

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 23, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: Matthew Duncan and Brandon Weathers, Resident Inspectors
SUBJECT: Oak Ridge Activity Report for Week Ending October 23, 2020

Nuclear Criticality Safety: NPO issued the final report for an assessment of actions taken by CNS to address the 2017 and 2018 uranium accumulation events (see 8/21/20 report). NPO performed a similar assessment last year and determined that production training and process drift were areas of weakness (see 12/13/19 report). NPO focused the scope of the most recent assessment on those two areas and implementation of the Inadvertent Accumulation Prevention Program. NPO evaluated whether the remaining actions for inadvertent accumulation of fissile material were planned and implemented adequately to address the safety of current conditions and prevent recurrence. NPO reached the same conclusion as last year's assessment—the objective was partially met. The assessment team identified one performance problem, nine observations, and one noteworthy practice. The performance problem was due to several instances where the documentation of the effectiveness of corrective actions for issue closure did not meet procedural requirements and yet the issue was closed. Last year's assessment team identified the same issue and reported it as an observation. The most recent assessment team found that the issue had not been corrected and elevated it to a performance problem. The assessment team also noted two observations related to the quality and closure of corrective actions. NPO directed CNS to enter the observations and performance problem into the CNS issues management system and provide a response within 45 days regarding actions taken to address the performance problem.

Building 9204-2E: During a routine walkdown of Building 9204-2E, the resident inspector noted the storage conditions of components containing hazardous material continue to be significantly improved from earlier this year (see 5/22/20 report).

Building 9212: CNS entered the new information process last week due to several legacy drums that do not have a label to indicate their contents. CNS originally assumed the contents could have been fissile material, but non-destructive assay measurements later confirmed that the drums do not contain fissile material. CNS is developing a plan to inspect the contents of the drums and considers the new information to not be mature until that occurs.

Radiological Protection: CNS reported an increase in the number of non-ORPS reportable personnel contamination events in October. So far there have been six. CNS reported two events in September and one event in both August and July. On Monday, a chemical operator inadvertently brushed their protective head cap and neck on a valve. The operator was wearing the required anti-contamination clothing. Radiological control personnel successfully decontaminated the operator's neck. In July, a chemical operator also contaminated their skin, but was not wearing all of the required anti-contamination clothing. The remaining eight events resulted in contamination of clothing only (shoes or pants). Radiological control personnel have briefed workers on the importance of situational awareness when working in contaminated areas, increasing the frequency of changing step-off pads, and cleaning the floor area around the boundary control stations.