

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 17, 2019

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director
FROM: J.W. Plaue and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending May 17, 2019

Transuranic Waste Facility: During the course of implementing a safety basis update that upgrades the fire suppression system to safety significant, engineers determined that the current performance flow curve for the firewater pump does not meet the commissioning test curve as specified in the new Technical Safety Requirements. Facility engineers are currently troubleshooting the system and examining alternatives to the commissioning curve. The NNSA Cognizant Secretarial Officer previously directed the upgrade to the fire suppression system. The safety basis update is also needed to support the receipt of pipe overpack containers, which currently constitute the majority of waste containers awaiting removal from the Plutonium Facility. Additionally, the fire suppression system upgrade was intended to help relax combustible loading and spacing controls; however, these changes have not yet been incorporated into the safety basis. Facility personnel expect to complete later this summer the replacement of the seismic power shutoff system and the conversion of the dry-pipe system from nitrogen to air.

Plutonium Facility–Work Planning and Control: On Wednesday, facility personnel conducted a fact-finding after a pipefitter dropped a hot brazing rod and burned his lip. Fact-finding participants discussed several points of confusion regarding appropriate personal protective equipment including: the worker was wearing four sets of gloves (liners, nitriles, cut resistant, and welding), which was beyond the number specified in the work document; unclear eye and face protection requirements in the work document; conflicting institutional guidance on face protection for molten metal splash hazards; and subject matter experts who were unfamiliar with one of the institutional guides specific to construction work. The group also discussed difficulties associated with the timeliness of making changes to work packages. Facility management has paused all welding, brazing, and soldering activities until the work documents are corrected.

Plutonium Facility–Nuclear Criticality Safety: Last week, the NNSA Field Office returned comments to Triad management regarding their proposed alternative approach to addressing water ingress into gloveboxes that could potentially result in criticality. The proposed approach relies on arguments that criticality is not credible from non-fire-related water ingress into gloveboxes, nor water ingress associated with fires either outside or inside of gloveboxes.

Area G: N3B and mobile loading team personnel loaded another shipment for transport to the Waste Isolation Pilot Plant. However, the load exceeded the gross transportation limit of 80,000 pounds and could not be shipped. The loaded shipment remains in Area G. The mobile loading team plans to swap the tractor with a slightly lighter unit and complete the shipment next week.

N3B completed a management self-assessment for resumption of limited waste remediation activities in a tent inside Building 412. The allowable activities will include de-nesting drums from standard waste boxes, liner pulls, and replacing plastic liner bags. Contractor and federal readiness reviews are planned for later this summer.