[DNFSB LETTERHEAD]

January 22, 1996

The Honorable Thomas B. Grumbly
Under Secretary, Acting
Department of Energy
Washington, D. C. 20585-1000

Dear Mr. Grumbly:

The Defense Nuclear Facilities Safety Board (Board) has reviewed the System Requirements Document (SRD) for the Uranium Hexaflouride Cylinder Program submitted to the Board on November 30, 1995. The SRD was developed per the Department of Energy's (DOE) Implementation Plan for Board Recommendation 95-1, *Improved Safety of Cylinders Containing Depleted Uranium*.

The Board is pleased to note that the SRD, in general, provides requirements that are consistent with the intent of Recommendation 95-1. Further, the Board observes that DOE and Lockheed-Martin have established a sound basis in the SRD for development of actions to evaluate and improve the safety of cylinder storage and maintenance. The Board has a few comments, however, regarding SRD requirements that need to be clarified, or added, to reflect ongoing efforts or to ensure appropriate actions are incorporated into DOE's future efforts. These comments are provided in the enclosure.

The Board would like to be informed of the resolution of the enclosed comments and any plans for revision of the SRD. The Board looks forward to continued progress in implementation of Recommendation 95-1.

Sincerely,

John T. Conway
Chairman

 c: Mr. Terry Lash
    Mr. Mark B. Whitaker

Enclosure

Comments on the System Requirements Document for the UF6 Cylinder Program

1. Cylinder Pedigree: The description of the cylinder integrity and storage condition requirements (section 5.4.1.1) notes that a small population of cylinders may not have been manufactured to ASME standards. The SRD, however, does not clearly address this population of cylinders. It would appear appropriate to include requirements in the SRD

calling for identification of this cylinder population, for determination of what manufacturing standards were not (or potentially not) used, and for evaluation of continued cylinder acceptability.

2. Painting of Skirted Cylinder Heads: Per the DOE Implementation Plan for Recommendation 95-1, an effort to paint skirted cylinder heads has begun as a priority action. While the SRD calls for the initiation of an overall cylinder maintenance coating program, there is no mention in the SRD of this ongoing effort.

3. Handling of Degraded Cylinders: The SRD discussion related to cylinder handling (section 5.2.3) is focused on minimizing handling damage during operations. There is no discussion, however, that clearly addresses evaluation of the handling of potentially degraded cylinders and incorporation of any special controls or precautions. This issue was discussed in the technical report forwarded by Recommendation 95-1.

4. Reduction of Cylinder Wetness and Degradation: The SRD contains a discussion (section 5.2.1.2) stating *". . . As part of continuous improvement*, other methods for reducing time of wetness and cylinder degradation will be evaluated as *identified* [emphasis added] ...."* This could imply that proactive identification of such measures is not necessary. This would not be consistent with the intent of Recommendation 95-1.

5. Training and Qualification of Personnel: The SRD discussion (sections 5.2 and 5.3) regarding training of "performing personnel," and qualification of "operators," is not clear. Specifically, it is not clear what training and/or qualification requirements are intended to apply to the supervisory personnel, equipment operators, inspection personnel, engineering support personnel, etc., that are identified by the personnel list in section 4 of the SRD.

6. Facility Monitoring: The SRD states that cylinder facility walk-throughs will be required and references DOE Order 5700.6C, *Quality Assurance Program*, as the governing document. While DOE Order 5700.6C provides general requirements on management assessments, DOE Order 5480.19, *Conduct of Operations Requirements for DOE Facilities*, provides more specific guidance on the conduct of such inspections by operations personnel and would also be an appropriate reference for this activity.