



Department of Energy
National Nuclear Security Administration
Washington, DC 20585

January 3, 2002

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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. 20004-2901

Dear Mr. Chairman:

In our response to your June 28, 2001, letter about the Justification for Continued Operations (JCO) related to the W88 Hazard Analysis Report (HAR), we agreed to:

- Reconsider the risk reduction provided by mats used to prevent High Explosive Violent Reaction due to High Explosive drops onto work surfaces in W88 operations and to reconcile the difference between the W88 value of the failure rate and the value used in the corresponding analysis of W78 operations.
- Issue a revised Section 11.8 of the Development & Production (D&P) Manual.

We have reconsidered the risk reduction provided by the mats and found the risks of the W88 operation to be comparable to the risks of W78 program and likewise acceptable. The W88 HAR and JCO will be updated during the next normal revision to the W88 HAR. We will work through your site representative to ensure that your staff has the opportunity to review the revised HAR. The revised Section 11.8 of the D&P Manual is in the final stages of approval and will be forwarded after approval by the Standing Management Team, and prior to January 30, 2002.

If you have further questions, please contact me or have your staff contact Mr. David E. Beck at 202-586-4879 or Mr. Jeff Underwood at 301-903-8303.

Sincerely,

RONALD J. HAECKEL
Brigadier General, USAF
Acting Deputy Administrator
for Defense Programs

Enclosure

cc w/enclosure:
Mark Whitaker, S-3.1



02-0074

memorandum

Albuquerque Operations Office
Amarillo Area Office

DATE: DEC -5 2001

REPLY TO
ATTN OF: OAO:ABS:KEW

SUBJECT: W88 Justification for Continued Operations (JCO)

TO: Dennis R. Ruddy, President and General Manager, BWXT Pantex, LLC

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The W88 JCO currently credits floor mat material to prevent a reaction should a high explosive hemisphere be dropped on a work table. The analysis assumes that if the mat is present, a weapons response is Unlikely (i.e., 1E-2) and that the failure probability for the floor mat material to perform it's function is 1E-4/operation.

Preliminary information from Los Alamos National Laboratory (LANL) indicates a response of Unlikely should be assigned as a result of drops to either padded or bare surfaces. BWXT used the conservative end of this bin (i.e., 1E-2 reactions/drop) for weapons response in the W88 JCO and W88 Hazard Analysis Report (HAR) for drops of 6 inches to 6 feet. As a result, no changes to the JCO or HAR are required in that regard. However, the LANL information raises questions about whether it is appropriate to credit the mat material as a control when the effect of the presence of the mat could not be quantified. AAO considers the mat does provide benefit and that assertion is qualitatively supported in the LANL information. As a result, AAO supports taking credit for the presence of the mats in the W88 JCO and HAR. However, there is an inconsistency between the floor mat failure probability used in the W88 JCO (and HAR) and the W78 HAR in that the W78 HAR assigns a failure probability of 1E-1/operation.


BWXT should take action to revise the W88 JCO (and the "drop-from-workstation-to-floor" scenario in the W88 HAR) to use a mat failure probability consistent with the W78 HAR. Additionally, the logic diagrams should be revised to correct the "No NEO Consequence" legs for when the floor mat does not fail. These changes will increase the annual likelihood of HEVR due to a drop to the workstation from 3E-7 to a probability in the E-4 range and will increase the annual likelihood of HEVR due to a drop to the floor from <Beyond Extremely Unlikely to Extremely Unlikely. These risks are similar to those accepted under the W78 HAR for like operations and provides further example of the need to improve work processes through the implementation of SS-21 Step 2. The JCO and HAR should be updated during the next normal revision of the W88 HAR.

DEC -5 2001

Ruddy

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The action requested by this memorandum supercedes the request in the AAO correspondence dated September 28, 2001. Questions in regard to this matter should be discussed with Karl Waltzer at extension 3148.

A handwritten signature in black ink, appearing to read "Daniel E. Glenn FOR". The signature is stylized and cursive.

Daniel E. Glenn
Director

cc:

C. Durham, BWXT
L. Eppler, BWXT
D. Brunell, 12-36
S. Erhart, 12-36
J. Kirby, 12-36
D. Kelly, 12-36
K. Waltzer, 12-36

02-2006-ABS