

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 4, 2016

TO: Steven A. Stokes, Technical Director
FROM: Matthew P. Duncan, Cognizant Engineer
SUBJECT: Lawrence Livermore National Laboratory Report for October 2016

Plutonium Facility: As mentioned in the August 2015 report, the laboratory submitted a justification for continued operations that, in part, curtailed hydrogen operations in Building 332 with some exceptions. To address the underlying issue, the field office approved a change to the Building 332 Documented Safety Analysis and Technical Safety Requirements that upgraded the hydrogen gas control system from safety significant to safety class. The Livermore Field Office approved the justification for continued operations on November 18, 2015, and indicated it was not to remain in effect for more than one year.

The laboratory recently informed the field office that the actions required to upgrade the hydrogen gas control system, the safety basis implementation for the hydrogen systems, and the implementation verification review will not be completed by the November 18, 2016, expiration date. The laboratory intends to let the justification for continued operations expire. Though there is a programmatic need to resume operations using the hydrogen systems in the future, the laboratory informed the field office that they would continue to prohibit all operations using hydrogen until all required resumption activities are completed. The field office is reviewing the recently provided information.

Criticality Safety: A researcher at a radiological (non-nuclear) facility reportedly received more uranium samples than anticipated in a shipment. He notified the facility manager who then determined the samples contained approximately 140 grams ^{235}U equivalent mass. This caused the administrative inventory limit of 220 grams ^{235}U equivalent mass for that segment of the building to be exceeded by 20 grams ^{235}U equivalent mass. Laboratory criticality safety personnel evaluated the situation and confirmed there was no credible criticality hazard.

Livermore Field Office: The Livermore Field Office implemented a change to its organizational structure at the beginning of October, calling it the realignment. Some key changes include the elimination of the Assistant Manager for Sustainability and Infrastructure group. Its functions and staff were reassigned to other groups. Five Deputy Assistant Manager positions were created, with a goal to drive better integration of the field office's activities. Another notable change was that the emergency management function moved from the Operations group (formerly known as Facility Operations) to the Security group.