

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 30, 2012

TO: T. J. Dwyer, Technical Director
FROM: M. T. Sautman and D. L. Burnfield, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending November 30, 2012

Tank Farms: The site rep attended a Facility Radiological Assessment Team (FRAT) meeting regarding the replacement of the demister in the 2F evaporator. The purpose of a FRAT is to review first-time activities where high potential exists for significant personnel exposure, spread of contamination, release to the environment, or other high risk activities identified by facility management, to ensure that adequate radiological controls are included in the work planning and that the Person in Charge (PIC) or designee is adequately prepared to safely execute the planned activity. This is the third such FRAT meeting to be conducted for this task. (See 10/5/2012 report.) According to Liquid Waste Operations procedures, "All work planning efforts should be completed prior to the meeting and presented in a clear, concise manner." However, the work package still required additional effort to bring it up to site and DOE standards. The site rep discussed several areas where improvements could be made with the deputy facility manager at the close of the meeting.

The 254-13H Standby Diesel Generator provides power to a safety significant process vessel ventilation system for the H-Tank Farm. While load testing this diesel generator, tank farm personnel failed to follow the procedure as written. Following a review of the occurrence and initial corrective actions, tank farm personnel again began the load test on the following day. The diesel generator operated as expected for several hours and then, for reasons apparently unrelated to the previous day's occurrence, shut down based upon high coolant temperature during the 75% load test. SRR personnel are working through the corrective actions at this point.

Defense Waste Processing Facility (DWPF): The SRR Safety Documentation Manager identified that the DWPF Facility Operations Safety Committee had incorrectly concluded that a proposal to downgrade the low point pump pit steam line from safety significant to production support (a variation of general service) did not require DOE approval. While the manager agreed with the proposed downgrade, the manager determined that the Unreviewed Safety Question Evaluation should have been positive because this downgrade requires DOE approval.

Last week, SRR tested the response of one of the DWPF diesel generators to a loss of offsite power and its ability to reject a load greater than or equal to the largest single operating plant load. During the test, the zone 2 and lab exhaust fans did not switch to local control as expected. In addition, the lab exhaust fan, which they expected to remain running, shut down and they were unable to restart it from the local control station. Then the control room supervisor inadvertently shut down the sole zone 2 exhaust fan that was running. As a result of the two unexpected fan shutdowns, the control room supervisor entered two abnormal operating procedures and instructed workers to leave the DWPF building as a precaution. SRR is still investigating why the equipment did not perform as expected.

H-Canyon: Shortly after construction-forces began chipping away concrete to repair damage from old acid leaks, a structural engineer questioned why this work was being performed under a general service (GS) work order (WO) when the H-Canyon structure is safety class (SC). While superficial work such as painting and hanging signs can be performed using a GS WO, any work involving concrete chipping requires a SC WO. SC WOs include acceptance criteria and inspections for the repair. This repair met the definition of a cosmetic repair because its size did not require a reanalysis of the structural loading. The design authority mistakenly believed that cosmetic repairs did not require a SC WO.