

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 18, 2010

TO: T. J. Dwyer, Technical Director
FROM: W. Linzau and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending June 18, 2010

River Corridor Closure Project: Workers declared a project-wide stop work because of concerns about the implementation of controls that protect workers from exposure to residual hazardous chemicals. An exception was made to allow personnel, using respiratory protection, access to Building 324 to perform minimum safety activities and TSR surveillances. Project management committed to re-evaluate chemical characterization data and application of protective controls. They anticipate work will be restarted incrementally as each facility or activity confirms consistent, reliable implementation of appropriate controls.

Contamination was discovered on a worker's clothing during activities associated with grouting the hot cells removed from Building 327 (see Activity Report 1/15/10). The hot cells were removed from the facility earlier this year and had forms placed around them to allow encapsulation in grout. Three of the cells have been grouted and watery leakage was discovered dripping from one of the cells after the grout had set and the heavy steel clamps (walers) on the forms were removed. The leakage was contaminated and it is believed to be the source of the clothing contamination (no skin contamination) on a Radiological Control Technician who was performing additional investigations the day after discovery. Workers never formally declared a spill and the required level of personnel protective clothing was not increased for re-entry even though radiological conditions had changed. Project managers are formulating corrective actions that include preventing the spread of leaked contamination as well as eliminating future leaks during the remaining grouting activities.

Plutonium Finishing Plant (PFP): The site rep observed a hazard review board (HRB) for the cut-up and removal of the pencil tanks from the Plutonium Reclamation Facility. The meeting was delayed last week when the HRB leader determined it would be beneficial for the board members to perform a walkdown of the work area and mockup so they could better understand the work. The HRB approved the package with minor comments. The review was well attended by project personnel as well as a significant number of representatives from the Richland Operations Office. The start of the contractor readiness assessment for this work was delayed from next week to the week of June 28.

The stop work for beryllium-related work was lifted after more than a dozen procedures were revised to clarify actions and remove inconsistencies. The stop work had been in effect for four weeks, which significantly limited progress on D&D activities in the facility.

Annual Emergency Preparedness (EP) Field Exercise: The site-wide EP drill scenario this year involved a small plane crash into a waste storage building at the Waste Receiving and Processing Facility and the subsequent fire, numerous injured and contaminated workers, and the large-scale spread of contamination. The lead drill evaluator did not note any major failures in the response actions, but evaluation of all the observations will have to be accomplished to identify weaknesses. The drill also exercised the ability of Hanford Patrol to secure public access roads that cross the boundaries of the site and it appears that they were in position, simulating securing access, in about an hour after the initiating event.