

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 14, 2009

TO: Timothy Dwyer, Technical Director
FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending August 14, 2009

Highly Enriched Uranium Materials Facility (HEUMF). As part of operational readiness efforts, B&W anticipates starting full-scale practice operations during the week of August 24th. Regarding safety basis implementation, B&W plans to start their Implementation Validation Review on August 31st.

New On-site Transfer Vehicle (SST-E). This week, NNSA completed its Operational Readiness Review (ORR) for the SST-Es that are to be used for on-site transfer of nuclear material to HEUMF (see the 7/2/09 site rep. report). The ORR team concluded that SST-E operations can be safely started. The team did not identify any pre-start findings; however, the team identified 3 post-start findings regarding safety basis documentation.

Building 9201-5 Fire Suppression. Several fire suppression systems in Building 9201-5 are credited as safety-significant. The Building 9201-5 Technical Safety Requirements (TSR) define a minimum water supply riser pressure of 46 psig. Last week, B&W identified that incorrect sprinkler head elevations were used in the ten-year-old calculation that supports the TSR and developed a preliminary calculation that shows the required minimum pressure should be 59 psig. B&W declared a Potential Inadequacy in the Safety Analysis (PISA) and issued a Standing Order to formally communicate and require use of the higher pressure value. The site reps. noted to Y-12 management that B&W did not identify an action during the PISA critique to perform an extent-of-condition evaluation in other facilities with similar fire system calculations.

Conduct of Operations/Feedback and Improvement. On Monday, B&W held a critique following discovery that several items of lifting equipment for weapon component assembly operations have been in use since April with expired inspection stickers (none of the equipment is credited in the safety basis). Assembly workers noted during the critique that a question was raised about the expired stickers in April, but that supervision responded that an extension on the inspections had been granted and that new stickers were to be provided (none were subsequently provided). Assembly operations then continued from April until last week when a worker identified an expired inspection sticker on welding equipment and B&W initiated an extent-of-condition review. B&W management is conducting additional investigation.

Following the critique, the site rep. noted to YSO and B&W personnel that the critique did not establish whether the Shift Manager had been informed of the issue with the expired inspection stickers in April as would be required by the Y-12 Conduct of Operations Manual. B&W management subsequently indicated that the Shift Manager was not informed and that B&W would address that deficiency in developing corrective actions.

Operation Startups. The site rep. observed startup of infrared debonding operations of weapon components in the Assembly/Disassembly Building (see the 7/24/09 site rep. report). In addition, B&W resumed operations to stabilize potentially pyrophoric saw fines in Building 9201-5 after being suspended for eight weeks (see the 6/19/09 site rep. report).