

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 9, 2020

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director
FROM: J.W. Plaue and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending October 9, 2020

DNFSB Staff Activity: On Wednesday, a staff team commenced a series of remote interactions with Triad and NNSA personnel as part of a review of credited safety systems. This week, they discussed the Oxygen Monitoring System and Tritium Gas Handling System at the Weapons Engineering Tritium Facility.

Plutonium Facility–Conduct of Operations: Last month, while attempting to move items into a safe, Triad personnel noted that the criticality safety posting prohibited the type of containers they were using. They also noted that containers currently inside the safe were non-compliant. The posting for this safe had been updated in August with restrictions associated with container geometry and container type. The containers in the safe were compliant with the geometry, but not the type. During the fissile material operations review to change the posting in August, Triad personnel did not identify that the contents of the safe were non-compliant with the new posting. Criticality safety personnel determined the safe is currently in a safe and stable configuration. The safe is posted out-of-service pending completion of a recovery plan.

Nuclear Criticality Safety: Last Wednesday, Triad’s institutional Nuclear Criticality Safety Committee issued to the LANL Director its report on the status and quality of the nuclear criticality safety program for fiscal year 2020. They concluded that the program needs improvement, but is on a positive trajectory and is making improvements at a satisfactory rate. On staffing, the report noted that they still do not have sufficient staff for institutional criticality safety needs; however, they have been making progress with staffing more than doubling since 2015. On the backlog of criticality safety evaluation documents, the report notes that progress is exceeding expectations with the backlog now expected to be eliminated within 18 months. The report also notes the need to sustain disciplined formality of operations especially for construction operations supporting the 30 pits per year mission.

Plutonium Facility–Contaminated Equipment Removal: Last week, Triad personnel removed a large glovebox weighing nearly four tons from the facility. This week, they held a post-job review for the activity in order to improve efficiency for future large equipment removals. The glovebox is currently packaged and staged on an outdoor waste storage pad within Technical Area 55. Triad is developing a strategy to disposition this oversize waste stream, which is expected to increase in the next few years with the planned removal of about 60 gloveboxes alone to support pit manufacturing. There is limited space on the pads for staging of future removed gloveboxes and oversize equipment. Previously, oversize containers were relocated to Area G to free up space on the pads (see 9/17/2017 report); however, neither Triad nor N3B currently possess the capability to size reduce or decontaminate oversized equipment.

Area G: This month, N3B received allocations for shipments to the Waste Isolation Pilot Plant. Using mobile loading, they successfully completed three shipments last week, two this week, and plan two next week. Additionally, they are targeting the week of October 19th to work with Triad and debut the use of the RANT Shipping Facility for two N3B loads.