

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 8, 2008

TO: T. J. Dwyer, Technical Director
FROM: W. Linzau and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending August 8, 2008

Staff members B. Heshmatpour, S. Lewis, C. Roscetti, and outside expert D. Boyd were on-site reviewing the conduct of operations improvements made in response to the S-102 waste spill.

Waste Treatment Plant (WTP): The Office of River Protection (ORP) started an Integrated Safety Management System (ISMS) re-verification this week. ORP decided to perform this assessment of ISMS rather than relying on the annual effectiveness review. The review is being led by personnel independent from the ORP organization and will be completed next week.

The ORP WTP Engineering Division (WED) reviewed the contractor's approach to ISA 84.01 and concluded that non-safety systems can be used to justify reducing the reliability of safety-class and safety-significant instrumented systems (see Hanford Activity Report 5/23/08). A draft change to DOE Guide 420.1-1 addresses using non-safety systems in combination with the safety system to meet the reliability requirements but would require provisions, such as Technical Safety Requirements (TSRs), to assure the reliability of the non-safety systems. It is not clear that WTP has similar requirements to assure reliability of the non-safety systems.

Tank Farms: The contractor submitted their proposed methodology for revising the TSR to redefine which administrative controls (ACs) are specific administrative controls (SACs) (see Hanford Activity Report 7/18/08). The methodology includes classifying ACs as primary or secondary controls. Primary ACs will become SACs and secondary ACs will not, but will have key elements identified. An example being considered for a SAC is the control to prevent reaching the lower flammability limit in the tanks.

Plutonium Finishing Plant (PFP): Shipments of new 9975 Type B shipping containers were put on hold by the Kansas City Plant Procurement Office because of quality assurance (QA) issues. Questions were raised on the primary container sidewall thickness, lead shielding thickness, and the type of Celotex used. The contractor believes that the design authority has concurred with the corrective actions, which include re-measurement of critical dimensions and revising the QA paperwork. PFP management was told that resolution of these issues is imminent and they will receive shipments of compliant 9975s within a few days. They do not believe that these issues will negatively affect their de-inventory schedule.

The contractor took actions to prevent inadvertent shipment of the non-compliant 3013 storage container discovered last week (see Hanford Activity Report 8/1/08) and is conducting an extent of condition review. In addition, the contractor is preparing a letter to DOE that includes an evaluation of the safety situation and a recovery plan. Creating the recovery plan within 30 days is the SAC required action, and the plan will provide options to DOE for their decision on the path forward.