

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 28, 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 June 28, 2019

Salt Waste Processing Facility: The Resident Inspector (RI) and an Associate Technical Director discussed plans for emergency preparedness exercises and operational readiness reviews (ORR) with several senior managers with DOE and Parsons (see last week's report). Parsons will be performing additional training and drills/exercises this summer and the ORR teams will evaluate an exercise in the fall. The RIs observed oral boards for a field operator (FO), control room operator (CRO) and manager (CRM), shift operations managers (SOM), and shift technical engineers (STE). The oral boards for the FO and CRO were appropriate and involved demonstrations in the field and simulator. The RIs provided feedback on the conduct and content of the first round of CRM/STE oral boards. The second round of CRM, SOM, and STE oral boards was satisfactory.

Defense Waste Processing Facility: A rigger performing housekeeping in 512-S alarmed the personnel contamination monitor as he exited. Surveys found 120,000 dpm $\beta\gamma$ on the skin of his hand and 6,000 dpm $\beta\gamma$ above his upper lip. The source of the contamination may have been a 4-way spreader the rigger handled with his leather gloves. Cross-contamination appears to be the cause of the skin contaminations. The whole body count and chest count were negative, but analysis of urine bioassays is ongoing.

Savannah River National Laboratory (SRNL): Last week the RI observed a research and development evolution. The hands-on workers were knowledgeable of the process and the hazards associated with the task and completed the work without incident. However, the RI observed an informal pre-job brief that was inadequate. The discussion of the actual task was approximately one minute in length and consisted of stating that nothing had changed from the previous day and that the hands-on workers were fit for duty. The group did not discuss hazards, controls or task assignments.

Hot steam condensate splashed onto an operator's sleeve, ran into their gloves and burned their wrist while performing an independent verification (IV) of the valve alignment for reintroducing steam. The operator entered a room to IV the position of a valve when they noticed a cap on the drain line. Rather than stopping, the operator closed the valve they were intended to verify was open, removed the cap, positioned a bucket under the drain line on top of a stack of cases of water bottles, and re-opened the valve. More water than the operator expected drained into the bucket. The filling bucket began to tip over when the operator stopped it and hot steam condensate splashed on their arm. The operator then closed the valve and alerted control room personnel. Emergency medical technicians performed first aid on the operator. SRNL personnel identified that a less than adequate pre-job brief and task preview contributed to the event. Further, it was not until the RI inquired how and when the valve was re-opened that it became evident that another operator resumed the task immediately after the first operator was injured. The second operator (unaware of the injury) took it upon themselves to finish the task.