

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 6, 2007

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJECT: Activity Report for the Week Ending July 6, 2007

K Basins Closure (KBC): On Tuesday the contractor declared that they had completed bulk sludge consolidation in the K West Basin. The site rep noted that the criteria for bulk sludge consolidation in the revised implementation plan for the Board's Recommendation 2000-1 were not met. The contractor has yet to vacuum sludge from under the equipment used to wash the fuel during the fuel retrieval operations. The equipment blocked access to approximately 10 percent of the west bay floor. Subsequent to declaring completion, the contractor recommenced debris removal and sludge consolidation. The site rep will perform a walkdown of the K West Basin with Richland Field Office personnel next week to better understand the situation.

The contractor recently completed a week-long value engineering study to evaluate options for the decontamination and demolition of the K East Basin. The study was performed because the radiological conditions of the basin were significantly less severe than those previously assumed. The prior plan was to hydrolase the walls and floor of the basin, grout the spoils and high-dose-rate debris in the pits, then rubblize the basin. The proposed path forward is to apply a relatively small layer of grout on the floor to capture the remaining sludge and small debris, fill the basin with sand, and use heavy machinery to demolish the basin. The contractor noted that this approach would save significant time and money, but several safety-related issues remain to be resolved with the new approach, including the disposition of high-dose-rate items.

During a walkdown of the K East Basin, the site rep noted that the water was very clear and most of the debris had been removed from the basin. In general, the quantity of sludge that had resettled in the basin was minimal. The exception was the east bay near the sludge containers and Hose-in-Hose transfer equipment where there was more significant quantities of sludge.

Plutonium Finishing Plant: The project submitted an updated occurrence report documenting recurring weaknesses in procedure use and communications. Six events are listed in the report that have similar causes, such as missing key steps in procedures due to inattention or poor communications. A number of corrective actions are being completed including changing the senior supervisory watch program to better reinforce management expectations and developing an institutional process to revise procedures to remove error-likely precursors.

Small insects were found in two 9975 Type B containers during unpacking in preparation for leak testing. It is believed the insects were in the Celotex® insulating liner and they are not indigenous to the local environment. The project plans to ship the containers to the Package Authority at Savannah River Site for evaluation.