Facility Decommissioning Evaluation
Building 710-16D, Storage Building

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

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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 the following buildings and ancillary structures, which are further described in the next section:

710-16D is a storage building and has no ancillary structures.

The proposed decommissioning end-state for this facility is demolition to the building’s concrete foundation.

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 substances to the environment.

Facility Description

The 710-16D (Figure 1) storage building was built in 1993. The 1580 square foot (49.75' x 31.76') building is wood frame construction on a concrete foundation. The foundation is not a slab; however, it does consist of some interior concrete floor as it extends inward beyond the walls in many locations. The remaining floor space is natural dirt (Figure 2). The building has an asphalt shingle roof and vinyl siding. The building has eight (8) storage areas. Additional "attic" storage, with ladder access in Storage 1, is available above the ceilings installed over Storage 2 and 3 and over Storage 4, 5, 6, 7 and 8. Building position with respect to surrounding buildings is shown in Figure 4.

Figure 1. Building 710-16D, Storage Building

Process History

Review of records, walkdowns 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 the input material or to produce a new output product).

Building 710-16D was built and utilized as storage for the 484-D Powerhouse area. Currently, there are no building contents.

Chemical Process

Chemical Name	Process Location	Evidence of Spills?
N/A	N/A	N/A

Radioactive Process

Isotope	Contaminated areas/others
N/A	N/A

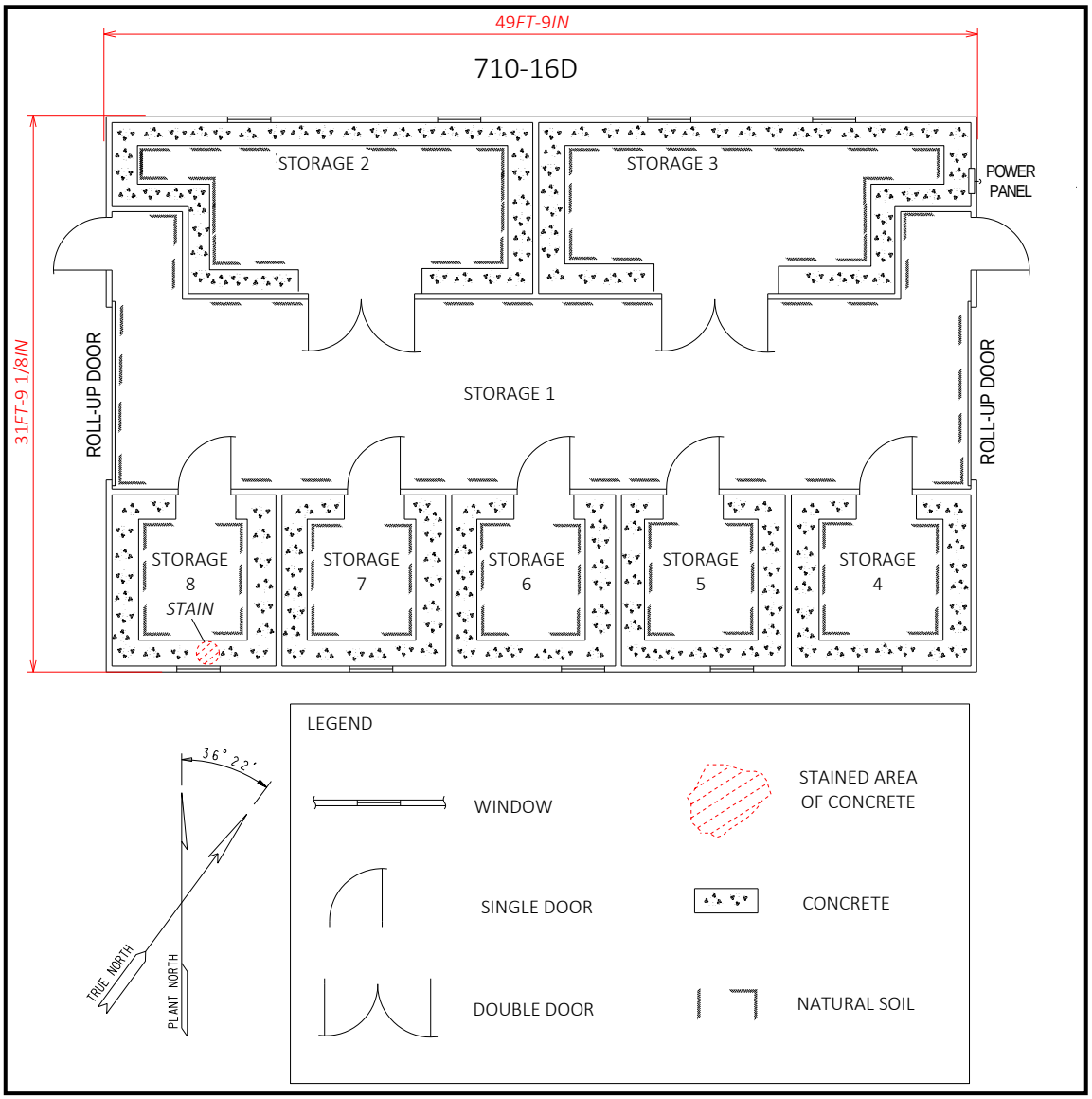

Figure 2. Building 710-16D Layout

Though no chemical or radioactive processes were associated with this storage building, what appears to be a small (~1 ft^2) oil stain is evident on the concrete within Storage 8 (Figure 2 and Figure 3). There is no evidence of the spill having reached onto the adjacent dirt floor area. Stained concrete will be cleaned with BioSolve® or equivalent surfactant during decommissioning.

Figure 3. Stain in Storage 8

The building has no associated sumps or drains. The concrete foundation is in good condition.

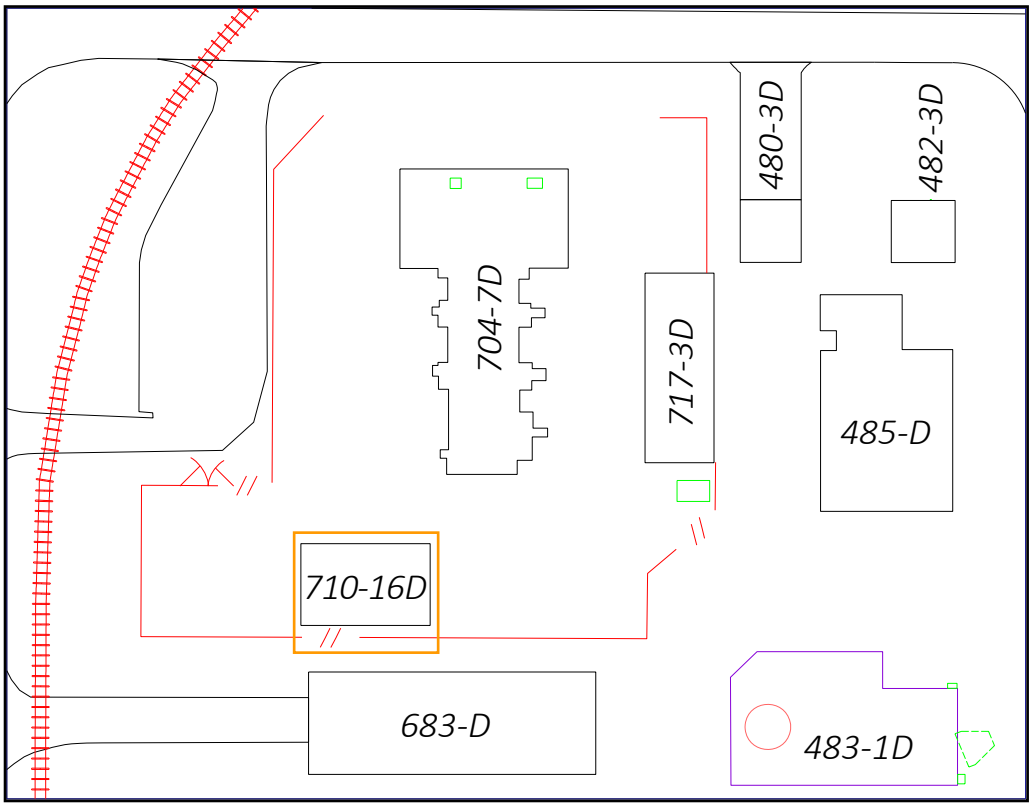

Figure 4. Building 710-16D Area Layout

Summary of Existing Characterization

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

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 (Reference 2) conducted from the effective date of the Federal Facility Agreement (FFA), August 16, 1993 to present and a review of the FFA (Reference 1). The FFA serves as a review of releases/spills to the environment prior to August 16, 1993. Review of the FFA, the SRS ORPS/SIRIM database and the SRS spill files reveal no record of spills having occurred at Building 710-16D.

An asbestos survey of the building was conducted on November 25, 2019, which identified no Asbestos Containing Materials (ACM) to be present in the facility. The results of that survey are included in Q-APG-D-00019, Baseline Asbestos Inspection Report of Building 710-16D, Reference 5. In accordance with 40 CFR part 61.145, a ten-day notification will be filed with South Carolina Department of Health and Environmental Control (SCDHEC) prior to demolition and all ACM removal, if any is subsequently found, will be performed by asbestos trained personnel with proper permitting and waste disposal procedures.

Wastes generated during decommissioning will be characterized and managed in accordance with Savannah River Site (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 3)

in which the facilities with historical significance are listed. This facility is not listed in that reference and therefore is not historically significant.

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	Facility was a storage area for various non-hazardous, packaged chemicals. However, it appears that a spill event of unknown substance occurred in the facility (See Figures 2 & 3). Review of the chemical inventory of D-Area does not indicate presence of any hazardous materials stored in the building. No hazardous materials storage areas have been demarked within the building.
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		A stained area of concrete exists in Storage 8 (See Figures 2 & 3). It appears to be an oil stain, but source is unknown. It is not radiological (Reference 4).
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.*	X		Stain from spill in Storage 8 appears to be petroleum oil based. The apparent spill was contained within the facility. Concrete has been cleaned. Stained concrete will be further cleaned with BioSolve® or equivalent surfactant. This will be a SIMPLE MODEL DECOMMISSIONING.

Contaminated Facilities

	Question	Yes	No	Justification
4.	Is the facility listed as a Resources 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 for evaluation to assign a hazard category, then proceed.*			
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 DOE-SR 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.*			

Contaminated Facilities

	Question	Yes	No	Justification
12.	Is the facility a formerly nuclear, radiological, or high-hazard chemical facility? *If Yes, this is an Integrated Sampling Model. Stop.*			
13.	Has EC&ACP's Regulatory Support Group determined that a final survey is not required for this facilty? *If Yes, this is a Simple Model. If No, this is an Integrated Sampling Model. Stop*			

Part 3. Review of Existing Records

The following facility records were reviewed as a part of this evaluation:

Ref #	Document No.	Revision/Date	Title
1	WSRC-OS-94-42	Rev 0, Aug. 16, 1993 All updates through Sept. 21, 2018, including Rev. 0 Appendices C, G and K for Fiscal Year 2019	FFA for the SRS, Administrative Document No. 89-05-FF
2	N/A	N/A / Since 1993	D-Area SIRIM and ORPS reports 08/1993 to 02/2009.
3	N/A	Final January 26, 2005	Savannah River Site's Cold War Built Environment Cultural Resources Management Plan
4	S-EHS-D-00001, Rev 0	0/April, 2006	D-Area Hazards Survey
5	Q-APG-D-00019	0/November 25, 2019	Baseline Asbestos Inspection Report of Building 710-16D