

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 1, 2014

MEMO TO: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending August 1, 2014

DNFSB Staff on Site: R. Arnold, F. Bamdad, M. Dunlevy, and P. Foster were at the Pantex Plant this week to perform a review of the New Information and Unreviewed Safety Question program, implementation of the Documented Safety Analysis Improvement Plan, and dispersion analyses.

Potential Inadequacy of the Safety Analysis (PISA): Consolidated Nuclear Security, LLC (CNS) declared a PISA when they discovered that they had not analyzed all components in the load path for the mass properties transfer cart for the falling man rare event. CNS tooling engineers determined that the load path does not meet the functional requirements specified in the safety basis.

Blast Door Interlock Limiting Conditions for Operation (LCO): CNS entered the LCO for an inoperable blast door interlock system in three nuclear explosive operating facilities. In the first event, on a Saturday, the CNS facility representative reset the system within a few minutes and exited the LCO. In the second event, CNS maintenance personnel reported that the door release button did not function and the light indicating that the door was open did not function. CNS reported this event as a degradation of the safety-class control when required to be operable. In the third event, the blast door interlock failed the pre-operations check. CNS personnel set access to the facility to zero in the Argus system and the facility was placed into maintenance mode. CNS crafts personnel reset the blast door interlock system a couple of hours later and the facility was placed into operations mode. CNS did not report the first and third event in the occurrence reporting and processing system.

Nuclear Explosive Safety (NES) Evaluation: CNS sent a letter to the NNSA Production Office (NPO) requesting a NES evaluation be performed on the lock and key system for nuclear explosive operating facilities. The CNS Nuclear and Explosives Surety department identified that the lock and key system had been inadvertently omitted from the recent NES master studies and was last studied in the September 2007, *Nuclear Explosive Safety Master Study of the Bays and Cells at the Pantex Plant*. CNS requested NNSA to perform this evaluation in August 2014 and include the report as an addendum to the *Nuclear Explosive Safety Master Study of Security at the Pantex Plant*, which was completed in August 2013. NPO sent a letter to the Director of the Nuclear Explosive Safety Division (NA-121.1) requesting them to perform a NES evaluation of the lock and key system.

Electro-Static Dissipative (ESD) Flooring: Approximately one month ago, CNS system engineering personnel reported a newly poured ESD floor covering failed the initial acceptance testing. (See report for 7/11/2014.) The subcontractor performing this work ground off the failed coating and poured a new ESD coating. The new coating passed the acceptance test. The subcontractor believes they have identified the cause of the failure and they do not expect future floors to fail acceptance testing.