The Honorable John E. Mansfield  
Vice Chairman  
Defense Nuclear Facilities Safety Board  
625 Indiana Avenue, NW, Suite 700  
Washington, D.C. 20004  

Dear Mr. Vice Chairman:  

On July 12, 2006, Secretary Bodman submitted the Department of Energy’s (DOE) revised Implementation Plan (IP) for Defense Nuclear Facilities Safety Board Recommendation 2004-2, Active Confinement Systems. Deliverable 8.6.3 of the IP consists of facility-specific confinement ventilation system (CVS) evaluations performed by the site offices in accordance with the Department’s Ventilation System Evaluation Guidance. Deliverable 8.6.5 consists of Program Secretarial Office concurrence and approval of the disposition of gaps and upgrades. This letter and its enclosures comprise Deliverables 8.6.3 and 8.6.5 for Buildings 9212, 9215, and 9204-2E at the Y-12 National Security Complex. 

In accordance with the IP and National Nuclear Security Administration (NNSA) guidance dated December 6, 2006, the DOE Independent Review Panel (IRP) and the NNSA Central Technical Authority’s Chief of Defense Nuclear Safety (CDNS) have performed separate reviews of the evaluation and its conclusions. The CVS evaluation report for Buildings 9212, 9215, and 9204-2E and the IRP reports are enclosed. 

All three evaluation reports identify significant gaps between the performance criteria within the Ventilation System Evaluation Guidance and the existing “as built” conditions. Given their age and the evolution of safety standards and expectations since their construction, reconfiguring these facilities to support confinement ventilation systems would require a significant investment of resources. All three of these buildings are scheduled to be replaced by the Uranium Processing Facility (UPF). In addition, a Facility Risk Review (FRR) was performed on each of the buildings to identify the investments needed to allow these buildings to continue to operate safely and meet mission needs for another ten to fifteen years. The FRRs identified a prioritized list of needed upgrades and additional investments. Some confinement ventilation upgrades were included in the FRR scope. The majority of the FRR work is being funded under the Nuclear Facility Risk Reduction (NFRR) project, which received CD-1 approval in October 2009. In addition, Readiness in Technical Base and Facilities Matter transmitted contains Unclassified Controlled Nuclear Information. When separated from enclosures, this transmittal document does not contain UCNI.
(RTBF) is working to establish the funding required to complete many of the remaining FRR items that are not funded under the NFRR Project.

Even with the gaps identified in the evaluation reports, the existing safety bases for these facilities demonstrate that the mitigated consequences for the most limiting accident scenario would not exceed DOE’s Evaluation Guideline of 25 rem for off-site radiation exposure. Considering the planned schedule for the replacement facility (UPF), the significant cost to achieve full compliance with the evaluation criteria, and the set of credited controls identified in the current safety bases for these facilities, the risk is not judged to warrant the benefit cost.

The NNSA CDNS and IRP have concluded that the evaluations and their results are technically sound and appropriate, and meet the intent of the IP. If you have any questions concerning this letter or its enclosures, please contact me or have your staff contact James J. McConnell at (202) 586-4379.

Sincerely,

Thomas P. D’Agostino
Administrator

Enclosure

cc: (w/enclosure)  
M. Whitaker Jr., HS-1.1