

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 22, 2006

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJECT: Activity Report for the Week Ending November 24, 2006

Mr. Linzau was out of the office this week.

K Basins Closure: The project was successful in clearing blockage in the containers in the hose-in-hose transfer system. A nut and other debris were back-flushed out of the container suction pump into a debris basket. It is believed that the debris was the cause of the recent problems with transferring sludge. The project is evaluating methods to prevent recurrence of this problem, such as using foreign material exclusion practices above the containers.

The site rep discussed the plans for testing the sludge treatment system with representatives from Fluor Hanford, Inc. (FHI) and their subcontractor, British Nuclear Group America (BNGA). A joint test group (JTG) has been created and test plans from FHI and BNGA have been issued. The JTG will be similar to the one used for the hose-in-hose transfer system but will have to review significantly more test procedures because of the larger scope of this project.

The project initiated the vacuuming of sludge in the K West Basin.

Tank Farms: A Technical Safety Requirement violation was declared because safety-significant isolation valves were not verified to be closed prior to a waste transfer. It is believed that one of the valves required to be closed prior to a transfer from tank AN-106 to tank AW-102 was open during the transfer this past weekend. The errors in the valve lineup were noted after approximately 1,300 gallons of flush water were misdirected to tank AP-103.

The Office of River Protection provided a contract incentive to accelerate the completion of the Monitoring and Control System (MCS) before the planned start in FY 09. The MCS will monitor for leaks during waste transfers in the tank farms. CH2M Hill Hanford Group (CHG) plans to place the first portion of the MCS in service next month to permit monitoring of the scheduled transfer between tanks AY-102 and AN-106. The MCS will not have the ability to automatically stop the transfer pump after a leak is detected but this feature will be added within two years. The system engineer for the MCS reported that the programmable logic controllers for the MCS are safety-significant and the associated software is safety software. The system engineer stated that the software was developed and maintained consistent with guidance in IEEE standards and fully meets the new software quality assurance requirements of DOE Order 414.1C.

Washington Closure Hanford (WCH): The Richland Field Office sent a letter to WCH that addresses an inadequate safety-conscious work environment. WCH is required to provide a corrective action plan that addresses issues, such as workers displaying a hesitancy to use their stop work authority when a potential safety problem is identified.