

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 29, 2006

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJECT: Activity Report for the Week Ending December 29, 2006

Mr. Quirk was out of the office this week.

Waste Treatment Plant (WTP): Seismic data logging of basalts and interbeds in the deep boreholes was completed last week. Compression wave and shear wave data were collected from three deep boreholes; two boreholes (C4996 and C4993) logged last week and one (C4997) completed the week before (see Hanford Activity Report 12/15/06). Logging occurred from about 400 feet below grade to about 1,400 feet, but signal strength became insufficient to distinguish arrival times for shear waves at depths greater than about 1,280 feet. The deepest of the four major interbeds, the Mabton Interbed, is over 100 feet thick and terminates at a depth of about 1,200 feet. The project is making back-up plans to conduct an additional campaign in January if more testing is required. The final seismic velocity report is currently scheduled to be complete on April 24, 2007, and the final site response report is now scheduled for delivery on May 30, 2007.

K Basins Closure (KBC): Richland Operations Office (RL) authorized Fluor Hanford, Inc. (FHI) to perform early procurement of the Assay System, Drum Handling System and the sludge retrieval pump for the Sludge Treatment Project (STP). In addition, RL also authorized FHI to proceed with the modifications to the Cold Vacuum Drying Facility that will be necessary for the STP. The RL safety evaluation report for the preliminary documented safety analysis (PDSA) revision 0 should be completed next week. This initial issue to the PDSA does not include the Retrieval and Transfer System nor the Drum Handling System, but RL has concluded that these systems will not impact the conclusions of the PDSA.

Washington Closure Hanford (WCH): Earlier this month a root cause analysis (RCA) was completed for an event at 105N Building in which there was a spread of airborne radioactivity outside of posted Airborne Radioactivity Area (ARA) boundaries. The event occurred in May 2006 during the sampling of the fission product trap and RL conducted a detailed surveillance of the corrective actions in September. The surveillance report indicated that significant improvements to the corrective actions were required and the RCA was part of the corrective actions plan in the contractor's response to the surveillance report. The analysis indicated poor radiological work planning and inadequate procedures for responding to high airborne radioactivity results. Deactivation and decommissioning activities at the 100N facilities will be ongoing through 2007 and the site rep has requested schedules for work with radiological hazards.