

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy Dwyer, Technical Director
FROM: Matthew Duncan and Rory Rauch, Pantex Site Representatives
SUBJECT: Pantex Plant Report for Week Ending April 23, 2010

Potential Inadequacy in the Safety Analysis (PISA): Early one morning, material handlers were preparing to load two vehicles with canned subassemblies (CSAs). After they moved the CSAs from the warehouse where they were staged to the loading dock, the plant shift superintendent (PSS) issued a severe weather warning. The severe weather program is a specific administrative control (SAC) covered by the generic limiting condition of operation (see 11/27/09 and 3/12/10 reports). Severe weather warnings are issued for high wind, tornado, or severe thunderstorm warnings. The control requires that operators move CSAs (or other items such as nuclear explosives [NEs]) into an approved structure or an NE or nuclear material transport trailer with the doors closed upon issuance of the warning.

The material handlers decided to load the trailers because the dock area was not an approved structure. Later, they realized they needed to close the doors; however, they would have had to move the trailers at least ten feet to allow the doors to close. They remembered they were not allowed to move trailers unless all of the CSAs were tied down (this is another SAC), but that would have taken about an hour to perform properly. Instead of taking an action that would have been compliant with the SAC (e.g., moving the CSAs to an approved structure) they chose to do nothing. About 20 minutes later, the PSS lifted the severe weather warning. This event was initially declared a Technical Safety Requirement (TSR) violation, but the next day B&W changed the event categorization to a PISA since closing the trailer doors in this situation would require violation of the tie down SAC.

Missed In-Service Inspection (ISI): While performing monthly ISI activities on a facility crane assembly in a nuclear explosive bay, maintenance personnel noticed the sticker for the annual hoist insulator ISI—which ensures the hoist pendant and hoses will sufficiently limit the current to the lightning sensitive component following a lightning strike—indicated the inspection was approximately 10 months overdue. They immediately contacted the on-shift facility manager who subsequently set the facility material limits to zero after he was unable to locate any evidence that the hoist insulator ISI had been performed within the required time frame. The following day, the day-shift facility manager located the relevant paperwork, which showed the ISI had been initiated in May 2009, but maintenance personnel never completed the work. The facility manager returned the facility to operational status after the hoist pendant passed the current-limiting requirements associated with the ISI.

Transportation Accident: While attempting to park an empty NE transportation trailer in an approved NE staging area, the driver contacted a metal pole, rupturing the fuel tank and spilling approximately 20 gallons of fuel (the TSRs specify a limit of 30 gallons of fuel for all NE transport trailers). The driver's supervisor contacted the PSS, who immediately dispatched the spill team. The spill was contained within two hours. B&W management has removed the driver's qualifications and will require spotters for all NE transportation trailer parking in Zone 4 until a formal investigation and causal analysis has been completed. NE transport trailers are qualified to protect thermally-sensitive contents from the fuel fire that could have resulted from this spill.