

Decommissioning Project Final Report Building 710-16D, Storage Building

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History of Revisions

Revision	Date	Revised Section	Change
0	07/08/2021	N/A	Initial Issue

LIST OF ABBREVIATIONS AND ACRONYMS

ACM	Asbestos Containing Material
EPA	(U.S.) Environmental Protection Agency
EC&ACP	Environmental Compliance & Area Completion Projects
FAI	Final Acceptance Inspection
FDE	Facility Decommissioning Evaluation
ft	feet
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
yd	yard(s)

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1.0 SUMMARY

Building 710-16D storage building was a 1,580 square foot facility located in the north end of the 400-D Area of the Savannah River Site (SRS). It was built in 1993 and utilized as storage for the 484-D Powerhouse area. Ancillary to 710-16D were fencing and fence posts.

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 710-16D 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-00046, Rev. 1, dated 9/29/2020, Reference 8.01. No chemical, hazardous or radioactive materials were associated with this structure other than commonly used materials of construction, which were managed as waste during demolition in accordance with established SRS practices. 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 8.06) was performed on 5/20/2021 and no additional work or cleanup was required.

The proposed decommissioning end-state for Building 710-16D, along with any associated fencing, was demolition to, but not including, the concrete slabs/foundations.

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

The 710-16D storage building was built in 1993. The 1,580 square foot (49.75-foot [ft] x 31.76-ft) building was wood frame construction on a concrete foundation. The foundation was not a slab; however, it did consist of some interior concrete floor as it extended inward beyond the walls in many locations. The remaining floor space was natural dirt. The building had an asphalt shingle roof and vinyl siding. The building had eight (8) storage areas. Additional "attic" storage, with ladder access in Storage 1, was available above the ceilings installed over Storage 2 and 3 and over Storage 4, 5, 6, 7 and 8 (See Appendix A, Figure 2). No chemical or radioactive processes were associated with this storage building, what appeared to be a small (~1 ft²) oil stain was evident on the concrete within Storage 8, See Appendix A, Figure 2. There was no evidence of the spill having reached onto the adjacent dirt floor area. Stained concrete was cleaned with

BioSolve® during decommissioning. An asbestos survey of the building was conducted on October 15, 2020, with the results indicating no Asbestos Containing Materials (ACM) or Presumed Asbestos Containing Materials (PACM) (Reference 8.02). See Appendix A, Figure 1 for a photo of the building prior to decommissioning and Figure 3 for a photo of the area after decommissioning.

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). No regulator walkdown of the facility occurred due to COVID-19 travel restrictions. The FDE received South Carolina Department of Health and Environmental Control (SCDHEC) concurrence on November 6, 2020, and U.S. Environmental Protection Agency (USEPA) concurrence on February 26, 2021 (References 8.03 and 8.04; respectively).

4.0 DECOMMISSIONING ACTIVITIES COMPLETED

Execution of the Building 710-16D decommissioning was planned and described in the FDE (Reference 8.01) and the Decommissioning End Points Document (Reference 8.05). Building 710-16D was decommissioned by CTI and Associates, Inc. (SRNS's mentor protégé subcontractor). The 710-16D structure was demolished to its concrete foundation/grade. It was confirmed complete in the FAI-51 (Final Acceptance Inspection) walkdown on 5/20/2021 (Reference 8.06).

5.0 WASTE MANAGEMENT

5.01 Salvage and Reuse

No building materials were managed for salvage or reuse.

5.02 Waste Disposal

Table 1. Waste Generation

Waste Classification	Waste Source	Disposed to	Total Volume
LLW	N/A	N/A	N/A
ACM	Non-friable Asbestos	Three Rivers Landfill	N/A
PCB	Lamp/Light Ballasts	Solid Waste	N/A
Sanitary	Construction Debris	Three Rivers Landfill	300 yd ³
Recycle Metals	Doors, Wall Studs, Beams	741-1N Salvage Yard	N/A

LLW – Low level radioactive waste
 N/A – Not applicable
 ACM – Asbestos-containing material

PCB – Polychlorinated biphenyl
 CSR – Clean Structural Rubble

6.0 FINAL FACILITY CONDITION

6.01 Final Facility Condition and Remaining Hazards

710-16D was demolished down to the concrete slab/foundations. Ancillary fencing was demolished and removed. Protrusions (i.e., anchor bolts, rebar, etc.) were cut off flush with the top of the concrete slab.

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 710-16D 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, hazardous, or 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 or soils 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 slab/soils) because they pose no threat to human health or the environment while awaiting area completion.

7.0 CONCLUSIONS/RECOMMENDATIONS

Building 710-16D was decommissioned and the concrete slab/foundation has been left in place. Ancillary fencing was demolished and removed. All decommissioning activities have been completed in accordance with Federal and State regulations. 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 710-16D will be added to Appendix K.2 of the Federal Facility Agreement for the SRS.

8.0 REFERENCES

- 8.01 G-FDE-D-00046, Revision 1, dated 9/29/2020, “Facility Decommissioning Evaluation Buildings 710-16D, Storage Building”
- 8.02 Q-APG-D-00019, Revision 1, dated October 21, 2020, “Baseline Asbestos Inspection Report of Building 710-16D”
- 8.03 SRNS-OS-2020-00413, dated November 6, 2020, SCDHEC Concurrence on the FDE for 710-16D
- 8.04 SRNS-OS-2021-00050, dated February 26, 2021, USEPA approval of the FDE use of the Simple Model for 710-16D, 484-5D, 483-3D, and 484-9D
- 8.05 V-PMP-D-00018, Rev. 1, dated November 02, 2020, “Decommissioning End Points Document Building 710-16D, Storage Building”
- 8.06 G-SDD-D-00008, dated 6/2/2021, “FAI-51, Final Acceptance Inspection of Building 710-16D”
- 8.07 V-PCOR-D-00042, Revision 0, dated 7/1/2014, “Deactivation Project Final Report 484-D Powerhouse and Ancillary Buildings”
- 8.08 V-PCOR-D-00055, Revision 0, dated 7/8/2021, “Completion of Decommissioning End Points for Building 710-16D, Storage Building”

9.0 APPENDICES

Appendix A — Photographs

Appendix A — Photographs



Figure 1. Building 710-16D (Looking Southeast) Before Decommissioning

Appendix A — Photographs

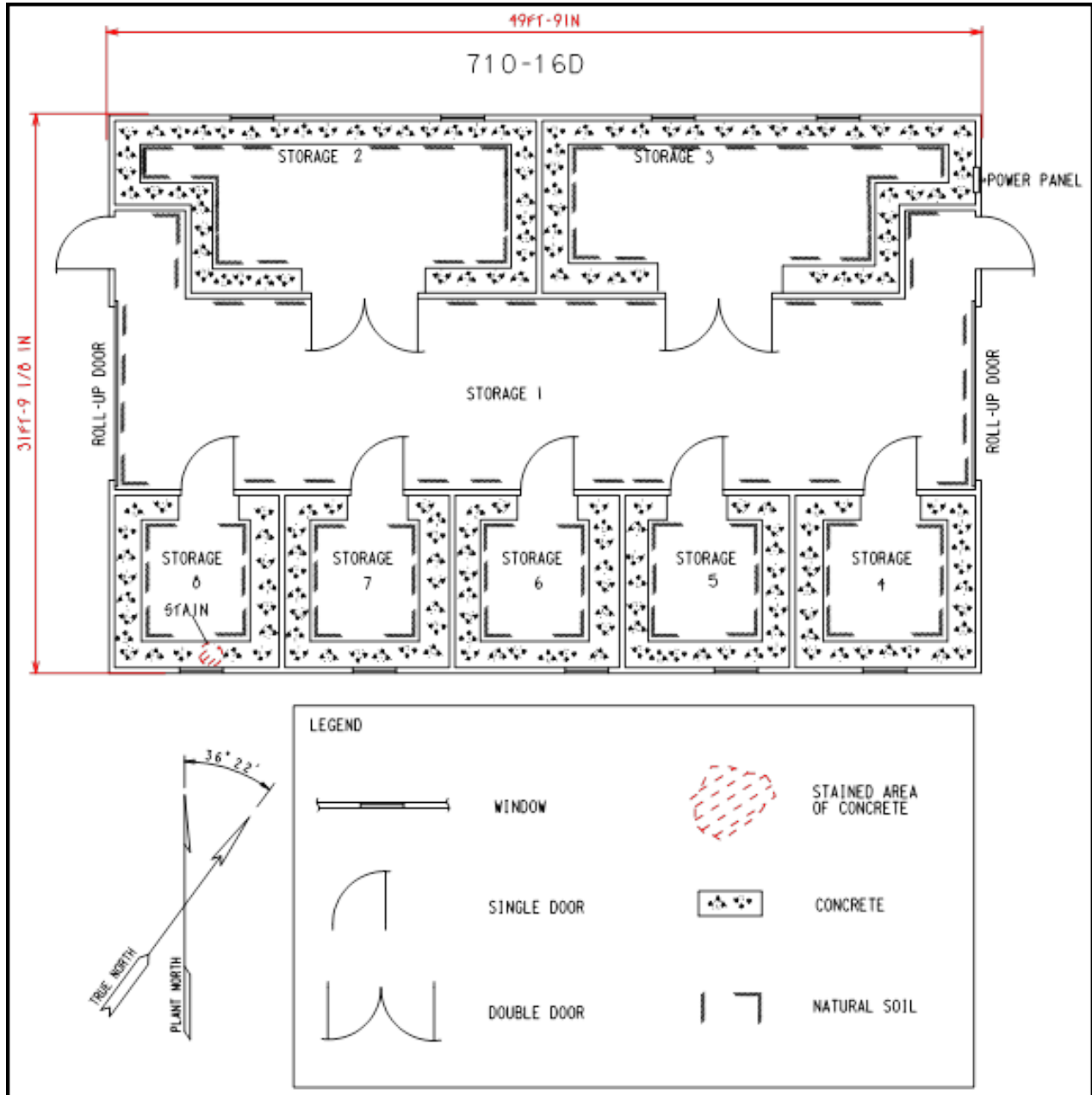


Figure 2. 710-16D Building Layout Before Decommissioning

Appendix A — Photographs



Figure 3. Building 710-16D (Looking Southeast) After Decommissioning