

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 23, 2015

TO: S. A. Stokes, Technical Director
FROM: P. Fox, D. Gutowski and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending January 23, 2015

R. Quirk completed his tenure as Hanford Site Representative.

Plutonium Finishing Plant. Last week, a ventilation exhaust plenum high pressure interlock activated during a routine shift in electric exhaust fan alignment. The contractor entered the appropriate LCO and terminated work activities in the facility until the ventilation system was restored. Troubleshooting activities were hindered by problems with exhaust fan 6 (EF-6). Consequently, the contractor has not been able to explain the cause of the trip. They believe that the ongoing problems related to starting EF-6 are caused by the supply breaker overload relay. Additionally, the contractor lifted an emergency use only (EUO) restriction on EF-6. The restriction was lifted by engineering because measured vibration levels are lower than those measured during previous surveillances. However, the reason for the change in vibration performance was not explained. When questioned, the facility management determined that EF-6 would continue to be treated as EUO until the change in vibration performance is explained. The ongoing system reliability problems are a concern because the ventilation system remains important to safety during the ongoing deactivation and decommissioning activities.

Tank Farms. ORP approved a standing TSR recovery plan that the contractor developed for activities supporting future retrieval of Tank AY-102. These activities are expected to impact the ability of the tank to remain at sufficient negative pressure which could cause repeated LCO entries. This pressure measurement is used to verify operability of the primary ventilation system. The contractor intends to continue operating the ventilation system to maintain flow through the tanks, but the system will not be operable as defined in the TSRs due to expected pressure fluctuations during construction activities. This standing recovery plan will preclude the need to develop individual recovery plans for each LCO entry.

The contractor lifted the stop work on supplied air respirator use in cold weather through implementation of a new standing order (see Activity Report 1/16/2015).

100K West Basin. The contractor implemented the 2013 annual update of their safety basis. The revision removes a LCO with explicit sludge level limits and instead includes an administrative control that requires a program to prevent formation of large pockets of hydrogen.

One System. The One System organization held a readiness workshop to start a dialogue among the various federal and contractor organizations regarding the types of readiness activities necessary to support the start of direct feed of waste to the Waste Treatment Plant Low Activity Waste facility, discuss readiness activity interfaces between the facilities and organizations, and to lay the groundwork for coordination and possible cooperation on the readiness activities. The meeting was well attended and the dialogue was constructive.

242-A Evaporator. The site reps observed erection of scaffolding in the pump room to support maintenance activities. The pump room is posted as a HCA/HRA/ARA. During this job on the previous day, a small amount of contamination was discovered on a worker's personal clothing.