DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 9, 2021

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director

FROM: D. Gutowski, Resident Inspector

SUBJECT: Los Alamos Activity Report for Week Ending July 9, 2021

Area G: N3B personnel continue their efforts to address transuranic waste containers with potential reactivity hazards as described in the revised Evaluation of the Safety of the Situation related to DNFSB-TECH-46 that was recently submitted to the Environmental Management Field Office (see 6/25/2021 report). The initial sets of containers identified as potentially reactive were moved into a single layer in the Dome 375 Permacon (see 2/12/2021 report). As N3B performed an extent of condition, they identified more containers of potential concern, and determined through additional review that some previously identified containers did not constitute a concern. There are currently 60 containers subject to operational restrictions due to potential reactivity. Fifteen of them are segregated in the Dome 375 Permacon and the rest remain in their original storage domes as N3B and the Field Office later determined it would be more prudent to avoid moving potentially reactive containers. For the drums that were not moved, N3B recently completed a posting effort to help assure compliance with operational restrictions. The current restrictions are that the containers shall not be moved, there is a marked buffer zone established around each container of potential concern, and intrusive operations are prohibited within the buffer zone.

The resident inspector has noted during walkdowns that control of vegetation in Area G has improved significantly this growing season following corrective actions from a 2019 Technical Safety Requirements violation (see 12/20/2019 and 6/5/2020 reports).

Plutonium Facility—Operations: While restarting control systems following a variable frequency drive upgrade for the ventilation system on Saturday June 26, Triad personnel discovered problems with the Facility Control System (FCS). The FCS is a safety-significant support system that controls and monitors the safety functions of the ventilation system. They determined the system was inoperable per the Technical Safety Requirements but were able to restore it to operability later that day. On the next Tuesday, Triad personnel identified additional issues with the FCS, declared it inoperable, and entered the associated limiting condition of operation. Replacement of an optical communications module resolved the issues with the system and, following additional monitoring of the system, facility personnel exited the limiting condition of operation and declared the FCS operable. The communications module has been installed for approximately seven years. The modules are currently scheduled to be replaced every eight years per the manufacturer's recommendations and spares are available. Facility personnel are evaluating their replacement and maintenance cycles as well as what level of system evaluation should occur following system errors.

Plutonium Facility–Radiological Safety: Last Tuesday, while performing an orderly exit of their area due to the FCS outage described above, an operator discovered contamination on a personal protective equipment glove. The cause was a glovebox glove breach. There was no skin contamination. The individual had been cutting open a 3013 can of plutonium feed, an activity with many potential sharps and pinch points. However, they were using overgloves and there was no evidence of damage to the overglove.