

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 10, 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 10, 1997

**DNFSB Activity Summary:** Timothy Dwyer and Harry Waugh were on site all week. OE Dave Boyd was on site Monday thru Wednesday reviewing Dynamic Balancer restart issues. OE Lary McGrew was on site Tuesday thru Thursday observing the W79 Type 6B dissolution.

**Dynamic Balancer:** The Dynamic Balancer Independent Review Team (IRT) was sent home on Monday, October 6<sup>th</sup>, just before the review was to start. The nominal reason for IRT deferral was a report from SNL that the hanging scale, an integral part of the mass properties determination process, failed to meet measurement error requirements, as well as resolution requirements. (Note that this was the second time SNL rejected this piece of equipment.) In addition to the hanging scale, there were restart objectives and prestart work that had not been completed in time for the IRT, as outlined in detail in the October 3<sup>rd</sup> Site Representative letter. The number of open items appears to exceed the "manageable list of open prestart findings" discussed in DOE Order 425.1. The Dynamic Balancer IRT has now been rescheduled for October 27<sup>th</sup>. A detailed path forward has been developed, incorporating all open prestart items known to the Project Team, and including scheduled completion *and validation* times.

**W79 Type 6B Program:** The W79 Single Internal Readiness Review (SIRR) was successfully completed last weekend. Three prestart findings were identified, including one concerning changes that were required in the NEOP. The finding regarding NEOP changes is a strong indication that site procedure development remains a weak point -- one of the four SIRR post-start findings also concerned additional NEOP changes, and observation of the SIRR NEOP demonstration by the Site Representatives indicated that the overall NEOP error total was closer to two dozen. [NEOP errors have also been a continuing sore point with the Dynamic Balancer.]

Resolution of SIRR prestart findings and briefing of M&H/AAO management was completed Monday afternoon. The Project Team also developed a work-around for a W79 Type 6B storage can internal fixture that was discovered to be out of calibration [as will also turn out to be the case with the first half dozen WR units to be worked]. In addition, the Project Team obtained SNL and LLNL letters that DOE has accepted as justification for disregarding DOE Explosive Safety Manual requirements on electrical bonding of the DMSO dissolution workstation. W79 Type 6B operations then commenced Tuesday morning.

Observation of the first W79 Type 6B operation indicated that the PTs and their supervisors [including the Facility Manager/Program Engineer] have good understanding of controls, safety, and the latest version of the NEOP. However, this first dissolution of HE in the new workstation revealed further shortcomings in the NEOP -- apparently due to inadequate information transfer from the Design Agency. Five Type 6B dissolutions were conducted at LLNL as part of the DMSO process prove-in; difficulties were reportedly experienced in dissolving HE in the vicinity of pit tubulation, and in separating two of the assemblies through which the tubulation passes. These difficulties were not highlighted to the W79 Project Team; no provision is made in the existing NEOP for dealing with these anomalies. As a result, further changes will be required in the W79 process before any consideration can be given to WR operations. WR operations will also require development of an approved W79 pit packaging standard, which does not yet exist.

## **Attachment**

### **Upcoming Pantex Events:**

October 16 -- B83 Program Review\*\*

October 20-24 -- NESD Annual Appraisal

October 21 -- W69 Dismantlement Restart [target date]\*\*

October 27-30 -- Dynamic Balancer Independent Evaluation\*\*

October 31 -- Dynamic Balancer startup [target date - *likely to be delayed*]\*\*

November 26 -- W79 NESS starts

November 30 -- Electrical Tester Master Study completion

December 1-12 -- W56 SIRR

NOTES:   \*\* highlights events for which schedule has changed