



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

APR 19 2006

400 Seventh Street, S.W.
Washington, D.C. 20590

Ms. Julie L. Heckman
Executive Director
American Pyrotechnics Association
P.O. Box 30438
Bethesda, MD 20824

Reference No.: 05-0208

Dear Ms. Heckman:

This is in response to your letter dated September 7, 2005, regarding the description of hazardous materials on shipping papers required under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask whether an interpretation could be provided allowing the quantity shown on a shipping paper for an explosive article, such as fireworks, to be expressed in terms of a percentage of the gross weight of the product being shipped.

In your letter you described the following:

The fireworks industry generally does not use the measure of net explosive mass. Because compatible assortments of fireworks are packaged in a single packaging for a typical display, companies generally use the gross weight of the product being shipped. It is extremely difficult for the fireworks industry to determine net explosive mass. Similarly, it is very difficult for companies to determine the net explosive mass in a product. For this reason, the American Pyrotechnics Association (APA) petitioned the Bureau of Alcohol Tobacco & Firearms (ATF) who issued a memorandum for determining the weight of explosive materials in display shells and cakes. The memorandum states that, for Division 1.3G aerial display shells, the weight of explosive materials should be calculated as 50 percent of the total weight of the completed firework and for fireworks items such as cakes the weight of explosive materials should be calculated as 25 percent of the total weight of the completed firework.

The answer is no. As provided in § 172.202(a)(5)(i), for an explosive article the quantity shown on a shipping paper may be expressed in terms of the net mass of the article or the net mass of the explosive substances in the article. Changing this requirement in the way requested would require a regulatory change or Special Permit rather than an interpretation. Further, we believe the option allowing an individual to express the quantity on a shipping paper for an explosive article in terms of the net mass of the article or the net mass of the explosive substances in the article provides flexibility to the regulated community and has worked well for transportation. It allows a conservative estimate of explosive mass unless the more precise quantity of net mass of explosive substances, which is available from the explosives approval process, is provided.



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172.202(a)(5)(i)

Based on our review of the ATF memorandum, it is the opinion of this office that expressing the quantity shown on a shipping paper for an explosive article in terms of a percentage of the gross weight of the product shipped could pose certain risks during transportation that do not exist during storage. For example, this methodology has the potential of underestimating the actual hazard of the article because estimates rather than known quantities are used for net mass of explosive substances. Such errors may be more critical in transportation where exposure to hazards is greater, with resultant increased risk to the public, transportation workers, or emergency response personnel. Any petition for rulemaking or request for Special Permit should address these issues and provide sufficient rationale for the change to or deviation from current regulatory requirements.

I trust this information is helpful.

Sincerely,

A handwritten signature in black ink that reads "Edward T. Mazzullo". The signature is written in a cursive, flowing style.

Edward T. Mazzullo
Director, Office of Hazardous
Materials Standards

September 7, 2005

Ms. Susan Gorsky
U.S. Department of Transportation
Pipeline & Hazardous Materials Safety Administration
400 Seventh Street, S.W.
Washington, DC 20590-0001

Betts
§172.202(a)(5)
Shipping Papers
25-0208

Re: Interpretation regarding Part 172.202(a)(5), Description of Hazardous Materials on Shipping Papers

Dear Ms. Gorsky:

As a follow up to our recent meeting, I am writing to you seeking a formal interpretation involving the implementation of 49 CFR Part 172.202(a)(5), Description of Hazardous Materials on Shipping Papers, as revised by Federal Register Notice issued December 20, 2004. 69 Fed. Reg. 76153 (2004)

As you know, under the revised language in Part 172.202(a)(5), shippers of class 1 materials (explosives) may now either provide the net explosive mass of the product, or in the case of small articles, they may provide the net explosive material in the product. In our discussions, you agreed that all class 1.4G items would be small articles. I suspect that most class 1.3G items, particularly after the larger shells are moved to class 1.1G, would be considered small articles as well. In any case, the fireworks industry generally does not use the measure of net explosive mass. Because compatible assortments of fireworks are packaged in a single box for a typical display, companies generally use the gross weight of the product being shipped. It is extremely difficult for the fireworks industry to determine net explosive mass. At best, our members would be guessing the net explosive mass.

Similarly, it is very difficult for companies to determine the net explosive material in a product. For this reason, many years ago, the Bureau of Alcohol Tobacco & Firearms (ATF) issued an interpretation that for class 1.3G aerial display shells, companies should use 50% of the gross weight of the product as a measure of the net explosive material (pyrotechnic material) in the product. For class 1.4G consumer fireworks items, companies have used 25% of the gross weight of the product, which is definitely a high measure for most 1.4G consumer items. The 25% figure would also apply to 1.4G and 1.4S Articles Pyrotechnic, (for professional use only items). And finally, class 1.3G multi-shot cake, candle and box items would also use the 25% net explosive material figure.

The APA respectfully requests that PHMSA accede to this ATF interpretation, which is rationally based and provides the agency and first responders with a very accurate measure of the net explosive material in a truck or trailer. The ATF interpretation has been in place for over

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13 years and is universally recognized by the fireworks industry. It also would not be difficult for PHMSA to communicate this policy to its inspectors by email. It is a very simple interpretation.

Otherwise, the fireworks industry will be forced to declared two different measures of explosive content – one for ATF and one for PHMSA. That does not make any sense.

Thank you for consideration of our request.

Yours truly,

American Pyrotechnics Association

Julie L. Heckman
Executive Director

Cc: David H. Baker, Esq.