

DDESB-KT

20 Feb 2002

MEMORANDUM FOR ARMY BOARD MEMBER, COLONEL PATRICK DUNKLE
NAVY BOARD MEMBER, CAPTAIN MIKE HERB
AIR FORCE BOARD MEMBER, COLONEL DANIEL TOMPKINS
MARINE CORPS BOARD MEMBER, MR. JERRY MAZZA

SUBJECT: 322nd Board Meeting

The Department of Defense Explosives Safety Board (DDESB) held its 322nd meeting on 20 February 2002 and took the following actions:

a. The Board tabled for 30 days, for Army review and comment, the coordinated proposal to clarify the siting criteria for small quantities of HD 1.1 (≤ 450 lbs), the use of ECM inhabited building distance columns for other than 7-bar and 3-bar ECM, and the application of HD 1.1 criteria to HD 1.2.1 items under certain situations involving small quantities (≤ 450 lbs) in DoD 6055.9-STD. The proposed changes are given in attachment (1). The Navy, Air Force, and Marine Corps Board Members have approved the change without comments. The Army Board Member requested additional review time. Any Army comments will be coordinated with the other Services for their review to determine any impact on their approvals.

b. The Board approved the new definitions for "Secure Explosives Holding Area" and Secure Non-Explosives Holding Area" and the explosives safety criteria associated with them, as revised. The approved changes are given in attachment (2).

c. The Board approved the wording to clarify the situations where explosives safety site submissions are not required. The approved change is given in attachment (3).

d. The Board directed the Secretariat to begin final Office of the Secretary of Defense (OSD) coordination on the revised DoDD 6055.9 after receipt of their review comments due 21 March 2002.

e. The Board agreed to staff the review of Chapter 7 (Lightning Protection), DoD 6055.9-STD (reference memorandum) with comments back to the Chair by 15 April 2002 in preparation for proposing a revision to Chapter 7 at the next Board meeting.

The Board tentatively scheduled the next formal meeting (323rd) for 30 July 2002.

/s/William E. Wright
WILLIAM E. WRIGHT
Captain, USN
Chairman

/s/Patrick Dunkle
PATRICK DUNKLE
Colonel, USA
Army Member

/s/Mike Herb
MIKE HERB
Captain, USN
Navy Member

/s/Daniel T. Tompkins
DANIEL T. TOMPKINS
Colonel, USAF
Air Force Member

/s/Jerry L. Mazza
JERRY MAZZA
Marine Corps Member

Attachments
As stated

cc:

Alternate Army Board Member
Alternate Navy Board Member, Mr. Richard Eldridge
Alternate Air Force Board Member, Eric Olson
Alternate Marine Corps Board Member, Col Henry Dewey, III
JCS(J-4-SMPED)
DTRA (Gatski)
DCMA (DCMA-O)
TRANSCOM (TCJ4-LT)
DA, Director of Safety (Mr. J. Gibson)
USADAC/SOSAC-ES (Mr. Johnnie Cook)
NOSSA/N711 (Mr. Richard T. Adams)

TITLE: This proposed change covers three topics;

(a) Clarification of Siting Criteria for Small Quantities of HD 1.1 (≤ 450 lbs).

(b) Clarification of the use of ECM IBD columns for other than 7-Bar and 3-Bar ECM.

(c) Application of HD 1.1 Criteria to HD 1.2.1 Items under Certain Situations Involving Small Quantities (≤ 450 lbs).

STATEMENT OF PROBLEMS:

PROBLEM NUMBER 1: The "Other PES" columns of C9.T1 were inadvertently not revised for quantities of HD 1.1 ≤ 450 lbs, when the DDESB adopted revised HD 1.1 hazardous fragment distance criteria (Attachment 2 of the 5 July 2000 DDESB Memorandum).

CURRENT C9.T1: (Only the "Other PES" columns (Number 5 and 9), for quantities up to 450 lbs HD 1.1, are shown for clarity.):

	IBD	PTR
NEW	OTHER PES	OTHER PES
Col 1	Col 5	Col 9
1	1250	750
2	1250	750
5	1250	750
10	1250	750
20	1250	750
30	1250	750
40	1250	750
50	1250	750
100	1250	750
150	1250	750
200	1250	750
250	1250	750
300	1250	750
350	1250	750
400	1250	750
450	1250	750

Proposed C9.T1: (Only the "Other PES" columns (Number 5 and 9), for quantities up to 450 lbs HD 1.1, are shown for clarity):

	IBD	PTR
NEW	OTHER PES	OTHER PES
Col 1	Col 5	Col 9
1	See Note 3	See Note 7
2		
5		
10		
20		
30		
40		
50		
100		
150		
200		
250		
300		
350		
400		
450	▼	▼

PROBLEM NUMBER 2:

- a. Clarification of C2.5.2.3.1.1 is needed for siting small quantities of HD 1.1 (< 450 pounds NEW), in terms of directing users of DoD 6055.9-STD to the correct criteria, for the siting situation being evaluated.
- b. Existing criteria are unclear as to what PTR and ILD to apply when siting small quantities of HD 1.1 (< 450 pounds NEW), when directed to Tables C2.T1, C9.T2., and C9.T6B for determining hazardous fragment distances.
- c. Existing criteria are not clear regarding when undefined ECM are permitted to utilize ECM IBD distances (Columns 2, 3, and 4) of C9.T1. Past Secretariat positions (in particular a 27 July 1990 Memorandum), which permitted use of these columns in certain situations for siting undefined ECM, are not documented in the Standard.

A. **CHANGE 1:** (Revision of C2.5.2.3.1.1):

CURRENT:

C2.5.2.3.1.1. For all types of Hazard Division 1.1 in quantities up to 450 lbs NEW (204 Kg NEQ), the hazardous fragment distance is given in Table C2.T1. For NEWs in the range 450 to 30,000 lbs (204 to 13,600 Kg NEQ), the minimum distance shall be

1250 ft (380 m). These minimum distances (those given in Table C2.T1. or the 1250 ft) must be applied unless it is shown that fragments and debris from structural elements of the facility or process equipment do not present a hazard beyond the distance specified in Table C9.T1. For items that have been evaluated adequately that result in a different minimum hazardous fragment distance (such as in Table C9.T2.) that is greater than the distance for the NEW shown in Table C2.T1, the larger distance shall be used. Facilities sited at 1,235 or 1,245 ft in accordance with past standards shall be considered to be in compliance with the 1,250 ft (380 m) minimum requirement.

PROPOSED:

C2.5.2.3.1.1. For all types of Hazard Division 1.1 in quantities \leq 450 lbs NEW, the hazardous fragment distance (HFD), which equates to IBD, will be determined as follows:

C2.5.2.3.1.1.1. For Hazard Division 1.1 in a 7-Bar or a 3-Bar ECM, use "Earth-Covered Magazine" distances shown in C9.T1, as discussed in C9.3.1.1. Intraline criteria will be in accordance with C9.3.1.2.

C2.5.2.3.1.1.2. For Hazard Division 1.1 in an Undefined ECM, where the loading density [NEW (lbs)/internal magazine volume (ft³)] is \leq 0.028 lbs/ft³, use "Earth-Covered Magazine" distances shown in C9.T1, as discussed in C9.3.1.1. Intraline criteria will be in accordance with C9.3.1.2.

C2.5.2.3.1.1.3. For Hazard Division 1.1 in an Undefined ECM where the loading density is $>$ 0.028 lbs/ft³, use "Earth-Covered Magazine - side and rear" distances of C9.T1 and for front exposure, apply the greater of "Earth-Covered Magazine - front" IBD distance of C9.T1 or the HFD from C2.T1, for the NEW in the ECM. PTR is 60 percent of IBD or HFD, as applicable. Intraline criteria will be in accordance with C9.3.1.2.

C2.5.2.3.1.1.4. Where ECM, regardless of structural designation, have been designed, analyzed, or tested to have a reduced IBD and have been approved by the DDESB, use the approved IBD. PTR is 60 percent of IBD. Intraline criteria will be in accordance with C9.3.1.2.

C2.5.2.3.1.1.5. For Hazard Division 1.1 in a structure (excluding ECM) capable of stopping primary fragments, but which can contribute to the debris hazard, use hazardous debris and PTR distances found in C9.T6B. Intraline criteria will be in accordance with C9.3.1.2. Structures that are capable of stopping primary fragments include all heavy wall (H) and heavy wall/roof (H/R) aboveground sites (AGS), as defined in General Comment (a) of C9.T8. Doors and other openings through which primary fragments could exit must be capable of stopping primary fragments from exiting the facility or will be barricaded in accordance with C5.3 to trap primary fragments that could exit the facility.

C2.5.2.3.1.1.6. For Hazard Division 1.1 in the open or in a structure incapable of stopping primary fragments, use HFD listed in C2.T1. Intraline criteria will be in accordance with C9.3.1.2. Structures (other than ECM) that are capable of stopping primary fragments include all heavy wall (H) and heavy wall/roof (H/R) aboveground sites (AGS), as defined in General Comment (a) of C9.T8. All other structures (other than ECM) are considered incapable of stopping primary fragments. PTR is 60 percent of HFD.

C2.5.2.3.1.1.7. Selected items have been evaluated for minimum HFD with results shown in C9.T2. Other items, through testing, have been hazard classified with a specific HFD presented in the format HD (xx)1.1. The HFD for these items is specified in hundreds of feet (in parenthesis), and they may not be listed in C9.T2. The distances for these two categories of select items apply only to items in the open.. When in facilities, secondary debris as well as primary fragments must be considered. If in a facility that can contain primary fragments, apply criteria of C2.5.2.3.1.1.1 through C2.5.2.3.1.1.5 above. If in a facility that cannot stop primary fragments, use the greater distance from C9.T2 (for the item being considered) or the HFD associated with the (xx)1.1 item or from C2.T1 for determining the applicable HFD. PTR is 60 percent of HFD. Intraline criteria will be in accordance with C9.3.1.2.

C2.5.2.3.1.1.8. For bare explosives in the open, distance is computed by the formula $d=40W^{1/3}$.

C2.5.2.3.1.2. For Hazard Division 1.1 NEWs in the range 451 to 30,000 lbs, HFD will be determined according to the below criteria. Public traffic route distance is 60 percent of the HFD, and intraline criteria, as applicable, will be in accordance with C9.3.1.2 or C9.3.1.3.

C2.5.2.3.1.2.1. The minimum HFD will be 1250 ft, as shown in C9.T1. Lesser distances are permitted if supported by a structural analysis. Facilities sited at 1,235 ft or 1,245 ft per past standards will be considered to be in compliance with the 1,250 ft minimum requirement.

C2.5.2.3.1.2.2. For Hazard Division 1.1 in a 7-Bar or a 3-Bar ECM, use "Earth-Covered Magazine" distances shown in C9.T1, as discussed in C9.3.1.1.

C2.5.2.3.1.2.3. For Hazard Division 1.1 in an Undefined ECM, where the loading density is ≤ 0.028 lbs/ft³, use "Earth-Covered Magazine" distances shown in C9.T1, as discussed in C9.3.1.1.

C2.5.2.3.1.2.4. For Hazard Division 1.1 in an Undefined ECM with minimum internal dimensions of 26 feet wide by 60 feet long, use "Earth-Covered Magazine - side and rear" distances of C9.T1 and "Other PES" distance of C9.T1 for the front exposure.

C2.5.2.3.1.2.5. For Hazard Division 1.1 in an Undefined ECM where the loading density is $> 0.028 \text{ lbs/ft}^3$ and internal dimensions are less than 26 feet wide by 60 feet long, use "Other PES" distances of C9.T1 for front, side, and rear exposures.

C2.5.2.3.1.2.6. Selected items have been evaluated for minimum HFD with results shown in C9.T2. Other items, through testing, have been hazard classified with a specific HFD presented in the format HD (xx)1.1. The HFD for these items is specified in hundreds of feet (in parenthesis), and they may not be listed in C9.T2. The distances for these two categories of select items apply only to items in the open. PTR is 60 percent of HFD. When these items are placed in a facility, apply the criteria of C2.5.2.3.1.2.1 through C2.5.2.3.1.2.5 above, as appropriate.

C2.5.2.3.1.2.7. For bare explosives in the open, distance is computed by the formula $d=40W^{1/3}$.

C2.5.2.3.1.3. For Hazard Division 1.1 NEWs $> 30,000 \text{ lbs}$, HFD will be in accordance with C9.T1. Lesser distances are permitted if supported by a structural analysis. PTR is 60 percent of HFD and intraline criteria, as applicable, will be in accordance with C9.3.1.2 or C9.3.1.3. The following apply to use of the reduced "Earth-Covered Magazine" distances shown in C9.T1, for the NEW range between 30,000 lbs and 250,000 lbs:

C2.5.2.3.1.3.1. For Hazard Division 1.1 in a 7-Bar or a 3-Bar ECM, where internal dimensions are a minimum of 26 feet wide by 60 feet long, use "Earth-Covered Magazine" distances shown in C9.T1.

C2.5.2.3.1.3.2. For Hazard Division 1.1 in a 7-Bar or a 3-Bar ECM, where internal dimensions are less than 26 feet wide by 60 feet long, use "Other PES" distances of C9.T1 for front, side, and rear exposures.

C2.5.2.3.1.3.3. For Hazard Division 1.1 in an Undefined ECM, where internal dimensions are a minimum of 26 feet wide by 60 feet long, use "Earth-Covered Magazine - side and rear" distances of C9.T1 and "Other PES" distance of C9.T1 for the front exposure.

C2.5.2.3.1.3.4. For Hazard Division 1.1 in an Undefined ECM, where internal dimensions are less than 26 feet wide by 60 feet long, use "Other PES" distances of C9.T1 for front, side, and rear exposures.

B. **CHANGE 2** (Revision of existing C2.T1 Notes):

CURRENT:

NOTES

1. NEW < 100 Pounds: Hazardous Fragment Distance = 291.3 + [79.2 x ln(NEW)];
NEW ≥ 100 Pounds: Hazardous Fragment Distance = -1133.9 + [389 x ln(NEW)];
NEW in pounds, Hazardous Fragment Distance in feet, with a minimum distance of 236 feet; ln is natural logarithm.
2. NEW = exp [(Hazardous Fragment Distance/79.2) - 3.678]; Hazardous Fragment Distance < 658 feet;
NEW = exp [(Hazardous Fragment Distance/389) + 2.914]; 658 feet ≤ Hazardous Fragment Distance < 1250 feet;
NEW in pounds, Hazardous Fragment Distance in feet; exp [x] is e^x.
3. Use of equations given in Notes (1) and (2) to determine other Hazardous Fragment Distance-NEW combinations is allowed.
4. Hazardous fragment distances for items given in Table C9.T2. will be used when they exceed the values indicated by this table (C2.T1.)
5. For HD 1.1 ammunition and explosives inside structures capable of stopping primary fragments, use Table C9.T6B. Structures capable of stopping primary fragments include all earth-covered magazines (ECM), and heavy wall (H) and heavy wall/roof (H/R) aboveground sites (AGS), as defined in Table C9.T8.

PROPOSED:

NOTES (See C2.5.2.3.1.1 regarding application of Table C2.T1):

1. NEW < 100 Pounds: Hazardous Fragment Distance = 291.3 + [79.2 x ln(NEW)];
NEW ≥ 100 Pounds: Hazardous Fragment Distance = -1133.9 + [389 x ln(NEW)];
NEW in pounds, Hazardous Fragment Distance in feet, with a minimum distance of 236 feet; ln is natural logarithm.
2. NEW = exp [(Hazardous Fragment Distance/79.2) - 3.678]; Hazardous Fragment Distance < 658 feet;
NEW = exp [(Hazardous Fragment Distance/389) + 2.914]; 658 feet ≤ Hazardous Fragment Distance < 1250 feet;
NEW in pounds, Hazardous Fragment Distance in feet; exp [x] is e^x.
3. Use of equations given in Notes (1) and (2) to determine other Hazardous Fragment Distance-NEW combinations is allowed.
4. Public traffic route distance is 60 percent of Hazardous Fragment Distance.

C. **CHANGE 3** (Revision of existing Note 3 of Table C9.T1):

CURRENT:

3. Bases for Column 5 Distances:

1-30,000 lbs- fragments and debris hazard. Lesser distances permitted as follows (see subparagraph C2.5.2.3.1 of Chapter 2): (a) If the NEW is less than 450 pounds, use Table C2.T1., (b) Bare explosives in the open, distances computed by formula $d=40W^{1/3}$. Distances other than 1,250 ft may be used when indicated by Table C9.T2.

30,000-100,000 lbs - blast overpressure hazard. Computed by formula $d = 40W^{1/3}$.
100,000-250,000 lbs - blast overpressure hazard. Computed by formula $d = 2.42W^{0.577}$.
250,000 lbs and above - blast overpressure hazard. Computed by formula $d = 50W^{1/3}$.

PROPOSED:

3. Bases for Column 5 Distances:

1-30,000 lbs- fragments and debris hazard. *Lesser distances permitted by C2.5.2.3.1 of Chapter 2.*

30,000-100,000 lbs - blast overpressure hazard. Computed by formula $d = 40W^{1/3}$.
100,000-250,000 lbs - blast overpressure hazard. Computed by formula $d = 2.42W^{0.577}$.
250,000 lbs and above - blast overpressure hazard. Computed by formula $d = 50W^{1/3}$.

D. **CHANGE 4** (Revision of existing paragraph C9.3.1.1):

CURRENT:

C9.3.1.1. **Inhabited Building and Public Traffic Route Distances.** Separation distances required from standard earth-covered magazines and other types of PESs to inhabited buildings and public traffic routes are listed for various quantities of Hazard Division 1.1 in table C9.T1. Specified separations from standard earth-covered magazines take into account reductions in blast overpressure attributable to the earth cover of the magazines. Permissible exposures at these distances are listed in subsections C2.4.3., C2.4.4., C2.4.5. and C2.4.6., Chapter 2.

PROPOSED:

C9.3.1.1. **Inhabited Building and Public Traffic Route Distances.** *Table C9.T1 provides required separation distances to inhabited buildings and public traffic routes from ECM and other types of PESs containing HD 1.1. See paragraph C2.5.2.3.1 for application of "Earth-Covered Magazine" distances of C9.T1 to 7-Bar, 3-Bar, and Undefined ECM. Specified separations from ECM take into account reductions in blast overpressure attributable to the earth cover of the magazines. Permissible exposures at these distances are listed in subsections C2.4.3, C2.4.4, C2.4.5 and C2.4.6, Chapter 2.*

-
PROBLEM NUMBER 3: When determining IBD for small quantities of HD 1.2.1 (< 450 pounds NEW), located in structures that will stop primary fragments but generate a secondary

debris hazard (such as an ECM), and then comparing the results to the required IBD for an equivalent small quantity of HD 1.1, in a similar structure, there is a disparity in the required

distances. As an example, for HD 1.2.1, there is a fixed 200 or 300-foot IBD distance from the sides and rear of an ECM (dependent on the MCE associated with the HD 1.2.1), while the front IBD could range from 200 to 1,250 feet. For a similar range of HD 1.1 in an ECM, the required IBD would be 250 feet for sides and rear exposures and 500 or 700 feet for a front exposure. When there is a limited quantity of HD 1.2.1 material present and only a single HD 1.2.1 is expected, the HD 1.2.1 reaction will be more like an HD 1.1 reaction than an HD 1.2.1 reaction. Consequently, HD 1.2.1 and HD 1.1 IBDs should be similar. This will be a rare situation. An example is the AIM-120. One outer-pack contains four containers (i.e. 4 warheads) with a combined NEW = 76 lbs. The MCE is also 76 lbs. From testing, we know the outer-pack prevents propagation of a detonation of 4 warheads to other warheads in other outer-packs, however, subsequent separate events could occur. The first detonation would be considered an HD 1.1 event, whereas the separate events now describe a typical HD 1.2.1 event.

A. **CHANGE 1** (Revision to C9.3.2.1):

CURRENT

C9.3.2.1. HD 1.2 are items configured for storage and transportation that do not mass detonate when a single item or package in a stack is initiated. Explosions involving the items result in their burning and exploding progressively with no more than a few at a time reacting. These reactions will project fragments, firebrands, and unexploded items from the explosion site. Blast effects are limited to the immediate vicinity and are not the primary hazard.

PROPOSED (in *italics*)

C9.3.2.1. **GENERAL.**

C9.3.2.1.1. The HD 1.2 hazard classification is given to items configured for storage and transportation that do not mass detonate when a single item or package in a stack is initiated. Explosions involving the items result in their burning and exploding progressively with no more than a few at a time reacting. These reactions will project fragments, firebrands, and unexploded items from the explosion site. Blast effects are limited to the immediate vicinity and are not the primary hazard.

C9.3.2.1.2. Small quantities of HD 1.2.1 (≤ 450 pounds NEW), in certain packaging configurations, will react in a manner more typical of an HD 1.1 event. When located in structures that stop primary fragments, but which generate a secondary debris hazard (e.g. certain ECM and hardened structures), the structural damage and debris hazards produced from these events again are more characteristic of an HD 1.1 explosion, rather than the progressive nature of an HD 1.2.1 event, as described above. When the NEW and the MCE of the packaged HD 1.2.1 items fall within the ranges specified in equation $\{NEW \leq MCE \leq 450 \text{ lbs}\}$, the HD 1.2.1 will be treated as HD 1.1 and the criteria of C2.5.2.3.1.1.1, as applicable, will be used. If they fall outside the ranges of the equation, then the criteria of C9.T8 will be applied.

B. **CHANGE 2** (Addition of Note 6 to C9.T8):

CURRENT C9.T8 Notes:

NOTES

1. Practical considerations such as firefighting and security will dictate specific separation distances as specified by DoD Component.
2. ILD = 36% of IBD with a minimum distance equal to the Intermagazine Distance given in this table for the applicable PES-ES combination.
3. PTR = 60% of IBD with a minimum distance equal to the Intermagazine Distance given in this table for light structures, open stacks, trucks, trailers, or rail cars. Such structures are designated as AGS (L).
4. For HD 1.2.1 items, use the larger of the two applicable values given in Tables C9.T6A. and C9.T6B; for HD 1.2.2 items use Table C9.T7.
5. See Paragraph C9.3.2.12 for HD 1.2.3.

PROPOSED C9.T8 Notes (Addition of Note 6):

NOTES

1. Practical considerations such as firefighting and security will dictate specific separation distances as specified by DoD Component.
2. ILD = 36% of IBD with a minimum distance equal to the Intermagazine Distance given in this table for the applicable PES-ES combination.
3. PTR = 60% of IBD with a minimum distance equal to the Intermagazine Distance given in this table for light structures, open stacks, trucks, trailers, or rail cars. Such structures are designated as AGS (L).
4. For HD 1.2.1 items, use the larger of the two applicable values given in Tables C9.T6A. and C9.T6B; for HD 1.2.2 items use Table C9.T7.
5. See Paragraph C9.3.2.12 for HD 1.2.3.
6. *When the NEW and the MCE of the packaged HD 1.2.1 items fall within the ranges specified in equation $\{NEW \leq MCE \leq 450 \text{ lbs}\}$, the HD 1.2.1 will be treated as HD 1.1 and the criteria of C2.5.2.3.1.1, as applicable, will be use (see C9.3.2.1.2).*

TITLE: Secure Explosives Holding Area/Secure Non-explosives Holding Area Definitions and Criteria.

APPROVED TEXT:

New reference:

(xx) DoD 4500.9-R (Part II, Cargo), Defense Transportation Regulation

New acronyms:

AA&E Arms, Ammunition and Explosives
CCI Controlled Cryptographic Items

New Definitions for Glossary:

Secure Explosives Holding Area. An area designated for the temporary parking of commercial carriers' motor vehicles transporting DoD-owned Arms, Ammunition, and Explosives (AA&E). (See Part 205 of reference (xx)).

Secure Non-explosives Holding Area. An area designated for the temporary parking of commercial carriers' motor vehicles transporting Categorized DoD Arms, classified (SECRET or CONFIDENTIAL) materials, and Controlled Cryptographic Items (CCI). (See Part 205 of reference (xx)).

APPROVED CRITERIA:

C5.5.20. **Secure Holding Area.** An area designated for the temporary parking of commercial carriers' motor vehicles transporting DoD-owned Arms, Ammunition, and Explosives (AAE), classified (SECRET or CONFIDENTIAL) materials, and CCI. There are two types of secure holding areas and the criteria for each are provided below. (**Note:** Although the intent of such areas is to provide a secure storage location for commercial carriers while in-transit, or during emergencies or other circumstances that are beyond a carrier's control, this Standard imposes no requirement for installations to have such areas. The term Secure Holding Area is applicable to areas (CONUS, Hawaii, Alaska, and Puerto Rico) governed by reference (xx).)

C5.5.20.1. **Secure Explosives Holding Area.** Site as a holding yard per C5.5.9 above.

C5.5.20.2. **Secure Non-explosives Holding Area.** No siting required if located outside all QD arcs. If located within a QD arc, site per C5.5.17 above. The holding of HD 1.4S materials, without regard to QD, is permitted at this location.

TITLE: Site approval submissions to DDESB

APPROVED CHANGE:

C5.6.5. Site plans are not required to be submitted to the DDESB for the specific situations listed below. Components will specify siting and documentation requirements for these situations.

C5.6.5.1. Storage and associated handling of HD 1.4S (see C3.4.13. and C9.3.4.2).

C5.6.5.2. Interchange yards limited to those operations described in C5.5.6.

C5.6.5.3. Inspection stations where only the operations described in C5.5.10 are performed.

C5.6.5.4. Transportation mode change locations, which involve roll-on/roll-off operations where no lifting is involved, and for off-installation MILVAN/ISO container inter-/intramodal transfers (involving highway and rail modes only) where containers are not stored or other operations are performed (see C5.5.11).

C5.6.5.5. Parking of aircraft loaded with specific munitions (see C9.4.1.2), while in designated aircraft parking areas that meet airfield criteria, and associated handling of these munitions, provided the quantity of munitions involved in the operation is limited to a single aircraft load.

C5.6.5.6. The handling of HD 1.3 and HD 1.4 material (300 pounds NEW or less) necessary for ships' security and safety-at-sea (see C9.5.1).

C5.6.5.7. Storage of limited quantities of HD 1.2.2, HD 1.3, or HD 1.4, for reasons of operational necessity, as permitted by C9.3.2.10 and applicable notes of Tables C9.T10 and C9.T11.

C5.6.5.8. Certain contingency and combat training operations as described in C10.4.