

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 13, 2018

TO: S. A. Stokes, Technical Director
FROM: P. Fox, Hanford Resident Inspector
SUBJECT: Hanford Activity Report for the Week Ending April 13, 2018

DNFSB Staff Activity. K. Amundson, D. Cleaves, and D. Owens were onsite observing the DOE Operational Readiness Review for the Engineered Container Retrieval and Transfer System (ECRTS) at 105-KW. M. Bradisse was onsite providing Resident Inspector support.

Solid Waste Operations Complex (SWOC). The CHPRC Executive Safety Review Board (ESRB) met to evaluate a corrective action plan that was developed to address a TSR violation at SWOC. The violation occurred when facility operators inadvertently delayed entry into an LCO after a worker discovered a waste drum with an abnormal condition. The condition was reported to the Shift Duty Officer (SDO) who entered the procedure for management of abnormal containers but did not recognize that the condition also required entry into an LCO. The Operations Manager discovered the error three days later and subsequently directed action to achieve compliance with the TSR. Operators surveyed the drums and determined that there was no release of contamination or harmful chemicals. The ESRB voted to approve the corrective action plan but directed the addition of actions related to the review and analysis of the DSA change Implementation Validation Review process. The affected TSR was changed in a recent revision to the DSA and the ESRB determined that inadequate implementation of the change could have been a causal factor for the event.

Tank Farms. WRPS personnel discovered errors in a calculation that provides the basis for flammable gas controls in double-contained receiver tanks (DCRTs). The calculations relate the waste level in DCRT tanks to flammable gas generation rates. The results are then used to derive the maximum waste level allowed in each tank before requiring operators to routinely measure flammable gas concentrations. When the error was corrected, the waste level of one of the tanks was determined to be above the level that requires the performance of flammable gas measurements. Operations personnel entered the appropriate LCO. The contractor is conducting an extent of condition review.

105-KW Basin. CHPRC completed pre-start corrective actions resulting from their recent contractor Operational Readiness Review (ORR) and certified their readiness to start sludge retrieval using the ECRTS (see Activity Report 3/9/2018). The federal ORR started on April 9.

Waste Treatment Plant. In December, BNI reported that some quality records for important-to-safety structural steel used in the WTP facilities appeared to be missing. DOE-ORP subsequently determined that the condition had existed since at least 2013 and represented a potentially unrecoverable quality issue. They directed the contractor to investigate the facts and circumstances surrounding the procurement, receipt, and acceptance of the structural steel. This week, BNI reported that most of the discrepancies appear to be the result of records receipt and storage issues. Based on the success of ongoing efforts to locate necessary documents, the contractor is confident in the quality issue is not unrecoverable and that there continues to be reasonable assurance that safety functions can be met by the installed materials.