

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 5, 2024

TO: Timothy J. Dwyer, Technical Director
FROM: Frank Harshman and Clinton Jones, Resident Inspectors
SUBJECT: Oak Ridge Activity Report for Week Ending July 5, 2024

Staff Activities: Y-12 and OREM nuclear facilities operated at a significantly reduced operational tempo with reduced staff due to the holiday. Both resident inspectors were out of the office most of the week.

Building 9204-2E: The resident inspector attended an event investigation and subsequent critique for a glovebox glove that was caught in a lathe. Operators working at the glovebox, but not within reach of the lathe, observed a glove on the other side of the glovebox get pulled in from the boost in negative pressure. This resulted in the glove becoming wrapped up in the lathe, removing it from its seat and leaving a large opening in the side of the glovebox. The immediate concern was due to a large amount of pyrophoric chips residing next to the newly formed opening in the glovebox. The operators reacted quickly and in accordance with the abnormal operating procedure to cover the open glove port prior to establishing a 15-foot administrative boundary. Operators monitored the atmosphere in the glovebox for excess oxygen and noted that it did not reach levels of concern. The glovebox is kept at a minimal oxygen level to prevent oxidation of pyrophoric materials. CNS is evaluating how to prevent the glove in that position from interacting with the lathe in future evolutions.

Building 9212: CNS completed emptying the previously discovered legacy drum that contained Raschig rings and an unknown uranium-bearing material (see 04/26/2024 report). CNS emptied the contents of the drum into smaller nuclear criticality safety approved containers. CNS is processing the material through normal building processes to prepare the material for final disposal.

Summer Maintenance Outage: CNS completed a utilities outage that secured steam to the entirety of the Y-12 site and electrical power to portions of the site. CNS scheduled the outage to conduct numerous steam system repairs through various buildings as well as perform electrical switchgear maintenance. No safety systems were impacted.