

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 12, 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 December 12, 1997

DNFSB Activity Summary: Timothy Dwyer and Harry Waugh were on site all week. Board Member Dr. Mansfield was on site Tuesday, and the entire Board and Board Technical Director were on site Wednesday and Thursday to discuss pit issues and integrated safety. Board staff members Jay DeLoach and Charles Keilers were also on site with the Board.

Dynamic Balancer: M&H successfully restarted the Dynamic Balancer on Wednesday, after approving a BIO change to address corrective measures for the over voltage (overspeed) trip device. [Note that the long term corrective action is to install an overspeed trip that directly senses faceplate speed (rpm) instead of drive motor armature voltage.] An inert W88 Joint Test Assembly (JTA) was balanced -- although a significant number of errors were discovered in the new W88 modules in the NEOP. Subsequently, on Thursday, after approving a JCO to allow use of the W88 POI as-is, a high-fidelity W88 JTA was successfully balanced. Long term corrective actions to address post-start Dynamic Balancer issues are scheduled to continue through March 1998. Additionally, current schedules show the balancing operation being moved out of Building 12-60 to Building 12-84 Bay 12 during March-April 1998 (due to 12-60 ramp structural issues).

Pit Issues: Over the last six weeks, several events have occurred that will affect the long-term safety of pit storage. On November 4th, the design agencies issued a draft pit storage specification with moisture controls that will likely require the pits to be stored in sealed containers. On December 3rd, DOE informed the Board that the selection of a modified AL-R8 pit storage container design had been delayed for two months. Although this means that pits received from Rocky Flats will need to be repackaged, the delay provides DOE an opportunity to apply a logical and consistent set of design requirements. On December 5th, M&H successfully restarted the AT-400A Pit Repackaging Line (halted since last September).

Also, on December 5th, DOE decided to discontinue efforts to consolidate surplus pit storage into Building 12-66, and shift the funding to increasing the number of Zone 4 magazines with active cooling. It has never been shown that the consolidation in 12-66 provided a net safety improvement, although the subject has been intensely studied since the storage and disposition record of decision (January 1997). Also, more actively-cooled magazines will slow pit corrosion and protect temperature-sensitive pits. It should be noted that this makes the second pit-associated project in a row (AT-400A, 12-66) for which DOE is reconsidering the path forward after considerable investment of time and money. On December 9th, DOE provided the staff a rough draft outline for an integrated pit storage program plan. DOE expects to have a draft plan by the end of January 1998, although the plan approval authority has not yet been determined.

Several questions remain open, including: (1) the role of the AT-400A pit container design; (2) the role of the container in accident mitigation; (3) the surveillance rate for surplus pits; and (4) whether pit temperature and humidity controls will become part of the authorization basis.

Attachment

Upcoming Pantex Events:

December 15 -- Neutron Radiography (Building 12-56) RA

December 16-17 -- Pantex BIO Upgrade Projects Review [@ Albuquerque]**

December 17 -- BIO Upgrade Transportation Project Team Meeting [@ Albuquerque]**

December 17 -- Pit Thermal Meeting

December 22 -- W79 SIID delivery [target date]

December 23-29 -- W79 Cell SIRR

January 5-6 -- W79 Type 6B (unit #2) Dissolution [target date]

January 13 -- Quarterly NMO Program Meeting**

January 14 -- Quarterly Production Meeting

January 20 -- W79 NESS starts

January 23-25 -- W56 SIRR

[unknown] -- NES Electrical Tester Master Study completion

February 9 -- W56 SIID complete

January 19 -- W79 NESS starts

March 16 -- W79 FDU

NOTES: ** highlights events which are new listings or for which schedule has changed