## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 29, 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 March 29, 2019

Weapons Engineering Tritium Facility (WETF)—Conduct of Operations: Last week, WETF personnel improperly executed a rearrangement of the Flanged Tritium Waste Containers (FTWC) in preparation for venting operations. The safety basis addendum that supports FTWC movement and venting includes Specific Administrative Controls (SAC) associated with a lift height restriction and lookout in order to preclude toppling and possible ignition of potentially flammable headspace mixtures of oxygen and hydrogen isotopes. WETF management implements these SACs using two procedures. The work crew determined that the FTWC movement procedure did not support rearrangement and chose to use an inappropriate work document that did not include the SACs; however, the crew stated that they nonetheless implemented the SACs. Subsequent to commentary from a member of the NNSA Field Office, WETF management preliminarily concluded that this event did not constitute a violation of the Technical Safety Requirements (TSR) because of the verbal statement that the SACs were implemented. Reliance on verbal implementation is contrary to DOE-STD-1186, Specific Administrative Controls, which states, "SACs are implemented to control facility operations using formally controlled procedures."

**Transuranic Waste Management:** N3B was unable to capitalize on their allocated shipment from Area G this week because the Waste Isolation Pilot Plant (WIPP) mobile loading team sent a key member that was unfit for work in a radiological environment due to an open surgical wound. They will try again next week. The mobile loading team is part of Triad's Repository Science and Operations program that supports the DOE Carlsbad Field Office. On Thursday, Triad received the complete set of approvals to send 19 drums to WIPP. They expect additional approvals to be forthcoming and are planning the first shipment from RANT for next month.

**Transuranic Waste Facility (TWF):** On Tuesday, TWF management declared a TSR violation after workers recognized that they failed to properly execute a surveillance on material-at-risk prior to moving containers into a waste storage building. The TSR surveillance protects an initial condition used in the safety analysis. At the fact-finding, personnel indicated that Waste Compliance and Tracking System (WCATS) records showed personnel had double scanned three drums and skipped scanning three other drums. TWF personnel discussed improvements to the formality of the surveillance, WCATS device network connectivity concerns, and questions on WCATS apparent inability to flag errant movements. TWF management plans to implement standing orders for all facilities that use WCATS and notify N3B.

**Plutonium Facility–Safety Systems:** On Saturday, during quarterly preventive maintenance on the safety class uninterruptable power supply (UPS), the system shut down and the facility lost power for a few minutes. Facility operations personnel restored all the systems impacted by the outage and entered the appropriate limiting condition for operations due to inoperability of the UPS. The cause of the shutdown is not yet known, and troubleshooting is in progress.

**Conduct of Operations:** Triad management has released Chemistry Division activities in the Plutonium Facility and the Radiological Laboratory Utility Office Building following validation of safety management program implementation and management walk-downs. Chemistry Division activities in the Chemistry and Metallurgy Research building remain paused (see 3/15/2019 report).