U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

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

JUN _ 6 2006

Mr. Chris S. Leason
Attorney at Law
Gallagher & Kennedy
2575 East Camelback Road
Phoenix, AZ 85016-9225

Reference No. 05-0205

Dear Mr. Leason:

This is in response to your letter and telephone conversation with a member of my staff asking on behalf of your client whether or not "Copper sulfate pentahydrate," which contains hydrated cupric sulfate, must be designated as a hazard substance or hazardous material when offered for transportation in commerce under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). You state copper sulfate in its anhydrous form, "Cupric sulfate," is a hazardous substance with a reportable quantity (RQ) of 10 pounds (4.54 kg). You did not provide a material safety data sheet for the mixture or specify the concentration of cupric sulfate it contained. We apologize for the delay in responding and any inconvenience this may have caused.

Under § 173.22 of the HMR, it is the shipper's responsibility to properly classify a hazardous material. This office does not perform that function. Under § 171.8, a hazardous substance (other than a radionuclide) is defined as a material, including its mixtures and solutions, that: (1) is listed in appendix A to § 172.101 of the HMR; (2) is in a quantity, in one package, which equals or exceeds its reportable quantity (RQ) listed in appendix A to§ 172.101 of the HMR; and (3) when in a mixture or solution, is in a concentration by weight which equals or exceeds the concentration corresponding to the RQ of the material, as shown in § 171.8. Based on the information you provided, it is our opinion that your client's material may meet the definition of a hazardous substance when the mixture in one package contains 10 pounds or more of cupric sulfate at a concentration of 0.02 percent (200 PPM) or higher.

If your client determines the mixture is a hazardous substance that does not meet the definition of any other hazard class specified in § 171.8, it may be described as "RQ Environmentally hazardous substances, solid, n.o.s. (cupric sulfate), 9, UN 3077, III" for shipment in the United States. If the mixture meets the definition of any other hazard class, the HMR requirements applicable to each hazard class it contains must be met.

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172.101
173.22

If your client's mixture does not meet the RQ for cupric sulfate, and does not meet the definition of any other HMR hazard class, it is not regulated under the HMR.

I hope this satisfies your request.

Sincerely,

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

Edmonson
§172.101, §172.22
Proper Shipping Name
05-0202

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August 23, 2005

VIA U.S. MAIL

Ms. Susan Gorsky
Acting Director, Office of Hazardous Materials Standards
U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
Office of Hazardous Materials Safety
400 7th St., S.W.
Washington, DC 20590

Re: Interpretation Request – Use of the "RQ" Designation as Part of the Proper Shipping Name

Dear Ms. Gorsky:

This letter seeks written confirmation of the conclusion reached during our conversation on August 12, 2005 regarding whether there is a need to include a "RQ" designation as part of the proper shipping name for copper sulfate pentahydrate, a "hazardous material." Thank you for taking the time to respond to my question and check with your colleagues in the Office of Hazardous Materials Safety to confirm our conclusion that such a designation is not required.

Copper sulfate pentahydrate is not identified by the U.S. Environmental Protection Agency ("EPA") as a "hazardous substance" under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), but cupric sulfate (the anhydrous form) is identified as a CERCLA hazardous substance (CAS No. 7758-98-7) with a 10 pound RQ. *See* 40 C.F.R. § 302.4, Table. The U.S. Department of Transportation ("DOT"), at 49 C.F.R. § 172.101, Appendix A, identifies:

> materials and their corresponding reportable quantities (RQ's) that are listed or designated as "hazardous substances" under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9601(14) (CERCLA; 42 U.S.C. 9601 *et seq.*). This listing fulfills the requirement of CERCLA, 42 U.S.C. 9656(a), that all "hazardous substances," as defined in 42 U.S.C. 9601(14), be listed and regulated as hazardous materials under 49 U.S.C. 5101-5127.

Thus, at the direction of Congress, DOT is mandated to regulate hazardous substances, as defined by EPA pursuant to CERCLA, as hazardous materials. 42 U.S.C. § 9656(a) ("Each hazardous substance which is listed or designated as provided in section 9601(14) of this title shall, within 30 days after October 17, 1986, or at the time of such listing or designation, whichever is later, be listed and regulated as a hazardous material under chapter 51 of title 49.").

Because copper sulfate pentahydrate is not identified by EPA as a hazardous substance and, as a result, not contained on DOT's list of hazardous substances at 49 C.F.R. § 172.101, Appendix A, the proper shipping name for this material should not include the RQ designation. We note that DOT defines a hazardous substance in 49 C.F.R. § 171.8 as "a material, including its mixtures and solutions, that - (1) Is listed in the appendix A to 172.101 of this subchapter; (2) Is in a quantity, in one package, which equals or exceeds the reportable quantity (RQ) listed in appendix A to 172.101 of this subchapter; and (3) When in a mixture or solution . . . is in a concentration by weight which equals or exceeds the concentration corresponding to the RQ of the material, as shown in the following table . . . ." For a hazardous substance such as cupric sulfate with a RQ of 10 pounds, the concentration is 0.02 percent, or 200 ppm.

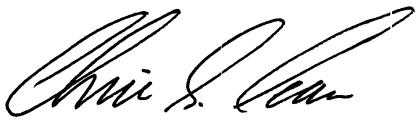
Analysis of my client's product indicates that it is entirely the hydrated copper sulfate (CAS No. 7758-99-8) and that no free cupric sulfate (CAS No. 7758-98-7) is present. Thus, although cupric sulfate is a hazardous substance identified in Appendix A to 49 C.F.R. § 172.101, it is not present in a package in an amount equal to or exceeding the 10 pound RQ. Further, although we do not believe that copper sulfate pentahydrate is a "mixture" or a "solution," EPA's regulations only apply the RQ requirements to mixtures or solutions if a "RQ or more of any hazardous constituent is released." 40 C.F.R. § 302.6(b)(1)(i). Because Congress intended DOT to regulate as hazardous materials only those hazardous substances identified by EPA as such, even assuming copper sulfate pentahydrate is a mixture or solution, the RQ designation would not apply as part of the proper shipping name because a RQ of a CERCLA hazardous substance could not be released from a single package of copper sulfate pentahydrate.

In sum, we conclude that the proper shipping name for our client's copper sulfate pentahydrate, which is identified at 49 C.F.R. § 172.101, Appendix B as a marine pollutant, and, as such, is a DOT hazardous material, should not include the RQ designation.

We seek DOT's confirmation of this conclusion. Thank you for your assistance with this interpretation request. If you have any questions, please contact me at 602-530-8059.

Very truly yours,

GALLAGHER & KENNEDY, P.A.



Chris S. Leason

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