DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 3, 1997

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 3, 1997

DNFSB Activity Summary: Timothy Dwyer and Harry Waugh were on site all week. Jack Deplitch was on site Wednesday through Friday to review W79 issues. Charles Keilers was on site Thursday and Friday to discuss pit issues.

Dynamic Balancer: The Project Team Leader determined that the Independent Review Team (IRT) would convene Monday, October 6th, despite the fact that project readiness was suspect. However, two members of the Project Team refused to sign the readiness statement, and AAO management therefore informed DOE-AL that IRT was deferred. Open issues include:

- A Facility Representative validation (commissioned by the Project Team) is incomplete.
- A final walkdown of the NEOP (late Thursday) revealed numerous errors.
- M&H is still trying to obtain satisfactory substitute bolts for the faceplate.
- Other physical equipment changes (e.g., hydraulic plant configuration verification, including valve line-ups and lockwiring) remain incomplete.
- Necessary documentation changes (e.g., Surveillances, Q-forms, Maximum Limits Lists) flowing down from the BIO/CSSM remain to be documented, implemented, and verified.
- The Dynamic Balancer BIO and CSSM changes have been approved by DP-2; Board staff identified (minor) errors in these documents, but they will not be addressed prior to startup.

Pit Issues: AT-400A pit repackaging will likely occur at a slow rate (20 pits/month or less) and be limited to one pit type for the foreseeable future. Last spring, M&H started to design a sealed insert for the existing pit containers (AL-R8) that would mitigate many of the current concerns with the AL-R8s. This effort was narrowly focused on pits being received from Rocky Flats, to avoid later repackaging of these pits and thereby minimize personnel exposure.

Since June, all three Design Agencies, as well as DOE-AL, initiated their own designs (6 designs total) for sealed AL-R8 inserts, focusing on the general population of pits. Two weeks ago, DOE-AL down-selected from these options to three competing designs, one of which is the original M&H concept. DOE intends to select a single design later this month. All of the designs are being based on a set of functions and requirements, assembled by M&H for Rocky Flats pits, that appears to be incomplete for the general population. In a further complication, AAO and M&H have been informed that there is no FY98 funding for the Pantex share of this effort.

W79 SIRR: The W79 Single Internal Readiness Review has been plagued by delays. Thursday's start was delayed four hours to allow the Project Team to complete several outstanding prestarts from the first SIRR, as well as the necessary documentation changes flowing down from the BIO/CSSM changes, which were approved by AAO on Wednesday. Subsequent startup of the DMSO Dissolution Workstation for SIRR observation was halted due to a fault in

the hot water system. At this point, if repairs can be effected, the SIIR Team will attempt to complete their review over the weekend. Resolution of any SIRR findings, as well as outbriefing of M&H/AAO management to request approval, may therefore delay the projected Monday morning startup of the W79 Type 6B. Observations thus far indicate major improvements have been made in both the NEOP and PT training. Two issues have already been identified:

- The bonding straps on the workstation are a combination of #12 and #18 wire; the Explosive Safety Manual requirement is for #10 wire. The Project Team is attempting to have SNL justify the use of the existing bonding straps.
- The DOE-AL JCO for W79 Type 6B operations includes a requirement to demonstrate satisfactory conductivity of the butyl rubber gloves in the workstation. Although an ASTM standard exists to guide conduct of such a conductivity test, no satisfactory specification is defined. SNL is attempting to define one.

W69 Detonator Occurrence: W69 Dismantlement was terminated late last week because of detonator assembly separation (on 4 of 41 units) during the removal process. The deterioration of the detonators appears to be the result of exposure to ammonia outgassing from the molded "dog dish" component. [Note that this was a known problem that resulted in an ALT during the W79 program lifetime, although no backfit was conducted.] The W69 Management Team arrived at the apparent optimum solution to the problem -- removing the HE hemishells from the pit but not removing the detonators, then moving the HE to another location for removal of the detonators. The Management Team correctly recognized that this required a detailed hazard analysis, and has charged the Design Agency hazard analysis group with reviewing this proposal; the group has responded that it will be at least two weeks before they can provide an answer. It therefore appears the W69 Dismantlement Program will be shut down for at least three weeks.

Attachment

Upcoming Pantex Events:

October 6-7 -- W79 Type 6B

October 6-7 -- General Gioconda Site Visit

October 6-10 -- Dynamic Balancer Independent Evaluation

October 7 -- SNL Institutional Operational Issues and Initiatives Meeting (@ SNL)

October 8 -- Pit Thermal Meeting

October 8 -- Quarterly Production Meeting

October 13 -- Dynamic Balancer startup [target date - *likely to be delayed*]

October 20-24 -- NESD Annual Appraisal

November 26 -- W79 NESS starts

November 30 -- Electrical Tester Master Study completion

December 1-12 -- W56 SIIR

NOTES: ** highlights events for which schedule has changed