

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 15, 2002

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending November 15, 2002

Bamdad, Jordan, and Martin were here this week reviewing Technical Safety Requirement (TSR) implementation. Also, a DOE Price-Anderson Office of Enforcement team was here reviewing recent TSR non-compliances and radiological events in defense nuclear facilities.

Authorization Basis (AB): LANL is quickly standing up the new Operations Support Group to assist nuclear facilities in consistently implementing new TSRs and improving formality of operations (site rep weekly 10/25/02). The Weapons Engineering Tritium Facility (WETF) is the first at LANL to be implementing new TSRs, followed closely by TA-18 (the Critical Experiments Facility). Coordination and planning for WETF have been problematic, but several key issues appear to have been resolved on Thursday. The current plan is that LANL will verify implementation of most of the TSRs during the upcoming LANL operational readiness review (ORR) and consider phasing in the new TSRs in a controlled manner soon thereafter. DOE will observe the LANL ORR verification. The previous plan was to implement the new TSRs all at once after the DOE ORR, now scheduled for January. While there are differences in verification strategy, the phased-in approach is similar to that taken by TA-18 and is advantageous if properly sequenced. It places more rigorous operational controls in place sooner and could reduce the potential for confusion caused by operating to one set of rules while practicing to another for an extended period.

Weapons Engineering Tritium Facility (WETF): Besides improved operational controls, the new WETF AB mandates using improved tritium storage containers and considering upgrades to fire walls that are currently 1 hour rated (site rep weeklies 8/10/01, 4/19/02, 4/26/02). In fact, 65% of the inventory is suppose to be in improved containers by April 2003. Last April, DOE advised LANL that higher temperature-rated seals need to be used on tritium storage containers and that alternatives could be considered. It appears that, based on progress made, increased management attention may be warranted on reaching agreement and aggressively pursuing engineered features that more fully address WETF fire scenarios and thereby achieving the intent of the new AB.

Integrated Safety Management: LANL has investigated several recent events and identified personnel not following existing requirements as a cause or a contributor to these events (e.g., site rep weeklies 10/18/02, 10/25/02). While corrective actions have been taken in each case in the affected facility, there is an increasing recognition here among management that the needs exist to (1) clearly identify management expectations and (2) possibly extend actions to other facilities or institutionally. Also being considered is the need to improve trending and evaluation of lower-tier events that could be precursors to more significant events or serious accidents, thereby increasing visibility to management of emergent safety trends. If pursued, these would be positive actions.

Plutonium Facility: The site rep understands that LANL expects the revised process hazard analysis for the Pu-238 scrap recovery line to be submitted to DOE on December 2nd.