

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 19, 2008

**TO:** T. J. Dwyer, Technical Director  
**FROM:** W. Linzau and R. Quirk, Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending September 19, 2008

Tank Farms: The contractor completed the readiness assessment (RA) for retrieving waste from single-shell tank C-110. The RA was a corrective action from the contractor's root cause assessment of the S-102 spill. The contractor resolved the two minor pre-start findings and authorized the startup. The Office of River Protection (ORP) concurred that the RA was adequate. During startup preparations the contractor determined that one of the safety-significant valves used for ensuring waste is isolated from the raw water system was not providing the required isolation. The valve has been in place for four years and was used successfully for other waste retrieval operations in C Farm. During troubleshooting, the contractor noted that the valve reach rod was moving before the valve stem started to move and concluded that the valve was not fully shut. Repair plans are being developed.

The contractor completed the turnover of the upgraded ventilation system in AN Farm (see Hanford Activity Report 8/1/08). This safety-significant system is used to prevent the accumulation of flammable gases in the tanks, has a much higher flow rate than the old system, and includes vacuum breakers on two tanks. The contractor completed the testing of a similar system for AW Farm and plans to make the system operational during the next few days. The testing of the 242-A Monitoring and Control System and upgraded ventilation system are also complete and the turnover to operations is expected within the next few days. All three of these upgraded systems need to be operational to support the upcoming evaporator hot run.

Contract Transition: The site rep met with managers from ORP and the Richland Operations Office (RL) to discuss the increased tempo of work activities for projects they oversee. Both RL and ORP are heavily tasked providing oversight of the contract transitions and efforts to complete incentivized work prior to the end of the existing contracts, such as the Tank Farm operations discussed above and Spent Nuclear Fuel operations at K West Basin.

The site reps also discussed the Plateau Remediation Contractor's plan to distribute nuclear safety personnel into the projects versus in a central nuclear safety organization. The site reps expressed concerns that having these safety personnel reporting directly to the project managers could lead to diminished effectiveness of their safety role.

Waste Treatment Plant (WTP): The site rep met with ORP and the contractor to discuss the authorization basis changes to the safety controls for the ammonia tanks at the WTP site. The tanks will remain categorized as safety-class to prevent adverse interactions with the emergency diesel generators and will have safety-significant features to protect workers from toxicological hazards. The Pretreatment Facility control room will have charcoal filters on the ventilation supply to protect the operators from an inadvertent ammonia release to the environment.

Richland Operations Office (RL): The site reps met with RL personnel and a contractor quality engineer to discuss how leading indicators are identified, tracked, and used. Nuclear-safety-related data is tracked independently from other reportable events and RL said most of the time this data is used to confirm negative trends that are identified in the field.