

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 20, 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 November 20, 2020

DNFSB Staff Activity: The staff team performing a review of credited safety systems held several follow-up discussions with Triad and NNSA Field Office personnel to resolve outstanding questions from the initial interactions. On Wednesday, the Technical Director remotely briefed the Northern New Mexico Citizens' Advisory Board on DNFSB activities related to the Environmental Management mission at Los Alamos.

Weapons Engineering Tritium Facility: On Monday, following evaluation of questions raised during the Board's staff review of safety systems, Triad personnel declared a potential inadequacy of the safety analysis (PISA) for the oxygen monitoring system. The alarm setpoint for maximum oxygen concentration may be non-conservative as compared with the most current version of National Fire Protection Association 69, *Standard on Explosion Prevention Systems*. While this is being further evaluated, facility management believes they are in a safe configuration given they check for leaks and initiate purges at oxygen concentrations well below the alarm setpoint.

COVID-19 Impacts: On Wednesday, operations within Area G were impacted by a presumptive case and a number of associated close contacts. Currently, Area G is in a safe configuration with transuranic waste operations suspended while key staff are self-isolating. The impacted operations include the emergency drill and a field evolution for the contractor readiness assessment of glovebag and drill and drain operations (see 11/13/2020 report). N3B and Triad management continue to work the arrangements necessary for N3B employees to participate in Triad's onsite testing program, which has been useful in the timely clearance of presumptive cases (see 10/23/2020 report).

Area G–Safety Basis: Last Friday, the safety basis approval authority for the EM Field Office approved the revised evaluation of the safety of the situation (ESS) for the PISA related to fuel pool fire depth (see 7/17/2020 report). N3B's original ESS submittal was rejected in September on the basis of insufficient detail on operational restrictions (see 9/11/2020 report). In the revised ESS, N3B proposes maintaining the existing compensatory measure that reduces the amount of liquid fuel allowed in defined areas. They will provide a more detailed thermal analysis in a Justification for Continued Operations planned to be submitted in February 2021.

Safety Basis: Last week, Triad safety basis management sent the NNSA Field Office for review and approval a revision to the institutional procedure for the Unreviewed Safety Question (USQ) process. This revision addresses previous comments from the field office (see 5/8/2020 report). Notably, this revision translates the DOE guidance of "hours to days, but not weeks" related to processing new information to declare a PISA to 9 working days. This represents a tightening from the current expectation of 15 days. Triad similarly tightened the expectations for PISA to USQ to 11 working days (from 15) and USQ to ESS to 25 working days (from 30). The lack of clear requirements for the PISA process was the subject of a letter from the Board dated July 10, 2020.