

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 2, 2018

MEMORANDUM FOR: S.A. Stokes, Technical Director

FROM: J.W. Plaue and D. Gutowski

SUBJECT: Los Alamos Activity Report for Week Ending March 2, 2018

Plutonium Facility–Safety Basis. On Wednesday, Plutonium Facility management declared a potential inadequacy of the safety analysis related to the unanalyzed storage of plutonium-238 feed materials in a basement safe. Programmatic personnel had stored about 80 units of this material in a safe for about two months beginning on March 15, 2017. Shortly after the units were removed, safety basis personnel raised a potential issue about the practice and initiated their safety basis change review process. As part of that review, they identified issues regarding thermal loading and the adequacy of the safety basis description, and entered their New Information process last Tuesday. At the fact-finding, participants raised questions regarding procedural coverage for material movements and unreviewed safety question screening for new equipment installations; confusion with the terms “staging” and “storage” between the safety basis and safeguards documents; and the availability of storage space for future shipments. Facility management has restricted storage of these materials in safes via the shift orders.

Plutonium Facility–Work Planning. On Wednesday, Plutonium Facility personnel held a fact-finding after a craft worker received a puncture wound while kneeling in a high contamination area. Participants noted appropriate response to the injury, which was found to have no detectable radioactivity. However, management noted the need to strengthen the processes used to protect against sharps hazards in high contamination areas. In particular, they noted that the sharps expert needs to observe the work area and the workers need to enhanced rigor for placing equipment and debris.

Emergency Management. On Wednesday, emergency management personnel conducted a quarterly exercise in Areas G and L of TA-54. The scenario involved an ammonia release from a container in Area L and worker injuries. During the formal critique, the evaluators noted opportunities for improvement with emergency notifications. Not all notifications to TA-54 personnel included details such as the location or nature of the release to support immediate protective actions. There were also instances where workers did not receive notifications from the multiple forms of communications in use. These are longstanding issues as noted in the Board’s letter dated October 11, 2017. The NNSA Field Office used four outside evaluators to observe this exercise as part of an assessment.

Transuranic Waste Facility (TWF). On Monday, TWF personnel held a post-job to review practices after a piece of scaffolding fell and damaged the insulation on the firewater tank. The tank wall was not damaged and facility personnel are working with the vendor to obtain a repair kit. The tank is currently credited as defense in depth, but the NNSA Field Office has directed the fire protection system to be upgraded to safety-significant. The scaffolding was supporting a job to replace the tank level switch, as the original is not properly rated for outdoor usage. Post-job personnel noted the need to ensure the appropriate number of craft personnel for the job.

Weapons Engineering Tritium Facility–Safety Basis. The NNSA Field Office approved the safety basis amendment to allow removal of an unused exhaust stack (see 11/3/2017 report). Removal eliminates the hazard of the stack falling onto the facility. The safety basis change includes a new specific administrative control for a critical lift plan to reduce the likelihood of the mobile crane from impacting the facility.