Facility Decommissioning Evaluation
Building 484-15D, D-Area 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 is for Building 484-15D in D-Area which is further described in the next section.

The proposed decommissioning end-state for this facility is demolition to the building slab.

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

Building 484-15D is a steel frame structure with metal roof and skin, sitting on a concrete slab. The ceiling and walls in the interior of the structure are insulated with white plastic-backed, fiberglass insulation. The structure itself is approximately (~) 100 feet (ft) by 20 ft and ~20-ft tall. The building's electrical service has been deactivated (disconnected and air gapped), rendering the building cold & dark, refer to "Deactivation Project Final Report Building 484-D Powerhouse and Ancillary Buildings", V-PCOR-D-00042 (Reference 6). No other utilities were provided to the structure. Figure 1 is a picture of the building. Figures 2 and 3 are a layout of the building and a layout of the area in which the building is located, respectively. The building has a laydown yard associated with it. The structure was erected post-1987.

There are two monitoring wells, DCB-44A and DCB-44C, in the immediate vicinity of Building 484-15D. The monitoring wells are not within the scope of this decommissioning.

Figure 1. Building 484-15D, D-Area Storage Building

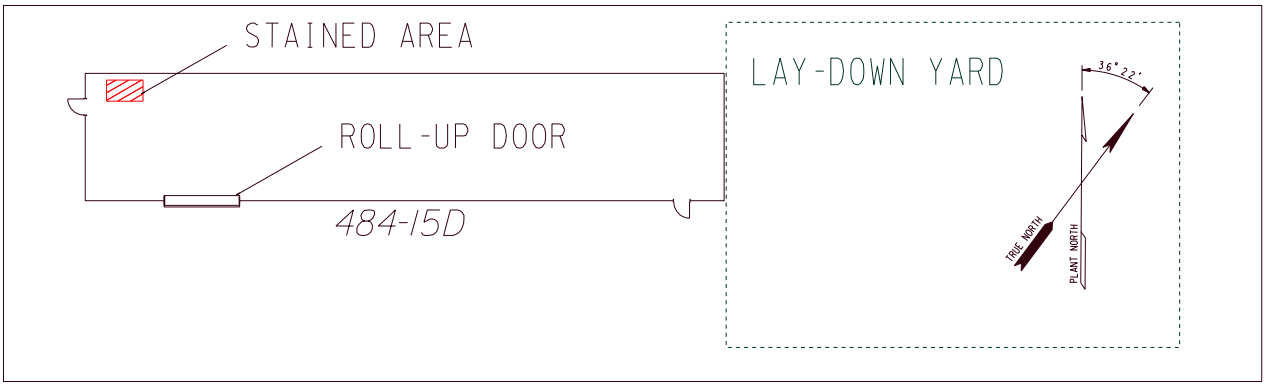

Figure 2. Building 484-15D, Storage Building (Layout)

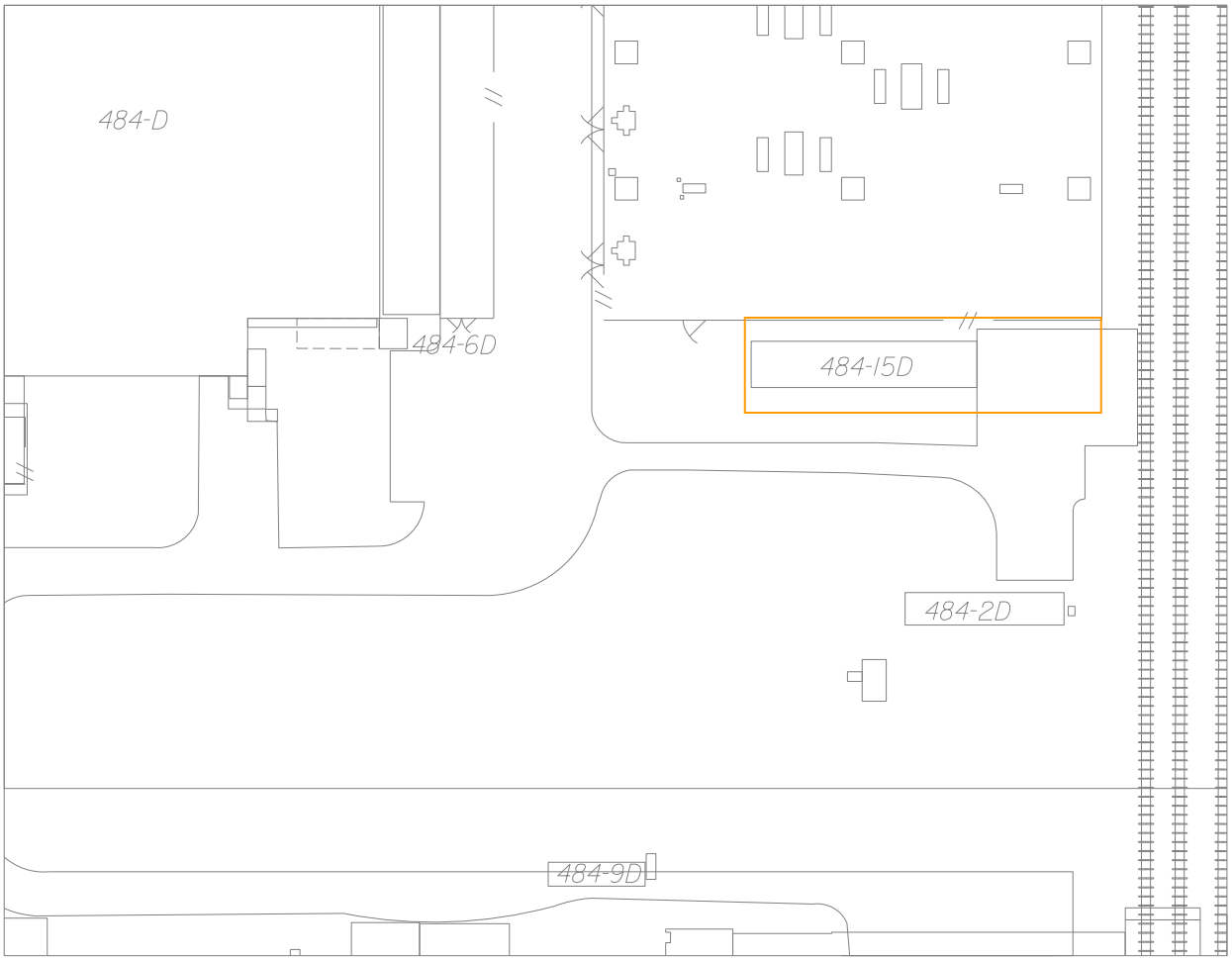

Figure 3. Building 484-15D, Storage Building (Layout)

Process History

A 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).

Historically, Building 484-15D was used for storage of grounds maintenance equipment and other items as listed below for the 484-D powerhouse and operations. There is a laydown yard exterior to the structure. The dimensions of the laydown yard are ~50 ft by 70 ft. The following list is a non-inclusive representation of items previously stored within the structure and in the laydown yard.

- Scaffolding
- Anion Resin
- Amberlite Resin
- Spare Electrical Equipment
- Large Electric Winch
- Spare Powerhouse Mechanical Equipment
- Sheet Metal
- Lubricating Oil
- Grass Seed
- Mortar Mix
- Pulverized Limestone
- Containerized Petroleum Fuel Products, <5 gallons (Flammable Storage Locker)

The concrete slab is stained in several places within the structure. The staining is limited in extent and is primarily along the north wall, indicating small quantities of release. Further, no evidence could be seen that the leaks may have migrated outside the confines of the slab. The slab is in good condition and has maintained its integrity. Further, there are no drains or sumps for the structure. Figure 4 provides a picture of stained concrete along the north wall of the facility.

Figure 4. Building 484-15D, D-Area Storage Building Slab Stains

Chemical Process

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

N/A – not applicable

Radioactive Process

Isotope	Contaminated Areas/Others
N/A	N/A

N/A – not applicable

Summary of Existing Characterization

Characterization has been accomplished using a combination of process knowledge/historical release information, verification walk downs and a review of S-EHA-D-00001, "Hazards Survey for D-Area".

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 Savannah River Site (SRS) 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.

Review of the FFA, the SRS ORPS/SIRIM database and SRS spill files reveal no records of spills having occurred outside of the 484-15D structure. Staining of concrete within the structure indicates that some small spills occurred. The nature and location of the staining indicate that the source of the material that caused the stains was likely oil or other common petroleum product leak. Staining was limited to within the structure. The leaks were apparently small and were limited to the concrete slab within the structure. No evidence of contamination of soil outside the structure was noted. Stains on the concrete will be cleaned with BioSolve® or equivalent surfactant during decommissioning.

An asbestos survey of the building was conducted on November 6, 2019 and no areas tested positive for asbestos containing materials (ACM). The results of that survey are included in Q-APG-D-00011, "Baseline Asbestos Inspection Report of Building 484-15D", Reference 7. In accordance with 40 CFR part 61.145, a ten-day notification of demolition will be filed with SCDHEC prior to demolition, even though no asbestos is present

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 (SRS's Cold War Built Environment Cultural Resources Management Plan; January 26, 2005) 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 is a standard storage structure. There is no evidence of radioactive or hazardous material processing or processing equipment within the structure. None of the available information or personnel interviews indicate the structure has been used for anything except storage.
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		Spills in the structure are primarily along the north wall of the building slab and appear to be motor oil or other petroleum products.
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		Spills were non-radiological and not hazardous to personnel. Spills did not impact occupancy of the structure. Stained areas will be cleaned with BioSolve® or equivalent surfactant during decommissioning. **Decommissioning of Building 484-15D will be performed as a Simple Model decommissioning.**

Contaminated Facilities

	Question	Yes	No	Justification
4.	Is the facility listed as a RCRA/CERCLA Unit in Appendix C of the SRS FFA? *If Yes, this is a CERCLA Model. Stop.*			N/A
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.*			N/A
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.*			N/A
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.*			N/A
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*			N/A

Contaminated Facilities *(cont'd)*				
	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*			N/A
10.	Has the Department of Energy-Savannah River directed that the decommissioning be performed using the CERCLA Model? *If yes, this is a CERCLA Model. Stop*			N/A
12.	Is the facility a formerly nuclear, radiological, or high-hazard chemical facility? *If Yes, this is an Integrated Sampling Model. Stop.*			N/A
13.	Has Environmental Compliance and Area Completion Project'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*			N/A

N/A – not applicable

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	SRNS-RF-2008-00086-000-M&O	Revision 19-01-MO, Feb. 14, 2019	Standard Requirements Identification System FA00 Facility List.
2	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
3	N/A	N/A / Since 1993	D-Area SIRIM and ORPS reports 08/1993 to 02/2009.
4	N/A	Final January 26, 2005	Savannah River Site's Cold War Built Environment Cultural Resources Management Plan
5	S-EHS-D-00001, Rev 1	October, 2009	Hazards Survey for D-Area (including 484-D Powerhouse)
6	V-PCOR-D-00042	Rev. 0, July 1, 2014	Deactivation Project Final Report Building 484-D Powerhouse and Ancillary Buildings
7	Q-APG-D-00011	Rev. 0, November 11, 2019	Baseline Asbestos Inspection Report of Building 484-15D