

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 30, 2021

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director
FROM: J.W. Plaue and D. Gutowski, Resident Inspectors
SUBJECT: Los Alamos Activity Report for Week Ending April 30, 2021

Plutonium Facility–Infrastructure: On Tuesday, the Deputy Secretary of Energy approved the Critical Decision 1 milestone (Approve Alternative Selection and Cost Range) for the Los Alamos Plutonium Pit Production Project. The Critical Decision 2 milestone (Approve Performance Baseline) is expected in 2023, and overall project completion is projected for 2027–2028. Triad also announced the creation of a new Associate Laboratory Directorate for Plutonium Infrastructure. This organization will be responsible for preparing the Plutonium Facility to meet its enduring programmatic missions through the execution of a multitude of efforts including: the pit production project, remaining subprojects from the Chemistry and Metallurgy Research Replacement Project, phase 3 of the Technical Area 55 Reinvestment Project, and other infrastructure efforts executed through programmatic funding.

Area G: Last week, N3B personnel identified two new potential inadequacies of the safety analysis (PISA). Personnel developing a modern documented safety analysis for the facility identified an inconsistency between the guidance in DOE-STD-5506-2007, *Preparation of Safety Basis Documents for Transuranic Waste Facilities*, and the construction classification of waste storage domes. The current safety basis considers the uncredited domes and Permacons to be light construction—meaning that if they collapsed, falling structural pieces will not damage waste containers and result in a release of radioactive material. The PISA notes that steel support trusses in some of the domes and Permacons are significantly heavier than the aluminum framework and may not be appropriately considered as light construction. A similar question came up two years ago following heavy snowfall which damaged some of the domes, but did not lead to a PISA (see 1/11/2019 report).

On Friday, N3B declared another PISA related to an inconsistency between DOE-STD-5506 and the current safety basis. The safety basis states that sympathetic deflagrations of additional waste containers can be prevented by not stacking containers and does not consider lateral as opposed to vertical sympathetic deflagrations. There are currently eight unvented containers, most of which contain cemented waste, stored aboveground at Area G. The containers are currently segregated in a restricted work zone and N3B is evaluating the storage situation. Container venting capability is not currently active at Area G; however, six of the unvented containers are 110-gallon drums that do not fit in the existing venting apparatus.

Federal Oversight: Mr. Pete Rodrik arrived this week to begin performing duties as the interim Manager of the NNSA Field Office. Later this summer, Mr. Ted Wyka will assume the permanent Manager position. Two new individuals also commenced their roles as Deputy Manager for Technical Operations and Deputy Manager for Business, Security, and Missions. As a result of these advancements and one departure, currently three of the four middle management positions in Technical Operations are vacant or being filled by individuals on temporary details.