**DEFENSE NUCLEAR FACILITIES SAFETY BOARD**

June 12, 2017

TO: Steven Stokes, Technical Director
FROM: Jennifer Meszaros and Rory Rauch, Resident Inspectors
SUBJECT: Oak Ridge Activity Report for Week Ending June 9, 2017

J. Deplitch and M. Helfrich were at Y-12 to observe the emergency response exercise.

**Emergency Management:** This week, the resident inspectors and DNFSB headquarters staff members observed the Y-12 Emergency Response Organization's (ERO) performance during a planned exercise. The exercise included simulated severe weather conditions that caused damage to several Y-12 facilities, an acetonitrile spill, and a depleted uranium chip fire. The exercise included activation of the Y-12 technical support center and the emergency operations center. Given the nature of the initiating events, the exercise also simulated impacts to facilities at the Oak Ridge National Laboratory and East Tennessee Technology Park; as such, cognizant Oak Ridge reservation managers utilized this opportunity to simulate the execution of a draft revision to the multi-site response plan. In the event of a reservation-wide emergency (e.g., caused by natural phenomena or a security event), this multi-site response plan activates a leadership team that includes senior federal officials from each field office in order to prioritize mutual aid requests and enhance communication between field offices. Given the draft status of the multi-site response plan, this exercise served as a good opportunity to identify areas for improvement so that the leadership team is better able to both effectively and efficiently aid in future emergency response activities. CNS ERO personnel will document their observations and findings in an after-action report.

**Work Planning and Control (WP&C):** CNS Y-12 uses a work request process to define specialized customer requirements associated with irregular programmatic work. CNS management has been working for more than a year on improvements to this process after encountering several issues with the WP&C of work request-directed operations (see 5/6/16 report). This week, the Senior Director for Y-12 Production Operations paused all activities governed by work requests after a work request error resulted in an enriched uranium part being processed incorrectly. The product engineer mistakenly included the incorrect part identifier in a revision to the work request that directed a rework operation. A potential contributing factor to the error was the fact that the part scheduled for rework was not segregated in accordance with Y-12 quality assurance (QA) requirements. Y-12 production management held a critique this week to identify corrective actions for the weaknesses specific to this event. Regarding the initiative to improve the work request process, Y-12 engineering plans to issue the procedure governing the new process in the next several weeks. Y-12 production management released routine work request-directed operations following the critique. Y-12 production management will release the remaining operations once product engineers have ensured that the associated work requests contain clear technical specifications that match field conditions.

**Building 9204-2E:** This week, the Assembly/Disassembly Operations (ADO) manager held a fact-finding meeting to evaluate an event in which an ADO crew performed an operation without QA approval. The operation involved lining through a part number on an assembly that had already received CNS QA certification. Per Y-12 product specification procedures, QA approval is required prior to any rework on a certified assembly. Neither the engineer who requested the operation nor the work crew that executed the operation were aware of the certification status of the assembly. The fact-finding meeting identified an action for the ADO manager to evaluate the methods used to communicate the certification status of these types of assemblies.