



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, DC 20590

APR 06 2017

Mr. Sean Kelly  
DGI Training  
P.O. Box 16972  
Fernandina Beach, FL 32035

Reference No. 16-0172

Dear Mr. Kelly:

This letter is in response to your October 23, 2016, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to lithium batteries. Specifically, you ask for confirmation of your understanding that button cell batteries installed in equipment can be transported as general cargo, regardless of the number of button cell batteries contained in the equipment, provided the total weight of button cell batteries in each package does not exceed 5 kilograms (kg).

You offer the following as an example of a package you believe should be accepted and transported as general cargo:

- A package contains 100 pieces of equipment—each piece of equipment contains 6 lithium button cell batteries—for a total of 600 button cell batteries in a package;
- Each button cell battery contains less than 1 gram (g) of lithium; and
- Each package contains not more than 5 kg of button cell batteries.

Your understanding is correct. In accordance with § 173.185(c), a package containing lithium metal cells or batteries (not exceeding 1 g for a lithium metal cell or 2 g for a lithium metal battery) contained in equipment in quantities less than 5 kg net weight per package is excepted from the requirement to mark the outer package to indicate it is forbidden aboard passenger aircraft. In addition, § 173.185(c)(3) excepts button cell batteries installed in equipment (including circuit boards), or equipment installed with four lithium cells or two lithium batteries or less, from the hazard communication requirements prescribed in that section, including the marking and documentation requirements prescribed in § 173.185(c)(3)(i), (ii), and (iii). Please note the four lithium cell/two battery limit exception in § 173.185(c)(3) does not apply to button cell batteries installed in equipment.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

T. Glenn Foster  
Chief, Regulatory Review and Reinvention Branch  
Standards and Rulemaking Division

Edmanson  
§173.185  
Batteries  
16-0172

**Dodd, Alice (PHMSA)**

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**From:** Rivera, Jordan CTR (PHMSA)  
**Sent:** Monday, October 24, 2016 3:39 PM  
**To:** Hazmat Interps  
**Subject:** FW: Clarification Letter of Interpretation Small Button Cell Batteries 49CFR, Section 173.185

Hi Shante/Alice,

Please submit this as a letter of interpretation. Please let me know if you have any questions.

Thanks,  
Jordan

-----Original Message-----

From: Sean Kelly [<mailto:dgitech@dgitraining.com>]  
Sent: Monday, October 24, 2016 3:17 PM  
To: INFOCNTR (PHMSA)  
Subject: RE: Clarification Letter of Interpretation Small Button Cell Batteries 49CFR, Section 173.185

Thanks Jordan, My complete contact information as follows:

Sean Kelly  
P.O. Box 16972  
Fernandina Beach, FL 32035

Tel. 904 556 7774

Thanks again, Sincerely,

Sean Kelly  
DGI Training

-----Original Message-----

From: INFOCNTR (PHMSA) [<mailto:INFOCNTR.INFOCNTR@dot.gov>]  
Sent: Monday, October 24, 2016 3:10 PM  
To: Sean Kelly  
Subject: RE: Clarification Letter of Interpretation Small Button Cell Batteries 49CFR, Section 173.185

Dear Sean,

We have received your request for a written letter of interpretation regarding the hazardous materials regulations (49 CFR Parts 171-180). The hazardous materials regulations are available at the following URL:

<http://phmsa.dot.gov/regulations>

In order to process your request, please respond to this email with your full contact information (mailing address, telephone number). You may contact the Hazardous Materials Information Center at +1 202-366-4488 with questions.

Please allow a minimum of 8 weeks before contacting the Office of Hazardous Materials Standards (OHMS) for a status on written letters of interpretations. Delivery time of a written interpretation can vary markedly based on topic complexity and the depth of review necessary by OHMS Divisions and modal administrations (e.g., FAA) to ensure an appropriate response.

Sincerely,

Jordan, Hazardous Materials Specialist

An e-mail response from this office is considered informal guidance. Formal guidance may be requested in accordance with 49 CFR 105.20. <http://phmsa.dot.gov/hazmat/regs/interps>

-----Original Message-----

From: Sean Kelly [mailto:[dgittech@dgitraining.com](mailto:dgittech@dgitraining.com)]

Sent: Sunday, October 23, 2016 3:01 PM

To: INFOCNTR (PHMSA)

Subject: Clarification Letter of Interpretation Small Button Cell Batteries 49CFR, Section 173.185

Could you please provide clarification on Section 173.185(c)(1)(iii) which states, "Except when lithium metal cells or batteries are packed with or contained in equipment in quantities not exceeding 5 kg net weight...."

Section 173.185(c)(3), "Except for a package containing button cell batteries installed in equipment (including circuit boards), OR no more than four lithium cells or two lithium batteries installed in the equipment:"

The ICAO Packing Instruction 970 says it clearly, "Except button cell batteries installed in equipment (including circuit boards)." IMDG Code, Special Provision 188.6 says the same thing.

Your letters of interpretations, 14-0013, 12-0261, and 15-0171, all reference the number of batteries installed in equipment rather than the complete exception for button cell batteries installed in equipment. Both government and industry have combined these two separate exceptions (number of batteries versus the type button cell batteries) installed in equipment.

It is my contention button cell batteries not exceeding 5 kilos installed in equipment should be transported as general cargo (regardless of the number of button cell batteries contained in the equipment). For example, if a piece of equipment contains 6 small lithium button cell batteries, each battery contains less than one gram of lithium, we can put 100 pieces of equipment (6 batteries each = 600 batteries total) in a single package and that package should be accepted and transported as general cargo so long as the weight of the batteries does not exceed five kilos.

Sincerely, Sean Kelly  
DGI Training