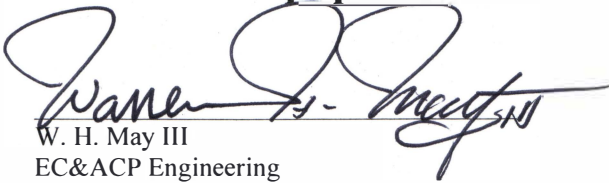

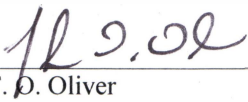


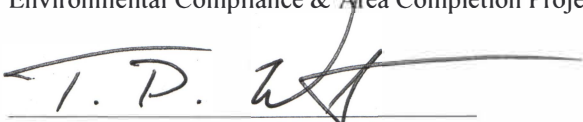
## Decommissioning Project Final Report Monitoring Buildings 614-1A, 614-1D, 614-F, and Equipment Shed 614-65G


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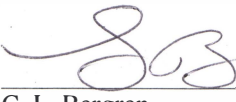
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Aiken, South Carolina**

### History of Revisions

Revision	Date	Revised Section	Change
0	11/11/2019	N/A	Initial Issue

## Acronym List

ACM	Asbestos Containing Materials
CSR	Clean Structural Rubble
CU YD	Cubic Yard or Yards
D&D	Deactivation and Decommissioning
DOE-SR	Department of Energy Savannah River Operations Office
DPFR	Decommissioning Project Final Report
EC&ACP	Environmental Compliance & Area Completion Projects
FDE	Facility Decommissioning Evaluation
LLC	Limited Liability Company
S&M	Surveillance and Maintenance
SCDHEC	South Carolina Department of Health and Environmental Control
SRNS	Savannah River Nuclear Solutions
SRS	Savannah River Site
USEPA	United States Environmental Protection Agency

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## 1.0 SUMMARY

Monitoring Buildings 614-1A, 614-1D, and 614-F were three of 614-series buildings erected in various locations near and around the Savannah River Site (SRS) to perform environmental sampling beginning in the 1950's. Monitoring Building 614-1A was erected in 1953 in the 300/700 Area north of Building 713-1A, Central Stores Warehouse, and was shut down in 1995. Monitoring Building 614-1D was erected in 1953 within D-Area and was shut down in 1995. Monitoring Building 614-F was erected in 1954 within F-Area and was shut down in 1995. The building was located in small grassy area approximately 82 feet southwest of Building 245-1F (personnel trailer) within an area that is now used for general parking.

In addition to the Monitoring Buildings, the Equipment Shed, 614-65G, was a small portable shed used to store equipment. The Equipment Shed was installed in 1994 in D Area and was associated with 614-1D.

A review of the drawing W155928, process/building history, and walk downs of the facility prior to decommissioning supported the determination that these buildings 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) (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 Savannah River Site (SRS) practices. Since there was no evidence of contamination on the slab before structure demolition, no final verification survey was required.

With exception of Equipment Shed 614-65F, which was demolished to grade and removed, Monitoring Buildings 614-1A, 614-1D, and 614-F were demolished to their concrete floor slab, which has been left in place. All debris was properly dispositioned in accordance with federal and state regulations.

## 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 Descriptions

#### Monitoring Buildings 614-1A, 614-1D, and 614-F

Monitoring Buildings 614-1A, 614-1D, and 614-F were three of eleven 614-series buildings erected in various locations near and around the Savannah River Site (SRS) to perform environmental sampling beginning in the 1950's. Monitoring buildings 614-1A and 614-1D

were erected in 1953 and 614-1F was erected in 1954. All three facilities were shut down in 1995. Most of the equipment for the buildings was removed and the structures abandoned. Descriptions of the buildings are as follows:

- Each was an 8' - 4" x 10' - 4" wood frame building with exterior ½" corrugated cement asbestos board and pre-molded angle trim of the same material on the corners, all backed by 2" rigid fiberglass insulation and ¼" Masonite board on the inside walls (Reference 8.02).
- Exterior siding was affixed by galvanized fasteners seated with lead washers.
- The buildings had an angled built-up roof with a metal fascia, and an approximately 3' x 3' x 2' - 6" tall cupola with metal louvers covered by a wire mesh screen.
- The structures rested on a reinforced 8" turn-down concrete slab along with an approximately 6' - 2" x 4' - 6" x 6" un-reinforced concrete stoop.
- The structures contained abandoned electrical components with no power to the building.
- The buildings were electrically isolated. The buildings had no mechanical systems.
- Building contained a metal exterior ladder and a wooden interior ladder
- There were no drains or sumps in the monitoring buildings.

### **Equipment Shed 614-65G**

Building 614-65G was installed in 1994 as an equipment shed in support of air monitor stations in D-Area.

- This building was a single story 8' x 10' Morgan Building (equipment shed) with a metal roof and siding, and a deteriorating plywood floor on wooden joists.
- The building consisted of a 2' x 4' lay-in ceiling with painted panels.
- The walls were painted drywall on wooden 2" x 4" studs.
- Electrical service to the shed was distributed through approximately 25 linear feet of conduits buried approximately 18" underground. This service was isolated prior to demolition and the underground conduits abandoned in place.
- There were no drains or sumps in Building 614-65G.

### **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 a Facility Decommissioning Evaluation (FDE) (Reference 8.01). No regulator walk down of the facilities was performed. Formal approval of the FDE was received from Gregory O'Quinn of the South Carolina Department of Health and Environmental Control (SCDHEC) on

February 07, 2019 (Reference 8.03) and Jon Richards of the United States Environmental Protection Agency (USEPA) on February 07, 2019 (Reference 8.04).

#### 4.0 DECOMMISSIONING ACTIVITIES COMPLETED

Savannah River Nuclear Solutions, LLC personnel completed the following decommissioning activities:

- Engineering Survey report.
- Asbestos Survey.
- Statement of Work.
- Isolation/removal of electrical service to Equipment Shed 614-65G.
- Complete demolition and removal of 614-1A, 614-1D, & 614-F (each to the concrete building slab), and 614-65G (to grade).
- Removal and disposition of demolition waste.
- Preparation of final reports.

Other decommissioning activities, including removal of equipment and isolating electrical and mechanical services for the monitoring buildings, were completed prior to the above decommissioning activities.

#### 5.0 WASTE MANAGEMENT

##### 5.01 Salvage and Reuse

None

##### 5.02 Waste Disposal

**Table 1: Waste Generation**

Waste Classification	Waste Source	Disposed to	Total Volume
ACM	Transite siding and roofing material.	Three Rivers Landfill	90 cu yds
CSR	Remnants of 614-65G, wood joists, gyp-board, metal siding and roofing material.	Three Rivers Landfill	30 cu yds

ACM – Asbestos-containing material

CSR – Clean Structural Rubble

#### 6.0 FINAL FACILITY CONDITION

##### 6.01 Final Facility Condition and Remaining Hazards

The Monitoring Buildings 614-1A, 614-1D, and 614-F have been demolished down to their concrete floor slabs and removed. The Equipment Shed 614-65G has been demolished down to grade and removed. Except for normal surface disruption caused by construction equipment, the surrounding area remains undisturbed. There were never any radiological hazards or hazardous materials

associated with these buildings. The only utilities servicing the Monitoring Buildings were electrical and communication (phone service). These utilities were isolated and removed as part of the cold-and-dark process conducted prior to the decommissioning activities conducted within the scope of this report. The only utility servicing the Equipment Shed was electrical which was isolated and removed as part of the cold-and-dark process.

### **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 these buildings (Monitoring Buildings 614-1A, 614-1D, 614-F, and Equipment Shed 614-65G) 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**

Monitoring Buildings 614-1A, 614-1D, and 614-F were demolished, and the foundation slab left in place. Equipment Shed 614-65G was demolished to grade and the site returned to natural conditions. All decommissioning activities have been completed, including waste disposal in accordance with Federal and State regulations. No further Surveillance and Maintenance activities or decommissioning action is required. Any remnants of the facilities pose no threat to human health or the environment.

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 respective area Completion, Record of Decision. To ensure facility remnants are addressed during the completion process, Buildings 614-1A, 614-1D, and 614-F should be added to Appendix K.2 of the Federal Facility Agreement for the SRS. The Equipment Shed, 614-65G, will be moved from Appendix K.1 to Appendix K.2.

## 8.0 REFERENCES

- 8.01 **G-FDE-G-00022**: Facility Decommissioning Evaluation Building 614-1A, General Monitoring Bldg. (300/700 Area); Building 614-1D, General Monitoring Building; Building 614-F, General Monitoring Building, and Building 614-65G, Equipment Shed.
- 8.02 **W155928**: Architectural & Structural 614 General Monitoring Bldgs. All Areas Plans, Elevations, Sections.
- 8.03 **Gregory O’Quinn (SCDHEC) to Brian Hennessey (DOE) dated February 7, 2019**, "RE: Facility Decommissioning Evaluation (FDE): General Monitoring Buildings 614-1A, 614-1D & 614-F; Equipment Shed 614-65G. G-FDE-G-00022, Revision 0, December 6, 2018 (Cover letter dated January 16, 2019)" (SCDHEC Letter of Concurrence).
- 8.04 **Jon Richards (USEPA) to Brian Hennessey (DOE) dated February 7, 2019**, "RE: EPA Approval Facility Decommissioning Evaluation Building 614-1A, General Monitoring Building; 614-1D, General Monitoring Building; 614-F, General Monitoring Building; 614-65G, Equipment Shed (G-FDE-G-00022, Revision 0, Dec. 6, 2018), Savannah River Site, Aiken, South Carolina" (EPA Concurrence Letter).

## 9.0 APPENDICES

**Appendix A - Photographs**

**Appendix B - Sample Location Map**

**Appendix A - Photographs**



**Figure 1 – 614-1A Before Demolition**



**Figure 2 – 614-1A After Demolition**

Appendix A – Photographs



Figure 3 – 614-1D Before Demolition



Figure 4 – 614-1D After Demolition

**Appendix A - Photographs**



**Figure 5 – 614-F Before Demolition**



**Figure 6 – 614-F After Demolition**

Appendix A – Photographs



Figure 7 – 614-65G Before Demolition



Figure 8 – 614-65G After Demolition



