



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

NOV 27 2007

Boone Pendergrast  
CDM Technologies, Inc.  
2975 McMillian Street, Suite 272  
San Luis Obispo, CA 93401

Ref. No.: 07-0195

Dear Mr. Pendergrast:

This is in response to your October 10, 2007, letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to vessel stowage. Specifically, you request clarification of § 176.83 for the segregation of incompatible containers on board container ships.

In your letter, you describe a scenario in which one container is stowed on deck and another container is stowed below deck in a closed versus closed situation and the incompatible containers are required to be segregated longitudinally by an intervening complete compartment or hold. It is your understanding that horizontal segregation is not required provided the containers are not stowed in the same vertical line and separated by a fire and liquid resistant bulkhead.

Your understanding is correct. The fore and aft segregation requirements need only be applied to incompatible containers when they are both on deck or when they are both under deck, unless otherwise stated.

I hope this information is helpful. Please contact us if you require additional assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "John A. Gale".

John A. Gale  
Chief, Standards Development  
Office of Hazardous Materials Standards

Leary  
\$177,848  
segregations  
07-0195

**Drakeford, Carolyn <PHMSA>**

**From:** INFOCNTR <PHMSA>  
**Sent:** Thursday, October 11, 2007 10:02 AM  
**To:** Drakeford, Carolyn <PHMSA>  
**Subject:** FW: Formal Intrepretation Letter Request  
**Attachments:** Formal\_Interpretation\_Request\_Leter.doc

Carolyn,

Could you process this as a formal request for interpretation? Thanks buddy!

Erin

**From:** boone@cdmtech.com [mailto:boone@cdmtech.com]  
**Sent:** Wednesday, October 10, 2007 4:46 PM  
**To:** INFOCNTR <PHMSA>  
**Cc:** Boone Pendergrast  
**Subject:** Formal Intrepretation Letter Request

To Whom It May Concern,

Attached please find a Word document with a request for the formal interpretation letter request for hazardous materials segregation aboard ocean-going vessels.

I appreciate your attention to this matter.

Regards,

Boone

Boone Pendergrast  
ICODES Customer Support  
phone: 800-542-8745 x262 (CONUS)  
805-541-3750 x262 (OCONUS)  
cell: 805-550-0244  
e-mail: boone@cdmtech.com

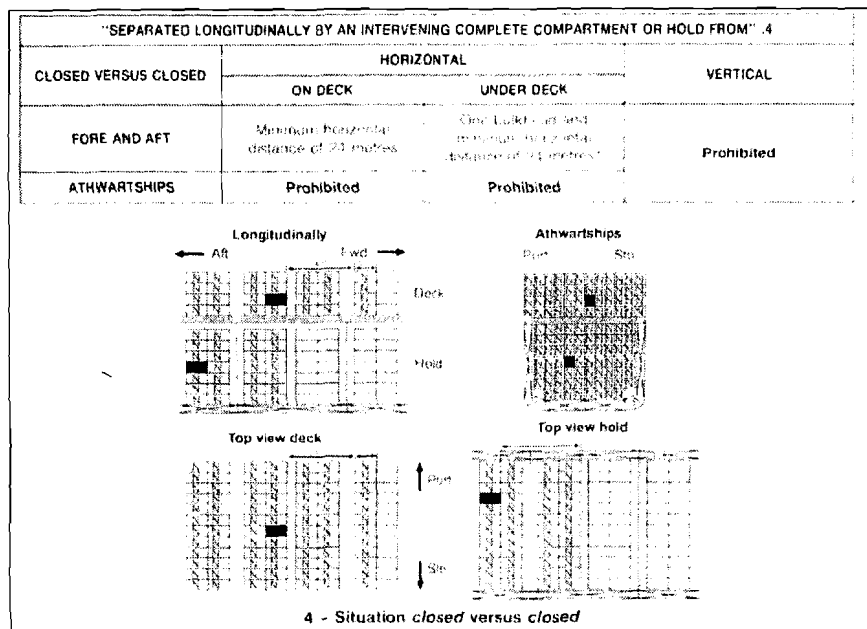
ICODES Customer Support  
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e-mail: icodes-support@cdmtech.com  
web site: [www.icodestech.com](http://www.icodestech.com)

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## Formal interpretation Letter Request Hazardous Cargo Segregation Issues

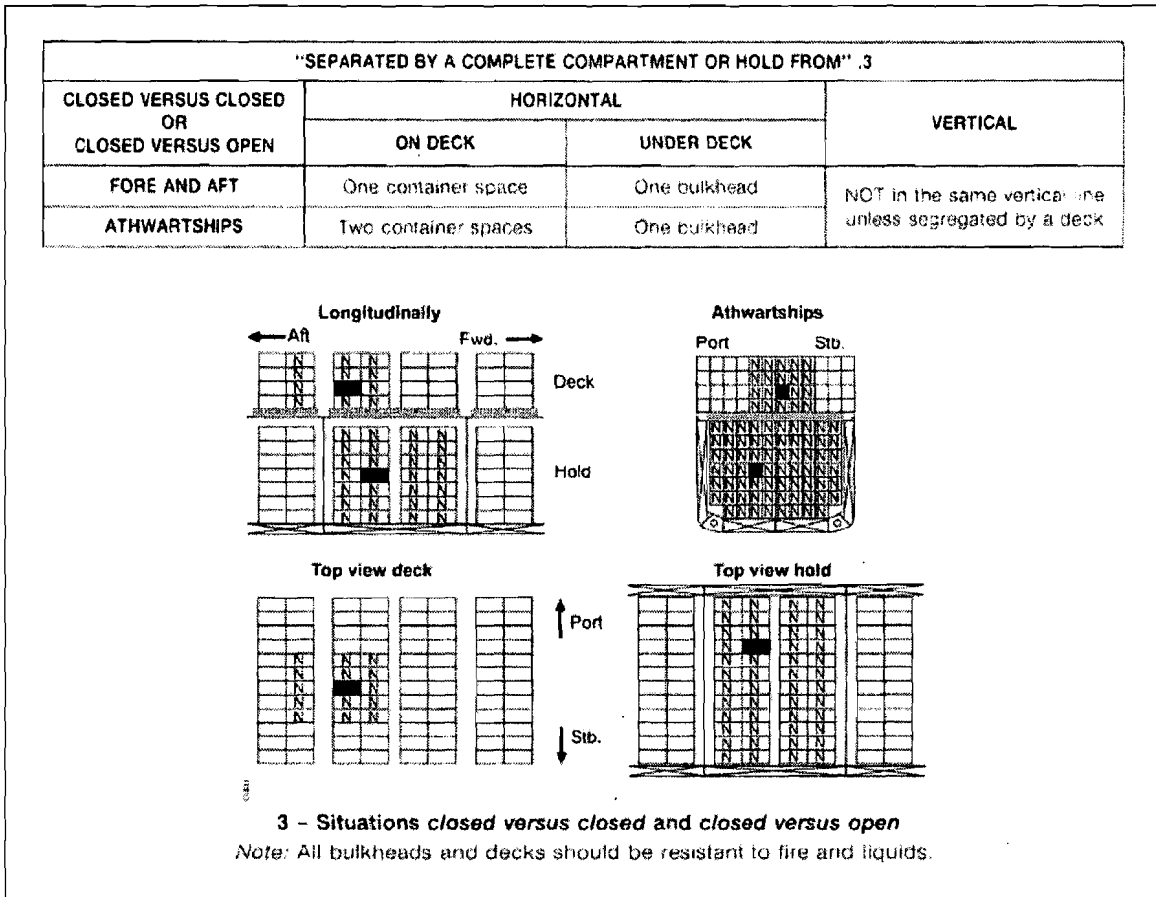
The Integrated Computerized Deployment and Execution System (ICODES) is the ship planning and execution system that the United States Department of Defense uses for the loading of vessels for military operations. ICODES is an agent-based software package and one of the agents is the Hazardous Agent, which uses the IMDG and the 49CRF to determine proper segregation of hazardous cargo items. There are several segregation requirements that we are requesting formal interpretations.

For Level 4 segregation of containers, closed versus closed, the requirements are noted below.



In the case in which one container is stowed on deck and another container is below deck, the ICODES system returns a violation that notes that the vertical stowage of these items is prohibited, but also requires a minimum horizontal segregation of 24 meters. To me, it seems as if the items can not be in the same vertical line but do not need any other segregation.

This interpretation is based on an example of level 3 segregation of closed containers, where in items can be in the same vertical line if they are separated by a fire and liquid resistant bulkhead. If the two items are separated by a fire and liquid resistant bulkhead with one on deck and one under deck, additional requirements would not be required in the fore and aft or athwartship direction (I.e.: one container space or one bulkhead).



I can demonstrate these situations on our ICODES system via a WebEx, if necessary.

I appreciate your attention to this matter.

Regards,

Boone Pendergrast  
 ICODES Customer Support  
 CDM Technologies, Inc.  
 805-541-3750 x262 (office)  
 805-550-0244 (cell)  
 805-541-8296 (fax)  
 boone@cdmtech.com