

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 21, 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 August 21, 2020

**Flanged Tritium Waste Containers (FTWC):** On Wednesday, the contractor readiness assessment team out-briefed its review of the FTWC venting and handling activities at Area G (see 8/14/2020 report). The team noted the superb dedication of the FTWC crew, but identified four findings concerning: (1) the need to define additional steps and actions in the procedure, including addressing differences between the mockup and actual settings, use of realistic timing, and contingencies; (2) incomplete hazard analysis and identification for actions to support timely resolution of potential abnormal conditions; (3) inadequate use of personal protective equipment, particularly gloves; and (4) the failure to demonstrate required responses to safety basis violations during simulated scenarios. Triad personnel have begun corrective actions in advance of the upcoming federal readiness assessment.

**Nuclear Environmental Sites:** On Wednesday, N3B management declared a violation of the technical safety requirements for a missed in-service inspection. The safety basis requires an inspection of the inventory isolation systems annually and within 30 days of “non-routine natural phenomena or external man-made events.” Subsequent to a request for a record, N3B personnel reviewed additional records and determined that a required inspection was not conducted for a non-routine rainfall event that occurred in early July. At the fact-finding, N3B personnel identified concerns and corrective actions associated with the lack of institutionalization following the loss of key personnel, insufficient criteria for non-routine events, roles and responsibilities, and maintaining best management practices. This week, N3B found the isolation systems to be satisfactory after they completed inspections for last month’s minor earthquake.

**Emergency Management:** Last Friday, the DOE Office of Enterprise Assessments (EA) issued the report for its assessment of emergency management (see 2/21/2020 report). EA noted that Triad has established a well-staffed emergency response organization that is equipped with state-of-the-art equipment. Nonetheless, they observed performance challenges during the February exercise. They identified three findings: (1) Triad did not provide accurate and effective initial notifications; (2) Triad did not demonstrate an effective capability to formulate and identify protective actions for onsite individuals and the public; and (3) Triad did not demonstrate an emergency operations system that effectively validates and coordinates incident information to establish and maintain situational awareness and a common operating picture. EA noted that Triad identified findings similar to the last two. Additionally, EA identified one deficiency and 11 opportunities for improvement that notably include: improving the coordination between facility-level and site-level protective actions, consider revising Triad and N3B procedures to ensure habitability at key incident response locations, and conducting an analysis of the Los Alamos County dispatch database to ensure effective integration with LANL. The NNSA Field Office and Triad are reviewing the report.

**Infrastructure:** On Wednesday, Triad transmitted to the NNSA Field Office for approval the major modification determination and safety design strategy for the Los Alamos Plutonium Pit Production Project. The project includes equipment installation in several rooms within the Plutonium Facility, infrastructure capabilities at Technical Area 55 such as office and training space, and capabilities elsewhere at the laboratory such as warehouse and support facilities. Triad determined that the activities to be conducted inside the Plutonium Facility are bounded by the existing safety basis and therefore do not constitute a major modification. The field office is reviewing the submittal.