Casey, C.
26-0054

Eaton
Mission Systems Orchard Park Inc.
10 Cobham Drive
Orchard Park, NY, 14127
tel: 716-662-0006
fax: 716-662-0747

Director, Standards and Rulemaking Division
U.S. DOT/PHMSA (PHH-10)
East Building
1200 New Jersey Avenue, SE East Building, 2nd Floor
Washington, DC 20590
infocenter@dot.gov

Original: 29 April 2026

Dear Mr. Shane Kelly:

Mission Systems Orchard Park Inc., a manufacturer of pneumatic control components and systems, wishes to request a formal letter of interpretation regarding section §173.306 Limited Quantities of Compressed Gases. The questions we request feedback to are outlined below.

173.306 Limited Quantities of Compressed Gases states the following:

Limited quantities of compressed gases for which exceptions are permitted as noted by reference to this section in § 172.101 of this subchapter are excepted from labeling, except when offered for transportation or transported by air, and, unless required as a condition of the exception, specification packaging requirements of this subchapter when packaged in accordance with the following paragraphs. For transportation by aircraft, the package must conform to the applicable requirements of § 173.27 and only packages of hazardous materials authorized aboard passenger-carrying aircraft may be transported as a limited quantity. In addition, shipments are not subject to subpart F (Placarding) of part 172 of this subchapter, to part 174 of this subchapter except § 174.24, and to part 177 of this subchapter except § 177.817. Except as otherwise provided in this section, each package may not exceed 30 kg (66 lbs.) gross weight.

(1) When in containers of not more than 4 fluid ounces capacity (7.22 cubic inches or less) except cigarette lighters. Additional exceptions for certain compressed gases in limited quantities are provided in paragraph (i) of this section.

MSOP (Previously Carleton Technologies), has received a letter of interpretation from the OHMS (Reference No.: 03-0029), outlining that B44637-1, which is a cylinder 2 cubic inches in volume, and will be filled with compressed Helium, UN1046, at 7000psig at time of letter receipt, which is now filled to 9500 +/- 200psig, is able to be transported under this section. Our request is to have answers to the following:

1. If a pressurized vessel is IAW §173.306 (1), is it exempt from all requirements of §178.65, and the other sections of the HMR (49 CFR 171-180), except §173.27, §174.24, and §177.817 as listed in §173.306?

2. Does a pressurized vessel need to be a DOT Specification Cylinder (or sphere) to have the ability to be shipped under §173.306?

3. What documentation would be needed other than an EX-Letter to ship under §173.306, if any?

4. When this pressure vessel is built into the top-level assembly, the EX-Letter will classify the highest-level hazard of the assembly, that being the compressed helium (UN1046 classification code 2.2). If the top-level assembly is also equipped with a pyrotechnic pressure relief device (which is not regulated as Class 1 per MSOP's EX letter for the sub-assembly, reference EX2021052492) alongside the compressed gas, would this prohibit the transport of this assembly via Air under §173.306?

5. Is the pressure vessel referenced above still subject to the marking requirements of the HMR (§178.35) if shipped under §173.306?

After reviewing this request, if you have any questions, please contact the undersigned as soon as reasonably practicable. Thank you for your consideration.

Sincerely,

Austin Proctor
Mechanical Design Engineer
AustinProctor@Eaton.com

U.S. Department
of Transportation
**Research and
Special Programs
Administration**

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

FEB 27 2003

Mr. John Szymanski
Design/Development Engineer
Carleton Technologies, Inc.
10 Cobham Drive
Orchard Park, NY 14127-4195

Reference No.: 03-0029

Dear Mr. Szymanski:

This is in response to your letter requesting clarification of the limited quantity exception for "Helium, compressed, 2.2, UN 1046" under the Hazardous Materials Regulations (HMR; 49 CFR parts 171-180). Your letter states that the helium is in non-refillable cylinders with a capacity of two cubic inches, at a pressure of 7,000 psig, and will be transported by motor vehicle.

When transported by highway, § 173.306(a)(1) excepts limited quantities of certain compressed gases from labeling (except when intended for further transportation by air) and the specification packaging requirements when packaged in containers of not more than 4 fluid ounces capacity (7.22 cubic inches or less) except cigarette lighters. Each package must conform to the general requirements in §§ 173.24 and 173.24a, and may not exceed 30 kg (66 pounds) gross weight. In addition, shipments of compressed gases packaged in limited quantities must meet all other requirements in the HMR from which they have not been excepted.

I hope this satisfies your request.

Sincerely,

Hattie L. Mitchell

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

030029

173.306

CARLETON

Carleton Technologies Inc
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$173.306
Limited Quantities
03-0029

February 5, 2003

U.S. Department of Transportation
400 7th Street SW
Washington, DC 20590-0001
Attention: DHM-10

Attention: Edward T. Massullo
Director, Office of Hazardous Materials Standards
USDOT/RSPA, DHM-10

Subject: Request for Letter of Interpretation

Dear Mr. Massullo:

Carleton Technologies Inc. requests a letter of interpretation on Carleton P/N B44636-3 (assembled, shipped level) and B44637-1 (filled bottle subassembly level) to ship under CFR 49 section 173.306 Limited quantities of compressed gases.

The P/N in question is B44637-1 is a cylinder 2 cubic inches in volume and will be filled with compressed Helium, UN1046, at 7,000 psig. Helium has a Hazard class of 2.2. I have talked with Transportation Regulation Specialist Helen Engrum and Mechanical Engineer Mark Toughiry about the shipping regulations concerning B44637-1 and B44636-3. Both individuals have verbally explained that shipping our part number falls under section 176.306 Limited quantities of compressed gases section (a)(1). Section (a)(1) provides exceptions to most regulations "when in containers of not more than 4 fluid ounces capacity (7.22 cubic inches or less)..."

My request is to have a letter of interpretation for our files and for shipping purposes explaining that we can ship by truck in packages weighing no more than 66 pounds per 173.306. If you require more information pertaining to this matter, please call at 716-667-6277.

Sincerely.

John Szymanski
Design/Development Engineer

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

1200 New Jersey Avenue, SE
Washington, DC 20590

October 6, 2026

Austin Proctor
Mechanical Design Engineer
Eaton, Mission Systems Division
10 Cobham Drive
Orchard Park, NY, 14127

Reference No. 26-0054

Dear Mr. Proctor:

This letter is in response to your April 29, 2026 email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to limited quantities of compressed gases. Specifically, you ask about transporting a pressure vessel two cubic inches in volume containing helium as a limited quantity. You reference a previously issued letter of interpretation for the same article, except that instead of being filled to 7,000 psig, it is now filled to approximately 9,500 psig.[1] You also note the article is associated with an EX approval *(i.e.*, EX2021052492) issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA).

We have paraphrased and answered your questions as follows:

Q1. Is a pressurized vessel that meets the requirements of § 173.306(a)(1) excepted from all requirements of § 178.65 (Department of Transportation (DOT) Specification 39 non-reusable (non-refillable) cylinders), and other sections of the HMR, except §§ 173.27, 174.24, and 177.817 as listed in § 173.306?

A1. Yes. Containers such as the one you describe meeting the capacity limit of § 173.306(a)(1) are not subject to specification packaging requirements (*e.g.*, § 178.65). As you indicate, limited quantities of compressed gases are further excepted from certain requirements of the HMR depending on the mode of transportation. For example, limited quantities of compressed gases shipped by rail meeting applicable conditions of § 173.306 are not subject to Part 174, carriage by rail requirements except for shipping

[1] Carleton Technologies, Inc., *Letter of Interpretation No. 03-0029*, available at: https://www.phmsa.dot.gov/regulations/title49/interp/03-0029

papers (§ 174.24). However, the material may be further excepted if meeting the conditions of § 173.306(i).

Q2. Does a pressurized vessel need to be a DOT specification cylinder (or sphere) to have the ability to be shipped under § 173.306(a)?

A2. No. As stated in § 173.306(a) introductory text, unless required as a condition of use for an exception, limited quantities of compressed gases are excepted from specification packaging requirements of the HMR when packaged in accordance with provisions of the section, such as paragraph (a)(1).

Q3. What documentation would be needed other than an EX approval letter to ship under § 173.306, if any?

A3. There are no documentation requirements for limited quantities of compressed gases transported in accordance with § 173.306. However, the shipment would be subject to any additional requirements specified in the EX approval.

Q4. Would an assembly that integrates the described pressure vessel that is also equipped with a pyrotechnic pressure relief device (PRD) (which is not regulated as Class 1 based on the EX approval letter) still be eligible for transport by air under § 173.306?

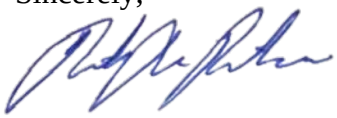
A4. Yes. If the assembly was evaluated with the PRD and assigned Division 2.2 via the EX approval, it is eligible for exceptions provided in § 173.306. However, for transportation by air, there may be additional requirements in accordance with § 173.27.

Q5. Is the pressure vessel referenced above still subject to the specification cylinder marking requirements of the HMR (*i.e.*, § 178.35) if shipped as a limited quantity under § 173.306?

A5. No. The exception from specification packages provided in § 173.306(a) removes the need for specification markings required by § 178.35.

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

Sincerely,



Dirk Der Kinderen
Chief, Standards Development Branch
Standards and Rulemaking Division