

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 22, 2020

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** Matthew Duncan and Brandon Weathers, Resident Inspectors  
**SUBJECT:** Oak Ridge Activity Report for Week Ending May 22, 2020

**COVID-19:** This week, CNS completed the remaining work area specific checklists for the second stage of the COVID-19 recovery plan (see 5/15/20 report). All operations that had been paused when Y-12 transitioned to a reduced mission critical operations status have been able to resume (see 4/10/20 report). Y-12's status is now normal operations with maximized telework.

**Building 9204-2E:** During a routine walkdown of Building 9204-2E, the resident inspector and NPO facility representatives noted that several components containing a hazardous material were being stored outside of a drum and had what appeared to be a significant amount of unnecessary combustibles nearby. He discussed this observation with NPO and CNS personnel.

**Building 9212:** Last week, chemical operators performed a technical safety requirements surveillance to function test a vacuum trap level detection system and the system failed the surveillance. The vacuum trap is a part of the wet vacuum system used to transfer fissile solutions in Building 9212. The vacuum trap level detection system is a safety significant system that automatically closes an isolation valve if a high level of solution is detected. This closure limits the amount of solution that can flow into a common header. To perform the surveillance, chemical operators vacuumed process water into the vacuum trap to verify that the isolation valve automatically closed and remained closed until an interlock was manually reset. While performing the surveillance, the chemical operators discovered that the isolation valve closed and then re-opened prior to resetting the interlock. Facility personnel returned the vacuum trap to the warm standby mode and maintained its isolation from the rest of the wet vacuum system. CNS held a fact finding meeting for the failed surveillance on Monday. CNS engineering personnel were tasked with determining why the isolation valve unexpectedly opened. CNS plans to re-perform the surveillance on the vacuum trap pending the results of the engineering evaluation.

**Safety Basis:** NPO approved a revision to the Y-12 unreviewed safety question determination procedure with no conditions of approval or directed changes. Among the changes made in this revision, CNS addressed a performance problem that NPO identified in a 2019 assessment of the unreviewed safety question program. The previous version allowed CNS to make intent changes to procedures using an on-the-spot change allowance without documenting the unreviewed safety question determination (or screen) prior to performing the action. CNS added an on-the-spot unreviewed safety question determination form to the procedure to ensure that the appropriate questions are answered and documented prior to performing work under the on-the-spot change allowance. An independent reviewer qualified in the unreviewed safety question process must sign the form and the operations manager must approve the form.

CNS also made changes to further align the Y-12 and Pantex unreviewed safety question processes. For example, CNS added a new appendix to the Y-12 procedure that provides guidance for operational restriction criteria based on criteria that are approved for Pantex.