

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 14, 2002

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: H. Waugh and W. White, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending June 14, 2002

DNFSB Activity Summary: H. Waugh was on leave Wednesday and Friday and was on site for the remainder of the week. W. White was on leave on Wednesday and was on site for the remainder of the week.

High Explosive Machining: On Tuesday, BWXT suspended high explosive machining operations at Pantex following an incident in which a computer-controlled machine drilled through a conventional high explosive part at excessive speed and without the coolant required for this remote, wet machining operation. No significant reaction occurred in the explosive, but until the cause of the event can be determined, machine operations are suspended. The machine appeared to be running a program for one tool when a different, longer tool was actually attached. The tool attached was the correct tool for the operation that was to be performed. It is unknown why the machine appeared to be running the wrong program for that tool. The likely causes are controller malfunction, software errors, or operator error. The operator, who was watching the remote machining operation via a video link, did not utilize an available emergency stop button to halt operations. The machine stopped when the drill bit hit the support on the other side of the explosive component. [II.A]

Pit Repackaging Program: Earlier this week, BWXT completed packaging six of a subset of problematic pits for shipment to the design agency. These pits had been deemed unsuitable by the design agency for packaging in sealed-insert containers using the current repackaging process. The path forward for repackaging these pits into an appropriate shipping configuration and transporting them to the design agency for disposition had been an open issue for several years. The packaging configuration used was the standard shipping configuration for pits in an FL container. NNSA and BWXT had to substitute one of the six pits intended for shipment with an alternate because its serial number was not legible. The six pits packaged this week are now ready for shipment, and the remainder of the problematic pits will be shipped later this year or early next year when the design agency is able to accept them. [II.A]

Enhanced Transportation Carts: On Wednesday, OASO approved authorization basis changes for the W78 and W80 programs to allow transportation of these units in the new enhanced transportation carts. For both programs, however, transportation of the units during lightning warnings will not be allowed until BWXT reviews weapon response information provided by the design agencies to show the unit configurations are not vulnerable to the maximum lightning threat inside the enhanced transportation carts.

The W80 program will utilize only the enhanced transportation cart designed for full-up configurations since those are the only transportation operations in the W80 program. Prior to using the enhanced transportation cart for either full-up or partial configurations on the W78 program, BWXT must review its method for taking electrostatic discharge measurements and determine whether those measurements are representative of actual facility conditions. According to OASO, measurements taken to date were obtained in a training bay which may not be representative of actual flooring and humidity conditions in a nuclear explosive facility. OASO requested a response from BWXT on this issue within a week. [II.A]