DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 3, 2015

TO: S. A. Stokes, Technical Director
FROM: P. Fox and D. Gutowski Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending April 3, 2015

Waste Treatment Plant (WTP). ORP briefed the contractor on the preliminary findings from their audit of the commercial grade dedication (CGD) program at WTP (see Activity Report 12/5/2014). The audit team found that while there were improvements since July 2014 when the contractor updated their procedures and processes for CGD, the overall CGD process was still not adequately defined or implemented. The contractor has a different perspective on some of the audit team's issues. ORP will conduct additional discussions to clarify potential findings.

Plutonium Finishing Plant (PFP). A site rep observed the size reduction of ducting on PFP duct level. The activity was performed inside a glovebag located inside a HCA. During the packaging of duct sections, a Radiological Control Technician (RCT) discovered a breached glove when frisking the hands of an individual who had removed their hands from the glovebag. The work supervisor carried out the appropriate actions for a glovebag breach. However, some workers did not immediately stop their work, potentially billowing the breached glovebag. The RCT noted the problem and directed the workers to place the ducting in a stable condition to reduce the potential for contamination escape from the glovebag. The Facility Representative present discussed the non-conservative worker response, along with several other work performance observations, with facility management. Additionally, the Site Rep noted that some previously removed sections of ducting were ineffectively chocked. Chocking of the removed duct sections is required by the procedure to prevent inadvertent movement of duct sections that may contain fissile material. Facility management stated that they would address the issues.

The PFP project met the criteria for declaring 242-Z glove box WT-2 "removed." WT-2 was the glove box in which a resin column exploded in 1976 severely injuring a nuclear chemical operator and leaving the entire room highly contaminated.

Tank Farms. The site reps observed the installation of a new slurry distributor into tank AN-106. During the installation, a fresh water leak occurred when the high pressure nozzles on the slurry distributor were initially pressurized. The spray from the leak wetted three personnel who were in the HCA pit. The work crew responded professionally. No personnel were found to be contaminated. The work crew later completed seating the equipment without further incident.

Contractor management approved the root cause analysis report completed in response to two incidents involving their Ignition Control Program. They determined that the basis behind the administrative control for ignition control in the DSA is unclear and contradictory leading to complex implementation processes. One of the contributing causes was that implementation of ignition controls is an expert based process but there is no training to ensure all users have the appropriate expertise. The site reps note that this is similar to a common cause determined for the conduct of operations problems in the tank farms (see Activity Report 2/20/2015).

Effluent Treatment Facility (ETF). The ETF and affiliated facilities transitioned from the Central Plateau Contractor and RL to the Tank Farms Contractor and ORP. These are less than HC-3 facilities and receive wastewater from various facilities including the 242-A Evaporator.