



The Secretary of Energy

Washington, DC 20585

June 4, 2003

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DNF SAFETY BOARD

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

Dear Mr. Chairman:

We are pleased to forward the enclosed Implementation Plan (Plan) for Defense Nuclear Facilities Safety Board's (Board) Recommendation 2002-2, *Department of Energy Plan to Address and Resolve Weapons Laboratory Support of the Defense Nuclear Complex*.

This Plan addresses the Department's need to re-emphasize the policy that the nuclear weapons program is the top priority among all activities at the weapons laboratories -- Los Alamos National Laboratory, Lawrence Livermore National Laboratory, and Sandia National Laboratories (Laboratories); identify senior weapons point of contact at each laboratory and their responsibilities; and identify a Federal function at each site office managing a weapons laboratory contract to ensure that requirements related to safety of operations of the defense nuclear weapons complex are being tracked and met. Specifically, the Department is taking the following actions to address its needs:

- The Secretary will re-emphasize that the nuclear weapons program work is his highest priority and that it takes precedence over work done for others by the Laboratories except as specified by the Homeland Security Act, which states that pursuant to arrangements entered into by the Secretary of Energy and the Secretary of Homeland Security: "Notwithstanding any other law governing the administration, mission, use or operations of any of the Department of Energy national laboratories and sites, such laboratories and sites are authorized to accept and perform work for the Secretary [of Homeland Security] consistent with the resources provided, and perform such work on an equal basis to other missions at the laboratory and not on a non-interference basis with other missions of such laboratory or site." Pub. L. 107-296, § 309(a)(2). Accordingly, the Department will update its current policy to communicate the Secretary's priority for the nuclear weapons program.

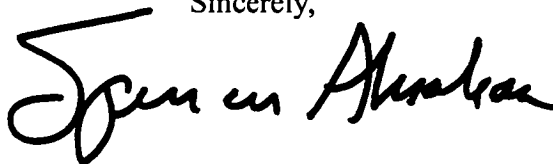


- The Laboratories will review and revise the process for ensuring a single point of contact is clearly identified for each weapon system. This information will be disseminated to the appropriate personnel in the weapons complex. Additionally, NNSA will request that the Laboratories review their existing processes for weapons point of contact selection, training and mentoring, and succession planning for continuous improvement. The Laboratories will certify to NNSA these processes are in place and will describe any plans for process improvement.
- NNSA will ensure that the Laboratories provide a deliverable to NNSA describing: basic qualifications and detailed roles, responsibilities and authorities of the weapons points of contact; the organization/systems in place for providing point of contact resources; how empowerment, resolution of emergent safety issues, and prioritization are accomplished; and the process of communicating point of contact roles and responsibilities within the Laboratories. NNSA will also ask the Laboratories to identify and implement any process improvements deemed necessary.
- NNSA will ensure the contracting officer at the DOE site office will appoint a designee for overseeing work of the laboratory at the defense nuclear weapons sites. This person will ensure laboratory support requirements related to safety of operations of the defense nuclear weapons complex are tracked and met within the current resources on the contract. Additionally, the Standing Management Team charter will be revised reflecting the new business approach to the lab contract management.

I have assigned Mr. Martin Schoenbauer, Office of Nuclear Weapons Stockpile, as my Responsible Manager for executing this Plan. Mr. Schoenbauer can be reached at (301) 903-3489.

We appreciate the advice and support provided by the Board and its staff during the development of this Plan.

Sincerely,

A handwritten signature in black ink that reads "Spencer Abraham". The signature is written in a cursive, flowing style.

Spencer Abraham

Enclosure

**U. S. Department of Energy
Plan to Address and Resolve Weapons Laboratory Support
of the Defense Nuclear Complex**

**Implementation Plan
for
Defense Nuclear Facilities Safety Board
Recommendation 2002-2**



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Executive Summary

On October 3, 2002 the Defense Nuclear Facilities Safety Board issued Recommendation 2002-2, concerning the Department's ability to provide appropriate technical support to its defense nuclear facilities. Specifically, the Recommendation identifies the concern that the number of nuclear weapons experts is declining and that action is required to re-emphasize the primary role of the nuclear weapons laboratories -- Los Alamos National Laboratory, Lawrence Livermore National Laboratory, and Sandia National Laboratories (Laboratories)—including formal training and development of new experts. On January 8, 2003, the Department accepted Board Recommendation 2002-2.

In its August 1, 2002, letter, the Board highlighted delays in implementing safety initiatives at the Pantex Plant and emphasized the need to designate a single person who would serve as the senior point of contact for each weapon system at each Laboratory. These continuing concerns led to the issuance of Recommendation 2002-2.

The Department will take the following actions to address this need:

- The Secretary will re-emphasize that the nuclear weapons program is his highest priority and that it takes precedence over work done for others by the Laboratories except as specified by the Homeland Security Act, which states that, pursuant to arrangements entered into by the Secretary of Energy and the Secretary of Homeland Security: "Notwithstanding any other law governing the administration, mission, use or operations of any of the Department of Energy national laboratories and sites, such laboratories and sites are authorized to accept and perform work for the Secretary [of Homeland Security] consistent with the resources provided, and perform such work on an equal basis to other missions at the laboratory and not on a non-interference basis with other missions of such laboratory or site." Pub. L. 107-296, § 309(a)(2). Accordingly, the Department will update its current policy to communicate the Secretary's priority for the nuclear weapons program.
- The Laboratories will review and revise the process for ensuring that a single point of contact is clearly identified for each weapon system. This information will be disseminated to the appropriate personnel in the weapons complex. Additionally, NNSA will request that the Laboratories review their existing processes for weapons point of contact selection, training and mentoring, and succession planning, for continuous improvement. The Laboratories will certify to NNSA that these processes are in place and will describe any plans for process improvement.
- NNSA will ensure that the Laboratories provide a deliverable to NNSA describing: basic qualifications and detailed roles, responsibilities, and authorities of the weapons points of contact; the organization/systems in place for providing point of contact resources; how empowerment, resolution of emergent safety issues, and prioritization are accomplished; and the process of communicating point of contact roles and responsibilities within the

Laboratories. NNSA will also ask the Laboratories to identify and implement any process improvements deemed necessary.

- NNSA will ensure that the contracting officer at the NNSA site office for each Laboratory appoints a designee to oversee the work of the Laboratory at the defense nuclear weapons sites. This person will ensure that Laboratory support requirements related to safety of operations of the defense nuclear weapons complex are tracked and met under the contract. Additionally, the Standing Management Team charter will be revised to reflect the new business approach to Laboratory contract management.

The Responsible Manager for execution of the Plan is Martin Schoenbauer of NA-122. The Responsible Manager will ensure that associated actions, deliverables, and commitments are accomplished, consistent with guidance provided in *Interface with the Defense Nuclear Facilities Safety Board* (DOE M 140.1-1B). The various lead responsible organizations identified in the Plan are accountable to the Responsible Manager with regard to the completion of deliverables. The Site Office Managers will be the points of contact for the site-specific actions for this recommendation.

Table 1 summarizes the commitments in this plan.

1. Background

On October 3, 2002 the Defense Nuclear Facilities Safety Board issued Recommendation 2002-2, concerning the Department's ability to provide appropriate technical support to its defense nuclear facilities. Specifically, the Recommendation identifies the concern that the number of nuclear weapons experts is declining and that action is required to re-emphasize the primary role of the nuclear weapons laboratories, including formal training and development of new experts. On January 8, 2003 the Department of Energy (DOE) accepted Board Recommendation 2002-2.

After visiting each of the nuclear weapons laboratories – Los Alamos National Laboratory, Lawrence Livermore National Laboratory, and Sandia National Laboratories (Laboratories) in 2001-2002 to discuss laboratory support for the safety of nuclear explosive operations at the Pantex Plant, the Board became increasingly concerned that an additional problem regarding technical expertise must be addressed. In Recommendation 2002-2, it stated that the Laboratories have not taken adequate steps to ensure that experienced staff members who can employ their specialized knowledge are readily available to the defense nuclear complex, especially to operations at the Pantex Plant. It is the Board's belief that while some new talent is being developed, it will be years before these individuals can be shepherded adequately through the nuclear weapons complex, inculcated with the unique knowledge gained through years of dedicated weapons laboratory work, and mentored in those skills required to maintain the stockpile safely. The Board also stated that highly experienced specialists responsible for individual weapon programs were leaving the complex, and that delays in addressing safety issues continue to occur.

In its August 1, 2002 letter, the Board identified delays in implementing safety initiatives at the Pantex Plant and emphasized the need to designate a single person who would serve as the senior point of contact for each weapon system at each weapons laboratory. The example highlighted in the Board's August 2002 letter also indicated the need for better coordination between points of contact.

The Board also voiced concerns that DOE should establish a position at each DOE office with responsibility for a nuclear weapons Laboratory to ensure that the requirements of the defense nuclear complex for support by that Laboratory are being tracked and met. Competent, experienced personnel who have the authority to resolve competing resource requirements should fill those positions.

2. Underlying Causes

DOE shares the Board's view that the nuclear weapons program is the Department's primary mission for its nuclear weapons laboratories, and that DOE should re-emphasize the importance of that work. The existing directive regarding the nuclear weapons program is out-dated and

needs to be replaced. The Department also believes that there are opportunities to improve communications between the Laboratories and the plants in the nuclear weapons complex to make the process as robust as possible. Although multiple communications occur daily between these groups, communication breakdowns do occur sometimes. The Department has reviewed these instances and identified corrective actions. The Department will ensure that the Laboratories have internal processes in place for identifying weapons points of contact and require the Laboratory Associate Directors (AD)/Vice Presidents (VP) to certify that these processes are in place and functioning. The Department has also identified the need to establish points of contact for issues that span multiple weapons programs. These multiple weapons program points of contact, along with the weapons points of contact, will be disseminated to the appropriate parties. The Department is committed to having qualified, competent individuals assigned and retained as weapons points of contact at the Laboratories. The Laboratories will review and revise as necessary their internal processes for selection, training and mentoring.

The National Nuclear Security Administration (NNSA) initiated a re-engineering process in December of 2002, which will streamline the way business is conducted while clarifying roles and responsibilities at the sites in the defense nuclear complex. Consistent with the re-engineering process, the Department is committed to assigning Contracting Officers Representatives (COR) to those sites with weapons Laboratories oversight responsibility. These CORs will ensure that Laboratory support requirements related to the safety of operations of the defense nuclear complex within their contractual purview are tracked and met.

The Department is committed with this plan to establish the following processes and tools to resolve the conditions that ultimately resulted in the issuance of Board Recommendation 2002-2.

3. Baseline Assumptions

In the development of this Plan, the following assumptions were made:

- The nuclear weapons program is the Department's highest priority for the Laboratories.
- The Implementation Plan (IP) must be executed in a manner consistent with the recently enacted Homeland Security Act, which authorizes DOE's national laboratories, pursuant to arrangements entered into by the Secretary of Energy and the Secretary of Homeland Security, to perform work for the Secretary of Homeland Security "on an equal basis to other missions at the [laboratories] and not on a non-interference basis with other missions."
- IP execution is based on target level funding approved by Congress in an atmosphere of stable mission requirements.

- Clear, concise communication between the defense nuclear complex and the Laboratories' weapons points of contacts is essential to successful work. The IP will build on existing laboratory and plant interface processes.
- Consistent with the principles of integrated safety management, continuous improvement will be the goal throughout IP implementation.
- Personnel management is an internal process of the Laboratories and should not be prescribed by the Department. A one-size-fits-all approach is not appropriate for the Laboratories.

4. Issue Resolution

Each commitment within this IP is supported by: an Issue Description describing the background, the Board's Recommendation, the Resolution Approach to address the Board's Recommendation, and the Deliverables/Milestones to address the commitment. Deliverables will be provided no later than the dates shown. Every effort will be made to accelerate the dates shown. Specific actions the Department intends to take to address the Board's recommendations are discussed below.

4.1 Board Recommendation Sub-part #1

Issue Description

The Secretary periodically needs to reiterate the commitment that the nuclear weapons program is the Department's highest priority for the Laboratories. The Laboratories conduct a wide variety of work for the DOE and other agencies, and the possibility exists that personnel could be diverted from important weapons work. It is imperative that the Laboratories' work reflects the Secretary's policy that the nuclear weapons program is assigned top priority among all DOE-funded activities at the Laboratories. In addition, the recently enacted Homeland Security Act authorizes DOE's national laboratories, pursuant to arrangements entered into by the Secretary of Energy and the Secretary of Homeland Security, to perform work for the Secretary of Homeland Security "on an equal basis to other missions at the [laboratories] and not on a non-interference basis with other missions."

Since the issuance of DOE Order 5600.1, *Management of the Department of Energy Weapon Program and Weapon Complex*, in June 1979, the organization of the Department has changed significantly, particularly with the creation of NNSA within DOE two years ago and its recent reorganization. DOE Order 5600.1 is currently obsolete and most of the organizational units therein no longer exist. Accordingly, the Department will update its current policy to communicate the Secretary's priority for the nuclear weapons program and reflect current functions and responsibilities.

Board Recommendation Sub-part #1

That the Secretary of Energy update and reemphasize DOE policies and Orders (e.g., DOE Order 5600.1, Management of the DOE Weapon Program and Weapon Complex) as needed to ensure that the nuclear weapons program is assigned the top priority among all activities at the Laboratories.

Resolution Approach

The Department is committed to the nuclear weapons program. The DOE Fiscal Year (FY) 2004 Congressional Budget Request and the DOE Annual Performance Plan for FY 2004 are focused to meet the Department's highest priority of maintaining the nuclear stockpile as safe, secure, and reliable. The weapons program priority is reflected in the Planning, Programming, Budgeting, and Evaluation (PPBE) process, which is undergoing initial implementation in the FY 2004 budget process. Any work for others that would compete with these high priority activities must be approved by federal managers and Laboratory management on a non-interference basis of the already agreed-to Laboratory scope of work, with the exception of work for the Department of Homeland Security, which is to be undertaken pursuant to arrangements entered into by the Secretary of Energy and the Secretary of Homeland Security and performed on an equal basis to other missions at the Laboratories and not on a non-interference basis with other missions. Additionally, to further demonstrate the Department's commitment to weapons work, NA-1 meets periodically with the Laboratory Directors and Presidents, and NA-10 has a weekly conference call with the Laboratory AD/VPs to discuss nuclear weapons program issues.

To address the Board's concerns, the Secretary will issue a memorandum to the Department re-emphasizing his priority for Laboratory support for the nuclear weapons program. The Department will also update its current policy to communicate the Secretary's priority for the nuclear weapons program and reiterate that within the weapons complex, other DOE programs are not adversely to impact the nuclear weapons program.

Deliverables/Milestones

Commitment 4.1.1: Issue a Secretarial memorandum to the Department to re-emphasize the nuclear weapons program is DOE's top priority for the Laboratories in supporting the nuclear weapons complex.

Lead Responsibility: NA-1

Deliverable: Secretarial memorandum

Due Date: June 2003

NA-1 action assignee: M. Shoenbauer, NA-122

Commitment 4.1.2: Replace obsolete DOE Order 5600.1 with a policy consistent with the Secretary's emphasis on laboratory support of the nuclear weapons program and reflecting current functions and responsibilities.

Lead Responsibility: NA-1

Deliverable: Revised policy with specific emphasis on Laboratory support for the nuclear weapons complex.

Due date: December 2003

NA-1 action assignee: T. D'Agostino, NA-13

4.2 Board Recommendation Sub-part #2

Issue Description

Significant communication occurs every day between personnel at the Laboratories and the defense nuclear complex. Although points of contact exist at each Laboratory and the weapon sites for weapons issues, on occasion there is a communication breakdown, thus necessitating strengthening of the process. An engineering procedure exists and is currently utilized by the Laboratories points of contact and Pantex. The point of contact listing should be clarified to facilitate its use by the end users in the defense nuclear complex. The procedure will be revised to reflect a single point of contact to be identified for each weapon system at each Laboratory, as well as points of contact for issues that span multiple weapons programs. Additionally, it is imperative that the Laboratories persevere in their training, mentoring and succession planning regarding the potential weapons points of contact to ensure that an adequate pool of personnel exists when retirements and attrition occur. Thus, the Laboratories have the opportunity to review and improve, if necessary, their processes for determining selection criteria, training and mentoring, and succession planning for weapons points of contact.

Board Recommendation Subpart #2

That a process be developed to ensure the assignment of a senior individual as the point of contact for each weapon system under the purview of each weapons laboratory. This process should include:

- (a) Adequate selection criteria;
- (b) Appropriate training and mentoring programs (as necessary) to ensure that each individual selected is fully knowledgeable about the weapon system assigned to him or her, as well as internal weapons laboratory programs and procedures;

(c) Formal planning for succession of individuals when they retire or are replaced;
and

(d) Periodic dissemination of updated listings of points of contact to the defense nuclear complex.

Resolution Approach

The Laboratories will review and revise Engineering Procedure 401104 to ensure that a single point of contact is clearly identified for each weapon system at each Laboratory. Additionally, a single point of contact will be identified for those issues that span multiple weapons programs. Generic roles and responsibilities of the weapons points of contact will be listed in the engineering procedure. Each point of contact will arbitrate and resolve issues pertaining to his weapon system. Corresponding points of contact will be identified to the end users in the defense nuclear complex. A periodic, updated listing of the points of contact will be disseminated to the end users in the defense nuclear complex. The Standing Management Team, comprised of NNSA, contractor, and Laboratory personnel, meets regularly to discuss weapons related issues. This periodic meeting enables any point of contact or crosscutting issues to be surfaced and resolved promptly by NNSA and Laboratory management.

To address the weapons point of contact selection criteria, training and mentoring, and succession planning, NNSA will direct the Laboratories by letter to ensure that the selection criteria, training and mentoring, and succession planning processes are in place, and will request them to review their processes for improvement. NNSA will clarify its expectations regarding these processes in this letter. The Laboratories will respond with a letter certifying that these processes are in place and will describe any plans for process improvement. NA-10 will evaluate the Laboratory responses against the specified expectations regarding these processes to ensure that the end result of the Laboratory processes is that senior, technically competent individuals are assigned as the single point of contact for each weapon system. NA-10 will confer with the Laboratory AD/VPs on the above processes and a subsequent, joint NA-10/Laboratory AD/VP briefing to the Board will then be conducted.

Deliverables/Milestones

Commitment 4.2.1: Issue a letter from NNSA to the Laboratories directing them to review and revise (if necessary) existing processes for the selection, training and mentoring, and succession planning for weapons points of contact.

Lead Responsibility: NA-1

Deliverable: Letter to Laboratories requesting review and revision (as necessary) of existing processes for the selection, training and mentoring, and succession planning for weapons points of contact.

Due Date: July 2003

NA-1 action assignee: M. Schoenbauer, NA-122

Commitment 4.2.2: Review and revise Engineering Procedure EP401104 to ensure:

- A single point of contact is named for each weapon system.
- A single point of contact for those issues that span multiple weapon systems.
- Weapons point of contact roles and responsibilities are updated (generic).

Lead Responsibility: M. Schoenbauer, NA-122

Deliverable: Revised procedure EP401104

Due Date: August 2003

Commitment 4.2.3: Issue an Information Engineering Release listing each point of contact at each Laboratory to the end users in the defense nuclear complex.

Lead Responsibility: LASO, SSO, and LSO Managers

Deliverable: Revised Weapon Point of Contact List

Due Date: September 2003

Commitment 4.2.4: Obtain response letters from the Laboratories to NNSA certifying that processes exist for the selection, training and mentoring, and succession planning for weapons points of contact and describe plans for improvement, if necessary.

Lead Responsibility: LASO, SSO, and LSO Managers

Deliverable: Laboratory response to NNSA

Due Date: October 2003

Commitment 4.2.5: Deliver a combined NA-10/Laboratory AD/VP Briefing to the Board.

Lead Responsibility: NA-10

Deliverable: Board Briefing

Due Date: January 2004

4.3 Board Recommendation Sub-part #3

Issue Description

Because resource requirements or competing technical issues may periodically arise, the weapons points of contact must have the ability to resolve issues to preclude schedule slippages on nuclear weapons program work. The Laboratories have the opportunity to review and improve, if necessary, their processes describing the roles, responsibilities and authorities of the weapons points of contact. The points of contact will be empowered to direct appropriate resources to ensure safe operations or have direct access to management authority to acquire the necessary support.

Board Recommendation Sub-part #3

That the internal organizational structure, programs, and procedures of the Laboratories be aligned to ensure that these senior, technically competent individuals are empowered (i.e., given the authority and the funding) to direct appropriate resources of their Laboratories to provide the support needed to ensure the safety of operations in the nuclear complex related to the weapons under their purview.

Resolution Approach

The Laboratories are in the process of reviewing the communication flow and reporting lines of authority for the weapons points of contact. NNSA will issue a letter to the Laboratories directing them to provide a response describing basic qualifications and detailed roles, responsibilities and authorities of the weapons points of contact; describing the organization/systems in place for providing point of contact resources, empowerment, resolution of emergent safety issues, and how prioritization is accomplished; and describing the process of communicating point of contact roles and responsibilities within the Laboratories. NNSA will clarify any additional expectations to ensure that the end result is clear and concise communication processes for the weapons points of contact. NNSA will also ask the Laboratories to identify and implement any process improvements deemed necessary. The Laboratories will issue a deliverable on how the aforementioned is accomplished. NA-10 will evaluate the Laboratory response against the specified expectations regarding these processes. NA-10 will confer with the Laboratory AD/VPs on the above processes and a subsequent, joint NA-10/Laboratory AD/VP briefing to the Board will then be conducted.

Deliverables/Milestones

Commitment 4.3.1: Issue an NNSA letter to the Laboratories directing them to:

- Provide a document describing weapons points of contact roles and responsibilities;
- Describe the organization/system for providing point of contact resources;
- Describe the process to communicate point of contact roles and responsibilities within the Laboratory (external to Laboratories through EP401104).

Lead Responsibility: NA-1

Deliverable: NNSA memo to Laboratories requesting a description of weapons point of contact roles, responsibilities and authorities.

Due Date: July 2003

NA-1 action assignee: M. Schoenbauer, NA-122

Commitment 4.3.2: Obtain responses from the Laboratories to NNSA transmitting a description of weapons point of contact roles, responsibilities and authorities and if necessary, plans for improvement.

Lead Responsibility: LASO, SSO, LSO Managers

Deliverable: Laboratory response to NNSA

Due Date: December 2003

Commitment 4.3.3: Deliver a combined NA-10/Laboratory AD/VP Briefing to the Board.

Lead Responsibility: NA-10

Deliverable: Board Briefing

Due Date: January 2004

4.4 Board Recommendation Sub-part #4

Issue Description

As part of the NNSA re-engineering, the site offices will operate differently from a contractual standpoint. Contracting officer and contracting officer representative (COR) roles and responsibilities are being redefined. The Standing Management Team shall be aligned to ensure NNSA objectives are being met.

Board Recommendation Sub-part #4

That DOE establish a position at each DOE site office with responsibility for a nuclear weapons laboratory to ensure that requirements of the defense nuclear complex for support by that laboratory are tracked and met. These positions should be filled by personnel with the appropriate competence and experience who have the authority to resolve competing requirements for resources.

Resolution Approach

As part of the NNSA re-engineering effort, contracting officers will be located at each NNSA site office, as well as a nominal number in NNSA-Headquarters. The contracting officer at the site office (site manager), will issue a COR letter to each individual who will be a designee to oversee work of the Laboratory. These letters will outline the roles and responsibilities of the CORs and describe how they will conduct business with the Laboratory per the contract. These CORs will ensure that Laboratory support requirements related to safety of operations of the defense nuclear weapons complex are tracked and met within the current resources under the contract. This will be accomplished through contract milestones and deliverables. For continuity, the points of contact identified for issues that span multiple weapons programs are the same representatives participating on the Standing Management Team. The NNSA Headquarters representative on the Standing Management Team will provide the linkage, as he will have the authority of a COR. Finally, the Standing Management Team charter will need to be revised to reflect the new business approach to Laboratory contract management with a subsequent briefing to the Board.

Deliverables/Milestones

Commitment 4.4.1: Issue NNSA COR letters to the NNSA sites with a Laboratory.

Lead Responsibility: LASO, SSO, and LSO Managers

Deliverable: COR letter

Due Date: June 2003

Commitment 4.4.2: Revise Standing Management Team Charter to reflect new contractual requirements.

Lead Responsibility: M. Shoenbauer, NA-122

Deliverable: New Charter for Standing Management Team

Due Date: June 2003

Commitment 4.4.3: Deliver an NA-10 briefing to the Board on NNSA roles, responsibilities and processes for ensuring safe nuclear explosive operations.

Lead Responsibility: NA-10

Deliverable: Board Briefing on NNSA Roles and Responsibilities

Due Date: July 2003

5. Organization and Management

The Responsible Manager for execution of the Plan is Martin Schoenbauer, NA-122. The Responsible Manager will ensure that associated actions, deliverables, and commitments are accomplished, consistent with guidance provided in *Interface with the Defense Nuclear Facilities Safety Board* (DOE M 140.1-1B). The various lead responsible organizations identified in the Plan are accountable to the Responsible Manager with regard to the completion of deliverables. The Site Office Managers will be the points of contact for the site-specific actions for this recommendation.

5.1 Change Control

Complex, long-range plans require sufficient flexibility to accommodate changes in commitments, actions, or completion dates that may be necessary due to additional information, improvements, or changes in baseline assumptions. The Department's policy (as stated in DOE M 140.1-1) is to (1) provide prior, written notification to the Board on the status of any implementation plan commitment that will not be completed by the planned milestone date, (2) have the Secretary approve all revisions to the scope and schedule of plan commitments, and (3) clearly identify and describe the revisions and bases for the revisions. Fundamental changes to the plan's strategy, scope, or schedule will be provided to the Board through formal re-issuance of the implementation plan. Other changes to the scope or schedule of planned commitments will be formally submitted in appropriate correspondence approved by the Secretary, along with the basis for the changes and appropriate corrective actions.

5.2 Reporting

To ensure that the various Department implementing elements and the Board remain informed of the status of plan implementation, the Department's policy is to provide periodic progress reports until implementation plan commitments are completed. During the Plan implementation, the Department will provide a quarterly briefing to the Board staff. Briefings will also be provided as requested by the Board, and will be requested by the Department at the discretion of the Responsible Manager.

Table 1. Summary of Implementation Plan Commitments and Deliverables/Milestones

Commitment	Deliverable/Milestone	Due Date	Responsibility
4.1.1 Issue a Secretarial memorandum to the Department to re-emphasize that the nuclear weapons program is DOE's top priority for the Laboratories in supporting the nuclear weapons complex.	Secretarial memorandum	6/03	NA-1
4.1.2 Replace obsolete DOE Order 5600.1 with a policy consistent with the Secretary's emphasis on Laboratory support of the nuclear weapons program and reflecting current functions and responsibilities.	Revised policy with specific emphasis on Laboratory support for the nuclear weapons program.	12/03	NA-1
4.2.1 Issue a letter from NNSA to the Laboratories directing them to review and revise (if necessary) existing processes for the selection, training and mentoring, and succession planning for weapons points of contact.	Letter from NNSA to Laboratories requesting action	7/03	NA-1
4.2.2 Review and revise Engineering Procedure EP401104 to ensure: a single point of contact is named for each weapon system; a single point of contact is identified for those issues that span multiple weapon systems; weapons point of contact roles and responsibilities are updated (generic).	Revised Procedure	8/03	LASO, SSO and LSO Managers
4.2.3 Issue an Information Engineering Release listing each weapon point of contact at each laboratory to the end users in the defense nuclear complex.	Revised Weapons Point of Contact List	9/03	LASO, SSO and LSO Managers

4.2.4 Obtain response letters from the Laboratories to NNSA certifying existing processes exist for the selection, training and mentoring, and succession planning for weapons points of contact and describing plans for improvement, if necessary.	Laboratory certification memo to NNSA	10/03	LASO, SSO and LSO Managers
4.2.5 Deliver a combined NA-10/Laboratory AD/VP Briefing to the Board	Board Briefing	1/04	NA-10
4.3.1 Issue an NNSA letter to the Laboratories directing them to provide a document: describing weapons point of contact roles, responsibilities and authorities; describing the organization/system for providing point of contact resources; and describing the process used to communicate weapons point of contact roles and responsibilities within the lab (external to Laboratories through EP401104).	NNSA letter to the Laboratories requesting a description of weapons point of contact roles and responsibilities and authorities.	7/03	NA-1
4.3.2 Obtain responses from the Laboratories to NNSA transmitting a description of weapons point of contact roles, responsibilities and authorities and if necessary, plans for improvement.	Laboratory response letter to NNSA	12/03	LASO, SSO and LSO Managers
4.3.3 Deliver a combined NA-10/Laboratory AD/VP briefing to the Board	Board briefing	1/04	NA-10
4.4.1 Issue Contracting Officer Representative letters	Contracting Officer Representative letters	6/03	LASO, SSO and LSO Managers
4.4.2 Revise Standing Management Team Charter to reflect new contractual requirements	New Charter for Standing Management Team	6/03	NA-122

4.4.3 Deliver an NA-10 briefing to the Board on NNSA roles, responsibilities and processes for ensuring safe nuclear explosive operations.	Board Briefing	7/03	NA-10
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Appendix A
List of Acronyms

AD	Associate Director
COR	Contracting Officer's Representative
DNFSB	Defense Nuclear Facilities Safety Board
DOE	Department of Energy
EP	Engineering Procedure
IER	Information Engineering Release
LANL	Los Alamos National Laboratory
LLNL	Lawrence Livermore National Laboratory
LASO	Los Alamos Site Office
LSO	Livermore Site Office
NNSA	National Nuclear Security Administration
PPBE	Planning, Programming, Budgeting, and Evaluation
SNL	Sandia National Laboratories
SMT	Standing Management Team
SSO	Sandia Site Office
VP	Vice President

Appendix B

[DNFSB LETTERHEAD]

October 3, 2002

The Honorable Spencer Abraham
Secretary of Energy
1000 Independence Avenue, SW
Washington, DC 20585- 1000

Dear Secretary Abraham:

The Defense Nuclear Facilities Safety Board (Board) has been following the Department of Energy's (DOE) efforts to provide appropriate technical support to its defense nuclear facilities, particularly the Pantex Plant. The complexity and uniqueness of the technical safety issues that arise in the nuclear weapons complex require the concerted effort of a cadre of highly competent individuals with expertise not generally available in industry or academia. Most of the personnel with this training and experience are employed at Los Alamos National Laboratory, Lawrence Livermore National Laboratory, and Sandia National Laboratories.

The Board is concerned that the number of nuclear weapons experts is declining and the focus of remaining experts is being diverted to other areas. Action is required to change this trend and to re-emphasize the primary role and obligation of the weapons Laboratories to support DOE's nuclear weapon-related activities, including the formal training and development of new experts.

As a result, the Board on October 3, 2002, unanimously approved Recommendation 2002-2, *Weapons Laboratory Support of the Defense Nuclear Complex*, which is enclosed for your consideration. After your receipt of this recommendation and as required by 42 U.S.C. § 2286d(a), the Board will promptly make it available to the public. The Board believes that the recommendation contains no information that is classified or otherwise restricted. To the extent this recommendation does not include information restricted by DOE under the Atomic Energy Act of 1954, 42 U.S.C. §§ 2161-68, as amended, please see that it is promptly placed on file in your regional public reading rooms. The Board will also publish this recommendation in the *Federal Register*.

Sincerely,

John T. Conway
Chairman

c: The Honorable Linton Brooks
Mr. Mark B. Whitaker, Jr.
Enclosure

DEFENSE NUCLEAR FACILITIES SAFETY BOARD
RECOMMENDATION 2002-2 TO THE SECRETARY OF ENERGY
Pursuant to 42 U.S.C. § 2286a(a)(5)
Atomic Energy Act of 1954, as Amended

Dated: October 3, 2002

Background

In the past, the Defense Nuclear Facilities Safety Board (Board) has issued recommendations addressing the need for weapons Laboratories to support the safety of nuclear explosive operations at the Pantex Plant, Specifically, Recommendation 93-6, Maintaining Access to Nuclear Weapons Expertise in the Defense Nuclear Facilities Complex, addressed preserving expertise in the defense nuclear facilities complex. Both the Board and the Department of Energy (DOE) have devoted significant resources to implementing this recommendation and to maintaining access to the unique knowledge of individuals who were engaged for many years in critical defense nuclear activities, such as weapons design and testing. The continued support by such individuals is necessary to avoid future safety problems in these and related activities, and to maintain the safety of activities with existing weapons.

The Board is encouraged by the initiatives undertaken thus far to ensure access to the capabilities and experience of such individuals while they are still available. Activities such as those at the Theoretical Institute for Thermonuclear and Nuclear Studies at Los Alamos National Laboratory and the Intern Program at Sandia National Laboratories provide excellent opportunities to introduce new personnel to the weapons programs.

However, after visiting each of the weapons Laboratories (Los Alamos National Laboratory, Lawrence Livermore National Laboratory, and Sandia National Laboratories) to discuss laboratory support for the safety of nuclear explosive operations at the Pantex Plant, the Board has become increasingly concerned that an additional problem regarding technical expertise must be addressed. The weapons Laboratories have not taken adequate steps to ensure that experienced staff members who can employ their specialized knowledge are readily available to the defense nuclear complex, especially to operations at the Pantex Plant. While some new talent is being developed, it will be years before these new individuals can be shepherded adequately through the nuclear weapons complex, inculcated with the unique knowledge gained through years of dedicated weapons laboratory work, and mentored in those skills required to maintain the stockpile safely. In the meantime, highly experienced specialists responsible for individual weapon programs are leaving the complex and delays in addressing safety issues continue to occur.

Some of these delays were highlighted in a letter dated August 1, 2002, from the Board to the Acting Director of the National Nuclear Security Administration, which addressed a specific

safety improvement at the Pantex Plant. In that letter, the Board emphasized the need to designate a single person who would serve as the point of contact for each weapon system at each appropriate weapons laboratory. That individual should be empowered to integrate and coordinate for his or her laboratory all information needed to respond to questions concerning the system under his or her purview and to provide the technical support required by the defense nuclear complex with regard to that system. The significant responsibilities assigned to these individuals will require care in their selection. There should be an internal process in place that provides for training and mentoring to ensure that they fully understand their weapon system and can competently judge how and when to draw on appropriate laboratory resources for the support needed by the complex to ensure safety. DOE is not adequately addressing this issue.

The example highlighted in the Board's August 2002 letter also indicated the need for better coordination between points of contact. In the example, both internal laboratory and inter-site communications were necessary between personnel who had been developing a technical application for several weapon programs and those responsible for one of the weapon programs. Both lines of communication broke down. As part of its actions to establish adequate points of contact, DOE will need to address proper communications amongst groups working on cross-platform projects, and to ensure that the appropriate resources are prioritized to provide critical stockpile support.

In formulating its Recommendation 93-6, the Board recognized some of the difficulties DOE would face in its stockpile stewardship program. That recognition was implicit in the statement: "Although it may be relatively straightforward to maintain these capabilities in the near term, ensuring their availability 5 to 20 years in the future may be very difficult." The Board is concerned that, without attention to the near-term problems associated with supporting the stockpile, the gains achieved in addressing Recommendation 93-6 are in danger of being lost.

Further, since the size and scope of the nuclear weapons stockpile have been reduced, and research and development leading to new weapons has been restricted, it appears that there has been an increase in "work-for-others" programs. The focus of the nuclear weapons Laboratories on the nuclear weapons complex as their number one priority has waned. The Board was encouraged by the Secretary's statement at DOE's October 2001 Quarterly Leadership Meeting that DOE's "overarching mission is national security." However, it appears that this message is still not being effectively implemented within DOE and its weapons Laboratories.

Recommendation

To address the above issues, the Board makes the following recommendations to ensure safety in weapons programs:

1. That the Secretary of Energy update and reemphasize DOE policies and Orders (e.g., DOE Order 5600.1, *Management of the DOE Weapon Program and Weapon Complex*) as

needed to ensure that the nuclear weapons program is assigned the top priority among all activities at the weapons Laboratories.

2. That a process be developed to ensure the assignment of a senior individual, as the point of contact for each weapon system under the pm-view of each weapons laboratory. This process should include:
 - (a) Adequate selection criteria;
 - (b) Appropriate training and mentoring programs (as necessary) to ensure that each individual selected is fully knowledgeable about the weapon system assigned to him or her, as well as internal weapons laboratory programs and procedures;
 - (c) Formal planning for succession of individuals when they retire or are replaced; and
 - (d) Periodic dissemination of updated listings of points of contact to the defense nuclear complex.
3. That the internal organizational structure, programs, and procedures of the weapons Laboratories be aligned to ensure that these senior, technically competent individuals are empowered (i.e., given the authority and the funding) to direct appropriate resources of their Laboratories to provide the support needed to ensure the safety of operations in the nuclear complex related to the weapons under their purview.
4. That DOE establish a position at each DOE site office with responsibility for a nuclear weapons laboratory to ensure that requirements of the defense nuclear complex for support by that laboratory are tracked and met. These positions should be filled by personnel with the appropriate competence and experience who have the authority to resolve competing requirements for resources.

John T. Conway, Chairman

Appendix C

[DOE LETTERHEAD]

January 8, 2003

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

Dear Mr. Chairman:

On October 3, 2002, the Defense Nuclear Facilities Safety Board (Board) issued recommendation 2002-2, *Weapons Laboratory Support of the Defense Nuclear Complex*. The Department agrees that providing the defense nuclear complex with appropriate support is an essential priority. We also recognize that "one-size-fits-all" organizational structures and systems are not appropriate for our weapons Laboratories.

The Department accepts recommendation 2002-2 and will develop an implementation plan to accomplish the following:

- We will re-emphasize the policy that the nuclear weapons program is the top priority among all activities at the weapons Laboratories.
- Each weapons laboratory will review its existing processes for assigning individuals as the senior point of contact for each weapons system and ensure that selection criteria, training and mentoring, and succession planning are in place. Personnel management is an internal process of the weapons Laboratories and should not be prescribed by the Department. However, the Department will ensure that the end result is that senior technically competent individuals are assigned as the point of contact for each weapons system. A list of senior individuals assigned as the point of contact of each weapon system will be provided.
- Each weapons laboratory will review its existing management system and demonstrate that through the appropriate alignment of a combination of internal organizational structure, programs, and procedures that the roles and responsibilities of each weapons point of contact are clearly defined. The point of contact for each weapon will be empowered to direct appropriate resources to ensure the safety of operations in the nuclear weapons complex within his/her assigned weapon system or have direct access to the management authority to acquire the necessary support.
- The Department will establish and staff a Federal function at each site office managing a

weapons laboratory contract to ensure that the laboratory support requirements related to safety of operations of the defense nuclear weapons complex are being tracked and met. For this function, the National Nuclear Security Administration reengineering will clarify the roles and responsibilities and the contractual lines of authority for providing direction and resolving competing requirements for resources.

I have designated Ms. Karen Boardman as the responsible manager for developing the Department's implementation plan for this recommendation. Ms. Boardman may be reached at (505) 845-6039.

Sincerely,

Spencer Abraham