

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 14, 2022

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director
FROM: D. Gutowski and J. Plaue, Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending January 14, 2022

DNFSB Staff Activity: J. Plaue completed his headquarters assignment and returned to regularly assigned duties as a Resident Inspector.

Plutonium Facility–Glovebox Safety: Last Friday, an airborne release of radioactive material occurred in a laboratory room while workers were executing a repack, consolidate, and discard activity. Specifically, a worker finished sizing a legacy container of nuclear material for a new overpack, withdrew their arms from the glovebox, and detected contamination during standard monitoring. Moments later, continuous air monitors sounded, and all six workers evacuated the room according to procedure. Radiological control technicians responded and identified contamination on areas of the personal protective equipment, face, and heads of two workers—they were subsequently successfully decontaminated. However, nasal swabs indicated potential radiological intakes of one of the contaminated workers, as well as two other workers who were in the room. All six workers were placed on special bioassay. Yesterday, the NNSA Cognizant Secretarial Officer for Safety appointed a formal Accident Investigation Board in accordance with DOE Order 225.1b, *Accident Investigations*. This decision was based on the NNSA’s determination that the potential exposure levels exceed the investigation criterion of a confirmed monitoring result indicating an intake of two or more times the annual limit on intake. Because bioassay results are not yet available, the confirmed monitoring result was based on the concentrations of airborne radioactive material detected by air monitoring equipment.

Plutonium Facility–Safety Basis: The NNSA Field Office formally responded to Triad’s submittal of a combined justification for continued operations/evaluation of the safety of the situation pertaining to the potential inadequacy of the safety analysis resulting from the July overflow event (see 11/19/2021 report). NNSA directed that Triad resubmit the document after addressing numerous review comments.

Area G: On Monday, a five-member contractor team commenced a readiness assessment for resumption of drill and drain and glovebag operations in the Dome 231 Permacon. These activities underwent a contractor readiness assessment in late 2020; however, safety basis issues at Area G curtailed nuclear operations prior to the completion of the federal readiness assessment. As a result, the Environmental Management Field Office directed N3B to perform a new readiness assessment scoped to account for the previous review prior to an upcoming federal assessment. This week’s review included cold performance demonstrations of both drill and drain operations and glovebag operations, which included two operational drills and one emergency drill. On Thursday, DOE Environmental Management personnel noted that there was a discrepancy between the actual review team leader and the leader designated in the approved plan of action. The field office and N3B are adjudicating the situation.