

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 30, 2014

**TO:** S. A. Stokes, Technical Director  
**FROM:** D. Gutowski and R. Quirk, Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending May 30, 2014

**Plutonium Finishing Plant.** Similar to last week, the contractor identified two more situations where significant contamination was inadvertently spread (see Activity Report 5/23/2014). The first case occurred after workers disconnected a glovebox from the ventilation exhaust (E-4) system; this was the same glovebox involved with one of the events last week. The holdup in this glovebox and in the E-4 duct is very mobile. Contamination levels as high as 1 million dpm/100 cm<sup>2</sup> alpha and airborne contamination levels over 4000 DAC were measured during the event. The work team responded properly and exited the area. Contamination levels as high as 100,000 dpm/100 cm<sup>2</sup> alpha were measured on the outer sets of Personal Protective Equipment (PPE). Additionally, there was significant contamination on the inner sets of PPE, so the inner sets were also doffed before workers exited to the corridor. Using a recovery plan, workers wearing SCBAs re-entered the room, began stabilizing the contamination, and placed a second layer of plastic sleeving over the suspected breach location. During this activity, they found contamination levels as high as 5 million dpm/100 cm<sup>2</sup> alpha.

And similar to a case last week where contamination spread from a high contamination area (HCA) to a contamination area (CA) in an adjacent corridor, HCA levels of contamination were again identified in a corridor. But unlike last week, personnel responded to this spread in a prompt manner and decontaminated the area back to CA levels.

**Hanford Site-Wide Risk Review.** As directed by DOE, the Consortium for Risk Evaluation and Stakeholder Participation (CRESP) is performing a site-wide risk review to identify and characterize potential risks and impacts to the public, workers, and the environment. This is intended to inform the efficient use of DOE-EM resources. This week, CRESP members discussed T Tank Farm with ORP personnel. This is one of six pilot reviews to test the overall risk review methodology. The other pilot reviews are of the Central Waste Complex, Building 324, 618-11 Burial Ground, the B-Complex vadose zone and groundwater, and the B-Complex cribs and trenches.

**Waste Treatment Plant.** The contractor started the hazard analysis (HA) for the ammonia reagent system. The ammonia tanks are part of the Balance of Facilities and have underground feeds to the High-Level Waste and Low Activity Waste facilities. Bounding releases have the potential for high on and offsite chemical consequences. The Low Activity Waste HA team is performing this activity and intends to address impacts on other facilities.

**222-S Laboratory.** Workers voided a radiological work permit after weighing a sample of solid material from piping involved in the exothermic event at the Plutonium Finishing Plant (see Activity Report 5/16/2014). They detected high alpha contamination levels while surveying the fume hood for release to normal operations.

**Site Office Management.** M. McCormick retired as manager of the Richland Operations Office and D. Shoop was named the acting manager.