DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 4, 2022

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca, P. Fox, and P. Meyer, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending March 4, 2022

DNFSB Staff Activities: The Resident Inspectors and a member of the Board’s staff met with representatives from DOE ORP and the Tank Farm Operations Contractor (TOC) to discuss the methods and controls used to support repair of damaged Chemjoint™ couplings (see 10/8/2021 report). The couplings are used to connect systems and equipment to the Tank Side Cesium Removal system ion-exchange columns (IXCs) and perform a safety-significant (SS) function when the IXCs are removed from the system and placed in storage. The attendees also discussed the specific administrative control (SAC) that supports implementation of the coupling’s SS function. The staff team is still reviewing information obtained from the discussion but has developed preliminary observations regarding the TOC’s application of ANSI/ASME NQA-1, Quality Assurance Requirements for Nuclear Facility Application, requirements, the adequacy of the engineering evaluation that supported the repair, and the design and implementation of the SAC. The Resident Inspectors are discussing the observations with DOE and TOC management.

Hanford Site: Some activities in the site’s 200 east area were curtailed for approximately one-half shift while Hanford Patrol and supporting organizations responded to a security event.

Waste Treatment Project (WTP): DOE-ORP directed the WTP contractor to establish an external expert panel. The panel will review information that supports readiness to complete the WTP High Level Waste (HLW) facility design, the associated safety basis, and the ramp-up of HLW facility construction. Based on that review, the panel will provide recommendations that support DOE’s development of a path forward for completing the HLW facility. The expert panel will also review a concept that would implement direct feed of waste to the HLW facility.

Inner Area End States (IAES): The Central Plateau Contractor Executive Safety Review Board (ESRB) met to evaluate the results of a root cause evaluation (RCE) that reviewed work activities that resulted in two workers being sprayed with a caustic liquid (see 11/19/2021 report). The analysis determined that the project team did not follow established processes, procedures, and guidelines during preparation and execution of the work package and related work activities. The ESRB voted to accept the RCE. A Resident Inspector observed the meeting and reviewed the RCE report. He notes that the identified root cause stops short of identifying the programmatic or management deficiencies that resulted in the project team’s failure to follow established processes, procedures, and guidelines. Additionally, the corrective actions identified are not forward looking and are not likely to preclude similar future occurrences.

222-S Laboratory: Workers assigned to drain oil from Hot Cell 11A shield windows to address oil leaks into the hot cell (see 2/4/2022 report) drained oil from the incorrect set of windows. The error did not result in a safety degradation since the oil does not provide significant shielding. However, the event does raise concerns regarding control of work at the 222-S facility. Contractor management has directed the performance of an apparent cause evaluation to identify actions necessary to prevent similar future occurrences.