

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 6, 2019

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director
FROM: J.W. Plae and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending December 6, 2019

Plutonium Facility–Conduct of Operations: Last month, machinists and quality inspection personnel moved a machined part to a location different from the location they had planned in the nuclear material control and accountability system. The next day, other workers declared a process deviation during a pre-movement walk-down when they identified that the posted inventory sheet did not match the as-found condition. Criticality safety personnel recommended an infraction severity index of level 5, since all controls remained intact. At a follow-up fact-finding held this Monday, personnel involved in this process deviation self-identified a number of significant conduct of operations issues, including failures to: (1) assign a person-in-charge for the material move; (2) conduct a pre-job briefing for the move; (3) complete the use-every-time attachment required for the material move; (4) post the updated inventory sheet to the correct glovebox; and (5) correctly verify the as-found glovebox inventory when updating the posting. Management suspended the qualifications of the individuals involved and planned other corrective actions to include evaluation of the material move procedure and spot audits to ensure completion of the required attachment for material moves. The material move procedure has been revised about ten times since the plant-wide pause of operations in 2013 in order to improve execution and reduce the potential for worker error.

Transuranic Waste Facility (TWF): This week, TWF personnel completed security upgrades to each of the waste storage buildings to accommodate greater flexibility with respect to the storage of waste containing low-grade materials. However, TWF and Central Characterization Program personnel continue to work through the associated challenges of requiring cleared workers, restrictions on electronics, and new access controls.

Plutonium Facility–Safety Basis: Last week, a four person team completed an Implementation Verification Review of the updated safety basis (see 3/1/2019 report). This updated safety basis addresses long-standing conditions of approval, modernizes the hazards analysis, and consolidates multiple safety basis documents. The team verified that new or changed controls from the revised safety basis were incorporated into the appropriate procedures and that facility personnel at all levels understand the new controls and requirements. The team identified two findings: (1) several procedures that have not been fully updated or contain errors and (2) a self-identified issue that the new in-service inspection for plutonium ion exchange resins was not completed since the procedure is not ready. The team concluded that all review objectives were met and the new safety basis is ready for implementation with the exception of a few procedures that need revision and three activities excluded from scope that will remain under the current safety basis. Facility management is reviewing the team's report.

Flanged Tritium Waste Containers (FTWC): On Thursday, the NNSA Field Office unconditionally approved the safety basis addendum to the Weapons Engineering Tritium Facility supporting receipt and remediation of FTWCs from Area G. The safety basis documents supporting venting at Area G and transportation from Area G are still under review.