DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 4, 2023

TO: Timothy J. Dwyer, Acting Technical Director
FROM: A. Boussouf and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for the Week Ending August 4, 2023

Staff Activity: H. Dacayanan was on site to attend the project review discussed below.

Plutonium Facility–Infrastructure: NNSA personnel were on site to perform a Technical Independent Project Review for the Los Alamos Plutonium Pit Production Project (see 5/6/2022). The team reviewed such nuclear safety topics as safety basis, nuclear criticality safety, and fire protection as well as scheduling and project management. The team is finalizing its conclusions and will brief them to NNSA and Triad management.

Plutonium Facility–Safety Basis: On Saturday morning, Plutonium Facility personnel exited the limiting condition for operations and returned to normal operations mode following resolution of the software version control issue for material at risk tracking on Friday evening (see 7/28/2023 report). Triad personnel believe the version error most likely came about due to the high workload of personnel who must address frequent software version changes. Another potential error contributor was the interface between testing and development organizations. Corrective actions are in progress to prevent further errors of this type.

The NNSA Field Office transmitted to Triad their comments from their review on the leak path factor and atmospheric dispersion methodology (see 5/5/2023 report). The revised methodology couples leak path factor and atmospheric dispersion to support the modern safety basis under development for the Plutonium Facility. The Field Office requested Triad submit a revised methodology incorporating all changes based on their comments within 45 days.

Plutonium Facility–Fire Protection: On Wednesday, facility management performed a walkdown to assess storage of compressed gas cylinders near the Plutonium Facility. This was part of an extent of condition review of cylinder storage at related facilities following issues identified with code compliance during the federal operational readiness review at PF-400. It also served to address frequent non-compliances with cylinder storage adjacent to the Plutonium Facility (see 7/14/2023, 12/9/2022 reports). During the walkdown, management identified several non-compliances including comingling of oxidizers and flammables, inconsistent labeling practices, and unsecured cylinders.

Emergency Management: Two weeks ago, there was a telephone service provider outage that affected most of New Mexico and impacted voice communications for Triad facilities laboratory-wide. The error originated at the provider's substation where telephone routing was corrupted, affecting landline telephone calls originating from the laboratory for approximately one and a half hours. As the telephone lines at the Emergency Operations Support Center (EOSC) were non-functional, site workers were notified to call 911 in the event of an emergency. Concurrent with this outage, the laboratory also experienced an unrelated network outage such that e-mail and messaging were not available. As a result, the EOSC relied on radio communications and cellular networks. Efforts to improve redundancy have been in progress since previous events of this type. These include providing backup contact information to Los Alamos County officials and facility operations center personnel as well as issuing and training personnel on the use of backup communications methods.