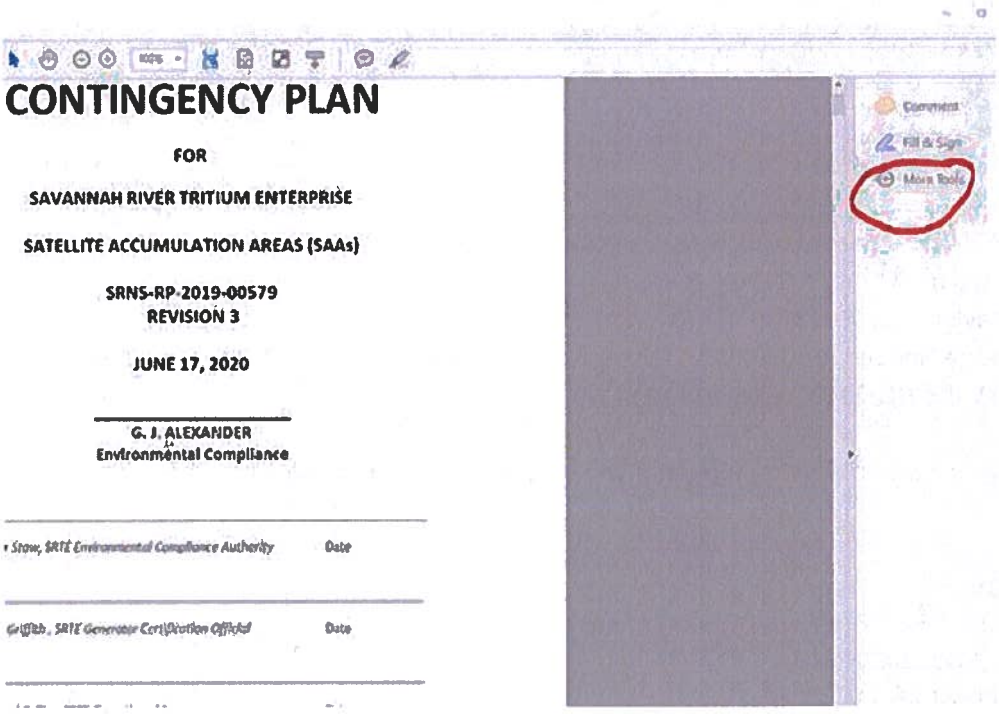
Were you able to sign the document?

Taylor M. Stow
Savannah River Nuclear Solutions
Environmental Compliance Authority
Office: (803) 208-8118
Pager: (803) 725-7243 #14517

SRTE
SAVANNAH RIVER TRITIUM ENTERPRISE

From: Taylor Stow
Sent: Thursday, October 20, 2022 2:14 PM
To: Charles Covington <charles.covington@srs.gov>
Subject: RE: Signature Needed for O&M Plan for Excavation/Replacement of 218-H Cooling Tower Make-up Isolation Valve HQ-234000-DW-V-80.018

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2. **Click "Certificates" ...*not* fill & sign...that's where they try and trick you**