

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 30, 2018

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 November 30, 2018

H-Canyon: H-Canyon personnel violated the Technical Safety Requirements (TSRs) when they failed to enter an operational restriction for having inadequate purge airflow into a canyon vessel. (An operational restriction is similar to a Limiting Condition for Operation, but prescribed by an Evaluation of the Safety of the Situation rather than the TSRs). When performing rounds, an operator found one of the safety significant purge rotameters out of range and properly reported the issue. The vessel in question had two other rotameters reading within range, which is all the TSRs require. On the following day, another operator found a second rotameter out of range on the same vessel. The rounds procedure directs the user to inform the shift operations manager (SOM) of the issue and to evaluate entering the appropriate operating restriction. The operator informed the SOM of the issue but, did not mention the necessary evaluation of the operating restriction. The SOM misunderstood the operator and believed them to be speaking of the rotameter that was found out of range on the previous day. The error was discovered later that day when H-Canyon personnel attempted to resolve the first rotameter issue and informed the SOM of the second issue again. Because the process vessel vent system was operating at the time of the issue there was no unsafe condition associated with a buildup of hydrogen. This is the first TSR violation at H-Canyon since November 2017.

Tank Closure Cesium Removal (TCCR): The resident inspectors (RI) observed the dry run and drill for the TCCR Readiness Assessment (RA). The SRR RA team identified 9 findings and 18 opportunities for improvement. The findings addressed the overall operations strategy and procedures. While the conduct of the RA was mostly acceptable, the RI observed several shortcomings. First, SRR considered the possibility of performing the operational demonstration prior to the start of the RA. The RI questioned how this would comply with their RA Plan of Action pre-requisites and line management's declaration of readiness. SRR chose not to pursue this further. Second, the RI questioned why the conduct of operations drill being performed for the RA team was a training drill, which allows controllers to coach participants, rather than an evaluated one. While a coached drill is acceptable for a facility self-assessment as part of achieving readiness, the purpose of the RA is to verify readiness. SRR ended up clarifying that the controllers were only to provide planned drill messages, but were not to coach. Third, SRR only has four operators that are qualified on TCCR and plans to assign one of these qualified operators to each shift, but rely on normal tank farms operators for other TCCR functions. However, SRR did not perform the RA demonstration using this approach, but rather used all four TCCR-qualified operators for the TCCR control trailer and field operator positions. Fourth, during the contractor RA team's level of knowledge interviews, the DOE observers repeatedly asked their own questions. It is hard for DOE to validate the effectiveness of the contractor's team to identify training issues when they insert themselves into the contractor's process.

Salt Waste Processing Facility: Parsons began receiving cold chemicals and transferring them to tanks in the Cold Chemical Area. Parsons also ran seven batches (using water) through the Alpha Strike Process. The RI observed portions of both of these activities.