

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 12, 2017

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending May 12, 2017

Fire Protection: Two small fires occurred at the laboratory this week—one at the Los Alamos Neutron Science Center and the other at the Sigma Complex. In both instances, lab employees extinguished the fire; however, notification to the fire department was delayed in the first instance and did not occur in the second. In particular, the fire at Sigma Complex involved an activity with depleted uranium metal turnings performed under an integrated work control document that provided workers with an allowance to avoid calling the fire department if they were able to extinguish the fire using graphite powder or machining coolant. In response to these events, fire protection personnel are reinforcing the need to contact the fire department as part of training and procedures.

Emergency Management: On Thursday, LANL personnel conducted their annual full-scale emergency exercise. This year's scenario involved a simulated spill of chromic acid with a concurrent fire at the Sigma Complex that resulted in chemical burns to two individuals and smoke inhalation to an additional six. In an attempt to reduce simulation, fire department responders utilized breathing apparatus and transported mannequins as victims. At the hotwash, several participants highlighted the benefits from recent training, tabletops, and drills. Additionally, NNSA Field Office performed an independent evaluation of the exercise utilizing additional experts from the NNSA Office of Emergency Operations and the Carlsbad Field Office.

Waste Characterization Reduction and Repackaging Facility–Restart: On Monday, while preparing equipment to treat the second container of surrogate waste, operators observed a potential crack in the waistband associated with the drum lifting fixture on the waste characterization glovebox. As a result, operators entered the limiting condition of operation for this credited equipment. On Thursday, operators executed a work package to replace the waistband thereby restoring the operability of the drum lifting fixture. They continue to troubleshoot a separate issue with the limit switch for the lift.

The EM and NNSA Field Offices have implemented a federal oversight plan for LANL's processing of the remediated nitrate salt waste drums. The plan ensures continuous federal coverage for the processing of two surrogate and the first ten remediated nitrate salt waste drums.

Plutonium Facility–Safety Basis: On Wednesday, LANL submitted to the NNSA Field Office for approval, an update to the plan and schedule for resolving all outstanding conditions of approval, directed changes, directed actions, Field Office comments and open evaluations of the safety of the situation that affect the Plutonium Facility safety basis (see 4/14/17 weekly). LANL submitted the update to provide specific dates for closure of outstanding items. LANL's update also proposes to submit for approval no later than August 31, 2017, a project plan for incorporating into the safety basis the most recent site meteorological data and an updated strategy for fire and leak path factor modeling.