

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 9, 2014

TO: S. A. Stokes, Technical Director
FROM: M. T. Sautman and D. L. Burnfield, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending May 9, 2014

Training: The site representative notified DOE, SRNS, and SRR about the inappropriate use of references during oral boards and readiness review level of knowledge interviews. The widespread practice of supplying copies of authorization basis and emergency response documents has grown to include computers with intranet access. SRS does not have detailed guidance concerning what information is required to be memorized and what can be looked up nor do the questions or answer keys provide any guidance regarding on this. The site rep has observed cases where candidates are simply reading abnormal operating procedure steps during accident scenario questions although shift operations managers are required to know immediate emergency actions. Furthermore, the references are being searched to provide key definitions, fundamental conduct of operations requirements, and basic safety basis implementation rules which are then simply read word-for-word. This practice provides little insight about the candidate's actual knowledge about the subject, but only demonstrates their ability to search a table of contents or search the intranet for keywords. SRNS management indicated they will address these concerns.

Defense Waste Processing Facility (DWPF): Workers installed a grounding breaker in a 13.8 kV breaker cubicle prior to the lockout being established. (Note all breakers were open and isolated). At the pre-job briefing, the workers were briefed on their planned scope of work (e.g., hanging tags, establishing barricades). An incorrectly placed note mentioning that a grounding breaker would be installed in the future was misinterpreted as an action step. The workers were not qualified to install a grounding breaker. Although they notified their supervisor of their plans to install a grounding breaker, he did not stop the work, but rather observed the installation. After the mistake was identified, SRR placed a hold on electrical lockouts, developed a management control plan requiring management oversight of electrical lockout/tagout installation and removal, and revised this and other lockout orders to make the format of notes and warnings consistent with that used for procedures.

The site representative attended a Facility Radiological Assessment Team (FRAT) meeting regarding the replacement of the inlet tunnel collection sump pump. This pump is highly contaminated and SRR plans on the placement of temporary shielding, timed entry and exit, and the use of multiple whole-body monitoring using electronic and thermoluminescent dosimetry to reduce the dose to the workers. While the team's review of the work package was more thorough than in past FRATs, the site representative still identified some procedure format issues (i.e., inappropriately placed notes) and inconsistencies amongst the work package documents.

L-Area: SRNS engineers and SRNL scientists presented the status of their corrosion evaluation of fuel in isolation containers and their vulnerable fuels ranking, the latter which will lead to thermodynamic and kinetic corrosion evaluations. However, since DOE does not have any real plans to validate the results with inspections of the actual containers or fuel or to take any action (e.g., process, repack) based on the results, this appears to mostly be an academic exercise.

Modular Caustic Side Solvent Extraction Unit (MCU): SRR continues to troubleshoot and repair the three issues previously reported (see 5/2/14 report). SRR has rebuilt the first extraction contactor and is now attempting to clean its drain. Meanwhile, SRR is in the process of rebuilding four other downstream contactors. SRR is also modifying the DWPF waste acceptance criteria to allow the receipt of the unexpected material currently in the strip effluent hold tank. Until SRR completes fixing the contactors, further troubleshooting of the wiring problem remains on hold.