



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

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

AUG 18 2016

Mr. Matthew Parker  
Global Manager of Regulatory Affairs  
Graham Packaging Company, L.P.  
2401 Pleasant Valley Road  
York, PA 17402

Reference No. 16-0027

Dear Mr. Parker:

This letter is in response to your January 20, 2016, letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the design and manufacture of aerosol containers. Specifically, you request confirmation that your company's DOT Specification 2S and non-specification aerosol containers meet the provisions of §§ 178.33b and 173.306, respectively. You also ask whether any exemptions or special permits are required to produce such containers for transportation in commerce. Your company's aerosol container designs are described as follows:

- Your containers will be constructed of polyethylene terephthalate (PET) as prescribed in § 178.33b-5(a).
- For your DOT Specification 2S containers, the pressure will not exceed 160 psig at 54.4 °C (130 °F) as prescribed in § 173.306(a)(5)(i). For your customers who request non-specification containers, the pressure will be less than 140 psig at 55 °C (131 °F) as prescribed in § 173.306(a)(5)(ii).
- Your DOT Specification 2S containers will be capable of withstanding without bursting a pressure of at least one and one-half times the equilibrium pressure of the contents at 54.4 °C (130 °F) as prescribed in § 173.306(a)(5)(ii).
- As prescribed in § 178.33b-8, one out of each lot of 5,000 or less of your DOT Specification 2S containers successively produced per day will be pressure tested to destruction and must not burst below 240 psig. *The container tested must be complete as intended for transportation.*
- You are instructing customers who fill your containers to fill and test them in accordance with the procedures prescribed in § 173.306(a)(5)(iii) through (vi) and (b)(1)(i), (ii), and (iii).
- As prescribed in § 178.33b-9, each container will be clearly and permanently marked as "DOT-2S" and with the symbol of the person making the mark. As required, your symbol will be registered with the Associate Administrator.

It is the opinion of this Office that your company's DOT Specification 2S and non-specification aerosol containers meet the requirements of the HMR. Furthermore, no exemptions or special permits are required to produce such containers for transportation in commerce.

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

Sincerely,

A handwritten signature in cursive script, reading "T. Glenn Foster". The signature is written in dark ink and is positioned above the typed name.

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

**Stevens, Michael (PHMSA)**

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**From:** Lucas, Adam (PHMSA)  
**Sent:** Friday, August 12, 2016 10:54 AM  
**To:** Foster, Glenn (PHMSA); Espinoza, Jaime (PHMSA)  
**Cc:** Bond, Jennifer CTR (PHMSA); Raksnis, Richard (PHMSA); Stevens, Michael (PHMSA)  
**Subject:** RE: Interp No. 16-0027

Hi Glenn,

PHH-40 concurs with this response.

Thanks.

-Adam

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**From:** Foster, Glenn (PHMSA)  
**Sent:** Wednesday, July 27, 2016 11:19 AM  
**To:** Espinoza, Jaime (PHMSA)  
**Cc:** Bond, Jennifer CTR (PHMSA); Lucas, Adam (PHMSA); Raksnis, Richard (PHMSA); Stevens, Michael (PHMSA)  
**Subject:** Interp No. 16-0027

Jamie,

Please find attached the incoming request for a Letter of Interpretation and our draft response for PHH-40 review/concurrence.

Thanks,  
Glenn



2401 Pleasant Valley Road  
York, Pennsylvania 17402  
(717) 849-8500

DOT/RSPA/OHMS  
UNIT

16 FEB 10 PM 3:30

Stevens  
173-306  
Limited Quantities  
of Compress GAS  
16-0027

January 20, 2016

Associate Administrator for Hazardous Materials Safety,  
Pipeline and Hazardous Material Safety Administration  
U.S. Department of Transportation  
East Building PHH-30  
1200 New Jersey Avenue, Southeast  
Washington, D.C. 20590

Re: Graham Packaging Company – Submission of Plans

To Whom It May Concern:

The Graham Packaging Company, a leading manufacturer of polymer containers, has developed a plastic aerosol container and soon plans to introduce these containers into the stream of commerce. Graham has developed prototype containers and requests clarification from the DOT and concurrence to our plan to test the production containers in accordance with CFR 178.33b, Specification 2S; inner non-refillable plastic containers.

Graham has a highly qualified staff of scientists and engineers who have a comprehensive database for the chemical and structural properties of PET, which will be used for these containers, along with a detailed understanding of the strength and response of the material to the dynamics of the product and its environment.

Graham is expecting customers may request non-DOT 2S containers. It is our understanding these containers will be limited to products which produce equilibrium pressures at 55 degrees C, (131 degrees F), less than 140 psi. For these non-DOT 2S containers, Graham will statistically verify the burst strength of the unfilled container exceeds one and one-half the equilibrium pressure of the product at 130 degrees F.

The unfilled containers made to the DOT 2S specification will be burst tested to one and one-half times 160 psi, or 240 psi, one can per each lot of 5000 containers or less.

Customers who fill empty containers manufactured by Graham are obligated to fill and test the containers in accordance with CFR 173.306 (a) (5) (iii) through (vi) and (b) (1) (i), (ii), and (iii).

178.33b-9 requires each container made to the 2S specification be so marked for identification, along with the name or symbol of the person making the mark, in this case Graham

Packaging Company's "G" on the base of the container. Graham will register the symbol with the Associate Administrator and ensure a properly trained Inspector is responsible for the testing.

Graham's plan is to control the marking of the containers manufactured by Graham by controlling the wording on the labels, which will be applied at the location of the customer, (filler), at the time of filling.

Please advise your concurrence to these plans and if any exemptions or Special Permits will be required.

Respectfully,

By: Matthew R. Parker

Matthew Parker  
Global Manager of Regulatory Affairs  
Graham Packaging Company, L.P.