

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 6, 2015

MEMO TO: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending March 6, 2015

Combustible Standoff Distance Technical Safety Requirement (TSR) Violation:

Consolidated Nuclear Security, LLC (CNS) declared a TSR violation when operations personnel entered a facility and discovered a chair within the prescribed combustible standoff distance.

Potential Inadequacy of the Safety Analysis (PISA) Declared due to Weapon Response

Validity: Los Alamos National Laboratory (LANL) sent an Information Engineering Release (IER) to Sandia National Laboratories (SNL) informing them that LANL could not find any documentation that they had reviewed and/or approved the release of the Weapon Response Summary Document, Issue B, for one weapon program. CNS declared a PISA based on the fact that supporting documents referenced in the Documented Safety Analysis may not be conservative with respect to consequence or frequency.

Repair Unit: In 2012, the Department of Defense (DoD) wrote an Unsatisfactory Report on a unit that sounded as if something was loose inside the unit. The Design Agency investigated and published an IER with weapon response information, so that the unit could be safely shipped to the Pantex plant. The unit was returned to Pantex as a disassembly unit rather than a repair unit. In the IER, the Design Agency stated that all Pantex testing and disassembly and inspection operations for this unit would require a specific step-by-step hazard assessment in which the full range of potential hazards are postulated by a Hazard Analysis Task Team. The contractor at the time, Babcock & Wilcox Technical Services Pantex, LLC, processed the unit shortly after it arrived without performing the step-by-step hazard assessment. The unit was processed without incident.

Update on Combustible Standoff Distance Technical Safety Requirement (TSR) Violation:

Following the discovery that the task exhausts used at Pantex were considered a combustible, CNS paused the use of task exhausts and declared a TSR violation for some facilities where the task exhaust was within the prescribed combustible standoff distance to thermally sensitive components. (See report for 2/27/2015.) CNS has updated the Combustible Materials Controls document to identify the task exhaust as a combustible, and trained the Production Technicians to the change. CNS has also modified and released the applicable documents to resume operations in most of the facilities.

Update on Anomalous Unit Determination: On January 29, 2015, representatives from CNS Process Engineering, CNS Nuclear Explosive Safety, and the Design Agency determined that the configuration of the nuclear explosive in one facility met the anomalous unit criteria. (See reports for 1/30/2015, 2/13/2015, and 2/20/2015.) This week, the Design Agency responded to CNS's request for information related to possible changes in the sensitivity of the high explosives due to the anomalous condition. The Design Agency's IER stated that there was no increase in sensitivity of the high explosives but that the structural integrity had been altered and that future operations could present additional complications. The Design Agency also sent a Special Instruction Engineering Release to CNS with detailed instruction on how to proceed with the disassembly process.