

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 8, 2014

**MEMO TO:** Steven Stokes, Technical Director  
**FROM:** Thomas Spatz, Pantex Site Representative  
**SUBJECT:** Pantex Plant Report for Week Ending August 8, 2014

**DNFSB Staff on Site:** R. Tontodonato (Deputy Technical Director) was at Pantex to observe Site Representative activities. J. Mercier was at Pantex for a lessons learned meeting of the Integrated Program Planning and Execution System. J. Deplitch, M. Helfrich, and J. Mercier were at Pantex to observe the Full Participation Exercise (FPE 14-1).

**Positive Unreviewed Safety Question (USQ) Determination for Mass Properties Transfer Cart:** Consolidated Nuclear Security, LLC (CNS) upgraded the declared Potential Inadequacy of the Safety Analysis on the falling man analysis of the mass properties transfer cart to a positive USQ determination. (See report for 8/1/2014.) The Mass Properties Safety Analysis Report contains a functional requirement for the transfer cart that it must withstand the 95<sup>th</sup> percentile falling man event without dropping the unit. CNS tooling engineers discovered that the transfer cart may not be capable of withstanding the vertical load of the falling man without dropping the unit when the unit is lowered below 41 inches. The mass properties transfer cart is used in the vacuum chamber and mass properties facilities. Prior to releasing the USQ determination, CNS removed the pause in operations of this cart for vacuum chamber operations because the unit is above 41 inches. CNS is preparing an Evaluation of the Safety of the Situation to transmit to the NNSA Production Office (NPO).

**Multi-Unit/Multi-Team/Multi-Mod Operations:** In July, CNS requested permission to remove all multi-unit operating restrictions on one weapon program from the Master Authorization Agreement (MAA). CNS stated that they had demonstrated multi-unit processing using a Manufacturing Process Evaluation Targeted Assessment with NPO personnel shadowing the assessment. This level of multi-unit operations was presented but not demonstrated during the NNSA readiness assessment or the latest Nuclear Explosive Safety evaluation for this program. This week, the NPO Acting Senior Scientific Technical Advisor sent a letter to the NPO Manager recommending removal of the restriction in the MAA.

**Blast Door Interlock (BDI) Limiting Conditions for Operation (LCO):** CNS entered one facility into the appropriate LCO for intentional override of the BDI system to perform maintenance operations on the inner BDI. This LCO does not require operations personnel to immediately implement an administrative control to restrict access to the facility. When the Site Representative attempted to access the facility to perform routine observations, the outer BDI failed, allowing the door to open while maintenance personnel were working on the inner interlock with the blast door open. Both personnel interlock blast doors were open at the same time, when one was required to be closed. CNS exited the original LCO and entered the LCO that categorizes the BDI system as being inoperable, and immediately implemented an administrative control to restrict access to the facility. CNS reported this as a performance degradation of a safety-class system when required to be operable.

**Pause in Operations:** CNS paused the use of a pneumatic press that preconditions weapon components for assembly. CNS discovered that the case of the press was not grounded and it presented an electric shock hazard to personnel, but not to a nuclear explosive.