

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 5, 2014

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.K. Verhaagen and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending September 5, 2014

DNFSB Staff Activity: J.W. Plaue was on leave this week.

Environmental Waste Management Operations (EWMO): On Tuesday, the EWMO Facility Operations Director (FOD) paused all waste container movements in Area G, the RANT Shipping Facility, and the Waste Characterization, Reduction and Repackaging Facility. This pause followed a series of events dating back to May 2014 in which waste shipments were found to be inadequately performed. The specific occurrences that led the FOD to pause operations included two instances where a required surveillance was not performed prior to moving waste drums and two instances where the receipt inspection was improperly performed. The FOD has ordered an extent of condition review be conducted for all receipt inspections performed in these three facilities since April 2014, as well as a causal analysis to assist in determining necessary corrective actions.

Weapons Engineering Tritium Facility (WETF): On Wednesday, WETF management briefed the field office on the status of efforts to meet calendar year 2014 project commitments for disposition of legacy items containing tritium (see 10/4/13 weekly). Project personnel indicated that most commitments were on track to be met, including exceeding the goal for dispositioning simple solution packages, but that the commitment to complete upgrades to the load-in glovebox will not be complete until next calendar year due to delays in facility startup (see 5/2/14 weekly). These load-in glovebox upgrades are essential to disposition the bulk tritium gas in the facility which represents the majority of the legacy tritium inventory.

On Thursday, WETF facility operations personnel completed the Implementation Verification Review (IVR) for the Evaluation of the Safety of the Situation (ESS) for the oxygen monitoring system (see 8/29/14 weekly). Operations personnel expect to work through this weekend to complete corrective actions from the IVR for ESS implementation, declare the oxygen monitoring system operable, and perform necessary system modifications and testing. These actions are prerequisites for LANL to declare readiness for the Contractor Readiness Assessment of tritium gas transfer operations, scheduled to start Monday, September 8, 2014.

Plutonium Facility–Criticality Safety: Last week, the field office disapproved a LANL request to close a Potential Inadequacy of the Safety Analysis (PISA) declared in September 2011 (see 9/23/11 weekly) and the associated ESS. The PISA was declared due to the potential for backflow of plutonium-bearing solutions from process tanks, through piping, into a bulk nitric acid tank that resides outside the Plutonium Facility's credited confinement boundary, which presents both safety basis and criticality safety concerns. The field office letter disapproving the request cited an inadequate evaluation basis in the modified criticality safety evaluation as the reason for disapproval. Additionally, the letter stated that an extension of the ESS, which expired last Friday, will not be approved and the operation identified as the source for backflow will have to cease until such time that an operational readiness assessment is successfully completed. Finally, the field office letter noted that LANL's submittal of the request to close the PISA provides another data point in the increasing trend of inadequate quality submittals.