



U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

1200 New Jersey Ave., SE
Washington, DC 20590

NOV 3 2009

Mr. Charlie Brandenburg
Corporate Safety/Environmental Specialist
Tennant Company
701 North Lilac Drive
Minneapolis, MN 55422

Ref. No.: 09-0197

Dear Mr. Brandenburg:

This responds to your letter dated August 20, 2009, regarding the applicability of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) to the transportation of walk-behind floor scrubbers powered by lithium ion batteries. Specifically, you ask if your walk-behind floor scrubbers powered by lithium batteries are considered "mechanical equipment" as the term is used in § 173.220(d), and therefore fall within the purview of § 173.220 as "Battery-powered equipment" as opposed to § 173.185 as "Lithium batteries, contained in equipment."

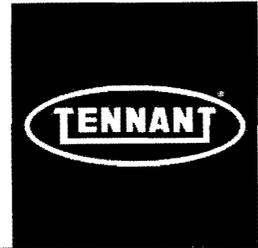
The answer is yes. Your mechanically operated walk-behind floor scrubbers powered by lithium-ion batteries are appropriately classed as "Battery-powered equipment, UN3171" under the HMR. Therefore, the equipment is subject to § 173.220(d) as mechanical equipment powered by a lithium ion battery. Note that § 173.220(d) forbids the transportation of these devices on passenger carrying aircraft when the battery is installed. Further, the lithium batteries contained in these devices must be of a type that has successfully passed each test in the UN Manual of Tests and Criteria as specified in § 173.185.

I hope this answers your inquiry.

Sincerely,

Charles E. Betts
Chief, Standards Development
Office of Hazardous Materials Standards

Eichenlaub
§173.220 (d)
§173.185
Batteries
09-0197



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August 20, 2009

Attn: PHH-10
U.S. Department of Transportation
Office of Hazardous Materials Standards
Pipeline and Hazardous Materials Safety Administration
East Building
1200 New Jersey Avenue, SE
Washington, DC 20590-0001

**Re: Request for Interpretation of phrase, "Mechanical Equipment,"
within 49 CFR 173.220(d)**

Dear Sir/Madam:

Tennant Company submits this request for guidance and interpretation pursuant to 49 CFR 105.20.

Background

Tennant Company manufactures floor cleaning equipment including scrubbers and sweepers in both walk-behind and rider models. Our clients can choose most of our equipment with one of two power sources: internal combustion and battery-powered. For your reference, I have enclosed with this letter a marketing brochure showing a typical model from Tennant's line of walk-behind scrubbers. As this brochure indicates, our scrubber equipment is mechanical in nature. When we ship our battery-powered scrubbers, we adhere to the requirements for "battery-powered equipment."

Request

Tennant is exploring using lithium ion batteries as a third power source option for certain models within our line of walk-behind scrubbers. I am writing to ask for clarification regarding the shipping requirements for small walk-behind scrubbers (approximately 125 lbs.) powered by lithium ion battery. Specifically, Tennant seeks confirmation that the latest revision of 49 CFR 173.220(d) excludes lithium ion battery powered-walk-behind scrubbers from the requirements set forth in the equipment subsections within 49 CFR 173.185. Tennant acknowledges that the lithium ion batteries contained within equipment, whether or not the equipment is mechanical, must meet the applicable requirements for lithium ion batteries set forth in 49 CFR 173.185(a).

49 CFR 173.220(d) was revised by HM-215J in early 2009 and now states that "Equipment (other than ...mechanical equipment) containing lithium batteries, must be described as "Lithium batteries contained in equipment" and transported in accordance

with §173.185 and applicable special provisions.” Tennant classifies its walk-behind scrubber as mechanical equipment. Therefore, we understand that the above underlined parenthetical exempts our mechanical walk-behind scrubbers from the requirements set forth in 49 CFR 173.185 for equipment containing lithium ion batteries and keeps mechanical equipment, such as scrubbers, within the regulatory purview of 49 CFR 173.220.

In conclusion, Tennant asks that you please confirm that a walk-behind scrubber powered by a lithium ion battery belongs in the category of “mechanical equipment” and therefore may be shipped as “Battery Powered Equipment” in accordance with §173.220.

Please send your response to:

Charlie Brandenburg
Tennant Company
701 North Lilac Drive
Minneapolis, MN 55422

Should you have questions or need additional information you may contact me at 763-513-1837 or by email at charlie.brandenburg@tennantco.com.

Sincerely,


Charlie Brandenburg
Corporate Safety/Environmental Specialist

Enclosure