Minor
OPERATION AND MAINTENANCE
Activity Plan

SRNS-J2600-2022-00316

Exploratory Excavation Near GPE

Prepared by: ROCHELLE BEASLEY (Affiliate) Digitally signed by ROCHELLE BEASLEY (Affiliate) Date: 2022.06.28 07:46:37 -04'00'

Rochelle R. Beasley Date
ECA, H-Area Complex

Approved by: CECIL COPELAND (Affiliate) Digitally signed by CECIL COPELAND (Affiliate) Date: 2022.06.28 08:22:06 -04'00'

Cecil Copeland Date
OF-H Operations Manager

Approved by: JEWEL LENDERMAN (Affiliate) Digitally signed by JEWEL LENDERMAN (Affiliate) Date: 2022.06.28 08:56:25 -04'00'

Jewel Lenderman Date
Radiological Protection, H-Area Complex

1. INTRODUCTION

This Operations and Maintenance (O&M) Plan is for an exploratory excavation beneath the sidewalk located west of the General Purpose Evaporator (GPE) to investigate the ongoing leak in underground process sewers.

This excavation will be located within Site Index (SI) 344 (Sandblast Area CMH-001, 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 344 near where the excavation is located, it is not anticipated that this classification could change.

2. AREA DESCRIPTION AND CONDITIONS

The location of the work is shown on the Map provided in Attachment 1. The approximate location of the excavation in relation to SI 344 is shown on Attachment 2. The area in which the activity will be conducted is in the drainage basin of H-Canyon Wastewater Outfall H-04B (Attachment 3).

For a discussion of the SIs, see "Revision 0 for Appendix C for Fiscal Year 2022" of Reference 1. SI 344 is 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 April 2043 for SI 344.

3. O & M ACTIVITY

A. O&M Activity Description

The scope of the activity includes the chipping and removal of material approximately 1.5' x 4' expose the area in front of the recycle sump located west of the GPE. Excavation will be no more than two feet below the surface. This activity includes removal of small grout square and associated concrete adjacent to the square. Mechanical excavation will be used to remove grout square and associated concrete. Workers will adhere to one foot buffer zone rule when using mechanical means to excavate. 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). If excavation meets two feet, 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) will be completed per Work Order 01954742 (Reference 4).

Work is expected to take three 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

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

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. Drawing Showing Excavation Location

Attachment 2. Map showing Site Index 344, Sandblast Area CMH-001, NBN

Attachment 3. H-04B Outfall Drainage Map with Exploratory Excavation Location

Attachment 4. Photo showing physical location of excavation site.

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: 01954742, *Chipping/Excavating GPE Sidewalk to Support Low pH Investigation*

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

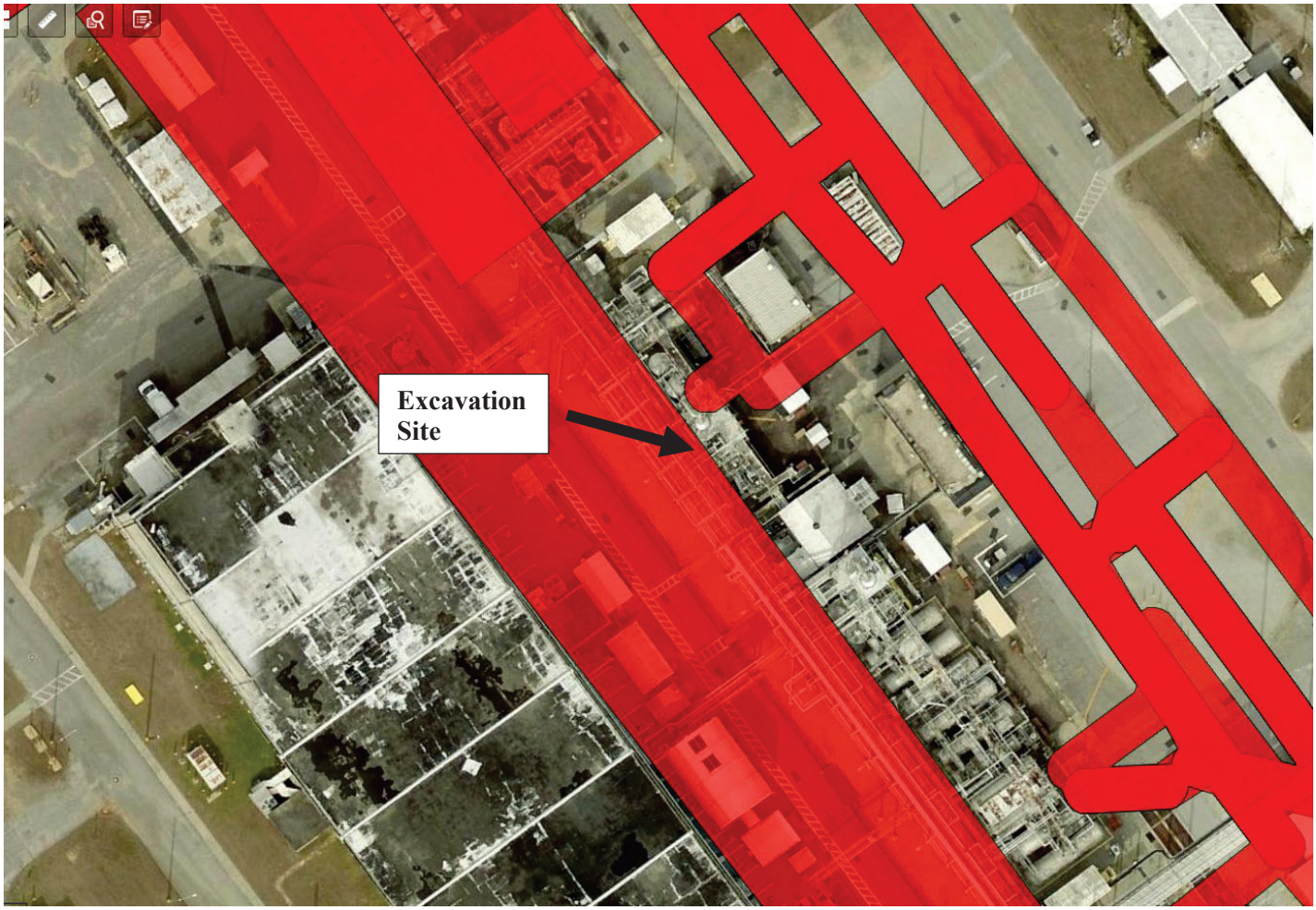
ATTACHMENT 1
Drawing Showing Exploratory Excavation Locations
Page 1 of 1



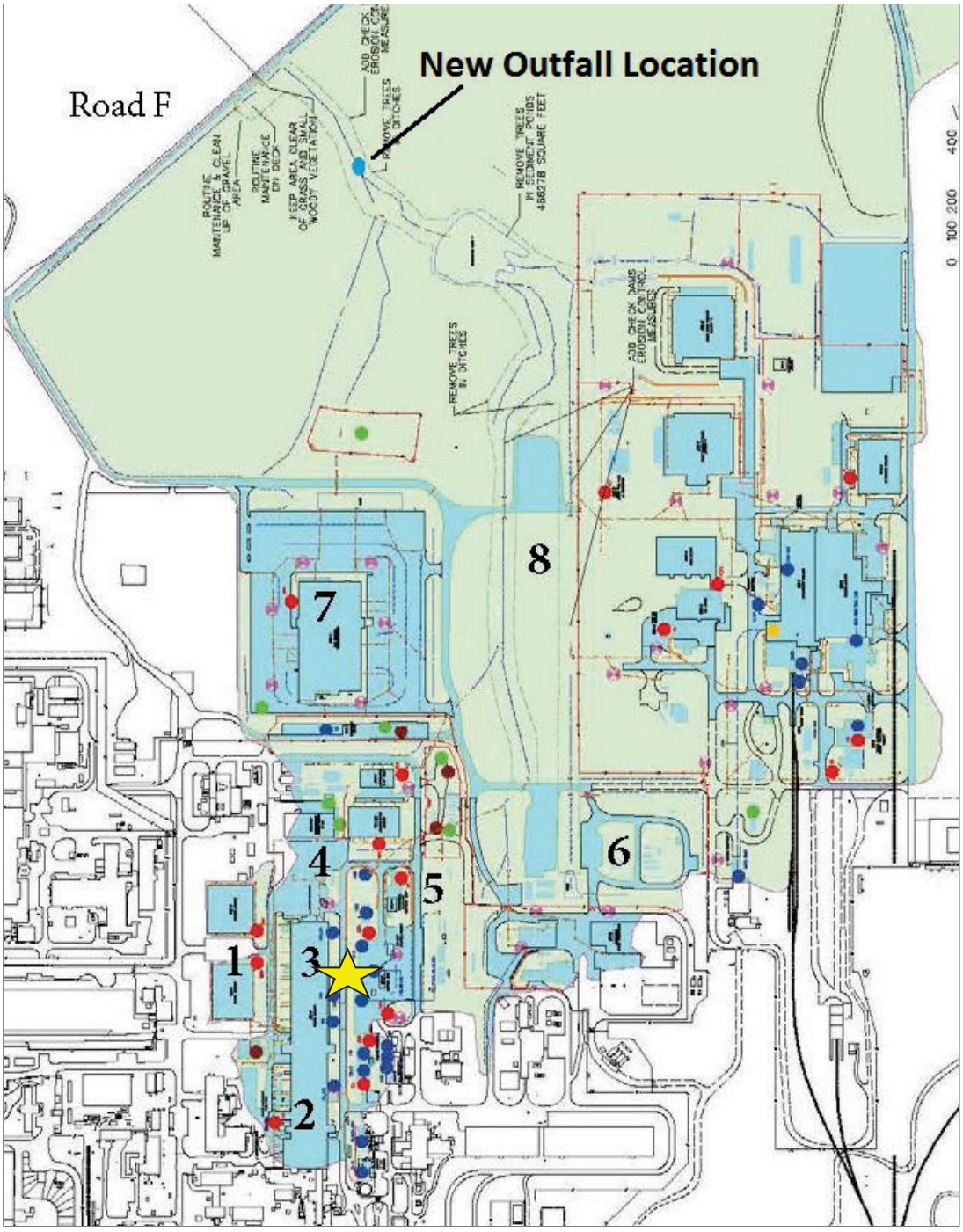
ATTACHMENT 2

Map Showing Site Index 344, Sandblast Area CMH-001, NBN

Page 1 of 1



ATTACHMENT 3
H-04B Outfall Drainage Map with Approximate Location of Excavation Site
Page 1 of 1



ATTACHMENT 4
Photos Showing Physical Location
Page 1 of 2

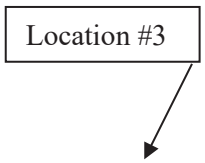


ATTACHMENT 5

Photos Showing Physical Location

Page 2 of 2




Location #3