

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 7, 2009

TO: T. J. Dwyer, Technical Director
FROM: W. Linzau and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending August 7, 2009

River Corridor Closure (RCC) Project: The Richland Operations Office (RL) completed the Type B Accident Investigation Report for the event where a worker fell from a bridge crane maintenance platform (see Activity Report 7/2/09). The report lists several root causes, including: the shortage of work supervisors and safety representatives as well as inadequate work planning was deemed acceptable by contractor management and the workforce; the work control process was inadequately implemented; and neither the fall protection program nor its implementation complied with OSHA standards. The report notes that the initial planning for demolishing the building did not address the removal of the bridge crane, which led the work to be characterized as low risk. The work scope was modified to remove the crane before demolishing the building, but the risk ranking, and therefore the development of controls and oversight, was not revised. RL plans to conduct a self-assessment to determine why they had not identified the problems before the event.

Waste Treatment Plant (WTP): The Office of River Protection (ORP) extended the authority for the contractor to continue drafting design drawings based on the reduced material at risk. The initial authorization was limited to two months, which ended at the start of August, but has now been extended to September 4, 2009 (see Activity Report 6/5/09).

The site rep observed project safety review meetings held to discuss the impacts of ashfall from a major volcanic eruption on the HLW and PT facilities. In response to a review by HS-64 (see Activity Report 10/31/08), the contractor is developing design criteria that will be used consistently across the project. The criteria are based on the assumption that the facility management will be notified within two hours of a major eruption and will have time to complete compensatory actions. These activities include stopping the feed to the melters; closing external doors; and protecting equipment, such as large motors and air compressors that could be damaged by the ashfall. The team was also evaluating which equipment, such as spargers and pulse jet mixers, needed to continue operating during the event. Another assumption is the loss of off-site power will be limited to two hours. The contractor noted this review is the first stage of the process, and future analysis will ensure that the actions specified by the review team can be completed by the available staff within two hours of the eruption.

Tank Farms: ORP completed an audit of the implementation of the revised commercial grade dedication (CGD) process and identified three findings and two observations. The audit is associated with previously identified CGD package deficiencies, which resulted in a Technical Safety Requirements violation and a Justification for Continued Operation (see Activity Report 1/16/09). The ORP audit team reviewed 10 percent of the CGD packages associated with the upcoming retrieval of waste from single-shell tank C-104 and identified problems with all five packages. ORP noted that the packages were much improved over those reviewed last year, but concluded that the contractor should perform an extent-of-condition review and correct similar problems in the remaining CGD packages for the C-104 retrieval. The contractor is establishing a group of experts that will assist engineers in the development of future CGD packages.