John T. Conway, Chairman
A.J. Eggenberger, Vice Chairman
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R. Bruce Matthews

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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

June 6, 2003

The Honorable Robert Gordon Card
Under Secretary of Energy, Science and Environment
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-1000

Dear Mr. Card:

The Defense Nuclear Facilities Safety Board (Board) understands that the Department of Energy (DOE) is considering exchanging 1 metric ton of plutonium currently under International Atomic Energy Agency (IAEA) safeguards at Hanford's Plutonium Finishing Plant (PFP) for an equivalent quantity of non-IAEA material being stored at the K-Area Materials Storage (KAMS) facility at the Savannah River Site.

Although there are a number of policy issues related to this proposal that still need to be addressed, the Board notes that there are significant worker dose implications from a delayed decision or a decision not to swap this material between the sites. For example, Hanford engineers have estimated that continuing IAEA safeguards inspections at PFP could require hundreds of fissile material moves beyond those currently required to support processing needs.

The additional handling of plutonium containers is estimated to result in an additional cumulative worker exposure that exceeds 10 man-rem. Performing these inspections with material overpacked in shipping containers at KAMS would likely result in substantially lower dose due to the increased shielding provided by the shipping containers.

The Board is forwarding this information to you as part of our analyses of operational data for your information and use, as appropriate.

Sincerely,

John T. Conway
Chairman

c: The Honorable Jessie Hill Roberson
Mr. Jeffrey M. Allison
Mr. Keith A. Klein
Mr. Mark B. Whitaker, Jr.