Department of Energy
National Nuclear Security Administration
Washington, DC 20585

February 20, 2003

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW.
Suite 700
Washington, D.C. 20004-2901

Dear Mr. Chairman:

This letter is provided as an interim response to your letter of December 27, 2002, regarding the Highly Enriched Uranium Materials Facility (HEUMF) at the Y-12 National Security Complex. Your letter noted that, despite improvements to the design criteria document and the process for identification of safety controls, persistent weaknesses discussed in the Issue Reports enclosed with your letter require attention to assure an adequate safety basis for the operation of the HEUMF facility. The National Nuclear Security Administration (NNSA) concurs with many of the issues noted in the Issue Reports.

Subsequent to the November 2002 HEUMF staff review, as part of the ongoing development of the HEUMF Preliminary Documented Safety Analysis (PDSA) process, the control set being developed to mitigate a large fire in the HEUMF continues to be updated. One element of the control set presently under investigation is the use of an active vented safety confinement system vice the isolation (holdup) approach noted with concern in the staff report. The analysis considers both worker and public protection and potential Post Accident Recovery consideration during the development of the System Safety Function and Functional Requirements. A draft PDSA that documents the updated contractor recommendation is scheduled for submittal to NNSA for formal review in early April. Additionally, the NNSA Site Office and Headquarters staff coordinate informally on an ongoing basis with the contractor staff to maintain awareness of the DSA progress, and to ensure that an appropriate set of design features are included in the facility to address worker and public protection. We will also continue to keep your staff apprised of developments in this matter.

Your letter noted concerns with the types and physical characteristics of materials and the technical standards and criteria for storage in the HEUMF. The current Y-12 site storage criteria, as described in Y/ES-015/R1 dated May 2002, apply to Highly Enriched Uranium (HEU) stored on an interim basis, as well as for indefinite or long-term storage up to 50 years. The criteria for long-term and interim storage from this document will be used for storing HEU metal, metal alloys, and stable oxides in the HEUMF. The solution or residue form of uranium is not an acceptable form of storage in the HEUMF. The staff report also noted concerns as to the type of storage containers that will be used for material stored in the HEUMF. To address a recent issue, which in part resulted from the fact that multiple types of storage containers complicate criticality safety requirements and affect operator conduct of operation performance, BWXT Y-12 is establishing a team to develop a project plan for implementing a storage container architecture for the Y-12 site.

The NNSA will provide a report by March 27, 2003, as requested in your letter to identify and provide status on specific actions being taken to address the issues noted in your letter on HEUMF design and storage requirements. We will also continue the actions taken by NNSA and BWXT in response to your March 2002 HEUMF letter, with our staff working closely with your staff exchanging updates on issue resolution and project documentation as it becomes available. We have found this ongoing dialogue to be useful and beneficial.

If you have any questions concerning our approach to responding to your letter, please contact me or have your staff contact Mr. David E. Beck at (202) 586-4879 or Mr. Bill Brumley at (865) 576-0752.

Sincerely,

Everet H. Beckner
Deputy Administrator
for Defense Programs