

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 9, 2001

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: H. Waugh and W. White, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending February 9, 2001

DNFSB Activity Summary: H. Waugh was on site all week. W. White was on sick leave Thursday and was on site for the remainder of the week.

W62 Milestone I: The Milestone I presentation for the W62 SS-21 program was given to the Standing Management Team on Friday, February 2, 2001. During this meeting, the W62 project team presented their conceptual designs for W62 tooling and process flow to the Standing Management Team. In general, the W62 SS-21 project team appears to have developed a conceptual design for tooling and process flow that, if properly implemented, will significantly enhance the margin of safety for W62 surveillance operations. The following accomplishments are particularly noteworthy:

- The design of tooling minimizes manual lifting operations for explosives.
- All but two electrical tests may be eliminated from the W62 surveillance process. The two remaining tests are both conducted with a DC resistance tester.
- Bore down operations may be implemented through tooling which controls the process more rigidly than current manual operations.
- Gas sampling may be accomplished by a new system (VIPER) which does not provide any electrical connection from the facility power system to the nuclear explosive.
- Radiography may be accomplished in the shipping container, eliminating the need for any lifts in the radiography bay. ^[II.A]

The Standing Management Team did suggest a few areas for further exploration, including the following:

- It may be possible to eliminate one of the two remaining electrical tests.
- The tooling design, while exceptional, left a single remaining manual lift of a mechanical component over the nuclear explosive package.
- The methodology for the Step 2 hazards analysis does not appear to take appropriate advantage of the work already completed for the Step 1 analysis

W76 Disassembly and Inspection Operations: A violation of administrative fire protection controls for the W76 occurred earlier this week when crafts personnel brought chairs into the round room of the W76 cell and later left the cell without removing the chairs from the round room. Fire protection controls for the W76 program require that unanalyzed, transient combustibles brought into the cell must be removed before the cell is left unoccupied. On Tuesday, production technicians noticed three chairs and a yellow plastic tie wrap had been left in the round room. At least two of the chairs were left by crafts personnel after conducting maintenance during earlier shifts. According to crafts personnel, one of the chairs was already in the round room when they began maintenance. The root cause of the control violation appears to be a lack of understanding by crafts personnel of what constitutes transient combustibles. Crafts personnel were under the impression that material in the cell corridor, not just in the round room, was part of the analyzed facility combustible load. Additional training may be warranted for crafts personnel given the growing complexity of the various administrative control schemes for fire protection of different weapons programs. ^[II.A]

Pit Repackaging Operations: The sealed-insert pit repackaging rate continues to average about 30 pits per week. The number of pits repackaged as of February 7, 2001, was 476 for FY01. A total of 1543 pits have been repackaged. ^[II.A]