

U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

MAR 9 2005

Ref. No. 05-0022

400 Seventh Street, S.W.

Washington, D.C. 20590

Mr. David H. Baker
Attorney for Zippo
Manufacturing Company
Thompson Hine LLP
Attorneys at Law
1920 N Street, N.W.
Washington, D.C. 20036-1600

Dear Mr. Baker:

This responds to your letter dated January 18, 2005, regarding the applicability of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) to empty butane lighters and lighter refills under the HMR. Specifically, you ask if an empty butane lighter is regulated under the HMR. In addition, you ask if a lighter refill containing 14 grams of butane, a Division 2.1 flammable gas, may be renamed "Consumer commodity" and reclassed "ORM-D" under the provisions specified in §§ 173.144 and 173.306(a)(1) of the HMR.

With regard to your first question, your understanding is correct that an empty, never-filled lighter is not subject to regulation under the HMR. Concerning your second question, a material described as a "Lighter refill, UN1057" may not be renamed "Consumer commodity" and reclassed as an ORM-D material; no exceptions for lighter refills are indicated in Column 8A of the Hazardous Materials Table in § 172.101. However, a lighter refill containing butane may be described as "Butane, UN1011" and classed as a Division 2.1 material. In accordance with § 173.306(a)(1), a limited quantity shipment of butane may be renamed "Consumer commodity" and reclassed as an ORM-D material provided the shipment conforms to the provisions of § 173.306(h).

The recent publication of two notices of proposed rulemakings (NPRM) in the <u>Federal Register</u> may be of interest. The first, published on August 16, 2004, titled "Requirements for Lighters and Lighter Refills," [RSPA-04-13795 (HM-237); 69 FR 50975] proposes a number of revisions applicable to the examination, testing, certification, shipping description, and



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transportation of lighters and lighter refills. The second NPRM, published on November 10, 2004, titled "Revision of Requirements for Carriage by Aircraft," [RSPA-02-11654 (HM-228); 69 FR 65293] proposed to prohibit materials packaged as limited quantities that are forbidden on passenger-carrying aircraft to be renamed "Consumer commodity" and reclassed "ORM-D." This proposal, if adopted, would only affect the transportation of lighter refills by aircraft. Copies of both NPRMs are enclosed.

I trust this satisfies your inquiry. Please contact us if we can be of further assistance.

Sincerely,

Hattie L. Mitchell

Hothe Z. Witchell

Chief, Regulatory Review and Reinvention Office of Hazardous Materials Standards



January 18, 2005

# Stevens \$173.144 \$173.308 Classification/lighters ORM-D 05-0022

### BY HAND

Mr. Michael Stevens
Regulations Specialist
DHM-12
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation
400 7<sup>th</sup> Street, S.W.
Washington, DC 20590

Re: Classification of new lighter product

Dear Mr. Stevens:

Following up on an email I sent to you on June 29, 2004, a copy of which I attach, I am enclosing a completely empty sample of a new lighter product to be manufactured by Zippo Manufacturing Company ("Zippo") of Bradford, Pennsylvania. The product will consist of the enclosed package containing an empty Zippo refillable butane lighter, which has never been filled, and a small metal canister containing .5 fl. oz (14 gms or 14.8 ml) of butane.

It is our understanding that completely empty lighter products, e.g., never filled, no residue, no vapors, etc.) are not regulated under the Hazardous Materials Regulations ("HMR"). This lighter will be completely empty and will never have been filled with fuel.

It is further our understanding that butane canisters of less than four ounces and containing less than 65 grams of gas are treated as a consumer commodity and classified as ORM-D material under 49 C.F.R. Part 173.144. This butane canister will be metal with an industry standard valve and the small amount of butane noted above.

The purpose of this letter is to confirm that the package containing this empty lighter with this small butane canister can be shipped as ORM-D under the HMR. This determination is critical to Zippo's marketing of this new product as it is not commercially viable to ship and sell this product as a lighter classified under 2.1, or a lighter refill classified under 2.1. The increased cost of shipping products under the HMR and the many limitations on shipping hazardous materials such as lighters by truck and air, have caused Zippo to develop this new product with the view that it will be treated as ORM-D.

## THOMPSON HINE

Mr. Michael Stevens January 18, 2005 Page 2

We are requesting your written opinion that for domestic transportation purposes this new product would be treated as ORM-D, or unregulated under the HMR. We would be pleased to provide you with more information, or to come in and meet with you regarding this matter.

Very truly yours,

David H. Baker

Attorney for Zippo Manufacturing Company

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### Baker, David

From: Stevens, Michael [michael.stevens@RSPA.dot.gov]

**Sent:** Tuesday, June 29, 2004 2:31 PM

To: Baker, David; Stevens, Michael

Cc: Gorsky, Susan

Subject: RE: Lighters and Butane

Good afternoon Mr. Baker. Thank you very much for the package provided to Susan. There is an immense amount of useful information in it. On to your inquiry.

Provided the lighter is empty (i.e., no vapors, gas, residue, or never filled), the lighter is not regulated under the HMR. Because a lighter refill does not meet the definition of an aerosol in § 173.306(a)(3), in order to get to the ORM-D hazard class it cannot exceed 4 fluid ounces capacity (7.22 cubic inches) as specified in § 173.306(a)(1). Only then may it be renamed "Consumer commodity" and reclassed as an ORM-D. If the refill does exceed 4 fluid ounces capacity, then it must be offered for transport as either "Butane, UN1011" (prohibited on passenger-carrying aircraft) or "Lighter refill, UN1057" (accepted on all aircraft). However, if described as a lighter refill, the net mass of gas may not exceed 65 grams. If the net mass of gas exceeds 65 grams, then it must be described as the gas contained therein. This clarification is based on the current regulations and is for domestic transportation only. For international transport by air, lighter refills can never be renamed "Consumer commodity" because they are not aerosols (see ICAO Packing Instruction 910). For vessel transport, a lighter refill may be offered as a lighter refill, limited quantity of Class 2, or as the gas contained therein.

I hope this advice makes sense. Feel free to contact me anytime on this or any other hazmat matter.

Regards, Michael

Michael Stevens
Regulations Specialist
U.S. Department of Transportation
Research and Special Programs Administration
Office of Hazardous Materials Standards (DHM-12)
400 Seventh Street S.W.
Washington, DC 20590
Phone: (202) 366-8553
Fax: (202) 366-3012

-----Original Message-----

**From:** Baker, David [mailto:David.Baker@thompsonhine.com]

Sent: Tuesday, June 29, 2004 12:49 PM

**To:** Stevens, Michael **Cc:** Gorsky, Susan <RSPA> **Subject:** Lighters and Butane

Michael - we gave the materials on the status of the CSPC rulemaking and the EU's adoption of the comparable ISO standard to Susan. I assume that you received them.

I had another question about lighters that I wanted to run by both of you, if possible.

I have a member that proposes to sell an EMPTY refillable lighter with a small can of butane to fill the lighter, in a single consumer package. We are assuming that because the lighter contains no fuel, e.g., no flammable gas, and butane is ORM-D, that the combined product would not be a haz mat shipment. Can you confirm that to me?

If the product is not haz mat, it reduces shipping costs dramatically.

I would greatly appreciate your thoughts on this question. Thanks, David

#### Stevens, Michael < PHMSA >

From: Baker, David [David.Baker@thompsonhine.com]

Sent: Tuesday, November 30, 2004 4:06 PM

To: Stevens, Michael

Subject: RE: Aerosols v. Refills

I don't know how you do this every day.

Thanks for your explanation. I will try and explain to my member.

Thanks again for your help. David

----Original Message-----

From: Stevens, Michael [mailto:michael.stevens@RSPA.dot.gov]

Sent: Tuesday, November 30, 2004 4:00 PM

To: Baker, David

Subject: RE: Aerosols v. Refills

Good afternoon David. Under the HMR, lighter refills no not meet the definition of an aerosol. See § 171.8. Because their sole purpose is to expel a gas (as opposed to a gas used to expel a liquid, paste, or powder), a non-DOT specification pressure vessel (e.g., lighter refill) is subject to the limitations of § 173.306(a)(1). This section limits capacity to 4 fluid ounces (7.22 cubic inches). Section 171.11 authorizes the use of the ICAO Technical Instructions (ultimately IATA) as an alternative to the HMR and § 171.11(d) (14) further limits an aerosol to meeting the definition in § 171.8. Internationally, an aerosol is permitted to expel a gas only (e.g., lighter refill). We don't (for safety reasons) agree with the international definition of an aerosol and, therefore, the restriction in § 171.11 and the definition in § 171.8 applies.

Internationally (by air), a shipment of lighter refills that does not transit to, through, or from the U.S. or is not transported on a U.S. flag carrier anywhere in the world could be offered for transportation as an aerosol under Packing Instruction 203. Packing Instruction 910 of the international air regulations, however, would not allow the further reclassification of a lighter refill to a "consumer commodity" as Class 2 materials are limited to only those that use a gas to expel a liquid, paste, or powder (our definition).

We do agree that the outer packaging proposed for lighter refills for other than air or vessel transport is excessive. All is negotiable.

I hope this guick mess makes sense. Feel free to contact me for more.

Regards,
Michael Stevens
Regulations Specialist
U.S. Department of Transportation
Research and Special Programs Administration
Office of Hazardous Materials Standards (DHM-12)
400 Seventh Street S.W.
Washington, DC 20590
Phone: (202) 366-8553
Fax: (202) 366-3012

-----Original Message-----

From: Baker, David [mailto:David.Baker@thompsonhine.com]

Sent: Tuesday, November 30, 2004 3:02 PM

**To:** Stevens, Michael **Subject:** Aerosols v. Refills

Michael - one of my members has suggested that lighter refills are treated as aerosols under haz mat regimes in other countries such as Canada, as well as under IATA. I have looked briefly at the issue and am uncertain whether this is correct. Is this an issue you looked at during your analysis of the lighter regulation?

I would appreciate your thoughts. Thanks, David