

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 20, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: Miranda McCoy, Resident Inspector
SUBJECT: Pantex Plant Activity Report for Week Ending November 20, 2020

Radioactive Material Transfer: CNS operations personnel discovered an item packaged in a radioactive material bag in the ramp outside of a special nuclear material facility. CNS experienced a similar incident in July; during the July incident, operations personnel noted a radioactive material bag in a cardboard box in the ramp and correctly moved the materials to a radioactive material management area but left the box in the facility, constituting a technical safety requirement (TSR) violation for combustible loading (see 7/31/20 report). CNS is still implementing a number of corrective actions following the July event; however, the action to address production stores handoffs with operations personnel—a briefing for production stores personnel on hazardous material packaging and handoffs—was completed approximately a month and a half ago. The production stores employee who incorrectly performed the recent handoff was not provided with the briefing due to being unavailable the day of the briefing, and was not provided with a back briefing upon returning to the site. Since CNS is still implementing other corrective actions related to the July event, CNS determined that the recent event did not require an event investigation or critique.

High Pressure Fire Loop (HPFL): During a weekly preventive maintenance activity, maintenance personnel determined that a diesel fire pump supporting the safety class HPFL system did not meet operability requirements per the TSR. The TSR specifies a minimum temperature for fire pump coolant to ensure sufficient coolant flow for quick pump startup. A manual check of the coolant temperature identified that the coolant was below this minimum temperature; however, the block heater temperature reading registered an acceptable temperature. Event investigation participants noted that the block heater was approximately five years old. The HPFL CNS facility representative submitted a work order to evaluate and repair or replace the block heater. The Pantex TSR requires operability of two of the three water supply sources—including both water tanks and associated pumps—for the HPFL system to be considered operable and to avoid entering limiting conditions for operation. Event investigation participants noted that the other two water supply sources remained operable.

Readiness Activities: Late last week, CNS received approval from NPO of their readiness assessment (RA) plan for startup of assembly and disassembly and inspection operations on one weapon program. On Monday, CNS kicked off disassembly and inspection demonstrations for the contractor RA. Demonstrations were halted part way through the week due to COVID-19 related quarantining of the production technician group. The RA team is continuing with document reviews and other RA elements that do not require demonstrations.

Electrostatic Dissipative (ESD) Flooring: In late October, CNS noted water intrusion in one nuclear explosive bay (see 11/6/20 report). CNS safety analysis engineering (SAE) personnel declared a potential inadequacy of the safety analysis (PISA) due to the potential for the standing water to affect the resistivity of the flooring in the facility. This week, CNS SAE personnel upgraded the PISA for electrostatic discharge hazards to an unreviewed safety question.