



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

AUG 13 2001

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

Mr. Bradford A. Gagnon  
ADCOM Express, Inc.  
2462-C South Santa Fe  
Vista, CA 92084-8002

Ref. No. 01-0170

Dear Mr. Gagnon:

This is in response to your July 5, 2001 letter and subsequent phone conversations with Michael Johnsen of my staff regarding the determination of when a hazardous material is a hazardous substance under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180).

In a conversation with Mr. Johnsen on July 31, 2001, many of the questions raised in your letter were addressed, but your question regarding how to determine the reportable quantity (RQ) of a mixture that is identified by more than one EPA waste code still required a response.

Enclosed is a February 26, 1998 letter from our office which provides that if you know the constituent and exact concentration of a waste stream, then the RQ amount for that constituent shall be used. If the constituent or concentration is not known, then the RQ for that waste must be used to determine the RQ. For a mixture that is identified by two or more EPA waste codes, the RQ amounts for each waste must be identified and determined by the amount of each waste code contained in the mixture. In addition you would also need to meet the concentration limits found in the definition of "hazardous substance" in § 171.8.

I hope this satisfies your request.

Sincerely,



John A. Gale

Transportation Regulations Specialist  
Office of Hazardous Materials Standards

Enclosure



U.S. Department  
of Transportation

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

FEB 26 1998

Mr. Kurt Swart  
Health & Safety Manager  
ROMIC Environmental Technologies Corp.  
2081 Bay Road  
East Palo Alto, CA 94303-1316

Dear Mr. Swart:

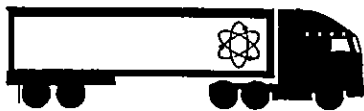
This is in response to your letter dated December 22, 1997, regarding reportable quantities for Resource Conservation and Recovery Act (RCRA) wastes under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask whether the RQ for the EPA waste number supersedes the RQ for the individual constituent.

The appropriate RQ for a hazardous waste depends on the amount of information available on the waste stream including the constituents of the waste stream and their respective concentrations. If the constituent and its concentration in the waste stream are known, then the RQ for the constituent is appropriate. For example, Pyridine has an RQ of 1000 lbs (454 kg). If Pyridine is the only constituent and its concentration in a mixture or solution is known, then the RQ for Pyridine is appropriate. However, if the waste's constituent or its respective concentration is unknown, then the appropriate RQ is that which is assigned to the waste stream. For example, the reportable quantity for a waste stream described under F005, and which contains Toluene in an unknown concentration, is 100 lbs (45.4 kg).

I hope this answers your inquiry. If we can be of further assistance, please do not hesitate to contact us.

Sincerely,

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



**ADCOM Express, Inc.**

2462-C South Santa Fe • Vista, California 92084-8002 • (760) 727-6461 • Fax (760) 727-5809

Johnson  
§ 172.101 Appendix A  
Hazardous Substance

01-0170

July 5, 2001

Mr. Edward T. Mazola  
Director, Office of Hazardous Materials Standards  
U.S. DOT/RSPA (DHM-10)  
400 7th Street S.W.  
Washington, D.C. 20590-0001

Dear Mr. Mazzullo:

I am looking for some guidance in determining when a hazardous material and /or a hazardous waste meets the definition of a hazardous substance. I understand for example, that acetone has a 5000-pound RQ in a single package. Where I need guidance is when the acetone is an EPA hazardous waste in a solution.

In this scenario a 55-gallon drum weighing about 400 pounds, the waste stream is characterized as having both the D001 for ignitability and the F003 for spent non-halogenated solvents. As a hazardous material, the Appendix A to the HMT lists acetone as needing 5000 pounds in a single container to meet the definition of a hazardous substance.

As a hazardous waste, the Appendix A to the HMT contains a listing for D001 Unlisted Hazardous Wastes Characteristic of ignitability with an RQ of 100 pounds. The F003 is also listed with a "generic" of 100 pounds and acetone specifically named at 5000 pounds.

Does the fact that the characteristic waste code listing for D001 reads "unlisted", refer to the fact that waste streams such as in my example, that is waste streams that in fact are EPA "listed" wastes, as in this case an EPA F003 listed waste, render the possibility of this waste being a hazardous substance for its D001 characteristic of ignitability a moot point because it is an EPA "listed" waste?

What now do we consider with the F003 portion? If we know that our 400-pound drum contains 50% acetone and 50% water, we do not have a hazardous substance for acetone, we have only 200 pounds of acetone in our solution and under F003, the acetone listing still needs 5000 pounds.

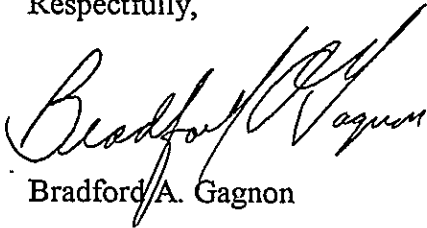
Since we know the exact amount of the acetone am I correct that we do not need to consider the F003 100-pound factor?

What if we only knew that the acetone solution was a range of say 45% to 55%, would it then be a hazardous substance due to the generic F003 because we did not know exactly how much acetone we had?

When does the table in 171.8 for hazardous substances come into consideration? If we had a 50%/50% mixture/solution of two materials that were similar in weight, the concentration by weight and the concentration by volume would be the same correct? What happens as in my example, we know that the concentration by volume is the same, how do we determine the concentration by weight?

Thank you. I have written a similar e-mail to [infocntr@rspa.dot.gov](mailto:infocntr@rspa.dot.gov) for an unofficial response but I'm very much in need of a written interpretation on hazardous substance determination in general for my own understanding and when presenting DOT Function Specific type training.

Respectfully,



Bradford A. Gagnon

Corporate Transportation Manager