DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 19, 1998

MEMORANDUM FOR: G. W. Cunningham, Technical Director

FROM: J. Kent Fortenberry / Joe Sanders

SUBJECT: SRS Report for Week Ending June 19, 1998

Stabilization of RFETS Residues at SRS - The final RFETS Plutonium Residue EIS is expected to be issued by August 1, with a Record of Decision (ROD) by early September. Dependent on this ROD, certain of these residues, scrub alloy, fluorides, and sand, slag and crucible (SS&C), may be shipped to SRS for storage and disposition. The material would likely be received and stored in Building 235-F (PUFF) and then dissolved in the two F-Canyon dissolvers, with end-product plutonium metal buttons coming out of FB-Line. A new dissolver insert has been fabricated to accommodate this material; the other dissolver is currently dissolving SRS SS&C and would not have to be modified other than to install nuclear safety blanks. However, because the decision has not yet been made, DOE-SR has delayed final installation of nuclear safety blanks and the new dissolver inserts. In addition, SRS has an agreement with RFETS to receive samples of SS&C later this month in order to verify the SRS flowsheet is adequate. Furthermore, RFETS is currently packaging SS&C in dissolvable cans so that SRS will not have to repackage it prior to insertion in the dissolver. It appears that both RFETS and SRS will be prepared to begin shipments of SS&C by the expected September ROD, if not earlier. If the ROD concludes that all of this material will go to SRS, it will require approximately two dissolver-years to complete.

Phased Canyon Strategy - As a result of delays in implementing the Phased Canyon Strategy, DOE is considering actions that might improve the schedule. To this end, DOE has requested that SRS provide a current integrated stabilization roadmap. This revised Nuclear Material Stabilization and Storage Visionary Roadmap is to address not only storage and stabilization schedules, but also the staffing and budget projections. Per DOE's direction, only materials previously assumed in the Phased Canyon Strategy are to be included in this new schedule. DOE-SR has requested WSRC to provide the revised Nuclear Material Stabilization and Storage Visionary Roadmap by June 30.

Loss of Melter Power at DWPF Due to Failure of an Uninterruptable Power Supply (UPS) - On 6/17/98, a number of non-safety systems shut down due to a loss of output power from two UPS cabinets, Y11 and Y15. These UPS cabinets were supplying control power to the Melter, Primary Off-Gas System Components, and a host of control indications. Melter feeding and pouring were interlocked off. Furthermore, loss of control indication caused a number of additional systems to align (via interlocks) to a safe state. The cause of this condition is being investigated but appears to have been a power transient. Cabinet Y11 has been bypassed in order to restore power to plant loads and cabinet Y15 has been repaired (replaced blown fuse). Facility management continues to investigate what happened and whether all systems responded as intended. All safety-related functions appear to have responded properly.