

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 7, 2022

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director
FROM: A. Boussouf and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending October 7, 2022

Radioactive Liquid Waste Treatment Facility (RLWTF): The contractor team assessing readiness to restart transuranic waste drumming operations at RLWTF completed their review and briefed facility management on their preliminary findings. The draft report identified seven pre-start findings and one post-start finding. Key findings included: the preventive maintenance program is not effectively implemented, several defense-in-depth controls in the safety basis are not implemented in accordance with the facility engineering processes manual, and the facility did not demonstrate effective, integrated procedural command and control for the full scope of drum tumbling operations. The team recommended the operation could restart following issuance of the final report closure of the pre-start findings.

Last Tuesday, during excavation work to support the Transuranic Liquid Waste project, an excavation subcontractor contacted and damaged an effluent line for the new Low-Level Liquid Waste Facility. The proposed cause for the strike on this line, whose location had been identified through potholing, was distraction due to other unexpected conditions in the excavation area. The damaged line has never been used to transport radioactive liquid waste as the Low-Level Liquid Waste Facility has not commenced hot operations yet. RLWTF management paused work on the excavation activities pending corrective actions by the subcontractor. Other lines within this excavation area are in use and radioactively contaminated. While evaluating this event, personnel noted that some of the unexpected conditions were due to installations associated with the Low-Level Liquid Waste Facility not using standard practices associated with the placement of test stations and marking new buried lines.

Plutonium Facility–Criticality Safety: On Thursday, facility personnel held a fact-finding meeting to discuss weighing practices during waste bag-out operations where a gross weight measurement is taken on top of a fissionable material transport cart. This long-standing weighing method is not defined in the criticality safety evaluation or the posting for the carts. Waste bag-outs in locations that rely on this method are paused until further review.

Weapons Engineering Tritium Facility (WETF): The NNSA Field Office unconditionally approved the safety basis addendum supporting plutonium coupon studies at WETF. This revision to the addendum resolved the issue regarding analyzing accident consequences for both tritium and plutonium identified during the management self-assessment (see 7/1/2022 report).

Emergency Management: Last week, the NNSA Field Office concurred that Triad successfully closed all corrective actions to address the 2019 Office of Inspector General report that identified weaknesses in pre-incident planning. One action taken by Triad is creating a Pre-Incident Plan Program integrated with the Geographic Information System, which incorporates critical facility information including, floor plans, fire alarm panels, fire detection systems, as well as a visual based document for quick access to critical information.