



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

1200 New Jersey Ave., S.E.  
Washington, DC 20590

JUL 29 2008

Mr. George Kerchner  
Executive Director  
Portable Rechargeable Battery Association  
1776 K Street, NW  
Washington, DC 20006

Ref. No.: 08-0161

Dear Mr. Kerchner:

This is in response to your June 3, 2008 electronic mail requesting clarification of the packaging requirements in the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) and the various international dangerous goods regulations pertaining to lithium batteries. Specifically, you ask if a shipper may use strong outer packagings, protective enclosures or pallets instead of UN combination packages provided certain requirements are met.

As provided by § 173.185(g) and Packing Instruction 903 of the International Civil Aviation Organization Technical Instructions and the International Maritime Dangerous Goods Code, batteries employing a strong, impact-resistant outer casing and exceeding a gross weight of 12 kg (26.5 lbs.), and assemblies of such batteries, may be packed in strong outer packagings, in protective enclosures (for example, in fully enclosed wooden slatted crates) or on pallets. Batteries must be secured to prevent inadvertent movement, and the terminals may not support the weight of other superimposed elements. Batteries packaged in this manner are not subject to specification packaging requirements but are subject to the other requirements of § 173.185(a) or Packing Instruction 903 including short circuit protection and design type testing.

Batteries packaged in the manner described above may be transported by highway, rail, and vessel. Such batteries are not permitted for transportation by passenger aircraft, and may be transported by cargo aircraft only if approved by the Associate Administrator prior to transportation.

I hope this information is helpful. Please contact us if you require additional assistance.

Sincerely,

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

Leary  
§173.185(g)  
Lithium Battery  
08-0161



June 6, 2008

Ms. Carolyn Drakeford  
U.S. Department of Transportation  
Pipeline and Hazardous Materials Safety Administration  
1200 New Jersey Avenue, SE  
Washington, DC

Re: Request for Interpretation on ICAO TI PI 903 and 49 CFR 173.185(g)

Dear Ms. Drakeford:

As a follow-up to my June 3 email to your office, I am writing for a clarification on the provision found in the lithium battery regulations at 49 CFR 173.185(g). A similar provision is in Packing Instruction 903 of the IMDG Code and Packing Instruction 903 of the ICAO Technical Instructions.

49 CFR 173.185(g) and Packing Instruction 903 state that "*Batteries employing a strong, impact-resistant outer casing and exceeding a gross weight of 12 kg (26.5 lbs.), and assemblies of such batteries, may be packed in strong outer packagings, in protective enclosures (for example, in fully enclosed wooden slatted crates) or on pallets. Batteries must be secured to prevent inadvertent movement, and the terminals may not support the weight of other superimposed elements. Batteries packaged in this manner are not permitted for transportation by passenger aircraft, and may be transported by cargo aircraft only if approved by the Associate Administrator prior to transportation.*" Large lithium batteries normally must be shipped in Packing Group II packaging. However, this provision at 49 CFR 173.185(g) and in Packing Instruction 903 appear to authorize shippers to use strong outer packagings, or protective enclosures (for example, in fully enclosed wooden slatted crates,) or pallets instead of Packing Group II packaging if the battery exceeds 12 kg and has an impact-resistant outer casing. I recognize that the battery also is subject to the UN testing requirements.

Therefore, my question is –

May a shipper use strong outer packagings, or protective enclosures (for example, in fully enclosed wooden slatted crates,) or pallets instead of Packing Group II packaging to ship a lithium battery if it exceeds 12 kg, has an impact-resistant outer casing, and has passed the required UN lithium battery tests?

I can be reached at 202.719.4109 if you have any questions. Thank you for your assistance.

Sincerely,

*George A. Kerchner*

George A. Kerchner  
Executive Director

1776 K Street, NW  
Washington, DC 20006  
202.719.4978