

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 7, 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 7, 1999

Material Characterization in FB-Line - WSRC began material characterization of plutonium residues this week to support Recommendation 94-1 stabilization activities. This activity includes opening packages, sampling material, and repackaging material using inert cabinets on the 6th level of FB-Line. Based on sample results, material will either be repackaged for interim storage or transferred to HB-Line for processing. Approximately 1800 packages will be characterized at FB-Line over the next two years. Subsequent stabilization activities to complete Recommendation 94-1 implementation plan milestones will require startup of HB-Line Phase II (scheduled to begin operations in June 2001) and packaging in accordance with DOE Standard 3013.

K-Area Material Storage (KAMS) - SRS is modifying the 105-K Reactor building to permit storing Rocky Flats plutonium starting in January 2000. Last Friday, WSRC submitted to DOE-SR proposed changes to this facility's Technical Safety Requirements (TSRs) and Basis for Interim Operation (BIO) that reflect this new mission. DOE review is expected to take 2 months. The BIO is focused on Rocky Flats material only and does not include increased storage options now being considered due to deferral of the Actinide Packaging and Storage Facility (APSF).

The draft BIO indicates that the KAMS safety posture is based on no plutonium releases. It assumes that material is stabilized and packaged to DOE-STD-3013-96 and then stored in 9975 shipping containers as the only confinement barrier for up to 10 years. The 105-K Reactor building provides protection from external hazards but no confinement. To ensure adequate tornado protection, SRS intends to award a contract this week to lower the stack height by 70 ft and thereby reduce the potential for stack debris striking the roof and causing internal roof debris to fall on containers (see site rep report 2/12/99). To address internal hazards, the facility relies on several new design features and administrative controls (e.g., fire watch during unloading, new internal fire barriers, UL-listed electric forklifts).

One open question is periodic surveillance for container integrity. Although the containers are the only confinement, a container surveillance program is not yet defined. Such a program may require use of another facility since shipping containers would not be opened in 105-K.

H-Tank Farm Safety Basis Implementation - The interim Safety Analysis Report (SAR) and Technical Safety Requirements (TSR) for H-Tank Farm were implemented on April 29 after approximately one month of final operator training on the safety basis requirements. Management observation and coaching were used during this month to help emphasize requirements and will continue to be in effect for another week. Implementation of the interim SAR and TSR at the F-Tank Farm is scheduled for August 1999. Later this year, WSRC will develop a plan for developing and implementing fully compliant DOE Order 5480.22 and 5480.23 safety basis documents.