

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 20, 2017

TO: S. A. Stokes, Technical Director
FROM: M. T. Sautman and Z. C. McCabe, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending January 20, 2017

Tritium Facilities: Operations placed the Environmental Conditioning (EC) rooms on standby because the Technical Safety Requirement (TSR) surveillance to conduct a functional test was going to be missed. This mode does not allow any EC activities to be conducted with a reservoir filled with hydrogen isotopes. When this mode change occurred, operations staff updated the official unclassified status board, but forgot to update the TSR mode status on a classified status board. Based on anecdotal comments, the mode status on the classified status board is not always kept up to date. The EC staff contacted the control room to verify the EC rooms were in operations mode before starting their work. Verifying the mode status was not a procedure requirement. Since the shift operations manager (SOM) and shift technical engineer (STE) were not present, a control room operator left in charge checked the classified status board, which incorrectly said the EC rooms were in operations mode. He then checked with a SOM (who was not on that day's watchbill, but was in the control room for other reasons) who stated they were in operations mode, but the SOM did not confirm this by checking the official unclassified status board. Based on answers provided at the fact finding meeting, this was the closest thing to a work release of the EC activity. The EC activity was conducted without incident and no questions were raised by control room staff when the EC personnel reported at the end of the shift what work they had performed. Meanwhile, operations staff had completed the functional test and the STE returned the EC rooms to operations mode later that night. The next morning, EC staff started to ask questions when they heard at shift turnover that the rooms had changed to operations mode. SRNS declared a TSR violation when they realized the EC work had been conducted with a reservoir filled with hydrogen isotopes during standby mode. SRNS realizes they have weaknesses in their configuration control of the classified status board and that they need a more positive means to ensure prohibited work is not conducted during standby mode. SRNS is developing corrective actions and trying to determine the extent of the condition.

H-Canyon Exhaust (HCAEX) Tunnel: SRNS personnel have recently identified concrete with lower than anticipated compressive strength in a wall that separates the H-Canyon personnel tunnel and the HCAEX crossover tunnel (see 1/13/17 report). SRNS personnel have since documented this nonconformance and determined the low concrete strength does not impact the safety function of the wall and does not require any revision to the H-Canyon safety basis. Therefore, SRNS has concluded that the wall can be used as is. SRNS personnel are still evaluating what impacts this new data will have on the evaluation of the H-Canyon facility and the exterior HCAEX tunnel (subject of 12/16/15 Board letter).

Emergency Preparedness: The site representative provided SRR observations on the effectiveness of trying to conduct a large-scale tabletop drill at DWPF last week. For example, nearly four dozen players were trying to "respond" while being in a large conference room with only one phone and no radios, without tools in the control room, and while using a drill scenario package that was designed for a field drill. SRR agreed that future tabletop drills should be limited to a smaller group of primary emergency response organization positions. The site representative also observed control room activities for a K-Area coaching drill involving a simulated truck and transuranic waste drum fire. In order to increase the training value to players and trainees observing the drill, the SRNS controllers were much more active in providing guidance on how to properly respond in this emergency.