

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 9, 2023

**TO:** Katherine R. Herrera, Acting Technical Director  
**FROM:** A. Boussouf and D. Gutowski, Resident Inspectors  
**SUBJECT:** Los Alamos Activity Report for the Week Ending June 9, 2023

**Staff Activity:** Q. Boney attended a course on hazard analysis review sponsored by the National Training Center at the NNSA Field Office. A staff team held a remote meeting with Triad and NNSA Field Office personnel to discuss conclusions from the staff's review of Triad's atmospheric dispersion protocol that they developed to support modern safety bases compliant with DOE Standard 3009-2014, *Preparation of Nonreactor Nuclear Facility Documented Safety Analysis*.

**Area G–Work Planning and Control:** N3B and Central Characterization Project personnel are working to upgrade the high energy real-time radiography unit at Area G. Last Thursday, radiological control technicians reported concerns that subcontractor personnel had left the work area and Area G without having their tools surveyed out. There was no written requirement to survey tools, and the workers had not been in the area with radiological contamination from a historical spill. Further investigation of this concern identified a series of work planning weaknesses. The person in charge of the job should have been from N3B rather than the Central Characterization Project. The upgrade task was being performed using a generic maintenance radiological work permit. The subcontractor personnel did not meet the training requirements to work under said permit so at the pre-job briefing, the crew decided to work dismantlement of radiologically clean areas under the Facility Radiation Protection Requirements, the minimum basic radiological controls for entry into Area G, rather than under the radiological work permit as called out in the work documentation. This control change was not worked through standard practices and led to confusion on the radiological requirements for this portion of the job. The upgrade project is currently paused while facility personnel redevelop the work documentation for this task with appropriate radiological controls for the different tasks. N3B plans to perform a formal causal analysis on this event.

**Plutonium Facility–Criticality Safety:** Last Thursday, workers identified a container containing nuclear material that did not have an engineered spacer installed as required for the amount of material being moved. They recovered from the event, and the container is now compliant. This is the fifth event over the past two years where a spacer was missing when required. Facility management plan to evaluate these events for common causes to help prevent recurrence.

**Plutonium Facility–Glovebox Safety:** On Monday, workers completing a material breakout noticed a crack on a glovebox window. They exited the room under direction of a radiological control technician. There was no evidence of any airborne release or contamination spread; only the inner window of the double pane was cracked. The glovebox underwent an immediate operability analysis the day after the discovery, which determined it was operable as the crack does not impact the confinement function. The breakout activity is rather vigorous as it involves smashing a crucible with the pieces collected in a metal tray. Initial corrective actions include replacing the window, briefing new personnel on spatial awareness during breakouts, and having personnel from the glovebox and sharps program observe the next breakout activity.