DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 22, 2021

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director

FROM: D. Gutowski, Resident Inspector

SUBJECT: Los Alamos Activity Report for Week Ending October 22, 2021

Plutonium Facility: On Tuesday, Triad personnel declared a violation of the Technical Safety Requirements (TSR) for the Plutonium Facility due to a breach of a confinement boundary without entering the appropriate limiting condition for operation (LCO). Workers have been installing pressure and velocity measurement instruments in the ventilation system to collect data for future upgrades. The installation involves opening ports in ductwork which breaches the credited confinement boundary. They performed several of these installations starting last week without entering the LCO before a review of logs identified the issue. The controlling work document for the installation notes it breaches a confinement boundary and has a hold point to inform the operations center of the potential for TSR impact although it does not explicitly state that the appropriate LCO must be entered prior to breaching the system. Miscommunication between operations center personnel and the crew performing the work resulted in a failure to recognize the need for LCO entry. Following discovery of the error, facility personnel measured differential pressures and verified the confinement boundary was intact. Facility management is evaluating their work control processes to find opportunities for improved work package review and release to avoid this type of error in the future.

Last week, following decontamination efforts, facility workers identified a steady drip of liquid from the wet vacuum system involved in the July overflow event (see 7/23/2021 report). The system resides in a room posted as a high contamination area/airborne radioactivity area. The exact source of the liquid is not currently known, although it was postulated that the source is related to the overflow event and may be holdup in the system. Swipes of the area indicate that it is highly contaminated consistent with other sampling related to the overflow event. The impacts of this liquid of questionable provenance will be assessed in the continued development of the Evaluation of the Safety of the Situation and upcoming modifications to the system (see 9/24/2021 report).

Area G: On Wednesday, the Implementation Verification Review team for four recently approved Justifications for Continued Operations (JCO) briefed their results to Environmental Management and N3B personnel (see 10/3/2021 report). They identified eleven preimplementation findings, two post-implementation findings, nine observations, and two noteworthy practices. Several of the findings involve management of hydraulic oil as a potentially combustible liquid. One noteworthy practice involved the use of flashcards to train the workforce on the numerous new controls. The resident inspect concurs that this was a noteworthy practice as he frequently observed that most workers had their cards on hand and frequently reviewed them or quizzed each other.

Emergency Management: On Tuesday, the NNSA Field Office sponsored a wildfire workshop. Field Office, Triad, and Los Alamos Fire Department personnel discussed impacts and lessons learned from previous major wildfires impacting the laboratory and surrounding communities. They also described current prevention and preparedness activities including fuel mitigation.