

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 19, 2024

**TO:** Katherine R. Herrera, Acting Technical Director  
**FROM:** D. Gutowski, Resident Inspector  
**SUBJECT:** Los Alamos Activity Report for the Week Ending January 19, 2024

**Staff Activity:** The Board's Executive Director of Operations, M. Buhler, accompanied by staff member P. Migliorini, was on site Tuesday and Wednesday for a familiarization visit. The visit started at the Chemistry and Metallurgy Research Building where Triad personnel led her through Wings 3, 5, and 9 while discussing current missions and risk reduction efforts. Senior leadership from the Environmental Management field office and N3B then led a tour of Area G which primarily covered the corrugated metal pipe excavation site and cutting activities in Dome 375. They also discussed organizational interfaces in the transuranic waste mission and the recent progress involving N3B training issues. Next was a visit to Triad's RANT Shipping Facility where Triad and N3B personnel discussed waste shipments and how they share the facility's capabilities. On Wednesday, Ms. Buhler went to Technical Area 55. Triad personnel discussed safe glovebox operations and training for the growing workforce in a cold lab. An exterior walk around the Plutonium Facility pointed out key safety systems such as fire pumps, instrument air, and the uninterruptible power supply. In the Plutonium Facility, the tour included entries into rooms associated with pit production, an overview of the heat source and plutonium disposition missions, and a visit to the basement focused on safety systems like the ventilation system. Ms. Buhler also met with both the NNSA and Environmental Management field office managers.

**Plutonium Facility–Safety Basis:** On Tuesday, the NNSA Field Office provided Triad with formal comments on a safety basis submittal that proposed limitations on fires inside certain gloveboxes to avoid the scenario where an internal glovebox fire actuates the fire suppression system, and damage to the glovebox allows water ingress and potential moderation of fissile material. This is a long-standing issue (see 3/21/2014 report) as many gloveboxes do not have criticality safety evaluations that account for flooding of the glovebox. These boxes must either be analyzed to show they are safe if moderated by flooding or flooding must be incredible.

**Seismic Hazard Analysis:** On Thursday, Triad personnel briefed NNSA Field Office and DOE headquarters subject matter experts on progress collecting data to support the new site probabilistic seismic hazard analysis.