

Department of Energy

National Nuclear Security Administration Washington, DC 20585 April 30 2002

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 Recommendation 98-2 for the period January 1, 2001, through March 31, 2001.

During this reporting period, the Department made progress toward completion of all commitments. Sixteen out of twenty-six commitments have been delivered and eight remain outstanding. The intent of Commitments 4.3.10 and 4.3.11 has been met by initiating expense-funded replacement of the Pantex fire alarm system, and these are no longer tracked as open items.

This letter also forwards the following deliverables referred to in the quarterly report:

- Commitment 4.3.3 Office of Amarillo Site Operations memorandum of April 1, 2002, approving the "Transportation Safety Analysis Report Module (TSAR) Phase I, and Associated Technical Safety Requirements." This is a partial completion of this commitment.
- Commitment 4.4.3 1) BWXT Pantex letter of December 20, 2001, with attached impact evaluation for Albuquerque Operations Office (AL) Supplemental Directives (SD) 452.1B, Nuclear Explosive and Weapon Surety Program, and 452.2B, Safety of Nuclear Explosive Operations; and 2) BWXT Pantex letter of February 28, 2002, with attached Configuration Management Plan, PLAN-PTS-380780, Revision 0, which implemented AL SD 452.1B and AL SD 452.2B. This completes all actions of commitment 4.4.3.
- Commitment 4.4.4 Nevada Operations Office Order NV O 452.1B, *Nuclear Explosive* and Weapon Surety Program. This is partial completion of this commitment.

We anticipate meeting with you in the coming weeks to discuss the pending change to the implementation plan and would like for those discussions to serve as the quarterly briefing. A copy of the viewgraphs we would present at the customary quarterly briefing is enclosed.

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If you have any questions, please contact me or have your staff contact Jeff Underwood at (301) 903-8303.

Sincerely,

David E. Beck

Assistant Deputy Administrator for Military Application and Stockpile Operations Defense Programs

8 Enclosures

cc w/enclosures: M. Whitaker, S-3.1

Quarterly Report for the Implementation Plan

Defense Nuclear Facilities Safety Board Recommendation 98-2

Accelerating Safety Management Improvements at the Pantex Plant

January 1 through March 31, 2002

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 DNFSB. The following quarterly report is for the period January 1 through March 31, 2001, and tracks progress made towards completing the commitments outlined in the revised 98-2 IP.

2.0 General Progress

From January 1 through March 31, 2002, one commitment was completed. The following actions are transmitted with this report:

- Commitment 4.3.3 " Develop improved site-wide TSR controls for on-site transportation of nuclear explosives" - the Safety Analysis Report approval letter (without attachments) for the classified Phase I Transportation Safety Analysis Report Module. (See Section 3.0 below for remaining actions.)
- Commitment 4.4.3, "Issue Revisions to Supplemental Orders" the impact analysis and implementation plan for AL Supplemental Directives 452.1 and 452.2. This completes all actions for this commitment.
- Commitment 4.4.4, "Revisions to NV Orders" NV O 4452.1B, Nuclear Explosive and Weapon Surety Program, April 15, 2002. (See Section 3.0 below for remaining actions.)

3.0 Task Area Status

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

4.1 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

<u>Commitment 4.3.2</u> – The purpose of this commitment is to validate implementation of the improved site-wide TSR controls for fire protection.

Deliverable: DOE Readiness Assessment (RA) Report for Fire Protection.

<u>Deliverable:</u> DOE Readiness Assessment (RA) Report for Fire Protection.

Implementation is complete for the site-wide controls, and for the bay/cell operations of the W56, W80, B83, and W78. The Contractor Readiness Assessment for the W87 is scheduled, and the Readiness Verification for the W79 is in progress. Implementation is expected to be complete for the Special Use Facilities by July 31, with the final DOE Readiness to be completed in August 2002. The implementation plan calls for this action to be completed on July 30, 2002.

<u>Commitment 4.3.3</u> —The purpose of this commitment is to address the hazards associated with on site transportation of nuclear explosives by developing and establishing the technical and analytical basis for site-wide TSR transportation controls.

<u>Deliverable:</u> DOE-approved BIO Module for On-Site Transportation and associated TSR and DOE-approved Implementation Plan for transportation controls.

The nature of this action has changed significantly since creation of the implementation plan. Whereas the original plan called for an single authorization basis document approved once in its entirety, the magnitude of the analysis required made it more feasible to divide it into three phases, with separate Safety Analysis Report (SAR) modules for each of three Phases – Phase I (weapons in their ultimate user configuration), Phase II (partial assemblies) and Phase III (nuclear material). The Department has approved the authorization basis for Phase I and is reviewing the implementation plan for that phase. (Copies of the approved Phase I SAR module have been provided to the Board's staff.)

The Authorization Basis Upgrade Plan calls for Phases II and III to be submitted for approval on or before March 7, 2003. These phases require extensive weapon response analysis and are the most challenging of all those developed in authorization basis upgrade. Progress toward their intermediate milestones is tracked weekly.

The implementation plan calls for completion of the Transportation Basis for Interim Operations (BIO), the earlier concept, by February 28, 2001.

<u>Commitment 4.3.4</u> - The purpose of this commitment is to validate implementation of the improved site-wide TSR controls for on-site transportation of nuclear explosives.

<u>Deliverable</u> – DOE Readiness Assessment Report.

This activity will be conducted in phases following the approval of the corresponding SAR modules. The implementation plan for Phase I is under review. The Readiness Assessment will be scheduled after approval of the plan by the NNSA, and conducted after implementation of the controls by the contractor.

The implementation plan calls for scheduling readiness verification activities after the associated authorization basis document is approved and implemented.

<u>Commitment 4.3.9</u> – The purpose of this commitment is to modify the fire detection and suppression system in Building 12-44

<u>Deliverable</u> – Completion of physical modifications to Building 12-44.

The original proposal included installation of UV detectors. The proposal was revised and approved November 2001 to install infrared detectors in lieu of the UV detectors. Progress continues at a rate consistent with an on time completion of this action.

The implementation plan calls for completion of the project by December 30, 2002.

4.4 Perform Work

Commitment 4.4.3 and 4.4.4 — The purpose of this commitment is to issue revisions to supplemental directives to align with the changes to DOE Orders 452.1, 452.2, and DOE-STD-3015.

<u>Deliverable:</u> Revisions to the AL Supplemental Directives 452.1 and 452.2 issued and an Impact Analysis and DOE-approved Implementation Plan (as required).

The AL directives have been issued and provided to the Board in an earlier reporting period. The contractor's impact analysis and implementation plan is provided to the Board with this report. All actions under commitment 4.4.3 are complete.

<u>Deliverable:</u> Revisions to the NV Supplemental Directives 452.1 and 452.2 issued and an Impact Analysis and DOE-approved Implementation Plan (as required).

Subsequent to the end of this reporting period the Manager, Nevada Operations Office, signed NV Supplemental Directive 452.1B which is attached to this report. Signature for NV Supplemental Order 452.2 is pending. A time frame for delivery of the impact analysis and implementation plan has not been determined.

The implementation plan calls for completion of these actions by February 28, 2001.

<u>Commitment 4.4.5</u> – The purpose of this commitment is to authorize startup of the W78 SS-21 process.

<u>Deliverable:</u> W78 SS-21 Startup Authorization.

Work is in progress. Completion is anticipated in December 2003 in accordance with the Integrated Weapon Activity Plan (IWAP) issue H as was briefed to the Board in July 2001.

The implementation plan calls for completion of this action by December 30, 2002. A change to the implementation plan revising the date to December 2003 is under review at NNSA Headquarters.

<u>Commitment 4.4.6</u> – The purpose of this commitment is to authorize startup of B83 SS-21 process

<u>Deliverable</u>: B83 SS-21 Startup Authorization.

This work is scheduled to commence in June 2002 and complete in June 2004 in accordance with IWAP issue H as was briefed to the Board in July 2001.

The implementation plan calls for completion of this action by June 30, 2003. A change to the implementation plan revising the dates to agree with IWAP issue H is under review at NNSA Headquarters.