DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Steven Stokes, Technical Director
FROM: William Linzau and Rory Rauch, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending July 4, 2014

Contractor Transition: On July 1, Consolidated Nuclear Security, LLC (CNS) assumed responsibility for the management and operation of Y-12 and Pantex.

Continued Safe Operability Oversight Team (CSOOT): This week, the CSOOT issued its annual report documenting the team's latest assessment of whether the physical condition of the infrastructure and process equipment in Buildings 9212, 9204-2E, and 9215 can support continued safe operations. Key observations from the report include the following:

- Building 9212's most significant infrastructure issues during the past year involved roof leaks, breathing air system breakdowns, and ventilation system issues. Significant process equipment issues included hydrogen fluoride leaks during Oxide Conversion Facility operations, cracking in the luminous wall of the Holden Gas Furnace, and the inoperability of the Primary Extraction system's gamma radiation monitor.
- The main ongoing issues in Building 9215 involve a steam leak in the M-Wing plenum that cannot be repaired without costly asbestos abatement actions, and challenges reducing worker radiation exposures during chip packing and machining of oxide-covered metal parts.
- Building 9204-2E's most significant ongoing issue involves kathene-induced concrete damage.
- The Nuclear Facility Risk Reduction Project continues strong performance and is on schedule to complete all refurbishments in fiscal year (FY) 2015.
- Despite entering FY14 under a continuing resolution and other funding challenges, Y-12 completed several risk reduction initiatives. These included the replacement of several old power panels in Buildings 9212, 9215, and 9204-2E; draining nine Building 9212 systems that presented criticality safety concerns due to material holdup; initiating a project to reroute the Building 9212 process condensate piping to criticality-safe geometry tanks; and applying epoxy coating to damaged concrete in Building 9204-2E.
- During the last several years, Y-12 has developed effective elements of an aging management program (AMP); however, not all elements are fully integrated. The CSOOT recommended that the Y-12 AMP be revised to ensure effective integration of all elements.
- With the most recent changes in scope and schedule for UPF, enriched uranium (EU) missions in Buildings 9204-2E and 9215 will likely continue into the 2040s. The CSOOT recommended that line management establish a comprehensive equipment and system preventive and predictive maintenance program for Buildings 9215 and 9204-2E.

The CSOOT noted that the investment needs for the existing EU infrastructure have increased since certain capabilities are no longer planned for transition to UPF. However, there is significant uncertainty in future funding profiles due to recent shortfalls in program funding for Production Support and Maintenance and Repair. As a result, the CSOOT has a growing concern that safe operations cannot be maintained within the existing EU infrastructure for the remainder of its projected operational lifetime.

Building 9212: Late last week, maintenance personnel inadvertently isolated power to the E-Wing ventilation system while installing a lockout/tagout for a job to replace a motor for a conveyor system. The radiological continuous air monitor near the casting line alarmed and workers evacuated the area. CNS plans to conduct a fact-finding meeting next week.