

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 15, 1999

MEMORANDUM FOR: G. W. Cunningham, Technical Director
FROM: T. Dwyer and H. Waugh, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending January 15, 1999

DNFSB Activity Summary: H. Waugh and T. Dwyer were on site all week. P. Gubanc was on site all week attending the NSTE-270 NES Orientation Course.

Isopropyl Alcohol Fire: The investigation into the cause of the small fire in 12-44 Cell 3 on December 29th continues. In the interim, DP-20 approved a JCO on Friday, allowing resumption of WR operations involving flammable solvents, provided a nuclear explosive engineering procedure (NEEP) explicitly addressing each application of solvent in a NEOP is approved. [Of note, AAO provided verbal direction to M&H regarding use of an Engineering Instruction (EI) instead of a NEEP for those weapons programs that still do not have NEOPs.] Any of 3 options may be chosen to mitigate electrostatic discharge as an ignition source during solvent use: change to less resistive gloves, bond, or touch off. The JCO restricts scraping operations during use of flammable solvents until M&H can evaluate them for generation of sparks. W79 operations resumed on Friday; several programs should resume on Monday as NEEPs are approved. Most other operations should be back up by the end of next week. In order to recover some of the lost production time, a scheduled outage in 12-84W will be delayed one week, to February 1st.

W87 Life Extension Program (LEP): AAO and M&H efforts to complete all of the prerequisites to commence Design Agency Engineering Evaluation (EE) demonstrations continued this week. In particular, development of an adequate HAR and ABCD has been a struggle -- both documents have been revised on an almost daily basis. Thursday, a "murder board" consisting of senior M&H Risk Management personnel, W87 Project Engineers, and Facility Managers; Design Agency representatives; Battelle and Sciencetech Risk Management Experts; and AAO Authorization Basis personnel conducted a very credible and critical review of the latest HAR/ABCD. Based on the corrective work required, AAO has obtained DOE-AL agreement that the start of the EE will be delayed until next Wednesday. Although current HAR/ABCD efforts appear to be moving in the right direction, a more telling question might be, "*What was the Project Team doing about the HAR/ABCD during the past 6 months?*" M&H has also ordered a last-minute walkdown of the W87 NEOPs, from start to finish. This effort began Thursday afternoon, and will continue through the weekend, as a result of the discovery that the W87 procedures were never walked down after they were converted from O&I to NEOP format.

Pit Issues: LANL, LLNL, and M&H have conducted a series of thermal tests comparing pit surface temperatures when packaged in the AL-R8 with those when packaged in the AL-R8 Sealed Insert (SI). Results indicate that in the same external environment, pits packaged in the helium-filled AL-R8 SI equilibrate at temperatures from 12–15 °F lower than those packaged in the AL-R8. This was welcome news, as it means there should be more margin during summer month storage of pits in Zone 4. A copy of the test data has been forwarded to the Board staff.