DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 10, 1998

MEMORANDUM FOR: G. W. Cunningham, Technical Director
FROM: J. Kent Fortenberry / Joe Sanders
SUBJECT: SRS Report for Week Ending April 10, 1998

Kent Fortenberry was at DNFSB Headquarters this week.

Proposal to Acquire Additional Highly Invulnerable Encased Safes (HIVES) - As noted in the weekly report from 3/13/98, approximately 20% of the tritium reservoirs in the 217-H vault remain stored within file-type Stanley-Vidmar cabinets. WSRC is considering removing the Stanley-Vidmar cabinets and locating four additional HIVES in the vault. With these additional HIVES, the optimistic projected date for getting reservoirs out of Stanley-Vidmar cabinets advances from September 1999 to March 1999.

If the 42 inch OSHA aisleway width egress limit is ignored, 11 rather than four additional HIVES could be located in the vault which would allow storage of the entire inventory of reservoirs. However, this would result in a narrow aisleway (≈24 inches) and would prevent the drawers from fully extending. The site reps suggested that DOE and WSRC evaluate acquiring shallower HIVES that would allow a reasonable aisle width to be maintained. The Board will be briefed on this subject during their site visit on April 14 - 15.

Overflow of DWPF Vessel - An inadvertent overflow of the Sludge Receipt & Adjustment Tank (SRAT) occurred last week. A flush water valve to the condenser spray ring was inadvertently left open after leak testing of jumpers reinstalled as part of the Slurry Mix Evaporator (SME) coil assembly replacement. Approximately 150 gallons of material overflowed to the cell sump before the condition was detected and corrected. Several conditions contributed to this event: (1) no pre-job briefing was performed for this nonroutine activity and the operator did not understand that the flush water ultimately entered the SRAT; (2) the procedure did not clearly state that system restoration involved closing the valve; (3) the SRAT's 'Hi' level alarm is routinely in alarm condition when the tank is full and being agitated and the 'HI-HI' and 'HI-HI-HI' level alarms are non-critical so they only print out to an alarm logsheet; and (4) the sump was already in alarm condition because solution was in the sump as part of the coil removal and decontamination effort. As a result of this occurrence, WSRC is evaluating making improvements to the procedure, reevaluating the level alarm prioritization and notification for this and other tanks, and making more consistent use of pre-job briefs for unusual or infrequent evolutions.

Tritium Reservoir Environmental Conditioning Chamber Startup - The WSRC ORR for starting up the Drop Tester, Shake Table, and Centrifuge located in Building 233-H (formerly RTF) is scheduled to begin on April 13th and the DOE ORR is scheduled to begin on April 27th. Carl Everatt will serve as the DOE team leader. He currently serves as the Operations Director in the SRS HLW Division. The site reps discussed with DOE and WSRC whether certain TSR surveillances positively verify satisfaction of a Limiting Condition of Operation (LCO). For example, one condition defining oxygen monitor inoperability is 'Programmable Logic Controller (PLC) is not operable.' However, a surveillance verifying PLC operability does not exist. DOE and WSRC agreed to review implementation of the new TSRs.