

## 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 June 5, 2015

Staff member D. Shrestha was at the Transuranic Waste Processing Center (TWPC) this week.

**Conduct of Operations/Work Planning and Control:** Last week, the Production organization issued a plan to address the work execution issues exposed by recent events (see 4/17/15 report). Some of the common issues included ineffective communication of equipment status during Plan-of-the-Day (POD) meetings, failures to identify or effectively implement task-specific hazard controls for the Production scope of work supporting maintenance activities, and ineffective pre-job briefings. The plan details nearly 30 improvement actions, most of which have already been completed or are scheduled for completion in the next 30 days. These actions include reviews of certain conduct of operations requirements (e.g., conduct of POD meetings, pre-job briefings) for improvements, improvements to the process by which Production personnel review and approve maintenance packages, and actions to review the Integrated Work Control Manual for any clarifications needed regarding the acceptable methods for implementing controls specified by engineering (e.g., nuclear criticality safety controls). Production management plans to charter an independent assessment of the effectiveness of these actions within two months of the completion of the plan.

**Technical Procedure Process:** Y-12 procedure Y15-232, *Technical Procedure Process*, is undergoing several changes to improve the process for making On-the-Spot (OTS) procedure changes (i.e., handwritten procedure changes that are not required to undergo formal verification and validation prior to implementation). The previous process required approvers (managers and subject matter experts) to sign next to each change in the document. Since OTS changes require at least four approvals (and often times more), this would lead to situations in which procedure pages were cluttered with more than 20 signatures, which negatively impacted the legibility of the document. The new process collects all signatures on a separate form where the process engineer lists all required approvals prior to initiating the approval process. This will not only enhance procedure legibility, but is also intended to prevent confusion regarding the total number of approvals required (the previous process relied on the process engineer to circulate the working copy of the procedure for signature, providing no documented means to crosswalk the approvals required with the approvals obtained). Other improvements include a requirement for the responsible manager to sign off on the changes in person (vice telephone), and limits OTS changes to in-process work activities (vice future work). The site reps believe these changes represent a significant enhancement to the legibility, accountability, and control of OTS changes.

**Material-at-Risk (MAR) Reduction:** NPO approved safety basis changes that reduced the MAR limits in Building 9212. Last year, NPO requested that CNS administratively reduce MAR in Building 9212 by 40 percent, and in November, CNS implemented reduced MAR limits through the use of a standing order (see 11/21/14 report). CNS has now institutionalized those changes through incorporation of the reduced limits into Building 9212's Safety Analysis Report (SAR) and Technical Safety Requirements. In addition, the SAR evaluated the new MAR values to revise the estimated radiological consequences, which resulted in a reduction in off-site dose from the postulated events (e.g., the off-site dose from the bounding earthquake event was reduced by 42 percent). CNS is pursuing similar reductions in the SARs for Buildings 9215 and 9204-2E and these changes are planned to be accomplished by the end of FY 2015 and 2016, respectively.