Minor
OPERATION AND MAINTENANCE
Activity Plan

Exploratory Excavation Near 218-2H

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1. INTRODUCTION

This Operations and Maintenance (O&M) Plan is for an exploratory excavation East of 701-3H and South of 218-2H to determine the location of a leak in underground process sewers.

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 excavate to a maximum depth of five feet to expose the buried manhole(s) and process sewer(s). Asphalt surrounding the chiller unit 218-2H will be cut as needed to gain access to the exploratory area. Workers will hand excavate to reveal all known/unknown Systems, Commodities, and Utilities (SCU) in compliance with Manual 8Q Procedure 34. Hand digging and probing will occur within six feet of each side of the expected SCU or to the excavation buffer zone (whichever is less) and to a depth of one foot below the expected SCU or one foot below the expected excavation (whichever is greater). Mechanical excavation will then be used to expose areas needing repair. Workers will adhere to a one-foot buffer zone rule when using mechanical means to excavate. If excavation meets five feet, work will stop for additional slope review.

The trench will be backfilled with enough sand to cover the drainpipe(s) and Controlled Low-Strength Material (CLSM) 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) have been completed per Work Order 01927746-01 (Reference 4).

Work is expected to take one week.

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 Exploratory 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 Exploratory 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 11 "Excavations and Trenches"

4. Work Order No: 01937746-01 “PERFORM EXPLORATORY EXCAVATION NEAR 701-3H”

5. SRS Manual 5Q, Chapter 2, Revision 17 “Radiological Standards.”

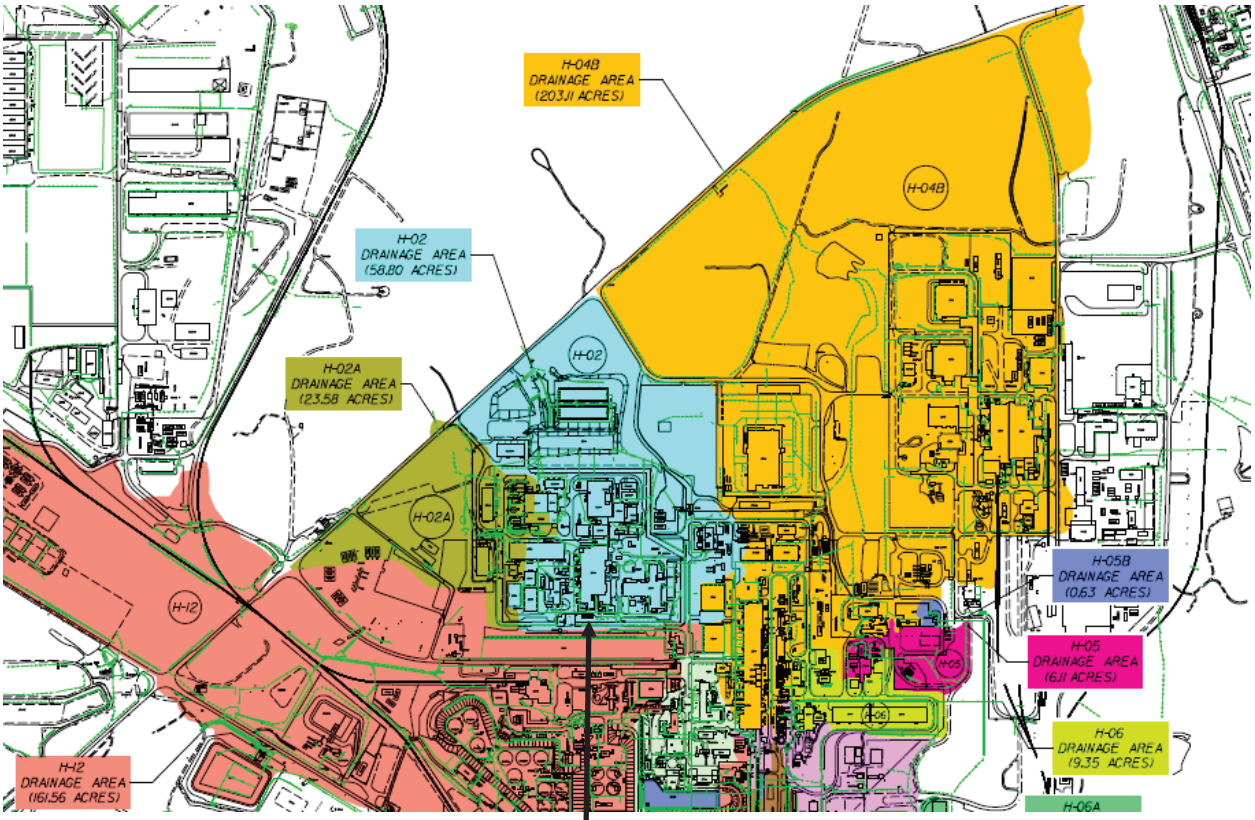
Attachment 1. Drawing Showing Exploratory Excavation Location



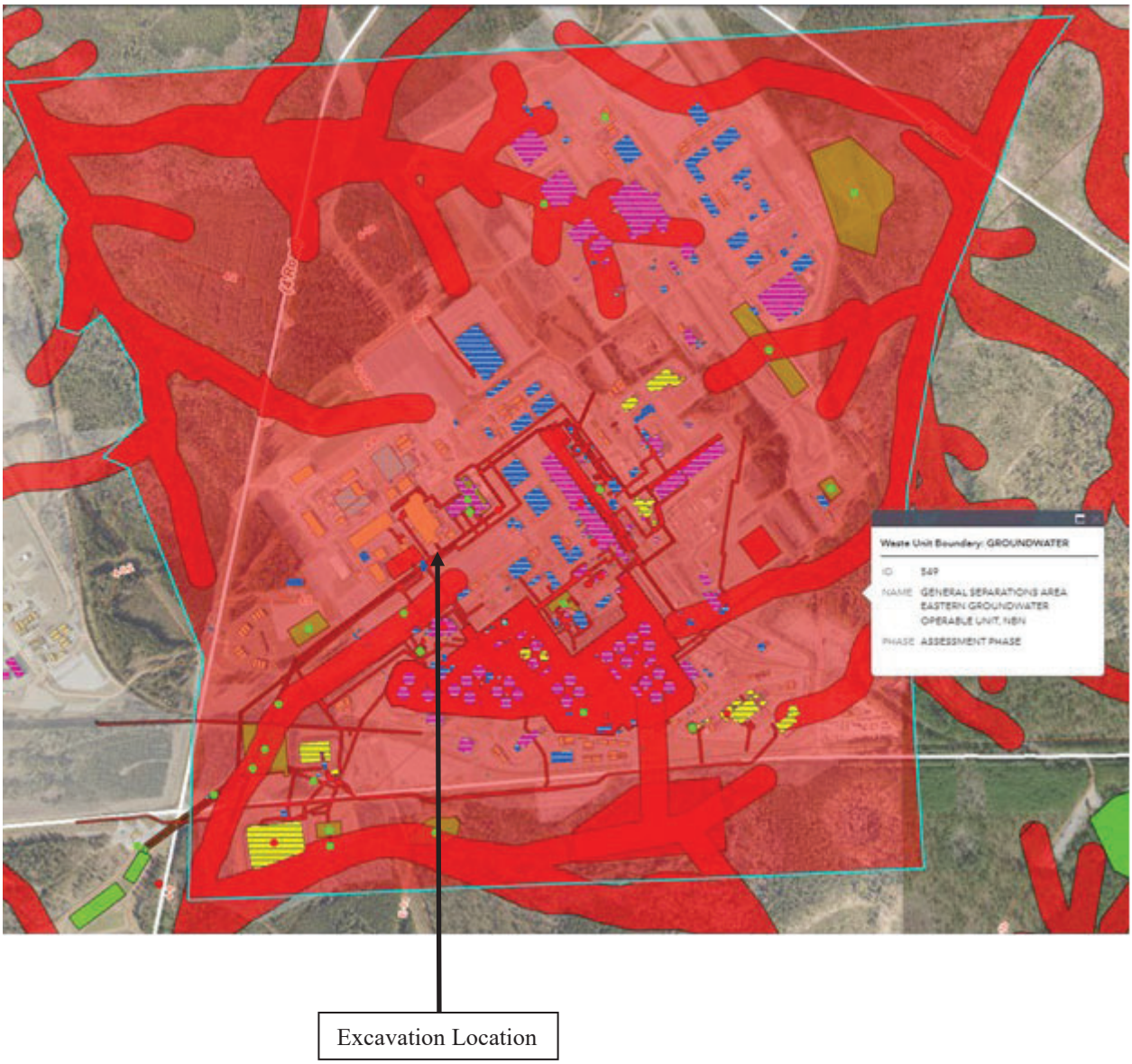
Attachment 2. Map showing Site Index 591, H-Area Process Sewer Lines as Abandoned, NBN



Attachment 3. H-02 Outfall Drainage Map with Approximate Location of 232-H Sinkhole



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

