

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 20, 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 August 20, 2010

DNFSB Staff Member, Herbert Massie was on site this week to attend the kick off of the Pit Disassembly and Conversion project conceptual design review.

Saltstone: After reviewing process parameters, engineers believe that the indicated sharp drop of dry feeds last week (right before a weigh hopper fill cycle commenced) was actually a false indication. After the fill cycle, the dry feed controller overshot the setpoint and then automated action returned the feed rate to the setpoint. The mixing and transfer control system responded as designed. SRR plans to modify the system control software so that a setback is initiated on high dry feed rate deviation to limit the impact of any future dry feed overshoots. Saltstone personnel rebuilt the 4-way pig launcher valve this week and were preparing to conduct a processing run on Friday morning.

Solid Waste Management Facility: SRNS resumed handling their lowest risk transuranic waste drums (i.e., good condition drums containing less than 180 plutonium-239 equivalent curies and no liquids). (See August 13, 2010 report).

The Site Rep requested a discussion on lessons learned from the Pad 16 drum leak and what actions will be taken across SRS to better prepare for any future transuranic waste container breach.

SRNS also restarted shipping of TRU waste drums to WIPP. They shipped one shipment this week and preparations are underway for another shipment early next week.

HB-Line: Management declared they were ready to start processing low-assay plutonium drums received from Hanford. The site rep attended the prejob brief and discussed a few minor issues from this brief with SRNS management before the activities commenced. An SRNS senior supervisory watch observed the operations as well as facility management and the DOE facility representative. The site rep observed the opening of the first drum and the removal of the first capsule. The opening of the drum and the removal of the capsule occurred without problem.

Tank Farms: The second feed and bleed transfer between Tanks 6 and 7 was temporarily shut down after a continuous air monitor detected activity. The high efficiency particulate air filter was replaced and the transfer resumed and was successfully completed. SRR completed the preliminary mapping of Tank 6 and reported "positive" results. SRR is also preparing to install the crawler into Tank 5. The high-level liquid conductivity probe was moved into riser 2 of Tank 5 to prepare for the installation of the crawler. Once this work is complete on Tank 5, SRR will continue with the preparations for the third feed and bleed transfer between Tanks 6 and 7.

L-Area: SRNS completed the Facility Self Assessment confirming readiness to resume spent fuel shipments from L to H. The assessment resulted in 10 actions being required prior to resumption.