

U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

JUL '7 2011

Mr. Joseph Dugan Military Surface Deployment and Distribution Command Department of the Army Scott Air Force Base, IL 62225

Ref. No. 11-0053

Dear Mr. Dugan:

This responds to Mr. Maham's March 3, 2011 letter regarding placarding requirements for a freight container system under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) and under the International Maritime Dangerous Goods (IMDG) Code. The letter describes a freight container system ("container") consisting of three or four individual units assembled together for ease of handling during intermodal transportation commonly referred to as tricons or quadcons, respectively. The assembled containers (i.e., the tricon or quadcon) form approved containers in accordance with the International Convention on Safe Containers (CSC) as referenced in the definition of a freight container in the International Maritime Dangerous Goods (IMDG) Code and the United States Coast Guard (USCG) regulations (see 49 CFR Part 450). Specifically, the letter includes a request for clarification of the placarding requirement for a tricon or quadcon when the individual units contain a mix of hazardous material classes or when the end units contain a mix of hazardous material classes and an interior unit(s) contains no hazardous material.

The general placarding requirements under the HMR require the individual units containing hazardous material to display placards on each side and each end (see \S 172.504(a)). In lieu of placarding on all four sides, the HMR authorizes freight containers less than 640 ft³ to display one placard (or label) on the freight container (see \S 172.512(b)). As described in Mr. Maham's letter, each individual unit of a tricon or quadcon has a capacity less than 640 ft³, thus, under the HMR, each individual unit containing hazardous material must display a placard (or label) representative of the hazardous material it contains. With regard to IMDG placarding requirements, it is our opinion that the CSC-approved containers (i.e., the assembled tricon or quadcon) described in your letter are essentially compartmented containers, and thus, may be placarded in the same manner as a multiple-compartment tank containing more than one hazardous material. Such a tank must display placards along each side at the positions of the relevant compartments containing a hazardous material (see 5.3.1.1.4.1.3 of the IMDG Code).

1200 New Jersey Avenue SE Washington, DC 20590 Accordingly, a tricon or quadcon displaying placard(s) on each side of an individual unit containing hazardous material satisfies the placarding requirements of both the HMR and the IMDG Code.

I hope this information is helpful. If you have further questions, please contact this office.

Sincerely,

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Ben Supko Chief, Standards Development Branch Standards and Rulemaking Division



DEPARTMENT OF THE ARMY MILITARY SURFACE DEPLOYMENT AND DISTRIBUTION COMMAND 1 SOLDIER WAY SCOTT AFB, IL 62225-5006

Der Kinderen §172.504(a) ™ Placarding 11-0053

Directorate of Safety (AMSSD-SA)

March 3, 2011

U.S. Department of Transportation Pipeline Hazardous Materials Safety Administration Office of Hazardous Materials Safety Office of Hazardous Materials Special Permits and Approvals 1200 New Jersey Avenue, SE East Building, 2nd Floor Washington, DC 20590

ATTN: Office of Hazardous Materials Standards (PHH-10)

Dear Sir:

In accordance with the provisions of Title 49, Code of Federal Regulations (CFR), Part 105, Section 105.20, the Department of Defense (DOD) hereby requests an Interpretation of the Hazardous Materials Regulations as outlined below. DOD petitions for a clarification of 49 CFR 172.504(a), General Placarding Requirements, in particular "Assembled Tricon/Quadcon containers shipped as a single unit)". The following file number is assigned:

File Number: 25-11 (0303)

Re: Request Interpretation of 49 CFR 172.504 (a), General Placarding Requirements Proponent: Department of Defense (DoD)

DoD shippers are encountering difficulty in the preparation and transportation of approved Intermodal Packagings; the problem is current domestic and international regulatory standards are in conflict regarding the definition of a container. DoD chooses to use alternate container systems known as a Tricon, which are comprised of three individually constructed units possessing intermodal fittings that can be assembled into a single 20'container unit; another similar system is in use known as a Quadcon, which is comprised of four individually constructed units when assembled into a signle 20' container unit fitting the same description as a Tricon. Please see attachments 1 and 2 respectively for specification descriptions for each.

An individual Tricon unit is approx. 96"H x 96"W x 72.5"L with a cubic capacity of 356 cu ft. and an area of < 52 sq ft (attachment 3); further an individual Quadcon unit is approx 82" H x 57.375" W x 96"L. with a cubic capacity of 258 cu ft. (attachment 4). 49 CFR 171.8 defines a Freight Container as a reusable unit of > 64 cu. ft. Domestically, the 49 CFR 171.8 definition conflicts with the standard proscribed in 49 CFR 450.3 which applies to containers used in international transport. 49 CFR 450.3 defines a container as meeting the requirement for size being at least 75 sq. ft. Internationally the International Maritime Dangerous Goods (IMDG) Code implements the Convention for Safe Containers (CSC) describing a container as of a size of at least 75 sq. ft.

Therefore an individual Tricon/Quadcon unit may be considered a container if offered only for domestic transport. Consequently, an individual Tricon/Quadcon unit <u>would not</u> be considered a container or CSC approved to be offered for international transport by vessel.

49 CFR 172.504 proscribes each packaging containing any hazmat must be placarded on each side and each end. IMDG 5.3.1.1.4.1 states a freight container shall clearly display placards on each side and each end. Once DoD assembles a Tricon/Quadcon coupling the individual units together to now form a single 20' CSC approved freight container, 49 CFR 172.502 (a)(1)(ii) would not apply because the placard on the end Tricon/Quadcon unit accurately represents the hazards within the 20' CSC container.



When Tricon/Quadcon unit containers are coupled together to form a single CSC approved 20' container they must be a placard on each end and each side of the 20' container. Since the act of coupling the Tricon/Quadcon unit together will obscure at least one side or end, a placard(s) will need to be placed on the opposite end of the Tricon/Quadcon unit. This will mean that an individual Tricon/Quadcon unit which may not contain any hazmat will have a placard on it. When the Tricon/Quadcon assembled unit is decoupled the placard on the non-hazmat Tricon component must be removed immediately; for those remaining component units the appropriate HAZMAT placards must be placed on all four sides of each compent unit .

Question: What are the placarding requirements when three/four Tricon/Quadcon containrs are assembled into a signle 20' container unit and loaded on a vehicle or vessel?

1. When all four containers have a mixed Hazard Classification/Division (HC/D) materials?

2. When the end container units have a mixed HC/D and there is no HZZMAT in the middle container of a Tricon or in positions 2 or 3 of a Quadcon?

My point of contact for this matter is Mr. Joseph P. Dugan, (618) 220-5040, e-mail <u>sddc.safb.safety@us</u> .army.mil or <u>joseph.dugan@us.army.mil</u> Safety Team, Military Surface Deployment and Distribution Command, ATTN: AMSSD-SA, One Soldier Way, Scott AFB, IL 62225.

Sincerely Daniel A. Maham Director of Safety

Encl(s)

- Att I Tricon description
- Att 2 Quadcon description
- Att 3 Tricon characteristics
- Att 4 Quadcon characteristics



TRICON



The Tricon modular container is used extensively by the United States Armed forces for its unique and versatile deployability. The Tricon is configured so that when three units are secured together, using the exclusive SeaLock connectors, the resulting package has the same footprint and increased mobility as a standard 20' ISO intermodal container.

The Tricon is available I, II, III, IV & V variants, providing multiple door locations for increased mission flexibility. Intended for use as a transport/storage unit, the Tricon offers a wide range of options for storage, equipment integrations, specialized security containers, and office modules. The Tricon's all-steel construction and unique versatility make this an ideal new option for military and commercial logistics challenges.

Charleston Marine Containers, Inc., a Kratos company, is a leading design, engineering, manufacturer and integrator of modular intermodal, and specialty container systems. CMCI offers high levels of custom in-house integration for increased solutions to mission requirements. Strategically located in Charleston SC, CMCI can meet your needs by land, sea or air.



DURABLE - VERSATILE - AFFORDABLE



QUADCON



The Quadcon is a unique and versatile mini-container originally developed for use by the United States Armed Forces. The unit is configured to enable four containers to be secured together using the exclusive SeaLock connector. The resulting package has the same footprint as a standard 20' ISO intermodal container.

Alternatively, two Quadcons may be connected together to create a 10' ISO container. This four-into-one concept offers the advantages of a segregated loading pattern with the ease of handling of a standard 20' container. Intended for use as a transport/storage unit, the Quadcon's double-door access offers a wide range of options for on-site storage sheds, mobile lockers, capital equipment housings, etc.

Quadcon's all-steel construction and unique versatility makes it an ideal new option for both commercial and military operations.

Charleston Marine Containers, Inc., a Kratos company, is a leading design, engineering, manufacturer and integrator of modular intermodal, and specialty container systems. CMCI offers high levels of custom in-house integration for increased solutions to mission requirements. Strategically located in Charleston SC, CMCI can meet your needs by land, sea or air.



A KRIGTOS Company

DURABLE - VERSATILE - AFFORDABLE

SEA BOX



STANDARD FEATURES:

- Corrugated steel sides, roof, & swing doors on one side
- Heavy duty steel floor
- (4) way fork lift pockets
- Wall tie down steel lashing rings, 4,000 lbs. cap. each, (28) total
- Front corner post tie downs, (10) total
- Door corner post tie downs, (10) total = restraint system, shoring slot will support 2" x 6" lumber
 Adjustable shelving brackets:
- Sets = (10) Vertical E-Track sections total
 Vents, (2) each

OPTIONAL FEATURES:

- Manifest Box, (2) each
- Connecting couplers, (3) per Tricon
- Connecting coupler storage bracket, (1) each
- Decking and Shoring Beams, (15) each
- 383 Green exterior CARC paint

(3) Tricon Containers coupled together to form one 20' ISO module

ALL NEW CONTAINERS ARE MANUFACTURED TO THE LATEST ISO STANDARDS

TRICON	Length		Height		Width		Door Opening	
	Ext.	Int.	Ext.	Int.	Ext.	Int.	Height	Width
Ft. / in.	6' 5 1/2"	6' 3 5/16"	8' 0°	7' 5 1/64"	8'0"	7'7 23/32"	7' 1 3/64"	6'1 45/64"
Metric	1,969	1,913	2,438	2,261	2,438	2,330	2,160	1,872

TRICON	Tare Weight	Payload	Gross Weight	Cubic Capacity
Lbs.	2,580	12,320	14,900	356 Cu. Fi.
Kg.	1,170	5,590	6,760	10.0 Cu. M.

ALL DIMENSIONS AND WEIGHTS ARE NOMINAL AND SUBJECT TO MINOR VARIATIONS THAT MAY OCCUR DURING THE MANUFACTURING PROCESS

SB821.0

ouble Doors One Side (TYPE 1) icon Dry Freight ISO Cargo Containe

ISN #: 8145-01-475-9570





CORPORATE OFFICE 1 Sea Box Drive Cinnaminson, NJ 08077 Tel: (856) 303-1101 Fax: (856) 303-1501 Email:

