



U.S. Department  
of Transportation

1200 New Jersey Avenue SE  
Washington, DC 20590

**Pipeline and Hazardous  
Materials Safety  
Administration**

AUG 01 2012

Carlisle Smith  
Supervisor, Hazardous Materials Section  
Transportation Enforcement Division  
Public Utilities Commission of Ohio  
180 East Broad Street  
Columbus, Ohio 43215

Reference No.: 12-0136

Dear Mr. Smith:

This is in response to your June 21, 2012 email requesting guidance relating to the highway transportation load securement requirements of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). You present a particular loading scenario for intermediate bulk containers (IBCs) within a van type trailer and provide supporting photographs. You ask whether the IBCs, loaded as described and depicted are in compliance with the load securement requirements of the HMR.

The answer is no.

As depicted, the longitudinal (front to back) securement of the load may be appropriate, however, the lateral (side-to side) securement is insufficient. Section 177.834(a) of the HMR provides, "Any package containing any hazardous material, not permanently attached to a motor vehicle, must be secured against shifting, including relative motion between packages, within the vehicle on which it is being transported, under conditions normally incident to transportation." As loaded, voids between the IBCs and between the IBCs and the sides of the trailer could allow the IBCs to shift, and there is no securement mechanism in place to prevent the IBCs from shifting. Specific methods for securing packages in a motor vehicle are not provided in the HMR. However, varied methods, such as tiedowns, using dunnage or other cargo, shoring bars, jack bars, or toe-boards would be acceptable to secure the IBCs from side to side movement within the trailer.

I trust this satisfies your inquiry. Please contact us if we can be of further assistance.

Sincerely,

Delmer Billings  
Senior Regulatory Advisor  
Standards and Rulemaking Division

Babich  
§177.834(a),  
Loading and Unloading  
12-0136

**Drakeford, Carolyn (PHMSA)**

**From:** INFOCNTR (PHMSA)  
**Sent:** Friday, June 22, 2012 9:27 AM  
**To:** Drakeford, Carolyn (PHMSA)  
**Subject:** FW: Request Formal Letter of Interpretation  
**Attachments:** OH3202305369 007.jpg; OH3202305369 008.jpg; OH3202305369 004.jpg

Carolyn,

We received the following request for a formal letter of interpretation.

Thanks,  
Victoria

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**From:** Smith, Carlisle [<mailto:Carlisle.Smith@puc.state.oh.us>]  
**Sent:** Thursday, June 21, 2012 2:52 PM  
**To:** INFOCNTR (PHMSA)  
**Subject:** Request Formal Letter of Interpretation

To Whom it may concern;

I am requesting a formal letter of interpretation of 49 CFR 177.834(a) regarding the proper securement of hazardous materials packages in a closed transport vehicle. Attached please find photo evidence taken by an Ohio PUC HM Specialist of 16, 330 gallon IBC's containing Class 8 (6.1) material. 49 CFR 177.834(a) specifies that "any package containing a hazardous material, not permanently attached to a motor vehicle must be secured against shifting, including relative motion between packages, within the vehicle on which it is being transported, under conditions normally incident to transportation." Our question is, are the packages as loaded in violation of 177.834(a)?

As you will see by the photo evidence provided, the IBC's were loaded in an staggered formation in the front of the trailer, with the remaining IBC's loaded in an "I" formation. The rearmost IBC's were secured by a load strap. The IBC's were not mounted to or secured to the floor of the trailer. There was no evidence of motion or movement of the IBC's. As you will note, there were no means taken to prevent the IBC's from shifting into the void spaces on the left and right sides of the packages.

A review of PHMSA (RSPA) Interpretations produced RSPA 97-0205 and RSPA 98-0021. Although neither Interpretation responds to an exact duplicate of the Ohio scenario provided, they are the closest thing to be found.

Thank you for your assistance,

Sincerely,  
Carlisle Smith

Carlisle Smith, Supervisor  
Hazardous Materials Section  
Transportation Enforcement Division  
Public Utilities Commission of Ohio  
Office: 614-728-9126

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