



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

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

SEP 11 2002

Mr. David Ellis
Compliant Technologies, Inc.
6113 Creekhead Drive
Knoxville, TN 37909

Reference No. 02-0111

Dear Mr. Ellis:

This is in response to your letter requesting clarification of the requirements in the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) for determining if a waste stream contains a hazardous substance, as defined in § 171.8. Your questions are paraphrased and answered as follows:

Question 1

The material safety data sheet for a hazardous waste stream states the waste code, listed in Appendix A of § 172.101, is D001 (ignitability). It also states the waste stream contains approximately 32 to 35 percent each of "Acetone, 3, UN 1090, PG II," "Toluene, 3, UN 1294, PG II," and water. The net weight of the waste in one package is 330 pounds. Since I know the hazardous constituents and their maximum amounts, can I determine if the mixture meets the definition of a hazardous substance using the reportable quantities (RQ) for Acetone, 2,270 kg (5,000 pounds), and Toluene, 454 kg (1,000 pounds), or must I use the RQ for waste code D001, which is 45.4 kg (100 pounds)?

Answer 1

Based on the information you provided, for your situation you may use the reportable quantity for each constituent to determine whether or not it is a hazardous substance. 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, their amount per package, and their respective concentrations. In your example, the packaging size limits each constituent at its highest concentration from meeting or exceeding its RQ. If a waste's constituent and its respective concentration are known within a specified range, and the packaging size does not permit the constituent at its highest concentration to meet or exceed its RQ, this information may be used to determine the constituent is not a hazardous substance.

Question 2

A D001 hazardous waste contains water and Ethyl cyanide, also known as "Propionitrile, 3, 6.1, UN 2404, PG II." The concentration of Ethyl cyanide is not known. Its RQ is 4.54 kg (10 pounds). The net weight of the waste per package is 25 pounds. Although it is possible the mixture in one package may contain an RQ of Ethyl cyanide, my company does not know what specific amount or maximum concentration is present. Should we use the RQ for D001 of 45.4 kg (100 pounds) or the RQ for Ethyl cyanide to determine if the waste is a hazardous substance?



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172.101

Answer 2

Because the concentration of the waste constituent is unknown, the RQ for D001 must be used.

Question 3

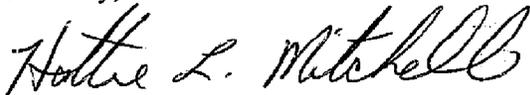
A spent solvent waste, assigned waste code F003, contains water and approximately 70 to 73 percent Acetone. The net weight of the Acetone per package is 145 pounds. The total net weight of the waste per package is 198 pounds. Since only a concentration range is known for the Acetone, must I use the F003 RQ of 45.4 kg (100 pounds) or the Acetone RQ of 2,270 kg (5,000 pounds) to determine if the waste is a hazardous substance? In this case, my company knows that the RQ for Acetone in one package has not been met. Because of the different RQ amounts, if a spill occurs during transportation and the F003 waste code is used in every case where the exact concentration is not known will this description cause the shipper to violate the HMR and the Environmental Protection Agency's Comprehensive Environmental Response, Compensation, and Liability Act?

Answer 3

As explained in Answer 1, your company may use the RQ for Acetone to determine if the material is a hazardous substance when a specific concentration range for the constituent is known and the packaging size limits the constituent at its highest concentration from meeting or exceeding its RQ.

I hope this information satisfies your inquiry.

Sincerely,



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

Compliant Technologies, Inc

Edmonson
§ 172.203 (c)
§ 172.101, App A
Hazardous Substances
Shipping Papers
02-0111

April 15, 2002

David Ellis
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(865) 384-3926

RSPA Office of Hazardous Materials Standards
U.S. Department of Transportation
400 Seventh Street, SW
Washington, DC 20590-0001

RE: Clarification on Hazardous Substances

To Whom It May Concern:

In November of 2001, I submitted a letter requesting an interpretation on Hazardous Substances. I received a phone call from your office, but no definitive answer was provided to my questions. Subsequently, I am requesting that a written interpretation be provided with a specific answer to the following questions. It is urgent that I receive an answer in the near future. Previous questions regarding this matter have been vague and the responses (interpretations) do not resolve my concerns.

Question Number 1

I have a product that has been declared a Hazardous Waste containing Acetone, Toluene and Water. The waste code assigned to the material is D001 and the net weight of the waste is **330 pounds** in one package. The MSDS gives a concentration range for each of the three constituents of between 32 - 35 %. In many cases, MSDS's give percent ranges and not "exact" percentages. Since I know the hazardous constituents and their maximum amounts can I use the individual RQ for each hazardous constituent or must I use the RQ for the waste code D001 of 100 pounds? The RQ for Acetone is 5000 lbs. and the RQ for Toluene is 1000 lbs. I have received informal guidance from the Environmental Protection Agency that this scenario would not constitute an RQ since we know the hazardous constituents and specifically know that neither approaches their individual RQ levels. Please provide guidance on this specific scenario as to whether it meets the definition of a Hazardous Substance, requiring compliance with 49 CFR 172.203 (c).

Question Number 2

I have a Hazardous Waste (D001) that contains Ethyl Cyanide (RQ = 10 lbs.) and Water. The maximum concentration of the Ethyl Cyanide is not known, meaning that I cannot determine if I have 10 lbs. in the mixture or not. The net weight of the waste is 25

Compliant Technologies, Inc

pounds in one package. The waste code assigned to the material is D001, which has an RQ of 100 pounds. Since I do not know the "exact" amount of the hazardous constituent do I use the RQ for D001 (100 lbs.) or the RQ for Ethyl Cyanide, which is 10 pounds? If one must revert back to the waste code RQ when the "exact" concentration is not known, this material would not be an RQ. However, it is possible to have 10 pounds of the constituent in the mixture since we don't know a maximum concentration. It is our contention that this material should be described as a Hazardous Substance on shipping papers and package markings. If you make the assertion that in Question Number 1 we must revert back to the RQ for D001 then one must do the same for this scenario. Our contention is simply that if it is possible to have an RQ, then it should be described as such. If it isn't possible to have an RQ for the individual hazardous constituents (e.g., Question Number 1) then the waste should not be described as an RQ.

Question Number 3

A spent solvent waste having the waste code F003 contains Acetone and Water. Process knowledge indicates that the acetone concentration would be 70 - 73 percent and the balance would be water. The net weight of the waste is 198 pounds. Since I know only a concentration range (70 - 73 percent) must I use the RQ for F003, which is 100 pounds or may I use the RQ for Acetone (5000 lbs.)? The total Acetone in the container would be no more than 145 pounds with the balance being water. It is our contention that the F003 waste code of 100 pounds should be used only when one does not know enough about the waste stream (constituents and/or concentrations) to establish whether an RQ has been met for any F003 hazardous constituent. In this case, we do specifically know that the RQ level for acetone has not been met. If one reverts back to the waste code RQ in every case when the "exact" concentration is not known, you will have potential violations of both the HMR and EPA (CERCLA) should a spill of an RQ occur during transport. There are numerous cases where the constituent RQ is lower than the waste code RQ (e.g., Question Number 2).

As mentioned above, previous questions submitted by industry have not been specific enough to fully clarify when to use the waste code RQ vs. the constituent RQ. Previous interpretations have used the word "exact concentration" and we disagree with this language. While it is possible to know the "exact" constituents in a waste stream, knowing the "exact concentration" is a different matter. Process knowledge, analytical data and even MSDS's all have at least a slight margin of error concerning concentrations. In summary, we contend that if one knows enough about a waste stream to prove that the constituent RQ level has not been met then Hazardous Substance (RQ) requirements do not apply. I would appreciate a prompt written reply to the above questions. Should you need to contact me for further information, please call (865) 384-3926.

Sincerely,



David A. Ellis

FROM :

FAX NO. :

Mar. 28 2001 06:32AM P1

19
April 18, 2002 D.E.

Page 1 of 3 (including cover)

To: Edward Mazzullo, U.S. DOT (RSPA)
Fax No.: 202-366-3012

From: David Ellis, Compliant Technologies, Inc.
Fax No.: 865-769-8608
Ph. No.: 865-384-3926

RE: HMR Interpretation

Comments

To follow is a request for interpretation. A prompt reply would be appreciated.

Thank-you,

David Ellis