DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 13, 2015

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending November 13, 2015

DNFSB Staff Activity: T. L. Hunt observed activities of the federal readiness assessment (FRA) underway for Pit Flowsheet activities at the Plutonium Facility.

Plutonium Facility–Restart Activities: On Monday, the FRA team commenced fieldwork for their assessment of Pit Flowsheet activities, which consists of 17 detailed operating procedures, supplemented by about 30 specific process instructions. These documents govern the general functional areas of welding, assembly, inspection, and evaluation. In addition to a large number of interviews, FRA team members observed six operational evolutions covering downdraft room operations, autoclave operations, assembly gas operations, weighing, dye penetrant testing, and a material move.

Plutonium Facility–Nuclear Criticality Safety: On Thursday, Plutonium Facility personnel conducted a fact-finding after operators declared a potential process deviation when a container listed on the printed inventory for a floor location was not actually present. Participants noted that the operators responded appropriately to the situation. Their subsequent review indicated that operators had moved the missing item into a new location on October 21, 2015, and that the revised printout was generated one minute after the transfer initiated. The timing of the printout is important since the LANMAS database indicates that an item being moved remains in its sending location, but is flagged with an "in transit" designation until it is received and logged into its destination. In addition to the time needed to physically move the item, operators require at least 10 minutes to complete a complicated login and LANMAS transaction process. As a corrective action, management decided to issue a lessons-learned and remind operators of their allowance to make ink-based changes in these types of situations. One of the participating group leaders also indicated that a preferable solution would be to change the software used to generate the printouts to indicate the "in-transit" status. He is separately working on a proposal to modernize the LANMAS login process, streamline the user interface specific to Plutonium Facility needs, and acquire additional terminals.

Transuranic Waste Facility (TWF): Given projections indicating that transuranic waste generation will exceed storage capacity at the Plutonium Facility sometime in early 2017, LANL management has initiated an effort to accelerate the transition to operations for the new TWF project. Their current accelerated schedule predicts final commissioning in January 2016, approval of the safety basis in February 2016, and ensuing readiness activities culminating in the start of a federal operational readiness review in September 2016. The Site Representatives note that the TWF provides about another year of storage capacity and that the majority of waste is generated through important risk reduction activities. Additional capacity will be necessary if LANL shipments to the Waste Isolation Pilot Plant do not resume in that time frame.

Area G–Safety Basis: Upon additional consideration, NNSA Headquarters has paused their effort to seek Federal Aviation Administration approval to expand the restricted airspace zone above the laboratory to include the space above Area G (see 11/6/15 weekly). If the option of expanding the restricted airspace is not pursued, LANL personnel will need to explore other measures to prevent or mitigate the consequences of this accident, such as footprint reduction, which is currently under evaluation.