

Department of Energy

Washington, DC 20585

September 18, 1998

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

Dear Mr. Chairman:

Earlier this year, my office received the report titled "Surveillance of Nuclear Weapon High-Explosive Operations at Pantex." While the official transmittal of this report did not request a response, I am writing to provide my comments.

I distributed the report to reviewers in my office and around the nuclear weapons complex. The feedback confirmed my view that the report is factual. In addition, I welcome the report's endorsement of high-explosive (HE) work conducted through the Enhanced Surveillance Program. However, some discussion is needed to provide clarification. Our technical conclusions are not as complete as the report suggests.

Of the report's conclusions, I would like to address three: the need to increase sampling of HE in systems awaiting dismantlement, the need to consider cracked HE carefully during safety reviews of procedures for disassembly, and the need to review the process by which significant finding investigations (SFI) are opened.

The Department of Energy (DOE) is clear in its responsibility to ensure retired systems awaiting dismantlement are assessed with regard to nuclear and personnel safety. Each design agency is asked for their assessment on weapon systems in this category. All responses from the design agencies have stated no additional surveillance activities are needed. This conclusion has been recently supported by new tests on surrogate materials and components similar to those in the retired systems.

Another conclusion in the report suggests the need to carefully consider cracked HE during the safety reviews of procedures for disassembly. I fully agree that cracked HE must be carefully considered during the safety reviews of procedures for disassembly. It must also be carefully considered by the project teams who develop the disassembly processes. Our data on sensitivity changes caused by cracked material are not clear cut. Therefore, we establish safe stop points, should unexpected incidents occur during disassembly, and the issue of cracked HE is fully reviewed whenever the situation is encountered.



Finally, the report suggests the need to revisit the process for opening an SFI. Since the specific incident cited in the report (degradation of PBX-9501), a clarification has been communicated to the nuclear laboratories regarding the criteria for opening an SFI. DOE agrees this specific issue should have resulted in an SFI. Future discoveries of this type, outside of routine surveillance testing, will result in an SFI. Based on the current knowledge of this degradation, the resulting investigation has been closed, with followup actions currently under way.

Thank you for the opportunity to provide these comments. We appreciate the time and effort of the reviewers and are available to provide briefings on these topics as desired.

Sincerely,

Gene Ives

Deputy Assistant Secretary for Military Application and Stockpile Management Defense Programs

cc: V. Stello, DP-3 M. Whitaker, S-3.1