The Honorable Peter S. Winokur  
Chairman  
Defense Nuclear Facilities Safety Board  
625 Indiana Avenue, NW, Suite 700  
Washington, DC 20004  

Dear Mr. Chairman:

The purpose of this letter is to notify you that the National Nuclear Security Administration (NNSA) has completed responses to Defense Nuclear Facilities Safety Board (Board) concerns expressed in the February 4, 2011 letter. In this letter, the Board requested that additional information regarding the proposed change to the safety basis for Building 9720-5 at the Y-12 National Security Complex be provided within 90 days. This proposed change would use Building 9720-5 to store non-Material Access Area (MAA) material.

Per the Board’s request, the NNSA is providing the following documents, as attachments to this letter:

- The Y-12 Site Office (YSO) letter that provides a summary of the Y-12 evaluation and selection process used to determine the Y-12 consolidated Non-MAA uranium storage site.
- The Y-12 report that responds to the following specific Board concerns:
  - Discussion of the rationale used in selecting Building 9720-5 for non-MAA material storage
  - Identification of the type and amount of material to be stored in Building 9720-5
  - Identification of current nuclear material storage locations
  - Discussion of specific disposition paths for excess non-MAA materials
  - Discussion of alternatives for the long-term storage of Non-MAA material
- The Y-12 ventilation system evaluation (VSE) report
- A report that details YSO’s independent review of the Y-12 VSE report.
- A report that details the Office of Nuclear Safety and Governance (NA-171) independent review of the Y-12 VSE report.
- Briefing slides to brief the Board

As discussed in the YSO letter, a qualitative evaluation and selection process that considered safety, security and mission capability resulted in Building 9720-5 being identified as the appropriate Y-12 warehouse for consolidated non-MAA...
uranium materials. The selection of Building 9720-5 was the best choice overall from a safety, security and mission capability perspective.

Per the Y-12 report, various material forms of uranium, including depleted uranium (DU) will be consolidated into Building 9720-5 at the end of FY 2012. Some of the DU is currently stored in wooden crates. Y-12 plans to initiate the overpack of the wooden crates beginning in FY 2012 and complete it within 4 years.

While the ultimate solution to address non-MAA storage at Y-12 is to consolidate all non-MAA materials into a new warehouse facility (currently projected in the 2025-2028 timeframe), the NNSA considers the Y-12 proposal to use Building 9720-5 in the interim to be a prudent course of action.

The Building 9720-5 ventilation systems were evaluated against safety class, safety significant and defense-in-depth (DID) performance criteria. Because the 9720-5 Safety Analysis Report does not credit the ventilation systems for any safety functions or DID for the building’s safe operation, Y-12 determined that no changes are required or recommended. The NNSA concurs with this recommendation.

As agreed to with the Board, Y-12 will facilitate an on-site briefing to the Board during the Board’s upcoming site visit, currently scheduled for May 17-18, 2011.

If you have any questions or comments, please contact me or James McConnell, Assistant Deputy Administrator for Nuclear Safety, Nuclear Operations, and Governance Reform, at (202) 586-4379.

Sincerely,

DONALD L. COOK
Deputy Administrator
for Defense Programs

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