

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 23, 2024

TO: Timothy J. Dwyer, Technical Director
FROM: B. Caleca, P. Fox, and P. Meyer, Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending August 23, 2024

DNFSB Staff Activity: M. Sautman, Associate Technical Director for Field Operations (ATDFO), was onsite to observe and evaluate resident inspector activities and performance.

Radiochemical Processing Laboratory: Radiological surveys performed after last week's personnel contamination event (see 8/16/2024 report) identified the likely source of the contamination as an improperly packaged uranium sample. To restart radiological operations in the facility, management established compensatory measures and conducted a briefing for all facility personnel regarding the conditions that led to the event.

U Plant: A resident inspector observed a CPCCo team of operators and radiological control technicians perform the annual surveillance of U Plant material and radiological conditions. The team's inspection was limited to the facility exterior and the uncontaminated areas of the facility interior. The team determined, based on comparison to previous annual surveillance reports, that facility conditions in the inspected areas appear consistent with those observed during the last surveillance. The resident inspector observed that the facility is dry. However, floor staining in various areas provides evidence of previous or ongoing water ingress. Additionally, the facility contains more combustible material than other facilities in surveillance and maintenance status. CPCCo management will hold a post-job meeting where subject matter experts will review the results of the inspection to determine the need for any maintenance to sustain facility safety.

Plutonium Concentration Facility (224-B): CPCCo reported a non-compliance with their approved Documented Safety Analysis (DSA) for 224-B. The DSA requires a minimum shift complement to ensure adequate response to abnormal conditions while the facility is occupied, and the facility is in a deactivation and decommissioning mode. An individual with lapsed qualifications was inadvertently assigned to fulfill a minimum shift complement role. Facility management placed the facility into surveillance mode when the error was discovered, which removed the requirement. The individual completed requalification requirements the same day.

Waste Treatment Plant: A resident inspector and the ATDFO observed an emergency response drill that simulated an ammonia spill at the ammonia offload station. The drill revealed a need to further improve methods for accounting for facility visitors during emergency events.

Canister Storage Building (CSB): Welding of cover cap assemblies onto the 15 multi-canister overpacks (MCOs) previously used for monitoring is ongoing at the CSB. A resident inspector observed welding operations on the fifth MCO to date, as well operation of the MCO handling machine to retrieve a capped MCO from the second welding station prior to its relocation to its storage location. The welding operations have been running smoothly, taking about two and one half 12-hour shifts per MCO. Given the long shifts, facility management is emphasizing paced operations to minimize worker stress or fatigue.