

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 22, 2011

TO: T. J. Dwyer, Technical Director
FROM: W. Linzau and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending April 22, 2011

R. Quirk was off-site this week.

Plateau Remediation Contractor: The site rep attended a meeting of contractor managers responsible for overseeing the implementation of the Integrated Corrective Action Plan (the team is known as the ICAP Champions). One of the responsibilities of the team is to review, comment, and concur on documents required by the ICAP, but no reviews were discussed at this meeting. The team did discuss the difficulty in getting the Richland Operations Office (RL) approval of submitted documents, but RL's issues or efforts to improve the documentation were not discussed. At this meeting, the main focus of the ICAP Champions appeared to be whether the documents and corrective actions were completed on schedule.

Plutonium Solids in the Tank Farms: The Office of River Protection was briefed by the leader of the teams reviewing the questions about plutonium oxide in the wastes stored at Tank Farms and that may end up in the feed to the Waste Treatment Plant (WTP) (see Activity Report 2/18/11). The team lead expressed that the current work is to determine the most likely locations, amount, and particle size of the oxide; once that is completed, a path forward for WTP design and Tank Farms operations can be evaluated. They have mapped the eight different processes used during production operations at the Plutonium Finishing Plant and, now that the processes are understood, the team will start reviewing the historic data from the process runs to understand what could have been discharged to the Tank Farms. Also, they do not believe the material could have formed larger particles through crystalline growth. The team is also investigating other potential sources of plutonium oxide, such as small independent campaigns conducted at other Hanford plants. The final report from this review is scheduled for completion in August.

209-E Facility D&D: A radiological controls technician (RCT) discovered alpha contamination on both hands while working in a radiological buffer area. The RCT was surveying potentially contaminated equipment from the ongoing D&D work at the facility. The source of the contamination is believed to be from the handle of probe used during clean-up of a spill the previous night. Decontamination efforts were successful in removing the skin contamination.

618-10 Burial Ground Remediation: The remediation of the burial ground started this week and the contractor will utilize the techniques developed from the successful remediation of the other burial grounds, such as 618-7. The site rep and the contractor manager in charge of operations conducted a walkdown of the burial ground and discussed the safety controls and training of the operators. As in other burial grounds, the project expects to find pyrophoric materials associated with waste generated during operations of the facilities in the 300 Area. Remediation of these trenches will take at least a year but it does not include remediation of the vertical pipe units.

Canister Storage Building (CSB): The site rep watched workers conduct a demonstration of loading of a multi-canister overpack cask from its transport trailer and into the receiving pit. This evolution was part of the facility's normal process to remain proficient with these types of operations. The project expects to get its next actual shipments from K Area later this summer.