

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 16, 2010

TO: Timothy Dwyer, Technical Director
FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending April 16, 2010

Uranium Processing Facility (UPF). Board member Joseph Bader and staff members Kasdorf and Grover visited Y-12 to review progress on preliminary design of UPF. YSO has previously accepted B&W's revised Critical Decision (CD) strategy that includes two stand-alone CD-2/3 packages (see the 1/22/10 site rep. report) and that would not include submittal of a Preliminary Safety Design Report. The first CD-2/3 package covering site preparation and long-lead procurement of some process equipment is now to be submitted to YSO in June 2010. The Board member and staff inquired on how incorporation of safety-in-design to meet the intent of DOE Standard 1189, *Integration of Safety into the Design Process*, will be verifiable for preliminary design with the combined CD approach. B&W management stated that B&W will develop a document to illustrate how and when the planned design and safety basis deliverables will satisfy the intent of DOE Standard 1189.

Staff members Blackman, Grover and Kimball and outside expert Stevenson met with UPF project and NNSA Headquarters personnel to discuss paths to resolution of issues raised in the Board's letter of March 15, 2010. The Board's letter noted issues with UPF civil/structural design and with NNSA oversight of UPF civil/structural design.

Conduct of Operations/Hoisting and Rigging. B&W issued an occurrence report regarding a designated critical lift of a 300-lb motor off of the roof of Building 9212 that occurred last Friday, April 9th. The sling configuration used was different from the approved critical lift plan. Key factors of concern include: (1) a YSO Facility Representative observing the lift noted to the supervisor that the sling configuration deviated from the critical lift plan, and neither during nor following the completion of the lift was a formal work suspension declared by B&W or YSO personnel; additional critical lifts were conducted after a short stoppage; (2) while the pre-job brief covered the planned sling configuration (several hours prior), the workers did not reference the critical lift plan in rigging the motor for lifting; (3) no specific verification (or signoff) of the sling configuration was required; and (4) no notifications of the deviation to the critical lift plan was made to senior B&W or YSO management until Monday, upon which B&W senior management called for a critique of the event. B&W suspended critical lifts by the Facilities, Infrastructure and Services Division and corrective actions are in development.

Dismantlement Operations/Small Fire – Update. B&W has completed its follow-up investigation of the small fire that occurred in uranium chips produced during a lathe machining operation in February (see the 2/26/10 site rep. report). The review team identified design changes to the lathe that are being evaluated including: (1) modifying the coolant spray to increase coverage on the chips, and (2) replacing the strainer-type pan used to catch chips with a recessed pan that would submerge the chips in coolant. The site rep. inquired with B&W management on planned actions to address the failure to promptly call 911 upon discovery of the fire as required (a repeat problem that has occurred during previous small fires at Y-12). B&W had not planned an action to re-emphasize to operations personnel the requirement to call 911 upon discovering any fire. B&W management indicated to the site rep. that B&W would consider an action on this issue.