DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 16, 2000

MEMORANDUM FOR: J. K. Fortenberry, Technical Director

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

SUBJECT: Pantex Plant Activity Report for Week Ending June 16, 2000

DNFSB Activity Summary: T. Dwyer and H. Waugh were on site all week. C. Martin and W. White were on site Tuesday through Friday observing B61 Mod 10 Project activities.

Pit Issues: During a critique held to investigate the circumstances surrounding the over-temperature condition in Building 12-99 bay 4 [see last week's report], it was suggested that only forced hot air could have caused such a fast temperature rise. Building 12-99 facility management indicated that this was not possible. It appears now that a malfunctioning Honeywell controller could have resulted in a fan blowing hot air into the facility. A controlled experiment is underway to confirm this possibility.[II.A]

AL-R8 Sealed Insert (SI) Repackaging Line: On Thursday, M&H completed loading of the thermistored AL-R8 SIs into an instrumented magazine in Zone 4 in support of the planned thermal study. M&H has also cleaned the etching acid from over 90% of the ready inventory AL-R8 SIs. Repackaging throughput this week remained low -- 4 pits.[II.A]

B61 Mod 10 Project: The B61 Mod 10 Project Nuclear Explosive Safety Study (NESS) and DOE Readiness Assessment (RA) commenced this week. The NESS was essentially complete Thursday evening. Open Board's staff questions regarding the safety of these operations were not resolved during the NESS, which had no pre-start or post-start findings. The NESS group will report several observations, most notably concerning the unnecessary use of isopropyl alcohol in the cell while the nuclear explosive is present. The DOE RA did not conclude this week, in part due to inadequate support from the M&H Project Team, which appeared to be distracted by the NESS. The DOE RA will continue next week. The Board's staff noted at least two TSR-level controls that appeared to be inadequately implemented.

> Radiographic verification of unit conditions is required before the operation begins. The radiograph has already occurred [in May], yet the operation will not occur until at least July. Nothing in the authorization basis provides an adequate justification for this delay between taking the radiograph and commencing operations.
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> The project justification for continued operations (JCO) requires the plant shift superintendent to verify that national weather service predictions and the lightning detection and warning system indicate no threat of thunderstorms exists during the shift scheduled to perform the operation. There are no explicit criteria specified for this control.[II.A]

Fire Protection Issues: DOE-HQ, DOE-AL, AAO, and M&H personnel met to discuss the path forward regarding the site Fire Alarm System and the reactivation of ultraviolet (UV) actuated deluge capability. The major issue remains funding. While UV hook-up in nuclear

explosive facilities other than Building 12-44 is proceeding this summer [on scrounged funds], work in Building 12-44 will require reprioritization of the FY ’01 budget. Corrective actions for the Fire Alarm System will not be addressable with a formal budget line item until FY ’03. In the interim, the site will have to use site maintenance funds to stave off a system failure. Interestingly, the system in use was reportedly forced on the complex by a GSA requirement; it is not clear why other DOE sites are not reporting similar difficulties.[II.A]