



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

**DEC 05 2013**

Mr. Don Collier  
Manager – Order Fulfillment  
Legend, Inc.  
988 Packer Way  
Sparks, NV 89431

Ref. No.: 13-0188

Dear Mr. Collier:

This is in response to your letter dated July 2, 2013, requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the classification of mixtures of lead compounds containing lead oxide as a marine pollutant. Your questions are paraphrased and answered as follows:

Q1. You request confirmation of your understanding that to be classified as Division 6.1 a material must meet the definition in § 173.132(a). The lead compound mixtures being shipped do not meet the definition of a Division 6.1 poisonous material and therefore may not be described as “Lead compound, soluble, n.o.s.” on the shipping document.

A1. You are correct.

Q2. To obtain the toxicity levels of the lead compound mixtures you performed a calculation based on the actual toxicity of the ingredients and the combined chemical formulation of the product. You ask if this method for determining toxicity is acceptable.

A2. The use of the formula provided in § 173.132(c)(3) is acceptable for classification of mixtures possessing toxicity hazards.

Q3. You ask if international standards concerning toxicity levels for Division 6.1 are expected to change in the foreseeable future.

A3. Currently, no changes to the international standards relating to toxicity levels for Division 6.1 are being considered. We are unable to speculate on the likelihood of future changes.

Q4. You ask if the criteria for the solubility of lead compounds in § 172.102(c)(1), Special Provision 138 is applicable to the classification of a lead compound as a marine pollutant.

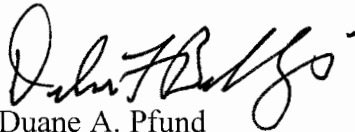
A4. Yes. The defining criteria for the solubility of lead compounds are in § 172.102(c)(1), Special Provision 138. When we incorporated this definition, it was our intent for it to also apply to the soluble lead compounds entry on the List of Marine Pollutants in § 172.101, Appendix B. However, we neglected to include that language. We intend to clarify this in a future rulemaking.

Q5. If the lead compounds are classed as a marine pollutant, are they eligible for the limited quantity exception for Class 9 materials provided in § 173.155, including the package weight limitations? Further, you ask for guidance on how you might increase the gross weight limitation of the packages.

A5. Yes. If the lead compounds are classed as a marine pollutant, the limited quantity exceptions for Class 9 materials provided in § 173.155 would apply, including the maximum gross weight limitation of 30 kg (66 pounds) for each package. The 30 kg (66 pound) gross weight limitation would not apply if the products are shipped as fully regulated Class 9 materials.

I trust this information is helpful. If you have further questions, please do not hesitate to contact this office.

Sincerely,



*bp*  
Duane A. Pfund  
International Standards Coordinator  
Standards and Rulemaking Division



July 2, 2013

U.S. Department of Transportation  
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Washington, DC 20590

Babich  
§ 173.132  
§ 171.8  
§ 172.101  
Definitions  
13-0188

RE: Guidance Concerning Classification of a Mixture Under 49 CFR §173.

Dear Sir/Madam,

Our company ships three categories of products that consist of mixtures constituting soluble lead compounds that contain lead oxide (PbO). According to formulae-based calculations, none of the mixtures have sufficient toxicity levels to meet the definition of a Class 6.1 Poison described in 49 CFR §173.132(a)(1)(i), (ii), or (iii). However, lead is listed in Annex B to the Hazardous Materials Table, and each of the mixtures contain lead oxide in excess of 10% of the respective mixture by weight, and appear to qualify as a Marine Pollutant pursuant to 49 CFR §171.8.

We would greatly appreciate interpretive guidance concerning each of the following:

Item 1. Our understanding, based on other interpretations published by PHMSA, is that classification as a Class 6.1 Poison pursuant to the Hazardous Materials Table (49 CFR §172.101) requires that the material qualify under the definition described in Section 173.132 (a)(1)(i), (ii), or (iii). Based on our calculations, our products involving the described mixtures do not meet the Class 6.1 definition, and should not be classified as a Class 6.1 Poison and should not be described as "Lead Compound, Soluble n.o.s." on shipping documents. Please confirm our understanding.

Item 2. Our conclusion stated in Item 1 (above) concerning the toxicity level of our products is derived using a calculation based on actual toxicity of ingredients and the combined chemical formulation for the product. Please confirm that this method of determining toxicity is acceptable for our purpose, and that specific product toxicity tests are not required when evaluating application of Section 173.132.

Item 3. In light of the process of harmonization of 49 CFR §§171 – 179 with international standards (including IMDG), are the criteria in 49 CFR 173.132 concerning toxicity levels for Class 6.1 Poison expected to change in the foreseeable future? If so, are the criteria and effective date known or predictable at this time?

Item 4. Each of the three mixtures described above contain lead oxide in a concentration that exceeds 10% of the respective mixture by weight and appear to constitute a Class 9 Marine Pollutant as a "Lead

Compound, soluble, n.o.s." per Annex B to the Hazardous Materials Table. As mentioned, the lead oxide is soluble per § 172.102 Provision 138, but insoluble in water and consists of particles meaningfully larger than the 100 micron threshold (actual size is 800-2000 Microns (95% Pass)) for which Reportable Quantity non-applicable. We believe that as such they do not meet the definition of Marine Pollutant per 49 CFR §171.8 and do not require a Class 9 classification per 49 CFR §173.140. Please confirm or correct our understanding.

Item 5. If our understanding in Item 4 is not correct, we believe that the insolubility in water and the large particle size, augmented by our use of appropriately protective inner packaging and strong outer packaging, should allow us to ship by all modes of transportation per the exception from classification as a Class 9 Marine Pollutant for inner packaging weighing not more than 30 kilograms each. We ask for confirmation of this understanding, and further, we ask for guidance on how we might increase the gross weight limit of our inner package given the water insolubility and larger particle size that our products offer.

Thank you for your assistance concerning these items. We look forward to receiving your guidance.

Best Regards,



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LEGEND, Inc.



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July 2, 2013

U.S. Department of Transportation  
Pipeline and Hazardous Materials Safety Administration  
East Building, 2nd Floor  
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1200 New Jersey Ave., SE  
Washington, DC 20590

Dear Sir/Madam:

In response to technical opinion provided by Dr. Ke (attached) concerning lead oxide (PbO), please accept included letter requesting guidance and interpretation.

I look forward to your response.

Sincerely,

Don Collier

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LEGEND, Inc.