

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 27, 2009

TO: Timothy Dwyer, Technical Director
FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending March 27, 2009

Mr. Kupferer was out of the office from Wednesday through Friday. Staff member Todd Davis was in Oak Ridge this week to augment site rep. coverage.

Building 9212 Fire Suppression Systems. In the Board's letter of February 28, 2006, weaknesses were noted in the Building 9212 safety analysis regarding the classification of fire suppression systems. Subsequently, YSO directed that four of the Building 9212 fire suppression systems be upgraded to safety-class. The YSO Safety Evaluation Report included the following two Conditions of Approval (COAs) related to these systems: 1) completion of hydraulic calculations for the four systems and 2) completion of a design adequacy evaluation of water supply pressure monitoring. In September 2008, B&W requested relief from these COAs, proposing that the hydraulic calculations will yield little benefit relative to the estimated cost. Regarding pressure monitoring, B&W noted that the current potable water pressure monitoring system does not meet safety-class requirements and upgrade costs would be significant. B&W considered that a full design adequacy evaluation would not yield significant additional information. Instead, B&W proposed the pursuit of a new pressure sensing system that would provide local and/or remote monitoring capability. YSO personnel informed the site reps. that B&W's request on these COAs is still under review as part of YSO evaluation of the annual update to the Building 9212 safety analysis.

NNSA Headquarters Biennial Review of Y-12. NNSA Headquarters staff conducted its Biennial Review of Y-12 this week and briefed results to Y-12 management. The review team focused on YSO oversight and actions since the last review. Nearly all areas reviewed were considered satisfactory by the review team. The review team indicated concern, however, with YSO staffing and support for future work in criticality safety, quality assurance and nuclear safety system oversight. A review report is to be issued.

Building 9204-4 Deactivation. This week, B&W completed a Readiness Assessment (RA) related to removal of nuclear materials from Building 9204-4 (see the 10/10/08 and 3/20/09 site rep. reports). The purpose of the RA was to confirm (1) that the inventory of nuclear materials was reduced to levels below Hazard Category 3 thresholds, and (2) that documentation exists to support and operate the facility as a Chemically Hazardous facility. The RA team concluded that these objectives were achieved. The RA team identified four findings including the lack of a documented process in B&W command media for the deactivation of nuclear facilities. The site reps. note that there is no specific requirement to perform this type of review when downgrading a Hazard Category 2 nuclear facility; however, B&W initiated this review as a best practice.

New Complex Command Center (CCC). In December 2008, NNSA Headquarters approved Critical Decision-1 for a new CCC at Y-12. The facility will house plant shift management, fire fighting and emergency response support, and will be designed in accordance with applicable codes and standards. Upon completion, the Y-12 Fire Department will be moved from its present location to the CCC location that is planned near the east end of the site (and outside of the Protected Area). The Y-12 Fire Department conducted a test this week that showed fire engine response time from the CCC to nuclear facilities would meet an industry standard response time of 4 minutes.