DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 15, 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 April 15, 2022

PUREX 211A Facility: The contractor held an Executive Safety Review Board (ESRB) to review changes to the Root Cause Evaluation (RCE) and its associated corrective actions that had been previously rejected by the DOE field office (See 3/18/22 report). The revised document's root causes emphasize that, beyond noncompliance with procedures, the culture of the Inner Area End States (IAES) organization does not prioritize conduct of operations principles. Added corrective actions are more durable, including quarterly workshops for responsible managers and field work supervisors to share challenges experienced in the field, strengthening expectations for senior supervisory watch performance, and enhanced oversight of work in the field. The other substantial change is a clear set of effectiveness review criteria that had not been articulated in the prior evaluation.

Waste Treatment Plant (WTP): A resident inspector observed a WTP test and operations team perform the first bubbler installation into Low-Activity Waste Facility Melter 1. The work required the performance of multiple crane lifts over the melter. The evolution was accomplished with only minor procedure and equipment issues which were correctly addressed by the team. Overall, the work was properly controlled, the team's performance was professional, and their application of conduct of operations principles was excellent.

The external expert review team (EERT) that 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 (see 03/04/2022 report) has been established. The EERT has identified initial lines of inquiry and will meet during the week of May 8 at Hanford site.

Central Waste Complex (CWC): The CWC shift office was notified of a controlled burn that was being performed by the Hanford Fire Department (HFD) near the facility. It was determined by CWC Operations that the burn was taking place inside the facility boundary, as defined by the Documented Safety Analysis, without proper authorization. HFD dispatch was notified, and the burn was terminated. Facility management is evaluating approaches to ensure appropriate coordination with site services so that future burns do not encroach on facility boundaries.

Waste Encapsulation and Storage Facility (WESF): A resident inspector observed a full facility drill at WESF. The purpose of the drill was to evaluate the WESF Facility Emergency Response Organization (FERO) response to a security event involving a bomb detonating and breaching a facility filter bank. The FERO positions being evaluated for proficiency included the Building Emergency Director, Initial Command Post Communicator, and the Radiation Hazard Assessor. During discussions after the drill, controllers noted several areas for improvement related to the facility's response, including timely treatment of injured personnel, implementing appropriate protective actions, and minimizing exposure and control of radiological conditions. Overall, the drill team effectively evaluated FERO performance. Going forward, the Emergency Preparedness organization plans to implement new, less subjective, proficiency grading criteria, as well as formal training on firefighter doffing.