

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 15, 1997

**MEMORANDUM FOR:** G. W. Cunningham, Technical Director  
**FROM:** J. Kent Fortenberry / Joe Sanders  
**SUBJECT:** SRS Report for Week Ending August 15, 1997

**FB-Line Bagless Transfer System** - DOE-SR began a readiness assessment this week for the Bagless Transfer System operation. Procedure problems and lack of preparation resulted in an unsuccessful dry run, rescheduled for next week. The DNFSB site office pressed DOE-SR to add compliance with the DOE-STD-3013-96 plutonium storage standard to the readiness assessment. Issues being explored include controlling the parameters of the weld qualification and quality control of essential process steps.

**SRS Canyon/B-Line Utilization Study** - Initial responses to a request to identify materials which might require use of the SRS canyon facilities have been received from the field. In summary, there were no big surprises, but small quantities of materials were identified at each site which may require SRS processing. These responses are preliminary, since some sites requested assistance to determine if material could be processed by SRS. Additional discussions with the field are expected in order to better understand material condition, impurities, packaging configuration, transportation requirements, etc. A technical analysis of the field data will be required to understand the benefits, potential disadvantages and the timing of transporting and processing off-site material at SRS. Preliminary results are planned for the end 1997.

**Tritium Facilities Non-Nuclear Reconfiguration (NNR) SAR Addendum** - The SAR Addendum for NNR, which includes the environmental conditioning chambers, is being revised. As you will recall, the manager of DOE-SR chose not to approve the original version. A primary risk for the chambers is a deflagration/detonation caused by a reservoir assembly breaking away from its mounting and the contents being released and ignited. While safety-related controls (i.e., chamber inerting, room stripping, and electrical isolation) have been put in place to prevent and/or mitigate this accident, the scenario is not specifically evaluated for adequacy in the SAR Addendum. The facility fire scenarios which supposedly "bound" this scenario involve different controls and are not really comparable to the deflagration/detonation scenario.

**Tank 17 Closure** - WSRC has attempted to reduce the residual sludge in Tank 17 to about 700 gallons by adding water to the tank and pumping the suspension to Tank 18. However, the most recent survey indicated that the sludge quantity in Tank 17 has not changed substantially over the last several weeks of washing. WSRC plans to proceed with tank grouting. The Tank 17 closure module, previously approved by the state, will need to be revised because it is based on a residual sludge quantity of 700 gallons. With the larger amount of residual sludge, approximately three times the original amount of reducing grout will be needed to meet Class C LLW limits (per 10CFR61.55).