

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 15, 2013

TO: S. A. Stokes, Acting Technical Director
FROM: D. Gutowski and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending February 15, 2013

Tank Farms. The contractor continued operational acceptance testing of the B-train ventilation system at AN Farm. They also started flow testing of this system but will have to repeat it next week. These are some of the last actions needed to complete implementation of the Tank Farms safety basis revision (see Activity Reports 2/1/2013, 1/25/2013).

Workers reported smoke coming from a portable exhauster in C Farm and the Hanford Fire Department responded to the event, which did not require suppression. A preliminary investigation determined the source of the smoke to be the exhauster's heating system. The exhauster was electrically isolated and normal access was restored to C Farm. This event appears to be similar to one in 2011 for the same exhauster (see Activity Report 8/12/11).

The site rep observed Mobile Arm Retrieval System maintenance work at single-shell tank C-107. Conduct of the work in the morning was good but the site rep observed several poor work practices in the afternoon. The site rep discussed these observations with a contractor manager who noted the same behavior and planned to follow-up on these observations.

Plutonium Finishing Plant. The contractor implemented the annual update to the Documented Safety Analysis after completing an Independent Verification Review. The changes in this update (see Activity Report 11/23/2012) include: resolution of issues noted by the Office of Health, Safety, and Security in their review of Specific Administrative Controls (see Activity Report 12/3/2010) and closeout of the Justification for Continued Operation for the holdup of significant quantities of material in Building 291-Z (see Activity Report 3/11/11).

At the request of the Richland Operations Office, the contractor is evaluating if they can revise the safety basis to allow removal of glove boxes from the facility while they still have more holdup of transuranic material. The contractor believes this analysis will show a significant increase in radiological consequences for events involving gloveboxes when they are outside the protection provided by the facility and not yet protected by an approved shipping container.

Safety Culture/Recommendation 2011-1. The Waste Treatment Plant (WTP) contractor presented a nuclear safety culture briefing to the Office of River Protection (ORP), and ORP presented a safety culture briefing to DOE headquarters (see Activity Report 11/30/2012). These periodic briefings are a commitment from the addendum to the Recommendation 2011-1 Implementation Plan. Both the WTP contractor and ORP have positive perceptions of their progress towards improving nuclear safety culture.

Sludge Treatment Project. The contractor began the "Delta Design Review" for the Engineered Container Retrieval and Transfer System. This review will address changes made since the recent contractor Final Design Review (FDR), including those made to resolve issues identified during the FDR and significant design changes to the Auxiliary Ventilation System (AVS). The AVS was not reviewed during the FDR because the system was undergoing significant design changes to resolve single-point failures identified just prior to the FDR.