

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 12, 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 February 12, 1999

Tontodonato, Robinson, Moyle, and J. West were on-site this week reviewing high level waste activities including alternatives for salt disposition, startup preparations for the Replacement High Level Evaporator, and Tank 49 evaluations. Fortenberry and Keilers were on-site for site representative transition.

**Future Plutonium Storage and Disposition** - This week, DOE Office of Fissile Material Disposition (DOE-MD) met with DOE-SR and DOE-EM to discuss surplus plutonium disposition. The meetings focused on roles, current status, and opportunities for more efficiently performing the storage and disposition functions. Key points are as follows:

- The hold on construction of the Actinide Packaging and Storage Facility (APSF) will have a ripple effect on the design of the disposition facilities (i.e, MOX fabrication, immobilization, pit conversion). For example, although the facility interfaces are incompletely defined, APSF was being depended on for material receipt, stabilization, surveillance, packaging, and storage. SRS expects to complete an evaluation in early March 1999 of the impact of deferring APSF.
- Facility design progress will be limited until after DOE issues the record of decision (ROD) on surplus plutonium disposition, expected mid-1999. Until then, communications appear restricted between the site and the architect-engineering firms selected by DOE-MD. This may hamper early identification of site-specific design requirements, including safety requirements.
- The facility designs to date are conceptual and include numerous enabling assumptions (e.g., technical, budgetary, political, regulatory), several of which are outside of DOE control. Considering the long-term uncertainty in disposition schedules, it appears even more prudent for DOE to maintain a near-term commitment to stabilize and package material to the plutonium storage standard, consistent with Board Recommendation 94-1.

**K-Area Material Storage** - SRS continues to make progress in modifying the 105-K building to permit storage of plutonium from Rocky Flats in STD-3013 containers within 9975 shipping containers. Planning is also proceeding for removing the top section of the stack because of its predicted marginal performance during a design basis tornado (specifically, WSRC calculations indicate that the stack remains standing, but it is susceptible to ovalling and spallation, leading to debris impacting the roof). Container analyses are expected in late March 1999, and a revised Basis for Interim Operation (BIO) is expected in June 1999, to support an ORR later this year.