

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 10, 2018

TO: Christopher J. Roscetti, Technical Director
FROM: P. Foster and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending August 10, 2018

DNFSB Staff Activity: R. Eul was onsite to support review activities related to the Request for Board Action (RFBA) 2018-300-076.

Plutonium Finishing Plant (PFP): Workers removed rigging equipment from a storage yard within a Radiological Buffer Area (RBA) at the PFP site for loan to the tank farm contractor without performing a contamination survey of the equipment. Once placed on a truck for transport, the equipment was driven to multiple locations, including an offsite DOE contractor facility in Richland, before being offloaded at the mission support contractor's onsite hoisting and rigging facility. At the request of an employee at that facility, a contamination survey was performed and it identified low levels of alpha contamination on the equipment. The critique determined that the error resulted from multiple communication breakdowns including a failure to obtain approval from the PFP operations manager for transfer of the equipment. Additionally, since the equipment was stored in a RBA, a survey was requested prior to transport; however the radiological control technician performed it on the wrong piece of equipment. The mission support contractor has completed surveys of their facility and equipment and did not identify any contamination spread. The PFP contractor is also performing a detailed survey of the storage yard and is continuing their investigation. They have also tightened their protocols for release and movement of materials within the RBA to maintain accountability and prevent the movement of equipment out of areas controlled for contamination. Given the complexity of the event and involvement of multiple contractors, DOE-RL is closely monitoring the investigation and they are working with the Washington State Departments of Ecology and Health to determine other necessary actions. In addition, this event will also be a focus of the upcoming assessment of the PFP contractor's readiness to resume low-hazard demolition activities.

222-S Laboratory: There was a small equipment fire in one room of the laboratory's RBA. A nearby employee responded to the fire and successfully extinguished it. Two employees were taken to the hospital for potential smoke inhalation and were later released without restrictions.

105-KW Basin: While moving equipment to support sparging operations in the basin, workers snagged and damaged the alarm cable on the Engineered Container Retrieval and Transfer System (ECRTS) rupture disk. A project engineer noted the unexpected alarm and properly communicated the situation to management. During the critique, a number of potential compensatory measures were discussed to better protect this cable given the visibility and ergonomic issues associated with the sparging operations. The rupture disk assembly is designed for removal and will be repaired or replaced before the next container is to be filled.

Tank Farms: The ORP Senior Review Board (SRB) met this week to review the safety evaluation report for an upcoming amendment to the Tank Farms DSA. The amendment will address Action 3-1 in the implementation plan for Recommendation 2012-2 and also implement instrumented freeze protection for a number of tanks. The SRB recommended approval.