

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 15, 2002

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
J. J. McConnell, Deputy Technical Director  
**FROM:** R. T. Davis/ T. D. Burns  
**SUBJECT:** SRS Report for Week Ending March 15, 2002

**Public Interaction:** On Thursday, a site representative briefed a Citizens Advisory Board committee on nuclear material management activities at SRS. WSRC has achieved significant progress in stabilizing nuclear materials at SRS; however, several important missions remain including plutonium packaging and stabilization, highly enriched uranium blend down, americium-curium solution stabilization and spent fuel processing. The site representative also discussed the status and potential path forward for research reactor spent fuel processing.

**3H Evaporator:** Over the weekend, the contents of the 3H evaporator pot (~9,700 gallons of waste) were successfully transferred to Tank 29 via the leaking lift line jumper (site rep weekly, 3/8/02). Waste remaining in the evaporator cell is below the Authorization Basis residual waste limit of 565 gallons, and water flushes have commenced to clean and decontaminate the evaporator cell. Camera inspections supporting the cell cleaning efforts revealed a second, much smaller, leak site located at the isolation valve on the feed line jumper. The leak at this site does not appear to be related to the lift line leakage, and visual evidence suggests that it may not be actively leaking.

A subcontractor has successfully cleared the Tank 30 gravity drain line using a high pressure water lance. Back flushing of this gravity drain line is ongoing, and the facility will be placed into a cold standby mode to support equipment repairs after this activity is complete. An engineering path forward has been developed to repair the lift line jumper and the feed line isolation valve, and work packages are being prepared. Execution of the work packages will commence once the evaporator cell is adequately decontaminated. WSRC expects to return the 3H evaporator to service within the next two weeks.

**Sludge Batch 3:** Several welds on the transfer line tie-ins between Tank 18 and Tank 7 did not pass radiography examinations. Efforts to repair these welds this week proved unsuccessful as radiography examinations again revealed flaws. A second rework cycle is scheduled for this weekend.

**HB-Line Phase II:** WSRC continues to develop the plan and schedule for HB-Line Phase II processing of solutions contained in tank 16.3 that are expected to meet the Mixed Oxide Fuel Fabrication Facility (MFFF) specification (site rep weekly 2/15/02). WSRC will likely complete processing some of the solutions that will not meet the MFFF specification (i.e., solutions in the HB-Line facility and in tank 9.5). Following this campaign, HB-Line will enter an outage until solutions in tank 12.1 are transferred to the HLW system. HB-Line Phase II processing will resume following this transfer, which is expected to occur by August. WSRC also continues to investigate material hold-up problems in the precipitator.