



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

JAN 23 2004

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

Mr. Cliff Jacobson  
Spray Chem Chemical Company  
705 Keenan Court  
Durham, CA 95938

Ref No.: 03-0300

Dear Mr. Jacobson:

This responds to your November 25, 2003 letter requesting clarification of the requirements under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) for the segregation and separation of Class 8 (corrosive liquid) and Division 5.1 (oxidizing) hazardous materials transported by highway. Specifically, you ask whether two empty Intermediate Bulk Containers (IBC) that contain the residue of a liquid Class 8 (corrosive) material and a Division 5.1 (oxidizing) material may be transported by highway in the same vehicle with several inches of air space between the two containers.

As provided by § 173.29, an empty packaging containing only the residue of a hazardous material generally must be offered for transportation and transported in the same manner as when it previously contained a greater quantity of that hazardous material. Section 177.848(d) establishes segregation requirements for loading, transporting, or storing hazardous materials on a transport vehicle. The table in § 177.848(d) prohibits a Class 8 corrosive liquid and a Division 5.1 oxidizer from being loaded, transported, or stored together in the same transport vehicle unless the packages are separated so that, in the event of leakage from the packages during transportation, commingling of the hazardous materials will not occur. Further, despite the method of separation employed, Class 8 liquids may not be loaded above or adjacent to Division 5.1 materials (see § 177.848(e)(3)). Packages containing residues of a Class 8 liquid and a Division 5.1 material must be loaded, transported, and stored in accordance with the segregation requirements in § 177.848(d).

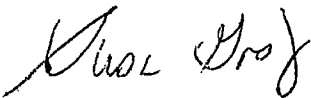
Several inches of air space between containers of incompatible liquid hazardous materials does not satisfy the requirements of § 177.848(d). Air space would not prevent commingling of the liquid hazardous materials in the event of failure of the containers. Moreover, merely placing the packages on pallets to elevate them above the vehicle floor does not satisfy the separation requirements. Separation must be accomplished by a means of physical separation, such as by placing non-permeable barriers, non-reactive freight, or non-combustible, non-reactive absorbents between the packagings, or by elevating the freight in a manner that prevents commingling of the liquid hazardous materials required to be separated. Note, however, that § 177.848(e)(3) permits a shipper to load truckload shipments of Class 8 corrosive liquids and Division 5.1 oxidizer materials together when it is known that the mixture of contents would not cause a fire or a dangerous evolution of heat or gas. As used in this section, the term "truckload" means a shipment of hazardous materials loaded onto a transport vehicle by a single

shipper. Shipments of hazardous materials offered to a carrier by different shippers and loaded into a transport vehicle are not truckload shipments.

You also ask whether an IBC that has been rinsed is subject to the HMR. In accordance with § 173.29(b)(2)(ii), a packaging that is sufficiently cleaned of residue and purged of vapor to remove any potential hazard is not regulated under the HMR. "Cleaned and purged" means that no residual material and no residual vapor remains in the interior of a container. The methods used are intentionally not defined because they vary greatly depending on the nature of the hazardous material and the type of packaging. In some instances, a packaging can be totally emptied of hazardous material, including residue, without undergoing a cleaning process, and may be considered to have been cleaned and purged. In other instances, an active cleaning process may be necessary to purge a packaging of hazardous residue.

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

Sincerely,



Susan Gorsky  
Senior Transportation Regulations Specialist  
Office of Hazardous Materials Standards

cc: Paul Hogan, CHP

# Spray Chem

*Chemical Company*

705 Keenan Court, Durham, CA 95938  
(530) 895-3658 Fax (530) 896-0147

Reletterford →  
§177.848  
Segregation  
03-0300

Research & Special Programs Administration  
400 Seventh Street SW  
Washington, DC 20590-0001

11/25/2003

Dear Mr. Ed Mazullo

This is in ref to a letter 03-0120 dated Aug 28 2003 sent to Officer George Barber of the California Highway Patrol.

In review of this letter it appears to me that you were not clear on his question based on your response. Could you clarify this? He stated "while performing a vehicle inspection on a vehicle transporting hazardous materials classed as class 8 liquid and division 5.1 I discovered that the 5.1 materials and the class 8 liquids were loaded adjacent to each other". He further, describes the remaining load on the vehicle then asks for your advise.

I ask you to review the letter then both of his questions and finally clarify your response. If his first question had been worded "Could segregation of two empty IBC containers that only contain the residue of a 5.1 and a class 8 be transported in the same vehicle with several inches of air space between the containers, would your response have been yes or no. I ask this because his question asks if the above described liquids could be transported in that manner. He doesn't ask if empty packagings can be transported in that manner. (11/25/03)

In your 49 CFR 177.848 you state that the separation of these two materials is performance oriented and I have a letter of interpretation from your office 02-0310 stating the appropriate distance for full IBC containers and 55 Gallon containers. The California Highway Patrol, in a letter dated April 29 2003 From the office of A.R. Jones, Captain Commander of the Commercial Division has stated the following:

"The separation distance for IBC's that contain only the residue, is a performance standard and would be whatever distance is required to prevent the two materials from commingling. However, containers with only residue as you have defined in you letter (e.g. no free liquid in the container or only a few ounces) and without residue on the exterior of the containers could be separated by a minimal air gap" I interpret this to mean that I can load Empty IBC containers adjacent to each other when they meet that criteria. 177.29

Do you agree with this statement ? if not, which part do you disagree with specifically?

Captain Jones's letter further states:

"An empty 330 Gallon IBC that previously contained any type of hazardous material, but is cleaned to the extent that the remaining material (residue and or cleaner) no longer meets the definition of a hazardous material or hazardous waste is no longer regulated as a hazardous material. Although not regulated as a hazardous material, 49 CFR Section 171.1(a) docs prescribe regulations concerning communication elements relevant to hazardous material transportation; however, 49 CFR Section 173.29 allows empty IBC's to remain marked and placarded provided the placards and markings are not visible in transportation, and the empty packages are loaded and unloaded by the shipper or consignee (e.g. private carriage).

Since the "empty" IBC does not contain a regulated hazardous material, it is not subject to any type of shipping documents, vehicle placarding, or separation and segregation requirements.

I interpret this to mean that if I rinse the IBC container to the point that the material in it would not meet your definition of a hazardous material and I transport it in my truck completely obscured from the road it is completely non regulated and does not have to have any of it's labels or placards removed.

Do you agree with this statement ? if not, which part do you disagree with specifically?

Your response on this matter is of the utmost importance. Please give it your full attention and be very specific in your response.

Respectfully



Cliff Jacobson

Spray Chem Corporation