

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 22, 2002

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending February 22, 2002

Weapons Engineering Tritium Facility (WETF): WETF resumed gas transfer operations last week (site rep weekly 2/8/02). Corrective actions included implementing an independent verification of valve positions for tritium container loading and unloading operations, as well as a thorough rate-of-rise integrity check for gas transfers of more than 1 gram. After 30 days, the facility will reevaluate these actions.

WETF is also pursuing a locking device to prevent the mechanical fittings from loosening and is evaluating potential preventive maintenance improvements for fittings and valves. The site rep believes that these are appropriate followup actions to the events reported earlier this month.

Radiography Facility: TA-8 Building 23 (TA-8-23) is a 1940s era building that is used for nondestructive testing of high explosive (HE) and nuclear components. In late 2000, DOE designated TA-8-23 as a Hazard Category 2 nuclear facility, although this facility did not have a DOE-approved authorization basis (AB). In October 2001, DOE approved a Justification for Continued Operations (JCO) for TA-8-23 subject to conditions considered equivalent to Technical Safety Requirements (TSRs). Among those was a prohibition on combined HE/radioactive material operations (site rep weekly 11/16/01). In December 2001, DOE approved a limited-term JCO that permitted radiography of two assemblies of combined HE/radioactive material (site rep weekly 12/7/02). In January 2002, DOE approved a JCO addendum that removed this restriction.

On February 14th, LANL completed a TA-8-23 readiness assessment (RA), which reported several post-start findings. Among these is the facility's backlog of unreviewed safety questions (USQ). The RA report states that AB staffing may not be adequate to keep up with the work load for a new Hazard Category 2 Facility. The LANL master schedule for AB upgrades indicates that LANL will submit a 10CFR830 compliant safety basis for TA-8-23 by May 30th. This may become challenging if the USQ backlog and facility AB staffing issues are not addressed.

Emergency Exercise: On Wednesday, DOE (SO-40) conducted a mid-day, no-notice emergency exercise at LANL, based on a postulated glovebox fire in the Chemistry and Metallurgical Research Building (CMR), Wing 5. Facility actions and external notifications were simulated. The Emergency Operations Center (EOC) was fully activated in about 20 minutes of initiating recall. Based on the information available, the postulated event was categorized as a Site Area Emergency, as expected, a few minutes after full activation.

The site rep observed the exercise from the EOC. Overall, the EOC response was proficient. The May 2000 Cerro Grande Fire experience is still fresh. Information management in the existing EOC is challenging. While facility condition reports were timely, the site rep believes that the EOC should have had quicker access to information on personnel accountability, affected room location, room radiological and chemical inventory, and any injuries or contaminated personnel. Information management should improve when the new EOC is completed (preparation of the construction site is underway). The DOE (SO-40) exercise assessment is expected in about one month.