



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

JUN 20 2008

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

Ms. Erin N. Jarman  
Environmental Scientist  
URS Corporation  
1600 Perimeter Park Drive  
Morrisville, NC 27560

Ref. No. 08-0139

Dear Ms. Jarman:

This is in response to your April 28, 2008 letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the packaging requirements for transporting non-pressurized gas samples.

In your letter, you ask whether shipping gas samples in "Tedlar" bags placed in a one-quart metal can (similar to a paint can) with a friction lid sealed with plastic-ring seals is permissible under the HMR. You also provide a copy of the product documentation for the friction lid metal cans indicating a hydrostatic test rating of 100kPa.

Section 173.306(a)(4)(iii) requires non-pressurized gases, flammable to be packed in hermetically sealed glass or metal inner packagings of not more than 5 L (1.3 gallons) and overpacked in a strong outer packaging. Section 171.8 defines "hermetically sealed" as closed by fusion, gasketing, crimping, or equivalent means, so that no gas or vapor can enter or escape. It is the opinion of this Office that the metal can with a friction lid sealed with plastic-ring seals described in your letter meets the definition of "hermetically sealed," and therefore can be used as an inner packaging as specified in § 173.306(a)(4)(iii).

I hope this information is helpful.

Sincerely,

John A. Gale,  
Chief, Standards Development  
Office of Hazardous Materials Standards



Foster  
§ 173.306(a)(4)(iii)  
Cylinders  
08-0139

April 28, 2008

Mr. Edward T. Mazzullo  
Director, Office of Hazardous Materials Standards  
U.S. DOT/PHMSA (PHH-10)  
1200 New Jersey Avenue, SE East Building, 2nd Floor  
Washington, DC 20590

Dear Mr. Mazzullo:

I am writing to you with regards to clarification on the proper packaging for the purpose of transporting non-pressurized, flammable gas samples. The gas samples are collected using Tedlar® bags which vary in size. A few Tedlar® bags are then typically placed into a 1-quart metal can (similar to a paint can) that closes using a tightly sealing friction lid. The friction lid is then locked into place using a heavy duty plastic-ring seal. Finally, the sealed can containing the gas samples is further overpacked in a strong outer packaging such as a fiberboard box. Once the heavy duty plastic-ring has been placed around the head of the metal can, it is very difficult to remove and therefore appears as though it provides adequate protection against gas releases.

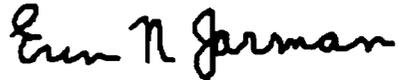
For purposes of Section 173.306(a)(4)(iii), there has been some debate within industry as to whether or not this type of friction lid metal can, paired up with a plastic-ring seal would satisfy the requirement to place non-pressurized gases, flammable into “hermetically sealed” glass or metal inner packagings? In an interpretation issued by RSPA (PHMSA) on March 15, 2000 (Billings to Gilbert, Ref. No. 99-0270) the letter stopped short of giving final DOT approval for this type of packaging and whether it would indeed meet the definition of “hermetically sealed” found in 49 CFR §171.8. due to the fact that no product testing information had been provided to your office by Mr. Gilbert.

This type of friction lid metal can, with heavy duty plastic-ring seal is manufactured by numerous packaging manufacturers throughout the U.S. and abroad and is widely available through packaging suppliers. One example in particular is available through HAZMATPAC (Stock numbers C-674# and C-684#). I am providing for your review a copy of the product documentation as published by HAZMATPAC, just one of the many suppliers of this type of can and plastic ring-seal.

provide regarding whether this type of widely used packaging would meet the definition of "hermetically sealed" and would therefore be acceptable for the transportation of non-pressurized, flammable gas samples as specified in Section 173.306(a)(4)(iii).

Thank you in advance for your assistance. I look forward to your response.

Sincerely,

A handwritten signature in black ink that reads "Erin N. Jarman". The signature is written in a cursive, flowing style.

Erin N. Jarman  
Environmental Scientist

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