

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 24, 2014

TO: S. A. Stokes, Technical Director
FROM: M. T. Sautman and D. L. Burnfield, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending October 24, 2014

Emergency Preparedness (EP): The site representatives met with DOE and SRR to discuss drills conducted at SRR facilities (see 10/10/14 weekly report). During the last 21 months, SRR conducted 24 drills at the Defense Waste Processing Facility, but the variety of drills was fairly limited (e.g., eight medical emergencies, six formic acid spills). SRR conducted more drills and a wider variety of scenarios at tank farms. SRR conducted only one drill each at Saltstone and the 299-H Maintenance Facility during the same period. Because EP and conduct of operations drills only address a small number of process upsets, the site representative has begun reviewing the training provided to control room staff (i.e., classroom and simulator) on abnormal and emergency operations as part of their initial qualifications, subsequent requalifications, and continuing training. SRR also discussed their plans to update their drill scenarios, write new scenarios, ensure documented safety analysis credited elements are addressed, and develop a three-year plan for drills. The site representatives will meet with DOE and SRR in a few weeks to discuss specific actions and progress to date.

Waste Solidification Building: The site representative visited the construction site. Construction is about 99% complete and the construction subcontractor is closing out a handful of open items. SRNS will be finishing up additional activities through next March. Because the facility will be going into an extended layup period, NNSA is not performing activities like putting the agitators inside tanks (to assist future tank inspections) or windows on the gloveboxes. Furthermore, the laboratory analytical equipment will not be purchased until needed. SRNS will conduct a limited amount of startup testing, mostly focusing on facility utilities. The ventilation system will be temporarily modified so that it will have one zone during the layup period. NNSA provided SRNS comments on the submitted Preliminary Document Safety Analysis (PDSA), but the PDSA will not be revised to address those comments nor will NNSA approve the PDSA.

Savannah River National Laboratory: SRNS personnel performing rounds found a small drip coming from a forged carbon steel T-fitting in the sprinkler system of B-wing. The next evening the fitting was spraying openly and facility management called upon site services to perform an off-shift repair. While the maintenance mechanics that normally support fire protection repairs were unavailable, other resources were available, and construction personnel who were already doing work on the fire protection system stepped in and repaired the leaking joint. The post maintenance test was satisfactory and the system was placed back in service. SRNL management is exploring ways to improve the availability of parts for vital safety systems during the off shifts.

Tritium: The site rep participated in a radiological controls manager field observation of open glove box maintenance for the Thermal Cycling Absorption Process (TCAP) room of H-Area New Manufacturing. The observation concentrated on the controls associated with the breathing air system. Suggested improvements by SRNS radiological controls included methods to ensure that the breathing air manifolds are not disconnected while workers are still in plastic suits. The site rep observed several unauthorized operator aids were present in the hallway adjoining the entrance to the TCAP room. This deficiency is of concern since the facility is just exiting from senior supervisory watches that were in place to correct conduct of operations problems.