

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 7, 2014

TO: S. A. Stokes, Technical Director
FROM: D. Gutowski and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending March 7, 2014

Tank Farms. There was a continuous air monitor (CAM) high radiation alarm on the exhaust stack for a ventilation system in C-Farm. The system was not operating when the alarm activated. The contractor entered the appropriate abnormal operating procedures and determined that the filter papers on both the CAM and the record sampler had elevated count rates, primarily from cesium. The contractor completed investigative surveys of the ventilation system and is evaluating possible causes and corrective actions.

The contractor completed their root cause analysis for the Technical Safety Requirements (TSR) violation for single shell tank flammable gas surveillances (see Activity Report 12/27/2013). They determined that there was no validation process for changes to critical data that supports TSR or environmental requirements during turnovers. The contractor plans to create a standard definition of critical data, determine where and when it is recorded, and incorporate validation processes.

The contractor identified what appears to be dried material in a region in the annulus of tank AY-102 where it had not been observed before.

Waste Treatment Plant. The Office of River Protection released the contractor to resume limited production engineering for the High Level Waste Facility (see Activity Report 12/20/2013).

242-A Evaporator. The contractor is continuing startup preparations for the evaporator including performing a cold run. The site reps discussed the Operational Acceptance Test with contractor personnel. The most significant item to come out of this testing was the unexpected actuation of the new safety-significant flammable gas interlock which started a slow dump of the contents of the evaporator vessel to the tank farms.

Plutonium Finishing Plant. The contractor implemented the annual update to the safety basis (see Activity Report 12/13/2013). The contractor has not developed procedures to implement the controls in Technical Safety Requirements for high mass gloveboxes because the Richland Operations Office (RL) has not authorized these operations.

RL issued a Safety Evaluation Report approving the contractor's Evaluation of Safety of the Situation for impaired fire barriers (see Activity Report 11/29/2013). RL accepted the contractor's compensatory actions until the barriers are repaired.

Crack in Wanapum Dam. Workers at the Wanapum Dam on the Columbia River identified a long crack on the upstream side of a dam spillway. The Wanapum Dam is the second dam upstream of Hanford and is not the source of the maximum postulated flood scenario for the site. Outside agencies intentionally spilled significant amounts of water to remove pressure on the dam and notified the appropriate site organization that flowrates on the river through the site would increase.