DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 14, 2023

TO: Timothy J. Dwyer, Acting Technical DirectorFROM: A. Boussouf and D. Gutowski, Resident InspectorsSUBJECT: Los Alamos Activity Report for the Week Ending July 14, 2023

Staff Activity: Headquarters staff members A. Hutain, P. Natividad, and E. Tetteh were on-site to observe the annual emergency preparedness exercise. Hanford resident inspector P. Meyer was on-site for the exercise and to compare resident inspector oversight approaches.

Emergency Management: On Wednesday, Triad conducted the annual full-participation evaluated emergency management exercise, coined TRIT-EX. The scenario was a process upset at the Weapons Engineering Tritium Facility leading to a fire and glovebox breach, releasing both tritium and plutonium. One worker near the event suffered burns and required transport to the hospital and another worker was transported to occupational medicine for behavioral health treatment. Exercise play emergency response actions included: fire department response, shelter-in-place, accountability, and monitoring for airborne radiological contamination. Triad and NNSA personnel are evaluating the exercise performance.

Plutonium Facility–Fire Protection: Last Thursday, the resident inspectors were observing conditions in the Plutonium Facility when one noted what appeared to be paint coating a concealed sprinkler cover plate. Foreign compounds applied to sprinkler components have the potential to impair their operability. They reported this observation to facility management who promptly sent personnel to evaluate the situation. Engineering personnel determined that the foreign material was a drywall compound and found the compound on several other sprinkler head covers. Management paused painting and drywall activities in the facility. The sprinklers are components of the safety-class fire suppression system. Operability evaluations concluded that the impacted sprinkler heads are operable but nonconforming. Facility personnel have spare covers and are planning to replace the impacted units. The pause on drywall and painting activities was lifted on Monday with additional restrictions on working too close to fire system components while physical solutions are under evaluation.

On Thursday, a resident inspector observed oxygen cylinders stored alongside fuel-gas cylinders in the compressed gas cylinder staging area outside of the Plutonium Facility. The storage array did not meet the minimum separation requirements between oxygen and fuel gases in accordance with National Fire Protection Association standards and Occupational Safety and Health Administration regulations. This is a recurring noncompliance that the resident inspectors have observed and reported to facility management (see 12/9/2022 report).

Waste Characterization, Reduction, and Repackaging Facility (WCRRF)–Safety Basis: On Monday, Triad transmitted to the NNSA Field Office for approval a revised preliminary documented safety analysis (PDSA) to support resumption of operations as a hazard category 3 facility. NNSA did not approve the initial revision of the PDSA and this resubmittal is intended to resolve their review comments.