

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 23, 2016

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 December 23, 2016

Defense Waste Processing Facility (DWPF): All four safety significant gas chromatographs for the Sludge Receipt and Adjustment Tank and Slurry Mix Evaporator at DWPF are now operable. The four GCs were taken out of service when SRR engineers identified a software error that erroneously reported the hydrogen concentration in the vessel headspace as zero under specific conditions (see 12/9/16 report). The error has since been resolved and there are no known issues with the GC software as installed.

The site representative attended an apparent causal analysis (ACA) meeting concerning the recent event involving multiple breakdowns in work planning, conduct of operations, conduct of maintenance, and control room operations (see 12/16/16 report). The team identified the following causes:

- Complacency/noncompliance by the maintenance first line manager and mechanics
- The control room operator was on the phone responding to the report of a fire alarm when the process chillers refrigerant monitors alarm actuated creating priority determination issue.
- Shift Operations Manager believed there was no unsafe condition due to hearing the alarm clear while on a call with the mechanics in the field.

SRR is developing lessons learned from this incident and addressing performance issues.

Site Rep Observations: The site representative observed a successful building first line manager oral board for H-Canyon.

Tank Farms: SRR declared a positive Unreviewed Safety Question. During a review of a calculation, an analyst identified that the in-leakage allowance for Tank 22 was incorrect and the differential pressure requirement in the Technical Safety Requirement needed to be increased. This review also identified that two tanks were in the wrong fan group. The compensatory actions include restrictions from entering three Limiting Conditions for Operation under specific circumstances.