

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 9, 2006

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJECT: Activity Report for the Week Ending November 10, 2006

Washington Closure Hanford: The site rep met with Richland Operations Office (RL) personnel to discuss the hazard analysis for the remediation of Burial Ground 618-7. The scope of the work was separated into two different work areas to stay below the Hazard Category 3 (HC-3) threshold criteria because of additional hazardous material discovered during a recent integrated hazards evaluation. The evaluation uncovered records that indicate that thorium nitrate solution and depleted uranium may be buried in the burial ground. Along with these recent discoveries, the Final Hazard Categorization and Auditable Safety Analysis (ASA) document lists drums of Zircaloy-2 in the burial ground. When these 30-gallon drums were placed in the trenches, they were filled with water to prevent a pyrophoric reaction of the Zircaloy-2, but the ASA assumes no water remains due to leaks. Further reviews are warranted of the controls that will prevent common cause failures between the separate work areas and the controls that prevent the spread of contamination during recovery and remediation activities. This work is scheduled to start in January 2007.

Waste Treatment Plant (WTP): The teams from the University of Texas and Redpath Geophysics were on-site to conduct shear wave data collection from the deep boreholes. Progress has been slow due to a number of minor problems. The teams experienced difficulties lowering the geophone to the complete depth of the deep borehole and delays occurred when it was temporarily stuck during retrieval. Once the equipment is placed and adjusted, the work proceeds quickly but, as of the writing of this report, the teams have yet to complete data collection of a deep borehole. The teams are scheduled to work through the weekend and will probably return in early December to collect the remaining data.

Plutonium Finishing Plant (PFP): The site reps met with PFP and RL personnel to discuss the strategy behind the selection of gloveboxes scheduled for clean-out during the next two years. The selections were not based on the amount of material at risk but rather the duration and complexity of the work planning and execution. The project proposed and RL agreed to focus on gloveboxes that didn't require long ramp-up activities prior to starting the work. PFP management believes this strategy will allow flexibility in resource allocation and provides for the retention of the remaining skilled workforce.

Tank Farms: The void limit in a radiological work permit was exceeded during the removal of a small pump from the UX-302A catch tank. The workers placed the pump in a safe configuration and exited the work area. The apparent cause is a weakness in the process for ensuring the protective measures developed by the health physicist (HP) are implemented in the field.

Three new facility representatives, including one qualified at another site, will begin the tank farm qualification process over the next two months.