

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 20, 2009

TO: T. J. Dwyer, Technical Director
FROM: W. Linzau and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending March 20, 2009

Board staff member R. Raabe was on-site to observe the review of the Sludge Treatment Project.

Sludge Treatment Project: A team from DOE-EM headquarters completed an External Technical Review of the project. The team presented several recommendations at the outbrief, including: developing a clear scope and schedule for testing of key equipment; devoting more resources to testing; documenting a more convincing argument for not processing the sludge in the 100 K Area; and improving the integration of the two phases of the project. The team expects to issue the final report by the end of April.

Waste Stabilization and Disposition Project: The contractor sponsored a value engineering workshop last week to formulate a new approach to TRU retrievals known as Next Generation Waste Retrieval and Disposal. Currently, most of the drums retrieved from the low level burial grounds are overpacked and moved multiple times to do repackaging, inspection, and precertification for shipment to WIPP. In addition, the project is encountering more drums that are degraded to a point where normal retrieval methods will not work. The team's recommendations to their management included using mobile facilities located in or adjacent to the retrieval trench to do the preparation work for final disposition. The team recognized that changes to the safety basis and regulatory approach are most likely required but believes it is a worthwhile effort for the final 5,000 cubic meters of waste that still needs to be retrieved. The team also recognized the need to closely integrate safety in the design early and the importance of worker involvement. The team had the initial assumption that it would take 18 months to implement the changes but now believes that changes can be made in six months.

River Corridor Closure Project: The site rep met with project management responsible for D&D of Building 327 to discuss the upcoming wire-cutting operation to remove the contaminated hot cells. The contractor uses a "risk-ranking" process to determine the level of hazard review and, for this activity, the ranking was "low" risk versus "medium" or "high." In the report attached to the October 30, 2008, Board letter to DOE, the staff noted that the contractor's risk-ranking process would seldom result in any activity being ranked as "high" risk and receive the most detailed work planning process. This complex wire-cutting activity appears to warrant a ranking of "high" and may not have received the appropriate rigor of work planning. The contractor agreed to re-evaluate the risk-ranking for this activity. The wire-cutting operation is scheduled to start next month.

There was a near miss rigging event at the Building 327 when a nuclear chemical operator (NCO) was contacted by a waste storage box while it was being moved by the overhead gantry crane. The load was not centered under the crane hook, and, upon lifting, the box rotated unexpectedly, contacting the NCO and cornered him between the box and a hot-cell wall. The NCO was not injured and the project has implemented a number of corrective actions, including retraining rigging personnel, sending out lessons learned, and declaring the event a near miss.

Office of River Protection: J. Sondag completed his qualification as a facility representative for the Tank Farms.