



U.S. Department of Transportation
**Pipeline and Hazardous Materials
Safety Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

MAR 16 2011

Captain Steve Dowling
Department of California Highway Patrol
P.O. Box 942898
Sacramento, California 94298-0001

Ref. No. 10-0254

Dear Mr. Dowling:

This responds to your November 10, 2010 letter requesting further clarification of placarding requirements in § 172.516 of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). You disagree with our response to Mr. Wes Pace in letter Ref. No. 10-0075 (attached) regarding placarding shrinkwrapped pallets of non-bulk packages on a flatbed transport vehicle and request further clarification.

In our response to Mr. Pace, we indicated that required placards may be attached or affixed to the load of packages instead of the flatbed transport vehicle itself. We also indicated that the shipment must conform with the display and visibility requirements in the HMR. In your letter, you agree with the placement of placards on an overpack of non-bulk packages is not prohibited as long as the visibility requirements are met. However, you do not agree with our opinion that required placards may be attached or affixed to the overpack instead of the flatbed transport vehicle itself.

It is the opinion of this office that the PHMSA letter in question (Ref. No. 10-0075) is a valid response. In the situation described in letter Ref. No. 10-0075, the general placarding requirement in § 172.504(a) stating that each transport vehicle containing a placardable quantity of hazardous material must be placarded on each side and end may be met by placarding a pallet of non-bulk packages on a flatbed transport vehicle. In accordance with § 172.516, the placards must be clearly visible from the sides and ends of the transport vehicle.

I hope this answers your inquiry. If you need further assistance, please contact this office on 202-366-8553.

Sincerely,

Charles E. Betts
Director

Standards and Rulemaking Division



U.S. Department of Transportation
**Pipeline and Hazardous Materials
Safety Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

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In our response to Mr. Pace, we indicated that required placards may be attached or affixed to the load of packages instead of the flatbed transport vehicle itself. We also indicated that the shipment must conform with the display and visibility requirements in the HMR. In your letter, you agree with the placement of placards on an overpack of non-bulk packages is not prohibited as long as the visibility requirements are met. However, you do not agree with our opinion that required placards may be attached or affixed to the overpack instead of the flatbed transport vehicle itself.

It is the opinion of this office that the PHMSA letter in question (Ref. No. 10-0075) is a valid response. In the situation described in letter Ref. No. 10-0075, the general placarding requirement in § 172.504(a) stating that each transport vehicle containing a placardable quantity of hazardous material must be placarded on each side and end may be met by placarding a pallet of non-bulk packages on a flatbed transport vehicle. In accordance with § 172.516, the placards must be clearly visible from the sides and ends of the transport vehicle.

I hope this answers your inquiry. If you need further assistance, please contact this office on 202-366-8553.

Sincerely,

Charles E. Betts
Director
Standards and Rulemaking Division

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

P. O. Box 942898

Sacramento, California 94298-0001

(916) 843-3330

(800) 735-2929 (TT/TDD)

(800) 735-2922 (Voice)



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§172.516

§172.301

Placarding / Marking
10-0254

November 10, 2010

File No.: 60.11902.062.14250.2010-3-0325

U. S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
Attention: Mr. Charles E. Betts
1200 New Jersey Ave, SE
Washington, D.C. 20590

Dear Chief Betts:

It has come to the attention of the California Highway Patrol (CHP), Commercial Vehicle Section (CVS), of a letter of interpretation that was issued by your office (Ref. No 10-0075, enclosed) on May 13, 2010. The letter was in response to Mr. Pace of Landstar Transportation Logistics request for interpretation of Section 172.516 (Visibility and Display of Placards, enclosed) of Title 49, Code of Federal Regulation (49 CFR). The information contained within the letter represents a substantial change in regulation affecting enforcement and emergency response capabilities and because of this, the CHP requests further clarification as to the intent of the letter and its' applicability. Additionally, the letter as it reads; extends beyond the scope of interpretation and may establish regulatory action taken outside of the Federal Registry process.

In the letter, Mr. Pace requested, "...clarification on the use of placards on shrink wrapped pallets of non-bulk packages on a flat bed to meet the transport vehicle placard requirements." The CHP concurs with your interpretation of 172.516, Title 49, CFR, to the extent that the placement of placards on a non-bulk load is not prohibited as long as the visibility requirements listed are met. Specifically, permissive placarding is allowed under 172.502(c) 49 CFR which states:

"Placards may be displayed for a hazardous material, even when not required, if the placard otherwise conforms to the requirements of this subpart."

However, in your response to Mr. Pace you stated, "*The required placards may be attached or affixed to the load of packages instead of the truck itself.*" The CHP does not concur with this statement due to its' substitutive wording because it constitutes a regulatory change.

Background

On November 16, 1990, the President of the United States (U.S.), signed into law the Hazardous Materials Transportation Uniform Safety Act of 1990 (HMTUSA; Pub. Law 101-615). This law amended the Hazardous Materials Transportation Act, 49 App. U. S. C. Sec.1801 et. Seq. Section 25 of HMTUSA, which requires the Department of Transportation (DOT) to initiate rulemaking to determine methods of improving the current system of placarding vehicles that transport hazardous materials, determines methods for establishing and operating a central reporting system, and computerized telecommunication data center that can provide information to facilitate responses to accidents and incidents involving the transportation of hazardous materials. In May of 1991, the DOT entered into a contract with the National Academy of Science (NAS) to conduct a study for this rulemaking and a 16-member committee was formed that represented industry, academia, and the emergency response communities. The scope of this study was limited to matters that could affect the *consequences* of hazardous materials incidents after they occur, but not methods for *preventing* them. The committee additionally reviewed the DOT's existing hazard communication system with respect to regulatory, enforcement, and training options in the context of not relying on the introduction of new information technologies.

Over the last 40 years, DOT has developed a comprehensive hazardous materials identification and communication system that is designed to provide emergency response personnel with information in the event of a transportation incident or accident involving the release of hazardous materials. Hazard communication and emergency response information requirements are set forth in Subparts C through G of Part 172 of the Hazardous Materials Regulations (HMR 49 CFR Parts 171-180). When hazardous materials are in transportation, they are subject to the HMR, including any requirements for placarding of the vehicle that contains it. However, in your interpretation, the placard may be attached to the load "*instead of the truck itself.*" As stated, permissive placarding is an additional allowance, and cannot be substituted for the placarding requirements of Section 172 Subpart F 49 CFR.

Department of Transportation Research and Special Programs Administration Office of Hazardous Materials Safety and John A. Volpe National Transportation Systems Center prepared a 2003 report titled, *The Role of Hazardous Material Placards in Transportation Safety and Security*, and stated:

"The participants at the September 24, workshop agreed that the main purpose of placards is to provide information – to indicate that hazardous materials are being shipped and the potential risks of that material. They noted that first responders, emergency responders, and even the general public, would use this information when there has been an incident. Enforcement personnel in their daily regulatory activities use this information. The use of placards represents a system that is international in scope and easily understood. It is part of a system for which millions of emergency response personnel have been trained, one that is used and recognized worldwide. Because the current placarding system is so tightly

integrated into the national hazardous materials safety program, replacing it would be costly, take a long time, and entail a significant amount of training.

Consistent and recognizable hazard communication is the backbone of the HMR's and straying from internationally established standards could inhibit emergency response efforts and may be the catalyst for exposing responders to hazardous conditions.

Conflicting Sections of Title 49 CFR

Section 172.504 49 CFR states:

- (a) **General.** *Except as otherwise provided in this subchapter, each bulk packaging, freight container, unit load device, transport vehicle or rail car, containing any quantity of a hazardous material must be placarded on each side and each end with the type of placards specified in tables 1 and 2 of this section, and in accordance with other placarding requirements of this subpart, including the specifications for the placards named in the tables and described in detail in Sections 172.519 through 172.560.*

Section 172.505 49 CFR states:

- (a) **Subsidiary Hazards.** *Each transport vehicle, freight container, portable tank, unit load device, or rail car that contains a poisonous material subject to the "Poison Inhalation Hazard" shipping description of Section 172.203(m) must be placarded with a POISON INHALATION HAZARD or POISON GAS placard, as appropriate, on each side and each end, in addition to any other placard required by Section 172.504. Duplication of the POISON INHALATION HAZARD or POISON GAS placard is not required.*
- (b) **Radioactive Placard.** *In addition to the RADIOACTIVE placard which may be required by Section 172.504(e) of this subpart, each transport vehicle, portable tank, or freight container, that contains 454 kg (1001lbs) or more gross weight of fissile or*
- (c) *low specific activity uranium hexafluoride shall be placarded with a CORROSIVE placard on each side and each end.*
- (d) **Dangerous When Wet.** *Each transport vehicle, portable tank, freight container, or unit load device, that contains a material which has a subsidiary hazard of being Dangerous When Wet, as defined in Section 173.124 of this sub-chapter shall be placarded with DANGEROUS WHEN WET placards, on each side and each end, in addition to the placards required by Section 172.504.*

Section 172.506 49 CFR states:

- (a) *Each person offering a motor carrier a hazardous material for transportation by highway shall provide to the motor carrier the required placards for the material being offered prior to or at the same time the material is offered for transportation, unless the carrier's motor vehicle is already placarded for the material as required by this subpart.*

Section 172.516 49 CFR states in part:

- (a) *Each placard on a motor vehicle, and each placard on a rail car, must be clearly visible from the direction it faces, except from the direction of another transport vehicle or rail car to which the motor vehicle or rail car is coupled. This requirement may be met by the placards displayed on the freight container, or portable tanks loaded on a motor vehicle, or rail car.*
- (b) *The required placarding of the front of a motor vehicle may be on the front of a truck-tractor instead of or in addition to the placarding on the front of the cargo body to which a truck-tractor is attached.*
- (c) *Each placard on a transport vehicle, bulk-packaging, freight container, or aircraft unit load device must-*

These sections apply to a placard, "...on a motor vehicle...;" "...on the freight containers or portable tanks loaded on a motor vehicle or rail car..." or "...on a transport vehicle, bulk packaging, freight container, or aircraft unit load device...."

Section 172.301 49 CFR states:

- (a) **Large quantities of a single hazardous material in non-bulk packages.** *A transport vehicle, or freight container containing only a single hazardous material in non-bulk packages must be marked, on each side and each end as specified in Section 172.332 or Section 172.336, with the identification number specified for the hazardous material in the Section 172.101 Table, subject to the following provisions and limitations:*
- (i) Each package is marked with the same proper shipping name and identification number.
 - (ii) The aggregate gross weight of the hazardous material is 4,000 kg (8,820 lbs) or more;
 - (iii) All of the hazardous material is loaded at one loading facility;
 - (iv) The transport vehicle or freight container contains no other material, hazardous or otherwise; and

- (v) The identification number marking requirement of this paragraph (a) (3) does not apply to Class 1, Class 7, or to non-bulk packaging for which identification numbers are not required.

This section refers to the required location of the marking to be on each side and both ends of the transport vehicle, or freight container, *not* the individual non-bulk package. In your letter, if the required identification number was placed on the placard as allowed, and the placard was placed on non-bulk packaging, a violation would exist under 172.301(a) (3), and 172.506(a) 49 CFR. The requirements for placarding and the marking of identification numbers do not allow for the use of a placard affixed directly to non-bulk commodities.

Inhibits Emergency Response

Although at first glance it may seem innocuous, but allowing a placard to be affixed directly onto a load instead of on the transport vehicle itself, as required, is inconsistent with current practices and poses detrimental impacts to emergency responses. Placards can indicate that considerable amounts of hazardous materials are being transported on a single conveyance. The placard enables identification of a product from a substantial distance for the safety of both emergency responders and the public. Labeling less significant quantities is sufficient, since product identification may be safely performed at a lesser distance, but placarding the vehicle will ensure identification of a hazard when it is needed most, during an emergency response. Placards on non-bulk loads will be displaced with a lost load, which would not provide emergency responders any indication of the hazardous materials that may be present until they are close enough to identify the labels. This would pose a significant risk for exposure, injury and or death for emergency responders and the public.

The current hazard communication system is recognized worldwide and the DOT has aligned the U.S. hazard requirements with international standards by adopting shipping descriptions, labels, and placards conforming to the United Nations Recommendations on the Transport of Dangerous Goods (UN Recommendations). With this in mind, the North American Emergency Response Guidebook (NAERG) was developed jointly by the DOT, Transport Canada, the Secretariat of Transport and Communications of Mexico, and the collaboration of Centro de Informacion Quimica para emergencias of Argentina, to assist emergency responders who may be the first to arrive on the scene of a transportation incident involving dangerous goods. The NAERG incorporated dangerous goods lists from the most recent UN Recommendations as well as, from other international and national regulations.

The inside front cover of the NAERG provides examples of placards or panels with identification (I.D.) numbers and states:

"The 4-digit ID number may be shown on the diamond-shaped placard, or on an adjacent orange panel displayed on the ends and sides of a cargo tank, vehicle, or rail car."

Chief Betts
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The NAERG page 15 states in part:

“Match the vehicle placard(s) with one of the placards displayed on the next two pages.”

The NAERG pages 16-17, display the placards currently used on transport vehicles carrying dangerous goods to assist emergency responders in identifying hazards they may encounter when approaching a vehicle involved in a reported, or suspected dangerous goods incident. If the placards are directly affixed to the load, and the load is lost, the hazard communication would be negatively impacted. Emergency responders for over a decade have been trained in the use of the existing hazard communication system and the standard training incorporates the use of the NAERG that is developed and distributed by your agency.

In closing, the content of the letter of interpretation prepared in response to Mr. Pace of Landstar Transportation Logistics causes confusion as to the application of Section 172.516 of 49 CFR and is in conflict with related sections. As a result of this, the CHP respectfully requests that a written response be made to further clarify the regulatory conflicts and instructions to emergency responders. I appreciate the opportunity to address these concerns. Should you desire further information regarding this matter, please contact Captain Steve Dowling, of CVS at (916) 843-3400.

Sincerely,



J. B. RODRIGUEZ, Chief
Enforcement and Planning Division

Enclosures



U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

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

MAY 13 2010

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

Ref. No. 10-0075

Dear Mr. Pace:

This responds to your April 14, 2010 request for clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Your scenario involves a flatbed trailer with multiple pallets of non-bulk packages (e.g., 5 gallon pails) that have been individually shrink wrapped and properly secured to a transport vehicle. Specifically, you ask whether the requirements in § 172.516 are met if the required placards (adhesive backed) are placed on the shrink wrapped pallets so that the placards are visible from all four sides of the transport vehicle.

The required placards may be attached or affixed to the load of packages instead of the truck itself. However, the shipment must conform to all the display and visibility requirements. Each placard must be readily visible from the direction it faces except when the vehicle is attached to another motor vehicle (§ 172.516(a)). The required placards must be securely attached or affixed to the load of packages, and they must be located clear of appurtenances and devices (e.g. ladders, pipes, doors, and tarpaulin). The placards must also be affixed to a background of contrasting color or have a dotted or solid line outer border which contrasts with the background color (§ 172.516(c)).

I hope this answers your inquiry. If you need additional assistance, please contact this Office.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles E. Betts".

Charles E. Betts
Chief, Standards Development
Office of Hazardous Materials Standards

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

Boothe
§ 172.516
Placarding
10-0075

U.S. DOT
PHMSA Office of Hazardous Materials Standards
Attn: Mr. Edward Mazzullo
East Building
1200 New Jersey Avenue, SE.
Washington, DC 20590-0001

Mr. Mazzullo,

Please except this letter as my request for an interpretation of 49CFR 172.516 (Visibility and Display of Placards). Specifically, I'm requesting clarification on the use of placards on shrink wrapped pallets of non-bulk packages on a flat bed to meet the transport vehicle placard requirements.

The scenario is, a flatbed trailer with multiple pallets of non-bulk packages (5 gallon pails for example) which have been individually shrink wrapped and are properly secured on the transport vehicle. Would the requirements of 172.516 be met if the required placards (adhesive backed) were placed on the shrink wrap of pallets in a manner where placards are visible from all four side of the transport vehicle?

There is no specific reference to this scenario in 172.516 (c) and it would seem as though the intent of the rule would be met when a transport vehicle had been placarded in the method described.

Your assistance is greatly appreciated.

Sincerely,

Wes Pace
Director, Hazmat Compliance
Landstar Transportation Logistics
(904) 390-4815
wpace@landstar.com