

## Decommissioning Project Final Report Building 484-7D, D-Area Storage Building

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0	4/29/2021	N/A	Initial Issue

## LIST OF ABBREVIATIONS AND ACRONYMS

ACM	Asbestos Containing Material
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CRO	Community Reuse Organization
D&D	Deactivation and Decommissioning
D&R	Dismantlement and Removal
DOE-SR	Department of Energy Savannah River Operations Office
DPFR	Decommissioning Project Final Report
EPA	(U.S.) Environmental Protection Agency
EC&ACP	Environmental Compliance & Area Completion Projects
FAI	Final Acceptance Inspection
FDE	Facility Decommissioning Evaluation
PACM	Presumed Asbestos Containing Material
S&M	Surveillance and Maintenance
SCDHEC	South Carolina Department of Health and Environmental Control
SRNS	Savannah River Nuclear Solutions
SRS	Savannah River Site

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## 1.0 SUMMARY

Building 484-7D was an approximately (~) 24-year old 840 square foot metal frame structure with metal skin that was used primarily for receiving D-Area Materials.

- Electrical power, which was disconnected during deactivation, was the only utility supplied to the structure (refer to “Deactivation Project Final Report Building 484-D Powerhouse and Ancillary Buildings”, V-PCOR-D-00042, Reference 8.06). There are no sumps and/or drains associated with the facility. Concrete associated with the facility is in good condition.
- A review of the existing characterization data, process/building history, sample data and walk downs of the facility, supports the determination that this building meets the criteria of a Clean Building, Simple Model as described in Facility Disposition Manual 1C, Procedure 501.
- The proposed decommissioning end-state for this facility was demolition/removal of the entire building structure to the building slab.
- The above ground portion of the structure was removed by the Community Reuse Organization (CRO) to be sold as a recycled building. There were no interfacing utilities in the building or holes to be plugged in the floor. Any surrounding soil that was disturbed during decommissioning was raked and cleared of debris.

A review of the existing characterization data, process/building history, sample data and walk downs of the facility prior to decommissioning supported the determination that Building 484-7D met the criteria of a Clean Building, Simple Model as described in the Facility Disposition Manual 1C, Procedure 501. This decision was supported by the documentation found in the Facility Decommissioning Evaluation (FDE), G-FDE-D-00039, Rev. 0, dated 11/13/2019, Reference 8.01. No chemical, hazardous or radioactive materials were associated with this structure. There were no wastes associated with this building. CRO was responsible for the dismantlement and removal (D&R) of the building, and also completely removed all construction materials and any other components associated with the building and removed them from the site to be reused and/or sold for use by others. Since there was no evidence of contamination on the slab before structure demolition, no final verification survey was required. FAI-51 Final Acceptance Inspection (Reference 8.05) was performed on 8/18/2020 and no additional work or cleanup was required.

## 2.0 PURPOSE AND SCOPE

The purpose of this report is to document what was done to the facility as a part of the decommissioning project, and the condition the facility was left in at the completion of the project. The requirement for this report is found in the Facility Disposition Manual 1C, Procedure 506, “Preparing a Decommissioning Project Final Report”.

## **2.01 Facility Description**

Building 484-7D was an approximately (~) 24-year old 840 square foot metal frame structure with metal skin. The building was used primarily for receiving D-Area materials. The interior was non-partitioned and had aluminum walls. There were no sumps or drains associated with the structure. Covered laydown areas were located on the east and south sides of the building. Each area had a concrete slab and a metal roof supported by posts distal to the slabs and structure. An asbestos inspection survey of the building was conducted on October 10, 2019 to revalidate a previous inspection performed on March 25, 2009 (Reference 8.04, Q-APG-D-00004) with the results being there was no Asbestos Containing Material ((ACM) or Presumed Asbestos Containing Material (PACM) found in the building or its components. See Appendix A, Figure 1 for a photo of the building prior to D&R and Figure 2 for a photo of the area after D&R.

## **2.02 New Facility Information**

SRS identified no new facility information during or as a result of the facility decommissioning.

## **3.0 DECOMMISSIONING MODEL APPROVAL**

The facility was decommissioned using the Simple Model as described in Facility Disposition Manual 1C. The selection of the model was based on an FDE (Reference 8.01). The regulator walkdown of the facility occurred on February 27, 2020, and the FDE received South Carolina Department of Health and Environmental Control (SCDHEC) concurrence on January 9, 2020, and U.S. Environmental Protection Agency (EPA) concurrence on March 1, 2020 (References 8.02 and 8.03 respectively).

## **4.0 DECOMMISSIONING ACTIVITIES COMPLETED**

Building 484-7D was decommissioned by CRO in accordance with their agreement with the Department of Energy Savannah River Site Operations (DOE-SR) and was confirmed complete in the FAI-51 (Final Acceptance Inspection) walkdown on 8/18/2020.

## **5.0 WASTE MANAGEMENT**

### **5.01 Salvage and Reuse**

Building 484-7D and all its components were removed intact by CRO for reuse or resale.

## 5.02 Waste Disposal

No wastes were generated with this building – all materials/components were recycled. Any hazardous or universal waste associated with the building was removed and disposed of during deactivation in 2013. (Reference 8.06, Deactivation Project Final Report, V-PCOR-D-00042).

**Table 1: Waste Generation**

Waste Classification	Waste Source	Disposed to	Total Volume
LLW	N/A	N/A	N/A
ACM	N/A	N/A	N/A
PCB	N/A	N/A	N/A
CSR	Structural steel, aluminum siding, conduit, light fixtures, miscellaneous piping	Recycled by CRO	Approx. 3,500 cu ft

LLW – Low level radioactive waste  
ACM – Asbestos-containing material  
PCB – Polychlorinated biphenyl  
CSR – Clean Structural Rubble

## 6.0 FINAL FACILITY CONDITION

### 6.01 Final Facility Condition and Remaining Hazards

484-7D was dismantled and removed down to the concrete slab. Awning extensions on the south and east sides supported by posts were removed flush to the slabs resulting in no holes left in the slab or surrounding area. The slab was completely cleaned, including a suspect oil stain that had been identified in the FDE which was cleaned with BioSolve®.

### 6.02 Risk Assessment Summary

A review of the existing characterization data, process/building history, sample data and walk downs of the facility prior to decommissioning supported the determination that Building 484-7D met the criteria of a Clean Building, Simple Model as described in Manual 1C, Procedure 501.

This decision was supported by the documentation found in the FDE, Reference 8.01. No chemical or hazardous radioactive materials were associated with this structure other than commonly used materials of construction, which were

managed as waste during deactivation in accordance with established SRS practices. Since there was no evidence of contamination on the slab either before or after structure demolition, no final verification survey was required.

### **6.03 Post Decommissioning Requirements**

The remaining structure is free of physical, chemical, and radiological hazards; therefore, it needs no further decommissioning action. No surveillance and maintenance (S&M) activities were identified for the remaining structure (concrete slabs) because they pose no threat to human health or the environment while awaiting area completion.

## **7.0 CONCLUSIONS/RECOMMENDATIONS**

Building 484-7D was dismantled and removed and the concrete slab has been left in place. All decommissioning activities have been completed in accordance with Federal and State regulations, and CRO's agreement with DOE. The remaining structure is free of physical, chemical, and radiological hazards; therefore, it needs no further decommissioning action. No S&M activities were identified for the remaining structure, because it poses no threat to human health or the environment while awaiting area completion.

In accordance with the "Memorandum of Agreement for Achieving an Accelerated Cleanup Vision at the Savannah River Site", this report will be maintained as a record for reference and use in the D-Area Operable Unit Completion Record of Decision. To ensure facility remnants are addressed during the completion process, Building 484-7D will be added to Appendix K.2 of the Federal Facility Agreement for the SRS.

## **8.0 REFERENCES**

- 8.01** G-FDE-D-00039, Revision 0, dated 11/13/2019, "Facility Decommissioning Evaluation Building 484-7D, D-Area Storage Building"
- 8.02** SRNS-OS-2020-00049, dated January 9, 2020, SCDHEC approval of the FDE use of the Simple Model for 484-7D
- 8.03** SRNS-OS-2020-00120, dated March 1, 2020, USEPA approval of the FDE use of the Simple Model for 484-7D
- 8.04** Q-APG-D-00004, Revision 0, dated October 14, 2019, "Baseline Asbestos Inspection Report of Building 484-7D"
- 8.05** D-SRSCRO/BMG-2, dated 8/18/2020, "FAI-51, "Final Acceptance Inspection of Building 484-7D"
- 8.06** V-PCOR-D-00042, Revision 0, dated 7/1/2014, "Deactivation Project Final Report 484-D Powerhouse and Ancillary Buildings"

## 9.0 APPENDICES

### Appendix A - Photographs

Appendix A - Photographs



Figure 1: Building 484-7D (Looking North) Before

## Appendix A - Photographs



**Figure 2: 484-7D (Looking North) After**