

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 2, 2017

TO: S. A. Stokes, Technical Director
FROM: M. T. Sautman and Z. C. McCabe, Resident Inspectors
SUBJECT: Savannah River Site Resident Inspector Report for Week Ending June 2, 2017

F/H Laboratory: As part of the recovery from a hose leak, SRNS installed a new isolation valve and removed the transfer hose. (See 5/19 and 5/26 weekly reports). The residual liquid was absorbed. At this time, there is no contamination or airborne radioactivity in the spill area and dose rates are background. SRNS also removed many of the transient combustibles that were found in the attic. (See 2/24 and 3/3/17 weekly reports).

Defense Waste Processing Facility (DWPF): The resident inspector observed SRR move melter #3 from F-Area to DWPF's outer railroad well.

Emergency Preparedness (EP): SRNS completed a more thorough gap analysis of their emergency planning hazards assessments, documented safety analyses, and other hazards analyses to identify scenarios for EP exercises and conduct of operations drills and prioritize these scenarios at the facility level. A total of 146 new scenarios were identified. Forty-three of these scenarios will address emergency action levels (EAL) while six address operational emergencies and two address general emergencies. (Note a single scenario may address as many as 12 individual EALs). Many of the new scenarios involve full facility fires, fires/explosions involving process rooms or areas not protected by a ventilation system, natural phenomena hazards, or nuclear criticality events. SRNS is developing an overall schedule for the development of these new scenarios and a performance indicator to track their progress. (See 10/10/14 and 5/1/15 weekly reports).

H-Canyon: SRNS declared a positive Unreviewed Safety Question when an engineer identified that a completion time for a Technical Safety Requirement required action that establishes an alternative flammable gas purge in the two H-Canyon dissolvers was non-conservative (see May 26 report). SRNS has developed and approved an Evaluation of the Safety of the Situation (ESS) that permits the operation of one of the two dissolvers with an additional control for loss of purge in the dissolvers. The new control requires an alternative purge be established within 23 hours of discovery versus the previous completion times of 76 hours if purge loss was identified during periodic surveillances or 104 hours if the specific time purge was lost is known. SRNS has submitted the ESS to DOE-SR for approval.

Maintenance/Training: The resident inspector had separate meetings with the SRNS training and maintenance managers. In addition to closely working with the local technical colleges to train future workers, SRNS is starting an apprenticeship program for electrical and instrumentation technicians for high school students. The program will be expanded if successful.