

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 6, 2006

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJECT: Activity Report for the Week Ending October 6, 2006

Board's staff member D. Grover and Outside Expert D. Boyd were on-site this week to observe a DOE Operational Readiness Review (ORR).

Washington Closure Hanford (WCH): The project had a one-day safety stand-down because of a series of electrical safety events that have occurred since June 2006, including an event earlier this week when a worker in the 105-N facility cut into a conduit that contained a 120-volt power cable. The worker believed the cable was de-energized but the work package for that day's work, removing asbestos panels, did not include conduit removal. In June and August of this year, two events occurred when underground energized cables were damaged during earthwork, and in July a worker was shocked while using a power tool in a wet environment. On September 8, 2006, Richland Operations Office (RL) sent a letter to WCH that withheld fee due to significant weaknesses in work planning and work controls that led to the previous events. The stand-down this week was directed by the company president because of his concerns about work planning and the behavior of his supervisors. During the stand-down WCH management conducted briefings to all employees stressing the importance of hazardous energy controls, conducting formal work planning, and following work package instructions. Additionally, it was emphasized that production pressures should not override safety precautions. Feedback from the workforce during the briefing indicated there was inadequate completion of safety training, such as lockout/tagout training. Others mentioned that appropriate personnel were not always present during job-planning and hazard identification walkdowns. In addition to the briefings, the following compensatory measures have been implemented: (1) all electrical work will have to be released by designated electrical subject matter experts; (2) all decontamination and demolition activities will be conducted with the building utilities disconnected (cold, dark, and dry); and (3) the proper use and inspection of ground-fault circuit-interrupters will be briefed to the workforce and periodic testing will be conducted per manufacturer's instruction.

K Basins Closure: The DOE ORR for the Hose-in-Hose Transfer System was completed this week resulting in two pre- and five post-start findings. The pre-starts were a failure to adequately understand a Technical Safety Requirement control for protecting the above-water portions of the basin ingress/egress pipe sections from falling objects and questions on the adequacy of emergency lighting in the basin. In general, the DOE team was competent and the review was adequate.

Waste Treatment Plant (WTP): The site rep attended a meeting in which the hazards and controls strategy for hydrogen generation in tanks in the Low Activity Waste (LAW) facility were discussed. Previous discussions of controls for hydrogen generation were limited to concerns in the Pretreatment and High Level Waste facilities.