



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590

MAR 21 2003

Mr. Ira F. Salkin, Ph.D., F(AAM)  
Information From Science, LLC  
P.O. Box 408  
West Sand Lake, NY 12196

Ref. No. 02-0270

Dear Mr. Salkin:

This responds to your October 15, 2002 letter requesting clarification on processing waste body fluids contained in suction canisters in accordance with revisions to the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) under Final Rule, Docket HM-226. Your questions are paraphrased and answered as follows:

Q1. When suction canisters containing three liters or more of waste body fluids are transported for off-site treatment and disposal in non-bulk containers, should they be packed as described in § 173.197, i.e., in packaging that meets DOT's Packing Group II performance standards?

A1. Waste body fluids may be packaged according to provisions in §173.197(b) or under exceptions provided in §173.134(c) or §173.6. You are correct that § 173.197 requires non-bulk packagings for regulated medical waste (RMW) to be UN specification packaging conforming to Packing Group II performance requirements in Part 178 of the HMR. However, § 173.134(c) permits RMW that is transported in dedicated vehicles by private or contract carriers to be packaged in non-specification non-bulk packagings, provided such packagings are rigid and conform to the general packaging requirements in §§ 173.24 and 173.24a of the HMR and Occupational Safety and Health Administration (OSHA) regulations in 29 CFR 1910.1030. In addition, the materials of trade (MOTS) exception in § 173.6 permits RMW to be transported by a private motor carrier in non-specification combination packagings. For liquid RMW, the inner packagings must be leak-tight and the outer packaging must contain sufficient absorbent material to absorb the entire contents of the inner packagings. The outer packaging must be a strong, tight packaging that is securely closed. The MOTS exception includes limits on the capacity of a packaging.

Q2. Since I am not aware of any commercially available suction canisters that would meet Packing Group II specifications, would the canisters have to be packaged in Packing Group II type of packaging when transported in bulk containers?

A2. Liquid RMW transported in a bulk packaging, i.e., a large packaging, wheeled cart, or bulk outer packaging, must be packaged in a rigid inner packaging that conforms to the general packaging



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requirements of Part 173 of the HMR, specifically the general packaging requirements in §§ 173.24 and 173.24a. Such inner packagings need not be UN specification packagings, nor are there performance requirements for the inner packagings.

Q3. Relative to Packing Group II standards, wouldn't the canisters with the waste body fluids have to be placed into plastic bags with sufficient absorbent materials to absorb and retain all liquids during transportation?

A3. There is no requirement for inner packagings of liquid RMW that are transported inside bulk containers to be placed in plastic bags with absorbent material.

Q4. Do cardboard boxes meet the DOT standards for rigid outer containers or must these containers be composed of more durable materials, e.g., fiberboard?

A4. We have not formally defined the term "rigid" in the HMR. Generally, the requirement for a rigid packaging means a packaging that is not flexible, will retain its shape, and will not yield to knocks, bumps, drops, or other forces that may be encountered during transportation.

I hope this answers your inquiry.

Sincerely,



Delmer F. Billings  
Chief, Standards Development  
Office of Hazardous Materials Standards

Boothe  
§ 173.197  
Hazardous Waste  
IFS 02-0270

INFORMATION FROM SCIENCE, LLC  
P.O BOX 408  
WEST SAND LAKE, NY 12196

October 15, 2002

Mr. Edward T. Mazzullo  
Office of Hazardous Materials Standards  
DHM-10  
United State Department of Transportation  
400 7th Street, SW  
Washington, DC 20510

Dear Mr. Mazzullo:

You may recall that we met at several conferences when I was the Director of the New York State Regulated Medical Waste Program. Having retired from state service, I have entered the world of private consulting in the area of waste management. In this regard, I have been requested by one of my clients to obtain formal interpretations of components of the Department of Transportation's (DOT) rule under HM-226, *Hazardous Materials: Revision to Standards for Infectious Substances*.

My questions focus on the processing of waste body fluids contained in suction canisters. In discussing my views on this subject with Ms. Sue Gorsky, she suggested that I direct my inquires to you for formal responses. Specifically, I would appreciate receiving DOT's answers to the following questions:

1. When suction canisters containing upwards of three liters of waste body fluids are transported for off-site treatment and disposal in non-bulk containers, should they not be packed as described in §173.197, i.e., in packaging that meets DOT's Packing Group II performance standards? Have I correctly interpreted this subsection of the rule?;
2. Since I am not award of any commercially available suction canisters that would meet Packing Group II specifications, would not the canisters have to be packaged in Group II type of packaging when transported in bulk containers? Have I correctly interpreted this component of §173.197 ?;

3. Relative to Packing Group II standards, wouldn't the canisters with the waste body fluids have to be placed into plastic bags with sufficient absorbent materials to *absorb and retain all liquids during transportation*? In addition, may I infer that the absorbent material cannot be discarded surgical gowns, drapes or similar waste fabrics?; and

4. Do cardboard boxes meet the DOT standards for rigid outer containers or must these containers be composed of more durable materials, e.g., fiberboard?

Thank you in advance for your interpretations of these questions and I look forward to receiving your responses in the near future. If you have need of any additional information from me, please don't hesitate to contact me at 518-674-1713 (voice/fax) or at irasalkin@aol.com (e-mail).

Sincerely,



Ira F. Salkin, Ph.D., F(AAM)  
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