

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 22, 2015

TO: S. A. Stokes, Technical Director
FROM: P. Fox and D. Gutowski Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending May 22, 2015

Tank Farms. The contractor restarted retrieval from tank C-105 to tank AN-106 after being shutdown since September 2014 due to the plugged slurry distributor in AN-106. The first retrieval run was shut down due to camera failure in the tank. The procedure required two cameras and operators did not notice they had met a shutdown criterion until a new shift came on. The contractor subsequently revised the procedure to clarify shutdown criteria. The site rep observed the successful field work to replace a rad hardened camera in C-105. Retrieval resumed with the new camera and updated procedure. However, it was again halted after a leak detector alarmed in the AN06A pit. The site rep observed control room actions related to the alarm response. Field investigation including insertion of a camera in the pit found no indication of a leak. Maintenance troubleshooting found no issues with the detector.

Plutonium Finishing Plant. In the last two weeks, there have been three instances where workers performing deactivation work in the facility discovered unexpected materials. The first case involved several gallons of acidic liquid in a ventilation duct, the second was approximately a cup of mercury found in vacuum piping, and the last was the discovery of approximately a half cup of white powder and some capped vials behind a cabinet in the analytical laboratory. In each case workers responded correctly. Management has responded by communicating the events and reminding workers of how to respond to unexpected material discovery. They have also instituted additional controls based on the specific circumstances of each discovery.

The contractor performed a criticality alarm emergency preparedness drill. Workers responded appropriately. The site rep considered performance by facility personnel satisfactory, and the drill team evaluation was adequate. The site rep discussed weaknesses with the drill coordinator.

The Facility Hazard Review Board (HRB) performed a review for the work package that will be used to perform in-situ size reduction of large gloveboxes HA-9A and HC-9B. The Field Work Supervisor who presented the work package was well prepared and very knowledgeable. The work package was rejected with comments, all of which can be easily resolved.

242-A Evaporator. The contractor opened the cell covers in the pump room to access the stuck air-actuated feed valve (see Activity Report 5/15/2015). They discovered a disconnected airline and are planning additional repair work. ORP and the contractor determined that the seismic drain path valve discussed in the Activity Report does not need to be controlled in the TSRs. They consider it adequately controlled by configuration management and procedure.

100-K Area. The contractor's Plant Review Committee conditionally approved the 2014 annual update to the K-West Basis safety basis pending completion of a new criticality safety evaluation report (CSER). The updated CSER will provide the basis for removing several criticality related controls.

Low Activity Waste Pretreatment System (LAWPS). DOE approved Critical Decision 1 for the LAWPS Project.