

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 22, 2005

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: T. D. Burns Jr. and C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending April 22, 2005

Critical Experiments Facility (TA-18): NNSA-HQ issued correspondence to the LASO site manager and LANL director outlining the priorities relative to work at TA-18 for the remainder of this fiscal year. First and second priority are to be given to work supporting the Early Move (EM) and Critical Experiments Facility (CEF) projects, respectively. Third priority is given to high-importance programmatic work which includes the following criticality experiments: a uranium-based Planet experiment supporting the National Aeronautics and Space Administration's space reactor program, uranium-based experiments on Planet and Sheba supporting the DOE nuclear criticality training program, and an experiment on Comet supporting emergency response programs. NNSA-HQ reiterated the importance of the critical experiments and its expectation that they can be performed this fiscal year in concert with the higher priorities. LASO concurrence with all programmatic work will continue to be required to ensure impacts to EM and CEF are minimized.

Plutonium Facility (TA-55): On Tuesday, NNSA rejected the interim TSRs submitted by LANL on March 23, 2005. Though stating that this was one of the best safety basis documents submitted by LANL, NNSA indicated that several comments, primarily dealing with insufficient specificity in Limiting Conditions for Operation statements, needed to be addressed prior to approval. The rejection memorandum made no mention of the NNSA position regarding implementation of a safety-class active confinement ventilation system to address vulnerabilities associated with the previous passive confinement strategy (site rep weekly, 4/1/2005).

Plutonium-238 Operations: LANL priorities for TA-55 Pu-238 operations are (1) recover the room contaminated in August 2003 and (2) startup the full-scale aqueous scrap recovery line, preferably by late August 2005; LANL is rebaselining these efforts. Plans for the latter include full readiness verification, which would address a previous issue (site rep weekly 8/1/03). Progress on the former requires LANL to next verify compensatory measures are in place for getting residue cans into drums and out of the room. In parallel, DOE-NE is considering if low-inventory cans can be disposed as waste instead of retained to recover the Pu-238. This would be beneficial since about half the cans in the room (~120 of 238) plus about 20 others in the vault may qualify for WIPP. Many of the other cans are higher-inventory cans with rags and combustibles. These residues require pyrolysis, which is not expected to resume before October. Pyrolysis appears key for significant risk reduction since cans in this population also contain about half of the room's inventory by mass of Pu-238.

Integrated Safety Management (ISM): LANL has had several occurrences recently in non-nuclear facilities that indicate worker safety issues continue to warrant elevated management attention. These include uncontrolled electrical hazards and improperly assigned respiratory protection levels.

Radiography Facility (TA-8-23): NNSA has approved downgrading TA-8-23 from a hazard category 2 nuclear facility to a radiological facility pursuant to inventory restrictions limiting nuclear material to less than 0.5% of hazard category 3 thresholds (site rep weekly 4/1/05).