

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 29, 2018

TO: Steven Stokes, Technical Director
FROM: Jennifer Meszaros, Resident Inspector
SUBJECT: Oak Ridge Activity Report for Week Ending January 26, 2018

Building 9212: Enriched Uranium Operations (EUO) personnel are currently on track to meet processing goals set at the beginning of their “briquette blitz” campaign, during which they are dedicating all casting resources to briquette processing in order to reduce the backlog of briquettes in storage (see 1/5/18 report). This week, EUO management and Y-12 production training held an operational drill that evaluated production personnel response to a rapid oxidation event during movement of briquette cans. The drill included participation by fire protection operations personnel. The resident inspector observed the drill and found no issues.

In an unrelated event, Nuclear Criticality Safety (NCS) engineers documented a deficiency this week after they identified during a walkdown that certain casting stack assemblies were missing a stabilizing component. The casting NCS evaluation credits the component for prevention of a tip-over event and requires that it be used during certain briquette casting operations. In response to the deficiency, EUO management suspended casting operations. CNS also held a fact finding meeting to further discuss the issue. During the meeting, attendees noted that the briquette casting procedure refers to a drawing that incorrectly led EUO workers to conclude that the stabilizing component is interchangeable with a different part. As such, meeting attendees committed to providing a clarifying note in the briquette casting procedure before restarting briquette processing operations.

Building 9212/Oxide Conversion Facility (OCF): This week, CNS held a fact finding meeting to discuss a recent OCF technical safety requirements (TSR) violation (see 1/19/18 report). The violation applies to a TSR-level surveillance during which operators measure the time between a dock scrubber low level alarm and automated closure of hydrogen fluoride isolation valves. System engineers were reviewing previous surveillance records as a result of an observation from the readiness assurance organization when they noted that system response times recorded since July 2016 did not fully satisfy the surveillance requirement as described in the TSR. During the fact finding meeting, attendees determined that they did not have sufficient evidence to identify corrective surveillance modifications. As such, they identified an action to perform the surveillance as a troubleshooting activity. OCF operations remain suspended; CNS will implement necessary system, procedure, and/or operator training modifications identified as a result of the troubleshooting activity and perform the improved surveillance before resuming operations.

Building 9204-2: CNS continues to make progress in their effort to downgrade Building 9204-2 from a hazard category 2 nuclear facility (see 7/15/16 report). In May 2017, CNS ceased fissile material operations in the facility. This week, NPO issued a safety evaluation report (SER) that concurs with a revised facility classification identifying Building 9204-2 as a less than Hazard Category 3 facility. The SER also approves a Building 9204-2E safety basis supplement that supports the downgrade of Building 9204-2 safety-related controls by removing them from the Building 9204-2E TSR. NPO identified a condition of approval (COA) in their SER; CNS must develop a strategy to address the impact of a potential seismic event on Building 9204-2E as a result of Building 9204-2 failure. The COA identifies that a particular fissile material operation located in Building 9204-2E near a wall adjoining the two facilities may be vulnerable during such an event. CNS is currently working to fully implement the Building 9204-2 downgrade this summer.