U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

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

FEB 3 2006

Mr. Steve Laughlin
Occupational Safety Specialists
519 Hillcrest Lane
Lindenhurst, IL 60046

Ref. No. 04-0182

Dear Mr. Laughlin:

This responds to your letter regarding hazardous substance determinations under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). I apologize for the delay in responding and any inconvenience it may have caused. Your questions are paraphrased and answered as follows:

Q1. A hazardous waste generator is to offer spent sulfuric acid (100%) for transportation. Because it is also a RCRA waste, it will require designation as a D002 unlisted waste characteristic of corrosivity. The reportable quantity (RQ) for sulfuric acid is 1000 lbs (454 kg) while the reportable quantity for unlisted waste code D002 is 100 lbs (45.4 kg). Which reportable quantity, if any, has precedence over the other?

A1. In the scenario you provide, since the specific constituent of the hazardous waste and its respective concentration is known, the RQ for the constituent (i.e., sulfuric acid/1000 lbs (454 kg)) should be used when determining whether a reportable quantity has been met.

Q2. A hazardous waste generator is to offer a waste stream (F003) that is primarily acetone with trace amounts of water for transportation. The reportable quantity for waste stream F003 is 100 lbs (45.4 kg) while the reportable quantity listed for acetone in waste stream F003 is 5000 lbs (2270 kg). Which reportable quantity, if any, has precedence over the other?

A2. In the scenario you provide, since the specific constituent of the waste stream (acetone) is known but the specific concentration of acetone is unknown, you would apply the total amount of hazardous waste in the packaging

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172.203(c)

to the RQ of its constituent(i.e., acetone/5000 lbs (2270 kg)) when determining whether a reportable quantity has been met.

Q3. In the above Q2/A2 scenario, why is the reportable quantity for waste stream F003 100 lbs (45.4 kg) while the reportable quantity listed for a known constituent (acetone) in this waste stream is 5000 lbs (2270 kg)?

A3. The lower RQ value is a default RQ value only to be used when some or all the hazardous constituents of a particular waste stream (e.g., F003) are unknown. Because the specific hazardous constituent (acetone) in the waste stream in your above scenario is known, it is permissible to use the higher RQ value.

Q4. A hazardous waste generator is to offer a 55-gallon drum of soil that is contaminated with lead (D008/15 ppm). The reportable quantity for unlisted waste D008 is 10 lbs (4.54 kg). A 15 ppm concentration of lead in a 55-gallon drum of contaminated soil weighs less than 10 lbs. Because the concentration of lead in the drum is known, it is our understanding that a reportable quantity has not been met. Are we correct?

A4. Yes, you are correct.

Q5. Is it permissible to use a waste code (e.g., D008) to identify a hazardous substance on a shipping paper?

A5. Yes, see § 172.203(c).

Q6. Is it a violation of the HMR to mark a package or annotate on a shipping paper the letters "RQ" when a reportable quantity is not present?

A6. If only the residue of a hazardous substance remains in a package, the "RQ" markings may remain on a package even when a reportable quantity is not present. The shipping paper in this scenario should be consistent with the markings on the package by prefacing the shipping description with "RESIDUE Last Contained***" as provided by § 172.203(e)(1). In all other circumstances, however, a shipping paper should not identify a package as containing a reportable quantity nor should a package be marked "RQ" when a reportable quantity is not present.

Q7. Where must a reportable quantity constituent be placed on shipping paper?

A7. As specified in § 172.203(c), if the proper shipping name for a material that is a hazardous substance does not identify the hazardous substance by name, the name of the hazardous substance must be entered in parentheses in association with the basic description. This may be accomplished by placing the name of the hazardous substance either immediately following the proper shipping name or the basic description.

Q8. If a material contains multiple hazardous substances, how many must be listed on a shipping paper in association with the basic description?

A8. As specified in § 172.203(c), when a material contains two or more hazardous substances, at least two hazardous substances, including the two with the lowest reportable quantities (RQs), must be identified.

I trust this satisfies your inquiry. Please contact us if we can be of further assistance.

Sincerely,

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

OCCUPATIONAL SAFETY SPECIALISTS

Stevens
§172.203(c)
Shipping Papers
04-0182

August 8, 2004

US DOT/RSPA (DHM-10)
400 7th Street S.W.
Washington, DC 20590—0001
Attn: Mr. Edward T. Mazzullo
Director, Office of Hazardous Materials Standards

Dear Sir/Madame,

Over the last several years I have heard varying interpretations on the proper application of Reportable Quantities in association with proper shipping descriptions. More specifically as this issue relates to the shipment of materials also deemed hazardous wastes under the RCRA regulations. I am hopeful that you will be able to provide me with some clear direction on how to proceed in these matters including specific and clear-cut answers to the examples I have included in this correspondence.

There are several scenarios under common waste disposal practices that do not appear to be specifically addressed within the scope of the HMR and Hazardous Substances Appendix. I believe that examples will be the most efficient method of discussing these issues.

1) Hazardous waste generator has spent sulfuric acid no longer usable in their process. The material is primarily still sulfuric acid and would be properly shipped using the PSD of Sulfuric Acid, spent, 8, UN1830, II. Because it is also regulated as a hazardous waste under RCRA regulations, it also will bear a D002 waste code. The HS Appendix includes RQ's for waste codes. In the table, the D002 states it is for Unlisted Hazardous Waste and has an RQ of 100lb. While sulfuric is not considered a "listed" code under EPA regulations, it would still bear a D002 if the waste's pH was $\leq$2. We will assume for our example that it should carry the D002. While it is not considered a listed waste, the generator/shipper does know the specific chemical constituent (Sulfuric Acid – RQ – 1000lb).

   When waste codes apply and the constituent is known, which takes precedence, the chemical RQ or the waste code RQ?

2) Hazardous waste generator has a waste stream that is primarily acetone with trace amounts of water rendering it no longer usable. In this case the material is considered a listed hazardous waste bearing an F003 waste code (many states require all applicable waste codes be applied therefore requiring a D001 as well).

   In the hazardous substances table, the RQ directly across from the F003 code indicates an RQ of 100lb. The table then lists directly below the F003 the specifically listed solvents for that code, including Acetone and its chemical specific RQ of 5000lbs.

   As the name implies, listed codes are for specific chemicals so it is not possible to carry an F listed solvent code and not know the specific chemical. Why the reference to Acetone and 5000lb directly below the F003 code, when an F003 has an RQ of 100lbs?

3) Hazardous waste generator has soil contaminated with lead. The soil is tested for TCLP the results indicate the concentration of lead from the test to be 15ppm thereby making it regulated under RCRA as a D008. According to the RQ table, D008 has an RQ of 10lbs. Is the shipper allowed to calculate the actual amount of lead and compare it against 10bls or is the entire container considered D008 hazardous waste and therefore the entire contents of the container compared against lead? A 55-gallon drum of contaminated soil would weigh more than 10lbs, but 15ppm of TCLP lead in a 55 gallon would not calculate out to more than 10lbs. Which would be the appropriate designation?

   Also, can an EPA RCRA waste code be used as an NOS descriptor or RQ indicator when applicable? EX. Hazardous Waste Solid, n.o.s. (**D008**)...

4) Can and would the DOT cite a shipper for carrying an RQ when it was not necessary. I was told of an instance in Pennsylvania where this situation occurred, but I have no specific information to verify its accuracy?

5) Is it accurate that the RQ constituent can placed anywhere in "association" with the proper shipping description or is there a specific place within the proper shipping description that it should be placed?

6) For materials carrying multiple RQs, how many are required to be listed in association with the proper shipping descriptions?

I thank you for your time in responding to these questions. Over the years, I have found the RSPA hotline extremely responsive on most issues. I realize these questions represent some of the more complicated issues in applying the regulations but it is why I turn to you for assistance in how the DOT would like to see these issues handled. A simple quoting of HMR and locations where RQs are referenced within them has proved ineffective and frustrating. I look forward to reading your response.

Sincerely,

Steve Laughlin

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