

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 21, 2017

TO: Steven Stokes, Technical Director
FROM: Jennifer Meszaros and Rory Rauch, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending February 17, 2017

Building 9206: Last week, CNS personnel performed the annual Technical Safety Requirements (TSR) surveillance of the Building 9206 Criticality Accident Alarm System. The Limiting Condition of Operation (LCO) entered during the surveillance requires the facility shift manager to establish a restricted access area that includes zones exterior to the facility. The LCO bases stipulate that personnel may only enter this area if they are performing certain specified duties and have an approved means of alternate coverage (i.e., personal radiation detection instruments). The responsible manager instructed the CNS workers tasked with controlling access into the restricted access area to obtain her permission prior to allowing anyone into the area. Subsequently, the workers inadvertently allowed several CNS and NPO employees into the restricted access area during the annual test without approval from the responsible manager. Because the employees allowed into the area were not performing duties described in the LCO bases, the responsible manager reported a TSR violation.

This week, CNS personnel held a critique on this event. They noted that similar TSR violations have occurred recently (see 8/8/14 and 2/12/16 reports) and identified corrective actions to better control the restricted access area during LCO entries. CNS engineering management further noted that an approved revision to the facility TSR (due to be implemented later in the year) may reduce the required size of the restricted access area and thus simplify control of the area. Coincidentally, facility personnel entered the same LCO again this week due to an unplanned impairment and associated maintenance activity. No issues occurred during these activities.

U-233 Downblending Campaign: This week, the OREM Acting Manager approved the Building 2026 Documented Safety Analysis (DSA) and TSR submitted by Isotek. Currently, Building 2026 is owned by the DOE Office of Science; the DSA/TSR, once implemented, will authorize Isotek to perform surveillance and maintenance activities within the facility. Work to disposition legacy U-233 material (see 7/13/12 and 7/29/16 reports) at this facility will occur under a future DSA/TSR revision. Isotek is currently planning to assume control of Building 2026 and implement the safety basis documents in spring 2017.

Fire Protection Operations (FPO): This week, the site representatives observed several Y-12 FPO surveillance activities on credited and non-credited Highly Enriched Uranium Materials Facility fire protection systems. The FPO crew executed applicable procedures in accordance with site conduct of operations standards for placekeeping and reader/worker communication protocols. The site representatives also reviewed the activity-level job hazards analyses for the activities. Several of the questions in this documentation contained responses that appeared to be inconsistent with actual field conditions. For example, the documentation contained a negative response to the question of whether the activity involves fire detection and/or alarm components. Answering affirmative to this question would require additional hazard control documentation; however, the FPO crew explained that the notifications and controls driven by an affirmative response were already integrated into FPO work planning processes. Additional discussions with FPO management revealed that the documentation was originally developed for maintenance activities and later adopted by the FPO organization, thereby creating the observed conflicts. The FPO and emergency services system operations (ESSO) organizations are currently developing FPO-centric job hazard analysis documentation. The site representatives also provided ESSO with some opportunities to improve procedure clarity and the communication of device impairment status prior to work start.