

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 4, 2020

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** M. T. Sautman, Resident Inspector  
**SUBJECT:** Savannah River Site Activity Report for Week Ending September 4, 2020

**Salt Waste Processing Facility:** Parsons tried to resume their 3-batch simulant run. During both attempts, failures of both Strip Effluent Pump Tank pumps shut down processing within a few hours. Parsons has been rebuilding the pumps and trying to remove foreign material, which is suspected of causing the pumps to fail. Parsons later curtailed this work due to staffing issues.

During the latter part of the week, Parsons faced the challenge of having 40+ staff unavailable. Most of these staffers work in operations or maintenance. For approximately one day, only one of the eight qualified shift operations managers was available. This individual worked day shift while a control room manager took control of night shift. This was allowed by their Technical Safety Requirements (TSR). Later in the week, Parsons changed the mode of the Central Processing Area to De-Inventoried. This is the most restrictive mode.

**Savannah River Tritium Enterprise (SRTE):** Personnel at the Tritium Extraction Facility uploaded an unapproved revision to an electronic round sheet and used it once. The round sheet had not gone through an Unreviewed Safety Question Screen (USQS) and had not been signed off by the Design Authority. Although this round sheet is used for implementing TSRs, the revision in question did not make any changes to the TSR implementing steps. SRTE personnel determined that poor communications and failure to have the correct people involved at the pre-job briefing prior to loading directly contributed to the error. Independently, the individual that performed rounds with the unapproved version failed to verify that revision number of the electronic rounds sheet as required prior to beginning any procedure. The error was discovered when the owner called the Tritium Process Control group and informed them that they would not be approving the revision for loading because it had not gone through a USQS. However, SRTE personnel did not immediately realize that the procedure had already been loaded and was in-use at that time. After the issue review meeting, the resident inspector pointed out similarities between this event and another event within SRTE regarding another electronic procedure that did not receive the proper USQ review prior to being uploaded and used. (See 12/21/2018 report.)

**Tank Farms:** Changes to how the hydrogen generation rate is calculated may reduce the minimum time to the lower flammability limit for evaporator waste tanks from 7 to 3 days. Evidence also indicates that thermolytic pathways to methane generation could become significant at temperatures greater than 100 °C.

**Oral Board:** The resident inspector observed an oral board where the candidate violated the TSRs in a given scenario. After discussion and consultation with training group, the board failed the candidate in that area. The resident inspector also noted that there were limited questions asked in the area of conduct of operations, one of the four subjects being evaluated.