



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

NOV 16 2004

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

Mr. Robert Brown, Jr.
Tom Dunaway & Associates, Inc.
P.O. Box 712
Antioch, California 94509

Ref. No.: 04-0236

Dear Mr. Brown:

This responds to your letter regarding the proper segregation and separation of a Division 5.1 (oxidizer) and a Class 8 (corrosive) liquid under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, your questions concerns the segregation and separation requirements for hazardous materials identified by the letter "O" in § 177.848(e)(3). You state that you have a client who wishes to transport a Class 8 (corrosive) material and a Division 5.1 (oxidizer) material in a multi-compartmented cargo tank. Your questions are paraphrased and answered as follows:

- Q1. Are these hazardous materials authorized to be transported in adjacent or non-adjacent tanks of the same cargo tank?
- A1. The answer is no. Section 177.848(a)(2) applies to materials that meet one or more hazard class definitions and are in a compartment within a multi-compartmented cargo tank subject to the restrictions in § 173.33. Section 173.33(a)(2) prohibits the loading of materials on the same cargo tank motor vehicle that, if mixed, could result in an explosion, fire, excessive increase in pressure or heat, or the release of toxic vapors. This restriction applies regardless of whether the incompatible materials on the cargo tank motor vehicle are separated by adjacent compartments/tanks or non-adjacent compartments/tanks.
- Q2. If the answer to Q1 is no, would that answer change if the shipper certifies that the mixture of the contents would not create a fire or a dangerous evolution of heat or gas?
- A2. The answer is yes. Section 173.33(a)(2) is not intended to prevent the shipment of materials that, if mixed, would produce a moderate exothermic reaction that would not start a fire, rupture the tank, or release acutely toxic vapors.



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173.33 (a)(2)
177.848 (a)(2)

Many factors affect how materials may react with each other. They include the chemical composition and properties of the materials involved, and how they react to air, water, contaminants, or temperature conditions during transportation. Because there are so many variables, under the HMR, the parties involved must evaluate the potential risk posed by different materials that are offered and accepted for transportation on the same multi-compartmented cargo tank motor vehicle. If your client has specific questions on making these determination, your client may contact Mr. Charles Hochman, Office of Hazardous Materials Technology, at (202) 366-4545 for assistance.

I hope this satisfies your request.

Sincerely,

A handwritten signature in cursive script that reads "Hattie L. Mitchell". The signature is written in black ink and is positioned above the typed name.

Hattie L. Mitchell, Chief
Regulatory Review and Reinvention
Office of Hazardous Materials Standards

Tom Dunaway & Associates, Inc.

Beets
§ 177.848(a)(2)
§ 173.33(a)(2)
Segregation
04-0236
June 29, 2004

Office of Hazardous Materials Standards
Research and Special Programs Administration
Attn: DHM-10
U. S. Department Of Transportation
400 7th Street SW
Washington, DC 20590-001

Clarification 49 CFR 177.848(a)(2)/173.33(a)(2)

My questions concern the Segregation Requirements for materials identified by Note "O" in 177.848(e)(3). I have both phone and e-nailed the RSPA Information center. The responses to my inquiry only deal with non-bulk packages. A client wishes to transport a Class 8 corrosive material and a Division 5.1 oxidizing material in a multi-compartmented cargo tank.

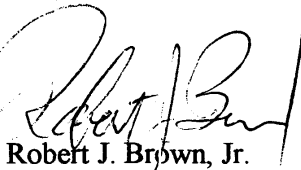
Q-1 May these materials be transported in adjacent compartments/tanks of the same cargo tank motor vehicle?

Q-2 If the answer to Q-1 is no, may they be transported in non-adjacent compartments/tanks?

Q-3 Would the intervening tank need to be empty?

Q-4 If the answer to Q-1 or Q-2 was No, would there be change to the answer if the shipper certifies that the mixture of the contents would not create a fire or a dangerous evolution of heat or gas?

Sincerely



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