

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 4, 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 October 4, 2019

NNSA Field Office: On Monday, Mr. Steve Goodrum retired from federal service. Mr. Gabriel Pugh replaced him as manager in an acting capacity.

Emergency Management: Last Thursday, workers discovered two bulging plastic drums in a warehouse adjacent to the Sigma Facility. The drums contained a nitric acid mixture recovered from the Sigma Facility's electroplating baths that are under refurbishment. They reported their discovery and emergency management personnel and the hazardous materials team responded. While the situation did not trip any emergency action levels, the Emergency Operations Center activated in monitoring mode and directed a precautionary evacuation of Sigma and the Beryllium Technology Facilities. The hazardous materials team used a remotely operated robot to vent the two drums and manually vented a third drum containing a hydrochloric acid mixture. On Monday, Triad personnel held a fact-finding and discussed issues concerning chemical management, aisle spacing, and other factors concerning drum storage.

Radiological Laboratory Utility Office Building: Last Thursday, all critical electrical loads were lost while workers performed a preventive maintenance task on the uninterruptible power supply. The issue resulted from an error in the work package. Key systems lost included ventilation, most communication systems, computer networks, and facility condition monitoring. Operations center personnel directed an evacuation of radiological areas of the facility which went smoothly despite the lack of the public address system. Power was restored in approximately 30 minutes. Facility management is evaluating means to improve work control for critical tasks, such as this one, that have high potential impacts on operations.

Last month, Triad engineering personnel completed system adequacy analyses of the ventilation, air supply, and fire suppression systems. The analyses compare the as-found systems against the minimum codes and standards required for operations as a future Hazard Category 3 (HC-3) nuclear facility. The analyses identified 6 observations and 1 requirement that could not be verified for the fire suppression system and 5 observations and 3 requirements that could not be verified for the ventilation and air supply. An example of an observation is that the ventilation system contains non-fire rated flexible connectors contrary to DOE and industry requirements. An example of a requirement that could not be verified is whether the sway bracing on the fire suppression system meets current seismic criteria. Engineering personnel are developing strategies to physically or administratively remedy each of the identified issues.

Area G–Operations: On Wednesday, N3B personnel commenced liner pull operations in Building 412. The EM Field Office approved the restart of operations last week after concluding that a federal readiness assessment was not required if operations remain at or below the HC-3 quantities of material-at-risk.

Area G–Readiness: N3B personnel determined that a federal and contractor readiness assessment is required for the retrieval and staging of corrugated metal pipes containing condensed, cemented waste from the former TA-21 Radiological Liquid Waste Facility. A safety basis addendum to support this task is in progress. These pipes were buried in Area G in the 1980s. Size reduction and packaging of these pipes will be treated as a separate activity with different safety basis and readiness activities.