

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 18, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: Zachery S. Beauvais, Resident Inspector
SUBJECT: Pantex Plant Activity Report for Week Ending April 19, 2019

DNFSB Activity: The resident inspector was offsite, augmenting the Board's oversight at Los Alamos National Laboratory.

Combustible Controls: During their review of an extensive safety basis update, an NPO analyst identified that two pieces of furniture that are credited to isolate combustible materials from thermally sensitive components did not meet the explicit requirements of this design feature. Specifically, the Pantex safety basis requires that "when doors are present [on combustible storage cabinets], they are secured closed with a latch." The relevant pieces of furniture are a cabinet used to store logbooks and procedures in nearly every bay and a toolbox used to hold category 1 electrical equipment that is considered to be combustible. CNS fire protection engineering (FPE) identified multiple copies of both pieces of furniture that lacked latches but were in-use when this issue was identified. CNS FPE relocated the combustible materials to appropriate areas and applied stickers to the furniture to denote that they were no longer authorized to store combustibles. In 2010, Pantex engineering wrote an evaluation concluding that the cabinet and toolbox could meet the intent of this design feature without being latched or equipped with latches. However, last week, CNS management determined that the use of combustible storage cabinets and toolboxes that lack latches represented a non-compliance with the safety basis. CNS conducted and the resident inspector participated in a fact finding review of this issue. Participants at the fact finding questioned whether the issue could have been discovered during the review activities for previous revisions to the engineering evaluation, and also identified that the toolbox has a required preventive maintenance that would require technicians to inspect the latch. CNS management identified near term corrective actions to train production personnel on the new restrictions and to brief engineering personnel on the importance of verbatim compliance with technical safety requirements.

Maintenance Procedures: Crafts personnel performed an annual fire inspection in the separation testing and former mass properties facilities using the most recent published revision of their procedure; however, the procedure had multiple outstanding revisions that changed the intent of the work. For example, the fire suppression system in these facilities was downgraded from safety class to general service in the early 2010s, but the procedure still contained multiple surveillance requirement and in-service-inspection steps for that system. CNS maintenance personnel discovered the issue after crafts personnel completed the work, and engineering determined that the issue did not impact the operability of the affected systems. CNS included a "use prohibited" coversheet with the procedure, but the manual process used to compile work orders resulted in the sheet being placed below a separate coversheet and missed by the crafts personnel. CNS maintenance personnel implemented "use prohibited" coversheets last year as a stop-gap measure to address the extraordinary number of outstanding revisions to maintenance procedures. A maintenance clerk involved in this event noted that there are over three hundred outstanding revisions to maintenance procedures. This is the second recent event involving the Pantex process for addressing maintenance procedure revisions (see 1/25/19 report).