

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 31, 2009

TO: T. J. Dwyer, Technical Director
FROM: W. Linzau and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending July 31, 2009

Board Members J. Bader and L. Brown and staff members R. Tontodonato and J. Troan were on-site to discuss various topics with the managers and staff of the local DOE offices and their contractors. The topics discussed included: work being performed under the American Recovery and Reinvestment Act, Waste Treatment Plant (WTP) proposed safety basis changes and closure of technical issues raised by the WTP External Flowsheet Review Team, Tank Farms proposed safety basis changes, effectiveness of corrective actions for the S-102 waste spill, K Basin Sludge Treatment Project, K East Basin demolition, plans for the K East Reactor demolition, Plutonium Finishing Plant (PFP) de-inventory, PFP decontamination and decommissioning (D&D), balance of site D&D, transition of the Mission Support Contract, and potential topics for safety-related research and development. The Board and staff also completed a walkdown of the major WTP facilities, and L. Brown and staff observed a facility representative performing normal oversight activities at PFP.

Board staff members A. Poloski, S. Seprish, and S. Stokes were on-site discussing their comments on the calculations that support the proposed reduction of safety-related controls at WTP. It appears that project personnel and DOE now understand the extent, magnitude, and implications of the questions raised by the staff, and are working to address them.

River Corridor Closure Project: The contractor submitted a letter to the Richland Operations Office (RL) describing the corrective actions taken to date in response to the event in which a worker was injured in a fall at Building 336 (see Activity Report 7/3/09). The corrective actions included an extent of condition review of work packages across the project to address specific deficiencies identified during the event investigation, such as: the scope of the work package was not adequately defined, which allowed "scope creep"; the change control process allowed for ineffective review of changes in the work scope; the hazards were not adequately identified; and the pre-job walkdown of the work area was also inadequate. The report from the DOE Type B investigation is expected to be completed soon and the contractor anticipates additional correctives actions will be required. Additionally, RL senior managers told the Board members during discussions this week that the contractor is hiring a significant number of first line supervisors to improve oversight of field work.

Plutonium Finishing Plant: The contractor determined the seismic shutdown system could be eliminated because removing it was not an unreviewed safety question (USQ). The system had been used to shut down ventilation systems in the event of facility breach caused by a seismic event but is no longer credited as a safety system. When informed of the change by the site rep, RL safety engineers stated that they will evaluate the USQ to determine if the change is justified without explicit RL approval.

100K Project: RL approved the removal of the Integrated Water Treatment System (IWTS) from the list of Vital Safety Systems. The contractor requested the downgrade of the IWTS and the RL chief engineer approved this request. The approval was provided in an e-mail, which appears too informal for this type of change.