

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 5, 2010

TO: T. J. Dwyer, Technical Director
FROM: W. Linzau and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending November 5, 2010

Staff members J. Blackman, B. Caleca, R. Kazban, and R. Oberreuter were on-site to observe the Office of River Protection (ORP) Pier Review Team for structural and equipment qualification at the Waste Treatment Plant (WTP). Kazban and Oberreuter also observed portions of the DOE Construction Project Review (CPR) of WTP. Staff members Z. Beauvais, J. Deplitch, C. March, and J. Troan were on-site performing a review of the Site Emergency Preparedness Program.

Waste Treatment Plant: The DOE CPR team was on-site to assess the project's costs, schedule, and technical progress. The team presented their preliminary observations and they provided a generally positive evaluation of project management and how previous recommendations had been addressed, but the team expressed significant findings and comment. Examples of the findings and comments presented at the outbrief are: DOE-WTP has committed to large-scale integrated testing (LSIT) to resolve outstanding vessel mixing issues and this testing is on the critical path for completion of the Pretreatment facility, but no funding has not been identified to conduct the testing and no contingency (cost or schedule) is included in the baseline if the tests do not confirm the design is adequate; the contract does not require system engineers even though this is a requirement of DOE Order 420.1, *Facility Safety*; sufficient operations engineering resources for start-up and commissioning are not in the project baseline; the commissioning schedule assumes little to no rework; and DOE-WTP does not have written plans for their oversight of start-up and commissioning.

River Corridor Closure Project: The site rep observed a fact finding meeting at the Environmental Restoration Disposal Facility (ERDF) that was not conducted in a manner likely to reveal all the relevant facts for an event where worker safety was jeopardized. The event that led to the meeting was a waste container (ERDF can) slid off the shuttle truck while workers were preparing to dump contaminated soil into the landfill. Two workers were near the ERDF can when it slid into the landfill keyway. The site rep discussed the poor conduct of the fact finding meeting with the attending Richland Operations Office (RL) facility representative and later with managers from both RL and the contractor.

Contamination has been spread by wild rabbits in the 300 Area. The source of contamination has not been verified but is believed to be associated with the recent demolition of Building 327. The contractor is trying to eliminate the spread of contamination, primarily cesium, at the demolition site, but it is unclear why it was not adequately confined earlier.

Tank Farms: The contractor concluded that they have reached the limits of technology for retrieving waste from single-shell tank (SST) C-111 because there is a hard layer of waste that cannot be mobilized using modified sluicing. They are also preparing to remove an obstruction below the retrieval pump in SST C-104 so they can restart retrieval using modified sluicing there. The obstruction, believed to be the bottom part of the old heel jet pump that was removed to install the retrieval pump, resulted in stopping the waste retrieval from C-104 after 50 percent of the waste had been retrieved approximately six months ago.