Decommissioning Project Final Report
720-F, Central Alarm Station (CAS)

Prepared by: JOHN BAILEY (Affiliate) Digitally signed by JOHN BAILEY (Affiliate) Date: 2026.09.11 09:51:58 -04'00' Date: 9/11/26

J. Ulysses Bailey
EC&ACP Engineering
Environmental Compliance & Area Completion Projects

Reviewed by: BRANDON CALDWELL (Affiliate) Digitally signed by BRANDON CALDWELL (Affiliate) Date: 2026.09.14 06:02:24 -04'00' Date: 9/14/26

Brandon Caldwell
EC&ACP Engineering
Environmental Compliance & Area Completion Projects

Approved: Rasheed Muwwakkil Digitally signed by RASHEED MUWWAKKIL (Affiliate) Date: 2026.09.14 06:06:31 -04'00' Date: 9/14/26

Rasheed Muwwakkil
Control Account Manager
Environmental Compliance & Area Completion Projects

Approved: RYAN MCDANIEL (Affiliate) Digitally signed by RYAN MCDANIEL (Affiliate) Date: 2026.09.14 06:21:26 -04'00' Date: 9/14/26

Ryan McDaniel
EC&ACP Environmental Compliance Authority Manager
Environmental Compliance & Area Completion Projects

Approved: MANUEL TERRONEZ (Affiliate) Digitally signed by MANUEL TERRONEZ (Affiliate) Date: 2026.09.14 12:52:59 -04'00' Date: 9/14/26

Manuel Terronez
EC&ACP Engineering Manager
Environmental Compliance & Area Completion Projects

Approved: THELESIA OLIVER (Affiliate) Digitally signed by THELESIA OLIVER (Affiliate) Date: 2026.09.14 12:57:33 -04'00' Date: 9/14/26

Thelesia (Lisa) Oliver
EC&ACP Chief Engineer
Environmental Compliance & Area Completion Projects

Approved: CHRISTOPHER BERGREN (Affiliate) Digitally signed by CHRISTOPHER BERGREN (Affiliate) Date: 2026.09.15 08:11:32 -04'00' Date: 9/15/26

C. L. Bergren
Director, EC&ACP
Environmental Compliance & Area Completion Projects

Savannah River Site
Aiken, South Carolina 29808

Savannah River NUCLEAR SOLUTIONS℠

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History of Revisions

Revision	Date	Revised Section	Change
0	9/11/2026	Not Applicable	Initial Issue

Acronym List

ACM	Asbestos Containing Material
CAS	Central Alarm Station
C&D	Cold and Dark
CTI	CTI and Associates
D&D	Deactivation and Decommissioning
D&R	Demolition and Removal
E3S	Electronic Safeguards & Security
EC&ACP	Environmental Compliance & Area Completion Projects
FAI	Final Acceptance Inspection
FDE	Facility Decommissioning Evaluation
HVAC	Heating, Ventilation, and Air Conditioning
ISD	In Situ Disposal
PIDAS	Perimeter Intrusion Detection and Assessment System
S&M	Surveillance and Maintenance
SCDES	South Carolina Department of Environmental Services
SRNS	Savannah River Nuclear Solutions, LLC
SRS	Savannah River Site
USDOE-SROO	United States Department of Energy-Savannah River Operations Office
USEPA	United States Environmental Protections Agency

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1.0 SUMMARY

Building 720-F, Central Alarm Station (CAS), was built in 1989 and provided F-Area with intrusion and access control per Electronic Safeguards & Security (E3S) system. The building was a steel framed structure consisting of an interior of cement masonry block walls, drop acoustical ceiling tiles, and below grade accessible floating floor panels in the computer and control rooms and electrical rooms along with a sump in the diesel generator room. Exterior to 720-F were the ancillary structures which were constructed alongside the CAS in 1989. One small concrete slab is located south of the structure and housed a transformer, 252-9F. This transformer provided power from the Savannah River Site (SRS) electrical grid to the E3S system. On the northern side of CAS were two heating, ventilation, and air conditioning (HVAC) units that provided a temperature and humidity-controlled environment for the E3S system. Additionally, there was a radio tower that provided alarm transmissions to and from the F-Area E3S system.

A baseline asbestos survey of 720-F was completed on June 21, 2023 documenting existence of non-friable and friable asbestos. All asbestos- containing material (ACM) has been removed and properly disposed of by certified asbestos abatement personnel in accordance with all local, state, and federal asbestos abatement regulations prior to the decommissioning of 720-F (Reference 8.05).

Building 720-F was determined to be a Clean Building, Simple Model per Manual 1C, Procedure 501. This determination was supported by Facility Decommissioning Evaluation (FDE) for 720-F dated June 24, 2025 (Reference 8.01). Since there was no evidence of contamination on the slab either before or after structure demolition, no final verification survey was required. Final Acceptance Inspection (FAI) was performed on September 17, 2025, and approved (Reference 8.02). No additional work or cleanup was required.

The proposed decommissioning end-state for this building involved demolishing the structure down to but not including the building slab that was created by in situ disposal (ISD) of the below-grade level. This demolition and removal (D&R) and ISD was completed by CTI and Associates (CTI). The above-ground portion of the prefabricated metal structure was demolished to the top of the floor slab elevation and removed. All interfacing utilities were, and remain, isolated, disconnected, and plugged. The sub area in the computer and control room was filled up to grade forming the slab to be left in place. All coarse debris was removed from the remaining slab. All concrete slab penetrations greater than 2 inches in diameter were cut off flush with the slab and plugged and grouted/filled over in accordance with “Environmental Compliance and Area Completion Projects (EC&ACP) Deactivation & Decommissioning (D&D) Policy on Decommissioning End Points for Slabs, Pits, Basements, and Basins.” (Reference 8.03). Slab penetrations were cut off flush with the slab/grade.

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". Interactions with regulatory agencies, South Carolina Department of Environmental Services (SCDES) and United States Environmental Protection Agency (USEPA), for concurrence on this report are governed by "Core Team Protocol for Review and Concurrence on Facility Decommissioning Evaluations and Decommissioning Project Final Reports" (Reference 8.04).

2.01 Facility Description

The CAS includes the building and the following ancillary structures:

- Building 720-F, Central Alarm Station (Figure A-1)
- 252-9F, Transformer (Figure A-1)
- Heating, Ventilation, and Air Conditioning units (2) (Figure A-4)
- Radio Tower (Figure A-5)

Building 720-F, CAS, provided F-Area with intrusion detection and access control per the E3S system for the 235-F complex. Building 720-F was a 3,913 square foot, single-story structure (Figure A-1). It was built in 1989 on a concrete slab. The building was a steel-framed structure that consisted of an interior of cement masonry block walls, drop acoustical ceiling tiles, and accessible floating floor/raceway panels in the computer and control rooms and electrical rooms. The exterior was a stucco finish and built-up roofing. The structure contained old equipment such as a mechanical compressor or items to support the E3S system and climate control that were abandoned-in-place. The equipment was previously deactivated. The building contained 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 A-2) as well as a sump with its own drain separate of the sewer system in the northeast corner near the deactivated diesel generator (Figure A-3). The CAS had 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 discharged to the F-Area sanitary sewer system (the sanitary sewer was previously grouted), the sump discharged out of the northern side of the building via a pump-out and separate collection/disposal, and the roof drains to the storm drain.

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 A-1). This transformer provided power from the SRS electrical grid to the E3S system

prior to 235-F deactivation activities. On the northern side of CAS was the doorway and pad to the mechanical room and two HVAC units (Figure A-4) with chilled water lines that provided a temperature and humidity-controlled environment for the E3S system. Additionally, there was a radio tower (Figure A-5) that provided alarm transmissions to and from the F-Area E3S system, the equipment is not operational.

All utilities have been disconnected from 720-F facility including electricity, domestic water, cooling water, and fire water, during deactivation and earlier D&R activities; therefore, 720-F has been rendered Cold & Dark (C&D). All work for this decommissioning is within the global C&D boundary for 235-F.

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 information reported in the FDE (Reference 8.01). Multiple walkdowns were performed by Savannah River Nuclear Solutions, LLC (SRNS) Solid Waste and Deactivation Management and Environmental Compliance & Area Completion Projects (EC&ACP) groups (i.e., Engineering, Project Management, Safety, Industrial Hygiene, Environmental Compliance Authority, etc.). The FDE submittal letter stated that SCDES and USEPA could contact United States Department of Energy-Savannah River Site Operations (USDOE-SROO) if the regulatory agencies were interested in an overview and field visit. A regulatory walkdown was not scheduled. However, USDOE-SROO briefed SCDES and USEPA on the status of the decommissioning activities during the Federal Facility Agreement Project Managers' Quarterly Microsoft Teams meetings that were held on February 24, 2025, June 2, 2025, August 25, 2025, and November 24, 2025.

SCDES and USEPA concurred with Simple Model decommissioning on August 6, 2025, and July 7, 2025, respectively (References 8.06 and 8.07).

4.0 DECOMMISSIONING ACTIVITIES COMPLETED

720-F, Central Alarm Station, was demolished to but did not include the concrete slab. The above-ground portion of the structure was demolished to grade and removed, while the below grade was filled with cementitious material by ISD (Figure A-6). The stained concrete identified in the FDE was treated with a surfactant during the decommissioning process and prior to the FAI. The sump was inspected for cracks or stains, and after no evidence of either, the sump was filled with cementitious material up to grade to form the slab (Figure A-7). The remaining slab was created during the ISD of the below grade

structure. The HVAC units (Figure A-8) and the radio tower (Figure A-9) were all demolished to grade and removed. All decommissioning field work was performed by the subcontractor, CTI. All interfacing utilities were isolated, disconnected, and plugged. All concrete slab penetrations were cut off flush with the slab, plugged, and grouted in accordance with "Environmental Compliance and Area Completion Projects (EC&ACP) Deactivation & Decommissioning (D&D) Policy on Decommissioning End Points for Slabs, Pits, Basements, and Basins" (Reference 8.03). All slab penetrations were cut off flush with the slab or filled over during ISD. The slab will pose no additional risk to Site workers. No additional barricades or sloping is required. The FAI was conducted and signed on September 17, 2025 confirming the decommissioning of 720-F was completed (Reference 8.02).

5.0 WASTE MANAGEMENT

5.01 Salvage and Reuse

The decommissioning scope of G-SOW-F-00420 (Reference 8.08) contained the 720-F CAS, 252-9F secondary transformer, 701-4F Entrance Control Facility, and the Perimeter Intrusion Detection and Assessment System (PIDAS). The 720-F diesel generator was sent to the 741-N Salvage Yard along with 330 cubic yards of recycled material that were removed from 720-F and 701-4F during demolition.

5.02 Waste Disposal

See Table 1 for a list of all waste generated during decommissioning. The decommissioning scope of G-SOW-F-00420 (Reference 8.08) contained the 720-F CAS, 252-9F secondary transformer, 701-4F Entrance Control Facility, and PIDAS. The waste generated was combined into one list as the aforementioned facilities were decommissioned as one project. 720-F had ACM with floor tile mastic (Reference 8.05) with identified presumed ACM. The totality of this work scope is the waste volume identified by the generator certification official group at SRNS.

Table 1: Waste Generation

Waste Classification	Waste Source	Disposed to	Total Volume
LLW	N/A	N/A	N/A
ACM	701-4F and 720-F Floor tile with mastic	Three Rivers Landfill	30 cubic yards
PCB	N/A	N/A	N/A
CSR	Concrete, structural steel, steel siding, ductwork, conduit and miscellaneous piping	Construction and Debris Landfill	2,790 cubic feet
Recycle	701-4F and 720-F scrap metal	741-N Salvage Yard	330 cubic yards

LLW – Low level radioactive waste
ACM – Asbestos-containing material
PCB – Polychlorinated biphenyl

CSR – Clean Structural Rubble
N/A – Not Applicable

6.0 FINAL FACILITY CONDITION

6.01 Final Facility Condition and Remaining Hazards

Decommissioning activities were completed by CTI. The metal structure and ancillary structures have been removed. The pit resulting from the removed floating floor has been filled with cementitious material to form a slab to leave in place. All interfacing utilities were isolated, disconnected, and plugged prior to D&R. All coarse debris was removed from the remaining slab. All concrete slab penetrations greater than 2 inches in diameter were cut off flush with the slab, plugged, and grouted to grade in accordance with Reference 8.03. Slab penetrations were removed prior to grouting. Any stains identified on the concrete slab during decommissioning were pressure washed and/or cleaned as much as reasonably achievable with an effective surfactant (e.g., Biosolve). The slab does not pose a hazard to personnel.

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 this building 720-F and its ancillary structures, 252-9F, two VAC units and the radio tower 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 demolition in accordance with established SRS practices. The amounts of such materials were described in Section 5.02 of this report. 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, because it poses no threat to human health or the environment while awaiting area completion.

7.0 CONCLUSIONS/RECOMMENDATIONS

720-F was demolished, the sump was filled with cementitious material up to grade and the foundation (slab) has been left in place. All decommissioning activities have been completed, including waste disposal 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 F-Area Operable Unit Record of Decision. To ensure facility remnants are addressed during the completion process, Building 720-F should be added to the Federal Facility Agreement for the SRS Appendix K.2, D&D Facilities (or Remnants) that Require No Further Evaluation.

8.0 REFERENCES

8.01 G-FDE-F-00062, Rev. 2, dated June 24, 2025, "Facility Decommissioning Evaluation Building 720-F, Central Alarm Station (CAS)"

8.02 G-SDD-F-00021, Rev. 0, dated September 17, 2025, "Final Acceptance Inspection Of Work Order 02131867-01"

8.03 SDD-2005-00170, Rev. 2, dated October 22, 2020, "Environmental Compliance and Area Completion Projects (EC&ACP) Deactivation & Decommissioning (D&D) Policy on Decommissioning End Points for Slabs, Pits, Basements, and Basins."

8.04 SRNS-RP-2021-00120, Rev. 1, dated August 2022, "Core Team Protocol for Review and Concurrence on Facility Decommissioning Evaluations and Decommissioning Project Final Reports."

8.05 Q-APG-F-00066, Rev. 1, dated June 22, 2023, "Baseline Asbestos Inspection Of Report Of Building 720-F"

8.06 SRNS-OS-2025-00215, dated August 6, 2025, "SCDES Concurrence of the Facility Decommissioning Evaluation [FDE]: 720-F Central Alarm Station (G-FDE-F-00062, Revision 2, June 19, 2025), Cover Letter Dated July 2, 2025"

8.07 SRNS-OS-2025-00181, dated July 7, 2025, "EPA Approval: Facility Decommissioning Evaluation Building 720-F, Central Alarm Station, G-FDE-F-00062, Revision 2 June 2025, Savannah River Site Aiken, South Carolina"

8.08 G-SOW-F-00420, Rev. 0 dated May 29, 2025 "Decommissioning of Buildings 701-4F Entry Control Facility, 720-F Central Alarm Station, 252-9F Secondary Transformer, Removal of 235-F Perimeter Security Fencing, Perimeter Intrusion Detection and Assessment System (PIDAS)"

9.0 APPENDICES

Appendix A – Before and After Photo of the Facility/Structure

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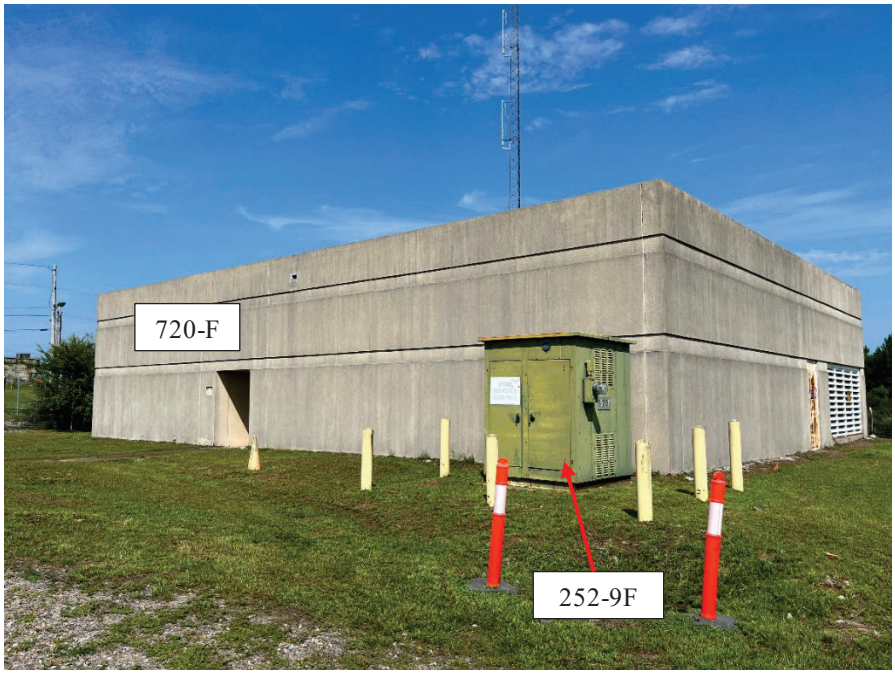


Figure A-1: View of 720-F and 252-9F from Southeast Looking Northwest (Before)



Figure A-2: Inside View of 720-F Diesel Generator (Before)



Figure A-3: 720-F Diesel Room Sump (Before)



Figure A-4: North Side HVAC Units and Slabs (Before)



Figure A-5: View of CAS Radio Tower from Southwest (Before)



Figure A-6: View of 720-F and 252-9F from South Looking Northwest (After)



Figure A-7: 720-F Diesel Room Sump (After)

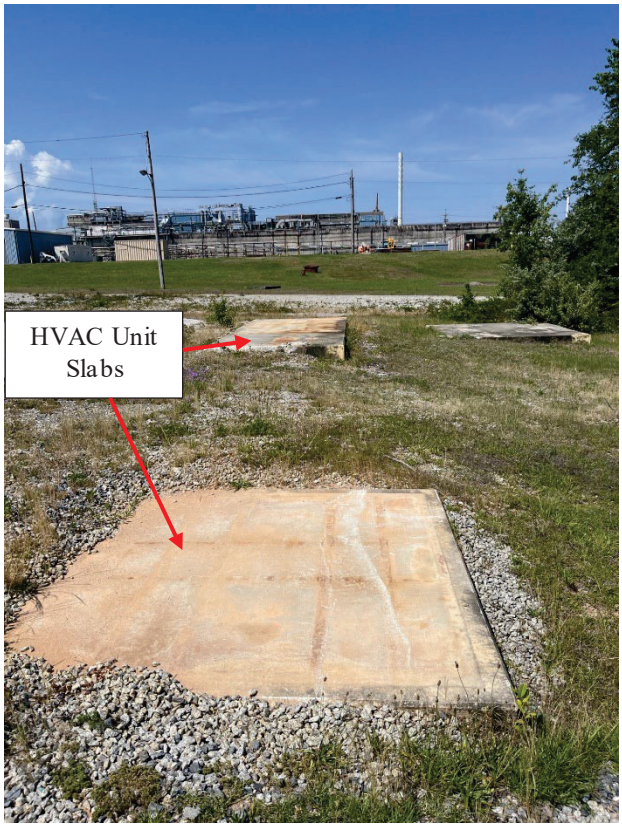


Figure A-8: North Side HVAC Unit Slabs (After)



Figure A-9: Radio Tower (After)