

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 5, 2008

TO: Timothy Dwyer, Technical Director
FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending December 5, 2008

Staff Member Todd Davis was in Oak Ridge this week to augment site rep. coverage.

Recommendation 2005-1. B&W recently submitted a revised implementation plan (IP) in response to DOE Manual 441.1-1, *Nuclear Materials Packaging Manual*, being issued (see the 2/1/08 site rep. report). The revised IP commits to design, fabricate and implement four or five new containers during the next decade, which will gradually replace more than 50 types of containers currently in use. The IP states that new containers will replace the nonconforming containers as they are handled for production processing. Initial design efforts will focus on containers that are required to support the Uranium Processing Facility Project, which has committed to use containers that are compliant with the Manual criteria. YSO plans to forward the revised IP to NNSA-Headquarters in December. B&W is working to integrate the implementation of the Manual with other site initiatives including the following: container standardization (reduces the complexity of criticality controls), Highly Enriched Uranium Storage Facility load-out (planned to occur during fiscal years 2010 and 2011), and the Storage, Tracking and Material Movement Project (proper container labeling, etc.).

Furnace Reduction Operations/Conduct of Operations. Engineering evaluation of the damage to two reduction reactor vessels continues. As reported on November 21st, the damage to this safety-significant equipment was identified by production operations personnel in late September. However, until a facility Shift Technical Advisor became aware of the damage in mid-November, no formal reporting of the specific damage was made via an internal Initial Event Information report and no formal hold on furnace reduction operations had been established. The site reps. have inquired with Y-12 management on any actions being planned to reinforce with nuclear operations personnel the need for proper reporting of unusual/unexpected conditions, particularly for nuclear safety systems and components.

Transuranic Waste Processing Center (TWPC). The site reps. and staff observed transuranic waste operations at the TWPC. Since startup of remote-handled (RH) waste operations in May 2008, EnergX has processed the waste from 5 concrete casks into 18 RH waste drums compliant for shipment to WIPP. Loading of the RH drums into RH shipping canisters/casks is to start in the next few weeks with the first RH shipment projected in late January.

Since mid-2007, EnergX has been planning to establish a capability to vent waste drums at the TWPC (see the 10/19/07 site rep. report). This new venting capability is for several hundred waste drums where an inner and an outer drum need to be vented. The new venting enclosure has been assembled and readiness efforts are in progress. Contractor and DOE Operational Readiness Reviews are now planned for early 2009.

Nuclear Facility Clean-up. B&W has continued its efforts to de-inventory and clean-up nuclear facilities, which were initiated in August with a two-day clean-up effort of Building 9212 (see the 8/15/08 site rep. report). In October, B&W conducted a clean-up effort of the Warehouse, during which personnel removed several large pieces of equipment (e.g., forklifts), numerous drums, and contaminated trash. During a two-day period last month, B&W removed 284 tons of material from Building 9215 including 46 large boxes of low-level radioactive waste, 3 truck-loads of chemicals, and 6 truck-loads of excess equipment and furniture.