



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety Administration**

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

AUG 24 2006

Mr. Lon D. Santis
Manager of Technical Services
Institute of Makers of Explosives
1120 Nineteenth Street, NW
Suite 310
Washington, DC 20036-3605

Reference No.: 06-0117

Dear Mr. Santis:

This responds to your May 18, 2006 letter regarding the description of Class 1 materials on a shipping paper in accordance with the Hazardous Materials Regulations (HMR; 49 CFR parts 171-180). Your questions relate to the requirement for the shipping paper to include the net explosive mass (NEM) of the article being transported. Your questions are paraphrased and answered below.

- Q1. The HMR appear to require shipping papers to list the NEM as a whole number. For an article containing less than one kilogram total NEM, may the NEM be expressed as "less than one kg" rather than the actual NEM?
- A1. 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 substance in the article. The HMR do not require the quantity to be expressed in whole numbers; indeed, the NEM should be as accurate as possible. Thus, for an article containing less than one kilogram NEM, the NEM indicated on the shipping paper must be either the net mass of the article itself or the net mass of the explosive material in the article.
- Q2. The Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) uses a general standard of 0.7 grams of explosive material per detonator to calculate the quantity distance requirements for explosives storage (27 CFR 555.218, Note (3)). Consistent with the ATF regulations, may the NEM for a detonator containing not more than two grams NEM be expressed as "1 gram" rather than the actual NEM?
- A2. No. Transportation of hazardous materials poses certain risks that are not present when materials are stored. Your suggested approach has the potential to underestimate the actual hazard of the article because an estimate rather than a known quantity is used to express NEM. Such errors may be more critical in transportation where exposure to hazards is greater, which increases the risk to the public, transportation workers, and emergency response personnel. For this reason,



060117

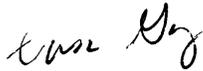
172.202(a)(5)(i)

we do not agree that standards applicable to the storage of explosives outside of transportation should be applied in a transportation scenario. For a detonator, the NEM must be either the net mass of the detonator itself or the net mass of the explosive material in the detonator.

We believe the option provided in the HMR allowing a shipper to express the NEM on a shipping paper in terms of the net mass of the article or the net mass of the explosive material contained in the article provides flexibility for the regulated community and has worked well for transportation. It allows a conservative estimate of explosive mass unless the more precise NEM of the explosive substance in the article, which is available from the explosives approval process, is provided. Changing this requirement in the way requested would require a regulatory change or a special permit rather than an interpretation.

I hope this information is helpful. Please contact this Office if you have questions or need additional information.

Sincerely,



 Edward T. Mazzullo
Director, Office of Hazardous
Materials Standards



Corbin
§ 172.202(a)(5)(i)
Shipping Papers
06-0117

The safety & security institute of the commercial explosives industry • Founded 1913

May 18, 2006

Dr. Robert McGuire
Associate Administrator
Office of Hazardous Materials Safety
Pipeline and Hazardous Materials Safety Administration
US Department of Transportation
400 Seventh St., SW
Washington, DC 20590

RE: Regulatory Interpretation

Dear Dr. McGuire:

I am writing on behalf of the Institute of Makers of Explosives (IME) regarding interpretation of 49 CFR 172.202(a)(5)(i), which requires net explosive mass (NEM) on shipping papers for Class 1 materials.

The IME is the safety and security association of the commercial explosives industry. Our mission is to promote safety, security and the protection of employees, users, the public and the environment; and to encourage the adoption of uniform rules and regulations in the manufacture, transportation, storage, handling, use and disposal of explosive materials used in blasting and other essential operations. Commercial explosives are transported and used in every state. Additionally, our products are distributed worldwide. The ability to transport and distribute these products safely and securely is critical to this industry.

Last August, we met with PHMSA to explain compliance difficulties and questions with the above referenced regulation. The regulation does not specify what level of accuracy PHMSA expects to enforce regarding the listing of NEM on shipping papers. IME members ship a wide variety of articles with different NEMs and need guidance in this area. IME believes that PHMSA expects shipping papers to list the NEM in whole number kilograms. When a product listed on the shipping paper contains less than one kilogram total NEM (including all the articles covered by that entry), IME believes that the shipping paper should list the NEM as "less than 1 KG" for that entry.

IME also requests that PHMSA allow the use of one gram per detonator when calculating NEM for UN numbers 0360, 0361, 0500, 0030, 0255, 0456, 0029, 0267, and 0455 so long as the detonator contains no more than two grams NEM. The Department of Justice's Bureau of Alcohol, Tobacco, Firearms and Explosives uses a general standard of 0.7 grams of explosive material per detonator to calculate quantity-distance requirements for explosives storage at 27 CFR 555.218, Note(3). For NEM on shipping papers, a general standard of one gram per detonator will greatly aid in compliance without sacrificing safety.

Thank you for your attention to this matter. IME membership will benefit from a formal letter of interpretation clarifying its position on these issues. Please contact me at 202-266-4333 if you have any questions

Sincerely,

A handwritten signature in black ink, appearing to read "Lon D. Santis". The signature is fluid and cursive, with a long horizontal stroke at the end.

Lon D. Santis,
Manager of Technical Services