

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 10, 2016

TO: Steven Stokes, Technical Director
FROM: Jennifer Meszaros and Rory Rauch, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending October 7, 2016

Continued Safe Operability Oversight Team (CSOOT): Last week, the CNS Y-12 CSOOT issued a report documenting its annual evaluation of the adequacy of Buildings 9212, 9215, and 9204-2E to support continued safe and reliable operations. The CSOOT identified no safety concern that would currently provide reason for limiting operations in Buildings 9212, 9215, and 9204-2E. The CSOOT noted that CNS exceeded fiscal year (FY) 2016 material-at-risk (MAR) reduction targets for Buildings 9212, 9215, and 9204-2E. Key components of this effort included dedicated activities to reduce the quantity of higher hazard forms of uranium in Building 9212 (e.g., uranyl nitrate crystals and uranium briquettes) and increased dismantlement rates in Building 9204-2E (see 6/13/16 report).

The CSOOT also highlighted the successful initiation of key material condition improvement projects, such as the Metal Production Improvement Project (see 6/3/16 and 9/2/16 reports) and Nuclear Facilities Electrical Modernization project (see 3/18/16 report). However, despite the progress being made in these areas, the CSOOT concluded that facility and equipment degradation is outpacing the additional maintenance work being performed. Further, maintenance resources are projected to decrease moving forward. As such, the CSOOT reaffirmed its recommendation from last year's report for additional maintenance support and continued refurbishment and replacement activities necessary to sustain enriched uranium operations for the remaining life of Buildings 9212, 9215, and 9204-2E.

Emergency Management: Last week, the DOE Oak Ridge Office led a tabletop drill that simulated a wildland fire on the Oak Ridge Reservation (ORR). Emergency response personnel from Y-12, Oak Ridge National Laboratory, and East Tennessee Technology Park participated in the drill, in conjunction with personnel from the state forestry division and the City of Oak Ridge Fire Department. This drill familiarized participants with their assigned roles and responsibilities and examined whether response activities performed by site and offsite agencies can be coordinated successfully. It was conducted in preparation for the graded ORR exercise scheduled in the summer of calendar year 2017.

Highly Enriched Uranium Manufacturing Facility (HEUMF)/NPO Oversight: This week, NPO staff out-briefed CNS management on the results of an integrated assessment of HEUMF. Integrated assessments are larger in scale than a typical NPO independent assessment and are coordinated across multiple functional areas (e.g., safety basis, nuclear criticality safety, security, quality assurance, and conduct of operations). In FY16, NPO management instituted the integrated assessment concept as a means of evaluating the overall health of select CNS facilities or programs and fostering the flow of information between NPO staff.

The HEUMF integrated assessment team evaluated the facility against 15 functional areas. Objectives in most functional areas were met; however, the review team found that the HEUMF storage analysis does not fully consider potential storage demands beyond five years nor the extent to which more recent initiatives (including MAR reduction initiatives) will impact available storage space at the facility. As such, the team noted that current HEUMF storage plans may not ensure that sufficient storage capacity will exist without additional actions by CNS. CNS management is formulating a response.