

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 31, 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 31, 2019

Flanged Tritium Waste Containers (FTWC): Last Friday, Triad provided the DOE Field Offices with a schedule for remediation of the FTWCs with potentially flammable headspaces currently stored at Area G (see 5/24/2019 report). The proposed schedule has venting at the end of June at Area G then transportation to the Weapons Engineering Tritium Facility in early August. The DOE Field Offices are evaluating this proposal. Safety basis documents for both venting at Area G and transportation of the vented FTWCs to the Weapons Engineering Tritium Facility are under development. The venting process for the Area G FTWCs will be similar to that currently in use to remediate FTWCs at WETF although the Area G FTWCs are expected to be more challenging.

Plutonium Facility–Nuclear Criticality Safety: Last Thursday, Triad personnel submitted to NA-LA a revised safety basis addendum addressing changes to nuclear criticality safety related to water ingress into gloveboxes. This revision addresses comments from DOE’s review of the initial submittal which was transmitted in January. The addendum provides an alternative approach to address moderator ingress into gloveboxes. Under the current safety basis, a fissile material operation requires additional controls for moderator ingress unless there is an implemented process-specific evaluation showing these controls are not needed or the location is de-inventoried. Under the new addendum, operations will not need additional moderator controls if they meet criteria established in two Criticality Safety Technical Documents issued in January 2019 that provide general analyses for moderator ingress due to seismic events with and without fires.

Transuranic Waste Facility (TWF): Facility personnel partially implemented the revised safety basis that allows TWF to accept pipe overpack containers (POCs) and upgrades the fire suppression system to safety significant (see 5/17/2019 report). The upgrade to the fire suppression system and its associated limiting condition for operation were not implemented. To address the growing number of POCs in waste storage areas at TA-55, NA-LA and Triad personnel agreed to partially implement the safety basis amendment allowing POCs to be moved to the modern TWF facility. The fire suppression system is still undergoing troubleshooting. This week, TWF personnel were not able to restore flow to match the acceptance test curve as required by the new safety basis. However, the pumps are still capable of providing adequate flow and pressure to meet the sprinkler demand.

Transuranic Waste Management: Triad Safety Basis personnel entered the New Information process for both TWF and TA-55 to evaluate whether direction from the Carlsbad Field Office to the Waste Isolation Pilot Plant and the Idaho National Laboratory transuranic waste program regarding nitric acid and polyol interactions in waste have any impacts on the transuranic waste program at LANL.

Area G: N3B personnel completed another mobile loading shipment of transuranic waste to the Waste Isolation Pilot Plant.