



**Department of Energy**  
**National Nuclear Security Administration**  
Washington, DC 20585

August 6, 2004

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:

Enclosed is the "Quarterly Report for the Implementation Plan Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 98-2, Accelerating Safety Management Improvements at the Pantex Plant," for the period April 1 through June 30, 2004.

During this reporting period, the National Nuclear Security Administration (NNSA) made progress toward completion of the 98-2 commitments and provided the DNFSB closure notification for Commitment 4.4.5 requiring W78 improvements in tooling and process design and successful execution of all other aspects of the Seamless Safety for the Twenty-First Century (SS-21) process for a weapon system with conventional high explosive. On June 23, 2004, the NNSA granted a Nuclear Explosive Safety Study extension for the B83-0/1 Weapon Program until March 31, 2005. The B83 SS-21 targeted completion is currently January 2005. Twenty-four out of twenty-seven commitments have been delivered and three remain outstanding.

If you have questions, please call me at 202-586-4879 or have your staff contact Ms. Debra Volk at 505-845-5106.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Schoenbauer", with a horizontal line extending to the right.

M. Schoenbauer  
Acting Assistant Deputy Administrator  
for Military Application and  
Stockpile Operations  
Defense Programs

Enclosure

cc w/enclosure:

J. McConnell, DNFSB  
W. Andrews, DNFSB  
A. Matteucci, DNFSB  
M. Whitaker, DR-1  
S. Erhart, PXSO



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# Quarterly Report for the Implementation Plan

**Defense Nuclear Facilities Safety Board  
Recommendation 98-2**

*Accelerating Safety Management Improvements  
at the Pantex Plant*

**April 1 through June 30, 2004**

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

## 1.0 Introduction

On September 25, 2000, the Secretary of Energy approved Revision 1 to the 98-2 Implementation Plan (IP) and provided a copy to the Defense Nuclear Facilities Board (DNFSB). Change 1, to Revision 1, was provided on October 28, 2002, and was accepted by the DNFSB on December 19, 2002. The following report for the period April 1 through June 30, 2004, tracks progress towards completing the commitments outlined in the 98-2 IP, Revision 1, as modified and expanded through Change 1 to Revision 1.

## 2.0 General Progress

From April 1 through June 30, 2004, the National Nuclear Security Administration (NNSA) completed Commitment 4.4.5 requiring W78 improvements in tooling and process design and successful execution of all other aspects of the Seamless Safety for the Twenty-First Century (SS-21) process for a weapon system with conventional high explosive. On June 23, 2004, NNSA granted a Nuclear Explosive Safety Study (NESS) extension for the B83-0/1 Weapon Program until March 31, 2005. The B83 SS-21 targeted completion is currently January 2005.

## 3.0 Task Area Status

The status of open commitments is provided below for each task area of the 98-2 IP, Revision 1.

## 4.0 Safety Issue Resolution

### 4.1 Define Scope of Work

There are no outstanding commitments within this task area.

### 4.2 Analyze Hazards

There are no outstanding commitments within this task area.

### 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.

**Deliverable:** The DOE Readiness Assessment (RA) Report.

The NNSA is planning to complete and issue the final RA report 90 working days after the BWXT Pantex General Manager declares readiness. This declaration of readiness will be issued upon the completion of the final Contractor Readiness Assessment (CRA) scheduled for March 2005 and the resolution and/or corrective action plans (post-start findings only) for any identified CRA findings. Reference

Official Use Only, "TSR Integrated Implementation Plan, Revision 1," dated August 18, 2003, submitted to the DNFSB on September 30, 2003, for CRA schedules.

#### 4.4 Perform Work

**Commitment 4.4.6** - The purpose of this commitment is to authorize startup of the B83 SS-21 process.

**Deliverable:** The B83 SS-21 Startup Authorization.

Scheduled completion for the B83 SS-21 startup authorization was May 30, 2004 and rebaselined to October 29, 2004 to accommodate satellite facility scope expansions. On June 23, 2004, NNSA approved a NESS extension until March 31, 2005. The extension was granted based on the following, to include the fact program operations remained stable with only minor changes in the weapon specifications, tooling, etc. All changes had been processed through the combined Nuclear Explosive Safety/Unreviewed Safety Questions change control process:

1. Improved SS-21 project performance with more integration from BWXT Pantex and the National Laboratories toward resolving multi-site project priority disconnects.
2. The experience gained with other projects and the fact that lessons learned about tooling changes, etc. are being incorporated more effectively.
3. A federal manager leading the SS-21 effort so inter-site resource disconnects could be resolved more efficiently.
4. The inherent safety of the insensitive high explosive which provides an added layer of safety with respect to external insults, such as fire, impact, and lightning.
5. The fact that the B83 includes Enhanced Nuclear Detonation Safety features, and
6. New TSR controls, reviewed and approved by a Joint Nuclear Explosive Safety review conducted on April 23, 2004, had been implemented into the B83 process.

In addition, during this reporting period B83 SS-21 activities were significantly delayed due to Electro-static Discharge (ESD) concerns and resulting cease of operations. As a result of an NNSA Readiness Assessment performed in June 2004, restart authorization was granted to ongoing B83 activities with new ESD controls. Recent additional schedule impacts were encountered due to delayed Safety Basis Review Team completion of the Safety Evaluation Report. Current B83 SS-21 completion is targeted for January 2005.

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

**Deliverable:** Final Assessment Report.

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