

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 29, 2008

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director

FROM: B. Broderick and C. H. Keilers, Jr.

SUBJECT: Los Alamos Report for Week Ending February 29, 2008

The staff held a teleconference on the Radioactive Liquid Waste Treatment Facility Replacement.

Environmental and Waste Operations: On Tuesday (2/26), LANL announced organizational changes to strengthen operations under the Environmental Programs Directorate. LANL also paused non-essential waste operations, to allow management and the workforce to refocus on improving disciplined operations. Essential operations are continuing, particularly at the Radioactive Liquid Waste Treatment Facility (RLWTF). Some operations have been reviewed and may resume today, such as Area G waste characterization and the WCRR waste repackaging facility. Remaining operations, particularly at Area G, are scheduled to resume next week (site rep weekly 2/8/08).

This week's activities included setting expectations, evaluating material condition and operations (e.g., rounds, operations center), reviewing closure of readiness review and accident investigation findings, and conducting training on safety basis and conduct of operations. On-going actions for Area G include: • assigning a senior supervisory watch, • communicating roles and responsibilities, • achieving interim operator qualifications, • cross-walking activities and work control documentation (IWDs), • implementing select elements of formality of operations, • reviewing occurrence reports, • selecting technical safety requirements (TSRs) common to the current and proposed safety bases for accelerated implementation, and • drafting an updated disciplined operations project execution plan.

Weapons Engineering Tritium Facility (WETF): On Monday (2/25), during multiple concurrent operations, an operator inadvertently transferred approximately 3 grams of tritium to the tritium waste treatment system (TWTS). The mis-transferred material was fully contained by the TWTS.

These types of gas transfers at WETF are not proceduralized and rely heavily on operator training and experience. In response to a similar inadvertent transfer event in October, the facility developed a standing order that required an independent review of the proposed flow path and valve lineup by a second qualified operator prior to executing a gas transfer. Despite the standing order, in practice, operators were identifying and independently verifying the intended flow path, but not explicitly specifying and verifying the proper valve alignment prior to transfers. Failure to confirm the necessary valve lineup created the conditions for this event, since independent activities involving another portion of the tritium gas handling system caused the actual system configuration to be different than the operator expected. Gas transfers have been suspended until the verification process can be strengthened and confirmed to be effectively implemented (site rep weekly 10/19/07).

Chemistry and Metallurgy Research Building Replacement (CMRR): NNSA has received funding to continue design activities for the CMRR Nuclear Facility and its special equipment (e.g. gloveboxes). Recent program direction calls for the existing project scope to be validated against NNSA Complex Transformation planning in parallel with continued design. However, any future scope changes resulting from the validation effort could perturb the design and delay the project, prolonging reliance on the existing CMR facility (site rep weekly 11/23/07).