

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy J. Dwyer, Technical Director
FROM: Matthew Duncan and Rory Rauch, Pantex Site Representatives
SUBJECT: Pantex Plant Report for Week Ending November 27, 2009

Generic Limiting Condition of Operation (LCO): B&W is in the process of implementing a single, generic LCO that addresses the failure to comply with the required actions for a number of specific administrative controls (SACs). In every case, the recovery action is to re-establish compliance immediately or place the affected material in a safe configuration and develop a recovery plan. The generic LCO mainly covers controls with sitewide applicability, such as lightning standoff, fire department response, transportation configuration assembly, and the nuclear material and inventory control program. PXSO approved the safety basis change to implement this generic LCO last week, but the change will not become effective until B&W conducts all required training, which could take several weeks. In a related longer-term effort, B&W is in the process of reviewing the derivation of all administrative controls (ACs) in the documented safety analysis to determine whether each control has been appropriately labeled (e.g., SAC or programmatic AC). When the AC labeling effort is complete (currently most proposed changes have been submitted to PXSO for approval), B&W plans to eliminate the generic LCO and establish specific LCOs for some of the remaining SACs.

W76-1 Operations: The original attempt to recover from the high explosive (HE) separation event from August was suspended after the lifting fixture from the assembly process was unable to maintain vacuum on one of the HE charges (see 11/13/09 report). B&W was at a point in the process where the assembly lifting fixture could be exchanged for the disassembly lifting fixture, which is better suited for the operation primarily because it is capable of providing more lifting force. The procedure and justification for continued operation were modified accordingly and the recovery operation was successfully executed this week.

In developing the process and governing safety basis documentation for the above recovery operation, B&W exercised the terms of a special weapon response agreement. In October 2008, representatives from the design agencies and Pantex gave B&W primary responsibility for weapon response when the pit and HE are separated by design features such that an HE detonation or deflagration cannot present a fissile material dispersion hazard. According to the agreement, the impetus for this change was the desire by all parties to employ the significant HE expertise at Pantex to reduce the demand on the design agencies for input to HE hazard analyses. In the case of this recently executed recovery operation, B&W designed the process such that the pit would be packaged and removed from the facility as soon as practicable. B&W's Applied Technology division provided weapon response for the steps that followed the segregation of the pit and HE.