DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 31, 2016

TO: Steven Stokes, Technical Director
FROM: Jennifer Meszaros and Rory Rauch, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending October 28, 2016

Staff member R. Jackson was on site to observe the NNSA technical independent project review of the Uranium Processing Facility.

Building 9204-2E: CNS personnel held a critique this week to discuss a new revision to a product engineering procedure that was issued to the field without the required unreviewed safety question (USQ), safeguards and security, and training impact screenings. During the critique, CNS personnel noted that product engineering procedures are issued in two document management systems that are managed by different organizations. The critique attendees noted that the CNS Y-12 procedure management process drove engineering personnel to issue the product engineering procedure via one document management system before the required screenings were completed and the procedure was issued officially by records management personnel via the other document management system. The critique attendees also noted that Building 9204-2E workers only use the first system to verify that they have the correct revision of a product engineering procedure. As a result, the critique team identified an action to review and revise the processes by which product engineering procedures are implemented. Further, the team committed to evaluating the interface between the two document management systems in order to identify other document types that might be impacted by the use of two systems.

Fire Protection/Conduct of Operations: Last week, the Building 9204-2 and 9204-2E operations managers entered limiting conditions of operation (LCO) for a credited fire suppression system common to both facilities after learning that fire protection operations (FPO) personnel had inadvertently isolated the water supply to the system. The error occurred during testing and maintenance activities on a non-credited fire suppression system that shares a water control valve (WCV) with the credited system. FPO personnel initially impaired the credited fire suppression system by closing the WCV during NFPA-required testing on the non-credited system. FPO personnel performed the testing per procedure; however, neither the FPO personnel nor the procedure recognized that testing would also impair the operability of the credited fire suppression system.

Immediately following the NFPA testing activity, maintenance personnel, with FPO support, initiated a repair on a riser supply valve for the non-credited system. During the maintenance activity, the maintenance supervisor requested that FPO personnel close the WCV to stop a leak. This action, which was not within the scope of the maintenance work package, once again impaired the credited fire suppression system. While responding to the alarm associated with this impairment, the fire department alarm room supervisor recognized the impact to the credited system and contacted the Building 9204-2 shift manager. The Building 9204-2 and 9204-2E shift managers entered the appropriate LCOs shortly thereafter. In response to this event, CNS identified a series of corrective actions that include a review of the NFPA test procedure for improvements and broader extent-of-condition-related implications, and an evaluation of the field identification of components with the potential to affect credited systems.

Building 9720-5: This week, CNS reported a potential inadequacy in the safety analysis after a shift technical advisor identified a container stacking configuration that exceeded floor loading limits identified in a calculation supporting the Building 9720-5 safety basis. The responsible operations manager has prohibited additional stacking in unapproved configurations until a USQ determination is completed.