

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 15, 2014

MEMO TO: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending August 15, 2014

DNFSB Staff on Site: M. Duncan and B. Laake were at Pantex to discuss the response from Consolidated Nuclear Security, LLC (CNS) to the Board's falling man letter dated June 2, 2014.

Positive Unreviewed Safety Question (USQ) Determination for Mass Properties Transfer

Cart: CNS sent an Evaluation of the Safety of the Situation (ESS) to the NNSA Production Office (NPO) regarding the positive USQ determination on the mass properties transfer cart. (See report for 8/8/2014.) In the ESS, CNS states that the factor of safety for the guide rollers is less than one due to the vertical component of the force applied by the tripping man. NPO responded with a Safety Evaluation Report (SER) approving most of the nuclear explosive operations with the transfer cart with no conditions of approval. NPO acknowledged that the unit in the cart could rotate and potentially fall from the cart due to the tripping man event.

The transfer cart is used on three weapon programs. For two of these weapon programs, the weapon response for the assumed three foot drop is mechanical release and worker safety consequences. NPO approved resumption of operations on these programs based on the existing personnel evacuation specific administrative control for workers to evacuate the facility within five minutes of an event. For the third weapon program, the weight measurement operations were approved based on the fact that the unit is either horizontal and above 41", or the top of the unit is above 41" when it is vertical and the vertical falling man analysis is not applied. The mass properties operations, other than weight measurement, were not approved for this weapon program because the consequences from the unit dropping are not limited to facility workers. The unapproved mass properties operations will remain paused until CNS can redesign the transfer cart. The SER states that the redesign is expected to be complete within one month.

Blast Door Interlock (BDI) Limiting Conditions for Operation (LCO): CNS entered one facility into the appropriate LCO when the system failed the pre-operations check. CNS switched between the LCO for the system being inoperable and the LCO for intentional override of the system, to trouble shoot the system and then to repair the system. CNS crafts personnel replaced an actuator switch which detects that the door pins have been engaged and returned the facility to operations mode. The following day, the BDI system in the same facility failed, and CNS entered the LCO that categorizes the BDI system as being inoperable. CNS crafts personnel found some foreign material blocking the sensor for the same switch, removed the material, and returned the facility to operations mode.

Beryllium Contamination: CNS Explosive Technology personnel destroyed some weapon components in a press and placed the waste in a waste drum. After the components had been destroyed, Supply Chain Management personnel notified the Explosives Technology personnel that the components contained hazardous material and needed to be disassembled prior to crushing. CNS Industrial Hygiene personnel surveyed the press area, and proceeded to decontaminate the press, the work area, and bagged the technician's coveralls worn while performing the decontamination. This event was not in a nuclear facility and did not involve nuclear materials.