

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 17, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: Matthew Duncan and Brandon Weathers, Resident Inspectors
SUBJECT: Oak Ridge Activity Report for Week Ending April 17, 2020

COVID-19: Earlier this week, CNS personnel completed the remaining activities necessary to transition the Y-12 National Security Complex to a reduced mission critical operational status.

NPO Oversight: NPO issued a report to CNS that identified concerns in some key areas such as disciplined operations, nuclear criticality safety, and abnormal event investigations. A management concern for disciplined operations noted recurring issues regarding procedural adherence and lack of timely and effective corrective action management. A previously identified emerging item of interest for nuclear criticality safety infractions due to personnel errors was elevated to a management concern (see 6/7/19 report). NPO's basis for doing so was influenced by the January 2020 event in Building 9212 that resulted in three nuclear criticality safety requirement violations (see 2/7/20 report). Last year, CNS changed the order of operations for conducting abnormal event investigations such that the initial event notification occurs after a fact finding meeting. For some events, this change has resulted in the initial event notification being delayed by several days from the time of the actual event. As a result, NPO opened an emerging item of interest due to concerns with the timeliness of abnormal event investigations and notifications. NPO noted that several of the management concerns and emerging items of interest had "a general theme of corrective actions being mismanaged."

Extended Life Program: Last week, NPO approved Revision 3 of the Safety Strategy for the Extended Life Program (ELP) for Building 9204-2E and the 9215 Complex. As with the previous revision to the ELP Safety Strategy, NPO received advice from the Office of the Chief of Defense Nuclear Safety (CDNS) on this approval (see 4/13/18 report). CDNS supported approval of the ELP Safety Strategy revision and advised NPO that the document could be strengthened by clearly describing anticipated exemptions to nuclear safety rules and discussing the roles and interfaces for processing exemption requests. The updated nuclear criticality safety control strategy acknowledged a Central Technical Authority (CTA) position on how to demonstrate subcriticality for design basis events (including natural phenomena hazard events) in legacy facilities (see 7/26/19 report). CNS is developing site-specific criteria in line with the CTA position for the ELP facilities. A few of the ELP activities that were planned for fiscal year 2019 have shifted into fiscal years 2020 and 2021. The structural walkdowns that were planned to start in fiscal year 2019 were able to begin earlier this year (see 3/6/20 report).

Nuclear Criticality Safety: Last week, the NNSA Administrator issued a preliminary notice of violation to CNS for violations associated with nuclear criticality safety control weaknesses related to the uranium accumulations in 2017 and 2018. Details are available here: <https://www.energy.gov/ea/downloads/preliminary-notice-violation-consolidated-nuclear-security-llc>.