Expansion of 234-7H
Near 234-H, 249-H, & 232H – Site Indices 549 & 591

O&M Plan 21-001

Minor
OPERATION AND MAINTENANCE
Activity Plan

Expansion of 234-7H

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1. INTRODUCTION

This Operations and Maintenance (O&M) Plan is for the planned expansion of 234-7H which includes adding an electrical building, stack, and diesel generator. This modification requires site preparation for modifying the access road behind 249-H, installation of concrete pads for the new systems, supports for the ductwork, and installation/relocating storm drains. Note: This is only a conceptual layout. Design agency shall determine the most effective and ergonomic layout for the stack, diesel generator, electrical building, and support equipment. Locations are subject to change.

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). While the Stack, Diesel Generator, and Electrical Building are located outside the 20 ft buffer of Site Index (SI) 591 (H-Area Process Sewer Lines as Abandon, NBN) the potential exists for the ductwork and cable tray supports to be located within the 20 ft buffer of SI 591.

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 "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 SRTE Industrial Wastewater Outfall H-02. The approximate location of the Stack to be installed is shown as a "Green Octagon," Diesel "Gold Rectangle," Electrical Building "Blue Rectangle," and SI 591 is the red area shown on Attachment 1.

For a discussion of the SIs, see "Revision 0 for Appendix C for Fiscal Year 2020" of Reference 1. The location of the work is shown as a green dot on the portion of the H-02 Outfall Map provided in Attachment 3. SI 549 & 591 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; the current status of the units is inactive. Per Appendix E of Reference 1, Remedial Actions are scheduled to begin in April 2043 for SIs 591 and May 2047 for SI 549.

3. O & M ACTIVITY

A. O&M Activity Description

The scope of the activity is to expand 234-7H (Material Test Lab) capabilities. This project will provide a new exhaust system (2 Fans), a small electrical building, a stack, and a new diesel generator for 234-7H and will blank off the existing ductwork connection to the 234-H exhaust system. This modification also requires site preparation for modifying the access road behind 249-H and for the installation of concrete pads for the new systems, as well as supports for the ductwork and cable trays. The activity occurs within general SI 549 and near specific SI 591.

The Exact location for new Stack, Diesel Generator, and Electrical Building will be determined following completion of the Ground Penetrating Radar scans and removal of soil cover. The Design Change Package M-DCP-H-19024 and Task Requirements and Criteria Package G-TC-H-00086 (UCNI) allows the installation to be adjusted to avoid existing interferences and obtain the most effective and ergonomic layout.

Work is expected to take 24 months.

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, RP will determine if protective equipment and 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, Timeout will be taken and the Shift Operations Manager (SOM), Environmental Compliance Authority (ECA) and the Maintenance/ Site Service 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 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

Per G-TC-H-00086 R/4 (UCNI) the following permits shall be required for the project. The following permits shall be required:

- Site Use Permit for outside underground utilities
- Air Permit revision
- Power Services Utilization Permit
- Domestic Water Distribution Permit

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 material, if generated.

Attachments

Attachment 1. Drawing Showing Approximate Location of new Stack (Green Octagon), Electrical Building (Blue Rectangle), and Diesel Generator (Gold Rectangle) Nearby Site Indices (Red Areas)

Attachment 2. Map showing the Site Index 549, General Separations Area Eastern Groundwater Operable Unit

Attachment 3. H-02 Outfall Drainage Map with Approximate Location of new stack, diesel generator, and electrical building shown as a Large Green Dot

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 2020.

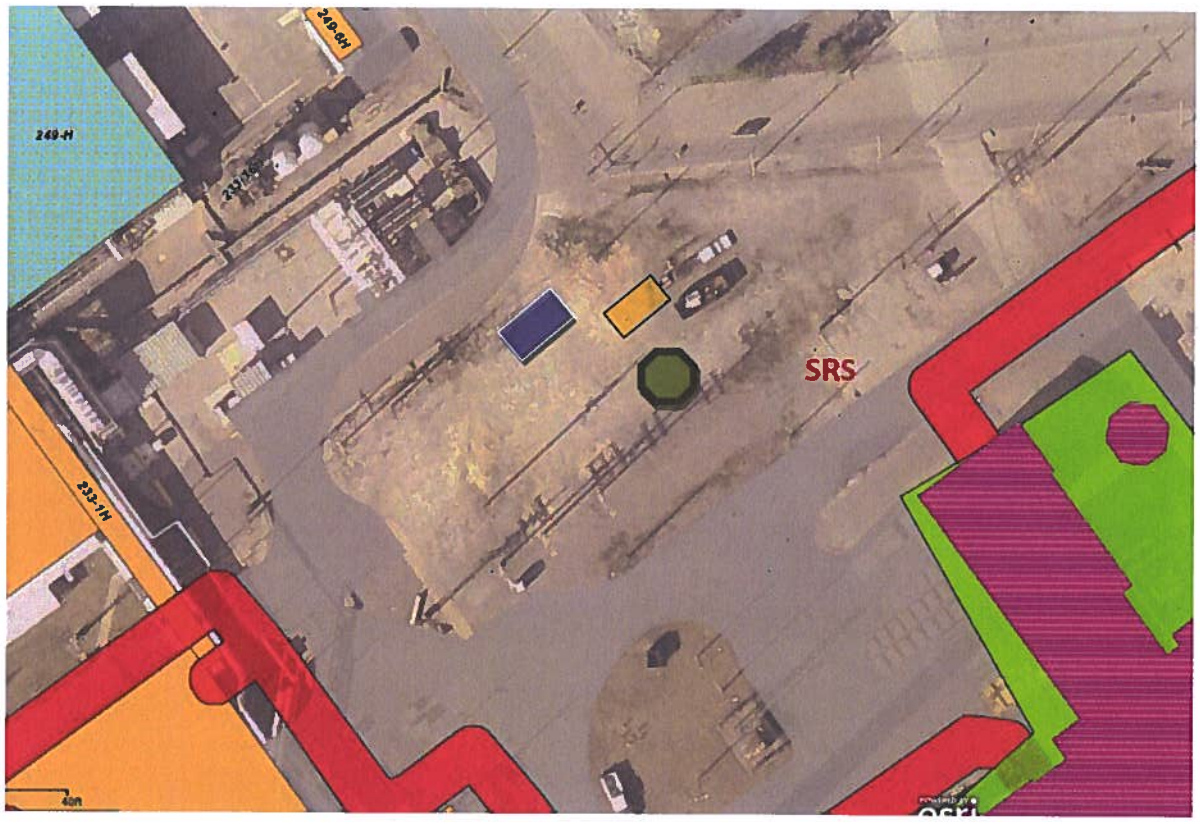
2. SRNS-RP-96-45, *Savannah River Site Plan for Performing Maintenance in Federal Facility Agreement Area (O&M) Plan (U)*, December 15, 1996.

3. SRS Manual 8Q Procedure 34, Revision 11 "Excavations and Trenches"

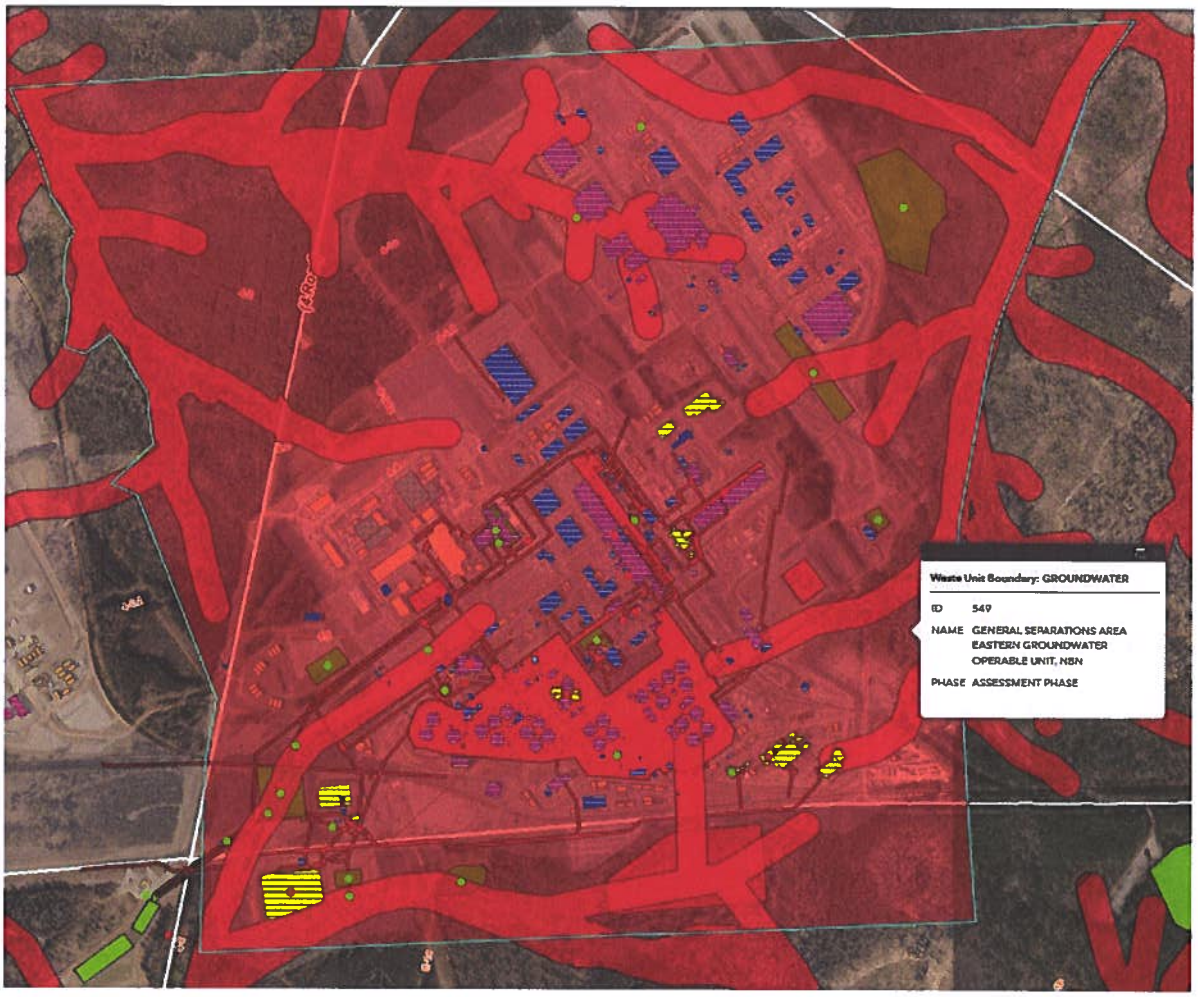
4. P-PA-H-8776 R/2 "Area 200-H Process Sewer Routing Plan & Details"

5. G-TC-H-00086 Revision: 4, Task Requirements and Criteria Document, Site Preparation and Exhaust Ventilation System for Building 234-7H (U)

Attachment 1. Drawing Showing Approximate Location of new Stack (Green Octagon), Diesel (Gold Rectangle), Electrical Building (Blue Rectangle), and Specific Site Indices (Red Areas)



Attachment 2. Map showing the Site Indice 549, General Seperations Area Eastern Groundwater Operable Unit



Attachment 3. H-02 Outfall Drainage Map with Approximate Location of New Stack, Diesel Generator, and Electrical Building shown as a Large Green Dot

