

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 September 26, 2014

Building 9212: This weekend, CNS is scheduled to complete a substantial, multi-year effort to replace or electrically isolate 68 aging electrical panels in Building 9212. The impetus for this effort can be traced back to a 2003 electrical panel fire in Building 9212, which prompted the contractor to establish a more rigorous program for monitoring of the condition of aging electrical equipment. This program primarily took the form of periodic predictive maintenance activities that consisted of temperature monitoring supplemented by visual inspection. Over a period of several years, system engineers used this data to identify panels that presented an increased fire risk and worked with production and program personnel to prioritize and fund panel replacement and isolation activities. Moving forward, CNS will continue to inspect the in-service electrical panels biannually for signs of aging. Analogous electrical panel monitoring and risk mitigation activities have also been implemented for Buildings 9204-2E and 9215.

Aging Infrastructure: In May, a report from CNS structural engineers (see 7/11/14 report) noted that Building 9744, an unoccupied legacy support facility, had significant degradation included failing roof trusses and bowing walls. Access to the building had previously been restricted and required senior contractor management approval prior to entry. The building had been slated for demolition for several years, and this week, after several months of preparation, CNS construction personnel completed the demolition. Thorough planning and preparation resulted in the demolition being completed in one day without incident.

Highly Enriched Uranium Materials Facility (HEUMF): The CNS Nuclear Criticality Safety organization revised five criticality safety evaluations to allow storage of additional reactor fuel materials with different containers in HEUMF. This action supports the recommendation from the Red Team to optimize storage in HEUMF in order to reduce the material-at-risk in aging production facilities.

Work Planning and Control (WP&C): A key component of the CNS maintenance organization's ongoing effort to improve WP&C performance at Y-12 is the Maintenance Center Lead (MCL) work package review process. The process requires the MCLs (the first line supervisors for the maintenance work planners) to review all complex and minor work packages for unsatisfactory content (e.g., unclear work scopes or missing hazard controls) using a management-generated checklist of questions. Maintenance management established this process last spring as a defense-in-depth barrier to minimize the issuance of unsatisfactory work packages and provide work planners additional performance feedback. Maintenance management has also collected the data from completed work package review checklists to trend WP&C performance. In the most recent contractor assurance system quarterly report, CNS management concluded that WP&C performance had improved based in part on the data collected from these reviews (see 9/5/14 report).

Following contract transition, the new CNS management team identified some opportunities to enhance the value of MCL work package reviews. Key enhancements included more detailed criteria for the planners to determine which issues would lead to an overall unsatisfactory work package, the removal of ambiguous terms from the work package review checklist, and clear criteria for when work planner remediation is required. This week, the site rep observed an MCL training session implementing these enhancements. The format included an interactive work package review that fostered an excellent exchange between the MCLs and maintenance management regarding the expectations for work package content.