

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 30, 2000

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: T. Dwyer, H. Waugh, and W. White, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending June 30, 2000

DNFSB Activity Summary: T. Dwyer, H. Waugh, and W. White were on site all week. Board members J. Mansfield and J. Roberson were on site Monday-Wednesday observing weapons operations. M. Helfrich and OE R. Lewis were on site through Monday observing the ISMS Verification. T. Burns and T. Huntley were on site Wednesday-Thursday attending a pit management meeting. J. McConnell was on site all week for both the ISMS and pit activities.

Integrated Safety Management System (ISMS) Verification: The Phase II ISMS Verification at Pantex was completed on June 26th. The 1-week verification process resulted in 1 DOE and 4 contractor Opportunities for Improvement (OFIs). Contractor OFIs involved Authorization Basis improvements, activity/task level hazard identification, procedural consistency and compliance, and integration of feedback and improvement mechanisms. The DOE OFI was a compilation of 3 specific, unrelated issues. There were also 5 Noteworthy Practices. Bottom line: the verification team determined the ISMS is implemented at Pantex.^[II.A]

Recommendation 99-1: A periodic pit management meeting was held on Wednesday, with representatives from DP-20, DOE-AL, AAO, M&H, and the Design Agencies. The status of the AL-R8 Sealed Insert (SI) repackaging program was the focus of discussions. M&H indicated that they may scale down their efforts to a 2-line-1-shift operation, with a target production rate of 100 pits per month. This course of action is inconsistent with DOE's commitment under the Recommendation 99-1 Implementation Plan to establish and sustain a 2-line-2-shift operation, with a target rate of 200 pits per month. M&H has little alternative, however, given the current funding. M&H has developed an adequate approach to augment the container surveillance plan, in order to address the 600 [already packaged] AL-R8 SIs that were affected by the problematic vendor etching process -- the current funding profile will also preclude implementation of this remedial approach. With regard to progress on the AL-R8 SI bolt replacement effort, bolt qualification is behind schedule, as LLNL has yet to perform the necessary 20 foot drop test. It appears that the repackaging effort will continue to degrade and ultimately fail unless DP-20 provides adequate funding to execute DOE's Implementation Plan commitments.^[II.A]

Tooling Issues: DOE-AL approved an exemption to the electrical isolation requirements in the DOE-AL Supplemental Directives, to reinstate use of the "Blue Goose" gas-sampling carts. Cart certification had been pulled as a result of failed isolation tests of ceramaseal® isolators under partial vacuum conditions. The exemption was approved based on M&H plans to provide a "path off" isolation by using PVC floor mats. The exemption approval, however, did not require M&H to determine why the isolation tests suddenly failed -- they had passed (using similar equipment/procedures) only months earlier. M&H has no plans to identify the cause of an apparently rapid decline in the isolation properties of the ceramaseals®.^[II.A]

Canned Secondary Assembly (CSA) Issues: AAO efforts to drive a solution to the open Board question on CSA vulnerability to fire [re: Board letter to DP-1 dated May 2nd] hit another snag on Wednesday. AAO/M&H determined that the results from initial modeling efforts conducted by Y-12, using scenario data provided by M&H, did not properly characterize the issue at hand. M&H provided Y-12 with revised scenario input data, based on a better understanding of what input was required and how that input was used in the model. It now appears that rough, bounding calculations will not be available until late next week.^[II.A]