

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 19, 2001

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** R. T. Davis/ T. D. Burns  
**SUBJECT:** SRS Report for Week Ending October 19, 2001

**Spent Nuclear Fuel:** SRS continues to receive and store aluminum based research reactor fuel (both foreign and domestic) in accordance with the Spent Nuclear Fuel (SNF) Management Final Environmental Impact Statement (FEIS). The site is currently consolidating storage of all SNF to L-Basin. K-Basin and the Receiving Basin for Offsite Fuels (RBOF) are expected to be deinventoried by 2003 and 2006, respectively. To provide sufficient storage capacity, WSRC is pursuing a project to design and install new fuel storage racks in L-Basin. With the addition of these racks, L-Basin is expected to have capacity for fuel receipts through 2012 (depending on Canadian participation). WSRC continues to pursue the melt and dilute technology to process the aluminum based SNF. Startup testing for the L-Area Experimental Facility (LEF), which is intended to demonstrate this technology, is on-going. However, DOE's commitment to the production facility (i.e., the Treatment and Storage Facility) appears uncertain because of resource limitations. As noted in the FEIS and in communications to the Board, DOE intends to maintain H-Canyon processing capability until successful demonstration of the melt and dilute technology.

**HLW Activities:** The Record of Decision for selection of Caustic Side Solvent Extraction technology for the processing of HLW salts at SRS was published in the federal register this week. The Project Acquisition Strategy to support a Request for Proposals (RFP) is in comment resolution and awaiting EM-1 approval. Issuance of the RFP is expected in November 2001.

Several significant milestones with regard to tank space management were also achieved recently. The 2H Evaporator was restarted (site rep weekly 10/12/2001) and operated over the weekend producing 10,780 gallons of overheads. It has been placed in warm stand-by until the middle of next week to support a transfer evolution from its drop tank (Tank 38). Tank 49 was returned to service (site rep weekly 10/12/2001) and will serve as the receipt tank for the aforementioned waste transfer, which was initiated on Thursday and should be complete by Monday.

Additionally, the schedule for the Tank Farms AB upgrade effort for Consolidation, Storage, and Transfer (CST) operations has been revised. This revision will allow WSRC to address the DOE-SR perception that the current analyses are based on overly conservative assumptions. The original schedule had the first three Documented Safety Analysis modules (covering evaporators, transfer lines, pump tanks, and diversion boxes) being submitted to DOE in November 2001 with the remaining two modules submitted in April 2002. All five modules are now scheduled for concurrent submission in February 2002.

**Tritium Operations:** In April, the Board's staff reviewed the Lock-out/Tag-out (L/T) procedures at the Tritium facilities in response to several problems in this area. Both NNSA and WSRC senior management had outlined a set of corrective actions including revisions to procedures to better track the status of L/Ts, and preclude shift changes with L/Ts left in a partially installed condition. Two recent occurrences involving L/Ts have cast some doubt on the effectiveness of these measures. In response to the latest events, WSRC has instituted further modifications to the L/T procedures which require additional positive affirmation of the L/T steps performed. The site reps believe this action is appropriate provided it is accompanied with commensurate management attention.