

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 14, 2018

TO: Christopher J. Roscetti, Technical Director
FROM: P. Foster and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending September 14, 2018

DNFSB Staff Activity: P. Fox was offsite. M. Bradisse was onsite to perform oversight support activities.

Plutonium Finishing Plant (PFP): The contractor completed actions to close pre-start findings associated with the management self-assessment of the effectiveness of corrective actions taken as a result of last year's loss of contamination control events (see 8/24/2018 report). DOE-RL subsequently authorized the resumption of lower-risk activities at PFP, such as loading and removing existing 234-5Z facility debris. Contractor management, along with DOE oversight, will perform an additional management assessment prior to resuming higher-risk activities.

Hanford Site: The Hanford Fire Department responded to multiple range fires on the site this past weekend. The first, located near the Laser Interferometer Gravitational-Wave Observatory, burned approximately 3000 acres. The second, located near Energy Northwest, burned approximately 14,000 acres. Neither fire damaged any site facilities or waste sites.

Effluent Treatment Facility: The contractor Executive Safety Review board (ESRB) met to discuss the root cause analysis for a contamination spread event at the Liquid Effluent Retention Facility Basin 42 (see 9/7/2018 report). The ESRB voted to approve the report with minor revisions and directed the development of a lessons learned package.

Tank Farms: The contractor recently completed recirculation of caustic solution in tank AY-102 as part of a final rinse and flush of the tank. While transferring the solution to AP-102, a tank level indicator in AP-102 failed. The contractor paused the transfer to correct the issue. Due to the existing holes in the primary tank bottom, the liquid level in AY-102 annulus equalized with the tank and the liquid in the annulus exceeded the allowed level requiring the contractor to enter the appropriate limiting condition of operation (LCO). After returning the level indicator to service, the contractor resumed the transfer and exited the LCO.

105-KW Basin: The contractor completed an Independent Evaluation of a Drill for Exercise Credit. This type of drill structure evaluates the facility emergency response to fulfill annual requirements and allows an external evaluation of the overall drill conduct. The postulated drill scenario involved a spray release the 105-KW Annex. During the drill hot-wash, a number of drill simulation/control problems and potential improvements were discussed. The drill team will complete their report on the facility response before the external evaluators conclude their review of the overall drill team performance.

222-S Laboratory: A limited scope drill was conducted to evaluate members of the Facility Emergency Response Organization. The scenario postulated an explosive device detonating outside the north wall of the 222-S building, between the Hot Cell Annex and building 219-S.