



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

January 19, 2023

Mr. Travis Brandt, MS, CHMM
Hazardous & Radioactive Waste Management
Mayo Clinic
200 Frist Street SW
Guggenheim 1-12
Rochester, MN 55905

Reference No. 22-0050

Dear Mr. Brandt:

This letter is in response to your May 6, 2022, letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the placarding of hazardous wastes. Specifically, you ask whether your understanding of the placarding requirements is correct for the three scenarios described below.

Scenario 1:

A shipment of hazardous materials in non-bulk packages that contain 2,400 pounds (1,089 kg) of Division 6.2 (Infectious substance) originates from one location. You ask whether your understanding is correct that no placard is required for this shipment.

Response to Scenario 1:

Your understanding is correct. As provided in Table 2 of § 172.504(e), no placard is required for a material categorized as Division 6.2 (Infectious substance).

Scenario 2:

A shipment of hazardous materials in non-bulk packages originating from one location contains:

- 600 pounds (272 kg) of Division 6.2 (Infectious substance);
- 200 pounds (91 kg) of Class 3 (Flammable liquid); and
- 250 pounds (113 kg) of Class 8 (Corrosive material).

You state that the provision in § 172.504(c) for less than 1,001 pounds (454 kg) of Table 2 material does not apply to this scenario due to the aggregate gross quantity of 1,050 pounds (476 kg) of Table 2 materials. You also state that the DANGEROUS placard may be used in lieu of the CORROSIVE and FLAMMABLE placards. You ask whether your understanding of the placarding requirements applicable to this scenario is correct.

Response to Scenario 2:

You are not required to include the 600 pounds (272 kg) of Division 6.2 materials towards the aggregate gross weight of hazardous materials allowed when determining compliance with the provisions in § 172.504(c) because Division 6.2 (Infectious substance) materials are not required to be placarded. *See* § 172.500(b)(1). In addition, a shipment consisting solely of 200 pounds of Class 3 (Flammable liquid) material and 250 pounds of Class 8 (Corrosive) material does not require a placard. *See* § 172.504(c). However, should you choose to permissively placard your vehicle, due to the presence of more than one category of Table 2 material, you may use the DANGEROUS placard in lieu of either the CORROSIVE or the FLAMMABLE placards. *See* §§ 172.502(c) and 172.504(b).

Scenario 3:

A shipment of hazardous materials in non-bulk packages originating from two locations includes the following quantities of hazardous materials:

Materials loaded at location “Alpha”

- 1,200 pounds (544 kg) of Division 6.2 (Infectious substance)
- 400 pounds (181 kg) of Class 3 (Flammable liquid)
- 50 pounds (23 kg) of Class 8 (Corrosive material)

Materials loaded at location “Beta”

- 2,400 pounds (1,089 kg) of Division 6.2 (Infectious substance)
- 100 pounds (45 kg) of Class 3 (Flammable liquid)
- 150 pounds (68 kg) of Class 8 (Corrosive material)

You state that the exception in § 172.504(b) for use of the DANGEROUS placard does not apply after location “Beta” materials are loaded, and the exception in § 172.504(c) does not apply in either location due to the presence of the Division 6.2 (Infectious substance) material. You ask whether your understanding of the placarding requirements applicable to this scenario is correct.

Response to Scenario 3:

The total amount of covered Table 2 materials after loading the hazardous materials at location “Alpha” and “Beta” is 700 pounds (317 kg). Therefore, the exception in § 172.504(c) still applies when the transport vehicle departs locations “Alpha” and “Beta.” *See* Response to

Scenario 2—i.e., no placards are required including the DANGEROUS placard. However, if you choose to permissively placard your vehicle, due to the presence of more than one category of Table 2 material, you may use the DANGEROUS placard in lieu of either the CORROSIVE or the FLAMMABLE placards. *See* §§ 172.502(c) and 172.504(b).

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

Sincerely,

A handwritten signature in blue ink that reads "T. Glenn Foster". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

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

200 First Street SW
Rochester, Minnesota 55905
507-284-2511

May 6, 2022

To whom it may concern:

On behalf of the Mayo Clinic, our department hereby submits a request for interpretation regarding the placarding requirements used in public roadway transportation.

Mayo Clinic is a not-for-profit organization hospital that encompasses numerous locations and spans over multiple states. Our department is considering a program that consolidates waste from its satellite sites to our main facility in Rochester. In the initial steps of planning, concerns about placarding and its associated applicability arose. In short, the various materials will be packaged to regulations in non-bulk containers. Most of the waste will be classified as Division 6.2, flammable liquids, and corrosives. The packages will then be properly marked, labeled, and loaded into the truck to be transported to the final facility.

Under §172.504, the general placarding requirements can be briefly summarized as any amount of Table 1 material or an amount in excess of 1001 pounds of Table 2 material. The hazardous waste present at the sites should fall into Table 2. Our request for interpretation is as such: With these three subsequent scenarios, what are the placarding requirements if the following interpretations are not correct?

1. A shipment from one location includes the following amounts:

- 2400 pounds of Class 6.2 material

The aggregate weight of hazardous material is 2400 pounds, therefore the exemption of §172.504(c) will not apply. Since the aggregate gross weight is not 8820 pounds or more, §172.301(a)(3) will not pertain as well. Since there is no placard for the 6.2 class, no placard would apply.

2. A shipment from one location includes the following amounts:

- 600 pounds of Class 6.2 material
- 200 pounds of Class 3 material
- 250 pounds of Class 8 material

The aggregate weight of hazardous material is 1050 pounds, therefore the exemption of §172.504(c) will not apply, however the DANGEROUS placard could be used since the aggregate falls below the limit of 2205 pounds per §172.504(b). The options would be to use either a DANGEROUS placard or a FLAMMABLE placard in conjunction with a CORROSIVE placard since there is no placard for the 6.2 class.

3. A shipment from two locations includes the following amounts:

Location Alpha

- 1200 pounds of Class 6.2 material
- 400 pounds of Class 3 material
- 50 pounds of Class 8 material

Location Beta

- 2400 pounds of Class 6.2 material
- 100 pounds of Class 3 material
- 150 pounds of Class 8 material

The exemption of §172.504(c) will not apply for either location. At location Alpha, the DANGEROUS placard could be used if the material were shipped first per §172.504(b) or using individual placards for just FLAMMABLE and CORROSIVE since no placard for Class 6.2 exists. When shipping with the material at location Beta, the amount of Class 6.2 material exceeds the limit of 2205 pounds from one location and must be placarded as such. However, no placard for 6.2 material exists. The result is to classify the remaining waste with a CORROSIVE and FLAMMABLE placard.

Please assist in any inaccuracies or misinterpretations that may be present for the stated scenarios. If you have any questions or would like to discuss these issues further, please do not hesitate to contact me.

Respectfully,

A handwritten signature in blue ink, appearing to read 'Travis Brandt', with a horizontal line under the first name.

Travis Brandt, MS, CHMM
Hazardous & Radioactive Waste Management

Please remit response(s) to the following:

Travis Brandt, MS, CHMM

200 First Street SW

Guggenheim 1-12

Rochester, MN 55905

OR

brandt.travis@mayo.edu

If you have any questions or concerns, please email me. Thank you for your time.