



U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

1200 New Jersey Ave., SE
Washington, DC 20590

OCT 3 2008

Mr. Ronald J. Stokes
ExxonMobil Chemical Company
Intermediates, Synthetics Product Stewardship
P.O. Box 3140
Edison, New Jersey 08818

Ref. No. 08-0178

Dear Mr. Stokes:

This responds to your June 25, 2008 letter requesting clarification of the classification and training requirements in the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) for rail shipments. Specifically, you ask whether the HMR apply to the transportation of materials that release hydrogen into the vapor space of a tank car.

According to your letter, you ship various products by rail tank car. Some of these products meet the HMR definition for combustible liquid; others do not meet the definition for any hazard class. In all cases, however, these products release unincorporated hydrogen into the vapor space of the tank car. The vapor pressure is less than 40 psi; however, the hydrogen has been measured at between 2% and 80% concentration. The published flammable limits (LEL-UEL) of hydrogen are 4% and 75%. You ask how these materials should be classed and transported.

Under the HMR, hydrogen is classed as a flammable gas irrespective of the pressure it exerts in its packaging. A material that releases a hazardous amount of hydrogen into the vapor space of its packaging during transportation must be classed and transported to address the hazard posed by the hydrogen unless the material is stabilized or inhibited to preclude such a release. For example, the release of hydrogen during transportation could be inhibited through the use of a nitrogen blanket, provided the vapor pressure of the nitrogen does not exceed 40 psi. If the materials you ship are stabilized or inhibited to preclude the release of hydrogen, they may be transported as unregulated materials or as combustible liquids, as appropriate.

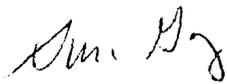
Alternatively, a material that does not meet the definition of any of the hazard classes defined in Part 173 of the HMR, but that releases hydrogen into the vapor space of its container or packaging under the conditions described in your letter may be described as "UN 1049, Hydrogen, compressed, 2.1" and transported in accordance with all applicable requirements, including appropriate packaging and hazard communication. A material that meets the definition for a combustible liquid and releases hydrogen into the vapor space of its container

or packaging under the conditions described in your letter may be described as “UN 1954, Compressed gas, flammable, n.o.s., 2.1 (hydrogen, compressed; combustible liquid)” and transported in accordance with all applicable requirements, including appropriate packaging and hazard communication.

You also ask whether a person who loads or unloads non-hazardous materials to or from a bulk packaging must be trained in accordance with Subpart H of Part 172. The answer is no. The training requirements in the HMR do not apply to persons who handle unregulated materials. However, persons who load and/or unload hazardous materials as described in this letter must be trained.

I hope this answers your inquiry.

Sincerely,

A handwritten signature in cursive script, appearing to read "Susan Gorsky".

Susan Gorsky
Acting Chief, Standards Development
Office of Hazardous Materials Standards

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Applicability &
Training
08-0178

ExxonMobil
Chemical

June 25, 2008

U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Admin (PHH-10)
Office of Hazardous Materials Safety
1200 New Jersey Avenue, SE East Building, 2nd Floor
Washington, DC 20590

Attn: Mr. Edward T. Mazzullo, Director
Office of Hazardous Materials Standards

Dear Mr. Mazzullo:

Two matters recently arose for which we seek your consideration. The first matter deals with a few select products we produce and ship primarily by rail tankcar. These products vary from being a combustible liquid; n.o.s. to non-regulated but in all cases these products release unincorporated hydrogen into the vapor space of the tankcar. While the vapor pressure is less than 40 psi, the hydrogen has been measured from 2% to 80% concentration in air. The published flammable limits (LEL - UEL) of hydrogen are 4% to 75%. As you can see, we don't have a Division 2.1 issue but we are concerned about the potential flammable and/or explosive issue surrounding shipment of these products.

1. Question. Based on the information stated above are there any hazardous material regulatory issues (classification & packaging) we should be concerned with.
2. Question. Are we correctly classifying our products by limiting the classifications where appropriate to combustible liquid, n.o.s or non-regulated?

The second issue deals with the shipment of non-regulated materials in specification rail tank cars, cargo tanks and portable tanks.

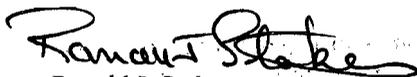
3. Question. Are persons who only load and/or unload non-regulated materials to and from bulk specification packagings required to be trained in accordance with Subpart H to Part 172?

Although we have the utmost appreciation for your time and obligations, we seek a prompt response so that we may ensure only compliant shipments are placed into commerce.

Should there be any questions concerning this request, I may be contacted at the above address or contact numbers shown below.

Thanks for your help in this matter.

Sincerely,



Ronald J. Stokes
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