

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 28, 1999

**MEMORANDUM FOR:** G. W. Cunningham, Technical Director  
J. Kent Fortenberry, Deputy Technical Director  
**FROM:** C. H. Keilers / R. T. Davis  
**SUBJECT:** SRS Report for Week Ending May 28, 1999

**F/H Canyon Exhaust Systems Upgrade Project** - This project for improving reliability of Safety Class ventilation is now slowing because of inadequate funding. DOE did submit a reprogramming request to Congress this week; however, it may take several more weeks to complete. (see SRS site rep report 4/30/99). (III.A.1, III.A.3).

**Building 235F Rack Seismic Issue** - On Thursday, WSRC declared a Potential Inadequacy in Safety Analysis (PISA) for unanchored racks used for storing Special Nuclear Material containers in Building 235F. WSRC believes the current inventory is critically safe, regardless of rack performance. To further reduce risk, WSRC has prohibited additions to the racks and is rearranging containers to minimize impacts in the event of a severe earthquake (III.A.1).

**High Level Waste (HLW) System** - Based on expected operations, the site will drop below the minimum tank farm working space in 2003. Preparing feed and operating the Defense Waste Processing Facility (DWPF) are major contributors to HLW volume. Tank space will continue to decrease until salt pretreatment and coupled salt/sludge feed to DWPF is initiated, which is not expected until 2008-2010. Options to address this issue include (1) curtailing DWPF operations; (2) accelerating salt pretreatment development; and/or (3) creating more space by converting an ITP tank and a Saltstone feed tank to HLW service, and eventually reusing old-style Type I tanks. These old-style tanks were constructed in the 1950's and have limited secondary containment. They also are difficult to inspect and have welds that were not stress-relieved. This week, it appears that DOE decided to compete the part of the WSRC contract dealing with salt pretreatment. It is not yet clear how this would be implemented or integrated with other site activities. (III.A.2).

**Future Plutonium Stabilization and Storage** - In February, DOE deferred building the Actinide Packaging and Storage Facility (APSF) in order to evaluate possible integration with potential new SRS facilities being designed by DOE-MD. This decision was driven by a higher estimated APSF cost, which arose from increased contingency and from work scope gradually added above Recommendation 94-1 requirements (e.g., storing 3,000 containers from Rocky Flats or Hanford).

A DOE team (SR, EM, DP, MD) has been studying storage alternatives to APSF. However, the study so far is only weakly coupled to concurrent stabilization studies, and none of the options are really integrated with the DOE-MD facilities. Several postpone the storage facility decision until FY 02. All the options rely on (at least) 50% more storage in K-Area, although it is not yet certain that more storage can be accommodated. DOE may be inclined to choose the lowest cost option (no APSF); however, this may result in extended Hanford and K-Area storage and further increases in K-Area storage (i.e., up to 2-3 times the current planned inventory). This option depends highly on "just-in-time shipments" and on DOE-MD meeting current schedules for their facilities. (III.A.1).