

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 31, 2023

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** A. Boussouf and D. Gutowski, Resident Inspectors  
**SUBJECT:** Los Alamos Activity Report for the Week Ending March 31, 2023

**Staff Activity:** M. Bradisse, R. Eul, and B. Weathers were on site to review Triad's nuclear criticality safety program.

**Chemistry and Metallurgy Research Building (CMR):** This Wednesday, CMR personnel recognized that they failed to enter the appropriate limiting condition for operations (LCO) after they identified a degraded fire suppression sprinkler head during an annual surveillance of the safety-significant system the day before. The worker performing the surveillance notified operations and engineering personnel; however, the appropriate LCO was not entered, and this information did not go through the operability determination process until the following day. On Thursday, a fact-finding was held to discuss the incident. Meeting personnel identified several potential corrective actions including reviewing the associated work documents to ensure clarity and alignment with the facility technical safety requirements (TSRs), implementing more rigor in use-every-time procedures, and reviewing deficiencies identified during TSR surveillances daily.

**Plutonium Facility–Infrastructure:** Facility personnel continued recovery efforts from the HEPA filter cool down spray actuation (see 3/17/2023 report). Last Friday, workers began siphoning water from the flooded HEPA filter housing into one of the basement sumps. The following day, they added pumps to help speed up the process. Shortly thereafter, workers noticed that an adjoining sump began to overflow and paused work. Water sampling revealed contamination around the overflowed sump. On Monday, workers pumped down the overflowed sump and discovered a broken float. A recovery plan was implemented to clean and decontaminate the area which began Tuesday and continued through the week. On Wednesday, the HEPA filter housing draining activities resumed at a reduced flow rate and with additional personnel monitoring sump conditions: one stationed at receiving sump, one at the overflowed sump, and another on a rotational basis for the remaining facility sumps. Next week, facility personnel plan to commence HEPA filter replacement activities. Access to the impacted wing of the facility remains controlled by a standing order which specifies entry requirements (see 3/24/2023 report).

**Plutonium Facility–Operations:** Last week, Triad personnel performed a shot using the Isotope Fuels Impact Tester. During post-shot activities, the workers discovered contamination indicating a potential fuel clad breach. They followed the contingencies in their procedures and returned the equipment to a safe configuration. There was no detectable personnel contamination or any evidence of an uptake. Recovery activities to determine the condition of the fuel clad and restore the system are being planned under the standing order for infrequent or unusual work activities.

**Federal Oversight:** The NNSA Field Office held a qualifying oral board in criticality safety for a staff member. The candidate performed well. The Field Office brought in two federal criticality safety experts from other NNSA organizations to be members of the evaluation board. The Field Office currently has two personnel assigned to criticality safety oversight. The other individual completed their oral board in early February.