

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 7, 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 May 7, 2021

DNFSB Staff Activity: Next Monday, J.W. Plaue will temporarily cease resident inspector duties to begin a detail as the acting Associate Technical Director for the newly formed Nuclear Facility Infrastructure and Projects group.

Weapons Engineering Tritium Facility: Last Friday, facility personnel noted that the closure mechanism for a fire door failed. This door is part of the facility structure, a safety class design feature. Engineering personnel evaluated the door and initially concluded it could still serve its safety function while secured with rubber door stops. Further evaluation concluded that the preventive maintenance performed last year to support the in-service inspection of the door was improperly completed. Facility personnel have declared a violation of the technical safety requirements and are planning to repair or replace the closure mechanism. Nuclear safety personnel have entered the New Information process to determine whether the existing configuration of the door provides the same fire rating as its tested configuration.

Emergency Management: On Wednesday, a team from the DOE Office of Enterprise Assessments in-briefed its upcoming assessment of the effectiveness of Triad and the NNSA Field Office in managing and maintaining emergency preparedness capability. The team plans to complete its primary interactions with LANL by the end of June with a final report expected in August.

Infrastructure: On Monday, Triad safety basis management transmitted to the NNSA Field Office for approval a major modification determination performed in support of a proposed project to replace an inoperable ventilation system exhaust fan in an inactive wing of the Chemistry and Metallurgy Research building with a externally-placed modular unit. This project will also serve as a demonstration of a key approach to transitioning other wings to an improved state of system reliability while awaiting final disposition. Of the six criteria provided in DOE-STD-1189-2016 for major modification determinations, Triad personnel concluded that the project tripped a single criterion associated with a hazard that is not previously evaluated in the safety basis. This hazard was associated with ventilation system maintenance performed outside. Triad personnel plan to develop new hazard scenarios for the ventilation system but expect they will not derive any new, or modifications to existing, credited safety systems.

Area G: N3B personnel commenced an Implementation Verification Review to validate adequate implementation of the compensatory measures documented in the consolidated standing order addressing 21 potential inadequacies of the safety analysis for the Area G safety basis (see 3/26/2021 report). Part of the review included a walkdown of storage areas to validate that pipe overpack containers with greater than 80 plutonium-239 equivalent curies and drums with the potential for energetic chemical reactions, as discussed in DNFSB/TECH-46, were segregated in their approved locations.