



U.S. Department  
of Transportation

**Pipeline and  
Hazardous Materials Safety  
Administration**

MAR 20 2007

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

Ms. Jennifer Eberle  
Veolia ES Technical Solutions, L.L.C.  
One Eden Lane  
Flanders, NJ 07836

Ref. No. 07-0024

Dear Ms. Eberle:

This is in response to your February 6, 2007 letter requesting clarification of the requirements in the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) related to 1) the appropriate hazardous materials description for a lab pack of waste materials prepared in accordance with § 173.12(b); and 2) the classification of subsidiary hazards for hazardous materials that do not have those subsidiary hazards listed in Column 6 of the § 172.101 Hazardous Materials Table (HMT) in association with the appropriate hazardous materials description.

Your questions are paraphrased and answered as follows:

Q1. Does the prohibition for packaging a Division 6.1 Packaging Group I material under § 173.12(b)(3) apply to a waste material that has a Division 6.1 Packing Group I subsidiary hazard (e.g., Waste Hydrofluoric acid, 8 (6.1), UN1790, PG I)?

A1. Yes. Section 173.12(b)(3) lists waste materials that may not be packaged or described under paragraph (b) including a Division 6.1 Packing Group I material. Regardless of the waste material classification as primary or subsidiary, a waste material meeting the definition of Division 6.1 Packing Group I is prohibited from being packaged or described under paragraph (b).

Q2. Is it assumed that the packing group assignment for the subsidiary hazard(s) listed in Column 6 of the HMT is the same as the packing group for the primary hazard of the material?

A2. In accordance with the precedence of hazard table in § 173.2a(b), the most stringent packing group assigned to a hazard of the material takes precedence over other packing groups. For example, a material meeting Class 3 PG II and Division 6.1 PG I is classified as Class 3 PG I.

Q3. May one hazardous materials description be used to describe a lab pack prepared in accordance with § 173.12(b) that contains multiple waste materials of the same hazard class (e.g., "Waste flammable liquid, toxic, corrosive, n.o.s., 3, (6.1, 8), UN3286, PG II")



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172.101  
173.12 (b)  
173.22

used to describe a lab pack containing “Waste flammable liquids, n.o.s., 3, UN1993, PG II;” “Waste flammable liquids, toxic, n.o.s., 3 (6.1), UN1992, PG II;” and “Waste flammable liquids, corrosive, n.o.s., 3 (8), UN2924, PG II”)?

A3. A generic description from the HMT may be used in place of specific chemical names, when two or more chemically compatible waste materials in the same hazard class are packaged in the same outside packaging. Chemically compatible materials having the same primary hazard class, but different subsidiary hazard classes, and not otherwise prohibited by § 173.12(b)(3), may be packaged together in the same outside packaging.

The generic description, "Waste flammable liquid, toxic, corrosive, n.o.s., 3 (6.1, 8), UN3286, PG II," is an acceptable generic description for materials shipped in a lab pack when all the subsidiary hazards are present. However, when materials being shipped in a lab pack have only the toxic or corrosive subsidiary hazards present, the generic descriptions, "Waste flammable liquids, toxic, n.o.s." or "Waste flammable liquids, corrosive, n.o.s." must be selected, as appropriate. Note that only those waste materials defined as hazardous waste in § 171.8 may be described with a proper shipping name that includes the word “waste.”

Q4. May additional subsidiary hazards be included in the shipping description even though the hazards are not shown in Column 6 of the HMT for a particular hazardous materials description?

A4. If it is specifically determined that a material meets the defining criteria for a subsidiary hazard that is not shown in Column 6 of the HMT for a hazardous materials description, the subsidiary hazard class or division number must be identified on the shipping paper in accordance with § 172.202(a)(2).

Q5. Is it correct to include a Class 7 subsidiary hazard in the shipping description for a material that meets the definition of multiple hazards including a limited quantity Class 7 radioactive material?

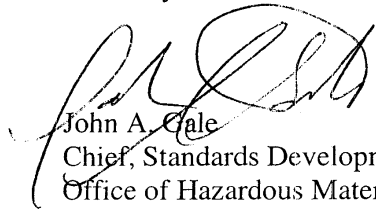
A5. Yes. See A4.

Q6. When classifying a material with more than one hazard in accordance with § 173.2a, should subsidiary hazards be considered?

A6. In accordance with § 173.22, it is the shipper's responsibility to properly classify a hazardous material and assign it a proper shipping name from the HMT. Section 172.101(c)(12)(iii) states that if a material meets the definition of more than one hazard class and is not specifically identified by name in the HMT, then the hazard class of the material must be determined using the precedence criteria specified in § 173.2a. To properly class a mixture containing hazardous components, you must analyze and test the

entire mixture to determine its primary hazard class and if it poses any subsidiary hazards. Please note that the mixture you describe in your letter may or may not exhibit the hazards of one or all of its components.

Sincerely,

A handwritten signature in black ink, appearing to read "John A. Gale". The signature is fluid and cursive, with the first name "John" and last name "Gale" clearly distinguishable.

John A. Gale  
Chief, Standards Development  
Office of Hazardous Materials Standards

Der Kinderen

§172.101

§173.12(b)

Waste / Lab Packs

07-0024

February 6, 2007

Mr. Edward T. Mazzullo, Director  
Office of Hazardous Materials Standards  
USDOT/PHMSA (DHM-10)  
400 7th Street, SW  
Washington D.C. 20590-0001

Dear Mr. Mazzullo,

Please accept this letter as a request for a formal interpretation from your office. Veolia wishes to receive clarification related to 1) selecting the proper generic description for a packaging prepared in accordance with the lab pack exception for waste materials provided under 173.12(b) and, 2) the assignment of additional subsidiary hazards to a shipping description when those hazards are not otherwise indicated in column 6 of the §172.101 Hazardous Materials Table (HMT).

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**Question 1:**

Currently, Division 6.1, PG I waste materials are prohibited from being packaged under the lab pack exception provided under §173.12(b).

Does this restriction also apply when the 6.1 PG I is present as a subsidiary hazard?

Example: Waste Hydrofluoric acid, 8, (6.1), UN1790, PG I

- Does this material qualify for the relief provided under 173.12(b) for waste materials in lab pack packagings?
- When an entry is listed in the Hazardous Materials Table with more than one hazard, is it assumed that the packing group for the subsidiary hazard(s) is the same as the packing group identified for the primary hazard?

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**Question 2:**

A lab pack prepared in accordance with §173.12(b) contains 3 separate inner packagings. Each of the inner packagings contains a different material. The proper shipping descriptions for the materials are as follows:

Waste flammable liquids, n.o.s., 3, UN1993, PG II  
Waste flammable liquids, toxic, n.o.s., 3, (6.1), UN1992, PG II  
Waste flammable liquids, corrosive, n.o.s., 3, (8), UN2924, PG II

Is it compliant with the HMR to assign the following single shipping description to the package to describe all 3 waste materials contained within the lab pack?

Waste flammable liquid, toxic, corrosive, n.o.s., 3, (6.1, 8), UN3286, PG II

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**Question 3:**

Is it permitted to include additional hazard labels/subsidiary hazards to a hazardous materials description that are otherwise not shown in Column 6 of the HMT for a shipping description, if you believe those additional hazards to be present in the hazardous material? If so, is there a limit to the number of

additional hazard labels/subsidiary hazards added as long as they are applicable to the hazardous material?

Example 1 (additional hazards present in a single mixture):

A shipper has a single hazardous waste mixture consisting of monochloroacetic acid and carbon tetrachloride. Because this mixture is not specifically listed by name in the HMT, he selects a generic n.o.s. description that most accurately describes the material, 'Flammable liquid, toxic, corrosive, n.o.s.'. Based on his knowledge of the waste mixture, he strongly believes this mixture also exhibits dangerous when wet properties, therefore, he includes Division 4.3 as an additional label/subsidiary hazard to the shipping description. The shipping description is then indicated on the packaging and shipping papers as follows:

Waste Flammable liquid, toxic, corrosive, n.o.s. (Monochloroacetic Acid, Carbon Tetrachloride), 3, (6.1, 8, 4.3), UN3286, PG II

Example 2 (additional hazards present in a lab pack container):

A lab pack contains two separate inner packagings. Each of the inner packagings contains a different material. The proper shipping descriptions for the materials are as follows:

Waste water-reactive liquid, corrosive, n.o.s., 4.3, (8), UN3129, PG II  
Waste water-reactive liquid, toxic, n.o.s., 4.3, (6.1), UN3130, PG II

Is it compliant with the HMR to assign a single shipping name to describe both waste materials contained within the lab pack and indicate all subsidiary hazards present even when they are not indicated in Column 6 of the HMT for the shipping description?

Waste water-reactive liquid, corrosive, n.o.s., 4.3, (8, 6.1), UN3129, PG II

Example 3 (limited quantity radioactive materials):

When describing a hazardous material that also meets the definition of a limited quantity Class 7 material, is it correct to indicate class 7 as a subsidiary hazard in the shipping description? For example:

Waste Flammable liquid, toxic, corrosive, n.o.s., 3 (6.1, 8, 7), UN3286, PG II, Limited quantity radioactive material

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**Question 4:**

In reference to §173.2a, should subsidiary hazard classes be considered when determining the proper classification of a material having more than one hazard?

Example

A hazardous waste mixture in a single packaging contains the following materials:

- 50% Zinc metal (4.3 primary hazard class and a 4.2 subsidiary hazard, PG I)
- 50% Cadmium powder (4.1 primary hazard class and a 6.1 subsidiary hazard, PG II)

After using the precedence table in §173.2a(b), Veolia believes the shipping description assigned to the mixture should be:

Waste water-reactive solid, self-heating, n.o.s. (zinc powder, cadmium powder), 4.3, (4.2), UN3135, PG II

Would it be incorrect to add 4.1 and 6.1 to the shipping description as additional subsidiary hazards?

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**Question 5:**

When additional subsidiary hazard labels are required for a package in accordance with §172.402, should the additional hazard(s) be included in the proper shipping name as a subsidiary hazard?

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Thank you in advance for providing clarification to the questions included in this letter. Please feel free to contact me at 973-448-4209 or [jennifer.eberle@veoliaes.com](mailto:jennifer.eberle@veoliaes.com) if additional information is required.

Sincerely,

Jennifer Eberle  
Manager, Transportation Compliance