DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 26, 2020

MEMORANDUM FOR: Christopher J. Roscetti, Technical Director

FROM: J.W. Plaue and D. Gutowski, Resident Inspectors

SUBJECT: Los Alamos Activity Report for Week Ending June 26, 2020

Plutonium Facility–Glovebox Safety: On Monday, Triad's team investigation commenced in response to the heat source plutonium airborne release event (see 6/12/2020 report). This week, the team conducted interviews of the involved workers, radiological control technicians, procurement and training personnel, and line management. In parallel with the investigation, Triad management issued two standing orders defining interim compensatory measures for glovebox glove inspection and replacement criteria. The first standing order, issued last Thursday, was specific to heat source plutonium operations. On Monday, management issued the second standing order, which applies to all glovebox operations within the directorate. Key compensatory measures in both standing orders include: workers must inspect their gloves prior to exiting them, supervisors will review glovebox training with all workers, and the threshold for taking gloves out of service for issues found during inspection has been reduced.

Plutonium Facility–Radiological Safety: On Thursday, Triad management paused repack, consolidation, and discard operations of legacy nuclear materials after an event revealed inadequate radiological controls for a legacy item with high radiation levels. The event resulted in a worker receiving an unexpected level of radiation exposure. Next week, they plan to reconvene a fact-finding that partially completed on Wednesday.

Chemistry and Metallurgy Research Building: On Friday, Triad personnel concluded the discovery of elevated hydrogen levels in 9979 containers constituted a potential inadequacy of the safety analysis because these containers are not currently covered by existing flammable gas controls. Facility personnel started venting the elevated containers on Wednesday. Triad personnel are evaluating why some of the materials in these containers generated gas at a much higher rate than expected.

Weapons Engineering Tritium Facility: On Monday, Triad personnel shipped one Flanged Tritium Waste Container (FTWC) to the Nevada National Security Site. This shipment represents the first successful offsite disposal of a FTWC and the first FTWC disposed of in about a decade. This is one of the five FTWCs without a flammable gas hazard currently stored in the facility. Removing these FTWCs clears up needed floor space for receipt and processing of the FTWCs at Area G that need to be vented.

Federal Oversight: On Monday, Mr. Kirk Lachman assumed the position as manager of the EM Field Office. Also on Monday, a 15 person team from DOE's Chief of Nuclear Safety commenced the desktop review phase of an audit on nuclear safety functions at the EM Field Office. This first phase focuses on the procedures and oversight actions related to nuclear safety oversight and nuclear readiness activities, as well as nuclear safety staffing resources. A subset of the team plans to perform a future second phase to include onsite interviews of federal and contractor staff, as well as targeted observations of operations and meetings in relevant functional areas. This is a pilot audit for a larger effort to be executed at other Environmental Management field elements.