

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 23, 2024

TO: Katherine R. Herrera, Acting Technical Director
FROM: L. Lin, Z.C. McCabe, and E.P. Richardson, Resident Inspectors
SUBJECT: Savannah River Site Activity Report for Week Ending February 23, 2024

Tank Farms: A resident inspector (RI) discussed cold weather protection procedures and practices with Tank Farms personnel. Some of the daily checklists and procedures are appropriately detailed, but the monthly facility walkdown for cold weather preparation is written more broadly. While this can allow an operator to determine what locations may require additional protection, but without more detailed guidance, it may be difficult for an operator to know where to look. For example, the operator is to ensure the portable heaters are inspected, tested, and staged as necessary. During a walkdown earlier in the year, the RI had noted an area with portable heat lamps, some of which were not on. Tank Farms personnel determined that the heat lamps that were noted to be off were not needed. After discussions with Tank Farms management, it was clear that key areas have been identified for deployment of portable heaters as extra protection from cold weather and the expectation is that operators would bring up any issues with portable heaters while performing their daily rounds. However, a specific list of portable heaters locations does not exist.

Savannah River National Laboratory (SRNL): SRNL initiated their Implementation Verification Review (IVR) for revision 3 of the yet to be implemented Documented Safety Analysis (DSA) and Technical Safety Requirements (TSR) this week. The team consists of personnel across the DOE complex, such as Los Alamos National Laboratory and Idaho National Laboratory, as well as SRS personnel. Interviews are scheduled to begin next week, which will be conducted remotely. IVR team members will travel to conduct the onsite portion of the review the week of March 11.

BSRA transmitted the Safety Basis Strategy (SBS) to DOE-SR for their review and comment. The SBS outlines upcoming safety basis efforts planned by BSRA regarding revision 4 and revision 5 of the DSA and TSR. The SBS includes potential resolution to Board safety issues described in the Board's April 5, 2023, letter to the Office of Environmental Management (DOE-EM). DOE-EM replied on August 23, 2023, stating that they were fundamentally aligned with the Board's concerns. The SBS addresses the Safety Integrity Level determination of instrumentation and the completion of Specific Administrative Control determinations on remaining administrative controls that were not addressed in revision 3 of the DSA and TSR. However, it does not outline the plan for inclusion of the results of the backfit analysis of the fire water supply system into the safety basis. BSRA personnel are currently developing the backfit analysis and expect it to be completed in May 2024.

H-Canyon: H-Canyon personnel entered the Potential Inadequacy in the Safety Analysis (PISA) process twice regarding the 70-ton cask car. For the first instance, H-Canyon personnel determined that the material-at-risk was appropriately conservative, and a PISA did not exist. However, during that determination, H-Canyon personnel found that the cask car, a safety significant initial condition design feature, was inappropriately credited as protecting the public from a release of radiological material during a fire.