

DLAD 4145.41
AR 700-143
AFJI 24-210
NAVSUPINST 4030.55B
MCO 4030.40B

DLSC-LDD

14 Jan 00

PACKAGING OF HAZARDOUS MATERIAL
[This publication has been revised significantly
and must be reviewed in its entirety.]

A. REFERENCES

1. DLAD 4145.41/AR 700-143/AFJI 24-210/NAVSUPINST 4030.55A/MCO 4030.40A, 23 Jul 96, superseded.
2. AFJMAN 24-204 /TM 38-250/NAVSUP PUB 505/MCO P4030.19/DLAM 4145.3, Preparing Hazardous Materials for Military Air Shipment.
3. Title 49, Code of Federal Regulations, Parts 100-199, Transportation.
4. ASTM D 4919, Specification for Testing of Hazardous Material Packagings.
5. International Civil Aviation Organization (ICAO) Technical Instructions.
6. International Maritime Dangerous Goods (IMDG) Code.
7. International Air Transport Association (IATA) Regulations.
8. MIL-STD-129, Standard Practice for Military Marking.
9. AR 700-15/NAVSUPINST 4030.28D/AFR 71-6/MCO 4030.33D/DLAR 4145.7, Packaging of Materiel.
10. DOD 4500.32R, Volume 1, MILSTAMP.
11. DLAD 4140.55/AR 735-11-2/SECNAVINST 4355.18/AFR 400-54, Reporting of Item and Packaging Discrepancies.

B. PURPOSE. This directive:

1. Supersedes reference A1.
2. Charters the DoD Hazardous Materials Packaging Working Group under the auspices of the Defense Packaging Policy Group.

3. Establishes uniform policy for the Military Services and the Defense Logistics Agency for packaging hazardous materials for safe, efficient, and legal storage, handling, and transportation, to include Certifications of Equivalency (COE), Department of Transportation (DOT) Exemptions, and Competent Authority Approvals (CAA).

C. APPLICABILITY AND SCOPE. This directive is applicable to the Military Services and the Defense Logistics Agency, referred to as DoD components in this directive.

D. DEFINITIONS. Refer to reference 6 for other terminology associated with hazardous material packaging. Refer to 49 CFR 171.8 for definitions and abbreviations provided by the DOT. The following terms and definitions are in addition to the DOT terms.

1. CERTIFICATION - the act of confirming that a completed package, marking inclusive, meets the requirements of UN Specification Packaging.

2. CERTIFIER - one who physically recognizes the correctness of a package construction or has access to test data for that package and who then verifies in writing that it will perform to the level required. A certifier may perform one or more of the following acts of certification:

a. performs a packaging operation in compliance with instructions prepared by a package designer.

b. determines that the packaging and/or container has been manufactured, assembled, and marked in accordance with requirements.

3. CLOSURES - devices which close an opening in a receptacle.

4. EXCEPTED QUANTITIES - excepted quantity, when specified in a section of 49 CFR for a particular material, is small amount of certain hazardous materials that are not subject to the other requirements of 49 CFR 173, when they meet the criteria of 49 CFR 173.4.

5. IN-HOUSE TESTING - Hazardous materials packaging testing conducted at a DoD packaging test facility.

6. INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG) CODE - regulatory document which implements the requirements of the IMO.

7. PACKAGES - the complete product of the packing operation, consisting of the receptacle to perform its containment function.

8. PACKAGING (DOT DEFINITION) - a receptacle and any other components or materials necessary for the receptacle to perform its containment function in conformance with the minimum packing requirements for this subchapter {49 CFR Subchapter C}. For radioactive materials packaging, see paragraph 173.403 of this subchapter {49 CFR Subchapter C}. Commonly known as "shipping container."

9. SELF-CERTIFIER - organization or person who acts as a certifier in his own packaging regard, approved by the Competent Authority.

10. TRANSITIONAL PACKAGING - packages recognized as permissible prior to an effective date of a requirement which may continue to be

legally used until an established expiration date.

11. UN COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS - panel responsible for the development of recommendations dealing with the multi-modal transport of dangerous goods.

E. POLICY

1. General. All DoD-managed hazardous materials will be provided minimum required packaging protection at the lowest overall cost without compromising established DoD safety standards. Packagings shall provide adequate continuous protection to the packaged hazardous material and shall prevent any release of the hazardous material into the environment. When hazardous materials are shipped, the packaging and marking shall conform to the applicable modal regulations. Modal regulations include the International Civil Aviation Organization (ICAO) Technical Instructions (reference 5), the International Air Transport Association (IATA) Regulations (reference 7), the International Maritime Dangerous Goods (IMDG) Code/International Maritime Organization (IMO) (reference 6), Title 49, Code of Federal Regulations (49 CFR) (reference 3) and AFJMAN 24-204/TM 38-250/NAVSUP PUB 505/MCO P4030.19/DLAI 4145.3, Preparing Hazardous Materials for Military Air Shipment (reference 2). Hazardous materials packaging which has been tested and passed the United Nations (UN) performance specification requirements will be applied to hazardous materials for domestic shipments consistent with reference 3, Parts 100-199, except for Class 2 and 7. Original single containers and/or single packagings of hazardous material where a portion of the contents have been consumed must be repackaged prior to induction into the commercial and/or Defense transportation systems.

2. Procurement. DoD components will specify hazardous materials packaging requirements based upon UN performance specifications in procurement documents for hazardous materials unless excepted under paragraph 11E of this section, or as directed by the DOD component Headquarters. UN performance packaging will be specified for all direct vendor deliveries (DVDs).

3. Multi-Use Hazardous Materials Packaging. Containers designed for multiple inner components will be tested and certified to their maximum capacity as stated in the applicable regulation. This testing will be sufficient for the containers when loaded to less than their maximum capacity. Any void space must be completely filled with cushioning material.

4. Marking. Marking of hazardous materials packagings will be in accordance with MIL-STD-129 (reference 8), and the applicable modal regulation(s).

a. Those packagings that successfully pass DoD hazardous materials packaging testing will be marked with the logo "USA/DOD." Activity-specific logos in Appendix A may be used by DoD test activities if directed by the owner of the code.

b. DoD components are authorized to mark the applicable DoD UN hazardous materials packaging logo on Federal or Military Specification containers that pass DoD hazardous materials packaging testing. DoD-tested vendor packs may be marked by DoD personnel with the applicable DoD UN hazardous materials packaging logo.

c. DoD logos may be provided to vendors, at the discretion of the procuring activity, only if the containers are Government Furnished Equipment, or if the containers are strictly controlled by

configuration control drawings, first article tests are performed, and inspection procedures are followed by Government quality assurance personnel that validate compliance.

5. Foreign Hazardous Materials Packagings. Foreign manufacturers exporting to the USA and utilizing packages certified to UN specifications by a nation other than the USA may be accepted into the military transportation system when the package markings are in English.

6. Testing Requirements for Hazardous Materials Packagings. Testing of hazardous materials packagings will be in accordance with reference 3 variation and instructions authorized by the Competent Authority, and any differences designated by reference 5, 6 or 7 as applicable. Use of ASTM D 4919, Specification for Testing of Hazardous Materials Packagings (reference 4), is encouraged to ensure that tests can be repeated. Except for Class 1 material, hazardous materials packaging testing will be conducted according to mode of transport, physical state of material, packing groups, weight, and container configuration rather than National Stock Numbers. Any other hazardous materials that are within the test parameters may be shipped in that certified container. Class 1 material shall be packed in UN specification packaging as specified by the managing activity.

a. DoD components shall ensure that hazardous items are in containers that have successfully passed the required test standards, unless that packaging is exempted under paragraph 11E of this directive. This may be accomplished by procuring the hazardous item(s) in certified containers, by performing in-house testing through use of a DoD test facility, or by use of a DOT-approved third-party test contractor. DoD components may require vendors to submit test reports and configuration control drawings when procuring hazardous materials in packagings conforming to UN specifications. Vendors may be asked to submit test reports by Data Item Description DI-PACK-81059 (Hazardous Materials Performance Oriented Packaging (POP) Test Report Format) or other applicable contractual packaging requirements. The decision to procure test data from a vendor is at the discretion of the contracting office. An example of when procurement of vendor test data may be appropriate is when the packaging data for the item is also being procured.

b. Hazardous materials packaging testing shall include all tests required by reference 3 or applicable Competent Authority decisions for the affected item's hazard class. DoD hazardous materials packaging testing activities are exempt from the Lead Service assignments outlined in reference 9. As a minimum, the following guidance applies to DoD component hazardous materials packaging testing.

(1) Prior to initiating a request for hazardous materials packaging testing, DoD components will research the DoD PC-POP program to determine if a tested package/configuration already exists.

(2) DoD components shall identify related families of hazardous items and use a single test report to package and certify a related family to the maximum extent possible in accordance with the instructions published and authorized by the Competent Authority.

(3) In order to qualify for air shipment, inner receptacles of a combination packaging containing liquids must be capable of withstanding without leakage an internal pressure differential standard and all other requirements of reference 5, 7 or 8, as applicable. Inner receptacles that do not meet this requirement must be packed in a supplementary packaging that meets the pressure differential requirement, as well as all other requirements of the applicable

modal regulation. Mark the outer pack or overpack "Air Eligible" in accordance with reference 8.

(4) Hazardous materials packaging tests will be conducted on affected hazardous materials packaging, regardless of tests that may be required by the Federal or Military container specification. If the specification requires the same tests as those required for UN testing specifications, the tests need not be duplicated if documented test results are available. Hazardous materials packaging tests will be conducted to the requirements of the most stringent mode of transportation anticipated.

(5) Where practicable, hazardous materials packaging testing will be accomplished on inner packagings (unit containers) of combination packagings.

7. DoD Testing/Retesting. The following applies to hazardous materials packaging testing/retesting.

a. The United States DOT is the United States Competent Authority and considers all of DoD as one entity (container manufacturer). Therefore, once a hazardous materials packaging configuration has been tested by one DoD activity, other DoD shippers need not test the same package configuration. For repairable hazardous items, the cognizant packaging design activity is responsible for the development of Special Packaging Instructions (SPI) or configuration control drawings and the required hazardous materials packaging testing of the reusable packagings.

b. Periodic retesting will be accomplished on packaging configurations in production by DoD activities as required by reference 3 or the Competent Authority. The Military Service/Agency having item management responsibility for the hazard item is responsible for ensuring the periodic retesting is performed as required.

8. Drop Tests. The multiple container drop test requirements may be satisfied by using a single container dropped once for each orientation specified in reference 3. There is no need to use additional new containers to complete the required drop test, as long as the single container configuration passes all the drop tests of the series. However, if the container configuration fails one of the drop tests, a new container must be used to complete the testing.

9. Providing Test Reports to Vendors. DoD hazardous materials packaging test reports will not be provided to vendors.

10. Reuse of Fast Packs. The reuse of tested fiberboard containers designed for reuse, PPP-B-1672, Box, Shipping, Reusable with Cushioning, is authorized contingent upon the requirements of Paragraph 173.28 of reference 3. Reuse is authorized for domestic, international air, and military air. For international surface shipments, reusable fiberboard containers may not be used unless they are shipped inside intermodal transport containers.

11. Exceptions to Hazardous Materials Packaging Testing. Exceptions to the hazardous materials packaging testing requirements are as follows:

a. The following hazardous materials do not require UN performance specification packaging provided the provisions of the applicable modal regulations are met:

- (1) Carbon Dioxide, Solid (Dry Ice).
- (2) Magnetized material with a field strength of less than

0.00525 gauss at 4.527 meters (15 feet).

- (3) Life Support Equipment.
- (4) Class 2 Compressed Gas Cylinders.
- (5) Class 7 Radioactive Material.
- (6) A packaging with a capacity over 450L (119 gallons) as a receptacle for liquids or items weighing over 400 kg (882 pounds) and a capacity greater than 450L as a receptacle for solids.
- (7) Limited quantities.
- (8) Excepted quantities.
- (9) Consumer commodities.

b. Aerosols (Class 2 for domestic air, and international vessel) will be packed and marked according to modal regulations. Air shipments must be packed in a packaging configuration meeting Packing Group II requirements.

c. The following hazardous materials are exempted from UN performance specification packaging based on international grandfathering and domestic transitional provisions:

(1) Government-owned hazardous materials packaged prior to 1 January 1990 are exempt from UN performance specification hazardous materials packaging requirements for purposes of international vessel and military air transportation. This is commonly referred to as the grandfather clause. The shipping papers for these shipments shall be marked "Government-owned goods packaged prior to 1 January 1990." This grandfather clause does not apply to commercial air transportation or domestic shipments.

(2) Reference 3, Part 171.14(a)(2) addresses the transitional provisions applicable to domestic shipments of packages filled prior to 1 October 1991 until 1 October 2001 providing the provisions of this Part are met.

(3) Reference 3, Part 171.14(b) addresses the transitional provisions applicable to domestic shipments of packages filled prior to 1 October 1996 until 1 October 2001 providing the provisions of this Part are met.

(4) Reference 3, Part 173.62(e) grandfathers Class 1 hazardous materials. Class 1 (explosive) materials owned by the Department of Defense, packaged prior to January 1, 1990 in accordance with the requirements of this subchapter in effect at that time, are excepted from the requirements of reference 3, Part 178 provided the packagings have maintained their integrity and the goods are declared as government-owned goods packaged prior to January 1, 1990.

d. Any hazardous materials exempt from the hazardous materials packaging test requirements as identified in paragraph 11a above must be shipped as specified in the applicable modal regulations. See Paragraph e below for use of CAAs, Paragraph f below for use of COEs, Paragraph g below for use of limited or excepted quantity packagings, and Paragraph h below for use of DOT Exemptions.

e. Unlike some previous requirements for hazardous materials packages, DoD activities may not waive hazardous materials packaging requirements. Only the DOT Competent Authority can grant permission to use a design-type package without testing it. This procedure is accomplished through a CAA. Hazard classes covered by the performance standards, but exceeding the requirements for hazardous materials packaging testing, must be shipped internationally using a CAA. See Appendix E for the information required to request a CAA.

(1) A CAA is a written approval granted by the DOT and is similar to a DOT Exemption. CAAs are required for international shipments of certain items, and must be attached to shipping papers. There are two types of CAAs, and different offices within DOT issue them. One type of CAA is issued for the hazard classification of explosive/munitions items. The other type of CAA is issued for the packaging. Only the packaging CAA may be used to certify an item for shipment. The Military Service/Agency who manages the item should obtain CAAs.

The shipping activity that requires a packaging CAA must forward the CAA request containing the information outlined in Appendix E to their Military Service/Agency focal point (see Appendix F). A copy of the CAA must accompany each shipment.

(2) Once a CAA is issued for a specific item(s) for international shipments, that CAA will also be used for domestic shipments. If the item(s) is also covered by a COE, the COE will be canceled and the CAA will be used.

f. The following information applies to COEs.

(1) COEs may continue to be used for domestic shipments of hazardous materials. However, whenever possible, these items should be converted to a CAA and the COE canceled. A copy of the COE must accompany the shipment.

(2) A COE is issued by the responsible Military Command. It is an approval that the proposed packaging for shipment of hazardous materials either equals or exceeds the requirements of reference 3, Parts 100-180. A request for a COE must include a Hazardous Materials Data Package, and that request must be forwarded to the responsible Military Command/Agency. Information required in a Hazardous Materials Data Package is in Appendix B. Elements required in a COE are identified in Appendix C. Examples of data item descriptions used to gather information for the Hazardous Materials Data Package are in Appendix D. When a reviewing activity approves a COE application, a Certification Control Number (CCN) will be issued to identify the COE using the following prefixes:

DLA - DL
Army - AY
Air Force - AF
Navy - NA
Marine Corps - MC

Combine these prefixes with the current calendar year to form the CCN; for example, DL-98-XXX. Mark the CCN on shipping papers, transportation control and movement documents (TCMD), and exterior containers in the same way as required by DOT regulations for DOT Exemption (special permit) numbers. The only exception to this marking requirement is the packaging of conventional ammunition (except the packaging for missiles and rocket motors, which have the CCN clearly marked on the exterior containers). Conventional ammunition packaging may be marked with the packaging drawing number in place of the CCN. Shipments of these packagings must have both the packaging drawing number and the CCN on the documents and TCMDs according to DOD 4500.32R, Volume 1, MILSTAMP (reference 10).

g. Packagings used to ship hazardous materials classified as either limited or excepted quantity must be capable of passing the performance tests peculiar to the classifications specified in the modal regulation(s) used to prepare the shipment.

h. Shipments packaged in accordance with a DOT Exemption must meet all requirements of the exemption and applicable requirements of reference 3.

i. COEs and DOT Exemptions may be used for international shipment in limited situations for hazardous materials that are exempted from UN performance specification packaging requirements. An example of such use would be compressed gas cylinders. Consult the applicable modal regulation and carrier requirements for acceptance of these documents for international shipment.

12. Opening Vendor Packs. DoD components may open, inspect and subsequently reshipe vendor certified packages without retesting only when the container is resealed in an equivalent or stronger manner than the original vendor method and the configuration of the contained hazardous items remains unchanged.

13. Noncompliant Hazardous Materials Packaging.

a. New Procurement. When DoD components determine that a vendor's certified hazardous materials packaging does not comply with contractual hazardous materials packaging requirements, suspend the receipt in materiel condition code "L." Follow the procedures in reference 11, and promptly notify the applicable procuring activity. The procuring activity will coordinate a review of the discrepancy report and provide written disposition instructions to the activity holding the discrepant material.

b. Station Returns and Receipts from Other DoD Activities. When DoD components determine that another DoD Activity's certified hazardous materials packaging does not comply with reference 3 and/or modal requirements, suspend the receipt in materiel condition code (CC) J or K, (for USAF assets, use CC: J only). Follow the procedures in reference 11, and promptly notify the applicable managing activity. The managing activity will coordinate a review of the discrepancy report and provide written disposition instructions to the activity holding the discrepant material.

F. RESPONSIBILITIES

1. The Office of the Deputy Under Secretary of Defense, Logistics, ODUSD(L), will act as the Program Manager for DoD Hazardous Materials Packaging.

2. The Commanders or Directors of DoD Components will:

a. Comply with the policies, objectives, and guidelines in this directive.

b. Designate individual focal points to coordinate with the DLA Hazardous Materials Central Management Office to:

(1) Coordinate purchase requests for United Nations (UN) testing that is performed by a DOT-approved third party test facility.

(2) Coordinate hazardous materials packaging testing to avoid redundant testing and to maintain DoD component serialization of tests.

c. Ensure that copies of all hazardous materials packaging test reports are forwarded to the DLA Hazardous Materials Central Management Office as outlined in paragraph F3b.

d. Develop internal operating procedures to handle organizational needs concerning proper hazardous materials packaging.

e. Participate in the DoD Hazardous Materials Packaging Working Group as defined in Appendix G.

3. The Defense Logistics Agency, Defense Logistics Support Command (DLSC-LDD) will:

a. Publish and keep this directive current.

b. Manage and maintain the DoD PC-POP Data System, including pertinent information related to hazardous materials packaging testing. Activities will ensure that copies of all test reports, whether developed in-house or on behalf of the DoD by a DOT-approved third party test facility, are forwarded to the Defense Distribution Center located at:

DEFENSE DISTRIBUTION CENTER
ATTN: DDC-TO
2001 MISSION DRIVE
NEW CUMBERLAND, PA 17070-5000

c. Provide, through DDC-TO, DLA hazardous materials packaging training on the use of the PC-POP system to Military Services and DLA activities if requested. Military Services' training will involve a cost to the requesting activity for travel and per diem for the DLA instructors.

G. EFFECTIVE DATE. This publication is effective immediately.

H. INFORMATION REQUIREMENTS. (Reserved for future use.)

BY ORDER OF THE DIRECTOR, DEFENSE LOGISTICS AGENCY, AND THE SECRETARIES OF THE ARMY, THE AIR FORCE, THE NAVY, AND THE COMMANDANT OF THE MARINE CORPS

R.B. FREDERICK
Acting, Headquarters Complex Commandant

Louis Caldera
Secretary of the Army

JOHN W. HANDY, Lt General, USAF
DCS/Installations & Logistics

Keith W. Lippert, Rear Admiral, SC
United States Navy, Commander
Naval Supply Systems Command

G.B. HIGGINBOTHAM
Major General, U.S. Marine Corps
Deputy Chief of Staff for
Installations and Logistics

7 Enclosures

1. Performance Oriented Packaging
Identification Codes
2. Hazardous Materials Data Package
3. Certification of Equivalency (COE)
4. Data Item Descriptions
5. Application for Competent Authority
Approval
6. Procedures for Submitting Requests
for Competent Authority Approval
7. DoD Hazardous Material Packaging
Working Group

COORDINATION: CAHS, DALOSMP, NAVSUP,
AF/ILT, CMC LPP-2, DLSC-LDT, LOGSAPSCC,
NAVICP, AFMC LSO-LOP

PERFORMANCE ORIENTED PACKAGING IDENTIFICATION CODES

NOTE: These codes are for the identification of the activities listed and are not to be applied to any packaging unless directed by the specific activity represented by the code.

<u>Packaging Design Activity</u>	<u>Code</u>
Defense Logistics Agency,..... Ft. Belvoir, VA	USA/DOD/DLA
Defense Supply Center Columbus,..... Columbus, OH (CAGE 16236 & 14933)	USA/DOD/DLC
Defense Energy Support Center,..... Ft. Belvoir, VA (CAGE 52838)	USA/DOD/DLF
Defense Supply Center Richmond,..... Richmond, VA (CAGE 13873)	USA/DOD/DLG
Defense Industrial Supply Center,..... Philadelphia, PA (CAGE 14153)	USA/DOD/DLI
Army Tank-Automotive and Armament Command (TACOM)..... Armament, Research, Development and Engineering Center (ARDEC)(AMSTA-AR-WEP) Picatinny Arsenal, NJ (CAGE 19200)	USA/DOD/AYD
Army Tank-Automotive and Armament Command (TACOM)..... Armament, Research, Development and Engineering Center (ARDEC) (AMSTA-AR-ESK) Rock Island, IL (CAGE 59678)	USA/DOD/AYA
Army Foreign Systems Division (FSD)..... Aberdeen Proving Ground, MD	USA/DOD/FAD
Army Defense Ammunition Center and School (USADACS)..... Savanna, IL (CAGE 28620)	USA/DOD/DEV
Army Communications-Electronics Command (CECOM)..... Fort Monmouth, NJ (CAGE 80063)	USA/DOD/AYC
Army Medical Materiel Agency..... Frederick, MD (CAGE 66732)	USA/DOD/AYS
Soldier Systems Command..... Natick, MA	USA/DOD/AYN
Army Aviation and Missile Command (AMCOM)..... Huntsville, AL (CAGE 18876)	USA/DOD/AYM
Munitions Systems Division,..... Eglin AFB, FL (CAGE 32231)	USA/DOD/AF18

Rome Air Development Center,.....USA/DOD/AF17
Griffiss AFB, NY (CAGE 07877)

Space Systems Division,.....USA/DOD/AF19
Los Angeles AFB, CA (CAGE 07868)

Ogden Air Logistics Center.....USA/DOD/AF70
Hill AFB, UT (CAGE 98747)

San Antonio Air Logistics Center.....USA/DOD/AF68
Kelly AFB, TX (CAGE 98750)

Oklahoma City Air Logistics Center.....USA/DOD/AF71
Tinker AFB, OK (CAGE 98748)

Sacramento Air Logistics Center.....USA/DOD/AF80
McClellan AFB, CA (CAGE 98749)

Warner Robins Air Logistics Center.....USA/DOD/AF84
Robins AFB, GA (CAGE 98752)

AF Packaging Test and Evaluation Facility.....USA/DOD/AF69
Wright-Patterson, AFB, OH (CAGE 0B275)

Marine Corps, Washington, DC (CAGE 80372).....USA/DOD/MCH

Marine Corps Research, Development and Acquisition.....USA/DOD/MCQ
Command, Quantico, VA (CAGE 5N998)

Naval Air Systems Command.....USA/DOD/NAA
Washington, DC (CAGE 30003)

Space and Naval Warfare Systems Command.....USA/DOD/NAB
Washington, DC

Naval Facilities Engineering Command.....USA/DOD/NAC
Washington, DC (CAGE 80091)

Naval Sea Systems Command.....USA/DOD/NAD
Washington, DC (CAGE 53711)

Navy Inventory Control Point (RIC N32).....USA/DOD/NAE
Philadelphia, PA (CAGE 80132)

Navy Inventory Control Point (RIC N35).....USA/DOD/NAF
Mechanicsburg, PA (CAGE 67991)

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HAZARDOUS MATERIALS DATA PACKAGE

NOTE: When the information requested does not apply, write N/A in the space.

1. Requester or Petitioner:
 - a. Name.
 - b. Company or activity and location.
 - c. Business telephone number.
2. Proposed Dates of Initial Shipment.
3. Title 49 CFR Provisions:
 - a. Identify all regulatory provisions involved.
 - b. Justify request for a COE and specify why DoD and public interest will be served by granting a COE.
 - c. Identify why standard provisions of Title 49 CFR are not appropriate.
 - d. Identify how the proposed deviation would provide adequate and reasonable degree of safety.
4. Item Description:
 - a. Proper Shipping Name.
 - b. Chemical Name.
 - c. Common Name.
 - d. Hazard Classification.
 - e. Form (radioactive materials only).
 - f. Quantity.
 - g. Properties and characteristics.
 - h. Composition and percentage (by volume and weight) of each chemical, if a solution or mixture.
 - i. Igniter ground procedures.
 - j. Explosive charges.
 - k. Whether or not rocket motor is in a propulsive state.
5. Packaging Data:
 - a. How the item is packed (drawing showing item/package interface) showing any containers, associated fill and relief valves, suspension system, cushioning media, shock indicators, explosive charges, cutters, dimensions, materials, etc. Drawings must contain enough information to permit engineering comparison between proposed item and the specification requirements or to permit evaluation of the proposed container or shipping configuration.
 - b. Number of items per inner package/quantity per unit pack.
 - c. Number of inner packages per exterior pack or container.
 - d. DOT specification number for containers (Class 2 or 7).
 - e. Type and size.
 - f. Marking and labeling.
 - g. Drawings showing items mounted in containers.
 - h. Container data that reflect relevant shipping or accident experience.
 - i. Center of gravity.
 - j. Packaging procedures.
 - k. Test results. State regulation specifying the tests required and procedures to conduct these tests.
 - l. Previous analogous certifications or approvals.
 - m. Appropriate data regarding DOT specification containers (Class 2 or 7) or modified containers used.
 - n. Calculations or, preferably, test results of bursting strength and shatter characteristics of pressure vessels.
 - o. Provisions for electrical grounding.
6. Transportation Description: If the item, as packaged, is a transportability

problem item, data required by a transportability report will form a part of this report. Where data are not generated by a transportability report, the following minimal action is required:

- a. Identify modes of transportation.
- b. Provide Drawings, sketches, or schematics showing different configurations:
 - (1) Blocking and bracing.
 - (2) Tiedown or securing.
 - (3) Location of center of gravity.
 - (4) Consolidation on pallets or in exterior shipping containers.
- c. Identify the most probable hazards involved with each handling operation, each mode, or each different type of carrier equipment. Show the need for:
 - (1) Briefing crews.
 - (2) Escorts (technical, security police, etc.).
 - (3) Personnel protective equipment.
 - (4) Protective environmental equipment/personnel.
 - (5) Alerting state, military, or government offices of incident or accident.
 - (6) Exclusive use of carrier equipment.
 - (7) Specialized materials, equipment, or procedures (nonsparking materials, explosive-proof motors, etc.).
- d. State what specific action is planned to satisfy each requirement identified in paragraph 6c.
- e. Provide reports of tests conducted to verify movement and handling safety.
- f. State what deviations or modifications or Title 49 CFR requirements are needed.

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CERTIFICATION OF EQUIVALENCY (COE)

1. The COE has the following items:
 - a. CCN.
 - b. Authority.
 - c. Issued by, with signature.
 - d. Basis for certification.
 - e. Packaging Description.
2. Recommended Items:
 - a. DOT hazard classification (Proper Shipping Name, Label, Marking).
 - b. DoD hazard classification (Security Classification Guide, Division, United Nations Identification Number).
 - c. Mode(s) of transportation authorized.
 - d. Expiration date.
3. Requirements of this appendix are considered minimum essential information to substantiate issuing a COE. When any of the information changes or is revised, the COE must be amended at the time such information becomes available.

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DATA ITEM DESCRIPTIONS

Examples of data item descriptions that may be used to acquire information for substantiating data required in the hazardous materials data package are:

DI-L-3311 Explosive Hazard Classification Data
DI-PACK-80880 Transportability Report
DI-L-1903 Part, Component or Subsystem Test Plan
DI-PACK-81059 Hazardous Material Performance Oriented Packaging
(POP) Test Report Format

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APPLICATION FOR COMPETENT AUTHORITY APPROVAL

Supportive information must be submitted with the CAA request for proper DOT review. Any request that does not contain all of the necessary information will be returned to the requestor for resubmission. Each request will include a cover sheet, which states why the CAA is being requested and identifies the mode(s) of transportation affected. The information required below must be included as attachments. NOTE: When the information requested does not apply, write N/A in the space.

1. Attachment 1 - Information to Support Competent Authority Approval:
 - a. Product Nomenclature, National Stock Number(s) and/or Part Number(s), and EX-number (if assigned).
 - b. Hazard Class/Division. For Class 1 material, include the Storage Compatibility Group.
 - c. UN Identification Number.
 - d. UN Proper Shipping Name (ICAO and IMDG).
 - e. Item Description and Drawing Number. Include the item net and gross weight. For Class 1 material, also include the net explosive weight.
 - f. Packaging Description and Instructions/Drawing Numbers. If a COE and/or DOT-E has been issued, include the number and description.
 - g. Difference between DOT and DOD containers.
 - h. Reports of Test(s) Conducted. List and provide a short description of the tests conducted on the container (i.e. MIL-STD-648, FED-STD-101C, MIL-R-8583A, Hazardous Materials Packaging Tests, Transportation and Handling Vibration Test, etc.).
2. Attachment 2 - Actual item drawings.
3. Attachment 3 - Actual item test reports.
4. Attachment 4 - Actual container drawings.
5. Attachment 5 - Actual container test reports.
6. Attachment 6 - Certification of Equivalency (if applicable).
7. Attachment 7 - Hazard Classification (if applicable).

Encl 6

PROCEDURES FOR SUBMITTING REQUESTS FOR COMPETENT AUTHORITY APPROVAL

1. When a CAA is required, the managing activity for the affected item will prepare the request. For a hazard classification CAA, contact the respective Military Service identified below:

a. Air Force:

HQ Air Force Safety Agency
Attn: SEWV
9700 Avenue G, Suite 264
Kirtland AFB, NM 87117-5670
DSN: 246-5658

b. Army:

U.S. Army Technical Center for Explosive Safety
Attn: SMCAC-ES
Savanna, IL 61074-9639
DSN: 585-8758

c. Navy:

Naval Ordnance Station
Attn: Code 0412
Indian Head, MD 20640-5000
DSN: 364-4484

d. HQ MTMC:

Military Traffic Management Command
Attn: MTOP-OPS
5611 Columbia Pike
Falls Church, VA 22041-5050
DSN: 761-6951

2. For a packaging CAA, the preparing activity will send the request to their service focal point identified below. The service focal point will review the request for completeness and accuracy before forwarding it through MTMC to DOT. Any questions on requesting or obtaining a copy of an existing CAA shall be addressed to the respective service focal point.

a. Defense Logistics Agency:

Until September 30, 1998:

DEPOT OPERATIONS SUPPORT OFFICE
ATTN: DOSO-DH
8000 JEFFERSON DAVIS HIGHWAY
RICHMOND, VA 23297-5900
DSN: 695-5445/4788

Effective October 1, 1998:

DEFENSE DISTRIBUTION CENTER
ATTN: DDC-TO
2001 MISSION DRIVE
NEW CUMBERLAND, PA 17070-5000
DSN: 977-8602

b. Air Force:

AFMC LSO/LOPP
5215 Thurlow Street
Wright-Patterson AFB, OH 45433-5540
DSN: 787-4503/1984

c. Army:

CHIEF
U. S. Army Logistics Support Activity
Packaging, Storage, and Containerization Center
Attn: AMXLS-TP-T
11 Hap Arnold Boulevard
Tobyhanna, PA 18466-5072
DSN: 795-7070

d. Navy/Marine Corps

Naval Packaging, Handling, and Storage Center
Attn: Code 50222
Naval Weapons Station Earle
Colts Neck, NJ 07722-5000
DSN: 449-2821

3. DoD agencies listed in the Department of Defense Explosives Classification Procedures (TB 700-2/T.O. 11A-1-47/NAVORDINST 8020.3/DLAI 8220.1) are authorized to assign Interim Hazard Classifications (IHC) to allow the transportation of Class 1 explosive materials that do not contain a final hazard classification, until that final classification is established. The DOT will not issue a packaging CAA through the process explained above without a final hazard classification. If a packaging CAA is required, the requester must prepare the package identified in paragraph 2, above. The request must include a copy of the IHC and supportive data used to determine that classification. The requester must validate the need for an IHC and indicate why the final hazard classification has not been established. Requests for a packaging CAA for these Class 1 items must be directed to the service focal points identified in paragraph 1, above. The focal points will work through HQ MTMC to the DoD Explosive Safety Board to obtain a CAA from DOT.

Encl 7
DLAD 4145.41

1. Objective. The DoD Hazardous Material Packaging Working Group is a subcommittee of the Defense Packaging Policy Group (DPPG) as authorized by the DPPG Charter. The Working Group is a decision making team responsible for developing, recommending, and implementing changes to ensure the most efficient procedures, policy, and standardization of hazardous material packaging throughout the Military Services and Defense Agencies.

2. Functions. The DoD Hazardous Material Packaging Working Group will develop and coordinate hazardous material packaging policy. The Working Group members will provide and exchange information to modify/establish policies and procedures for the most effective use of DoD resources. Recommendations will be forwarded to the DPPG or applicable Service/DLA headquarters as required. Areas of primary interest include:

a. Hazardous Material Packaging. Modify or establish hazardous material packaging policies and procedures to meet military operational requirements while ensuring compliance with applicable modal regulatory directives. Ensure proper packaging and preparation methods for the safe and efficient storage, handling, and transport of hazardous materials.

b. Testing. Establish testing procedures to ensure United Nations (UN) specification performance requirements are met for Service/DLA managed items. Coordinate testing to prevent redundancy and provide the most efficient use of testing resources. Support and advise the DoD PC-POP program as it pertains to each Service's requirements.

c. Compliance. Review and recommend changes to regulatory requirements. Develop and coordinate recommendations to ensure compliance with DoD and commercial modal regulations.

d. Training. Evaluate hazardous material packaging training issues.

e. Information. Develop effective means to distribute hazardous material packaging requirements to operating personnel.

f. Quality. Strive for continuous improvement through implementation of new packaging materials, processes, and procedures.

3. Procedures. The DoD Hazardous Material Packaging Working Group will work together to ensure safe packaging of hazardous materials throughout the logistics cycle.

a. Organization. The Working Group will consist of primary and advisory members. Primary members will include packaging policy representatives from each Service/DLA. Advisory members will include SMPT, GSA, and representatives of activities performing hazardous materials packaging testing. Primary members may invite guests as required.

b. Meeting. The Working Group will meet annually during the second quarter (FY) or as required by determination of the members. The Chair, in coordination with the primary members, will designate the dates and location of the meeting.

c. Agenda. Members will provide proposed agenda topics, with talking papers, to the Chair by the designated time established by the meeting announcement. The Chair will develop and distribute a final agenda with supporting talking papers to members prior to the meeting.

d. Travel Funds. Participating organizations will provide travel funds for members to attend Working Group meetings.