

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 5, 2024

**TO:** Timothy J. Dwyer, Technical Director  
**FROM:** D. Gutowski, Resident Inspector  
**SUBJECT:** Los Alamos Activity Report for the Week Ending April 5, 2024

**Area G–Emergency Response:** On Wednesday, workers excavating corrugated metal pipes (CMP) observed a metal object in the soil surrounded by a yellow substance of unknown provenance. They took initial rad readings which showed alpha activity, then paused, informed the operations center, and did a controlled exit from the excavation area while placing a sturdy plastic bag normally used for covering excavated CMPs over the material for contamination control. Operations center personnel later entered the appropriate abnormal operating procedure. Since the material was unknown, they subsequently entered an emergency response procedure and contacted Triad’s hazardous material (HAZMAT) team. The HAZMAT team responded and concluded the material was uranium. Further isotopic analysis showed that it was depleted uranium. HAZMAT turned the excavation area back over to N3B to plan recovery. No workers were contaminated or injured during the discovery and response. The area is still covered with a plastic bag which has been weighted down to prepare for predicted high winds while further recovery activities such as additional characterization, removal, and disposal of the material are planned. Longer term, N3B management plans to develop a procedure for anomalous discoveries such as this. The procedure will help ensure timely response and would include notifications to, and input from, all relevant organizations, such as criticality safety and nuclear safety.

**Plutonium Facility–Emergency Response:** On Wednesday, during the night shift, a glovebox fire alarm was inadvertently actuated in a laboratory room undergoing decontamination and decommissioning activities. Operations center personnel entered the alarm/emergency response instruction. The workers from the room informed the operations center that it was an inadvertent alarm, and this was communicated to the fire department. Due to individuals communicating that it was a false alarm, many workers were not following operations center instruction or alarm response protocols which require moving to the other half of the building on the other side of a fire barrier. The operations center paused all activities in the Plutonium Facility due to concerns over the lack of response.

**Nuclear Criticality Safety:** On Thursday, Triad personnel briefed the NNSA Field Office Manager on nuclear criticality safety improvements. They covered the remaining items in the criticality safety evaluation backlog (see 1/21/2022 report). There are 24 remaining locations in the backlog with most having a path forward to resolution within the next six months. These backlog items are largely related to the long-standing Evaluation of the Safety of the Situation related to the potential for flooding gloveboxes with firewater (see 6/6/2014 report). Other topics of discussion included staffing of the Nuclear Criticality Safety Division and recent activities of the Nuclear Criticality Safety Committee.

**Area G–Safety Basis:** Last week, N3B hosted personnel from the office of DOE EM’s Chief of Nuclear Safety to discuss finalizing technical safety requirements for the DOE Standard 3009-2014 compliant safety basis under development for Area G (see 12/8/2023 report).