



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

February 19, 2020

Shane Decker
Worthington Cylinder Corporation
200 Old Wilson Bridge Road
Columbus, OH 43085

Reference No. 19-0109

Dear Mr. Decker:


This letter is in response to your August 28, 2019, letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to closure instructions for cylinders. Your questions are paraphrased and answered below:

- Q1. You ask whether cylinders are covered by the closure requirements in § 178.2(c)(1)(i)(B).
- A1. The answer is yes. Cylinders are considered a package under the HMR and therefore could be subject to the closure requirements in § 178.2(c)(1)(i)(B). However, the Pipeline and Hazardous Materials Safety Administration (PHMSA) recognizes that closure instructions may not be necessary for certain types of cylinders, such as cylinders with self-closing valves.
- Q2. You ask whether a cylinder valve is considered a form of closure under the HMR.
- A2. The answer is yes. PHMSA considers the valve on a cylinder to be a form of closure under § 178.2(c)(1)(i)(B) of the HMR.
- Q3. You state that the valves on your cylinders are marked with the words "open" and "close" along with the arrows indicating direction. You ask whether this information meets the closure requirements in § 178.2(c)(1)(i)(B) of the HMR.
- A3. The answer is yes. It is the opinion of this Office that the markings you describe would be consistent with the closure requirements in § 178.2(c)(1)(i)(B) of the HMR. However, if the valve is removed or replaced at any stage then proper instructions for valve instillation must be obtained from the manufacturer or owner of the cylinder.

Additionally, closure instructions must provide for a consistent and repeatable means of closure that is sufficient to ensure the packaging is closed in the same manner as it was tested.

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

Sincerely,

A handwritten signature in black ink, appearing to read "T. Glenn Foster". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

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

Andrew

19-0109



August 28, 2019

U.S. Department of Transportation
PHMSA Office of Hazardous Materials Standards
PHH-10
East Building
1200 New Jersey Avenue, SE.
Washington, DC 20590-0001

Submitted via: infocenter@dot.gov

Dear Madam or Sir:

Worthington Cylinder Corporation is requesting an interpretation of 49 CFR 178.2, specifically paragraph 178.2 (c).

Background Information

Worthington Cylinder Corporation manufactures a variety of DOT specification cylinders. Recently, we have received several requests from customers asking for closure instructions, citing 49 CFR 178.2 (c)(1)(i)(B):

(c) Notification. (1) Except as specifically provided in §§178.337-18, 178.338-19, and 178.345-15 of this part, the manufacturer or other person certifying compliance with the requirements of this part, and each subsequent distributor of that packaging must:

(i) Notify each person to whom that packaging is transferred—

(A) Of all requirements in this part not met at the time of transfer, and

(B) With information specifying the type(s) and dimensions of the closures, including gaskets and any other components needed to ensure that the packaging is capable of successfully passing the applicable performance tests. This information must include any procedures to be followed, including closure instructions for inner packagings and receptacles, to effectively assemble and close the packaging for the purpose of preventing leakage in transportation. Closure instructions must provide for a consistent and repeatable means of closure that is sufficient to ensure the packaging is closed in the same manner as it was tested. For packagings sold or represented as being in conformance with the requirements of this subchapter applicable to transportation by aircraft, this information must include relevant guidance to ensure that the packaging, as prepared for transportation, will withstand the pressure differential requirements in §173.27 of this subchapter.

Section 171.8 defines a “Packaging” as “a receptacle and any other components or materials necessary for the receptacle to perform its containment function in conformance with the minimum packing requirements of this subchapter.” It also further defines a “Receptacle” as “a containment vessel for receiving and holding materials, including any means of closing.” The language provided in these definitions is most commonly associated with that of drums or other types of packagings, not cylinders.

Worthington understand that other cylinder manufacturers have also been requested to provide the same closure instruction information. Like with Worthington, this came as a new and unusual request. Similarly, the only information thought to be relevant to the customer’s request was specific to drum closure instructions, providing no relevance to the actual cylinder(s) in question.

Question 1

Does DOT consider cylinders covered under 49 CFR 178 Subpart C to be in scope of the requirements outlined in 49 CFR 178.2 (c)(1)(i)(B)?

Question 2

The words “effectively assemble and close the packaging” used in 49 CFR 178.2 (c)(1)(i)(B) do not make sense when talking about a cylinder. The cylinder is already constructed and there are no additional steps that need to happen in order to prevent leakage during transportation.

Per 49 CFR 173.301 (a)(11), DOT requires that cylinders used to transport compressed gases must be equipped with valves conforming to the requirements of CGA V-9. Assuming our cylinder DOES fall under the scope of 49 CFR 178.2 (c)(1)(i)(B), Worthington believes the cylinder valve would then be considered the “closure”. Does DOT concur?

Question 3

Our valves are marked with the words “OPEN” and “CLOSE” along with arrows indicating direction. Worthington believes that this information meets the closure instruction requirements of 49 CFR 178.2 (c)(1)(i)(B). Does DOT concur?

Thank you for your time and consideration in this matter. If any questions arise, please contact me at 614-840-3940 or shane.decker@worthingtonindustries.com.

Respectfully Submitted:

Shane Decker

Shane Decker
Regulatory Engineer
Worthington Cylinder Corporation