



U.S. Department of Transportation
**Pipeline and Hazardous Materials
Safety Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

JAN 8 2010

Mr. Craig Updyke
Manager, Trade and Commercial Affairs
NEMA
1300 North 17th Street, Suite 1752
Rosslyn, VA 22209

Ref. No.: 09-0235

Dear Mr. Updyke:

This responds to your September 30, 2009 letter regarding the applicability of the Hazardous Materials regulations (HMR; 49 CFR parts 171-180) to certain lamps (e.g., lighting equipment, including light bulbs), containing small amounts of hazardous materials, including mercury and/or radioactive isotopes. Specifically, you are seeking reaffirmation or an update of:

- Previous interpretations on this issue provided to your company on June 14, 2005 (Ref. No.05-0086) and August 17, 2005 (Ref. No. 05-0174); and
- An interpretation of the labeling requirements for pallet loads of lighting product marked "UN 2911".

Q1. Is the following statement of understanding correct?

On the first point, based on the 2005 letters, NEMA lamp companies understood that exceptions to the HMR are not mandatory. The importance of this for manufacturers of lamps containing radioactive materials is that measurements need not be taken to verify whether a package is subject to the exception if the shipper chooses not to take advantage of the exception to the requirement to mark packages of radioactive lamps with "UN 2911" without taking measurements of total radioactivity. In 2005, the companies wanted to make sure that over-complying would not constitute a compliance problem and were assured by PHMSA that it would not. Is that still the case?

A1. The answers to the questions in the two previous interpretations (Ref. No.05-0086; 6/14/05 and Ref. No. 05-0174; 8/17/05) provided to your company on this issue are still correct.

As you are aware, when properly identified as containing limited quantity amounts of both mercury and radioactive isotopes in accordance with §173.423, NEMA lamp companies' lighting products must be classed for the additional hazard, packaged to conform with the requirements specified in § 173.421(a)(1) through (a)(5) or § 173.424(a) through (g), as appropriate, and offered for transportation in accordance with the requirements applicable to the hazard for which it is classed. Therefore, except for those exceptions pertaining to labeling, specification packaging, and marking, a material offered for transportation as "Radioactive material, excepted package-instruments or articles, UN 2911" is fully subject to the HMR.

Q2. Is the following statement of understanding correct?

On the second point, NEMA lamp companies are seeking a clear interpretation of the requirements for marking of pallet-loads of "UN 2911" lamps. One view is that, if a pallet of "UN 2911" cartons is secured with transparent shrink-wrap, each carton must be marked with "UN 2911". A second approach would have the entire pallet of cartons enclosed by a large overpack box that is marked with "UN 2911". A third possibility would have the pallet of cartons shrink-wrapped with UN 2911" labels included between layers of the wrapping so they are clearly visible.

A2. Generally, in accordance with § 173.448(g), if an overpack is used to consolidate individual packages or to enclose a single package of Class 7 (radioactive) material, the package(s) must comply with the packaging, marking, and labeling requirements of the HMR. In addition, the overpack must be labeled as prescribed in § 172.403(h), and marked as prescribed in subpart D of Part 172 and § 173.25(a). The transport index of the overpack may not exceed 3.0 for passenger-carrying aircraft or 10.0 for cargo-aircraft shipments. Thus, the overpack must be marked, and labeled as required for each hazardous material it contains, unless markings and labels representative of each hazardous material in the overpack are visible. Your company's view that each carton must be marked with "UN 2911" if a pallet of cartons is secured with transparent shrink-wrap is the correct one.

I hope this information is helpful. If we can be of further assistance, please contact us.

Sincerely,



Charles E. Betts
Chief, Standards Development
Office of Hazardous Materials Development



Setting Standards for Excellence

September 30, 2009

Mr. Edward Manzullo
Director, Office of Hazardous Materials Standards
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

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§ 173.422
§ 173.424
RAM
09-0235

Dear Mr. Manzullo,

In part, NEMA represents U.S. manufacturers of lighting equipment, including light “bulbs”, which are known in the industry as “lamps”. Certain lamps, contain small amounts of hazardous materials, including mercury and/or certain radioactive isotopes, which are needed to optimize the energy efficient conversion of electricity into visible light. Over the past several years in particular, the Office of Hazardous Materials Standards has been helpful in providing clear interpretation and explanation of the U.S. Hazardous Materials Regulations (HMR) as they apply to these lamp products.

Consistent with their efforts to maintain compliance with the HMR, members of the NEMA Lamp Section are seeking

- reaffirmation of or an update of the interpretations provided in letters from PHMSA to NEMA of June 14 and August 17, 2005, and
- an interpretation of the labeling requirements for pallet loads of product marked “UN2911”

On the first point, based on the attached 2005 letters, NEMA lamp companies understood that exceptions to the HMR are not mandatory. The importance of this for manufacturers of lamps containing radioactive materials is that measurements need not be taken to verify whether a package is subject to the exception if the shipper chooses not to take advantage of the exception to the requirement to mark packaging with the UN number. In their specific case, NEMA companies have chosen to mark packages of radioactive lamps with UN2911 without taking measurements of total radioactivity. In 2005, the companies wanted to make sure that over-complying would not constitute a compliance problem and were assured by PHMSA that it would not. Is that still the case?

On the second point, NEMA lamp companies are seeking a clear interpretation of the requirements for marking of pallet-loads of UN2911 lamps. One view holds that, if a pallet of UN2911 carton is secured with transparent shrink-wrap, each carton must be marked with UN2911. A second approach would have the entire pallet of cartons enclosed by a large over-pack box that is marked with UN2911. A third possibility would have the pallet of cartons shrink-wrapped with UN2911 labels included between layers of the wrapping so they are clearly