



U.S. Department  
of Transportation

Pipeline and Hazardous Materials  
Safety Administration

1200 New Jersey Ave., SE  
Washington, DC 20590

NOV 25 2009

Mr. Dale Anderson  
Director Risk Management  
Costco Wholesale  
999 Lake Drive  
Issaquah, WA 98027

Ref. No. 09-0194

Dear Mr. Anderson:

This responds to your August 27, 2009 letter and subsequent telephone discussion with a member of my staff requesting further clarification of the applicability of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) to the transport of used or spent dry cell batteries.

In your letter, you reference letters issued by this Office on June 23, 2009 (Ref. No. 09-0090) and August 13, 2009 (Ref. No. 09-0150) in which we addressed the applicability of the HMR to the transportation of various types and sizes of used or spent dry cell batteries. In letter Ref. No. 09-0090, we stated that, based on the test data provided, spent 1.5-volt alkaline dry cell batteries are not subject to regulation under the HMR when transported by highway or rail because they are not likely to generate a dangerous quantity of heat nor are they likely to short circuit or create sparks when they are transported in a packaging with no other battery types or chemistries present. Similarly, in letter Ref. No. 09-0150, we stated that, based on the test data provided, used 6-volt carbon zinc batteries and 9-volt alkaline batteries are not subject to regulation under the HMR when transported by highway or rail because they are not likely to generate a dangerous quantity of heat nor are they likely to short circuit or create sparks when transported in a packaging with no other battery chemistries present.

According to your letter, your company participates in a battery recycling program. For purposes of shipping the used batteries in support of the battery recycling program, you request confirmation that used or spent batteries utilizing dry chemistries (e.g., alkaline and carbon zinc) of sizes ranging from 1.5-volt to 9-volt that are combined in the same package without terminal protection do not pose an unreasonable risk in transportation and, thus, are not subject to the HMR.

Your understanding is correct. After further consideration and analysis of the battery chemistries and sizes in question and based on information available to us, it is the opinion of this Office that used or spent dry, sealed batteries of both non-rechargeable and rechargeable designs, described as "Batteries, dry, sealed, n.o.s." in the Hazardous Materials Table in § 172.101 of the HMR and not specifically covered by another proper shipping name, with a marked rating up to 9-volt are not likely to generate a dangerous quantity of heat, short

circuit, or create sparks in transportation. Therefore, used or spent batteries of the type "Batteries, dry, sealed, n.o.s." with a marked rating of 9-volt or less that are combined in the same package and transported by highway or rail for recycling, reconditioning, or disposal are not subject to the HMR. Note that batteries utilizing different chemistries (i.e., those battery chemistries specifically covered by another proper shipping name) as well as dry, sealed batteries with a marked rating greater than 9-volt may not be combined with used or spent batteries of the type "Batteries, dry, sealed, n.o.s." in the same package. Note also, that the clarification provided in this letter does not apply to batteries that have been reconditioned for reuse.

This letter supersedes the clarification(s) provided in the following letters regarding the applicability of the HMR to the transportation of used or spent dry, sealed batteries:

Ref. No. 09-0090; June 23, 2009

Ref. No. 09-0112; June 23, 2009

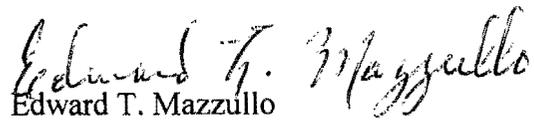
Ref. No. 09-0135; June 23, 2009

Ref. No. 09-0150; August 13, 2009

Ref. No. 09-0169; August 28, 2009

I hope this information is helpful. If you have further questions, please contact this office.

Sincerely,



Edward T. Mazzullo

Director

Office of Hazardous Materials Standards



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§ 172.102 SP189  
Batteries  
09-0194

Mr. Charles Betts  
Chief, Standards Development  
Pipeline and Hazardous Materials Safety Administration  
United States Department of Transportation  
1200 New Jersey Avenue SE, 2<sup>nd</sup> Floor  
Washington, D.C. 20590-0001

August 27, 2009

Re: Shipping of Spent Household Batteries for Recycling

Dear Mr. Betts,

In March 2009, we received guidance that each and every household (alkaline dry-cell) battery being shipped (by land) to a battery recycling center, whether shipped in a separate container of only 1.5v alkaline batteries or with other mixed batteries, must be "securely packaged" by either having its terminals taped or being placed in an individual baggie. Our previous interpretation had been that individual battery taping or bagging applied to spent lithium and NiCad types of batteries only. This recent interpretation has caused scrambling by battery recycling centers and companies who are attempting to "do the right thing."

Having reviewed recent DOT letter of interpretation, I would like to request further clarification of DOT policy.

On June 23<sup>rd</sup>, 2009, the DOT (Ref# 09-0090) responded to Kinbursky Brothers Supply Inc. April 16, 2009 letter requesting battery shipment clarification. Batteries were sorted so that only 1.5-volt dry cell alkaline batteries were packaged together for transportation. Test data was supplied to demonstrate that these spent batteries contained very little, if any, energy content and that they were not capable of producing a dangerous evolution of heat during transportation. The DOT responded that when transported by highway or rail and separated from other types of batteries of different sizes or chemistries, spent 1.5 volt alkaline batteries do not pose an unreasonable risk in transportation and are not subject to regulation under the HMR. This conclusion was reaffirmed in a June 23, 2009 DOT letter of interpretation to a Mr. Josh Lynch of Pinellas County Utilities, Florida.

In May 2009, Wiley Rein Company sent a letter to the DOT (Ref # 09-0150), requesting clarification of spent dry cell battery shipping requirements. They enclosed test results of dry cell batteries which demonstrated that even when spent 6-volt zinc carbon batteries and 9-volt alkaline batteries were connected in series, there was not enough heat generated to cause a dangerous evolution of heat even if damaged or short circuited.

Based upon this evidence, the DOT's August 13, 2009 response letter agreed with the company's finding and concluded by saying that "when transported by highway or rail and separated from other type batteries of different chemistries, used alkaline and zinc carbon batteries do not pose an unreasonable risk in transportation and are not subject to regulation under the HMR."

Based upon the above DOT letters of interpretation, please confirm that DOT policy is that spent alkaline and zinc carbon dry cell batteries ranging from 1.5 to 9 volts, are not subject to regulation under the HMR and may therefore be shipped by land or rail within the same container to a battery recycler without each battery's terminals being individually taped or bagged. {It is noted that spent lithium, NiCad, NI-MH and non-spillable batteries *are* subject to HMR and must be individually taped or bagged and transported in separate containers from the spent alkaline batteries.}

Thank you for your clarification.

Sincerely,



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