



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

MAR 15 2008

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

Mr. Frits Wybenga
Technical Director
Dangerous Goods Advisory Council
1100 H Street, NW., Suite 740
Washington, DC 20005

Ref. No. 07-0189

Dear Mr. Wybenga:

This responds to your October 11, 2007 email and follow-up telephone conversations requesting clarification of requirements for transport of nonspillable batteries under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask whether the "NONSPILLABLE" mark on the outside of packaging applies to nonspillable batteries shipped separately and also applies to batteries contained in equipment. Additionally, you ask whether an "uninterruptible power supply" (UPS) is considered "equipment" for purposes of the HMR.

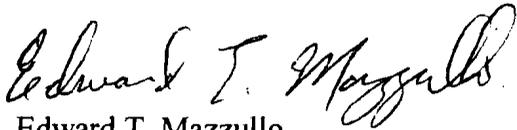
As a specific condition of the general exception from the requirements of the HMR under § 173.159(d), a nonspillable battery (manufactured after September 30, 1995) and the outer packaging containing a nonspillable battery must be plainly and durably marked "NONSPILLABLE" or "NONSPILLABLE BATTERY." This requirement also applies to both a nonspillable battery contained in equipment placed in an outer packaging and a nonspillable battery packed with equipment placed in an outer packaging. The marking facilitates the easy identification of a nonspillable battery by carriers, reshippers, and compliance enforcement personnel to know whether the battery being shipped may be offered for transportation or transported under the general exception of § 173.159(d). For a nonspillable battery contained in equipment and transported without outer packaging, the marking is not required on the outside of the equipment if the nonspillable battery meets the conditions of § 173.159(d).

We understand a "UPS" to be a device which maintains a continuous supply of electric power to equipment, such as a computer or a server. A UPS is typically connected between a utility power source and the electronic equipment and provides protection against common utility source problems (e.g., power outages, power surges, etc.). There are two general UPS systems: a standby UPS and a continuous UPS. A standby UPS supplies power to electronic equipment from a utility source until a problem occurs, at which point, the UPS switches to its own power source, often a battery, to supply power to the equipment. In a continuous UPS, the electronic equipment is always supplied with

power from the battery housed in the UPS, which is continuously recharged by the utility source. A battery housed in either type of UPS system does not power the UPS in the same manner as a battery powers an electric wheelchair or a laptop computer. Rather, a battery in a UPS is used to supply electric power to separate equipment. Thus, for purposes of the HMR, a UPS is essentially a battery and must be transported using a proper shipping name that most appropriately describes the battery type housed in the UPS.

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

Sincerely,

A handwritten signature in cursive script that reads "Edward T. Mazzullo". The signature is written in black ink and is positioned above the printed name.

Edward T. Mazzullo
Director, Office of Hazardous Materials Standards

Derkinderen
§ 173.159
Batteries
07-0189

Drakeford, Carolyn <PHMSA>

From: Gale, John <PHMSA>
Sent: Thursday, September 27, 2007 1:11 PM
To: Drakeford, Carolyn <PHMSA>
Cc: DerKinderen, Dirk <PHMSA>
Subject: FW: Classification of UN 2800 non-spillable batteries contained in equipment

: Frits Wybenga [mailto:fwybenga@dgac.org]

Sent: Thursday, September 27, 2007 11:40 AM

To: Gale, John <PHMSA>

Subject: Classification of UN 2800 non-spillable batteries contained in equipment

John – I have been discussing battery issues with one of our members who based on the attention PHMSA has been placing on batteries of late is doing a comprehensive review of the applicable requirements and their transport practices.

1. Regarding nonspillable batteries. Is the requirement to mark "Nonspillable" on the outside of the package restricted to batteries shipped separately or does it also apply to batteries in equipment? It has always been assumed to just apply to batteries transported separately but now that we have all this language for lithium batteries covering in equipment and with equipment etc this interpretation is somewhat called into question. Placing the words "nonspillable" on the outside of a 2000 pound package with only one battery inside would be a bit of a nonsense. I note that interp letter 98-0228 says something to the effect that 173.159(d) does not apply to a described situation of a battery installed in equipment. That would support the notion that 173.159 only applies to batteries packed separately.
2. Universal Power Systems. Since UPSs include extensive electronics to monitor power activity they regard them as equipment. Do you agree?

Thanks – Frits