The Honorable A. J. Eggenberger  
Chairman  
Defense Nuclear Facilities Safety Board  
625 Indiana Avenue, NW.  
Suite 700  
Washington, D.C. 20004

Dear Mr. Chairman:


During the fourth quarter of Fiscal Year 2005, the National Nuclear Security Administration made progress toward successful execution of the Seamless Safety for the Twenty-First Century (SS-21) process. This report documents the status as of September 30, 2005. The BWXT/Pantex Plant made extensive progress toward implementation of technical safety requirements related to on-site transportation. The B83 SS-21 projected startup authorization approval date is expected to occur in the second quarter of Fiscal Year 2006. This date is dependent upon the duration of the revised Hazard Analysis Report and associated readiness assessments. The draft technical business practice for weapon response to potential accident environments and stimuli will be available for formal review by October 31, 2005.

Twenty-three out of twenty-seven commitments in the DNFSB Recommendation 98-2 have been delivered and four remain outstanding. If you have questions, please call me or have your staff contact Ms. Wendy Baca at 505-845-6340.

Sincerely,

Xavier Ascanio  
Acting Assistant Deputy Administrator  
for Military Application and  
Stockpile Operations  
Defense Programs

Enclosure

cc:  
K. Fortenberry, DNFSB  
A. Matteucci, DNFSB  
M. Whitaker, DR-1  
S. Erhart, PXSO
Quarterly Report for the Implementation Plan

Defense Nuclear Facilities Safety Board Recommendation 98-2

SAFETY MANAGEMENT AT THE PANTEX PLANT

July 1 through September 30, 2005

U.S. Department of Energy
National Nuclear Security Administration
Assistant Deputy Administrator
for Military Application and Stockpile Operations
Defense Programs
Introduction

On September 25, 2000, the Secretary of Energy approved Revision 1 to the Recommendation 98-2 Implementation Plan (IP) and provided a copy to the Defense Nuclear Facilities Board (DNFSB). Change 1 to Revision 1 of the IP was provided on October 28, 2002, and was accepted by the DNFSB on December 19, 2002. The following report for the period July 1 through September 30, 2005, tracks progress towards completing the commitments outlined in the 98-2 IP, Revision 1, as modified and expanded through Change 1 to Revision 1.

General Progress

From July 1 through September 30, 2005, the National Nuclear Security Administration (NNSA) made progress toward completion of the outstanding recommendation commitments. Status of open items is provided below:

4.0 Safety Issue Resolution

4.2 Analyze Hazards

Commitment 4.2.2 - The purpose of this commitment is to create and publish a technical business practice (TBP) that includes guidance on expectations for the evaluation and documentation of weapon response to potential accident environments and stimuli.

Deliverable: A published TBP.

The draft TBP was converted to the TBP format and will be available for formal nuclear weapons complex review, including the DNFSB, by October 31, 2005.

4.3 Develop and Implement Controls

Commitment 4.3.4 - The purpose of this commitment is to validate implementation of the improved site-wide technical safety requirement (TSR) controls for on-site transportation of nuclear explosives.


The Pantex Plant made extensive progress toward implementation of TSR controls. As of September 30, 2005, 39 of the 44 TSR controls related to on-site transportation were through the contractor readiness phase. One control related to tow-motors is awaiting implementation. Two of the remaining four were deleted from the TSR control requirement and approved via a Pantex Site Office Safety Evaluation Report at the non-TSR level. The last two, pertaining to a high explosives transfer cart and a flammable liquid storage container, were determined to be covered by existing controls and will not be implemented until a later date. Per the Recommendation 98-2 deliverable, the Pantex Site Office will conduct a RA on all TSR controls and issue a final report.
Commitment 4.4.6 - The purpose of this commitment is to authorize startup of the B83 Seamless Safety for the Twenty-First Century (SS-21) process.

**Deliverable:** The B83 SS-21 startup authorization.

In response to the nuclear explosive safety study (NESS) pre-start findings, the NNSA reinstated the Tri-Laboratory Electro-Static Discharge Working Group to resolve issues related to environment characterization and preconditioning. Resolution of several of the NESS pre-start findings includes process and tooling changes, which will result in a Hazard Analysis Report (HAR) revision. The subsequent RA will occur after approval of the revised HAR. The projected startup authorization approval date is expected to occur in the second quarter of Fiscal Year 2006, depending upon the duration of the revised HAR review and approval period and completion of the Contractor and NNSA RAs.

Commitment 4.5.1 - The NNSA will complete a comprehensive assessment of the actions taken in response to the Recommendation 98-2.

**Deliverable:** Final assessment report.

The final assessment report will be completed after the NNSA closure of the Recommendation 98-2 commitments summarized in Sections 4.2, 4.3, and 4.4 above.