

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 9, 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 9, 2024

Waste Treatment Plant (WTP): The resident inspectors observed portions of a pilot for the recently revised Radiological Worker (RadWorker) training course for WTP personnel. WTCC developed the course to meet 10 CFR 835 training requirements without using training, which is currently provided at the Hanford Hazardous Materials Management and Emergency Response Federal Training Center to the rest of the Hanford workforce. The content of the training is also intended to meet DOE reciprocity requirements for RadWorker training. The resident inspectors, as well as DOE and contractor observers, noted weaknesses in the content and performance of the training. For example, the instruction was informal, some slides and the related discussions were not factually accurate, and the level of detail related to radiation fundamentals was insufficient to support an adequate understanding of radiation hazards without previous background in radiological work. Additionally, examples and procedures discussed during the training were generic vice specific to WTP facilities. Lastly, emergency procedure discussions were not detailed enough to allow an individual who did not have previous experience to understand how to identify abnormal radiological conditions and respond appropriately. These deficiencies were similar to those noted by the resident inspectors during their observation of the original version of the RadWorker course (see 3/19/2021 report). The resident inspectors provided their evaluation to contractor and DOE representatives. In most cases, there was agreement regarding the noted deficiencies. Contractor training managers have stated that the course material will undergo additional revision prior to performing more demonstrations.

A resident inspector observed portions of the ongoing analysis of natural phenomena hazards (NPH) that a BNI team is performing for the WTP direct feed HLW facility. The resident inspector noted that none of the core team members for the seismic hazard analysis team had subject matter expertise in seismic hazards and controls. When asked, the team lead could not identify a supporting on-call expert. The resident inspector also noted that during the hazard analysis for non-seismic NPH hazards, questions about lightning protection and wind hazards could not be answered by team participants due to the lack of subject matter expertise. While both teams recognized the need to reach out for appropriate guidance, the resident inspectors communicated their concern regarding the lack of subject matter support to BNI management.

The WTCC readiness organization led a workshop for the contractor team that will perform the upcoming cold commissioning management assessment. The team that will conduct the DOE operational readiness review also attended. During the workshop, WTCC personnel provided an a walkdown of the plant, an overview of plant operations, and the status of their readiness preparations. The workshop material was well presented and informative.

Hanford Site: The DOE Deputy Site Manager held a final oral board examination for a facility representative candidate who will cover the Central Waste Complex. The oral board was conducted well, and the candidate passed their examination.