

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 29, 2004

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
J. J. McConnell, Deputy Technical Director
FROM: J. S. Contardi SRS Site Representative
SUBJECT: SRS Report for Week Ending October 29, 2004

Staff member Jon Malen was onsite attending a meeting of the Tritium Working Group. Staff members Joel Blackman, Jeff Kimball, and outside experts John Stevenson and Paul Rizzo were onsite for a geotechnical and structural review of Building 235-F.

Spent Nuclear Fuel: All spent nuclear fuel has been consolidated in L-Basin. Both K-Basin and the Receiving Basin for Offsite Fuel have been deactivated. A new rack project in L-Basin will increase storage capacity an additional 20 percent and is scheduled to be completed next fiscal year. Upon completion of the rack project, L-Basin is expected to have sufficient storage capacity, based on projected research reactor fuel receipts (including increased receipts resulting from the Global Threat Initiative). In the 1990's, the Board raised concerns with inadequate chemistry controls in L-Basin. To address the Board's concerns, numerous chemistry improvements have been made and basin chemistry and contamination control were drastically improved.

Initial plans for aluminum research reactor fuel disposition utilizing a melt and dilute process were suspended in 2001. A new Treatment and Storage Facility for direct disposal is expected to be initiated in FY07 and would begin operations in fiscal year 2010. However, the development of a disposition technology for the deinventory of L-Basin is not funded under the current contract. The deinventory of L-Basin will be contingent upon the offsite shipping rate of spent fuel to a deep geologic repository. The shipping rate will be dictated by the Integrated Acceptance Schedule which has yet to be finalized. Delays in project initiation will impact the deinventory of L-Basin and could affect other facility operations (i.e., H-Canyon).

Uranium Scrap Processing: This week, the Westinghouse Savannah River Company concluded a readiness assessment (RA) for the processing of plutonium contaminated scrap in H-Canyon. The scrap contains uranium which will be recovered to support the highly enriched uranium blend down project. The current packaging configuration of the scrap is not compatible with the H-Canyon process and requires repackaging in HB-Line. Operations performed during the RA required one day, and only one operational issue was noted. A device used to crimp the repackaged scrap container failed to properly seal the item. The RA was delayed and a prefabricated can was used to finish the operation. The can crimper was subsequently repaired by maintenance and multiple cans were successfully sealed.

Configuration Management: During a recent construction activity, a subcontractor installed a wet-tap, which included a manual gate valve, on an operating process line for a stripper unit. Following the completion of the wet-tap, the construction project did not turn the recently installed components over to operations, which should have included the new valve as part of the operating boundary. The subcontractor did maintain configuration of the valve, but the operators of the stripper were not aware of the potential interactions the new valve may have introduced.