

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 25, 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 September 25, 2020

Area G–Safety Basis: On Monday, N3B personnel determined that a potential inadequacy of the safety analysis exists for an as-found condition where the radioactivity values for some sealed sources are incorrectly listed in the evaluation of the safety of the situation (ESS) for fire analysis of sealed sources. N3B personnel discovered the discrepancy while performing an extra check of the source values against data in the waste management tracking software system prior to moving sources into Area G. An additional validation against manufacturer’s data concluded that the error resided in the ESS values. The sources in question have not been in Area G since 2015. Transfers of sources listed in the ESS are currently paused and an extent of condition is in progress. This ESS was originally developed in October 2017 prior to N3B assuming control of Area G. N3B adopted the document as-is and performed implementation reviews following contract transition.

Plutonium Facility–Glovebox Safety: On Wednesday, a glovebox glove failed in a manner similar to a July event where the glove and support ring separated and moved into the interior of the box (see 7/24/2020 report). The event occurred in the same box, with the same type of oval gloveport, and the same worker. A thinner glove was in place this time, and the separation occurred when the worker was reaching to sweep up materials rather than upon entry of the gloves. The response to the breach went according to procedure. There were no airborne radioactivity alarms, and while the worker’s personal protective equipment was contaminated, there was no skin contamination. Radiological control technicians detected a small amount of contamination on the floor directly under the breached gloveport which was immediately cleaned up. Following the July event, testing revealed that the determining factor to fail the oval gloves appears to be force on the glove at an angle, versus straight into the box. Plutonium Facility management paused all operations using this brand of oval gloveport pending additional evaluation.

Plutonium Facility–Readiness: Last month, Triad personnel completed an extent-of-condition review regarding proper screening of new or restarted activities for compliance with DOE Order 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*. They performed the review after identifying a deficiency that permitted activities that screened below the formal readiness review level to proceed without a quality review performed by the institutional readiness program manager. The review examined all screened-out activities since October 1, 2018, and identified 8 activities that will be forwarded for quality review. They also identified 21 activities that are already operational and validated they did not meet the threshold in DOE Order 425.1D. To prevent recurrence, Triad personnel are revising command media at the institutional and facility level.

Plutonium Facility–Operations: Triad personnel continue to increase backshift operations associated with the removal of contaminated systems and new construction activities (see 6/5/2020 report). On Monday, the resident inspectors observed a recently instituted turnover walk-down intended to support coordination and operational awareness between shifts. Of note, the NNSA Field Office has not yet established oversight coverage for the backshift due to staffing shortages.