

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 3, 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 February 3, 2023

**Area G–Stop Work:** Last week, N3B personnel were working to resume excavation of corrugated metal pipes, which has been paused since last September due to a heat stress incident (see 9/16/2022 report). A facility representative from the Environmental Management Field Office paused resumption of activities due to questions on training, ladder requirements, snow removal, and the excavation slope. N3B management later formally stopped work after determining that the existing slope of the excavation was steeper than the slope on the drawings. The stop work remains in place while N3B personnel evaluate whether the existing slope is adequate for the soil conditions.

**Plutonium Facility–Criticality Safety:** On Monday, facility workers discovered a non-compliance with the mass requirements from the criticality safety posting for a safe in a laboratory room. This was the same safe involved in a similar event last year (see 11/18/2022 report). The workers paused and reported the discovery. A material move the week before was not completed properly with all mass checks such that a second item placed into the storage location exceeded the mass limit. This was an analyzed upset condition, and criticality safety personnel determined the condition was safe and stable. Access to the area was restricted until personnel completed recovery actions to restore compliance with the mass limit. Processing of special nuclear material in this room is paused with the exception of runs in progress that were completed per procedure to a stable condition. Corrective actions from this event include: prioritizing an incomplete corrective action from the November event to match the accountability and criticality safety locations for the safe, performing an extent of condition evaluation to determine if there are other locations with similar error traps where the criticality safety location is defined differently than accountability locations, and adding this event into the formal causal analysis in progress related to previous events.

**Plutonium Facility–Infrastructure:** Facility personnel are working on completing the installation of the new Facility Control System (FCS) (see 1/6/2023 report). Two weeks ago, facility personnel cut over portions of the new system to uninterruptible power supply power distribution panels. A delay due to issues with wire tracing left the FCS out of service for longer than anticipated, which delayed restoration of the facility to normal operations mode following the weekend work. This weekend, there will be another FCS outage to perform similar work. Facility personnel have taken photographs of wiring to alleviate similar wire tracing confusion during the upcoming cutover. A two-week outage is planned for the end of March to support the transition to the new FCS.

**Onsite Transportation:** On Monday, Triad provided a revised response to the NNSA Field Office regarding proposed compensatory measures to increase the safety of onsite transportation of nuclear materials while DOE reevaluates its approach to developing transportation safety documents (see 12/16/2022 report). The new response commits to implement a series of compensatory measures for high material-at-risk (MAR) onsite transfers of transuranic waste within sixty days. The response also states that non high MAR transfers will use existing controls, and there will be no high MAR transfers that are not transuranic waste until the transportation safety document is updated. A key compensatory measure is that the limit for high MAR transfers is dropping to 8.8 kg plutonium-239 equivalent from 20 kg plutonium-239 equivalent.