



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

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OCT 16 2007

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Ref. No. 07-0171

Dear Mr. Hammond:

This responds to your August 31, 2007 letter requesting clarification of the placarding requirements in the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask for clarification on the use of the DANGEROUS placard under §172.504(b) for your scenarios. Your questions are paraphrased and answered as follows:

Q1: A transport vehicle or freight container is loaded with 1,200 kg of Class 3 flammable liquids; 200 kg Division 6.1 poison material (not an inhalation hazard); and 300 kg Class 8 corrosive material. There are no subsidiary hazard classes. May we apply the Class 3 FLAMMABLE LIQUID placard for Item 1 and the DANGEROUS placard for Items 2 and 3?

A1: Yes. Placards are required because the aggregate gross weight (1,700 kg) of the Class 3, Division 6.1, and Class 8 hazardous materials exceeds 454 kg (1,001 lb). As provided in §172.504(b), the DANGEROUS placard may be substituted for the POISON AND CORROSIVE placards. The FLAMMABLE LIQUID placard must be used for the Class 3 material since it exceeds 1,000 kg (2,205 lb) loaded at one facility.

Q2: A transport vehicle or freight container is loaded with 500 kg Division 6.1 poison material (not an inhalation hazard); 200 kg Class 3 flammable liquid; and 100 kg Class 8 material. May we apply only the DANGEROUS placard?

A2: Yes. The DANGEROUS placard may be used to cover all three Table 2 hazardous materials.

Q3: A transport vehicle or freight container is loaded with 50 kg Division 6.1 poison material (not an inhalation hazard); 200 kg Class 3 flammable liquid; and 100 kg Class 8 corrosive material. Are placards required?

172.504(b)



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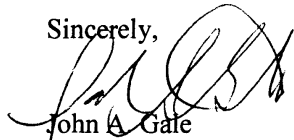
A3: No. Since the aggregate gross weight of all three Table 2 materials is less than 454 kg (1,001 lb), no placards are required.

Q4: A transport vehicle or freight container is loaded with 1,200 (exceeds 2,205 lb) Class 3 flammable liquid; and 200 kg Division 6.1 poison material (not an inhalation hazard). Is the Class 3 FLAMMABLE LIQUID the only placard required?

A4: No. The FLAMMABLE LIQUID placard is required because 1,000 kg of Class 3 material has been loaded at one facility. However, because the entire aggregate gross weight of hazardous materials on the transport vehicle exceeds 454 kg, either the DANGEROUS placard or POISON placard must be used for the Division 6.1 material.

I hope this answers your inquiry.

Sincerely,



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

Boothe  
§172.504(b)  
Placarding  
07-0172

MEMORANDUM

DATE: 31 AUGUST 2007

FROM: LEN HAMMOND

TO: GLENN FOSTER  
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SUBJ: REQUEST FOR CLARIFICATION ON PLACARDING EXCEPTIONS

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I am writing to request clarification and a letter of interpretation of the exceptions for placarding in accordance with 49 CFR §172.504. §172.504(a) states that "...each freight container, unit load device, transport vehicle or rail 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." As this is the basic rule and can only be deviated from with those exceptions as listed in subsequent exceptions, it is understood that only those items meeting one or more of the exceptions listed may be exempted from mandatory placarding.

Those exceptions include:

§172.504(b) Dangerous Placard. This exception provides for a summarizing "Dangerous" placarding for those items in Table 2 for which a placard is required [i.e. does not meet the exception of §172.504(c)]. However as I read this section, this exception does not apply to those items with an aggregate gross weight of more than 1000 kg.

I would like to offer several scenarios for your clarification in the application of the Dangerous Placard exception.

Scenario # 1:

A transport vehicle/container/unit load device is loaded with the aggregate gross weights of the following Hazard Classes.

Item 1: Class 3, Flammable liquids; 1,200 kg

Item 2: Class 6.1, Toxic material (not an inhalation hazard), 200 kg

Item 3: Class 8, Corrosive liquids, 300 kg

**All items are in Table 2 and are qualified for the Dangerous Placard Exception**

**Item 1 is pretty straight forward as it is greater than 1,000 kg and does not meet the exception as it is addressed in §172.504(b) under the rule for items greater than 100 kg and must be placarded for.**

**Items 2 & 3 do not meet the greater than 1,000 kg and are subject to the Dangerous Placard exception.**

**Therefore in Scenario # 1 the two placards which are to be applied are the Flammable Liquid, Class 3 placard for Item 1 and the Dangerous Placard for Items 2 & 3. (Item 1 is not to be considered in the computation of aggregate gross weight for applying this exception since is greater than 1,000 kg and has already been placarded for).**

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**Scenario # 2**

**Item 1: Class 6.1, Toxic material (not an inhalation hazard); 500 kg**

**Item 2: Class 3, Flammable liquid; 200 kg**

**Item 3: Class 8, Corrosive solids, 100 kg**

**All items are Table 2 items but since none are greater than 1,000 kg, they are all eligible for the Dangerous Placard exception. The total aggregate gross weight of all three items is greater than 454 kg therefore the Dangerous Placard can be used to summarize all three items.**

**Placard required for Scenario # 2 is only the Dangerous Placard for all three items.**

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**Scenario # 3**

**Item 1: Class 6.1, Toxic material (not an inhalation hazard); 50 kg**

**Item 2: Class 3, Flammable liquid; 200 kg**

**Item 3: Class 8, Corrosive solids, 100 kg**

**All items are Table 2 items but since none are greater than 1,000 kg, they are all eligible for the Dangerous Placard exception. The total aggregate gross weight of all three items is less than 454 kg therefore no placard is required under §172.504(c) which states "... except for bulk packagings and subject to §172.505 (subsidiary hazards requiring placarding), when hazardous materials covered by Table 2 of this section are transported by highway or rail, placards are not required..." on transport vehicles/containers/rail cars which contains less than 454 kg aggregate gross weight of Table 2 hazardous materials.**

**Placards Required: None**

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**Scenario # 4**

**Item 1: Class 3, Flammable liquids; 1,200 kg**

**Item 2: Class 6.1, Toxic material (not an inhalation hazard), 200 kg**

**Item 1 is pretty straight forward as it is greater than 1000 kg and does not meet the exception as it is addressed in §172.504(b) under the rule for items greater than 1,000 kg and must be placarded for.**

**Item 2 does not meet the greater than 1,000 kg and may subject to the Dangerous Placard exception. However since the item is less than 454 kg it falls under the exception of §172.504(c) and does not have to be placarded for.**

**Placards Required: Flammable Liquid 3 only.**

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**The reason I ask for this clarification is that there are continuous questions as to whether a Table 2 item greater than 1,000 kg is to be considered in the computation for the Dangerous Placard exception. I think that only those Table 2 items which are less than 1,000 kg are to be considered based on the statement in §172.504(b) “However, when 1,000 kg aggregate gross weight or more of one category of material is loaded therein at one loading facility on a freight container, unit load device, transport vehicle, or tail care, the placard specified in Table 2 of paragraph (e) of this section for that category must be applied.” This is as demonstrated in Scenario # 1.**

**I think the misunderstanding occurs because of the wording of §172.504(b) is often misinterpreted to require the inclusion of the aggregate gross weights of all Table 2 items, even those already placarded for under the greater than 1,000 kg rule when computing the aggregate gross weight for the Dangerous exception. As I read this section, it seems to exclude those Table 2 items already placarded for under the greater than 1,000 kg rule. Maybe the more correct statement would be to define the Dangerous Placard rule to those items in Table 2 not already placarded for under the greater than 1,000 kg rule. This question is most often raised in response to a scenario such as in # 4 where the gross weight of the one Table 2 item greater than 1,000 kg is included in the Dangerous Placard exception computation. This would result in that item being placarded for twice, with its own specific placard and again under the summarization of hazards eligible for the Dangerous Placard rule.**

**Could you please review these scenarios and provide a clarification of the applications of the Placarding rules? I have addressed this all three of you in hopes that your collective knowledge and experience will provide for a consensus of interpretation.**

**Thank you for your assistance in insuring that all instruction is based on the same application of rule.**

*Len Hammond*

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