

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 15, 1999

MEMORANDUM FOR: G. W. Cunningham, Technical Director
FROM: T. Dwyer and H. Waugh, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending October 15, 1999

DNFSB Activity Summary: This week, T. Dwyer was on site; H. Waugh was on leave.

W62 D&I Program: DOE-AL NESD has completed their change control review of the new W62 tooling that has been developed for the D&I Program Phase 1 restart. All tooling and operational changes were deemed to be minor, and, as such, do not require that a NES Study be convened. M&H also initiated the W62 Management Self Assessment (MSA) this week. Based on observations of the bay demonstrations, and the number of specific NEOP changes being recommended by both the MSA team and the PTs themselves, this review looks more like a Procedure Validation than an MSA. The NEOPs are much improved over those in use during last summer's initial W62 NESS Revalidation attempt, but they are still sub-par, and do not satisfy all requirements of the M&H *Writer's Manual for Technical Procedures* [MNL-PX0006]. Significant work will be required before the Project Team is ready for the contractor RA.^[III.A]

Lightning Issues: The June 29th SNL letter on lightning was apparently the 1st in a series of letters addressing the subject. A July 19th SNL letter addressed to the Manager, DOE-AL, explicitly states, "For Pantex operations the engineered safety features [in each weapon] are only relevant during initial transportation to and from the assembly/disassembly area and during storage in Zone 4." That is, safety features (controls) attributed to specific nuclear weapon components "are only valid in the fully assembled weapon." On October 1st, SNL sent a letter to DP-20 emphasizing that "during the manufacturing process, which includes in-process transportation of weapons, *process or facility controls* [emphasis added] must be in place to protect warheads from lightning energy. This week, SNL sent a letter to the M&H W88 Existing Operations Reauthorization Project Team [dated October 12th] that suspended use of SNL W88 weapons response information that had been submitted for the W88 Hazard Analysis Report (HAR) and Authorization Basis Controls Document (ABCD). The purpose of this suspension was to allow time for SNL to review the data in light of the policy/guidance voiced in the July 19th and October 1st letters. The backlash from the suspension resulted in another SNL letter [dated October 13th] stating, despite the clear policy line drawn in the 1st three letters, that SNL had decided to allow reliance on certain weapons design features for the W88 Program. Meanwhile, M&H awaits formal transmittal of comments from AAO regarding the Lightning JCO that was submitted on September 9th.^[III.A]

Pit Issues: Over the last 6 weeks, M&H reports averaging ~2 repacks per shift [against a goal of 2.5]. However, a myriad of unresolved issues will continue to impact throughput. Competing manufacturing needs may drive the existing AL-R8 SI line out of Building 12-99 at the end of the year; yet repackaging of the RFETS pits still in FL containers has not yet begun, is projected to take thru February, and cannot be [easily] performed in Building 12-64 due to space constraints. M&H projections for bringing on the additional PTs to run a 2nd AL-R8 SI line show a best case of 3-months delay [if using internal hires -- with a concomitant impact on whichever weapons program the PTs leave] and a worst case of 9-months delay for [uncleared, untrained] new hires. Posting of the positions cannot begin until FY '00 budget authority is granted. Delays in the construction associated with Building 12-116 Phase 2 are affecting available pit storage locations, and could soon result in further complications to the logistics of pit repackaging. Open technical questions still exist with regard to AL-R8 SI bolts, celotex, stage right 6-pack safety factors, image station image quality, and pit cleaning station requirements.^[III.A]