

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 17, 2005

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: J. S. Contardi/M.T. Sautman, SRS Site Representatives
SUBJECT: Savannah River Site (SRS) Report for Week Ending June 17, 2005

H Tank Farms: Last week, approximately 2400 gallons of sludge was transferred from Tank 40 to the Low Point Pump Pit (LPPP) after the transfer pump was shut down. (1300 gallons of this was expected as part of venting and draining the transfer line). Although a faulty valve or a plugged vent line was suspected at first, an investigation determined that the reason a siphon existed for so long was that an operator did not shut the manual isolation valve (which is followed by venting the transfer line) until ~23 minutes after the transfer pump was shut down.

F Area: The contractor presented their rationale (i.e., heat stress, facility constraints, air monitoring data) for why it is acceptable for potentially contaminated air to flow from some airborne radioactivity/contamination areas to radiological buffer areas in a uranium facility being decommissioned. The Site Reps will be walking down the airborne radioactivity areas next week so facility personnel can explain why this situation cannot be improved.

Solid Waste Management Facility (SWMF): After observing a SWMF Contractor Readiness Determination drill, the Site Reps passed on observations about the control and difficulty of the drill and the apparent lack of responder familiarity with radiation monitoring equipment they were expected to use. The Site Reps will observe upcoming drills and review training requirements.

Readiness Reviews: This week, National Nuclear Security Administration and contractor representatives from Y-12 were on site for a lessons learned exchange regarding recent SRS readiness reviews. SRS contractor personnel provided presentations on startup of HB-Line Phase II plutonium and neptunium processing, startup of the Tritium Facility Modernization and Consolidation project, the planned startup of the Tritium Extraction Facility, and the roles and responsibilities of the Operations Evaluations Department. Previously, SRS personnel traveled to Y-12 for a similar meeting in which lessons learned were shared concerning the readiness reviews for Oxide Conversion Facility and the Purification Facility.

Radiological Uptake: Results from a routine annual bioassay indicate that an operator at the Solid Waste Management Facility incurred a radiological uptake. The individual worked primarily in the Transuranic Visual Exam Facility (TVEF). Operations at TVEF involve the remediation of transuranic waste drums. An investigation has begun and the operator has been placed on a special bioassay program. A recent event at Lawrence Livermore National Laboratory (LLNL) involving operations similar to TVEF resulted in multiple personnel contaminations (LLNL Site Rep. Weekly 8/27/04, ORPS report OAK-LLNL-LLNL-2004-0039).

Operations Oversight: The Site Reps observed spent fuel transfers in L Basin, a cask processing demonstration in the Tritium Extraction Facility, dissolver charging in H-Canyon, canister handling activities at the Defense Waste Processing Facility, and HB-Line activities. No significant issues were identified.