

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 22, 2000

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers / R. T. Davis
SUBJECT: SRS Report for Week Ending September 22, 2000

Recommendation 94-1: This week, DOE headquarters (NN-1) approved Critical Decision 1 for the SRS Highly Enriched Uranium (HEU) Blend-down Project. SRS should now be able to begin the detailed design in October and meet a 94-1 milestone. The Project still needs the DOE-TVA interagency agreement, which DOE now expects in mid-October.

On plutonium stabilization and packaging, WSRC now has a schedule to complete the review of available surveillance results (due 9/30), document the relative risks of continued storage (due 10/16), and make recommendations (due 11/30). Within the last two weeks, DOE-SR and WSRC have begun initiatives to achieve STD-3013 compliance sooner, maximize risk reduction, and minimize the need for continued interim storage. Attention is focused on what can be done to better utilize FB-Line capabilities before the 235-F project is completed (i.e., before 2006 to 2008). WSRC has committed to providing a proposal by November 30. Although preliminary, these initiatives may lead to the program acceleration requested in the Board's July 14th letter.

K-Area Material Storage (KAMS): WSRC is planning a readiness assessment (RA) in late October focused on KAMS Phase 2 modifications (i.e., using the crane maintenance and stack area for plutonium storage). In response to comments in a Board letter and staff report (3/9/00), WSRC will demonstrate moving a simulated contaminated drum from KAMS to F-Area during the RA. Also, WSRC will submit an integrated container surveillance plan next month and plans to establish a surveillance program before KAMS receives material (i.e., before January 2001). Longer term, DOE intends to increase KAMS capacity to 4,000 containers (a 20 percent increase) by triple-stacking pallets in some areas and by going to a more densely packed array of containers.

H-Canyon: On Thursday, WSRC discovered that one of two criticality safety controls to prevent over-batching uranium to the 2nd Uranium Cycle evaporator (17.2E) had been violated. The system involves an upstream tank, a feed tank, and the evaporator. An operator reviewed the wrong sample results and incorrectly concluded it was acceptable to transfer solution from the upstream tank to the feed tank, violating the first control. Operators discovered the problem when they executed the second control by sampling the feed tank. The second sample is required before transferring solution to the evaporator. The feed tank was isolated, and the facility is preparing a response plan. This occurrence follows some recent similar occurrences (e.g., site rep weekly 9/1/00). As a compensatory measure, the facility is having Shift Test Engineers review all such calculations until operators are trained on "error awareness." Maintenance personnel recently received such training.

Transuranic Waste: This week, the site reps observed demonstration runs in the new E-Area transuranic (TRU) visual examination facility. This facility will visually inspect drum contents to verify characterization results (e.g., x-ray, radioassay). WSRC is currently resolving readiness assessment findings and expects to begin operations in October. The Carlsbad Area Office plans to perform a Waste Isolation Pilot Plant certification audit in early November with the first TRU shipments now expected by the end of the calendar year.