

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 26, 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 April 26, 2024

Tank Farms: Last week, DOE management notified WRPS that they are concerned about a recent trend in work planning issues, which they believe is indicative of weaknesses in the WRPS work planning process. DOE further noted that, in some recent cases, the issues had resulted in a failure by WRPS to effectively control electrical and pressure hazards, which had placed workers at risk of serious injury. This week, a resident inspector participated in a two-day meeting led by the WRPS Chief Operating Officer. The meeting attendees, which included individuals knowledgeable of recent events, as well as subject matter experts in the planning and execution of work, reviewed events with work planning causes that had occurred over the last three years. Their review validated causes for each event and then identified proposed methods for improving work planning and performance. The overall execution of the meeting was effective. WRPS management subsequently used the information to strengthen existing compensatory measures. The information will also be used to help focus an ongoing extent of condition review and support the identification of actions necessary to resolve the work planning process issues.

A resident inspector observed a follow-up meeting of the contractor's Corrective Action Review Board (CARB), which was held to review and approve changes made to an apparent cause analysis first presented to the CARB earlier this month. The report analyzed a technical safety requirement violation that occurred in AP-Farm when an administrative lock was removed without establishing an alternate control (see April 12, 2024, report). Based on feedback from the DOE facility representative and others, the revised analysis determined that multiple requirements for implementation of the technical safety requirement, including a written procedure, were not followed. The revised report also adds a corrective action that requires revision of training provided to operating engineers related to the contractor's administrative lock procedure. The CARB voted to approve the revised analysis.

In preparation for upcoming A-Farm retrievals, the contractor Plant Review Committee (PRC) met to consider changes to the safety basis documents. These changes pertain mainly to the addition of freeze protection systems, including low temperature monitoring systems and high temperature protection from in-pit convection heaters. The PRC voted to approve the changes.

High Level Waste (HLW) Facility: A resident inspector observed an HLW Facility safety design integration team (SDIT) meeting where the team reviewed proposed changes to the hazard control strategy for events that could expose facility workers to high radiation fields while handling HLW canisters and during other radioactive waste handling evolutions. The transition to a preliminary documented safety analysis that is compliant with DOE STD 3009-2014 is causing BNI to identify additional safety-significant hazard controls to protect facility workers. In this case, project personnel proposed establishing a requirement for HLW casks to remain intact if dropped and a specific administrative control that restricts access to certain locations where workers could be directly exposed to radiation from HLW canisters.