



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

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

SEP 16 2016

Mr. Wes Pace  
Director, Hazardous Materials Compliance  
Landstar Transportation Logistics, Inc.  
13410 Sutton Park Drive, South  
Jacksonville, FL 32224

Reference No. 16-0088

Dear Mr. Pace:

This letter is in response to your May 11, 2016 email, letter, and two photographs requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to loading and securing pallets of hazardous materials. Specifically, you ask if the loading and securement packing method you describe complies with the intent of § 177.834(a).

You state your transportation scenario, as further demonstrated in the attached photographs, is as follows:

- Four drums are loaded on one pallet,
- Drums on the pallet are shrink-wrapped to the pallets,
- Heavy cardboard is placed on top of each set of four drums banded to a pallet,
- An even number of these pallets are loaded side-by-side in a freight trailer,
- Pallets are loaded in the freight container with approximately 3–4 inches of void area between them,
- Pallets closest to the freight container door are secured with two straps,
- This loading and securement method makes it difficult, if not impossible, to nail a 2 x 4 inch blocking to the freight container floor in the void area, and
- This blocking method makes it highly unlikely for these drums to shift or fall to the extent that they become damaged.

It is the opinion of this Office that the transportation scenario you provided does not comply with the intent of § 177.834(a). The three to four inches of space between pallets in the freight container loading and securement method you describe provides a foot or more of space in which the end pallets can shift during transportation. Section 177.834(a) requires any hazardous material (hazmat) package that is not permanently attached to a motor vehicle to be secured against shifting, including relative motion between packages, within the vehicle on which it is being transported under conditions normally incident to transportation (e.g., vehicle starting, stopping, and cornering; accident avoidance; and varied road conditions).

Thus, the securement of hazmat packages requires that such packages do not shift when experiencing these conditions. Part 393, Subpart I of the Federal Motor Carrier Safety Regulations (49 CFR Parts 300-399) contains general requirements that address protection against shifting and falling cargo.

I hope this information is helpful. Please contact us if we be of further assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Glenn Foster". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

T. Glenn Foster  
Chief, Regulatory Review and Reinvention Branch  
Standards and Rulemaking Division

Edmonson  
§177.834(a)  
General Requirement  
16-0088

**Dodd, Alice (PHMSA)**

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**From:** Rivera, Jordan CTR (PHMSA)  
**Sent:** Wednesday, May 11, 2016 4:10 PM  
**To:** Hazmat Interps  
**Subject:** FW: Interpretation Request  
**Attachments:** Interpretation Request Securement.docx; Load securement Pictures.pdf

Hi Shante/Alice,

Please submit this for a letter of interpretation. Please let me know if you have any questions.

Thanks,  
Jordan

**From:** Pace, Wes [<mailto:wpace@landstar.com>]  
**Sent:** Wednesday, May 11, 2016 9:44 AM  
**To:** PHMSA HM InfoCenter  
**Subject:** Interpretation Request

Please find attached an interpretation request.

Thanks,  
Wes Pace  
Landstar Transportation Logistics, Inc.  
Director, Hazardous Materials Compliance  
Office- (904) 390-4815  
Email- [wpace@landstar.com](mailto:wpace@landstar.com)

Think twice before you press "print." Go Green!

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Landstar Transportation Logistics, Inc.  
13410 Sutton Park Drive, South  
Jacksonville, FL 32224  
904 398 9400

To: U.S. DOT PHMSA Office of Hazardous Materials Standards  
From: Wes Pace  
Director, Hazardous Materials Compliance  
Date: May 11, 2016  
Subject: Interpretation Request

Dear Sir:

I'm requesting an interpretation and clear understanding of 177.834(a) and when the intent of the rule has been met with a specific loading method and the securement of pallets in my scenario. I understand regulation is silent on what method must be used and also that intent of securement is to prevent shifting, including relative motion between packages within the transport vehicle under conditions normally incident to transportation.

My scenario, as shown in attached pictures is:

- 4 drums loaded per pallet. Drums are shrink wrapped to the pallets and also have heavy cardboard placed on top of each set of 4 drums which is then banded to the pallets
- An even number of pallets are then loaded side by side in the trailer.
- Once pallets are loaded, there is roughly 3-4 inches of void area located in-between the pallets
- The pallets are then secured with 2 straps on the rear of the load

Based on this loading and securement method, it's difficult and almost impossible to have 2 X 4 blocking nailed to the floor in the small void area. Under conditions normally incident to transportation (vehicle starting stopping, cornering, accident avoidance and varied road conditions) the possibility of these drums shifting or falling to the extent that the drums could be damaged are highly unlikely.

One state interprets 177.834(a) as meaning any void are must be filled or pallets blocked to prevent shifting of any amount and that this referenced loading and securement method is in violation of the rule.

Based on the scenario provided, would the true intent of 177.834(a) be met?

Sincerely,

Wes Pace  
Landstar Transportation Logistics, Inc.  
Director, Hazardous Materials Compliance  
Office- (904) 390-4815





