

# Department of Energy

National Nuclear Security Administration

Washington, DC 20585

November 3, 2004

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

#### Dear Mr Chairman

Enclosed is the "Quarterly Report for the Implementation Plan Defense Nuclear Facilities Safety Board Recommendation 98-2, Accelerating Safety Management Improvements at the Pantex Plant," for the period July 1 through September 30, 2004, and the National Nuclear Security Administration (NNSA) exemption extension approvals for the W87 and W88 weapon programs

During the fourth quarter of Fiscal Year 2004, NNSA continued to make some progress toward successful execution of all other aspects of the Seamless Safety for the Twenty-First Century (SS-21) process As you are aware, the Los Alamos National Laboratory and the rest of the NNSA complex suspended all classified operations in July 2004 to address issues associated with the handling and control of classified removable electronic media (CREM) The SS-21 activities on all weapons programs were impacted in various ways and some project deliverables were missed. For example, pursuant to the requirements of Title 10, U S Code of Federal Regulations, Part 820, Subpart E, requests for the temporary continuation of the exemptions for the W87 and W88 were extended to finalize laboratory weapon responses and peer review in support of the Hazard Analysis Report submittals In addition, the nuclear explosive safety study extensions were approved until March 31, 2005, for the B83 and W87 programs, and April 30, 2005, for the W88 to compensate for the time lost due to the CREM stand-down Similarly, the Standing Management Team is in the process of revising Issue I of the Integrated Weapon Activity Plan that was approved July 14, 2004, for CREM related impacts

Twenty-four out of twenty-seven commitments in the Defense Nuclear Facilities Safety Board Recommendation 98-2 have been delivered and three remain outstanding. If you have questions, please call me at 202-586-4879 or have your staff contact Mr. Michael Brown at 505-845-6258.

Sincerely,

M Schoenbauer

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

#### 5 Enclosures

Quarterly Report for the Implementation Plan DNFSB Recommendation 98-2 NESS Extension for the W87 Weapon Program NESS Extension for the W88 Weapon Program NESS Extension for the B83-0/1 Weapon Program Approval of Exemption Extension Request for 10CFR830, Subpart B

cc w/enclosures
J McConnell, DNFSB
W Andrews, 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** 

Accelerating Safety Management Improvements at the Pantex Plant

July 1 through September 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 June 30 through September 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 July 1 through September 30, 2004, the National Nuclear Security Administration (NNSA) continued to make progress toward completion of the outstanding recommendation commitments. Startup authorization of the B83 Seamless Safety for the Twenty-First Century (SS-21) is targeted for March 2005. Status of open items is provided below.

#### 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. Current B83 SS-21 completion is targeted for March 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.



# Department of Energy National Nuclear Security Administration

Washington, DC 20585 July 30, 2004

MEMORANDUM FOR Steven Erhart

Acting Manager, Pantex Site Office

FROM:

Everet H. Beckner Per verbal approved by
Deputy Administrator Dr. Beckner 1145, 30 July 04
for Defense Programs

Office Programs

SUBJECT: Approval of Exemption Extension Request for

Title 10, U.S. Code of Federal Regulations (CFR), Part

830, Subpart B

This memorandum is in response to your letters dated July 23, 2004 and July 27, 2004, for the W88 and W87 programs, respectively, requesting approval on behalf of the BWXT Pantex for exemption extensions from the requirements of Title 10, Code of Federal Regulations, Part 830, Nuclear Safety Management, Section 207(a). This section states that "By April 10, 2003, a contractor responsible for a Hazard Category 1, 2 or 3 nuclear facility must submit for DOE approval a safety basis that meets the requirements of this Subpart." On January 31, 2003, the Deputy Administrator for Defense Programs (NA-10) approved a temporary exemption from this requirement for specific weaponunique operations, including the W87 and W88, until submission of the Hazard Analysis Reports (HARs) in support of the Documented Safety Analysis.

Results of a previous review conducted by NA-124 as part of the original exemption were reconsidered pursuant to the requirements of 10CFR820, Subpart E, with respect to the current requests for temporary continuation of the exemptions for the W87 and W88. The findings of their review are summarized as follows:

- o Continuation of the W87 and W88 exemptions is authorized by law under 10 CFR 820, Subpart E.
- Continuation of the exemptions for the W87 and W88, subject to the conditions stated in the original exemption, presents no undue risk to public health and safety, the environment, or facility workers.
- o Continuation of the exemptions for the W87 and W88, subject to the conditions and limitations specified, is consistent with the safe operation of a DOE nuclear facility.

Several of the original special circumstance criteria in 10 CFR 820.62 for granting the exemption still apply under the current situation for the W87 and W88. Specific applications include:

- 0 10 CFR 820.62(d)(1) applies because requiring the contractor to continue activities to submit the HARs on schedule conflicts with the requirements mandated by the Classified Removable Electronic Media (CREM) stand-down at Los Alamos National Laboratory (LANL) and throughout the National Nuclear Security Administration (NNSA) Complex. Furthermore, it is not reasonable to force the contractor to apply extraordinary resources to comply because the situation can be resolved within the time specified in this extension.
- 10 CFR 820.62(d)(5) applies due to the inability to acquire necessary information and complete final documentation resulting from the CREM stand-down at the LANL and the NNSA Complex.
- o 10 CFR 820.62(d)(6) applies because the LANL and NNSA Complex stand-downs were not considered, nor did they exist, when the original exemption was granted.

Based on review of the supporting documentation, the exemption criteria for 10 CFR 820.62, and the findings of the previous technical review conducted by NA-124, BWXT Pantex is granted a continuation of the temporary exemptions subject to the conditions and limitations set forth below for the W87 and W88 only.

The extension is day-for-day until the date LANL and the remaining NNSA Complex become operational, plus an additional 4 weeks after that date for BWXT Pantex to complete and submit the W87 and W88 HARs to the Pantex Site Office for approval. Should the shutdown extend beyond 60 days, the Deputy Administrator for Defense Programs may direct further review of this matter. The 4 weeks are provided to allow for contingencies associated with the uncertainty with regard to implementation of any new CREM operations and controls required to finalize both HARs. However, it is NA-10's expectation that the sites work together to minimize the extensions to the best of their ability.

cc:

D. Brunell, PXSO M. Mallory, BWXT



# Department of Energy National Nuclear Security Administration

Washington, DC 20585

June 23, 2004

MEMORANDUM FOR MANAGER, PANTEX SITE OFFICE

D RONALD BACA, NNSA SERVICE CENTER/NESD

FROM David E. Deck

Assistant Deputy Administrator for Military Application and

Stockpile Operations
Defense Programs

SUBJECT REQUEST FOR NUCLEAR EXPLOSIVE SAFETY STUDY (NESS)

EXTENSION FOR THE W87 WEAPON PROGRAM

The Department of Energy (DOE)/National Nuclear Security Administration (NNSA) approves an extension for the subject NESS until March 31, 2005 NA-12 approved an Albuquerque Operations Office request, dated December 18, 2001, to extend the W87 NESS until July 30, 2004 The extension granted on April 5, 1999, was predicated on "the development and implementation of provisional hazard analysis reports (HAR), activity based control documents (ABCD), and Authorization Agreements (AA)" by May 1, 2000 The W87 program met these requirements prior to the start of the Life Extension Program that has been ongoing at Pantex since 1999

The rationale for this extension includes the following

- 1 The Seamless Safety-21 (SS-21) Project Execution Plan is consistent with the principles of DOE O 413 3, Program and Project Management for the Acquisition of Capital Assets, thus giving it a higher probability of remaining on schedule than past SS-21 projects,
- 2 Improved SS-21 project performance with more integration from BWXT and the National Laboratories toward resolving multi-site project priority disconnects,
- 3 The experience we have with other projects and the fact that lessons learned about tooling changes, etc are being incorporated more effectively,
- 4 A federal manager now leads the SS-21 effort so inter-site resource disconnects can be resolved more efficiently,
- 5 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, and
- 6 The fact that the W87 includes Enhanced Nuclear Detonation Safety (ENDS) features

In addition, operations for the program have remained stable with only minor changes in the weapon specifications, tooling, etc Finally, all changes have been processed through the combined NES/USQ change control process

If you have questions, please contact me or have your staff contact Chuck Westfall at 301-903-4051



# Department of Energy National Nuclear Security Administration

Washington, DC 20585

June 23, 2004

MEMORANDUM FOR MANAGER, PANTEX SITE OFFICE

D RONALD BACA, NNSA SERVICE CENTER/NESD

FROM David E Beck

Assistant Deputy Administrator for Military Application and Stockpile Operations

Defense Programs

SUBJECT REQUEST FOR NUCLEAR EXPLOSIVE SAFETY STUDY (NESS)

EXTENSION FOR THE B83-0/1 WEAPON PROGRAM

The Department of Energy (DOE)/National Nuclear Security Administration (NNSA) approves an extension for the subject NESS until March 31, 2005

The rationale for this extension includes the following

- Improved SS-21 project performance with more integration from BWXT and the National Laboratories toward resolving multi-site project priority disconnects,
- 2 The experience we have with other projects and the fact that lessons learned about tooling changes, etc are being incorporated more effectively,
- 3 A federal manager now leads the SS-21 effort so inter-site resource disconnects can 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 (ENDS) features, and.
- 6 New Technical Safety Requirement (TSR) controls, reviewed and approved by a Joint Nuclear Explosive Safety review conducted on April 23, 2004, have been implemented into the B83 process

In addition, operations for the program have remained stable with only minor changes in the weapon specifications, tooling, etc. Finally, all changes have been processed through the combined NES/USQ change control process

If you have questions, please contact me or have your staff contact Chuck Westfall at 301-903-4051



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

September 24, 2004

MEMORANDUM FOR MANAGER, PANTEX SITE OFFICE

D RONALD BACA, NNSA SERVICE CENTER/NESD

FROM M Schoenbauer

Actung Assistant Deputy Administrator

for Military Application and Stockpile Operations

Defense Programs

SUBJECT Request for Nuclear Explosive Safety Study (NESS) Extension for the

W88 Weapon Program for Bay Operations

The Department of Energy (DOE)/National Nuclear Security Administration (NNSA) approves an extension for the subject NESS until April 30, 2005. The NESS for the W88 program expires on September 28, 2004, before the completion date of the Seamless Safety (SS-21) process implementation as reflected in issue I of the Integrated Weapon Activity Program (IWAP). The current IWAP schedule calls for completing the implementation of SS-21 process for the W88 bay operations by December 2004.

This extension is granted based on the following factors

- Nuclear weapon-related activities have been in a security standdown for a period of about three months because of issues associated with classified removable electronic media (CREM) As a result, the Deputy Administrator for Defense Programs granted an "Approval of Exemption Extension Request for Tile 10, U.S. Code of Federal Regulations (CFR), Part 830, Subpart B" to the Pantex Site Office on July 30, 2004 This approval included a provision that the extension was day-for-day until the date that the NNSA complex become operational, plus an additional 4 weeks after that date for BWXT Pantex to complete and submit the W87 and W88 HARs (Hazard Analysis Reports) to the Pantex Site Office for Approval
- 2 It is logical for NESS expirations to be granted extensions that would appropriately track with HAR-related extensions/exemptions
- 3 Completion of the SS-21 process will bring the authorization basis for the W88 into full Compliance with 10 CFR 830 requirements within the timetable mentioned above.

It is expected that the CREM-related standdown may affect additional NESS expiration dates. It is recommended that the contractor and the site office examine the current status of the affected studies and submit additional NESS extension requests to Headquarters in a timely fashion

If you have questions, please contact Dr Kamiar Jamah of my staff on 301-903-7167

