DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 11, 2003

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending July 11, 2003

Stevenson and Von Holle were on site this week reviewing dynamic experimentation.

Pantex Support: The site rep attended the Standing Management Team (SMT) meeting at Pantex on Friday to determine the status of laboratory support for Pantex operations, including LANL support. The SMT is responsible for defining and managing requirements for seamless safety improvements (i.e., SS-21) for Pantex nuclear weapons processes. In June 2002, the SMT approved slipping completion of SS-21 for the W-88 from April 2004 to July 2004, due to scope growth from (a) accelerating bay tooling by 1 year (i.e., to 5/03 – still incomplete) and (b) incorporating a developmental primary assembly process specified by LANL that month. (Pantex site rep weekly 6/28/02).

This week, the W-88 SS-21 project informed the SMT that, because of delays in developing the new primary assembly process (a quality improvement), this safety-enhancement project is not expected to be completed until January 2006. This is a 17 month delay from the SMT approved baseline (7/04) and a 20 month delay from the original schedule (4/04). It is also beyond authorization basis and nuclear explosive safety study exemptions granted by NNSA (7/04 and 9/04, respectively), which will require NNSA to either suspend operations or extend the exemptions. It impacts availability of W-88 surveillance data. Per the project, even if the safety and quality improvements are decoupled now, the safety improvements would still be late – March 2005, an 11 month delay from the original schedule.

Price-Anderson Enforcement Letter: DOE Office of Enforcement (DOE-OE) informed LANL this week of its concern that LANL nuclear safety continues on a negative trend. DOE-OE observed that work control breakdowns that led to the recent Ion Beam Facility contamination resemble those that occurred in a TA-55 event in March 2002, raising questions on effectiveness of corrective actions. Also, the recurring TA-55 airborne releases, due mainly to glovebox glove failures, could indicate quality and work control issues. TA-48 exceeding its inventory limit as a radiological facility was also a flagged concern. DOE-OE took no action now because of LANL senior management commitment and because improvements being made will take time to be effective. They did state that escalated enforcement would be considered if non-compliances to the nuclear safety rule (10 CFR 830) occur at LANL (site rep weeklies 3/15/02, 4/18/03, 5/23/03, 6/13/03, 6/20/03 discuss the events above).

Plutonium Facility (TA-55): The LANL readiness assessment (RA) for the Pu-238 scrap recovery line began Monday. LANL expects it to conclude next week. Nearly all the procedures were updated between last Tuesday and Thursday (7/1-3/03), and management declared readiness. The RA team is the same as last July, and is using the same plan of action and implementation plan. This week, the team reviewed documents (e.g., closure of previous findings), walked down the line, and observed comminution and dissolution. These were demonstrated by the subject matter experts (PhDs) who are training the crew and who will supervise the operation after startup. Currently, the RA team does not consider the other operations significantly different than those observed last year, and does not plan to have those demonstrated again. In effect, this RA is a continuation of the RA of a year ago, focusing on the corrective actions from the last RA and on the subsequent changes due to the updated process hazard analysis, as identified informally by the individual team members within their areas of responsibility.