DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 7, 2003

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director

J. J. McConnell, Deputy Technical Director

FROM: R. T. Davis/ T. D. Burns

SUBJECT: SRS Report for Week Ending February 7, 2003

National Research Council Review: As a follow-up to their 1999 report, the National Research Council Committee for Oversight and Assessment of DOE Project Management was on-site this week to evaluate DOE progress regarding implementation of improvements previously suggested by the Committee.

HLW Safety Basis Upgrade: Activities supporting implementation of the new HLW Documented Safety Analysis (DSA) continue. Several equipment modifications were completed this week, including isolation (by installation of blanks) of steam to the warming coils of the 2F Evaporator. Program description documents outlining the details of administrative control programs credited in the DSA continue to be developed.

HLW Activities: WSRC is pursuing a process to categorize individual HLW Tanks on a risk-informed basis with primary consideration being given to tank inventory characteristics and current operational activities. The ultimate goal of this process is to decrease costs by reducing the support activities (e.g. surveillance, maintenance, ventilation) associated with lower-risk tanks. The four categories currently envisioned are 1) Active, 2) Dormant, 3) Waste Removal, and 4) Closure.

Recently, two F-Area tanks (Tanks 2 and 3) were determined to meet the criteria for Dormant status. Reduction of associated support activities for these tanks is being pursued in a phased manner. The initial phases (Phases I, II, III) focus on implementing relaxations that can be performed within the current (and recently upgraded) Authorization Basis while the final phase (Phase IV) will look at relaxations that may require Authorization Bases changes. The Phase I changes for Tanks 2 and 3 include placing reel tapes and area radiation monitors out-of-service, isolating chromate cooling water, moving from continuous ventilation to periodic ventilation, and reducing the frequency of preventive maintenance. A USQ screening was performed for these activities and resulted in a negative determination.

HEU Blend Down: This week, DOE-SR began the Readiness Assessment (RA) for loading Low Enriched Uranium (LEU) into LR-230 shipping containers. This phase of the Highly Enriched Uranium (HEU) Blend Down project will allow WSRC to begin shipment of LEU to the Tennessee Valley Authority (TVA) vendor (site rep weekly 01/24/03). For the RA, WSRC successfully performed several water transfers from HA-Line tank E1-1 to the LEU measuring tank (E1-2) and subsequent gravity transfers to the LR-230 shipping containers. In addition, WSRC demonstrated response to a material spill and return of LEU from the shipping container back to a HA-Line tank. All field activities for the DOE RA were completed this week and a report should be available late next week. As of Friday, no significant issues had been identified.

WSRC has now received the first shipment of natural uranium that will be used for blending. In addition, several batches of blend grade HEU have been transferred to HA-Line tank E4-2. On Monday, WSRC plans to begin blend activities to produce LEU that meets the TVA purity specifications.