

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 20, 2019

**MEMORANDUM FOR:** Christopher J. Roscetti, Technical Director  
**FROM:** J.W. Plaué and D. Gutowski, Resident Inspectors  
**SUBJECT:** Los Alamos Activity Report for Week Ending December 20, 2019

**Plutonium Facility–Operations:** Last Thursday, contaminated metal objects fell out of a trolley bucket into a dropbox where workers were engaged in work. No contact with the workers occurred, but the dropbox workers immediately communicated to the workers using the trolley to pause work. Follow-up investigation determined that the trolley was functional; however, the bucket door had not be securely latched. In the near-term, facility management is evaluating administrative means to ensure the bucket door is latched. In the longer term, there is an existing project to replace the trolley system which will include redesigned buckets. This event was not reported using internal institutional or external processes.

**Plutonium Facility–Safety Basis:** On Thursday, facility management declared implementation of the revision 1 of the 2018 safety basis, which means the facility is operating to a modernized safety basis that consolidates some of the multiple documents that have previously complicated implementation (see 12/6/2019 report). Due to several factors, management is taking exceptions for certain controls associated with the fire suppression system, chlorine gas system, ion exchange resins, and a programmatic welder—these will continue to operate under revision 0.3 of the 2016 safety basis.

**Area G:** On Tuesday, N3B personnel declared a technical safety requirement violation for not meeting a key element of their Fire Protection Program for vegetation inspections. A review of monthly vegetation cutback inspection records from April through October 2019 uncovered that they were missing the record sheets for June and September. Facility logbooks state that the June inspections were performed, but provided no data on the results. In addition to the records issue, the available results show numerous unsatisfactory conditions with the unchecked growth of shrubberies. N3B personnel plan to add requirements for addressing unsatisfactory conditions to the vegetation inspection procedure. They are also evaluating their recordkeeping practices.

**Transuranic Waste Facility (TWF):** On Monday, Central Characterization Program (CCP) personnel paused work after damaging the filter vent on a 55 gallon waste drum while sampling for flammable gas. TWF personnel summoned the hazardous material team who overpacked the drum in a vented 85 gallon drum because TWF procedures do not currently cover this operation. A spatula-like tool used to block the vent during sampling scraped off a portion of the carbon filter media. CCP personnel use this tool complex-wide for this model of filter; however, the tool is not specified in the CCP’s procedure which only states that the vent must be “covered or blocked with a material.” Triad safety basis personnel have entered their New Information process to determine if insertion of this tool is compliant with their safety basis. Triad and CCP personnel believe that the filter media was elevated in its housing due to standard manufacturing variations rather than pressurization within the drum. Triad’s corrective actions for this event include evaluating the CCP process for blocking the filter, evaluating use of the hazardous materials team versus facility personnel for drum overpacking, and issuing a lessons learned.

**Transuranic Waste Management–Safety Basis:** On Monday, Chemistry and Metallurgy Research building management declared a potential inadequacy of the safety basis after concluding hazards associated with autocatalytic reactions involving polysaccharides and greater than 12 molar nitric acid are not evaluated. Triad management previously identified and addressed this issue at the Plutonium Facility (see 11/8/2019 report) and at TWF (see 4/13/2018 report). The EM Field Office and N3B maintain this hazard is not applicable to Area G.