

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 6, 2024

TO: Timothy J. Dwyer, Technical Director
FROM: E. Freeman, D. Gutowski, and J. Kemp, Resident Inspectors
SUBJECT: Los Alamos Activity Report for the Week Ending December 6, 2024

Staff Activity: Z. McCabe, the Acting Associate Technical Director for Field Operations, was on site to visit defense nuclear facilities and to review the training progress of the new resident inspectors.

Plutonium Facility–Glovebox Safety: Last Monday, workers were performing work in a glovebox when a guillotine door between gloveboxes fell on a worker’s gloved hand. The threaded connection that connects the door to the pneumatic system that holds the door in the raised position failed. The falling door gave the worker a minor injury and damaged, but did not breach, the glovebox glove. No contamination spread occurred. Plant maintenance personnel repaired the door and placed it back in service. The repair occurred before glovebox system engineers had an opportunity to observe and assess the failed condition. Personnel are performing an extent of condition on other similar doors and are evaluating potential design changes to prevent recurrence of this type of event.

Plutonium Facility–Fire Protection: One of the safety-class diesel fire water pumps supporting the Plutonium Facility remains out of service (see 9/20/2024 report). Initial troubleshooting activities were unsuccessful, so facility personnel are requesting support from the pump vendor to repair the pump and restore it to operability. The other three fire pumps remain in service.

Plutonium Facility–Infrastructure: On Tuesday, workers reported an odor of natural gas in the south half of the Plutonium Facility. Operations center directed personnel to relocate from the south side to the north side of the facility and restricted entry. When workers also smelled natural gas in the north side of the building, they performed a normal exit. First responders did detect natural gas near a boiler building outside of the Plutonium Facility but determined no hazardous conditions existed inside the building. Facility personnel determined that the boilers were running rich causing unburned natural gas to enter the Plutonium Facility’s air intake. These boilers had been undergoing troubleshooting over the prior weekend. Following the event, workers placed the boilers out of service for repairs, which have been completed.

Emergency Management: Last Wednesday, the NNSA Field Office concurred with Triad’s proposal to eliminate the Emergency Planning Hazards Analysis (EPHA) for the Los Alamos Neutron Science Center (LANSCE). Triad developed a new technical basis, which concluded that events impacting the inventory of radiological material or mercury would not result in consequences that require LANSCE to be a facility covered by an EPHA as was the case historically (see 10/27/2023 report).

Chemistry and Metallurgy Research Building (CMR): On Thursday, the NNSA Field Office unconditionally approved the safety basis addendum authorizing storage of gloveboxes removed from the Plutonium Facility in the CMR yard (see 11/15/2024 report).