

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

**MEMO TO:** Timothy Dwyer, Technical Director  
**FROM:** Tom Spatz, Pantex Site Representative  
**SUBJECT:** Pantex Plant Report for Week Ending July 20, 2012

**Anomalous Units:** This week, the coordination copy of the Nuclear Explosive Safety Study Change Evaluation (NCE) report was briefed to the NNSA Production Office (NPO). The NCE team found no pre-start or post-start findings, no deliberation topics, and no minority opinions.

The safety basis for this recovery effort has not gone as well. The Justification for Continued Operations (JCO) was sent to the NPO on July 10, 2012, and has not been approved yet. The Design Agency's weapon response associated with two specific disassembly configurations shows the explosive having increased sensitivity to mechanical insults. This has resulted in the addition of three tools to the process, as well as some administrative controls for tool cleanliness. It is not clear from the weapon response summary document whether these new weapon response values apply to high explosives with this specific type of crack, or this type of explosive.

This week the Explosives Technology Division issued an Information Engineering Release (IER) stating that they had received a cracked charge with crack dimensions similar to those of the anomalous units. The IER stated these cracks from disassembly operations are, "increasing in frequency to the point they are expected."

**W87 Potential Inadequacy in the Safety Analysis (PISA):** This week, B&W Pantex issued a PISA for W87 operations. The PISA resulted from new weapon response data associated with the Limited Life Component Exchange start-up activity. The new data will only affect the mechanical assembly and disassembly operations, and not physics package operations. This is not expected to impact the ongoing mechanical assembly Operational Safety Review (OSR) since the assembly of the component with the new weapon response was not observed by the OSR team. The OSR team did observe a unit that failed vacuum chamber operations, and an obsolete procedure that needed to be revised to recover that unit. The OSR is ongoing.

**Conduct of Operations:** There were two events this week of conduct of operations mishaps. The first involved a production technician not reading a "note" in a nuclear explosive operating procedure, which resulted in the misalignment of tooling later in the procedure. The second involved several steps in the pre-operations checklist of a nuclear explosive operating procedure that were not initialed. This was observed by the NPO facility representative. Operations were stopped, and the unit placed in a safe and stable configuration.

**Deluge Activation:** The fire department was dispatched to an explosives pressing facility this week because of a deluge system activation. There were no personnel or explosives in the facility at the time and the fire department had to cut the lock to enter the facility. B&W has determined that a failed gasket was the cause of the deluge activation. The deluge system used for this explosives pressing facility is not the same as those used in the nuclear explosive facilities. The facility is expected to be operational next week following electrical system checks and cycling of the press.