

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 2, 2010

TO: Timothy Dwyer, Technical Director
FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending April 2, 2010

Uranium Processing Facility (UPF). During the past few years, YSO has submitted several formal requests to NNSA Headquarters to increase YSO staffing for oversight of the UPF Project. NNSA Headquarters has only authorized YSO to hire one additional employee for UPF project oversight. YSO has internally re-assigned five additional personnel to UPF oversight. YSO recently briefed the staff and site reps. that it requested NNSA Headquarters authorize YSO to hire 10 additional federal employees over the next three years for the UPF project (see the 2/26/10 site rep. report). These 10 additional YSO employees would cover UPF oversight in the areas of quality assurance, nuclear safety, system engineering, and criticality safety.

Building 9212. Since historical system reliability information at Y-12 is limited, ARES Corporation was tasked to provide reliability analyses for several systems in Building 9212 (e.g., steam, electrical power, heating, ventilation, Holden Gas furnace, etc.). ARES has completed its review and issued its report. The conclusions from the ARES report appear consistent with the conclusions of the Facility Risk Review (see the 12/15/06 site rep. report); the systems analyzed have, in general, operated beyond a normal design life and the likelihood for the systems to remain reliable for an additional 15 years without significant refurbishment is low. In response to the Board's letter of March 13, 2007 regarding the risks of operating Building 9212, Y-12's Continued Safe Operating Oversight Team is preparing to issue its third annual report and brief the Board later this month (see the 4/3/09 site rep. report).

Conduct of Operations/Procedures. In April 2009, B&W management directed production personnel to designate procedures with a use category (information only, reference use, or continuous use) as part of an ongoing procedure review initiative. Following site rep. inquiry on this initiative, B&W production management determined that incorporation of the procedure use categories was lacking and issued a Standing Order this week calling for all technical procedures to be marked with the use category (see last week's site rep. report). B&W management noted to the site reps. that numerous procedure modification requests (PMRs) had been developed many months ago during the procedure review initiative to implement the use categories (and other procedure improvements), but many of these PMRs have not yet been processed. B&W is developing a list of the back-logged PMRs and is prioritizing the PMRs for processing.

Transuranic Waste Processing Center (TWPC). DOE-ORO issued its Safety Evaluation Report (SER) for the annual update of the TWPC Documented Safety Analysis that addresses the planned drum venting campaign and functions of the programmable logic controller for the ventilation system (see last week's site rep. report). DOE-ORO agreed with the proposed controls for drum venting and did not identify any SER Conditions of Approval. Also, Wastren Advantage submitted its Plan of Action (POA) for the contractor Operational Readiness Review (ORR) for the drum venting campaign. The POA states the ORR is to be conducted in May.

Safety Analysis Research. B&W developed its test plan for obtaining data on airborne release fraction (ARF) and respirable fraction (RF) for uranium metal in a fire environment (see the 3/5/10 site rep. report). Such data could provide a basis for using ARF and RF values that are lower than the bounding values specified in the applicable DOE directive (DOE Handbook 3010-94). B&W personnel indicated that the first test is now planned to occur in the next few weeks.