

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 30, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: Christopher Berg, Acting Resident Inspector
SUBJECT: Pantex Plant Activity Report for Week Ending April 30, 2021

DNFSB Staff Activity: A staff review team conducted a teleconference with NPO and CNS to discuss lines of inquiry regarding the Pantex external dosimetry program, including factors contributing to the degradation of the program and the loss of dosimetry processing capability (see 9/11/20 report). Teleconference participants also discussed the Y-12 processing of dosimetry for both sites and any impacts resulting from this change in responsibilities.

Readiness Assessment: In early March, CNS notified NPO of its readiness to commence the federal assessment for the startup of assembly and disassembly and inspection operations on one weapon program. To transmit this notification, CNS first closed eight pre-start findings and developed corrective action plans for two weaknesses identified during the contractor readiness assessment (CRA) (see 1/8/21 report). The NPO federal readiness assessment (FRA) team documented one pre-start finding and two post-start findings during its evaluation.

Pre-start Finding—the FRA team identified that some procedures could not be conducted as written, as well as some steps were not performed as specified. In its report, the NPO team acknowledged four specific examples.

Post-start Finding One—the FRA team noted that the CRA should not be used to achieve readiness; this application is contrary to DOE Order 425.1D. To mitigate this issue, CNS identified long term actions to address weaknesses in its readiness verification process. However, the FRA team stated that interim compensatory measures should be taken, prior to the beginning of the next CRA.

Post-start Finding Two—during its review of CNS's startup plan to achieve safe unrestricted operations, the team found that there is no process to communicate certain prerequisites that require completion prior to conducting a readiness assessment.

Ultimately, the FRA team recommended NNSA authorization be provided to allow the startup of these activities upon satisfactory closure of the pre-start finding and development of corrective action plans to address the post-start findings. Last week, following these actions, NPO issued a letter authorizing the commencement of the nuclear explosive operations.

Electrical Equipment: During preparations for the use of new site pagers, CNS explosive technology identified that an existing pager type—employed onsite including in nuclear explosive facilities for approximately five years—may not be rated for certain hazardous operational areas. Further examination revealed that this pager had not been evaluated through the electrical equipment approval process. This evaluation process provides assurance that the equipment can be used safely in its assigned tasks. At the event investigation, participants noted planned actions to address this issue and prevent recurrence, including appropriately entering this equipment into the approval process and ensuring the process is well socialized with its users.