

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 20, 2023

TO: Katherine R. Herrera, Acting Technical Director
FROM: A. Boussouf and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for the Week Ending January 20, 2023

Staff Activity: On Friday, a DNFSB headquarters team held a call with NNSA Field Office and DOE headquarters personnel to discuss the proposed methodology of coupling leak path factor and atmospheric dispersion. The proposed methodology will support the upcoming safety basis upgrade for the Plutonium Facility (see 11/4/2022 report).

Area G–Readiness: On Monday, a twelve-member contractor team commenced a readiness assessment to initiate Corrugated Metal Pipe (CMP) size reduction operations in Dome 375. Non-CMP size reduction operations were last performed at that location in May 2014, and nuclear operations other than the movement and storage of waste containers have not been performed in the dome since November 2017. Readiness for retrieval of CMPs was evaluated separately in May 2022 (see 05/20/2022 report).

The scope of this review includes winching the CMP along roller conveyors into cell 1 of the Dome 375 Perma-Con; winching the CMP along roller conveyors into cell 2, the main size reduction area; cutting one 4-ft section of the CMP with hydraulic shears; loading the 4-ft cut section into a standard waste box; and securing and moving the waste box to a staging area inside of Dome 375. This week, the team performed interviews with operations and support personnel. The review will continue next week with observations of an operational drill and field demonstrations.

Plutonium Facility–Decontamination and Decommissioning: Last Friday, workers preparing a glovebox line for removal prior to replacement identified an unexpected condition. When they moved a hand press in the box for size reduction, they discovered a deposit of unknown material that had accumulated under the press. Following consultation with a manager in the area, they paused work and made the appropriate notifications. There was no sparking or other evidence of a chemical reaction when the material was disturbed. The glovebox has not been used in decades and historical processes were under an inert atmosphere. The box currently has an air atmosphere. Prior to performing this activity, workers had removed all known nuclear material from the box, which was posted as containing no special nuclear material. The box remains out of service while facility personnel determine the nature of the material, whether it contains nuclear material, and how best to dispose of it as waste. Facility management is also evaluating adding additional contingencies to work documents to address conditions that are likely to occur during this type of work.

Weather Impacts: Snowfall impacted onsite operations at the laboratory resulting in a closure on Tuesday and a delayed start on Wednesday.