

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 23, 2021

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director
FROM: J.W. Plaue and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending April 23, 2021

Safety Basis: In March, N3B declared a potential inadequacy of the safety analysis (PISA) at Area G because the safety basis had dismissed helicopter crashes as insignificant without a site-specific analysis (see 3/26/2021 report). In early April, N3B concluded the PISA constituted a positive unreviewed safety question (USQ) based on affirmative answers to four of the seven evaluation questions. Triad facilities use a variety of approaches to analyze helicopter crashes. The RANT Shipping Facility, which is adjacent to Area G, also does not evaluate helicopter crashes in the calculations supporting its safety basis. After receiving information from N3B about its PISA, Triad did not enter its New Information process to formally evaluate whether any of its facilities warranted entry into the PISA process for this issue. On Tuesday, Triad safety basis personnel briefed NNSA Field Office personnel on their arguments for not formally evaluating this matter. The field office requested Triad provide a written explanation of its analysis.

On a related note, last month the Facility Representative for the EM Field Office issued N3B a finding against DOE guidance associated with the PISA process. The finding cited: N3B did not make multiple PISA determinations in the expected timeframe of “hours to days;” and noted that documentation associated with multiple PISA determinations included more analysis than the expected “go/no-go” for this step in the process. We note that Triad safety basis personnel have a demonstrated record of these same practices.

Plutonium Facility–Construction Safety: Triad management paused backshift construction activities after two injuries last week: (1) a worker suffered a broken hand when a wind gust closed an unsecured transportainer door that smashed into the hand and (2) a worker received lacerations to the hand from an inadvertent actuation of a saw during practice downsizing operations in a glovebag in a non-radiological area. Fact-finding personnel discussed several concerns including: improper emergency notifications and associated conflicting direction on notifications; the need for additional onsite support personnel during backshift operations; the lack of drills and exercises to ensure readiness of the backshift for emergency events; and consideration of abnormal operating procedures to protect personnel working outside of the facility during high-wind conditions. Triad management is reviewing and individually releasing work packages for the backshift. We note that neither the NNSA Field Office nor the local NNSA Acquisition and Project Management Office have routine federal presence on the backshift.

Emergency Management: On Monday, the NNSA Field Office directed Triad to create a plan of action within 45 days to address the recurrence of improper emergency notifications. To support its argument, the field office cited seven instances of improper notifications since February 2020. The two construction safety injuries discussed above were not included in the tally.

Area G: On Wednesday, EM rejected N3B’s justification for continued operations associated with flammable gas sampling (see 1/8/2021 report). The rejection letter from the field office commits to provide detailed written comments to N3B no later than May 6, 2021. On Thursday, EM Headquarters and Field Office personnel discussed with N3B their concerns with the submittal. Flammable gas sampling operations have been suspended since January 2020.