

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 2, 2024

TO: Katherine R. Herrera, Acting Technical Director
FROM: D. Gutowski, Resident Inspector
SUBJECT: Los Alamos Activity Report for the Week Ending February 2, 2024

Staff Activity: M. Sautman was on site to evaluate resident inspector performance.

Plutonium Facility–Safety Basis: Last week, an NNSA facility representative questioned whether damage ratios were being appropriately applied when SAVY containers for nuclear material have hermetically sealed caps over their vents. These caps can be used to keep an inert environment in the container to protect the contents. SAVY containers have been tested in the uncapped configuration to provide a 1% damage ratio in specified fire and drop accident scenarios. However, the capped configuration has not been tested, and thus no damage ratio can be applied to a capped container. In many situations, these capped containers are being improperly credited with a damage ratio. Facility personnel entered the limiting condition for operations pertaining to container configuration in the room this was discovered in. Following resolution there, an extent of condition review found additional problems in other rooms leading to limiting condition for operations entries. All containers with caps are currently being evaluated to determine how they have been listed in the software that tracks nuclear material. In the long term, Triad is planning to implement software changes to ensure these types of containers are tracked properly and are not credited with damage ratios. Existing plans to test SAVY containers in the capped configuration to see if a damage ratio can be applied are on hold pending resource availability.

Waste Characterization, Reduction, and Repackaging Facility (WCRRF): Workers performing HEPA filter changes for the confinement ventilation system in WCRRF discovered that they were using the wrong model of filter. The new filters were not fitting properly into the housings, and after using more force than expected on several installs, the workers noted the discrepancy. Engineering personnel are evaluating whether the filter housings were damaged by the process of forcing in the incorrect filter model. The confinement ventilation system is credited as a safety-significant system in the current hazard category 2 safety basis, but is not required to be operational in cold standby mode, which is the current facility condition. The safety basis currently in development for the upcoming transition to hazard category 3 operation does not credit this system.

Area G–Operations: On Wednesday, the resident inspector and visiting staff member observed corrugated metal pipe size reduction activities in the Dome 375 Permacon. While performing rounds within the Permacon, a worker identified that one of the portable HEPA filter units was not operational. An examination of the power supply discovered a tripped breaker and thermal damage to a power cord. The work team appropriately paused work and made notifications.

Federal Oversight: Two individuals from the NNSA project management office went through final senior technical safety manager qualifications this week. Personnel from the NNSA field office acted as the qualifying officials. The field office has recently started developing alternative approaches to the traditional formal oral board approach for final qualifications. These involve a combination of discussion and field walkdown with more emphasis on the candidates volunteering knowledge rather than answering specific questions. The resident inspector and visiting staff member provided feedback on improving this approach.