

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 6, 2017

TO: Steven Stokes, Technical Director
FROM: Jennifer Meszaros and Rory Rauch, Resident Inspectors
SUBJECT: Oak Ridge Activity Report for Week Ending November 3, 2017

F. Bamdad, N. George, T. Hutain, R. Oberreuter, and C. Scheider were at Y-12 to review the Building 9204-2E Documented Safety Analysis.

Continued Safe Operability Oversight Team (CSOOT): This 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 concerns that would provide reason for limiting operations in these facilities. They noted that maintenance work performed as a part of the Metal Production Improvement Project (see 6/3/16 and 9/2/16 reports) addressed a significant portion of the maintenance backlog issues in Building 9212 chemical processing. Further, the CSOOT noted that the Extended Life Program (ELP) implementation plan (see 11/11/16 report), which includes recent work performed as part of the Nuclear Facilities Electrical Modernization Project (see 3/18/16 report), partially addresses their previous recommendation that CNS apply additional maintenance resources to support sustained safe mission operations in the identified facilities (see 10/7/16 report).

The CSOOT issued one new recommendation as a part of this annual report. They concluded that the current maintenance backlog does not capture a number of material condition issues that team members identified as part of facility walkdowns. The annual report suggested that the continued existence of these issues in facilities may desensitize workers to the need to report deficient material conditions. As such, the CSOOT recommended that CNS management improve communications related to recent efforts to improve the system health process and encourage engagement of workers at various levels in implementing the ELP. In response, the Y-12 site manager is planning communication sessions that will address this recommendation.

Building 9212: Briquette processing operations remain shut down while CNS implements corrective actions that address recent spontaneous exothermic reactions of briquettes in storage (see 8/18/17 and 6/30/17 reports). For instance, maintenance workers recently repaired and returned to service a supply fan in the briquette storage room. Operation of the fan improves temperature and humidity conditions in the storage room such that briquette reactions are less likely. Additionally, this week, Enriched Uranium Operations (EUO) management held a training activity for EUO operators that supports resumption of briquette processing in the skull burner (see 9/8/17 report). The resident inspectors observed this training activity and believe it was effective. EUO management plans to restart briquette processing in the skull burner in the coming weeks. Briquette casting will remain shut down pending additional operator training.

ORNL Solid Waste Storage Area (SWSA)- 5: This week, UCOR completed retrieving unvented waste drums from an underground bunker located in SWSA-5. These drums will be repackaged at the Transuranic Waste Processing Center (see 4/22/11 report); in the interim, UCOR will store the drums in a different facility within the SWSA-5 boundary. The facility's technical safety requirements (TSR) identify that seven of the retrieved drums present a possible deflagration-to-detonation transition (DDT) hazard. Last week, the resident inspectors observed UCOR workers as they retrieved and loaded one DDT drum into a credited overpack container. They also discussed TSR-level administrative controls that are implemented to address the DDT hazard (e.g., lifting height restrictions and vehicle access controls) with UCOR operations management. The resident inspectors will share their observations from this work activity with UCOR and OREM management.