

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 13, 2024

TO: Timothy J. Dwyer, Technical Director
FROM: L. Lin and E.P. Richardson, Resident Inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending December 13, 2024

DNFSB Staff Activity: Board's staff member Y. Li led a teleconference with site personnel as part of a continuation of the Board's staff probabilistic seismic hazard analysis review.

Savannah River National Laboratory (SRNL): SRNL continues to limit radiological material movements and receipts as a compensatory measure for the Technical Safety Requirements (TSR) violation that occurred last month where accountable material was discovered in E-Wing that was not in their inventory tracking system and that resulted in exceeding their inventory control limits (see 11/15/2024 report). An extent of condition review discovered other questionable legacy items that require further characterization to confirm their radiological content. In addition to operational limitations, SRNL has also instituted fire patrols for E-Wing as a compensatory measure in a standing order. Last week, it was discovered that one area had been left off the fire patrol surveillance log and therefore had not been performed during the 4-hour fire patrols. SRNL declared a management concern. The fire patrol surveillance log has been updated with the correct locations. If a response plan or a similar safety basis document (e.g., an Evaluation of the Safety of the Situation as part of the Unreviewed Safety Question process) had been approved with fire patrols as a compensatory measure until compliance is restored, this issue would have been a TSR violation.

The contractor is drafting a response plan to restore compliance with their safety basis, but they have encountered difficulties in developing a path forward to reduce their material-at-risk to below the inventory control limits. SRNL is exploring various options, including disposing of what material they can, temporarily storing some material in a different facility, and changing some materials into a less dispersible form. However, they will need to better characterize some of the material to determine how to proceed.

DOE-SR Facility Representative (FR) Triennial Assessment: The resident inspectors (RI) met with DOE-SR management to discuss their FR triennial assessment results. Last year, the RIs discussed the site's FR program, including the planning, scope, review, and approval of FR assessments (see 11/3/2023 report). The RIs concluded that DOE-SR's FR program does not fully implement the requirements in their procedures, in particular the lack of a formal tracking and trending process and weaknesses in management guidance to prioritize higher risk areas and to ensure assessments are of high quality. The Board transmitted a letter to DOE on June 14, 2024, requesting a briefing and report in response to the Board's concerns. Part of the report and briefing was to include DOE's assessed effectiveness based on DOE-SR's FR triennial assessment. The assessment results concluded that DOE-SR has an effective FR program with some opportunities for improvement. DOE-SR had revised their implementing procedures to address the concerns with tracking and trending by establishing the expectation for a quarterly trending analysis. The intent is to use this analysis to identify targeted assessments for high-risk areas. However, the FR triennial review was not able to assess this. DOE-SR plans to conduct an effectiveness review of the program in the second quarter of fiscal year 2025.