

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 26, 2019

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director
FROM: J.W. Plaeue and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending April 26, 2019

Nuclear Criticality Safety: Last week, Triad management sent the NNSA Field Office their plan to reduce the backlog of criticality safety evaluations. The plan notes that 211 of the 420 fissionable material operations at the laboratory currently have evaluations with compliance issues. After accounting for other needs, they developed a prioritized listing of 236 evaluations and plan to complete 98 of them this fiscal year. While the plan does not specify an overall completion date, Triad management is currently estimating completion in 2023. The plan discusses strategies to reduce workload including: eliminating NNSA Field Office approvals for evaluations produced to remove safety basis controls related to glovebox flooding; increasing emphasis on the identification of engineered controls; utilizing corporate reach-back to support development of operational requirements documents; developing a map of the Plutonium Facility indicating criticality safety limits in each location for use in planning material movements; and increasing use of standardized limit sets. The NNSA Field Office is reviewing the plan.

Chemistry and Metallurgy Research Building–Conduct of Operations: On Monday, Triad management released the majority of Chemistry Division operations from their pause following safety management program validations and walkthroughs (see 3/15/2019 report). Uranium operations and staging and storage activities remain paused. Formal causal analyses for the events that led to the pause are in progress.

Transuranic Waste Management: Senior leadership from Triad, N3B, and their field office counterparts recently met with the Carlsbad Field Office to strengthen the waste management plans for the laboratory. They identified a number of opportunities to improve integration, enhance shipping capability, and maximize risk reduction across the laboratory by optimizing payloads using NNSA and EM waste inventories. They plan joint communications to permeate this vision to their respective workforces and dissolve misconceptions. This week, N3B executed a successful mobile loading shipment. Last week, Triad successfully executed their second shipment from RANT.

Area G: Last week, N3B personnel restored all remaining safety-class vehicle barriers to operability and lifted the shift order on vehicle restrictions (see 11/2/2018 report).

Plutonium Facility–Conduct of Operations: Last Wednesday, facility personnel entered the limiting condition for operations for material-at-risk (MAR) after an individual performing trending analyses discovered a glovebox exceeded its limit for heat-source plutonium. Further investigation determined that a worker had mistakenly applied a multiplier on a material form, and the actual MAR present did not exceed the glovebox limit. This multiplier comes from the standing order issued in response to questions on biokinetic solubility of heat-source plutonium (see 9/7/2018 report).