DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 21, 2021

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director

FROM: D. Gutowski, Resident Inspector

SUBJECT: Los Alamos Activity Report for Week Ending May 21, 2021

Area G–Safety Basis: On Monday, the Environmental Management Field Office and Headquarters approved the consolidated Evaluation of the Safety of the Situation (ESS) covering 18 of the current potential inadequacies of the safety analysis (see 3/26/2021 report). The Safety Evaluation Report included no conditions of approval. However, it did note a programmatic concern with application of the Unreviewed Safety Question process. N3B already responded to that concern in a March letter outlining their approach to adjudicating open safety basis issues.

On-Site Transportation: On Wednesday, Triad responded to the NNSA Field Office's conditional approval and submitted a revised ESS addressing pyrophoric hazards in the Transportation Safety Document (see 2/12/2021 report). The revised ESS removes the previous allowance in a standing order to ship potentially pyrophoric materials in a pipe overpack container. It proposes to add a new packaging control to the Transportation Safety Document and Technical Safety Requirements. The packaging control will allow shipments of less than 50 grams of pyrophoric material using a pipe overpack container or SAVY-4000 container inside a Department of Transportation 7A drum.

Waste Characterization Reduction and Repackaging Facility (WCRRF): On Tuesday, the NNSA Field Office conditionally approved Triad's request for a temporary exemption from the DOE Order 420.1C requirement to comply with NPFA 13 sprinkler installation requirements. The glovebox enclosure in WCRRF contains several sprinkler heads that are not installed per code. Triad sought the exemption to decontaminate the enclosure prior to fully evaluating the sprinkler system. NNSA's three conditions of approval were: to include the exemption in the next annual update of the facility's Fire Hazards Analysis, the approval expires one year after decontamination efforts are complete, and annually report to the field office on the status of correct actions. WCRRF is an aging facility that is currently in cold standby but is one option to restore size reduction capabilities on site (see 10/9/2020 report).

Transuranic Waste Facility (TWF): Late last month, TWF personnel completed converting their dry pipe fire suppression system from using nitrogen to dry air. This eliminated an asphyxiation hazard in the waste storage buildings and the need for oxygen monitoring (see 11/22/2019 report).

Federal Oversight: On Thursday, the DOE Office of Enterprise Assessments issued their final report on the results of their remote assessment of the Triad Nuclear Criticality Safety Program (see 2/5/2021 report). Overall, they concluded that the program has improved since the 2013 Director's pause and that the NNSA Field Office has been providing comprehensive oversight. The one finding from the report was that criticality safety analysts authoring and reviewing criticality safety evaluations are not always ensuring compliance with analysis and documentation requirements defined in DOE-STD-3007. The report noted that approximately one third of the evaluations reviewed were noncompliant. There were several supporting deficiencies related to documentation and referencing of bases, references, and models in analyses. The team is planning a second assessment focused on control implementation and conduct of operations within the next year.