

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 15, 2011

TO: T. J. Dwyer, Technical Director
FROM: W. Linzau and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending July 15, 2011

Board staff members Z. Beauvais, D. Chudnow, T. Hunt, and J. Troan were on-site reviewing conduct of maintenance, beyond design basis accident analysis, and emergency management at the Waste Encapsulation and Storage Facility. In addition, J. Kimball observed a DOE-sponsored meeting on the need to update the site's probabilistic seismic hazard analysis.

DOE Order Revisions: DOE revised a number of nuclear safety-related directives during the last two years and several, such as DOE Orders 413.3B, 422.1, 425.1D and 433.1B, required the field offices to implement them by now. Richland Operations Office (RL) managers said that all the orders with required implementation dates are in the contracts and most of the changes have been implemented by the contractor. The major exception is DOE O 422.1, which will be implemented by the Plateau Remediation Contractor during the next fiscal year (FY). Office of River Protection (ORP) managers have cost estimates from the Tank Farms Contractor for implementing the changes but delayed implementation until the next FY because of budget constraints. ORP and the WTP and Tank Farms contractors are discussing the changes they will make to ensure the Tank Farms and WTP have a consistent set of orders in their contracts.

Tank Farms: Contractor managers and engineers held two more in a series of meetings to discuss their proposed changes to upgrade the DST ventilation systems to safety-significant (SS). The proposed changes to the DSA identify a significant number of system improvements that will be required to make the system compliant with SS requirements, but these would not be upgraded until funding is available. These include: backup electrical power, flow monitors, upgraded exhausters and control systems, and evaluations of below-grade duct work and two-over-one protection. The contractor plans to informally submit the proposed changes to ORP next week.

100 K West Basin: The contractor held a critique to understand why corrective actions to prevent contamination of modesty garments worn by workers were not totally effective (see Activity Report 4/29/11). While still in the basin, rad con technicians (RCTs) warned a worker to be careful when he exited because they found elevated contamination levels on his personal protective equipment (PPE) clothing. RCTs implemented this preliminary survey as a means to identify the cause of the last event, and this was the first time they had identified significant contamination on the PPE. The likely cause of the event was the zipper on the PPE opened when the worker had to repeatedly push down the bib on his respirator hood.

618-10 Burial Ground: On Monday, the contractor discovered that airborne contamination had been detected outside the posted area and workers might have been exposed. The air samples were taken the Friday before but not read until Monday morning. This is their normal practice to allow for the decay of radon. Actions to prevent recurrence are being evaluated by management.

Deputy Secretary of Energy Visit: D. Poneman visited Hanford and spoke with workers from RL, ORP, and the ORP contractors. One of the topics presented was the importance of a robust safety culture, including the need for workers to have a questioning attitude and no fear of raising questions related to safety.