

DRAFT – NOT REVIEWED FOR PUBLIC RELEASE

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 3, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: Miranda McCoy, Resident Inspector
SUBJECT: Pantex Plant Activity Report for Week Ending July 3, 2020

DNFSB Staff Activity: C. Berg provided remote resident inspector augmentation.

COVID-19: This week, CNS completed its transition to stage two of the COVID-19 recovery plan. Pantex will continue to operate in this condition until state and local restrictions permit transitioning to stage three and resuming normal onsite operations with full staffing levels.

Safety Basis: Earlier this year, CNS requested an extension to a safety basis addendum (SBA) for seismic accidents with high mitigated consequences (see 5/1/20 report). The SBA acknowledges that seismic events during various onsite transportation activities do not have a viable control strategy to prevent or mitigate offsite dose consequences to below the evaluation guideline. Last week, NPO submitted a letter to the NNSA Office of the Associate Administrator for Safety, Infrastructure, and Operations—the safety basis approval authority for the SBA—recommending approval of an extension of the SBA, justified, in part, by the significant progress in seismic bracing of the transportation routes. The SBA permits onsite transportation operations to continue during completion of these safety improvements. CNS requested, due to delays resulting from the COVID-19 protective posture, to extend the SBA to allow completion of physical modifications in September 2020 and finalize safety basis changes by the end of March 2021. At the current time, the SBA is set to expire at the end of July 2020.

Readiness Activities: Last week, CNS commenced a contractor readiness assessment (CRA) for assembly/disassembly operations on one weapon program involving two different first production capability unit (FPCU) options, one of which involves a nuclear explosive configuration (see 5/15/20, 6/5/20, and 6/19/20 reports). NPO is conducting the associated federal readiness assessment concurrent with the CRA. However, prior to concluding the federal assessment, NPO will validate adequate closure of any CRA findings.

Additionally, last week, NPO approved a change package concerning revisions to the safety basis supplement for FPCU operations due to weapon response changes. NPO identified no conditions of approval, noting weapon response in the previous safety basis supplement revision was bounding for all but one hazard. For this specific hazard, NPO acknowledged it as adequately controlled through the existing control set.

High Pressure Fire Loop (HPFL): CNS monitoring of the safety class HPFL system since May identified an increased leak rate of a few gallons per minute. Subsequently, two new leaks were discovered in the HPFL affecting two nuclear explosive facilities: one leak in a ductile iron lead-in line for a nuclear explosive bay and the other leak in a valve pit on a valve that had been repaired last year. CNS plans to repair or replace the leaking valve, and has isolated the lead-in with the leak and will not conduct operations in that bay until lead-in replacement in the fall. Pantex is undergoing a multi-year project to upgrade the HPFL infrastructure, including replacing ductile iron piping with high density polyethylene (see 11/8/19 and 3/6/20 reports).