

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 12, 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 12, 2008

Staff member D. Ogg was on-site to observe a workshop on K Basin sludge treatment options.

Sludge Treatment Project: The site rep and staff observed a workshop during which various alternatives for treating the sludge were presented to an Independent Expert Review Committee (IERC). The contractor reported they had evaluated thousands of alternatives and systematically eliminated all but seven. The IERC recommended that a hazard evaluation be conducted on all seven alternatives versus the phased approach previously proposed by the contractor (see Hanford Activity Report 9/5/08). Additionally, they recommended completing cost estimates on all seven, but they should be based on analogous experience rather than on detailed bottoms-up estimates. They also recommend that if the selected option is to package the sludge in the central plateau, the design of the 100 K Area packaging should continue as a backup in the event that they encounter too many problems with the containers that would be used to move the sludge, in slurry form, from the 100 K Area.

Waste Treatment Plant (WTP): The site rep met with contractor management and resident engineers to discuss the evaluation of embedded conduits that were not installed per the code of record (see Hanford Activity Report 8/15/08). The contractor stated they will prepare a document to provide instruction to their engineers on how to evaluate the structural adequacy of affected concrete slabs and walls. Resident engineers are checking the upcoming concrete placements but have not started checking the concrete elements that have already been placed. The engineers demonstrated a heightened level of awareness of the issue, but the site rep questioned if the evaluations for elements already placed with the non-compliant conduit spacing will be sufficient to ensure they meet the intent of the code.

Contract Transition: The site reps met with managers of oncoming Tank Farm Operations and Plateau Remediation contractors to discuss plans to control activities immediately after transition. Both contractors are suspending work for one day after turnover except for activities needed to meet safety requirements. The contractors are developing plans that identify high-risk work, and the requirements to restart that work after transition. Additionally, they will train workers and supervisors on management's expectations for safety.

Plutonium Finishing Plant (PFP): During construction activities to place a concrete pad, an excavator snagged overhead communication cables, which caused two telephone poles to snap at the base and fall. No one was injured and none of the PFP vital safety systems were impacted. The boom on the excavator was not in the fully lowered position during movement and the operator failed to ensure he had a required spotter.

Tank Farms: The contractor concluded that single-shell tank C-111, categorized as an assumed leaker, has not leaked and recommended to DOE that it be reclassified as a sound tank.