DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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 3, 2019

Nuclear Safety: During upcoming purge system modifications at the Defense Waste Processing Facility, SRR expects to exceed the allowable recovery times in the Technical Safety Requirements (TSR). The resident inspector (RI) questioned whether using a pre-approved response plan for a planned evolution was appropriate since the TSRs states that response plans are for “when abnormal situations arise.” After reviewing other options, SRR decided that a deinventory plan per the TSRs was more appropriate. The RI also discussed with SRR and SRNS their plans for implementing recent DOE-EM guidance on chemical hazards. SRS has relatively few TSR controls that are driven solely by chemical hazards – specific administrative controls (SAC) to secure transfers at Saltstone for severe weather/seismic event, a H-Canyon Cold Feed Preparation Basins separation wall, and a mercury Limiting Condition for Operations (LCO) at tank farms.

A RI review of SRS SACs noted two items. It is SRS policy that a TSR violation occurs when a “SAC that has an associated recovery action is not met and there is a failure to complete the recovery action within the required time limit.” (See March 22, 2019 report for a discussion if recovery actions are even appropriate for a SAC). The RI identified three SACs in the K-Area TSRs that include recovery actions with no required time limit which would make it nearly impossible to violate these SACs. Furthermore, DOE-STD-1186-2004 states that SACs in a LCO format require the TSR bases to document 1) a defensible estimate of how much a material-at-risk (MAR) limit can be exceeded, 2) an estimate of the risk involved in exceeding the analyzed MAR for some time interval to support LCO action times and surveillance frequencies, and 3) that surveillance frequencies are established to ensure a reasonably confident expectation that MAR will not be exceeded. A RI review of SRS TSRs identified that the TSR bases for radiological inventory limit LCOs at the Solid Waste Management Facility and F/H Laboratory do not meet the standard’s expectations. The SRNS nuclear safety manager directed his staff to review the above items, look for other cases, and address them as needed.

Savannah River National Laboratory (SRNL): SRNL has begun transitioning out of the safety pause (see 4/26/2019, 4/19/2019, and 4/12/2019 reports). Last week SRNL senior management distributed a work resumption memorandum to all SRNL managers. Per the memo, each SRNL group will begin releasing work beginning with the lowest hazard evolutions and transitioning to high hazard tasks. The memo notes a “need for focus on personal accountability, knowledge, proficiency, and task readiness” and later states that the SRNL “procedures and processes have become too complicated, making it difficult for employees to understand the expectations, and for management to communicate and enforce those expectations.” The transition memo will require managers to document their ownership and accountability prior to resuming work via the use of a “Work Resumption Accountability Review” form. Additionally, the memo requires all managers responsible for hands-on work attend training on task previews and pre-job briefs and for those managers to then train their personnel on the same subject. Managers will also determine which existing Task Previews were adequate and those which require a new task preview.