



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

JUN 30 2006

Mr. Robert Fick
President
3AL Testing Corporation
825 East 73rd Avenue
Denver, CO 80229

Reference No. 06-0082

Dear Mr. Fick:

This is in response to a March 31, 2006 letter we received from your company's former Vice President, Mr. Paul Graves, and your June 15, 2006 telephone conversation with a member of my staff concerning placarding requirements under the Hazardous Materials Regulations (HMR, 49 CFR Parts 171-180) for transport vehicles containing cylinders filled with flammable and non-flammable gas, and transport vehicles containing empty cylinders with oxygen residue or empty cylinders that no longer contain oxygen and have their valves open. We have paraphrased Mr. Graves' questions and answered them in the order provided.

- Q1. What placarding requirements apply to a transport vehicle with 1,000 pounds or more of non-bulk cylinders containing Division 2.2 (non-flammable) gas and one non-bulk cylinder containing a Division 2.1 (flammable) gas?
- A1. A transport vehicle or freight container transported by highway or rail that contains more than 454 kilograms (1,001 pounds) aggregate gross weight of Table 2 hazardous materials in non-bulk packages does not qualify for the exceptions from placarding prescribed in § 172.504(c), and must be placarded for each hazard class it contains. Alternatively, shippers may use the DANGEROUS placard in place of the separate placards specified for each Table 2 material unless 1,000 kg (2,205 pounds) or more aggregate gross weight of one category of hazardous materials in non-bulk packages is loaded at one loading facility. See § 172.504(b). For each Table 2 material with a subsidiary hazard, the placards must comply with the provisions in § 172.505 when applicable.
- Q2. Under § 172.504(d), are empty medical size E or empty medical size M6/B oxygen cylinders counted as full cylinders for determining whether or not the transport vehicle must be placarded?
- A2. Generally, empty packagings containing the residue of a hazardous material must be transported in the same manner as when they previously held a greater quantity of the material unless the packagings are sufficiently cleaned and purged of vapors



060082

172.504

to remove any potential hazard, or are refilled with a material that is not subject to the HMR. Hazardous materials packages, such as cylinders, that are sufficiently cleaned of residue and purged of vapor to remove any potential hazard are not regulated under the HMR. See § 173.29(b)(2)(ii). An oxygen cylinder is sufficiently cleaned and purged when the vapors in the cylinder are no longer capable of actively supporting combustion and performing as an oxidizing agent.

I hope this information is helpful.

Sincerely,

A handwritten signature in black ink, appearing to read "Hattie L. Mitchell". The signature is fluid and cursive, with a large loop at the end.

Hattie L. Mitchell, Chief
Regulatory Review and Reinvention
Office of Hazardous Materials Standards

March 31, 2006

Edmonson
§172.504
Placarding
06-0082

Pipeline and Hazardous Materials Safety Administration
400 Seventh Street, S.W.
Room 8421
Washington, DC 20590

Subject: Clarification of two questions regarding 49CFR.

Dear Sir or Madam:

In the course of my experience with hazardous materials and many journeys to compressed gas manufacturing and distribution plants across the United States, I often hear two statements about the HMR (49CFR) which can never be proven when asked to. Could your office please provide me a written response on the following two questions?

- 1) In regards to 49CFR§172.504 many plant managers, truck drivers and safety officers have made the comment that "when a transport vehicle has in excess of 1,000 pounds of division 2.2 non-flammable gas and you place one acetylene cylinder or any flammable gas cylinder on the vehicle, it does not matter what the flammable gas cylinder weighs; you must use the 2.1 flammable gas placards." "Not using a 2.1 flammable gas placard is illegal."

If my reading of the 49CFR is correct, the above statement is false. I read §172.504 to require a 2.1 flammable gas placard when more than 1,000 pounds of flammable gas is loaded onto a freight vehicle. In the above statement, the non-flammable gas placard would be appropriate and not violate any federal laws in regards to placards being placed on a transport vehicle. Is my reading correct?

- 2) In regards to 49CFR§172.504(d) some of the same persons have stated "an empty medical E or empty medical M6/B oxygen cylinder must be counted as a full cylinder and you must use them in determining whether or not to use placards." "If the valve is wide open and no gas is left, you still must count them in determining placard requirements."

Section 172.504(d) seems to plainly address this above statement, however, I ask for your reply as I hear so many people who completely disagree with the exceptions to empty cylinders. My reading indicates if an enclosed transport vehicle (trailer or box truck) is transporting in excess of 1,000 pounds of empty oxygen cylinders, under 200 cubic feet, then you would not need to placard the transport vehicle. Is my reading correct?

Sincerely,



Paul Graves
Vice President
3AL Testing, Corp.