

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Steven Stokes, Technical Director
FROM: William Linzau and Rory Rauch, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending April 4, 2014

Contractor Transition: This week, CNS and NNSA participated in post-award orientation meetings in which NNSA headquarters senior management discussed their expectations for CNS performance under the new contract. NNSA management stressed their priorities: safety, security, mission performance, quality, and cost savings that do not hinder successful performance in the other priority areas. NNSA management expressed their intent to direct these cost savings to arresting the declining state of the site's infrastructure. CNS management discussed the contract objectives, challenges, transition plans, and gave an overview on how cost savings would be achieved. In addition, CNS management discussed their plans for due-diligence walkdowns of Y-12 facilities, which started this week.

Ageing Infrastructure: On March 21, 2014, NPO sent a letter to B&W expressing concern related to the Building 9204-2 concrete spalling event (see 3/21/14 report). On March 31, 2014, B&W sent a response that provided its progress and plans to address the actions specified in the NPO letter. First, B&W has restricted access to the affected area of Building 9204-2. Second, B&W structural engineers have performed a preliminary engineering assessment of the damaged concrete and provided two alternatives— repair the degraded concrete or permanently abandon operations in the area while providing a protected safe passage route. Third, B&W has started reviews of the repairs of a similar concrete degradation mechanism in Building 9204-2E to ensure additional mitigating actions are pursued. Finally, B&W has performed a preliminary review of condition reports from other facilities across the site to identify other concrete degradation concerns for evaluation.

Nuclear Criticality Safety (NCS): American Nuclear Society Standard 8.1 requires an individual knowledgeable of criticality safety to perform an operational review at least annually to ensure that procedures are being followed and processes have not been altered so as to affect the applicable criticality safety evaluation (CSE). This week, B&W personnel determined that operational reviews were never conducted for glovebox (GB)-04 in Building 9204-2E. GB-04 was installed in late 2009 and a CSE was approved for operations in this glovebox; however, the document that summarizes the controls derived in the CSE (termed a Criticality Safety Approval, or CSA) was never entered on the list of effective CSAs and therefore never entered into the operational review database for implementation. The Production Organization's criticality safety officers have performed periodic implementation reviews of the GB-04 CSA since 2009, but none of these reviews were specifically dedicated to fulfilling the subject ANS requirement. This week, NCS engineers conducted an operational review of GB-04 to reestablish compliance.

During the extent of condition review, NCS engineers identified another CSE for which an operational review was never performed. This CSE covered equipment that had been used for nuclear detection technology testing in Building 9204-2E. This equipment is no longer operational.