

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 20, 2002

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending December 20, 2002

Jordan was on site this week reviewing the status of the TA-18 mission relocation conceptual design.

DOE-NNSA Management: Effective today, the NNSA Los Alamos Site Office reports directly to headquarters. NNSA expects this office's staff to increase from 75 to 95 personnel by October 2004 to support the increased local mission. Staffing plans are due in January. NNSA has also set an objective that its work force will be certified to ISO 9001 (a quality management standard) in 2004.

Weapons Engineering Tritium Facility (WETF): The LANL Operational Readiness Review (ORR) was completed last week. The ORR team briefed their findings this week and will issue their report early next month. The scope included Building 450 startup and new authorization basis implementation (i.e., new Technical Safety Requirements - TSRs). During the 3-week review, the team identified about 46 pre-start findings, 11 post-start findings, and 45 observations. WETF has been closing pre-starts as the ORR progressed. About 2 dozen remain open, mainly involving TSR implementation and related operator training and qualification. Four safety system surveillance procedures also need to be rewritten and were not reviewed by the ORR team. In January, WETF plans to bring in the new LANL Operations Support Group to mentor the facility (site rep weekly 11/15/02). Timing of the LANL declaration of readiness and the DOE ORR are both open.

The site rep believes that WETF has been working hard to get the new TSRs implemented, but much remains to be done. Longer-term, LANL needs to improve the readiness assessment process – particularly, broad-based understanding of the process – to be consistent with DOE requirements.

Radiochemistry Laboratory (TA-48): The Recommendation 2000-2 Phase II confinement ventilation review is complete. The review team found issues with the as-built configuration, the configuration and maintenance management programs, and conduct of operations. The report concluded that the facility was unable to fully demonstrate operability and reliability of confinement ventilation commensurate with the facility's Hazard Category 3 (HC-3) rating.

TA-48 is 46 years old and was designated a HC-3 nuclear facility in recent years, apparently with few substantive changes. Since August 2000, it has operating under a Justification for Continued Operation. In August 2002, DOE approved a two-year interim authorization basis that LANL has committed to implement by February 2003. LANL has also committed to reducing inventory and downgrading TA-48 to a radiological facility within 2 years. LANL may expedite this due to recent events. Given the nature of the Phase II findings, as well as fire protection, electrical, and seismic deficiencies, it appears that improvements may be needed, even if the facility is down-graded, if it is to operate as a radiological facility for an extended period (site rep weeklies 8/16/02, 11/29/02).

Plutonium Facility (TA-55): LANL has delayed submittal of the revised process hazard analysis (PrHA)

for the Pu-238 scrap recovery line. LANL independent review of the PrHA is underway.