DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 10, 2020

TO: Christopher J. Roscetti, Technical Director

FROM: M. T. Sautman and Z. C. McCabe, Resident Inspectors

SUBJECT: Savannah River Site Activity Report for Week Ending January 10, 2020

Salt Waste Processing Facility (SWPF): Parsons has been conducting many mock radiological evolutions in recent weeks. They will also be performing a mock DOE Operational Readiness Review (ORR) the next two weeks where they will perform the evolutions and interviews for their own management in preparation of the real DOE ORR planned for February. This week, the resident inspector (RI) observed the removal and installation of four process building ventilation pre-filters, a simulated transfer between H-Tank Farms and Saltstone that required a SWPF permissive and monitoring, a Technical Safety Requirement surveillance for the Barium Decay Tank high-gamma interlocks, and the replacement of an extraction contactor. In general, the pre-job briefings, work execution, and radiological practices have improved. Conduct of operations mentors provide helpful feedback. Radiological protection first-line managers provide simulated dose rate and contamination data and introduce simulated upsets during the evolution. However, the inter-area transfer procedures would benefit from a parallel review to ensure the various facility procedures use consistent terminology (e.g., enable/turn on permissive, suspend/stop/terminate/complete a transfer) and to ensure it is clear which control room is initiating certain joint activities (i.e., turn on a permissive). During the surveillance, the RI observed a Quality Control inspector pass through an electrical work barricade without reading the Caution sign or complying with the requirement to wear safety glasses and shoes. The RI talked with Radiation Protection management about their use of painter's tape for taping anti-contamination clothing and the actions they are taking to procure masking tape with a stronger adhesive. While these evolutions are improving worker proficiency, inter-area coordination, and procedure quality, they are typically performed prior to declaring readiness.

L-Area: The RI observed control room personnel during a coached emergency preparedness drill. The scenario involved a high radiation alarm due to operations personnel lifting fuel too high (reduced shielding from water) in the disassembly basin and a medical event during the evacuation. Generally, SRNS personnel described the drill as successful and did not note any significant issues. However, they did note some improvement items including correcting some artificialities and resolving some technical issues with the phone lines. Additionally, although the drill players were able to perform accountability survey within the required time, there was a significant delay due to L-Area personnel being sent the incorrect information. After the controller hot wash, the RI provided some additional observations and concerns regarding the inadequate flow of information to the shift operations manager (SOM). For instance, the SOM was not informed when the SRS fire department (SRSFD) arrived at the facility or when they assumed command and control. Further, the SOM halted SRSFD and facility personnel from reentering the building to retrieve the individual with the medical issue because he had not received any information regarding the re-entry.

NNSA Projects: NNSA has approved Critical Decision 1 packages for the Tritium Finishing Facility and Surplus Plutonium Disposition projects.