MINOR OPERATION AND MAINTENANCE ACTIVITY PLAN

Excavate and Replace Fire Water System PIV-2072 in F-Area – Site Indices 200, 343, 394 & 435

Prepared by: Mallory Skinner Digitally signed by Mallory Skinner Date: 2024.11.26 07:31:37 -05'00'
Mallory Skinner Date
Environmental Compliance Authority

Approved by: KYLE PUDNEY (Affiliate) Digitally signed by KYLE PUDNEY (Affiliate) Date: 2024.11.26 07:28:59 -05'00'
Kyle Pudney Date
Environmental Compliance Authority

Approved by: James L. Hines Digitally signed by James L. Hines Date: 2024.11.26 08:15:04 -05'00'
James Hines
U&Os WMC Date

1. INTRODUCTION

This Operation and Maintenance (O&M) Plan is for the excavation and replacement of the fire water system PIV-2072 located East of 772-1F. The work will protect human health and the environment and minimize the impact to long term characterization and remediation efforts.

This activity is within Site Index (SI) 200 (Spill on 05/01/57 of 125 FT2 of RAD Liquid From Solvent Trailer, NBN) (SI) 343 (Sandblast Area CMF-001, NBN), (SI) 394 (Spill on 02/25/85 of 20000 CM of Water Vapor -RAD, NBN), and (SI) 435 (Spill on 06/01/59 of <1 CI of Segregated Solvent From 211-F, NBN) of the Federal Facility Agreement (FFA, Reference 1). 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 an approximant 10ft x 10ft square in the northeastern portion of building 772-1F. The location of the repair to be completed is shown as a yellow square on Attachments 1 and 2.

Contaminants of interest near the work area include:

SI # 200 contains a spill from 5/1/57 of 125 sq. ft. of radiological contaminated liquid from a solvent trailer that overflowed at building 211-F contaminating the ground area. It was identified in the Stephens and Ross Report ad Key-007. Constituents of concern include fission products, TBP, n-paraffin. The Sandblast Area CMF-001, NBN, SI # 343 is considered suspect for chromium and lead contamination. SI # 343 occurred from the overflow of a sump in Building 211-F segregated solvent facility. It contaminated the concrete pad and graveled area. Most of the contamination was removed. Identified in Stephens and Ross Repost as Key-013. Constituents of concern include fission products, TBP, n-paraffin. SI # 394 occurred from a Spill on 02/25/85 of 20000 CM of Water Vapor. The concern from for SI # 394 is radiological contamination. SI # 435 is a spill that occurred on 6/1/59 of <1 Ci of segregated solvent from Building 211-F. Constituents of concern include fission products, TBP, n-paraffin. An overflow of a sump in Building 211-F segregated solvent facility contaminated the concrete pad and graveled area. Most of the contamination was removed. The ground was covered with soil and gravel. Identified in Stephens and Ross Report as Key-01.

3. O & M ACTIVITY

A. O&M Activity Description

The O&M activity involves:

The scope of the activity is to excavate and replace the fire water system PIV-2072 located East of 772-1F. SRNS Site Utilities will perform the work in accordance with the provisions of Asset Suite Work Order # 01819579 (Reference 4) and AHA # SUD-23197 (Reference 3).

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), Generator Certification Official (GCO), and Radiological Protection (RP) Direction.

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

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 excavated during this activity if necessary. 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

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 put back in place 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

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 Showing Excavation Location of PIV-2072
Attachment 2. Image Showing Location of 772-1F (Yellow Square) and Specific Site Indices (Red Areas)
Attachment 3. Photo Showing Physical Location

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 # SUD-23197, Perform layout/GPR survey to support excavation needed to replace fire water system PIV-2072 East of 772-1F.

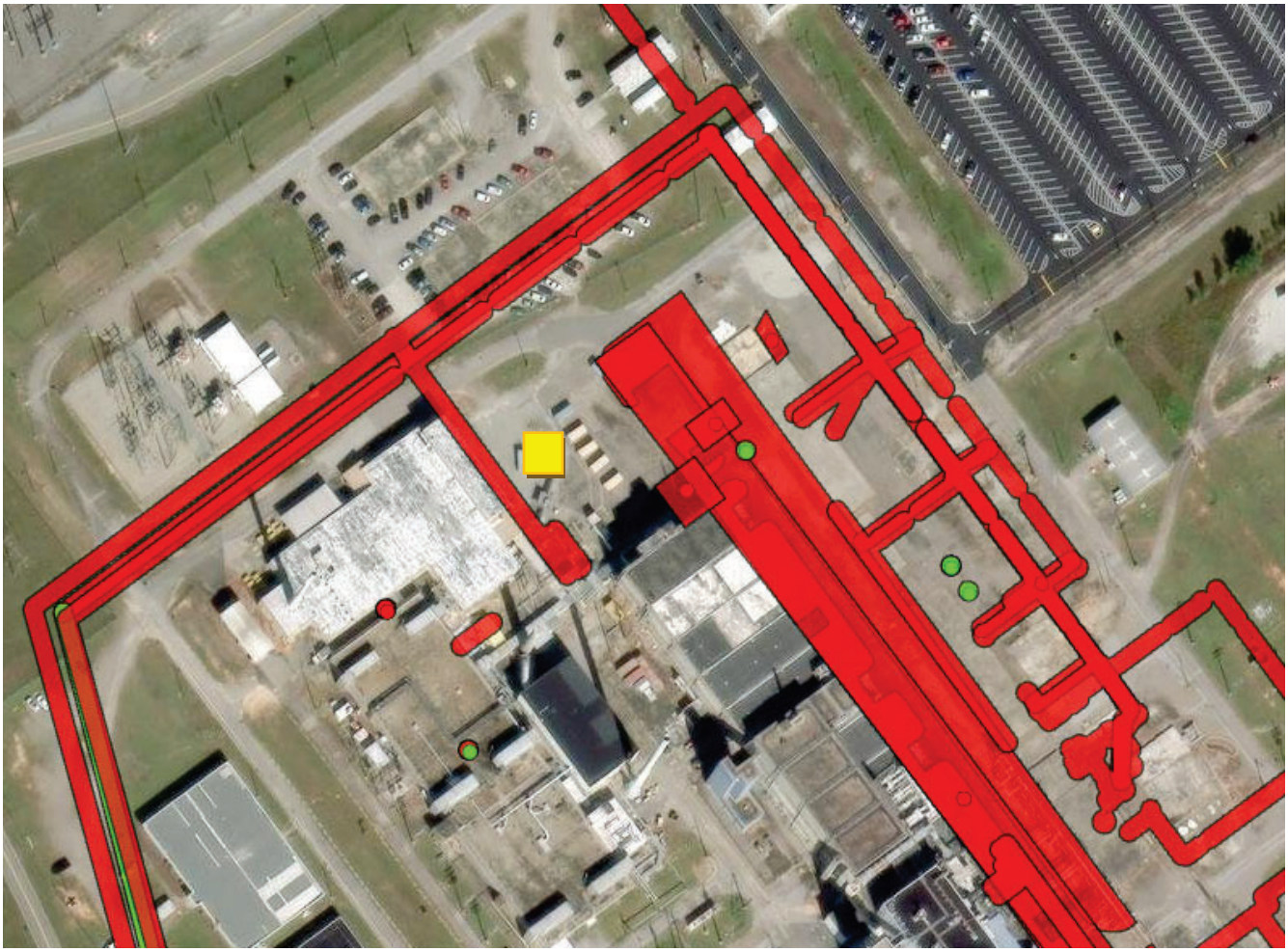
4. WO # 01819579, Excavate/Backfill Defective PIV 2072 in F-Area.

Attachment 1. Aerial Image Showing Excavation Location of PIV-2072 (Yellow Square)



Repair Site

Attachment 2. Image Showing Location of 772-1F (Yellow Square) and Specific Site Indices (Red Areas)



Repair Site

Attachment 3. Photo Showing Physical Location

