

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 12, 2007

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: B. Broderick and C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending January 12, 2007

Federal Management and Oversight: NNSA announced this week the temporary assignment of a new Los Alamos Site Office (LASO) Manager, effective Feb 5th; he will be the sixth LASO Manager assigned since the site rep office was established here in August 2001. NNSA management continues to fully support the two-year LASO oversight pilot, which has challenges (site rep weekly 11/10/06).

The NNSA Chief of Defense Nuclear Safety (CDNS) team on site this week split their efforts between waste operations, as discussed below, and an examination of the pilot. The pilot's current state and key challenges appear well understood; management acknowledged that additional technical resources are expeditiously required for the pilot's success. The CDNS biennial review is scheduled for May.

Criticality Safety: There are inconsistencies between the LANL institutional criticality safety manual (ISD 130), issued last July, and a general TA-55 administrative procedure for nuclear criticality safety, revised last October; LASO and LANL acknowledge the latter needs to be improved. In a larger sense, LASO and LANL have agreed upon a plan to improve LANL's criticality safety program during the next 3 years (site rep weekly 12/22/06). Accelerating reestablishment of an active Nuclear Criticality Safety Committee to provide semi-independent institutional oversight would be helpful.

Transuranic Waste Operations: Last month, NNSA and LANL stalled on developing a path forward for the high-activity drums, disposition of which is funded by DOE-EM (site rep weekly 12/8/06). Last week, NNSA management directed CDNS to examine the risks and viability of starting to disposition these drums within weeks, in response to budgetary pressure from DOE-EM.

This week's CDNS review concluded that this is viable. Subject to headquarters agreement, CDNS will lead the effort and will pursue jointly with LASO and LANL a notional path-forward that involves developing a resource-loaded project plan by the end of January, developing a safety basis in February, completing limited facility improvements in March, completing procedures, training, and a joint federal-contractor readiness assessment in April – to support startup by end of April.

Notionally, the safety basis would consist of the draft documents submitted two months ago, a set of additional conditions and controls, and an ad-hoc list of other documents describing safety program and system enhancements, all captured in an authorization agreement. Since this safety basis and the joint readiness assessment are not consistent with DOE rules and orders, CDNS plans to process exemption requests to the Nuclear Safety Management rule (10 CFR 830) and the DOE startup order (DOE O 425.1C). Separately, LASO and LANL would develop 10 CFR 830 compliant safety bases for the affected facilities that would be reviewed, approved, and implemented after the April startup.

Chemistry and Metallurgy Research Building (CMR): On Monday (1/8), an operator sustained a puncture wound while performing glovebox operations in CMR. This event appears to be prompting a reexamination of the hand tools used in CMR gloveboxes and the controls and PPE implemented to provide worker protection. A systematic review could enhance safety and help prevent recurrence.