

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 6, 2024

TO: Timothy J. Dwyer, Technical Director
FROM: E. Freeman and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for the Week Ending September 6, 2024

Plutonium Facility–Safety Basis: On Thursday, personnel from the NNSA Office of Environment, Safety, and Health walked down areas in the Plutonium Facility associated with the receipt and repackaging of large quantities of heat source plutonium from Idaho National Laboratory (see 4/26/2024 report). They discussed the planned activity with involved workers and management with an emphasis on those portions of the activity where mitigated dose consequences are estimated to exceed the evaluation guideline for the public. The NNSA personnel had recently visited Idaho National Laboratory to understand the current condition of this material and efforts to repackage and ship it to Los Alamos National Laboratory. They also discussed with the resident inspector additional details on packaging configuration that provided them with more confidence in the safety of this activity that supported their acceptance of the higher risk to the public as well as NNSA’s expectations for additional performance demonstrations prior to authorizing work (see 7/26/2024 report).

Also on Thursday, Triad submitted to the NNSA Field Office a request to close the Evaluation of the Safety of the Situation (ESS) currently in place that restricts introduction of the heat source material from Idaho into any glovebox lines. The closure request states that the approval and implementation of the revised safety basis addendum, which were the conditions to close the ESS, have been completed.

Legacy Facilities: On Wednesday, a team largely composed of offsite personnel affiliated with N3B’s corporate parents began an Independent Verification Review (IVR) to assess implementation of the new safety basis for Technical Area 21 building 0257 (21-257) and the associated industrial waste lines (IWLs). Previous characterization activities identified waste material at the location indicating the area may need to be treated as a Hazard Category 2 nuclear facility. In 2023, N3B submitted a safety basis for 21-257 and the associated IWLs reflecting the potential presence of Hazard Category 2 quantities of materials. The Environmental Management Field Office (EM-LA) approved this safety basis in February (see 2/23/2024 report). Interviews by the review team members with relevant N3B staff have already begun. On Thursday, the team observed a drill simulating a bee-induced vehicle accident in the area impacting a waste drum and resulting in a worker injury. The activities by the review team over the next two weeks will focus on the limited scope of work expected in Technical Area 21 given that N3B has determined that the work at 21-257 and the IWLs will be limited to surveillance and maintenance activities with no excavation due to a reprioritization of site activities. EM-LA personnel are simultaneously assessing the IVR to ensure that the activities accurately assess the status of implementation of the new safety basis.

Safety Basis: Last Friday, Triad submitted to the NNSA Field Office for approval a major revision to their Unreviewed Safety Issue process used at accelerator facilities. This revision is intended to bring Triad’s process into compliance with DOE Order 420.2D *Safety of Accelerators*.