Minor
OPERATION AND MAINTENANCE
Activity Plan

284-H ABATEMENT SUMP PUMP

Prepared by: _____ 1/30/18

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Date

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Date

1. INTRODUCTION

The existing 284-H abatement sump pump is supplied 480-volt power from a motor control center inside the 284-H powerhouse. Plans are to D&R the powerhouse in the future. Therefore, the abatement sump will require a pump that is not powered from the 284-H powerhouse. The plan is to install a new solar powered pump system. This Operations and Maintenance (O&M) Plan is required because Construction Services will use four 36" aluminum anchor bolts to secure the new free-standing battery/system (solar modules, batteries, controller, and associated wiring and piping) enclosure for a new solar powered pump 284-H. Also, a 10-foot ground rod (5/8" I.D.) will be driven into the ground 1 foot below grade.

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 SIs 294 (H-Area Retention Basin, 281-1H, Process Cooling Water Delaying Basin), 295 (H-Area Retention Basin, 281-2H, Process Cooling Water Pumping Basin), and 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. Attachment 2 shows approximate locations for SIs 294, 295, and 591 as red areas. The following large structures are in this portion of the drainage basin:

- 281-1H, 281-2H and 281-5H H-Canyon Process Cooling Water Basins
- 284-H Powerhouse
- 282-H Reservoir and Pump House

For a discussion of the SIs, see "Revision 0 for Appendix C for Fiscal Year 2017" of Reference 1. SI 549 is located in the drainage basin of Upper Three Runs Creek. SIs 294, 295, and 591 are located in the drainage basin of Four Mile Branch. These SIs are in the FFA because of possible radiological 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 SIs 294, 295, and 591 and May 2047 for SI 549.

3. O & M ACTIVITY

A. O&M Activity Description

The scope of the activity is to replace the abatement sump pump, per M-FCR-H-00225, which includes removing the existing electric pump and installing a solar powered pump. Construction Services will hand dig to ensure no underground interferences are encountered during installation of the 36" anchor bolts and 10-foot ground rod. Work will be performed in per Asset Suite Work Order # 01599281 and SUD AHA 16849.

ALL EXCAVATED SOILS WILL BE RETURNED TO THE ORIGINAL LOCATION OF SOIL DISTURBANCE. THE DISPOSAL OF ANY SOIL WILL BE PER THE ENVIRONMENTAL COMPLIANCE AUTHORITY (ECA) AND RADIOLOGICAL PROTECTION (RP) DIRECTION.

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 will prepare 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. Material removed as part of the excavation will be returned as backfill when the activity is completed.

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. Clean soil will be returned to the excavation once the 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.

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 material, if generated.

Attachments

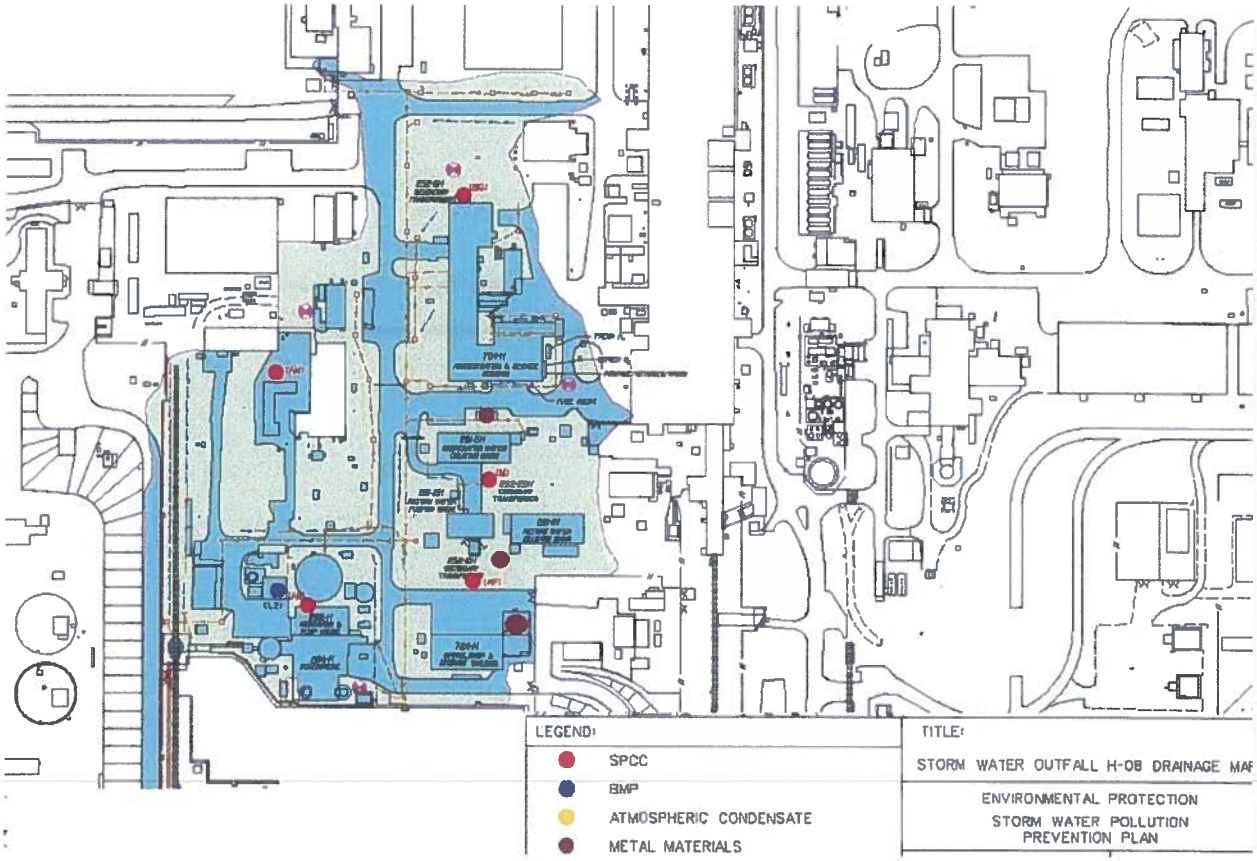
Attachment 1. Storm Water Outfall H-08 Map
Attachment 2. Drawing Showing Specific Site Indices (Red Areas)
Attachment 3. H Area Aerial Image Showing

References

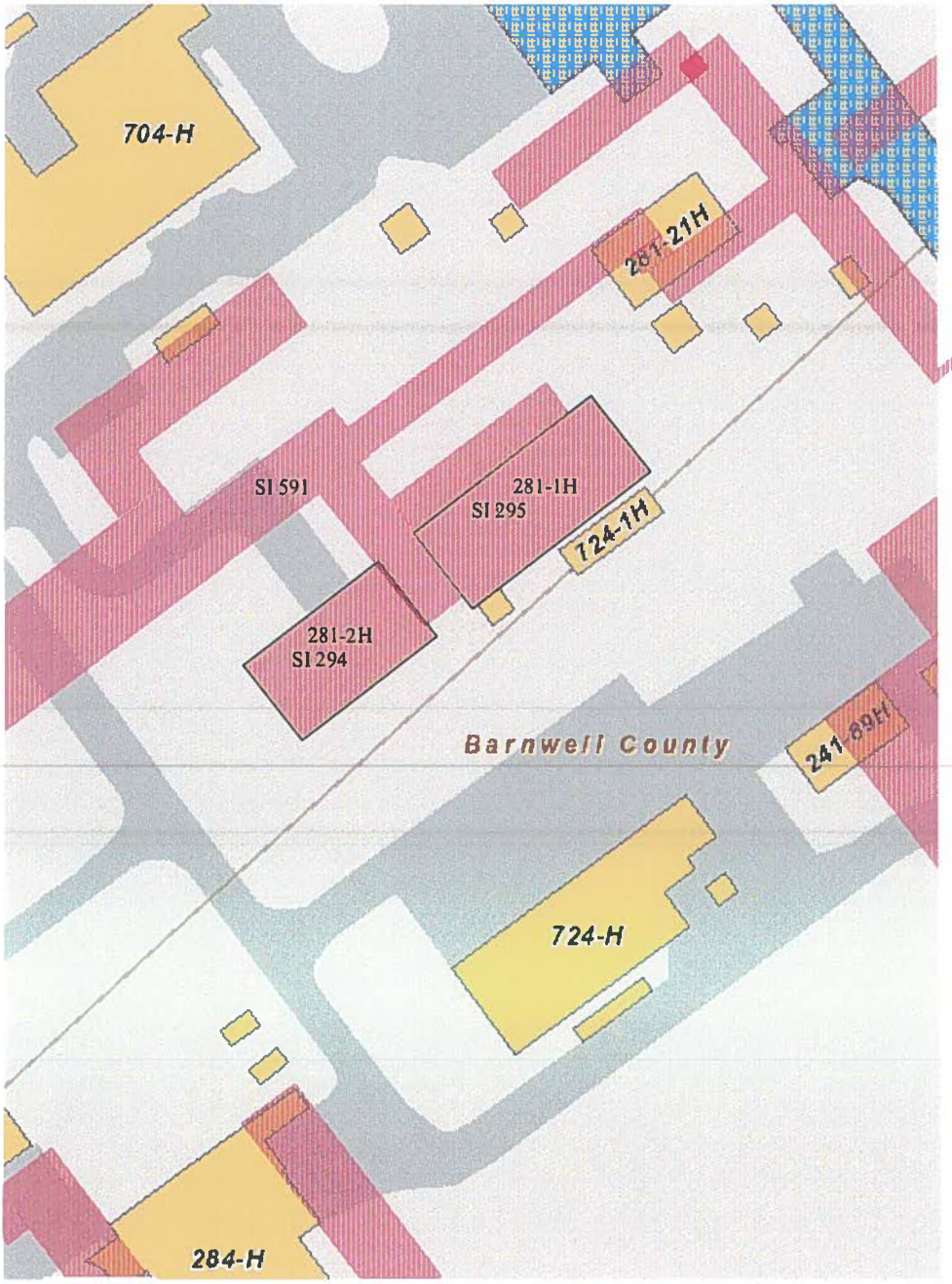
1. SRNS-OS-94-42, Federal Facility Agreement for the Savannah River Site, Administrative Document Number 89-05-FF, effective August 16, 1993, Revision 0 of Appendix C for Fiscal Year 2017.

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

Attachment 1. Storm Water Outfall H-08 Map



Attachment 2. Drawing Showing Specific Site Indices (Red Areas)



Note: The entire drawing is within SI 549.

Attachment 3. H Area Aerial Image

