



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

JAN 09 2020

Michael Polinski
Maryland Department of Environment
1800 Washington Blvd, Suite 105
Baltimore, MD 21230

Reference No. 19-0045

Dear Mr. Polinski:

This letter is in response to your April 3, 2019, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the definition of a bulk packaging for a gas. Based on subsequent phone conversations, we have rephrased some of the details of your question. You describe two cylinders, i.e., ASME specification cylinder (similar to the DOT 4B specification) and DOT 4B, respectively, and indicate that both cylinders have a water capacity of 1000 pounds and a volumetric capacity of 120 gallons. You also indicate that both cylinders are filled with propane. You ask whether the cylinders are a bulk packaging or a non-bulk packaging.

A DOT 4B cylinder with a water capacity of 1,000 pounds or less is a non-bulk packaging. Per the definition of a bulk packaging in § 171.8, a cylinder with a water capacity greater than 454 kg (1,000 pounds) that is used as a receptacle for a gas, as defined in § 173.115 of the HMR, is considered bulk. Furthermore, in accordance with § 171.10, where metric units appear, they are considered the regulatory standard of the HMR. In this instance, the metric unit of 454 kg appears and thus is the standard; and converts to approximately 1,001 pounds of water. Therefore, provided the cylinder has a water capacity of not more than 454 kg, the cylinder meets the definition of a non-bulk packaging, regardless of the gallon conversion (e.g., 454 kg = ~119.8 gal).

Also, note the definition of bulk packaging is used for purposes of the HMR and only applies to packagings transported in commerce. The same principle would apply to an ASME specification cylinder with a described volumetric capacity of 120 gallons. However, only in some situations may an ASME specification cylinder filled with a hazardous material be offered into transportation in commerce.

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

Sincerely,

Dirk Der Kinderen
Chief, Standards Development
Standards and Rulemaking Division

Ciccarone
19-0045

January, Ikeya CTR (PHMSA)

From: Geller, Shelby (PHMSA)
Sent: Thursday, April 04, 2019 11:31 AM
To: Hazmat Interps
Subject: FW: Interpretation of Bulk Packageing for Receptacle for Gas
Attachments: Bulk packaging.docx

Hi Alice and Ikeya,

See the below request for a letter of interpretation.

Thanks,
Shelby

From: Michael Polinski -MDE [mailto:michael.polinski@maryland.gov]
Sent: Wednesday, April 3, 2019 1:47 PM
To: Geller, Shelby (PHMSA) <shelby.geller@dot.gov>
Subject: Interpretation of Bulk Packageing for Receptacle for Gas

To whom it may concern

I am requesting an interpretation with regards to Bulk Packagings of Receptacles for a gas as described in the attachment of this email.

My address is as follows:
Maryland Dept of Environment
1800 Washington Blvd, Ste 105
Baltimore, MD 21230

Phone #: 410-808-0571

Phone #: 410-522-3975

Michael Polinski

Click [here](#) to complete a three question customer experience survey.

To whom it may concern

Subject: Bulk Package Definition on Receptacle for a gas.

Scenario:

ASME 120 and DOT 4B Upright Cylinders for Liquefied Petroleum Gas.

Inspection of a Straight Body Service Truck carrying an ASME 120 or an DOT 4B upright cylinder for Propane.

Regulation: **§171.8 Definitions and abbreviations.**

Bulk packaging means a packaging, other than a vessel or a barge, including a transport vehicle or freight container, in which hazardous materials are loaded with no intermediate form of containment. A Large Packaging in which hazardous materials are loaded with an intermediate form of containment, such as one or more articles or inner packagings, is also a bulk packaging. Additionally, a bulk packaging has:

(1) A maximum capacity greater than 450 L (119 gallons) as a receptacle for a liquid;

(2) A maximum net mass greater than 400 kg (882 pounds) and a maximum capacity greater than 450 L (119 gallons) as a receptacle for a solid; or

(3) A water capacity greater than 454 kg (1000 pounds) as a receptacle for a gas as defined in §173.115 of this subchapter.

Equation:

120 Gal x 8.3333333333 Weight of Water = 1,000 Lbs Water Capacity.

Or

1,000 Lbs Water Capacity ÷ 120 Gal = 8.3333333333 Weight of Water.

Question:

Are the ASME 120 and/or DOT 4B Upright Cylinders Bulk or Non-Bulk Packages as defined by the Definition in 171.8 Bulk Packaging? Both Cylinders have a WC of 1,000 Lbs with 120 Gal's of Water.

An Interpretation with regards to these packagings is requested so further confusion regarding this part of the regulations can be settled.