

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 29, 2019

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** Matthew Duncan and Brandon Weathers, Resident Inspectors  
**SUBJECT:** Oak Ridge Activity Report for Week Ending November 29, 2019

**Calciner Project:** The Building 9212 calciner will process low-enriched uranium feed solutions into a powder that is intended to be stable for storage and transportation. NNSA is currently reviewing the Critical Decision (CD)-2/3 (Approve Performance Baseline and Start of Execution) package submitted by CNS on October 31, 2019. NNSA previously determined the project is not a major modification per DOE-STD-1189 and therefore did not require development of a Preliminary Documented Safety Analysis. However, the package includes key documents such as a preliminary accident analysis. CD-2/3 approval is needed by May 11, 2020. Several formal reviews by NNSA are scheduled to occur between now and that date.

CNS submitted the quarterly startup notification report last month. In response, NPO directed that a checklist federal readiness assessment will be performed for the Building 9212 Calciner Project. The NPO manager will be the startup approval authority. NPO had previously approved that the project would only need a checklist contractor readiness assessment with the Y-12 site manager as the startup approval authority. The letter noted the change was made after further review, taking into consideration the project complexity, technical issues, and overall costs. NPO anticipates the federal readiness assessment will be performed concurrently with the contractor readiness assessment.

**Building 9204-2E:** Several corrective actions from the component drop incident in Building 9204-2E that occurred in August (see 9/6/19 report) were implemented in a standing order that remains in effect. These actions were meant to ensure that prior to use, all relevant lifting fixtures have been inspected, that the correct hardware is installed, and that required torque values are marked on the fixture.

Engineering personnel had been taking action to implement the requirements of the standing order to prepare for an upcoming operation. They ordered replacement bolts for a lifting fixture as shown on a design agency drawing. Y-12 drawings could not be located at that time. After several discussions between various engineering organizations and the design agency, the bolts were installed per the design agency drawing and used during an operation this week. Later the same day, the Y-12 drawings were finally located. There were several differences between the design agency and Y-12 drawings, such as the length of a bolt and the number of washers. In addition, there was no torque value specified on the Y-12 drawings. During the fact finding meeting, it became clear there had been a misunderstanding by design agency and engineer personnel as they had assumed it was a design agency fixture and not a Y-12 fixture. The fixture has been removed from service. CNS plans to perform a critique next week.

**Highly Enriched Uranium Materials Facility (HEUMF):** CNS successfully completed the HEUMF Rackable Can Storage Boxes (RCSBs) Rack Reconfiguration project. This multi-phase project converted some existing vertical drum storage locations to create 800 new RCSB storage positions in support of future storage requirements.