John T. Conway, Chairman

A.J. Eggenberger, Vice Chairman

John E. Mansfield

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

04-2901

625 Indiana Avenue, NW, Suite 700, Washington, D.C. 20004-2901 (202) 694-7000

August 9, 2002

The Honorable Spencer Abraham Secretary of Energy 1000 Independence Avenue, SW Washington, DC 20585-1000

Dear Secretary Abraham:

The Defense Nuclear Facilities Safety Board (Board) has received Revision 2 of the Department of Energy's (DOE) Implementation Plan for Board Recommendations 94-1, Improved Schedule for Remediation in the Defense Nuclear Facilities Complex, and 2000-1, Prioritization for Stabilizing Nuclear Materials, dated July 2002. In a letter dated March 23, 2001, the Board informed DOE that the delays in key stabilization activities at the Savannah River Site (SRS) and Los Alamos National Laboratory (LANL) proposed in the January 2001 revision of the Implementation Plan were unacceptable. The Board followed up with a letter on November 21, 2001, that made several suggestions regarding the strategy and schedule for stabilization at SRS and LANL. Revision 2 of the Implementation Plan is intended to incorporate revised plans and schedules for stabilizing nuclear material at SRS and LANL. The revision also incorporates updates for stabilization activities at other defense nuclear facilities.

Based on its review of the proposed Revision 2 of the Implementation Plan, the Board finds the revised plans and schedule for SRS acceptable. However, the plans and schedule for LANL are not responsive to the Board's letters of March 23, 2001, and November 21, 2001. In fact, Revision 2 further delays some of the key stabilization activities at LANL which the Board had previously concluded needed to be accelerated. Delays beyond those previously rejected in March 2001 are unacceptable.

In a letter dated December 14, 1999, the Board suggested to DOE that it likely would be more expeditious and efficient for LANL to dispose of lower-grade, low-risk residues instead of processing them to separate the plutonium. The Board reiterated this suggestion in its March 23, 2001, and November 21, 2001 letters. The proposed Implementation Plan discusses the potential to accelerate LANL's overall stabilization schedule contingent upon the approval of a vulnerability assessment for discard of some types of residue, but provides few details and no commitment to develop and implement an improved schedule. Actions required to facilitate discard of residues should be expedited, and a revised stabilization schedule that maximizes disposal of unneeded residues instead of processing should be formulated as quickly as possible.

The enclosure provides additional detailed comments on the LANL plan. Additionally, the enclosure provides a list of commitments which were revised without sufficient technical justification. The Revision 1 commitment dates should be retained for these commitments as noted in the enclosure.

The use of performance-based incentives has been particularly effective in focusing management attention toward timely completion of important activities. The Board believes DOE should give consideration to establishment of performance-based incentives for LANL's stabilization of unneeded residues and packaging of plutonium materials.

The Board also notes that many commitment dates for stabilization activities across the DOE defense nuclear complex have been changed simply because they were missed. DOE's manual, DOE M 140.1B, *Interface with the Defense Nuclear Facilities Safety Board*, encourages this practice. The continual changing of commitment dates in the Implementation Plan can lead to an appearance that the implementation of a commitment is on schedule when it is not, thereby weakening management attention to completing overdue Secretarial commitments. The Board believes that, unless a change to a commitment date is technically justified, the original date should be retained. The Board should be formally notified that the commitment will be missed, consistent with the current practice, and a forecast completion date provided. In the future, the Board requests that commitment dates in an Implementation Plan not be revised simply because they are going to be missed; DOE M 140.1B should be revised accordingly.

Pursuant to 42 U.S.C. § 2286b(d), the Board requests that within 30 days of receipt of this letter that DOE provide a briefing which discusses the actions DOE will take to accelerate material stabilization at LANL, including actions to maximize disposal of unneeded residues. The Board also requests that DOE provide a date by which a revised Implementation Plan reflecting an improved schedule for LANL and incorporating the comments in the enclosure will be submitted to the Board.

Sincerely,

John T. Conway

Chairman

c: The Honorable Jessie Hill Roberson The Honorable Linton Brooks Mr. Mark B. Whitaker, Jr.

Enclosure

Enclosure

Detailed Comments on the Department of Energy's Implementation Plan for Recommendations 94-1 and 2000-1, Revision 2

Comments on the Los Alamos National Laboratory Plan.

- In March 2002, the Defense Nuclear Facilities Safety Board's staff was informed that the Los Alamos National Laboratory (LANL) plans to move the unsheltered vessels into a Butler building near the Chemistry and Metallurgy Research facility by October 2002. A commitment to shelter the vessels should be established. Strong consideration should be given to providing filtered ventilation for the Butler building.
- The formal commitments do not include stabilization of those items which have radiological doses greater than 100 mrem/hr. Such a commitment should be added to the plan.
- New commitments for approval of the LANL vulnerability assessment for residue discard and formulation of an improved stabilization schedule that maximizes direct discard of residues should be established.

Delayed Commitments.

Prior commitment dates for the following deliverables/milestones should be retained:

Site	Milestone	Due Date
Rocky Flats Environmental Technology Site	Metal and Oxide>30% Pu	May 2002
Lawrence Livermore National Laboratory	Metal and Oxide>30% Pu+U Residues<30% Pu+U	May 2002 May 2002
Oak Ridge National Laboratory	Metal and Oxide>30% Pu	May 2002
Hanford	Polycubes Pu Alloys	August 2002 June 2001