

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 28, 2021

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** Z. C. McCabe Resident Inspector  
**SUBJECT:** Savannah River Site Activity Report for Week Ending May 28, 2021

**Savannah River National Laboratory (SRNL):** Last week, SRNL personnel convened a Facility Radiological Action Team meeting to discuss the removal of the stainless-steel liner from cell 7 of the shielded cells. SRNL personnel decontaminated the liner three separate times to significantly reduce the dose (previously 2 rem/hour on contact). The resident inspector (RI) observed the task preview and pre-job brief and identified several areas for improvement: 1) the discussion of response to electronic personnel dosimetry alarms, 2) the utilization of reverse pre-job briefings and 3) the overall discussion of hazards. The RI discussed these items with SRNL management.

**NNSA-SRFO:** NNSA-SRFO conducted two facility representative oral boards during the last two weeks. The RI observed both. After the first board, the RI provided feedback regarding the depth of knowledge explored by the questions related to system fundamentals. The feedback was incorporated into the second board. Overall, the RI concluded that the candidate preparation and board evaluation was appropriate.

**L-Area:** The operations support manager was performing a management field observation and identified that five individuals performing or supporting a filter change-out were not signed onto the job-specific radiological work permit (RWP). These individuals participated in the pre-job brief in the morning, which discussed the job-specific RWP. They did not actually perform the work until the afternoon due to a virtual drill. Partly due to the delay, the individuals did not remember to sign into the RWP after the drill prior to beginning work, but still complied with it. The corrective actions include an extent of condition review to determine if similar issues exist in other areas within the Environmental Management Organization. Those involved in the issue review noted similarities to a previous issue within SRTE (see 2/12/21 report).

**Savannah River Tritium Enterprise (SRTE):** Because there will only be one glovebox stripper system blower available during upcoming extractions (see 5/21/21 report), SRTE personnel have developed simulator scenarios that involve upset conditions for a single blower. SRTE and NNSA-SRFO are planning to provide additional oversight of the next extraction.

**Defense Waste Processing Facility (DWPF):** SRR personnel presented a safety basis update related to a natural phenomenon hazard event to the Senior Safety Inputs Review Committee. The update proposes a change in assumptions and credits a new safety-class control, resulting in an off-site mitigated dose consequences of 18.1 rem total effective dose (TED) (an increase of 1 rem TED from the previous analysis). Crediting the oil drain catch tank (ODCT) as a safety-class control would further reduce the mitigated dose consequence to 11.6 rem TED. However, the committee agreed with the proposal to not credit the ODCT and cited the fact that the tank is already in place and crediting it will not drive physical changes to the facility. Further, the presentation noted that crediting the tank as safety-class would lead to additional costs associated with maintaining an addition safety structure. DOE-SR personnel agreed with the proposal.