Facility Decommissioning Evaluation
Building 720-F, Central Alarm Station

This is a Simple Model Decommissioning per Facility Disposition Manual 1C

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Document Revision History

Date	Rev	Page/¶/Ref	Description of Changes
03/12/2007	0	N/A	Initial Issue
01/16/2025	1	All	Revisions made to reflect current Facility Decommissioning Evaluation template identified in the Environmental Compliance and Area Completions Project Regulatory Document Handbook (SRNS-RP-2022-00330) and current facility conditions.
06/19/2025	2	Removed from Facility Description and added to Summary of Existing Characterization.	The asbestos survey results paragraph was moved from "Facility Description" to "Summary of Existing Characterization".
		Facility Description	Added explanation of northeast oil stain via discussion of diesel generator refueling station. Added clarification of the mechanical room concrete pad and added Figure 7.
		Figure 3	Updated to add sump drain to further illustrate where/how the sump discharges.
		Process History	Updated to discuss the sump and associated drain in the diesel generator room.
		Summary of Existing Characterization	Added description of how the contents of diesel generator sump will be dispositioned.

Revision 0 is in Document Control but was not submitted to the regulators for review/concurrence.

Introduction

This document contains an evaluation of available existing information about a facility that is slated for decommissioning. This evaluation screens the project to determine whether it is appropriate to conduct the decommissioning under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), or to use a simpler graded approach.

This Facility Decommissioning Evaluation (FDE) consists of three sections. Part 1 contains a description of the project scope, including a brief summary of the purpose and history of the facility and photographs of the structures that are part of the project. Part 2 encompasses a series of questions, the answers to which determine the decommissioning model (CERCLA Model, Integrated Sampling Model, or Simple Model) that will be used. The three graded approach models are described in Facility Disposition Manual 1C, Procedure 501. Part 2 also includes a justification for the answers to each question. Part 3 is a list of references that were used for the evaluation.

Conclusion

A review of the existing characterization data, process/building history, sample data and walk downs of the facility, supports the determination that this building and its ancillary structures meet the criteria of a Clean Building, Simple Model as described in Facility Disposition Manual 1C, Procedure 501. This decision is supported by the documentation found throughout the body of this document. No chemical or hazardous radioactive contaminants are associated with this structure.

Part 1. Project Scope

Scope

This evaluation has been prepared in accordance with requirements found in Facility Disposition Manual 1C, Procedure 502, "Preparing Decommissioning Decision Documents." The scope of this evaluation includes Building 720-F, Central Alarm Station, and the following ancillary structures (Figure 1):

- Secondary Transformer 252-9F, a small transformer located on a concrete pad outside the south-east corner of Building 720-F,
- • 2 heating, ventilation, and air conditioning (HVAC) Units located on concrete pads north of Building 720-F, and
- A radio tower located on a concrete pad outside the north-west corner of Building 720-F.

The proposed decommissioning end-state for this facility is demolition to the building slabs/foundation and removal of the debris.

The described decommissioning activities are not the final area closure actions. The decommissioning of a building is intended to reduce landlord costs, increase safety by removing excess facilities, and reduce the potential for releases of hazardous substance to the environment.

Facility Description

Building 720-F, CAS, provided F-Area (Figure 1) with intrusion detection and access control per the Electronic Safeguards & Security System (E3S). Building 720-F is a 3,913 square foot, single-story structure (Figure 2). It was built in 1989 on a concrete slab. The building is a steel-framed structure consisting of an interior of cement masonry block walls, drop acoustical ceiling tiles, and accessible floating floor panels in the computer and control rooms and electrical rooms (Figure 3). The exterior has a stucco finish and built-up roofing. The control room and computer room supported the E3S system. The structure contains old equipment which has been abandoned-in-place such as a mechanical compressor or items to support the E3S system and climate control that are all deactivated and are set to be removed during decommissioning work and prior to demolition. Final hazard removal actions (including removing the deactivated equipment) will be done to facilitate demolition with heavy equipment. The building contains a minimum 6-inch-high wall surrounding the diesel generator to prevent spillage of oil/grease or water into E3S/computer rooms or outside (Figure 3 – top right) as well as a sump in the northeast corner near the deactivated diesel generator (Figure 4) (Reference 2).

The service inlet used for refueling the diesel generator is located outside of the northeast corner of 720-F (Figure 3). This area included an external mini containment dyke designed to contain any spills that might occur during the refueling process along with a valve designed to capture spills or release rainwater. Spills would have been managed through the ORPS/SIRIM (Occurrence Reporting and Processing System/Site Item Reportability and Issue Management) database. No records of spills to the surrounding area outside of 720-F were identified in that database during research to prepare this FDE. The stained concrete will be treated with a surfactant during the decommissioning process and prior to Final Acceptance Inspection.

The ancillary structures were constructed with the CAS in 1989. One small concrete slab is located south of the structure housing a transformer (252-9F, Figure 2). This transformer provided power from the Savannah River Site (SRS) electrical grid to the E3S system prior to 235-F deactivation activities (References 2, 3, and 4 for deactivation activities). On the northern side of CAS are two (2) HVAC units (Figure 5) that provided a temperature and humidity-controlled environment for the E3S system. Additionally, there is a radio tower (Figure 6) that provided alarm transmissions to and from the F-Area E3S system. The northern slab attached to the building (Figure 1) is for the mechanical room door collocated with the chilled water lines (Figure 7). The equipment is not operational (Reference 2).

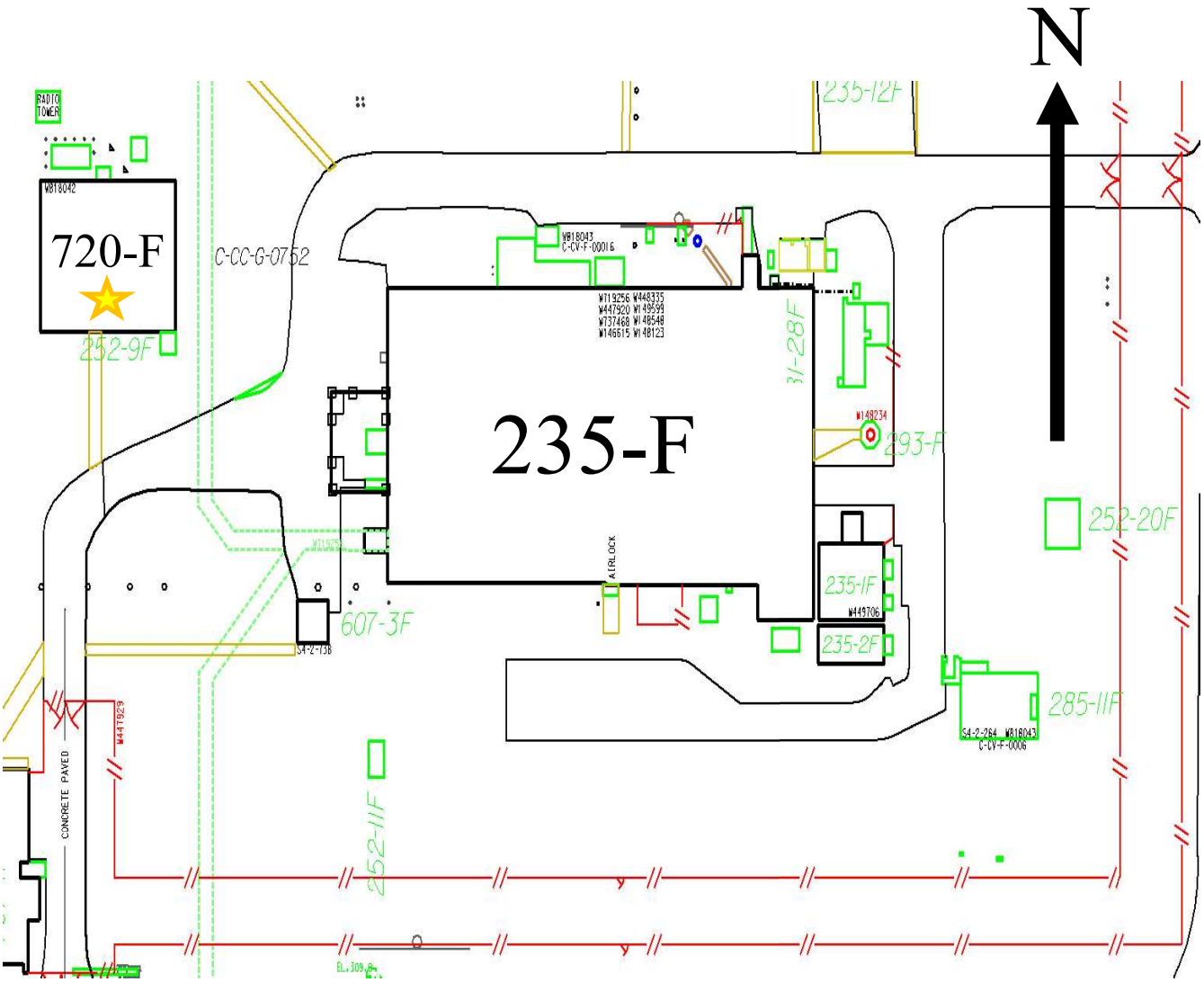

Figure 1: Location of the Central Alarm Station, 720-F.

Figure 2: Photograph of 720-F and 252-9F taken from Southeast.

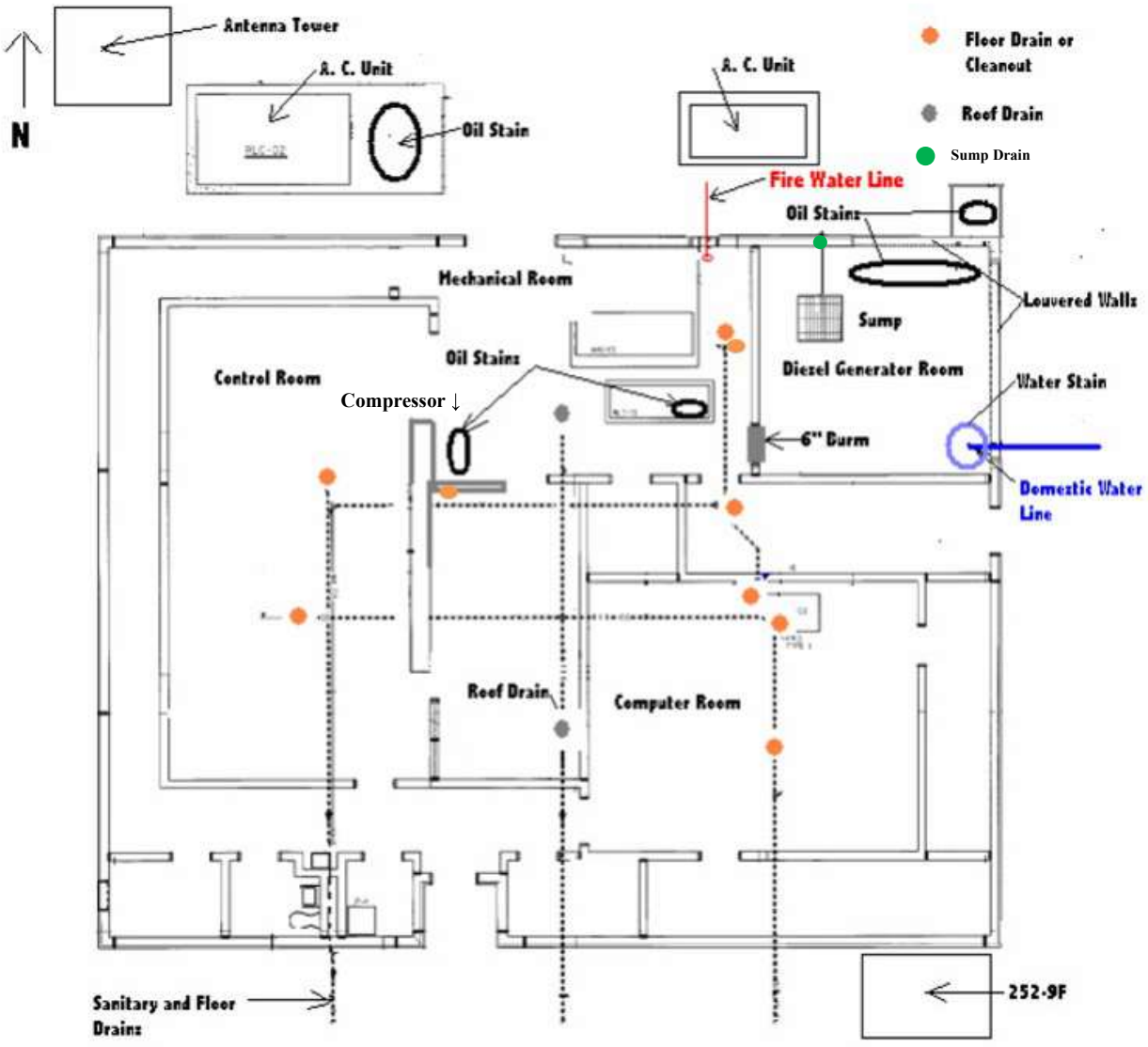

Figure 3: Labeled Floorplan of 720-F.

Figure 4: Diesel Generator within 720-F.

Figure 5: North Side of CAS Featuring the A/C Units and Slabs.

Figure 6: Radio Tower For CAS.

Figure 7: Doorway Pad to Mechanical Room – Northern Side of 720-F

Process History

Review of records, walk downs, and interviews indicate that no chemical or radioactive processes were performed in this building (i.e., no chemical, mechanical, or electrical energy or interaction was performed to change the state of an input material or to produce a new output product). All chilled/cooling waters have been flushed and drained (Reference 2).

Chemical Process

Chemical Name	Process location	Evidence of spills?
None	N/A	None per ORPS/SIRIM/FFA (References 6 and 7), but water and oil/grease stains exist as marked on floorplan. (Figure 3)

N/A: Not Applicable
ORPS/SIRIM: Occurrence Reporting and Processing System/Site Item Reportability and Issue Management
FFA: Federal Facility Agreement

Radioactive Process

Isotope	Contaminated areas/others
None	N/A

The structure was found to have no process-related history.

The CAS has floor and roof drains as well as a 6-inch walled surrounding structure and sump with its own contained 6-inch capped (not grouted) drain line to capture any fuel leaks from the diesel generator storage tank prior to deactivation. All building floor drains discharge to the F-Area sanitary sewer system (the sanitary sewer was previously grouted), the sump discharges out of the northern side of the building via a pump out and separate collection/disposal, and the roof drains to the storm drain. (Figure 3)

There are stains on the concrete slabs (See Figure 3) due to oil spills that occurred during routine maintenance of the diesel generator, air handling units, and the instrument air compressor, but none are due to facility operations. There are also water stains on the concrete slab inside of the northeast corner diesel generator room. There are no visible cracks in the building slab. The oil/grease stains will be cleaned with a suitable surfactant during facility decommissioning. Approximately half of the floor space is covered with a raised access/raceway floor and the sump contains rainwater that entered from the louvered windows. The rainwater will be removed during decommissioning; consequently, these areas cannot be inspected for stains or cracks at this time. These areas will be filled with cementitious material or cut as necessary to prevent water accumulation. This floor space and sump will be inspected for stains and cracks when available, and if necessary, these will be cleaned with a surfactant and/or repaired and then filled with cementitious material during demolition with the results documented in the Decommissioning Project Final Report (DPFR).

Summary of Existing Characterization

Characterization has been accomplished using a combination of process knowledge/historical release information, verification walk downs, and sampling as appropriate.

The asbestos report identifies Asbestos Containing Materials only within the floor mastic of the tiled floor while the roof, valve, flange gaskets and concrete block filler were not inspected due to inaccessibility and may be treated as Presumed Asbestos Containing Material (Reference 5).

An important part of the characterization portion of this evaluation is a historical review of spills/releases to the environment. This review includes a review of the Occurrence Reporting and Processing System/Site Item Reportability and Issue Management (ORPS/SIRIM) database conducted from the effective date of the Federal Facility Agreement (FFA), August 16, 1993 to present, and a review of the FFA. The FFA serves as a review of releases/spills to the environment prior to August 16, 1993. (References 6 and 7)

Contents emptied from the diesel generator sump will be pumped, typically into a 330-gallon tote tank, and characterized before disposition in accordance with the sample results. The disposition path and volume of rainwater will be discussed in the DPFR.

Wastes generated during decommissioning will be characterized and managed in accordance with SRS procedures and State and Federal regulations.

Historical Significance

A review has been conducted in accordance with a Programmatic Agreement. This review resulted in the publication of a Cultural Resources Management Plan (Reference 8) in which the facilities with historical significance are listed. This facility is listed in the Cold War Resources Inventory as “Not Eligible.”

Part 2. Evaluation

Clean Facilities				
	Question	**Yes**	**No**	**Justification**
1.	Has the facility ever contained or processed radioactive or hazardous material other than stored packaged material or materials of construction? *If Yes, go to question 4.*		X	Document reviews and a facility walkdown by EC&ACP personnel revealed no evidence that the facility ever contained or processed radioactive or hazardous material other than stored packaged materials or materials of construction.
2.	If there was stored packaged material, has there ever been a spill? *If No or N/A, this is a Simple Model. Stop.*		X	The facility was not used to store packaged material; however, there are minor oil/grease stains on the floor associated with routine equipment maintenance. **This is a Simple Model decommissioning**
3.	Was spill confined inside structure and cleaned to free release standard per Radiological Control Manual 5Q (for radiological) or continued occupancy per Industrial Hygiene Manual 4Q (for hazardous)? *If Yes, this is a Simple Model. Stop*			
Contaminated Facilities				
	Question	**Yes**	**No**	**Justification**
4.	Is the facility listed as a Resource Conservation and Recovery Act (RCRA)/CERCLA Unit in Appendix C of the SRS FFA? *If Yes, this is a CERCLA Model. Stop.*			
5.	Is the facility listed as a Site Evaluation Area in Appendix G of the SRS FFA? *If Yes, this is a CERCLA Model. Stop*			
6.	Is there evidence that there has been a release of hazardous or radioactive materials outside the structure? *If Yes, this is a CERCLA Model. Stop*			
7.	Is there a substantial threat of a release of hazardous or radioactive materials outside the structure? *If Yes, this is a CERCLA Model. Stop.*			
8.	Has the facility been assigned a hazard category as defined in Facility Safety Document Manual 11Q? *If No, stop and refer facility (except guard shacks, warehouses, office buildings, and other clean facilities with no chemical or radiological hazards) for evaluation to assign a hazard category, then proceed.*			

	Question	Yes	No	Justification
9.	Is the hazard category Nuclear (HC-2 or 3), radiological, or high hazard chemical? *If Yes, this is a CERCLA Model. Stop*			
10.	Has USDOE directed that the decommissioning be performed using the CERCLA Model? *If Yes, this is a CERCLA Model. Stop.*			
11.	Does the complexity of the facility or the nature and extent of contamination warrant a higher-than-normal level of rigor and detail for decommissioning planning and evaluation? *If Yes, this is a CERCLA Model. Stop.*			
12.	Is the facility a former nuclear, radiological, or high-hazard chemical facility? *If Yes, this is an Integrated Sampling Model. Stop*.			
13.	Have cognizant Engineering personnel and the Decommissioning Project Environmental Compliance Authority jointly concluded that a final survey is not required for this facility? *If Yes, this is a Simple Model. Provide justification for changing the screening to Simple Model by giving the reason the change was made. If No, this is an Integrated Sampling Model. Stop.*			

Part 3. Review of Existing Records

This section provides a list of the facility records that were reviewed as part of the evaluation.

Ref #	Document No.	Revision/Date	Title
1	G-FDE-F-00062	Rev. 0, 03/21/2007	Facility Decommissioning Evaluation: Building 720-F, Central Alarm Station (CAS).
2	Work Order 2021595	Multiple Dates	Deactivate, Isolate Electrical Feed to 720-F per E-DCF-F-03634
	Work Order 0841394		720-F, GS, Remove Coolant from Diesels
	Work Order 0780704		720-F, Remove Fluids & Batteries
	Work Order 02126700		Drain Oil and Remove Refrigerant in Eqpt in 720-F and 701-4F
	Work Order 2126662		Verify Contents of Conduits for Isolation Index
3	V-PCOR-F-00093	Rev. 0, 02/27/2023	Deactivation Project Final Report Building 235-F, Metallurgical Building
4	F-FCR-F-00022	Rev 23, 08/08/2024	Isolate Fire Water Supply To Bldg. 720-F And Update FW Map
5	Q-APG-F-00066	Rev. 1, 06/21/2023	Baseline Asbestos Inspection Report of Building 720-F
6	ORPS/SIRIM Database	N/A	ORPS/SIRIM Database
7	WSRC-OS-94-42	Rev. 29	Appendix K.1: D&D Facilities to be Decommissioned.
8	SRS-CRMP-Final-2005	Rev. 5, 01/26/2005	Savannah River Site's Cold War Built Environment Cultural Resources Management Plan