



Department of Energy
National Nuclear Security Administration
Washington, DC 20585

April 1, 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:

The Defense Nuclear Facilities Safety Board (Board) letter of December 27, 2002, noted that, despite improvements to the design criteria document and the process for identification of safety control, persistent weaknesses need to be addressed to ensure an adequate safety basis for the operation of the Highly Enriched Uranium Materials Facility (HEUMF). I am committed to ensuring that the HEUMF is designed with an appropriate safety basis. My letter dated February 20, 2003, reported that the HEUMF Preliminary Documented Safety Analysis (PDSA) process has resulted in a change in the control set and that the isolation holdup approach, which was identified in the staff report as a concern, is no longer being considered. The interim response also reported the establishment by BWXT Y-12 of a project team that will develop a plan to address concerns with the types and physical characteristics of materials and the technical standard and criteria for their storage in the HEUMF.

The preparation of the draft HEUMF PDSA has reached the point where we have a more mature preliminary determination of credited controls for Design Basis events. The safety analysis indicates that adequate protection to the workers and the public can be ensured by the identification of credited controls (Safety Class building and storage racks and Safety Significant fire sprinkler system) other than a Safety Class secondary confinement system. The secondary confinement system will be identified in the draft HEUMF PDSA as a Safety Significant system providing significant defense in depth. Specific details on the requirements for the secondary confinement system as it performs this function, such as equipment classification and power supply requirements for the confinement system fans, will be resolved as part of the PDSA review and approval process. Additional information on the HEUMF secondary confinement system and other staff report issues with the HEUMF Preliminary Hazard Analysis are attached as Enclosure 1, Confinement System for the HEUMF.



The draft PDSA is scheduled for submittal to NNSA for formal review in May 2003. NNSA Site Office and Headquarters staffs continue to coordinate with the contractor to maintain awareness of the PDSA progress and content. We will maintain an ongoing dialogue with your staff on our progress in resolving their issues and are planning a staff review of the HEUMF PDSA after its formal submittal to NNSA; at that time, we will be prepared to address the resolution of issues in the staff report not covered in the enclosure.

The Y-12 storage criteria that applies to all enriched uranium material forms, storage containers, and duration are specified in the "Criteria for the Safe Storage of Enriched Uranium at the Y-12 National Security Complex," Y/ES-015/R1, and "Criteria for Acceptance and Technical Assessment for Acceptance of Enriched Uranium at the Y-12 National Security Complex," Y/LB-15, 920/R2. The HEUMF must be in compliance with the storage criteria in these documents. As part of the activities committed in the January 31, 2003, NNSA "Report to the DNFSB on the Management of Inactive Actinide Material at NNSA Sites, Strategy for FY 2003-04 Activities," Y-12 will revise and update these documents in FY 2003 with specific focus on HEUMF storage requirements.

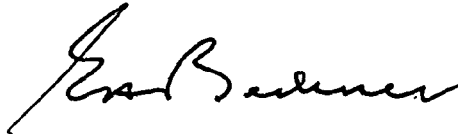
Since it will be several years before the HEUMF is ready to receive material, planning for stored material in the HEUMF will be based on a strategy that integrates all pertinent ongoing HEU storage and disposition initiatives. In addressing issues at Y-12 that resulted in part from the fact that multiple types of storage containers complicate criticality safety requirements and affect operator conduct of operation performance, BWXT Y-12 is developing a plan to evaluate current facility container storage and determine a minimum set of storage containers that meet facility safety and operational needs, while simplifying criticality safety and operator handling requirements. In addition, as part of the Material Recycle and Recovery program, actions are ongoing to develop and execute a project plan that will evaluate currently stored in-process HEU materials at Y-12 awaiting further processing with an end goal to establish and execute a path forward for recovery or discard.

BWXT Y-12 managers are integrating the actions from these initiatives into a Y-12 Comprehensive Ten-Year HEU Storage Material Management Project Plan. This plan will not only form the basis for the HEU that will be stored in the HEUMF but also will include the planning to move materials to the HEUMF. The Y-12 Site Office and BWXT Y-12 staffs have had preliminary discussions with your staff on the proposed path forward. Enclosure 2, "Development of Comprehensive HEU Storage and Material Management Plan," includes the current status and details of our planning.

We will continue to work closely with your staff to exchange updates on issue resolution as the draft PDSA for HEUMF is finalized and the project plan for HEU storage at Y-12 is finalized and executed. As your staff is aware, the HEUMF project team maintains a log of issues/questions raised by the Board and staff as a result of their site visits and document reviews. The team uses this log to track resolution of issues. Several of the comments included in the Staff Issue Report that are not directly addressed in the enclosures will be tracked via this log.

If you have any questions concerning our response 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

2 Enclosures