DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 31, 2019

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 May 31, 2019

Savannah River National Laboratory (SRNL): The resident inspector (RI) met with the DOE-SR manager, chief engineer, and manager of the Savannah River Laboratory Office to discuss his perspective on the ongoing issues at SRNL. The RI explained that he believes the issues at SRNL that have resulted in numerous events and multiple work pauses over the last two years are in large part due to a cultural issue (see 9/22/17, 4/27/18, 5/11/18, 4/12/19, 4/19/19, 4/26/19, and 5/3/19 reports). Specifically, the management team is not consistently setting and communicating the same set of expectations for work execution, which is similar to one of the findings SRNL self-identified during the April 2018 safety pause. DOE-SR personnel expressed similar concerns to the resident inspector regarding the need for a culture change at SRNL. However, the resident inspector does not believe the actions and plan, as currently documented, will resolve these issues long term. Earlier, the resident inspector provided similar feedback to the deputy laboratory director at SRNL who explained some additional corrective actions SRNL personnel are pursuing.

K-Area: After cutting the outer 3013 container, K-Area operations personnel removed the inner container and placed a piece of tape over the puncture hole. When the operator removed their hands from the glovebox, the operator surveyed their hands on the count rate meter, as required. The radiological protection department inspector in the room noticed the count rate begin to increase (had not alarmed) and instructed the operator to stop to allow the RPD inspector to survey their hands. The RPD inspector identified contamination (600 dpm/100cm² alpha) on the palm of the operator's outer glove and on the glovebox glove. Based on discussions during the subsequent issue review, the response to the situation appears appropriate.

235-F: Workers continue to make good progress removing residual Pu-238 from the surfaces of Cells 1 and 2 using a vacuum, wipes, and scouring pads. Remediation will continue two days next week and then stop to allow the cells and gloveboxes to be assayed again in order to determine how much Pu-238 remains and where it is located. SRNS has completed their seismic and fire scenario analyses and nuclear safety analyses are ongoing. For now, the furnaces will remain in Cell 1 unless the safety analyses and assay results determine they need to be removed.

Salt Waste Processing Facility: The RI observed a practice oral board for a shift technical engineer and provided feedback on the conduct of the oral board and shared lessons learned from other SRS oral boards. The RI observed an emergency drill simulating a radiological release and a contaminated injured person. The RI discussed performance consistency and proficiency observations with Parsons and DOE-SR personnel and management. The RI comments focused on what Parsons intends to do between now and the evaluated emergency preparedness exercise (for the Operational Readiness Reviews) scheduled for July. The RI also observed training for control room and field operators on inter-facility transfers.