

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 4, 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 December 4, 2020

Radiological Laboratory Utility Office Building (RLUOB): Last Monday, Triad submitted a safety basis implementation plan to the NNSA Field Office describing their planned approach to implementing the new safety basis for the upgrade of RLUOB to a hazard category 3 nuclear facility referred to as PF-400. The process is anticipated to include a major implementation verification review planned for April 2021. Following that review, facility personnel will implement technical safety requirements in two phases. The first, anticipated for July 2021, will occur prior to a management self-assessment, and includes all controls with the exception of the new, hazard category 3 material-at-risk limit. This final control will not be implemented until the facility has been approved as a hazard category 3 nuclear facility which is anticipated for March 2022.

Area G–Safety Basis: On Wednesday, N3B transmitted to the EM Field Office the results of their extent of condition review for unsupported assumptions in the Area G safety basis and supporting calculations associated with design basis accidents involving fire. The other accidents will be completed in March 2021. The field office directed this review following the discovery of an error in a fuel pool fire calculation (see 7/17/2020 report). The extent of condition for the fire accidents found numerous weaknesses and recommended that new control selection be performed to determine correct mitigated frequencies and consequences for these events. N3B personnel have also entered their initial confirmatory process for many issues identified during the extent of condition to determine if these errors constitute potential inadequacies of the safety analysis.

Plutonium Facility–Conduct of Operations: On Monday, three workers entered a room that was “red lit” to restrict access due to a continuous air monitor alarm that had occurred on the prior Friday. Fortunately, radiological control technicians had indications that the alarm had been false, and there was no evidence of an uptake. On Wednesday, facility personnel convened a fact-finding to learn from this near-miss. Fact-finding participants noted that the permanent red light was inoperable, a portable red light had depleted its battery, and a barrier tape had been incorrectly installed across the door frame. Accordingly, the workers indicated they had not realized they were crossing a barrier. Participants also noted that the workers had entered this room from a side door. All such side doors in the facility display a posting directing workers to consult the primary door posting prior to entry. In this case, the workers did not adhere to the posting and consult the primary door, which would have alerted them to the red lit status of the room. Triad management determined that corrective actions were necessary to reinforce expectations regarding door postings, review preventive maintenance for the lights, and explore the use of long-life light bulbs.

Transuranic Waste Management: On Tuesday, Triad safety basis personnel entered their New Information process concerning a potential for chemical incompatibility hazards in waste containers. They entered in response to information contained in DNFSB/TECH-46, *Potential Energetic Chemical Reactions Involving Transuranic Waste at LANL*, issued on September 24, 2020.