

Department of Energy

Washington, DC 20585

March 26, 1996

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

Dear Mr. Chairman:

On February 1°, 1996, the Department of Energy (DOE) issued its Revision 1 of the Implementation Plan (IP) for Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 93-6. The IP focuses on ensuring that the Department maintains the capability to conduct safe dismantlement, modification, assembly, and testing operations. This letter contains Deliverable A.1.A. as required by the 93-6 IP.

Commitment A.1 (Enclosure) - Development of a Weapon Safety Specification (WSS) for each weapon. The final WSS describes the weapon disassembly and inspection process for enduring weapons and the dismantlement operation for retired weapons. It also identifies all hazards that the Seamless Safety-21 project teams will consider when conducting safety hazard analyses, when developing the weapons operation process, and when determining appropriate safety criteria from the point of weapon shipping and handling through final disposition of materials. The WSS will capture safety aspects from all relevant weapon-specific documentation, including safety-related information from: (1) design individuals from the laboratories who are or were active in the original design of the specific weapons, (2) weapon operation experts from Pantex who participated in the assembly or disassembly of the weapons, (3) any other unique skills and knowledge drawn from technically competent laboratory and Pantex personnel, and (4) relevant safety information gained through the weapon surveillance program. Incorporating the archiving program information as an input to the WSS will also ensure that relevant historical safety information from all personnel, including retired and those about to retire, will be included. As a result, the WSS will be the single source document for all safety-related information, including that archived from Pantex and the nuclear weapons laboratories personnel (items 1, 2, and 3 above).

Should you have any questions, please contact me or have your staff contact Mr. Richard C. Crowe, Associate Deputy Assistant Secretary for Military Application and Stockpile Management, on (301) 903-4221.

Sincerely,

Victor Stello, Jr.

Principal Deputy Assistant Secretary

for Safety and Quality

Defense Programs

Enclosure

Weapons Operations - Albuquerque Operations Office

1. Responsibility

The Albuquerque Operations Office (AL) is responsible for the implementation of this task, subject to the final approval and acceptance from the Deputy Assistant Secretary for Military Application and Stockpile Management. Relevant operations office elements, management and operating contractor(s), and the nuclear weapons laboratories will be an integral part of the implementation of this task.

2. Commitment A.1

Development of a Weapon Safety Specification (WSS) for each weapon. The final WSS describes the weapon disassembly and inspection process for enduring weapons and the dismantlement operation for retired weapons. It also identifies all hazards that the Seamless Safety-21 project teams will consider when conducting safety hazard analyses, when developing the weapons operation process, and when determining appropriate safety criteria from the point of weapon shipping and handling through final disposition of materials. The WSS will capture safety aspects from all relevant weapon-specific documentation, including safety-related information from: (1) design individuals from the laboratories who are or were active in the original design of the specific weapons, (2) weapon operation experts from Pantex who participated in the assembly or disassembly of the weapons, (3) any other unique skills and knowledge drawn from technically competent laboratory and Pantex personnel, and (4) relevant safety information gained through the weapon surveillance program. Incorporating the archiving program information as an input to the WSS will also ensure that relevant historical safety information from all personnel, including retired and those about to retire, will be included. As a result, the WSS will be the single source document for all safety-related information, including that archived from Pantex and the nuclear weapons laboratories personnel (items 1, 2, and 3 above).

3. Deliverable

A description of how archiving and surveillance results, including significant findings and relevant safety hazards analysis, will be used to update the weapon-specific WSSs.

memorandum

DATE:

March 22, 1996

REPLY TO ATTN OF:

DP-24:MSchoenbauer:3-3489

SUBJECT:

DEFENSE NUCLEAR FACILITIES SAFETY BOARD (DNFSB)

RECOMMENDATION 93-6 "MAINTAINING ACCESS TO NUCLEAR WEAPONS

EXPERTISE," DELIVERABLE A.I.A

To: Assistant Manager for National Defense Programs, Albuquerque Operations Office

Your Deliverable A.1.A of March 5, 1996, fulfills my requirement to describe how archiving and surveillance information will be used to develop and update weapon-specific Weapon Safety Specifications (WSS).

I understand that the Interagency Engineering Procedure EP40110/B "Integrated Safety Process For Assembly And Disassembly Of Nuclear Weapons" is in the final review process, and it identifies specific weapon safety characteristics and hazards in addition to the requirement to include relevant archiving and surveillance information into the WSS. With this change, the WSS will incorporate all available nuclear weapon design, safety, and hazard information to enable development of the Seamless Safety 21 (SS-21) personnel plans, operating procedures, operating facility readiness, equipment, and facility layouts and tooling. The WSS will also provide a source document for the hazard assessment teams.

Although not required by the Recommendation 93-6 Implementation Plan, I also understand that a parallel effort is ongoing to review and enhance the Stockpile Evaluation Program so that procedural and process lessons learned, as well as weapon configuration hazards, are identified for inclusion in the WSS. This is a positive step forward that will ensure the WSS is truly a single-source document.

I look forward to receiving the revised Interagency Engineering Procedure EP40110/B and the W56 and W69 WSSs by the end of April so I can review them before forwarding them to the Board the end of May 1996.

Should you have any questions, please contact me or have your staff contact Mr. Richard C. Crowe, Associate Deputy Assistant Secretary for Military Application and Stockpile Management, on (301)903-4221.

Thomas P. Seitz

Deputy Assistant Secretary for

Military Application and Stockpile Management

Defense Programs

memorandum

Albuquerque Operations Office

DATE

MAR 1 4 1996

REPLY TO

WPD:GR

SUBJECT

Defense Nuclear Facility Safety Board (DNFSB) Recommendation 93-6 Deliverable A.1.A

TO:

Thomas P. Seitz, Deputy Assistant Secretary for Military Application and Stockpile Management, DP-20, HQ

The purpose of this letter is to modify Department of Energy/Albuquerque Operations Office's (DOE/AL's) previously documented approach to meeting Deliverable A.1.A of DOE's Implementation Plan for DNFSB Recommendation 93-6, Revision 1 (reference letter from Inlow, AL, to Seitz, HQ, dated March 5, 1996).

In summary, after further coordination with the national laboratories, we will now require that the Weapons Safety Specification (WSS) reference the applicable nuclear laboratory, nonnuclear laboratory, and production agency documents which describe the archiving methodology employed to obtain input to the WSS and describe the archiving-generated data that is reflected in the WSS. This approach will replace our previously stated commitment to insert a specific archiving section in the WSS. The new approach will allow the WSS to remain a technically oriented document, is consistent with the reference approach in other sections of the WSS, and will ensure that the different agencies involved are responsible for documenting their own archiving activities.

Other information, provided in our previous response, is repeated below to allow this letter to completely supersede the previous submittal.

The requirement to update the WSSs with safety related information from archiving activities and surveillance activities will be promulgated in the next revision of EP401110, Integrated Safety Process for Assembly and Disassembly of Nuclear Weapons. Revision B of EP401110 will be issued by May 31, 1996.

EP401110/B will require:

Surveillance Information

For retired weapon systems and enduring stockpile weapon systems, the Design Agency weapon system engineers shall review past surveillance program data and include pertinent safety related information resulting from that review in the derivation of the WSS.

In addition, for enduring stockpile weapon systems, the results of continuing surveillance activities will be reviewed on an annual basis by the design agency system engineers and the WSS will then be updated annually to include pertinent safety information. The results of this annual review will be provided to DOE for review.

Surveillance activities, which will potentially generate safety related data, include the new material laboratory and flight test program, stockpile laboratory and flight test program and accelerated aging unit activities for both new material and stockpile samples.

Surveillance documentation of particular interest for the WSS includes the annual surveillance cycle report for each weapon system and the Significant Finding Investigation Report and associated investigations of any anomalies discovered during surveillance.

Archiving Information

Each WSS will include the results of pertinent safety information generated during archiving activities to ensure the inclusion of relevant historical information from all personnel, including those that are retired or about to retire.

Sources of archive data, which will potentially generate safety information, include design individuals from the laboratories who are or were active in the original design of the specific weapons, weapon operation experts from Pantex who participated in the assembly or disassembly of the weapons, and any other unique skills or knowledge drawn from competent laboratory or production agency personnel.

Each WSS will provide references to nuclear laboratory, nonnuclear laboratory, and production agency documents which describe the methodology employed to obtain the safety information for that program, and describe the safety related information generated by the archiving process that is reflected in the WSS.

Archiving methodologies used may include individual tasking, individual and/or group interviews, and any other possible methods to effectively elicit information in each individuals' area(s) of expertise.

Although EP401110B will not be issued until May 1996, all future WSSs will contain the information discussed above.

Rush O. Inlow

Assistant Manager for

National Defense Programs

Rush O Salow

cc:

Dan Rhoades, DP-24, HQ Marty Schoenbauer, DP-24, HQ Dave Cameron, DP-12, HQ Michael Ferry, DP-12, HQ Steve Goodrum, AAO Bruce Lownsbery, L-300, LLNL Jerry Dow, L-125, LLNL Coleman Johnson, L-385, LLNL Mike Haertling, C936, LANL Charlie Miller, J514, LANL Lou Salazar, F630, LANL Darrell Schmidt, C936, LANL Corey Knapp, MS-9033, SNL/CA Jim Harrison, MS-0447, SNL/NM Mark Dickinson, MS-0645, SNL/NM Herb Berman, M&FI/PX Jeff Yarbrough, M&H/PX

Tim McEvoy, WPD, AL Ralph Levine, WQD, AL Bob Lopez, WQD, AL Ron Chevalier, WQD, AL Ron Baca, WPD, AL

Richard Crowe, DP-20, HQ