

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 29, 2024

TO: Timothy J. Dwyer, Technical Director
FROM: D. Gutowski, Resident Inspector
SUBJECT: Los Alamos Activity Report for the Week Ending March 29, 2024

Staff Activity: M. Bradisse and R. Jackson provided resident inspector coverage while D. Gutowski was offsite. The staff members walked down several systems in the Plutonium Facility to better understand the seismic capabilities of existing equipment and the facility's plans to procure and install newer and more robust replacements.

Plutonium Facility–Operations: On Wednesday, the Associate Laboratory Directorates for Weapons Production and Plutonium Infrastructure conducted a safety pause for all personnel. The intent of the pause was to discuss several recent events (see 3/15/2024 report and the following items in this week's report). Management stressed the importance of proper work planning, work execution, and having a questioning attitude. They engaged the workforce in discussions about work tempo, balancing safety and production, and the importance of bringing up concerns in whatever forum was most comfortable.

Plutonium Facility–Radiological Control: Last Thursday, after assisting with decontamination of multiple workers, a radiological control technician (RCT) alarmed the full-body personnel contamination monitor (PCM) as they attempted to exit the Plutonium Facility a few hours later. The PCM indicated contamination on the skin of the RCT's right hand; additional RCTs performed initial decontamination activities near the PCM, escorted the individual to the decontamination room, and successfully decontaminated the hand area. Upon a second attempt to exit the facility, the individual again alarmed the PCM, which this time indicated a radioactive particle on the right hip of their personal protective equipment coveralls. Responding RCTs again performed initial contamination control actions near the PCM and escorted the individual back to the decontamination room, where the individual doffed their contaminated coveralls and donned a fresh set. The individual was then able to exit the facility. At the fact-finding, radiological control personnel discussed expectations for RCT self-surveys after assisting with decontamination activities, which, if properly implemented, should help prevent recurrence.

PF-400–Operations: Last Thursday, personnel at PF-400 conducted two nuclear material transfers while the facility was in limited operations mode. Both activities involved small quantities of nuclear material, such that each item was considered "de minimis" per the safety basis. However, the facility technical safety requirements (TSR) do not generally allow material transfers during limited operations mode, and do not make exceptions for de minimis quantities of material. Therefore, after consulting operations and safety basis personnel, the facility operations director determined that both material movements constituted TSR violations and made appropriate notifications. At the fact-finding, participants noted that both movements were performed in accordance with applicable procedures, apart from being a violation of facility mode requirements, and discussed whether procedures could be clarified in this manner to help prevent recurrence. Personnel also plan to evaluate whether the TSRs should be revised to allow movement of de minimis quantities of nuclear material during limited operations mode.