## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 25, 2018

**MEMORANDUM FOR:** S.A. Stokes, Technical Director

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

**SUBJECT:** Los Alamos Activity Report for Week Ending May 25, 2018

**DNFSB Staff Activity:** J. Parham was on site to walk-down the electrical distribution systems at the Plutonium Facility, as well as supporting institutional electrical facilities.

**Plutonium Facility–Conduct of Operations:** Early last week, workers placed a container of plutonium salts in a glovebox where the criticality safety posting only allowed plutonium oxide or metal. While reviewing procedural changes last Thursday, the first line manager observed that the location did not permit the salts and initiated the potential process deviation process. At the fact-finding held last Friday, the workers involved in the event stated that they believed the salts were allowed because they were not explicitly forbidden by the posting. Notably, operations in this particular laboratory room have recently underwent two federal readiness assessments, as well as the criticality safety days pause (see 5/18/2018 report). Management revoked fissile material handler certification for this work crew and is currently conducting oral boards prior to their reauthorization for work. Management is also broadly assessing fissile material handler training based on apparent weaknesses exposed by this and other recent conduct of operations events. Management and nuclear criticality safety personnel learned that storage of salts was occurring in this glovebox, even though the operation includes a specialized storage box that has allowance for storing salts. As a result, they initiated an effort to map process flows across all glovebox locations that support the pit manufacturing flowsheet to ensure alignment between operations, criticality safety, and other safety programs.

In light of last week's contamination spread involving craft workers, the NNSA Field Office is encouraging the contractor to expand their conduct of operations improvement plan beyond programmatic workers.

**Plutonium Facility–Safety Basis:** On Thursday, the NNSA Field Office transmitted to LANL management their comments on the 2014 revision 2, 2016, and 2017 safety basis submittals. These comments support their overall effort to consolidate and modernize the safety basis. The associated project execution plan indicates a revised submittal by August 3, 2018.

**Chemistry and Metallurgy Research Building:** Facility personnel completed venting of the drum containing americium-241 from an offsite commercial vendor (see 2/16/2018 report).

**Area G:** Operations in Area G remain minimal following the recent contract transition (see 5/4/2018 report). Radio and cellphone communications have been established, as well as partial network access, though operations staff are largely reliant on paper-based procedures. Vegetation control to reduce wildfire risk has not been performed due to transition issues with the respiratory protection program. Routine surveillances in the area have noted increased vegetation growth.

**Transuranic Waste Facility:** Last week, the NNSA Field Office transmitted to LANL management their comments on a draft safety basis change necessary to upgrade the fire suppression system to safety significant. The final version addressing the changes is due June 8, 2018.