

**Department of Energy**  
Washington, DC 20585

February 12, 1998

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

Dear Mr. Chairman:

I am responding to your letter to the Secretary of Energy dated December 5, 1997, requesting a report that addresses the status and schedule for completing the remaining objectives of the Recommendation 93-1, "STANDARDS UTILIZATION IN DEFENSE NUCLEAR FACILITIES," and the Nuclear Explosive Safety Study Corrective Action Plan (NESSCAP). The Recommendation 93-1/ NESSCAP implementation program resulted in developing a revised family of the nuclear explosive and weapon surety (NEWS) directives (Department of Energy (DOE) 452 Series-Orders, standard, guide, and rule). Preliminary versions of these documents were released for coordination and implementation in April 1996 following our presentation to the Defense Nuclear Facilities Safety Board on February 28, 1996. Following extensive coordination within the Department, the operations offices, and the national laboratories, the directives were reissued on January 17, 1997.

The final publication of the NEWS directives was delayed to resolve legal requirements to formalize the Personnel Assurance Program (PAP) by an interim rule. This rule was published in the Federal Register in October 1997. The final PAP rule (10 CFR 711) is in final coordination at this time. We anticipate publication in the Federal Register by April 30, 1998.

Specifically, your letter requested us to address: (1) the actions taken by the Managers of the Albuquerque (AL) and Nevada Operations Offices (NV) to implement the revised NEWS directives; (2) the actions and resources required by the Deputy Assistant Secretary for Military Application and Stockpile Management (DASMAM) to execute his responsibilities under the NEWS directives; and (3) the status of the technical standard (preparation guide) for the Hazard Analysis Report (HAR), "U.S. DEPARTMENT OF ENERGY HAZARD ANALYSIS REPORTS FOR NUCLEAR EXPLOSIVE OPERATIONS." The actions associated with these tasks are still in progress. This response primarily addresses the current status on the issues.

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Enclosed is the response from NV which includes their original NV Implementation Plan published in November 1996. It is currently undergoing a revision to address the DOE 452 directives published on January 17, 1997 (Enclosure 1). As the NV Implementation Plan explains, many of the requirements in the NEWS directives require an active nuclear test program for full implementation. At this time, those elements necessary to assure adequate preparation for nuclear explosive operations are in process. Upon DASMASM approval, we will forward the revised NV Implementation Plan to your office.


The AL Supplemental Directives (SDs), which implement the NEWS directives, are being revised and will be reviewed by my office for compliance prior to the formal Defense Nuclear Facilities Safety Board review and comment. After receiving your written comments, I will request implementation of the AL SDs. I estimate at least 120 days from the date of this letter to complete this action.

Regarding the resources (funds and personnel) required by the DASMASM to execute his responsibilities as required in the NEWS directives, I am working various elements within my staff and associated operations offices to create a path forward that addresses your request. Our response will be ready in 90 days and will be forwarded to you.

Your final concern is related to the status of the HAR Standard and the schedule for publication and implementation. The HAR Standard (DOE-DP-STD-XXXX-96), dated December 6, 1996, was published for trial use and comment. It provides explanations of the specific requirements in the DOE Order 452.2A, "SAFETY OF NUCLEAR EXPLOSIVE OPERATIONS," related to hazard analysis of specific nuclear explosive operations. Our current plan is to publish the HAR Standard and associated HAR Handbook within 6 months. Additional information concerning this action is contained in Enclosure 2.

DOE sincerely appreciates your continued support on these very important issues. Numerous improvements have resulted in our nuclear explosive surety program since the start of the Recommendation 93-1 program. Your continued assistance will undoubtedly result in additional improvements. If you have questions, please contact Mr. Gene Ives 202-586-4879 or Mrs. Lisa E. Gordon-Hagerty 301-903-3558.

Sincerely,

  
Victor H. Reis  
Assistant Secretary  
for Defense Programs

2 Enclosures

**Enclosure 1 - Nevada Operations Office (NV) Implementation of the Nuclear Explosive and Weapon Surety (NEWS) Directives**

This provides information concerning the NV actions to implement the revised nuclear surety directives.

As the NV Implementation Plan explains, the NEWS directives implementation efforts are an active ongoing program. Full implementation of many NEWS directives requirements at NV require an active nuclear test program. At this time, most elements necessary to assure adequate safety for nuclear explosive operations are in progress or preparation. These elements include maintaining the ability to conduct the Nuclear Explosive Safety Study Program.

The NV developed their implementation plan soon after the initial directives were released for coordination and implementation in April 1996. Their implementation plan only required some minor adjustments to reflect the final text contained in the January 1997 directives. A copy of the NV overview for implementation of the NEWS directives follows (Enclosure 1A).

**Enclosure 2 - Hazard Analysis Report (HAR), "U.S. DEPARTMENT OF ENERGY HAZARD ANALYSIS REPORTS FOR NUCLEAR EXPLOSIVE OPERATIONS" STANDARD discussion:**

The HAR Standard (DOE-DP-STD-XXXX-96), dated December 6, 1996, compiles the requirements for the hazard analysis of nuclear explosive operations from all applicable Department of Energy (DOE) orders. It tells the users "what" needs to be done to comply with the applicable orders. Comments on the HAR Standard were received by the end of February 1997.

At that time it became clear that the development of the Integrated Safety Process (ISP), then in its early stages of development, may require some changes to the DOE 452 Series-Orders. For this reason, the draft HAR Standard has not been revised at this time.

The ISP process documentation for the Pantex Plant was recently completed by the Albuquerque Operations and was received by Headquarters. At this time, we are comparing the ISP requirements with the DOE 452 Series-Orders directives to identify any necessary revisions that might be required prior to a full ISP implementation. After the changes are known, the HAR Standard will be revised. It is anticipated that the revised HAR Standard can be published for use and comment within 2 months after the DOE directives are approved by Headquarters.

The HAR Standard will be accompanied by a HAR Handbook that will provide guidance to the users on how the requirements can be met. For instance, it will contain guidance on accepted hazard analysis methodologies, will formulate the content of the Activity Based Control Document (ABCD), and the content and format of future HARs. The HAR Handbook is developed by all affected DOE organizations/offices and contractors under the direction and administration of the Office of Weapons Surety (DP-21). It is a document that is intended to provide guidance to future managers and analysts on hazard analyses for the nuclear explosive operations and is written by practitioners who are experienced in hazard analyses and the management of nuclear explosive operations.

At the present time, some safety analysis methodologies, (e.g., seismic and lightning analyses), the ABCD and its interfaces with supporting analyses (i.e., what information needs to be provided and in what format) are under development. Since the HAR Handbook is intended to record proven methodologies and provide guidance on the content and format of documents for future users, DP-21 intends to publish the HAR Handbook as soon as possible after the HAR Standard is published but not before the guidance to future users by today's practitioners is included. DP-21 anticipates that the HAR Handbook will be published no later than 6 months after publishing the HAR Standard. The HAR Handbook will be updated as necessary, e.g., when significant new or revised methodologies have been developed and proven in application. It will be reviewed by DP-21 at least once a year to ensure it reflects the state-of-the-art of hazard analyses of nuclear explosive operations.