

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 3, 2014

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.T. Davis, R.K. Verhaagen, and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending January 3, 2014

The laboratory was closed Monday through Wednesday this week for the annual holiday break.

Weapons Engineering Tritium Facility (WETF): LANL submitted a Justification for Continued Operation (JCO) based on the discovery of an increased probability of WETF Oxygen Monitoring System (OMS) failure to the field office for review and approval (see 11/29/13 weekly). The submitted JCO evaluates the safety of the situation and concludes that the facility is in a safe condition based on the immediate actions taken, which include placing the Tritium Gas Containment System and the Tritium Waste Treatment System low-pressure receiver in warm standby mode. The JCO specifies that a monthly as-found calibration check of the OMS will now be performed in addition to the semi-annual Technical Safety Requirement calibration check. During the first monthly as-found calibration check that was performed in December, several OMS sensors were again found out of calibration. WETF personnel continue to evaluate the OMS to determine the appropriate calibration method and frequency.

Radioactive Liquid Waste Treatment Facility (RLWTF): LANL recently submitted a request to the field office to use the Waste Mitigation Risk Management (WMRM) facility for influent low-level liquid waste storage in addition to its intended function of providing emergency space for low-level liquid waste. This request follows WMRM facility system modification and a Management Self Assessment to ensure readiness (see 8/6/13 and 9/14/12 weekly reports). Approval of the request will allow replacement of aging RLWTF tanks that do not meet regulatory requirements while maintaining sufficient capacity for low-level liquid waste storage under emergency conditions requiring facility or site evacuations (e.g. wildland fire conditions).

Plutonium Facility – Safety Basis: In December, the field office directed LANL to resubmit the 2013 annual update of the Documented Safety Analysis (DSA) and Technical Safety Requirements (TSRs) within 45 days. Although LANL submitted annual updates to the DSA and TSRs in 2012 and 2013, the field office has not approved an annual update since 2011. The 2013 annual update includes the following changes:

- Resolution of field office comments from the 2012 annual update that was not approved and comments included in the safety evaluation report
- Changes to address Potential Inadequacies of the Safety Analysis, Evaluations of the Safety of the Situation, and JCOs that have been identified for the Plutonium Facility
- Re-evaluation of the leak path factor for the seismic accident scenario and identification of new material at risk limits
- Incorporation of changes to address the Transuranic High Efficiency Neutron Counter (TRU HENC) operations (see 10/4/13 weekly)

The field office response requested LANL to remove the changes associated with the TRU HENC operations (the field office previously provided comments on these changes) and changes associated with a PISA for the ventilation and facility control system, which require additional analysis.