MINOR OPERATION AND MAINTENANCE ACTIVITY PLAN

Excavation to Correct an Underground Steam Line Leak North of 105-L.

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1. INTRODUCTION

This Operation and Maintenance (O&M) Plan is for an excavation to correct an underground steam line leak north of 105-L. The work will protect human health and the environment and minimize the impact to long term characterization and remediation efforts.

This activity is within 200 feet of Site Indices (SI) 305 (Potential Release from the L-Area Reactor Cooling Water system, 186/190L) and SI 479 (L-Reactor Area: L-Area Reactor Area Cask Car Railroad Tracks 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 located north of 105-L within 200 feet of the buffer zone for SI's 305 & 479. The location of work will be presented on Attachment 1.

Contaminants of interest near the work area include:

SI 305 (Potential Release from the L-Area Reactor Cooling Water system, 186/190L): The L-Area Reactor Cooling Water System received water from the Savannah River. The non-contact cooling was processed through the heat exchangers and returned to the Savannah River visa Steel Creek and later L-Lake. Constituents of Concern are Mercury and Radionuclides.

SI 479 (L-Reactor Area: L-Area Reactor Area Cask Car Railroad Tracks as Abandoned, NBN): Area 479 is the area around the railroad tracks located within the entire L-Area Fence. This are could have become contaminated if rain washed radioactivity from a parked train car onto the ground or railroad tracks or during transit. Potential contaminants of concern are primarily radionuclides, chiefly as fission products and tritium from heavy water/D20 moderated reactor operations (AM-241, Ba-137, Co-60, Cs-137, Eu-152, Pu-238-241, Sr-90, Tc-99, Y-90). The potential for trace amounts of non-rad contaminants may be present from other activities performed in the area (oxalic acid, sodium hydroxide, surfactants, solvents, oil and grease, acids/caustics, nitrate, phosphate, sulfate, lead, cadmium and other unknown metals).

Safety and health concerns involve personnel exposure to radionuclides, but no radioactive contamination has been found in this area and none is expected. Radiological Protection (RP) will sample and/or survey the soil disturbance in the excavation per their standard protocol or procedures.

3. O & M ACTIVITY

A. O&M Activity Description

The O&M activity involves:

The O&M activity is an excavation to correct an underground steam line leak north of 105-L The work will be performed in accordance with the provisions of Asset Suite Work Order # 02145166-01 and AHA # AHA-SUD-23465. If soil is generated, then every attempt should be made to place any soil removed back into the hole. If any soil cannot be returned to its original location, then the soil should be placed as close to the original location as reasonably possible. The disposal of any soil will be per the environmental compliance authority (ECA), generator certification official (GCO), and radiological protection (RP) direction.

B. O&M Activity Sampling and Monitoring for Health and Safety

RP will sample the site of soil disturbance for radionuclide presence per their standard protocol and procedures. Radiological surveys of the area to date have revealed no contamination. If radiological contamination is encountered, RP will determine if protective equipment and personnel access requirements 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 Assisted Hazard Analysis.

C. Health and Safety Plan

The health and safety concerns involve worker exposure to contaminants of interest listed in section 2 above. 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 may prepare a sampling plan for work in this area and will conduct sampling of the soil 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 project will be returned as backfill when the activity is completed.

E. Contaminated Materials Management and/or Disposal

The disposal of any waste materials generated during this activity will be contingent upon sample results. If media is determined to be “clean”, normal work practices would occur. Any waste materials generated during this activity will be disposed of as appropriate. This waste will be managed as appropriate per facility Waste Management and ECA guidance and handled in accordance with existing SRNS waste guidance procedures. Clean soil can be utilized to complete the road or put back in place.

F. Environmental Plans and Permit Modification Requests:

This activity is not located near any drains which go to L-Area outfalls. This activity is not expected to involve other environmental plans/permits, required maintenance and inspections, or erosion control practices.

4. CONTINGENCY PLAN

If at any time during the implementation of the activity, the conditions change, such that the activity is no longer considered "minor" (greater than 10% of a waste unit area impacted or disturbed), the Shift Operations Manager (SOM) shall be notified and the Facility Manager (or designee) or the ECA shall:

• Immediately notify the SRNS-OSC. The SRNS-OSC will notify the DOE-OSC.

• Contain and stabilize the area, investigate as necessary to determine the necessary change in the activity plan, secure the area, and stop work.

• Update the SRNS-OSC as to the findings and the requested path forward. The SRNS-OSC will communicate the information to the DOE-OSC and obtain concurrence on the path forward.

5. DOCUMENTATION & REPORTING

The Project Manager 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. Aerial Image of location of work
Attachment 2. Aerial Image of Waste Unit IDs 305 & 479

References

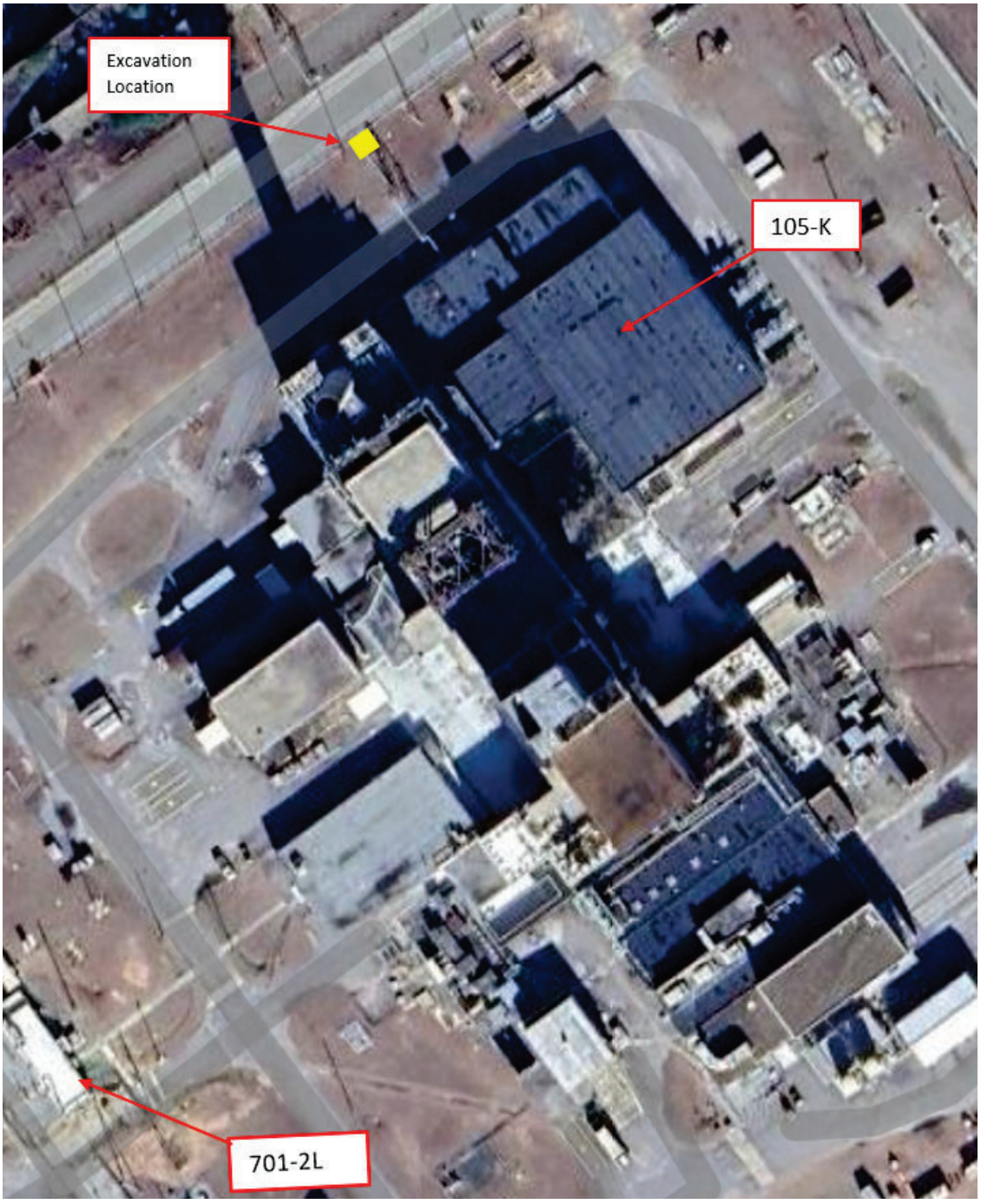
1. SRNS-OS-94-42, Federal Facility Agreement for the Savannah River Site, Administrative Document Number 89-05-FF, effective August 16, 1993, Revision 1 of Appendix C and Revision 0 of Appendix E for Fiscal Year 2018.

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. AHA # AHA-SUD-23465, Excavate and locate leak of L-Area Steam Line North of 105-L. Backfill will be performed as directed by engineering.

4. WO # 2145166-01, Investigate/Repair Steam Leak Under the 105-L Pidas Fence Line.

Attachment 1. Aerial Image of location of work



Attachment 2. Aerial Image of Waste Unit IDs 305 & 479

