



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

JUN 14 2005

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

Mr. Ron Runkles
National Electrical
Manufacturers Association (NEMA)
1300 North 17th Street, Suite 1847
Rosslyn, VA 22209

Reference No. 05-0086

Dear Mr. Runkles:

This is in response to your April 7, 2005 letter regarding the applicability of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) to radioactive articles and mercury. Your questions concern lamps that contain both mercury and a limited quantity radioactive material. Your scenarios and questions are paraphrased and answered as follows:

Q1. The definition of a radioactive material in § 173.403 applies to a material that contains radionuclides where both the activity concentration and the total activity in the consignment exceed the values specified in the table in §173.436 or values derived according to the instructions in §173.433. If a limited quantity shipment of radioactive materials is broken down and the remaining containers in the consignment do not exceed the activity limit for the consignment, may the ID markings remain on the packagings?

A1. The answer is yes. The prohibited marking requirements in § 172.303(a) state that "No person may offer for transportation or transport a package which is marked with the proper shipping name or identification number of a hazardous material unless the packages contains the identified hazardous material or its residue." Although the total consignment, as described in the above scenario, would not exceed the values specified in the table in § 173.436 or the values derived in accordance with the instructions in § 173.433, the identification marking may remain on the package because it would be considered a residue.

Q2. Can lighting products that contain both mercury and ionizing radiation be transported as Class 8 Mercury contained in manufactured articles, UN2809, when properly identified as containing radioactive material in accordance with § 173.423, even though the mercury falls within the limits specified in the § 173.164(e) exception for articles or packages?



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A2. The answer is yes. Since exceptions are not mandatory, the proper shipping name "Mercury contained in manufactured articles" may be used to describe the material in accordance with the multiple hazard limited quantity Class 7 provisions in § 173.423.

Q3. If the answer to Q2 is yes, can the UN 2809 marking be used in lieu of the UN2911 marking at our discretion?

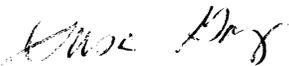
A3. The answer is yes. If the mercury in your lighting product meets the necessary conditions to qualify for the exception from the HMR in § 173.164(e), it is permissible to ship the lighting product as either "Radioactive material – excepted package, article, UN2911," or as "Mercury contained in manufactured articles, UN2809." However, if the lighting product does not meet the necessary conditions to qualify for the exception from the HMR in § 173.164(e), it must be shipped as "Mercury contained in manufactured articles, UN2809."

Q4. What training and reporting requirements are applicable to shippers that offer materials described as "Radioactive material, excepted package-instruments or articles, UN2911" under the HMR?

A4. Except for those exceptions pertaining to labeling, specification packaging, and marking, shippers and carriers of "Radioactive material, excepted package-instruments or articles, UN2911" are fully subject to the HMR including the training requirements found in Part 172, Subpart H and the reporting requirements in §§ 171.15 and 171.16.

I hope this information is helpful.

Sincerely,



Susan Gorsky
Acting Director Hazardous Materials Standards
Office of Hazardous Materials Standards



National Electrical Manufacturers Association
1300 North 17th Street, Suite 1847
Rosslyn, VA 22209
703-841-3278
Fax: 703-841-3378
ron_runkle:@nema.org

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April 7, 2005

Mr. John Gale
Standards Development Chief
Office of Hazardous Materials Standards
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation
Room 8430
400 7th Street, SW
Washington, DC 20590

Dear Mr. Gale:

The National Electrical Manufacturers Association (NEMA) appreciates your response to our January 28, 2005 inquiry (see PHMSA Reference No. 05-0029 signed by Hattie L. Mitchell and dated March 9, 2005) and the participation of yourself and PHMSA staff in the follow-up conference call of March 23, 2005.

This letter is written to confirm our understanding that lighting products containing ionizing radiation, otherwise meeting the conditions at 49 CFR 173.424, and transported as "Radioactive material, excepted package – articles" must be marked with the identification number UN2911 if:

- The product exceeds the radionuclide specific activity concentration limit

and

- It is included in a consignment where the radionuclide specific activity in the consignment exceeds the exempt consignment limit,

this according to the 173.403 definition of a Radioactive Material.

In addition, as indicated during our March 23, 2005 conference call, please confirm that packages for these articles may also be marked with the identification number UN2911 even though the product may:

- Contain less than the radionuclide specific activity concentration limit

or

- Be included in a consignment where the radionuclide specific activity in the consignment falls below the exempt consignment limit,

Mr. John Gale
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so long as the requirements of 49 CFR 173.422, as indicated by the presence of the UN2911 marking, are complied with.

The specific practical concern addressed during the March 23rd call involves a UN2911 marking remaining on containers within a consignment as the consignment is broken down and distributed beyond the point that the specific activity no longer exceeds the activity limit for exempt consignments listed in Table 173.436 or as calculated using the requirements of 49 CFR 173.433.

As a corollary to the questions asked in our original January 28th inquiry and March 23rd discussion, and following upon the above logic, we also seek the following guidance: Can lighting products that contain both mercury and ionizing radiation be transported as Class 8 Mercury contained in manufactured articles, UN2809, when properly identified as containing radioactive material in accordance with 173.423, even though the mercury level is less than the limits specified in 173.164(e) for articles or packages?

If the answer is no, we would like to understand why. If the answer is yes, can we, at our option, employ the UN2809 designation in lieu of the UN2911 designation?

Finally, as also discussed during our conference call, please detail our obligations that are associated with using the UN2911 designation, especially those that involve training and reporting.

We look forward to your response, and would appreciate the opportunity to continue the discussions between PHMSA staff and NEMA lamp manufacturers. We will contact you to set up such a call, or possibly a meeting in Washington, following receipt of your response.

Thank you for your continued assistance in this matter.

Sincerely,

Ron Runkles

Ron Runkles
Program Manager

cc: Kyle Pitsor, NEMA
Curt Riesenber, NEMA
Clark Silcox, NEMA
NEMA Task Force on Radioactive Materials