

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 29, 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 May 29, 2020

COVID-19 Impacts: The nuclear facilities continue with routine entry into their normal operation modes as defined in their safety bases to support programmatic work. Triad personnel continue to incrementally increase onsite programmatic work at the Plutonium Facility, the Chemistry and Metallurgy Research building, and the Weapons Engineering Tritium Facility. They also continued transuranic waste characterization, movement, and shipping activities.

Flanged Tritium Waste Containers (FTWC): On Wednesday, Triad personnel performed a practice evolution in Technical Area 49 for venting of the FTWCs stored at Area G. Personnel worked through the entire procedure using a combination of mockups and actual equipment. The major activities include: installation of the vent rig, leak testing, initial venting, additional venting as needed, and movement of the FTWC from the shed to a truck using a remote-controlled skid-steer conveyance. They identified the need for changes to the venting procedure and other improvements to the process.

Plutonium Facility–Safety Basis: Last Friday, facility management declared a potential inadequacy of the safety analysis after analysts completed their review of the trailer loaded with combustibles parked in proximity to transuranic waste containers (see 5/15/2020 report). Safety analysts concluded that the as-found configuration was inaccurately reflected in the assumptions associated with the applicable hazard analysis event, which is a refueling accident. In particular, they noted that the presence of the trailer challenged the assumption in the event that the historically low amount of ordinary combustibles present in the location meant that the refueling accident bounds the frequency and consequences of an ordinary combustible fire. We note that there are more fundamental problems with the original event logic, as the controls for a liquid pool fire are different than an ordinary combustible fire. As a compensatory action, management had the trailer relocated further from the containers shortly after the question was raised.

Engineering: Last Friday, Triad management sent the NNSA Field Office a letter requesting review and approval of its ten year assessment plan for natural phenomena hazards (NPH). DOE Order 420.1 C, *Facility Safety*, requires each site to review its NPH assessment every ten years for any significant changes in data, criteria, and assessment methods that would warrant updates. Triad noted the predecessor contractor had completed such an assessment in 2014, but could find no evidence that the field office approved the plan as required. The 2014 plan notes that the primary NPH in need of an update based on the last analyses are seismic (2007); volcanic (2004); wind and wind borne missiles (2004); flood, precipitation, snow and ice cover (2004); and landslides (2004). The letter notes that subsequent analyses for wind and precipitation-related hazards were completed in 2015. However, the letter does not provide an update to the schedule for completing the remainder of the analyses—the schedule in the 2014 plan was incomplete for some analyses (e.g., volcanic) or has deadlines that have passed (e.g., seismic in September 2019). The letter commits to submitting the next ten year assessment plan by 2024. The NNSA Field Office has requested headquarters support to review the plan.