

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 7, 1998

**MEMORANDUM FOR:** G.W. Cunningham, Technical Director

**FROM:** T. Dwyer and H. Waugh, Pantex Site Representatives

**SUBJECT:** Pantex Plant Activity Report for Week Ending August 7, 1998

**DNFSB Activity Summary:** H. Waugh and T. Dwyer were on site all week. A. Gwal was on site Tuesday-Friday participating in BIO Upgrade reviews and 12-116 electrical walkdowns.

**W79 Cell Dissolution:** No W79 dissolutions were conducted this week due to material difficulties with internal parts associated with the Workstation. M&H is investigating a potential problem with several Teflon and Teflon-coated parts that appear to have deteriorated. It is possible that the degradation is an effect of the heated DMSO on the Teflon, or that the condition of being heated increases the susceptibility of the Teflon to mechanical insult. An interim fix should allow restart of the program by next Tuesday; long term modifications are being pursued.

**BIO Upgrade Status:** BIO Upgrade Project status (Fire Protection [FP] and lightning) was presented to V. Stello (DP-3) this week. The FP/detection systems for Pantex explosive facilities only meet the NFPA requirements for commercial and industrial facilities -- other potentially more stringent requirements (e.g., single failure, redundancy) have not yet been considered. The Lightning Project Team reported significant progress, although remaining issues prevented providing a definitive date to meet the Board's reporting requirement. Board staff walkdowns of the Lightning Warning Detection System (LWDS) identified potential shortfalls in backshift Plant Shift Superintendent coverage, inadequacies in static detector (field mill) installation and maintenance, and incomplete analyses of system accuracy under credible deviation scenarios. Also significant was the discovery that the LWDS is not addressed in the current Pantex authorization basis. Of note, A. Scruggs will take over as the Lightning Protection Project Team Leader. K. Tolk has been promoted to be M&H lead for all BIO Upgrade Projects.

**Building 12-116:** Tuesday, the Authorization Agreement for Building 12-116 was signed by AAO. Thursday, G. Ives (DP-20) ceremonially cut the ribbon to open the facility, but authorization to commence loading pits is not expected before Monday. The M&H pit loading plan has been conditionally accepted by DOE. Aspects of the plan beyond the initial thermal test loadout may be reworked in coordination with the Sealed Insert Program. Of note, Board staff review of facility electrical systems revealed that the breaker coordination study and the short circuit study need to be reperformed to meet IEEE standards.

**W87 SLT/Testbed:** The W87 Stockpile Laboratory Test (SLT)/Testbed Program was suspended last week due to problems with test hardware and procedures. DOE-AL, AAO, M&H, and SNL met this week to develop an investigative plan of action. It was agreed that DOE will authorize M&H to resume a limited SLT effort in order that the investigative body can observe the actual problems that exist. SNL engineers admitted in advance that the test hardware was far from optimum due to cutbacks in funding, which resulted in one test hardware group losing almost two-thirds of its 30-man engineering staff. The investigation will begin next week.