

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 21, 2010

MEMORANDUM FOR: T. J. Dwyer, Technical Director
FROM: B.P. Broderick and R.T. Davis
SUBJECT: Los Alamos Report for Week Ending May 21, 2010

Staff member J. Pasko was onsite this week to attend the Integrated Nuclear Planning workshop.

Integrated Nuclear Planning: This week, LANL conducted an Integrated Nuclear Planning workshop with participation from NNSA Headquarters, service center and site office personnel. The focus of this workshop was on TA-55 programs, projects and facilities with particular focus on the path forward to address changing programmatic direction as a result of the Nuclear Posture Review. The workshop also covered the impact and integration of construction projects in the Pajarito Corridor (i.e., in and around TA-55).

Plutonium Facility - ARIES: LANL continues development and operation of the Automated Retirement and Integrated Extraction System (ARIES) to support the Pit Disassembly and Conversion Project (PDCP) and the MOX Fuel Fabrication Facility (MFFF). In March, LANL received certification as an approved supplier for MOX Services. This fiscal year, the baseline for ARIES is to produce and package 50 kgs of plutonium oxide with a stretch goal of an additional 50 kgs. The current commitment is to provide 2000 kgs of plutonium oxide to the MFFF by the end of 2018. LANL also continues support activities for the PDCP design authority.

Plutonium Facility – Safety Basis: Last week, LANL management requested an extension to complete full implementation of the technical safety requirements associated with the 2008 Documented Safety Analysis from May 31 to August 12, 2010. LANL requested the delay to allow additional time to complete (1) physical modifications to the fire suppression system in support of the new safety class designation for non-seismically initiated facility fires, (2) technical baseline documentation of glovebox support stands, and (3) final implementation activities related to the new software application to track and control facility material-at-risk limits.

This week, physical modifications to the fire suppression system began to address previously identified fire water flow density deficiencies. These modifications involve installing additional fire water riser piping to tie-in the laboratory floor and basement suppression system distribution lines to overcome hydraulic losses in the current facility configuration that cause flow density issues. Verification and validation of the actual software associated with the new computerized material-at-risk tracking program is complete. Work continues to configure and benchmark the software for reliable implementation at the Plutonium Facility.

Weapons Engineering Tritium Facility (WETF): On Monday, a NNSA facility representative noted that on two recent occasions WETF personnel failed to log performance of ceiling tile inspections as required by a Justification for Continued Operations (JCO). The JCO that included this compensatory measure was issued in response to deficiencies identified for a fire wall. Corrective actions included additional personnel training. For tritium gas handling restart, the contractor Operational Readiness Review, which was previously scheduled to begin next week, has been delayed to early-June; however, the schedule for the NNSA ORR has not changed (late-June).