

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 19, 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 March 19, 1999

Plutonium Stabilization and Storage - DOE is currently conducting a systems engineering evaluation of plutonium material management to determine the effects of de-funding the Actinide Packaging and Storage Facility (APSF) and the benefits of integrating plutonium storage/disposition facilities. The team met Wednesday and Thursday this week to review the results to date and continue their evaluation. The team is considering three storage strategies: complete APSF as currently designed independent of other facilities (delayed APSF case), design and construct a consolidated facility (consolidated storage case), and utilizing existing or expanded storage until material is dispositioned (no APSF case). Because APSF was intended to be used by SRS to stabilize and package material to meet the 3013 standard, this evaluation may impact 94-1 stabilization activities. Based on the team's initial analysis, they indicate that it is not prudent to pursue APSF as originally envisioned. Instead, it appears that the consolidated storage and no APSF cases appear to be the most attractive and that no FY '00 funding is required for any projected storage needs at SRS. The team will issue a final report by March 29th that will identify their recommendation for plutonium storage and provide a path forward for surplus plutonium storage.

In parallel with this activity, DOE-SR and WSRC are also studying alternatives for plutonium stabilization and packaging capability that would have been provided by APSF. Potential alternatives are evaluated based on cost, project risk, schedule, operational safety, and material stability. This study will be used as part of the input to respond to the Board's January 28th reporting requirement concerning the effects of delaying APSF on material stabilization activities. Many of the options that are being considered do not package material in accordance with the 3013 standard and rely on future processing capabilities provided by material disposition projects, a delayed APSF, or other new facility.

Material Characterization in FB-Line - WSRC is scheduled to start material characterization of miscellaneous plutonium packages at FB-Line at the end of March. These miscellaneous packages include material shipped from laboratories as Central Scrap Management Office (CSMO) materials. Based on sample results obtained during characterization, material will either be repackaged for interim storage or sent to HB-Line for processing. Approximately 1800 packages will be characterized at FB-Line over the next two years. WSRC is currently conducting a line management review for this activity.