Department of Energy
Washington, DC 20585

August 12, 2025

The Honorable Thomas Summers
Acting Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue NW, Suite #700
Washington, DC 20004

Dear Chairman Summers:

This letter serves as the Department of Energy (DOE) 2025 annual response to the Defense Nuclear Facilities Safety Board's (Board) May 28, 2025, letter requesting three additional annual reports through 2027 after the closure of Recommendation 2012-1, *Savannah River Site (SRS) Building 235-F Safety*.

DOE has assembled the enclosed report which provides an update on facility conditions, actions taken, and status of completing the decommissioning project. The report addresses the following topics:

1. Progress made to deactivate and decommission Building 235-F.
2. Results of radiological surveys and inspections to verify that contamination is not spreading.
3. Status and schedule for establishing an end state determination with regulatory authorities.
4. Results of structural integrity inspections, and any corrective actions identified and implemented from these inspections.
5. Any changes to the status of the E-5 ventilation system and sand filter, including any maintenance activities performed.

If you have any questions, please contact me or Ms. Brenda Hawks, Associate Deputy Assistant Secretary for Field Operations Oversight/Chief of Nuclear Safety, at (865)-805-0391.

Sincerely,

Roger A. Jarrell II
Principal Deputy Assistant Secretary for
Environmental Management

Enclosure

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Safety at Savannah River Site Building 235-F

The Department of Energy (DOE), along with Savannah River Nuclear Solutions (SRNS), has been working to improve the posture of Building 235-F. DOE is providing this report in response to the Defense Nuclear Facilities Safety Board's letter on May 28, 2025, requesting an Annual Report through fiscal year (FY) 2027 regarding safety at Savannah River Site (SRS) Building 235-F.

Deactivation of Building 235-F began in July of 2019 and was completed in February 2023. Deactivation activities prepared the facility for long-term safe storage, which is relatively free of non-radiological hazards, with acceptable radiological risks, and minimal continuing surveillance and maintenance.

Deactivation involved the shutdown of all active structures, systems, and components in Building 235-F along with electrical/mechanical isolation of the building. The deactivation prepared the facility for decommissioning. This shutdown/isolation greatly reduces the cost for surveillance and maintenance of Building 235-F during safe storage until decommissioning is completed. Decommissioning of Building 235-F is a top priority for the Office of Environmental Management and SRS.

1. Progress Made to Deactivate and Decommission Building 235-F.

Deactivation was completed in February 2023 and the building is in long-term safe storage awaiting decommissioning with minimal surveillance and maintenance.

Demolition and Removal (D&R) of Building 235-F exterior ancillary equipment and facilities started in fiscal year 2023 (FY23) and is planned to be completed by FY26. The scope includes but is not limited to asbestos abatement and removal of exterior conduit, piping, and ductwork, and D&R of office trailers, cooling tower, electrical substation, diesel generator/components and security entry point. D&R of the ancillary equipment and facilities will support eventual decommissioning of 235-F.

Decommissioning activities for FY25 and FY26 are planning and design, which includes updating the Safety Basis Documents to address in-situ decommissioning and developing the ventilation strategy and grouting strategy for the in-situ decommissioning design for 235-F.

The project schedule is dependent upon an approved baseline and receipt of funding. Currently design is in progress as of FY25, grouting is planned to begin in late FY27 with field work completion in FY29.

2. Results of Radiological Surveys and Inspections Verifying that Contamination is not Spreading.

Radiological Protection Personnel performed routine surveys of Building 235-F prior to each entry. No spread of contamination was found.

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Documented Safety Analysis (DSA) still supports the facility's surveillance and maintenance state and will continue to do so until changes are made to the facility; at which time design will follow the change process to ensure the DSA is updated and approved to document necessary changes.

The most recent Radiological Survey was conducted on May 6, 2025, by Radiological Protection personnel during entry for the annual inspections. No spread of contamination was found.

3. Status and Schedule for Establishing a Final End-State Determination with Regulatory Authorities.

The Regulatory Process for End-State Determination is complete and includes approval from DOE, the U.S. Environmental Protection Agency (EPA), and the South Carolina Department of Environmental Services (SCDES) for in-situ decommissioning.

4. Results of Structural Integrity Inspections, and any Corrective Actions Identified and Implemented from these Inspections.

Structural Integrity Inspections

The structural integrity inspections are performed every 5 years. The last inspection conducted in February 2022 found no conditions requiring repair. The inspection results are documented in the 235-F Facility 2021 SIP Report (T-ESR-F-00036). The next inspection is scheduled by February 2027.

Enclosure Integrity Inspections

The 235-F Enclosure Integrity Program (EIP) is described in the Basis for Interim Operation, AC 5.7.2.15. The EIP Program consists of radiological surveys, visual inspections, and smoke leak testing of the enclosures to verify the integrity of the structure and the pressure boundary.

On May 6, 2025, an EIP was performed in the facility Actinide Billet Line , Old Metallurgical Laboratory , Plutonium Experimental Facility (PEF) and Plutonium Fuel Form (PuFF) in parallel with the Level III Lock Inspection entry. This inspection was performed as a recommendation from the EIP Engineering Evaluation in May 2024.

No new items were identified during the inspection. There is no change in the PuFF Cell 8 manipulator thru-tube's minor in-leakage. There is no change in the minor leak associated with the bag out port on PEF Hood 2 that has negligible holdup quantities based on assay results. Facility engineering is not recommending repairs be made to either of these items. Neither is impacting the enclosures and no increase in contamination was found at the locations. The 2025 inspection will be documented in the next 235-F Enclosure Integrity Program Inspection Report.

The current planned periodicity of EIP inspections is once a year with the next inspection planned by May 2026.

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5. Any Changes to the Status of the E-5 Ventilation System and Sand Filter, including any Maintenance Activities Performed.

The E-5 Fans draw a vacuum on the process areas of Building 235-F. There were no changes to the E-5 Ventilation System and Sand Filter Status. The E-5 Fans have continued to operate with no issues during the past year. One fan is in standby when the other fan is in operation. The fan run times are equalized by rotating the operation. Ventilation readings are taken daily. Periodic preventive maintenance is conducted as needed, which includes vibration readings, belt changes, and lubrication.

No maintenance action has taken place since the previous action in May 2023.

The 292-2F Fan House and 294-2F Sand Filter are inspected every five years for structural integrity. The last inspection was performed in July of 2022, and is documented in the 2022 Structural Integrity Program Inspection Report for 294-2F (T-ESR-F-00040). The Filter Media was found to perform its design function. The next inspection is scheduled by July 2027.

The Sand Filter efficiency is checked every 18 months. The last test was performed on March 20, 2024, and the Filter Media passed with a 99.99 percent efficiency rating. The Fans and the Sand Filter remain in good working order and will remain functional while Building 235-F is in long term safe storage and decommissioning. The next test scheduled is for September 2025.

Conclusion

DOE completed deactivation of Building 235-F in February 2023. Radiological Survey Results verify that contamination is not spreading, and Structural Integrity and Ventilation System/Sand Filter Inspections conclude that systems are performing as required.

The SCDES and the EPA has approved the in-situ decommissioning end state of Building 235-F.

Responsibility for the facility has been transferred to the Office of Closure and Project Management (OCPM) for continued surveillance and maintenance, and decommissioning activities.

The Office of the Assistant Manager for Nuclear Material Stabilization personnel will continue to support OCPM, as requested, during the surveillance and maintenance, as the plans and designs for the decommissioning are implemented.

The facility is radiologically safe, with no spread of contamination.

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