

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 29, 2015

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending May 29, 2015

Plutonium Facility–Criticality Safety: On Wednesday, the Field Office approved LANL’s request to extend the Evaluation of the Safety of the Situation/Justification for Continued Operations (ESS/JCO) concerning the potential for nuclear criticality due to firewater intrusion (see 6/6/14 weekly). The new expiration date is May 30, 2016. In their approval, the Field Office noted that their performance expectations have not been met in that the original ESS was approved over a year ago and still has not been completely implemented. The Field Office further directed LANL to:

- Submit the Nuclear Criticality Safety Program Upgrades Project Plan for approval by July 10, 2015
- Submit safety basis changes referencing the approved plan by November 30, 2015
- Implement the revised safety basis prior to expiration of the extended ESS/JCO

Plutonium Facility–Restart: Facility personnel continued the second week of the management self-assessment for Pit Flowsheet operations. These operations include the various welding, assembly, and inspection activities needed to produce a pit for the stockpile. LANL management hopes to accelerate the start of the contractor readiness assessment to late July. The baseline schedule shows a request for restart authorization by January 5, 2016.

Area G–Conduct of Operations: Area G personnel have recently exhibited some difficulty properly managing technical safety requirements (TSR). In one instance, operators in the operations center were unaware of the fact that the TSR limit for composite source term material-at-risk was currently exceeded (see 5/8/15 weekly). Although the operators were aware that transuranic waste shipments were on hold, they did not know that this was the result of facility management direction to enter the associated limiting condition for operation (LCO) action statement. The Site Representatives believe that the following contributed to this event:

- Weaknesses in the process for how facility management notifies operations personnel of changes in facility status
- A poorly written LCO
- Failure of the system used by operations personnel to track material-at-risk limits to indicate that the composite source term limit was exceeded
- A shift turnover process that does not ensure operators are informed of facility conditions

This week, operations personnel chose to first inspect the storage area rather than entering the appropriate LCO after the material-at-risk tracking system indicated that numerous waste drums in the storage area were non-compliant. LANL management has indicated that a senior supervisory watch will be stationed to assist and mentor operations personnel in proper implementation of the TSRs and that a review will be performed of the process used by management to inform operations personnel of changes in facility status.