

# Department of Energy

Germantown, MD 20874-1290

April 14, 1995

Mr. John T. Conway Chairman Defense Nuclear Facilities Safety Board 625 Indiana Avenue, N.W., Suite 700 Washington, D.C. 20004

Dear Mr. Conway:

In accordance with the Implementation Plan (IP) for Recommendation 93-1 Action 4 Report/Nuclear Explosive Safety Study Corrective Action Plan (93-1/NESSCAP), the enclosed progress report describes program actions during the period of February 1 through 28, 1995. The previous report covered a 3-month period. These reports are normally submitted on a bimonthly basis; this report brings us back into coherence with the program schedule.

Program emphasis has focused on completion of action tasks defined in the Recommendation 93-1/NESSCAP IP, initiation of a comprehensive effort to integrate the results of the Albuquerque Operations Office (AL) and Nevada Operations Office (NV) coordination teams, and resolution of major issues which include proposed methodology for applying DOE Order 5480 requirements.

The Policy Oversight Group met for the second time on February 28, 1995. To ensure that program milestones are being met, this meeting included a detailed program review that was presented by AL and NV team coordinators.

If you have questions, please call me or have your staff contact Dana Krupa of my staff at 202-586-3842.

Sincerely,

Charles J. Beers, Jr.

Rear Admiral, U.S. Navy
Deputy Assistant Secretary

for Military Application and

Stockpile Support Defense Programs

Enclosure

Enclosure 1

# PROGRESS REPORT DNFSB RECOMMENDATION 93-1 AND NUCLEAR EXPLOSIVE SAFETY STUDY REVIEW

FEBRUARY 1-28, 1995

This progress report covers a 1-month period and describes the continued integration of the Defense Nuclear Facilities Safety Board Recommendation 93-1 Action 4 Report and the Nuclear Explosive Safety Study Corrective Action Plan (NESSCAP) of September 30 and June 15, 1994, respectively. These two nuclear explosive safety related efforts were combined into a single program to ensure the coordination and integration of actions related to the Departmental nuclear explosive safety orders and directives.

#### 1. CURRENT PERIOD

Principal efforts have been focused on completing action tasks defined in the Recommendation 93-1/NESSCAP Implementation Plan (IP), initiating a comprehensive effort to integrate the results of the coordination subject matter expert (SME) teams from the Albuquerque Operations Office (AL) and Nevada Operations Office (NV), and resolution of major issues which include proposed methodology for applying requirements of the DOE 5480 series Orders.

## A. Policy Oversight Group Meeting

The Policy Oversight Group (POG) held its second meeting on February 28, 1995. The POG was chaired by the Deputy Assistant Secretary for Military Application and Stockpile Support (DP-20). Attendees included organizational representatives and personnel who are responsible for performing the tasks specified in the IP. In addition to an overview of the program status, this meeting included a detailed program review presented by team coordinators from AL and NV.

Two major issues were brought to the attention of the POG which required resolution:

1) <u>Headquarters Guidance to the Field</u>. Discussion centered on the issues of a "bottoms-up" or "top-down" approach in the development of the new DOE orders. In the past, Headquarters (HQ) guidance has been limited to scope, contents, and schedule of the expected orders and/or standards products.

Resolution: The IP states that the DOE Order 5610 Integration Group will review, coordinate, and integrate draft orders, revisions, new orders, directives, technical standards, and guides prior to submitting them to the POG for subsequent Departmental processing. The Order Integration Group is composed of members from the Defense Programs (DP) and Environment, Safety and Health (EH) with support from the working group, SME teams, and national laboratories, as necessary. Through this process, HQ shall ensure that it maintains control over departmental policy. The decision was made to continue with the current process.

Policy with regard to the definition of the relationship between the DOE 5610 and 5480 series will be provided informally at the working groups. Formal policy will be defined in the final Orders and will explicitly state that relationship.

2) Treatment of the exclusion statements. Extensive discussion centered around the treatment of the exclusion clauses with regard to the nuclear explosive operations and facilities. These clauses are found in many of the Department's ES&H Orders (primarily DOE 5480 Series Orders). Definition of the term "adopt by reference", which is included in the Recommendation 93-1 Action 4 Report, was addressed. Some members of the POG stated that, in some instances, extraneous and/or nonapplicable requirements of the DOE 5480 Orders would encumber nuclear explosive operations by forcing activities to immediately apply for exemptions or be forced to halt operations.

Resolution: RADM Beers tasked the Working Group Chairperson to adopt the requirements of the excluded 5480 series Orders into the 5610 series Orders, or provide adequate justification on each individual and specific item as to why the entire set of Order requirements could not be adopted in it's entirety.

Response to this direction was requested by March 10, 1995. DP-20 will review the proposed methodology and render a determination on its acceptability shortly thereafter. The efforts of the Field Integration Team, who are developing the Strawman 5610 Order, will continue during this time.

## B. 93-1/NESSCAP Working Group

On February 1, 1995, (after matrix meetings between AL and NV) the 93-1/NESSCAP Working Group determined that work has progressed to combining AL and NV coordination teams into a single effort. A core group of AL and NV personnel will meet with specified SMEs to review inputs from each group for possible incorporation into DOE orders and standards. To ensure maximum participation, an itinerary was developed and issued to HQ DP and EH elements and the national laboratories. The first AL/NV integrated group was scheduled to meet in AL on February 28, 1995.

The 93-1/NESSCAP Working Group held a meeting on February 16, 1995, at AL. The group covered overall status and progress made by each of the coordination teams as well as issues that may impact the program. The Working Group provided an opportunity for the area coordinators to identify specific issues that affect their work and request specific types/levels of assistance for work in progress.

Discussions focused on the excluded and the nonapplicable portions of the 5480 series Orders. Nevada Operations proposed adopting the requirements of the excluded 5480 series Orders, and utilizing a graded approach for specific exemptions. The timeframe to process exemptions is unknown. The Working Group agreed to let the AL and NV efforts proceed on schedule, and to bring this subject up at the next POG meeting, if necessary.

Per request of the POG, a matrix was developed listing all action items involved in the 93-1/NESSCAP activies along with responsible persons, expected products, and completion dates (copy attached).

In addition to the revised DOE Orders 5610.10 and 5610.11, the 93-1/NESSCAP Working Group anticipated that six Guides and Standards would be required:

- 1. Implementation Guide for DOE Order 5610.11
- 2. Appraisals Standard for DOE Order 5610.10
- 3. PAP Standard
- 4. Nuclear Explosive Transportation Standard
- 5. NESS Process Standard
- 6. Nuclear Explosive Hazards Assessment Standard

The number of anticipated Guides and Standards may change as requirements or issues are identified during the development of the Strawman order and it's review by Headquarters elements of DP and EH. These Guides and Standards are expected to be developed and completed in parallel with the final Order.

#### C. Albuquerque Seamless Safety Initiative

The initial revision of the AL Seamless Safety-21 initiatives (draft AL SD 5610.10 and 5610.11) was provided to Mr. Steve Guidice on February 15, 1995. A comment resolution meeting has been scheduled for April 5, 1995, at AL.

#### 2. FUTURE ACTIONS

#### A. <u>Exclusion Statements</u>

After review of the proposed methodologies for adopting requirements of the DOE 5480 Series Orders, DP-20 will render a determination on its acceptability. Results of that study and decisions will be included in the next bimonthly progress report.

### B. <u>Future Meetings</u>

The next meeting of the Recommendation 93-1/NESSCAP Working Group is scheduled for March 23, 1995, at AL.

The next Policy Oversight Group meeting is scheduled for April 24, 1995, at DOE HQ, Washington, DC.

ACTION ITEM (93-1 Action 4 Report)	RESPONSIBILITY	DEADLINE(s)	CURRENT ISSUES
NESS PROCESS REVISION	F. Rider	March 31, 1995	
NUCLEAR EXPLOSIVES AND WEAPONS APPRAISALS PROCESS REVISION	T. Dunn	March 31, 1995	Transfered to J. Brooks
GENERAL ITEMS			
2.1 DOE-HQ Nuclear Safety Policy: 1. Revise 5610 series	D. Krupa	June 30, 1995	
2. Policy document on 5610 & 5480 orders interface	D. Krupa	May 1, 1995	Coordination with EH
2.2 Exclusion Statements review	D. Krupa	Iterim: Mar 1- Report to POG	Final-May 1,'95
2.4 HQ-Operations Office Direction	D. Krupa	Completed	
2.5 Scope of 5610 Orders	D. Krupa	In-process	5610.10-Nuclear Surety 5610.11-NEO Safety
3.1.1 AI-1 Audits & Assessments			
1. Adopt by reference 5482.1B & 5700.6C in 5610	T. Davito	March 31, 1995	5610.10 topic
2. SME Team to develop additional guidance	T. Davito	TBD(Apr 95)	Linked to Appraisal Guide Development
3. Audit/Assessment training & qualification	TBD	TBD(Apr 95)	Linked to Appraisal Guide Development

ACTION ITEM (93-1 Action 4 Report)	RESPONSIBILITY	DEADLINE(s)	CURRENT ISSUES
3.1.2 AI-2 Commitment Tracking System: addition to 5610	Joel Peterson Bill Mullen	March 31, 1995	
3.1.3 AI-3 Performance Indicators (PIs)			
1. Identify nuclear expl opns PIs	Bill Mullen Travis Hunsaker	March 31, 1995	
2. Prepare 5610 text	Bill Mullen Travis Hunsaker	March 31, 1995	
3.1.4 AI-4 Quality Assurance			
1. Adopt, by ref, 5700.6C in 5610	Bill Mullen Paul Konnick	March 31, 1995	Integrated Field Team Activity
2. Assess QC-1/5700.6C interface for assembly/disassembly at Pantex	Bill Mullen Paul Konnick	March 31, 1995	
3. Assess QC-1/QC-2 interface for NTS test operations & prepare docs	Bill Mullen Paul Konnick	March 31, 1995	
3.1.5 AI-5 Safety Committees			
1. Evaluate existing safety review groups & recommend 5610 improvements	Steve Thompson Paul Konnick	March 31, 1995	
2. SMEs evaluate existing guidance on safety committees (e.g., 5480.6B, etc)	Steve Thompson Paul Konnick	March 31, 1995	

ACTION ITEM (93-1 Action 4 Report)	RESPONSIBILITY	DEADLINE(s)	CURRENT ISSUES
3.2.1 AI-6 Staffing/Personnel Training & Qualification			
1. Adopt 5480.20 by reference	Dave OLson Buddy Garland	March 31, 1995	
2. SMEs determine accreditation requirements for NE activities	Dave OLson Buddy Garland	March 31, 1995	
3. SMEs determine if additional guidance is needed	Dave OLson Buddy Garland	March 31, 1995	
3.2.2 AI-7 Human Factors			
1. Develop 5480.23-like human factors guidelines for NES operations	Steve Thompson Corrine Burgin	TBD (April 95)	to be Included in Safety Analysis standard
3.3.1 AI-8 Criticality Safety			
1. Augment 5610 with adopted 5480.23 and 5480.24 provisions and develop new NES factors	Liz Roybal John Schlesser	March 31, 1995	To be included in 5610 order provisions
2. SMEs develop additional criticality standards, if needed	Liz Roybal John Schlesser	TBD( April 95)	
3.3.2 AI-9 Nuclear Explosive Safety			
1. Integrate NE risk assessments with hazard and accident analysis	Frank Rider Travis Hunsaker	TBD (April 95)	Standard (TBD-Jun))
2. Add qualification requirements for NESSG personnel in 5610.11	Frank Rider Travis Hunsaker	TBD (April 95)	Guide (TBD-Jun)

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ACTION ITEM (93-1 Action 4 Report)	RESPONSIBILITY	DEADLINE(s)	CURRENT ISSUES	
3.3.3 AI-10 Safety Analysis/TSRs				
1. Adopt 5480.22 and 5480.23 by ref. in 5610, and prepare unique NES standards	Steve Thompson Judy Steenhoven	TSR-Mar 31 SA-TBD(Apr 95)	Standard & Guide (TBD)	
2. SMEs review existing guidance and develop additional documents, as needed	Steve Thompson Judy Steenhoven	TSR-Mar 31 SA-TBD(Apr 95)	Standard & Guide (TBD)	
3.3.4 A-11 USQs				
1. Adopt 5480.21 USQ-like activities into 5610 for Nuc Exp components and NELAs.	Liz Roybal Judy Steenhoven	March 31, 1995	Included in NES Process	
2. SME develop new guidance, as needed	Liz Roybal Judy Steenhoven	TBD (Apr 95)		
3.4.1 AI-12 Configuration Management				
1. Add Configuration Management requirements for nuclear explosive facilities to 5610 series orders	Bill Mullen Joel Peterson	March 31, 1995		
2. SMEs develop CM guidance and standards, as needed	Bill Mullen Joel Peterson	March 31, 1995	No separate standard required	

ACTION ITEM (93-1 Action 4 Report)	RESPONSIBILITY	DEADLINE(s)	CURRENT ISSUES
3.4.2 AI-13 Design Criteria- Tooling & Equipment			
1. Develop Nuc Exp Tooling/Spec Equip general design criteria which include current standards, and add to 5610 orders.	Joe Martinez Steve Thompson	March 31, 1995	
3.4.3 AI-14 Maintenance			
1. Adopt Chapter II, DOE 4330.4B for maintaining nuclear explosive facilities.	Bill Mullen Dave Olson	March 31, 1995	
2. Require DOE approval of facility Maintenance Implementation Plan (MIP)	Bill Mullen Dave Olson	March 31, 1991	
3.5.1 AI-15 Onsite Packaging and Transport			
1. SMEs review current guidance & develop additional guidance for onsite transport and packaging of nuclear components and adopt in 5610 orders	Liz Roybal L.K.Roundtree	March 31, 1995	

ACTION ITEM (93-1 Action 4 Report)	RESPONSIBILITY	DEADLINE(s)	CURRENT ISSUES
3.5.2 AI-16 Readiness Reviews			
1. Adopt, by ref, DOE Order 5480.31 for nuclear explosive facilities and augment (develop) with unique explosive (weapon) standards.	Bill Mullen Joel Peterson	March 31, 1995	
2. SMEs review existing guidance and develop additional nuclear explosive guidance & technical standards	Bill Mullen Joel Peterson	TBD (April 95)	