**DEFENSE NUCLEAR FACILITIES SAFETY BOARD**

October 14, 2005

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director
**FROM:** J. S. Contardi/M.T. Sautman, SRS Site Representatives
**SUBJECT:** SRS Report for Week Ending October 14, 2005

**DNFSB Site Activities:** Staff member Larry Zull and outside expert Bob Lewis were onsite this week for a review of startup activities associated with the Tritium Extraction Facility.

**Mixed Oxide Fuel Fabrication Facility (MOX):** This week, the Department of Energy (DOE) held a ground breaking ceremony for the MOX facility, which will convert 34 metric tons of weapons grade plutonium into fuel for commercial power production. The Pit Disassembly Conversion Facility (PDCF) continues to lag MOX. Prior to PDCF startup, MOX will receive feed from plutonium currently stored at the SRS.

**Readiness Assessments (RA):** The RA team concluded that the Tank 5 Waste on Wheels Project is ready for startup. Their review identified 8 findings with 15 pre-start and 7 post-start corrective actions. Five findings and 14 of the 15 pre-start corrective actions dealt with conduct of operations issues like procedure inadequacies and equipment readiness. The DOE's Validation Review of the RA resulted in four recommendations, three of which overlapped the RA team's findings. The exception was to verify the structural integrity of the piping for an annulus-to-primary tank transfer. DOE also made observations about simulated demonstrations and the RA team's technical inquisitiveness. The tank 7 to 5 transfer is scheduled to start next Monday. Finally, Site Rep meetings with the RA team leaders for two upcoming contractor RA's indicate they clearly understand the tank 5 lessons learned and are addressing them.

**High-Level Waste Management:** A key component of near-term salt processing at SRS is the Actinide Removal Process (ARP). The current lack of high-level waste tank space necessitates interim processing capabilities such as the Modular Caustic-Side Solvent Extraction Unit (MCU) and ARP. MCU construction is ahead of the forecasted startup date in the Interim Salt Processing Plan but is still nine months behind ARP which is scheduled for startup in September 2006. As originally envisioned by DOE, ARP and MCU would operate in series and ultimately disposition decontaminated waste at the Saltstone Disposal Facility. The early completion of ARP will afford DOE the ability to process some waste which would have otherwise only been dispositioned through the deliquification, dissolution, and adjustment process.

**Personnel Contamination:** While an operator exited an airborne radiation area, a radiological control technician found contamination on the operator's personnel protective clothing as well as on the employee's skin. A subsequent survey of the work location determined that a glovebox glove had a pin hole leak. The glove in question had only been in service for two days. The contractor held a critique and is developing and implementing corrective actions.