

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 11, 2010

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 June 11, 2010

H-Canyon: The latest large steel box to be repacked had a history of rainwater intrusion – past dewatering campaigns removed 450 and 50 gallons. When the crane initially removed the lid, riggers saw that 3 of the 4 wooden boxes inside had fallen apart so they put the lid back on. Riggers later reopened the box and absorbed the liquid on the bottom. The riggers, wearing plastic suits and rubber boots, then climbed in the box, removed the degraded wooden pieces by hand, and had the crane lift the items out. Loose contamination was minimal since the items (possibly ductwork and a tank) had been wrapped in several layers of plastic. While the activity was safely performed, the site reps felt the pre-job briefing should have included a more detailed discussion of planned responses to anticipated upset conditions, without prompting.

The site rep observed Documented Safety Analysis (DSA) and spent fuel training courses and also observed the second oral board attempt for a first line manager. The effectiveness of the DSA training would have been improved if it had focused more on the differences between the current Safety Analysis Report and the new DOE-STD-3009 compliant DSA and better highlighted new/revised controls. The oral board is also being used to identify too many knowledge weaknesses that should have been detected earlier by written course exams. The board should have focused more on how the candidate applies their process/equipment knowledge as a manager. The facility is taking actions to address the above.

American Recovery and Reinvestment Act (ARRA): The site rep accompanied the L-area manager on a visual inspection of the railroad track repairs, which were recently completed as part of the preparations for the transfer of spent nuclear fuel from L-area to H-area.

2F Evaporator: SRR shut down the 2F evaporator after detecting radioactivity in excess of the Effluent Treatment Plant's (ETP) waste acceptance criteria at both the F-Lift Station and an ETP waste water collection tank. After SRR flushed the overheads tanks twice, the remaining radiological activity was below limits. SRR transferred the overheads tank contents to the F-Lift Station, where it will be blended with water. Engineering is expected to issue a path forward to define how the material in the wastewater collection tank will be handled. Transfers from H-canyon to ETP are also on hold.

F-Tank Farms: SRR plans to use the pulse tube agitator (PTA) during an upcoming tank transfer. Because the PTA causes air pressure pulses in the pump pit, it has occasionally resulted in airborne contamination. The site rep observed temporary modifications to diversion box and pump pit ventilation that should preclude any local contamination releases during the upcoming transfer.

Emergency Preparedness (EP): The site rep had meetings with DOE, SRNS, and SRR to discuss their preparations for high consequence, natural phenomena events (see 5/14/10 report). The review is looking at both immediate actions as well as longer term recovery actions. While parts of the programs are robust, the information reviewed so far indicates some noticeable gaps in these preparations, especially in recent years. Once the review is completed, the site rep will provide SRS personnel more detailed feedback.

Saltstone: The site rep observed the startup of grouting operations, but a salt feed tank pump trouble alarm was received within minutes and the shift manager terminated grouting. A long tank agitator run the day before is believed to have suspended enough solids to interfere with the operation a control valve.