

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 28, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending May 28, 2021

Effluent Treatment Facility (ETF): The contractor is replacing the rotor of the thin film dryer (TFD). The TFD is the final stage of the ETF secondary process train. Although feed into the facility contains very low levels of radioactive and chemical contamination, the contamination removal processes that are performed in the facility concentrate both types of contamination and result in high contamination levels within the TFD. Additionally, the size and weight of the component, close tolerances, and the use of multiple cranes to handle the item and to provide fall protection for workers located on the facility roof make this a challenging, high risk activity. A resident inspector observed a contractor work team remove the old rotor. Overall, the field work supervisor effectively coordinated the work and the team performed it professionally. The team did encounter one significant problem when they found that the plastic sleeve that is used to contain contamination during the rotor removal was too short to allow effective closure at the bottom of the suspended rotor. Upon discovery of the condition, the field work supervisor consulted with the senior supervisory watch. They conservatively decided to pause work and enter the abnormal operating procedure for placing equipment and personnel in a safe condition. They then developed and executed a recovery plan to recover from the event. The approach they used effectively controlled the event and allowed safe and efficient resolution of the problem.

Waste Treatment Plant (WTP): A resident inspector met with the DOE project representatives to discuss the results of a recent workshop that was held to discuss the scope and strategy for upcoming Contractor and DOE Operational Readiness Reviews (ORRs) for the Low-Activity Waste Facility. In addition to site DOE and contractor leadership and other personnel associated with the readiness activities, workshop participants included the DOE and contractor ORR team leads as well as the team leaders for other independent assessments that will be conducted before the ORRs. The workshop identified actions which, when complete, will help improve overall coordination and effective completion of the readiness certification activities.

Building 324: A resident inspector met with contractor personnel to walk down portions of Building 324 and discuss the status of the project. Training for airlock entries has continued at the mockup while room 18 has been undergoing interference removal and cleanup prior to the resumption of micropile drilling. As part of lessons learned from past operations, the new radiological control manager is implementing improvements such as a second contamination area step-off pad that will allow more egress points for radiological work. One of the most significant challenges for the project has been staffing radiological control personnel; currently there is only sufficient staff to support routine activities and room 18 operations. Project management will need significantly more personnel to support airlock activities.

Plutonium Finishing Plant (PFP): Contractor personnel have resumed Plutonium Reclamation Facility debris retrieval and loadout after making modifications to the work instructions to improve their ability to stay below radiological work permit (RWP) control limits (see 5/21/21 report). Now, workers using long reach tools will wipe down the debris shields prior to survey and removal, while maintaining the same RWP control limits. As a result, during operations this week there were no instances of surveys of the shields challenging the RWP limits.