

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 21, 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 June 21, 2019

Plutonium Facility–Transuranic Waste Management: On Monday, Triad personnel discovered five drums on an outdoor waste storage pad that were not present in the nuclear material control and accountability system. Facility operators entered the limiting condition for operation pertaining to exceedance of material-at-risk (MAR) in this location. Operators verified the contents of the drums, determined that the MAR limits had not been exceeded, and exited the condition on Tuesday. These drums were intended to be part of last year’s mobile loading shipment to the Waste Isolation Pilot Plant. However, only 16 of the planned 21 drums were shipped as weather delays extended operations to the point where one of the shipping casks’ certification expired. Facility management paused material movements from this storage pad while corrective actions are completed.

Plutonium Facility–Quality Assurance: During a final drawing verification walk-down, engineering personnel noted that several installed components for a new machining glovebox did not match the design drawings. Further checks found that almost half of the valves and gauges were incorrect. Some of these components are supposed to be safety-significant. The installed components were equivalent; however, the field change process had not been followed to allow for substitution. As a result of this discovery and another recent installation error (see 6/7/2019 report), facility management commenced an extent of condition review of construction projects.

Flanged Tritium Waste Containers (FTWC): Last week, Triad determined that they will recommend performing both a contractor and a federal readiness assessment for the venting of FTWCs in Area G. Triad will perform the contractor review, while NNSA will perform the federal review with the EM Field Office Manager as the startup authorization authority. Three safety basis documents for the process are in development by Triad: an addendum to the Area G Basis for Interim Operations to support venting, a Transportation Safety Document covering moving the FTWCs to the Weapons Engineering Tritium Facility (WETF), and an addendum for the WETF Documented Safety Analysis that will allow for handling of these FTWCs at WETF—the previous FTWC venting amendment for WETF is specific to three units currently being remediated at WETF. EM is the safety basis approval authority for the Area G addendum and NNSA is the authority for the other two documents.

Plutonium Facility–Configuration Management: Two weeks ago, engineering personnel updating drawings discovered that there was a positive pressure chilled water system entering a glovebox that has a criticality safety posting stating no liquid lines were plumbed into the box. The system had not been used in many years and was locked out upon discovery pending its removal as part of new equipment installations. A subsequent detailed walkdown this Friday determined the lines did not enter the box but terminated at a seal-welded plate heat exchanger.

Area G: Following less than 24 hours in their Initial Confirmatory process, N3B declared a potential inadequacy of the safety analysis related to MAR limits in Building 412. The safety basis has an inconsistency between hazard categorization and MAR limits for this facility. Management has prohibited introduction of MAR to the facility while they further investigate this issue.

Emergency Management: Last week, Triad replaced the damaged pane in the glass partition wall in the Emergency Operations Center (see 3/22/2019 report). The cause of the failure remains unknown; an engineering inspection concluded that snow load was not the failure mechanism.