

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 25, 2015

TO: Steven Stokes, Technical Director
FROM: William Linzau and Rory Rauch, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending November 27, 2015

Work Planning and Control (WP&C): Personnel from the CNS Y-12 Infrastructure (maintenance) organization have been working with the conduct of operations subject matter expert for the Production organization on a set of actions to improve WP&C integration for activities involving maintenance and Production personnel. These actions are being taken in response to events that resulted in part from a failure to identify required hazard controls for tasks performed by Production personnel in support of maintenance activities (see 4/17/15 report). These actions are also intended to address inconsistencies in the Production and Y-12 Infrastructure expectations for WP&C integration between the two organizations (see 9/25/15 report).

The most significant action taken to date involved the creation of a new template for maintenance work instructions that contain actions for Production personnel or interface with Production procedures. This template was based on key features that a planner had incorporated into recent maintenance work instructions for complex maintenance activities requiring Production support in Building 9204-2. Earlier this week, the site reps and the planner performed a field-based review of a work instruction that was recently used to perform maintenance on a piece of equipment in Building 9204-2. One of the key features of the template is a hold point requiring the responsible manager from the Production organization to verify that the scope of work and corresponding hazard controls for Production tasks are adequately covered in the work instruction. This feature ensures that maintenance work instructions implement the expectations outlined in the Production supplement to the Y-12 conduct of operations manual, which requires responsible managers to "...verify the activity [to be performed by Production employees] is described and controlled in the maintenance work package with specific step-by-step instructions." Other features include a hold point to ensure that appropriate Production personnel were in attendance at the pre-job briefing and a hold point for the system or process engineer to verify that the Production steps can be performed as written without impacts to the system and equipment. Y-12 Infrastructure personnel are currently developing training material for the new template. The training is scheduled to begin next month with a session for the planners' supervisors.

Building 9202: Last weekend, Y-12 experienced a loss of power event affecting the east end of the plant. One of the affected facilities was Building 9202, a non-nuclear facility that contains small amounts of radiological material for use in technology development activities. As a result of the power outage, one of the building's fan rooms became hot enough to activate the local fire suppression system. The fire department subsequently isolated the system and initiated a one-hour fire patrol until maintenance could replace the sprinkler heads, test the system and return it to service. The laboratories beneath the fan room received some water from the sprinkler activation. Radiological control technicians surveyed and released the rooms prior to resumption of technology development activities. CNS plans to hold a fact-finding meeting next week to identify the exact cause of the activation and associated timeline of response actions.