U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration

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JAN 3 1 2011

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Defense Ammunition Center
187 Markwell Street, Building 1292
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Fort Stewart, GA 31409-5503

Reference No. 10-0015

Dear Ms. Lewis:

This is in response to your letter and subsequent telephone conversation with a member of my staff requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to hazardous materials communication. Specifically, you ask how to determine if a material is a poisonous-by-inhalation or toxic-by-inhalation hazard when the proper shipping name and other information that accompany it do not include the words "poison," "toxic," "poison-inhalation hazard (PIH)," or "toxic-inhalation hazard," herein described as PIH. In your letter, you state your military shipping facility receives hazardous materials from a variety of manufacturers that sometimes do not include their product's hazard classification information. You also state your facility often has no time to retrieve this information before it must prepare these materials for rapid deployment overseas. Your questions have been paraphrased and answered in the order you provided.

Q1. If I put the POISON INHALATION HAZARD warning label (see § 172.429) on a package that contains "UN 1052, Hydrogen fluoride, anhydrous, 8 (corrosive), 6.1 (poison), Packing Group (PG) I," do I have to communicate this hazard on the shipping paper? The entry for this material on the Hazardous Materials Table (HMT; § 172.101) includes Special Provision 3 in Column 7. This provision states hydrogen fluoride anhydrous meets the criteria for a PIH Hazard Zone C, but does not refer to § 173.133, which prescribes how to assign the PG and hazard zone for a Division 6.1 material. Note 2 under the § 173.133(a)(2)(i) table states only liquid PG I, Hazard Zone A and B materials meeting the criteria prescribed in § 173.133(a)(2) are subject to additional shipping paper (§ 172.203(m)), marking (§ 172.313), and placarding (§ 172.504(e), Table 1) requirements for PIH materials.

A1. The answer is yes. "UN 1052, Hydrogen fluoride, anhydrous" is a Class 8, Division 6.1 liquid that meets the definition of a Zone C "material poisonous by inhalation" in § 171.8. Although § 172.203(m) does not require that the Zone C liquid material poisonous-by-inhalation hazard be communicated on a shipping paper, § 172.402(a)(2) requires that a PG I, Division 6.1 subsidiary hazard label be displayed on the package. In

addition, § 172.202(a)(3) requires that the subsidiary hazard be entered on a shipping paper when a subsidiary hazard label is required (also see §§ 172.400(b), 172.429(a), and 172.442(a)). Please note the words "Inhalation Hazard" are not required to be marked on the package if they appear on the hazard label (see § 172.313(a)). The motor vehicle, railcar, aircraft unit load device, or other transport vehicle the material is transported on is also required to display the POISON INHALATION HAZARD placard because the material is subject to the shipping description requirements for a poisonous-by-inhalation hazard (see § 172.505(a)).

Q2. The hazardous materials listed here all have Special Provision 5 in Column 7 of their respective entries on the § 172.101 Table, which tells me if these materials meet the definition of a PIH material, I must select a proper shipping name that identifies them as such.

No.	UN/NA#	Proper Shipping Name	Hazard Class(es)	Packing Group	Special Provision/ Hazard Zone
1.	UN 1583	Chloropicrin mixtures, n.o.s.	6.1	I	5
2.	NA 1911	Diborane mixtures	2.1		5
3.	UN 2983	Ethylene oxide and propylene oxide mixtures *with not more than 30 percent ethylene oxide*	3, 6.1	I	5
4.	UN 1614	Hydrogen cyanide, stabilized *with less than 3 percent water and absorbed in a porous inert material*	6.1	I	5
5.	UN 2478	Isocyanates, flammable, toxic, n.o.s.	3, 6.1	II, III	5
6.	UN 2285	Isocyanatobenzotrifluorides	6.1, 3	II	5
7.	UN 3281	Metal carbonyls, liquid, n.o.s.	6.1	I	5
8.	UN 3275	Nitriles, toxic, flammable, n.o.s.	6.1, 3	I	5
9.	UN 3276	Nitriles, toxic, liquid, n.o.s.	6.1	I	5
10.	UN 3280	Organoarsenic compound, liquid, n.o.s.	6.1	I	5
11.	UN 3279	Organophosphorus compound, toxic, flammable, n.o.s.	6.1, 3	I	5
12.	UN 3278	Organophosphorus compound, toxic, liquid, n.o.s.	6.1	I	5
13.	UN 1828	Sulfur chlorides	8	I	5

Attaching a PIH label to the package can easily be accomplished. The concern is how do I determine which item is a PIH if this information is not shown on the HMT and not provided by the shipper and/or manufacturer, and what if anything has to be annotated on the document? Again, § 173.133(a)(2)(i), Note 2, states only those items in Zones A and B must be annotated in accordance with § 172.203(m).

A2. Under § 173.22, it is the shipper's responsibility to properly classify a hazardous material before it is offered for or transported in commerce. As stated in Answer A1, the shipper is also responsible for stating the PIH hazard on the shipping paper, label, and placard that accompany the material. If the words "Inhalation Hazard" do not appear on the label or placard, they must appear on the package marking (see § 172.313(a)). Packages of PIH materials that do not include this information are in violation of the HMR and must not be offered for transportation in commerce. You can obtain classification information about a hazardous material from the product manufacturer or its material safety data sheet for the product, or by using methods prescribed in the HMR that include product testing or the use of reliable data or documented experience (see §§ 173.132 and 173.133 for Division 6.1 liquids). Also, § 173.133, Note 2, states that Division 6.1, PG I, Zone A and B liquids must be annotated in conformance with § 172.203(m)(2), marked in conformance with § 172.313, and placarded in conformance with Table 1 of § 172.504(e), but does not exclude other PIH materials from having to comply with these requirements.

Q3. These hazardous materials entries have Special Provision 6 in Column 7 of the HMT. This means they are PIH materials and must include this in their hazard communication. Again, a POISON GAS label can be applied to the item. The concern is what if any requirement is there for the shipping paper under § 172.203(m). That is, how do I determine which zone to communicate?

No.	UN/NA#	Proper Shipping Name	Hazard Class(es)	Possible Hazard Zone	Special Provision/ Hazard Zone
1.	NA 9035	Gas identification set	2.3		6
2.	UN 3169	Gas sample, non-pressurized, toxic, n.o.s.	2.3		6
3.	UN 3168	Gas sample, non-pressurized, toxic, n.o.s.	2.3, 2.1		6
4.	UN 1071	Oil gas, compressed	2.3, 2.1		6

A3. See Answer A2.

I hope this satisfies your request.

Sincerely,

T. Glenn Foster
Chief, Regulatory Review and Reinvention Branch
Standards and Regulations Division

Edmonson
§172.102 SP3
Special Provisions
10-0015

Request clarification on the following items. Items have been grouped per the special provision. This list may not be all inclusive. The overall concern is documentation requirements

The first item is PSN: Hydrogen fluoride anhydrous n UN 1052. This item is a Hazard Class 8 (6.1) with a special provision of 3. However IAW 172.102, Special provisions the number 3 does not refer you back to 173.133. The concern is if I put the toxic inhalation hazard label on the package, do I have to communicate this on the document. IAW Note 2 in 173.133 is specifically states that only 6.1 that meets the criteria of Zone A or B has to be communicated on the document IAW 172.203 m.

These next items all have special provision of 5, which tells me if the material meets the definition of an inhalation hazard to select a PSN that identifies it as such. Attaching the label to the package can easily be accomplished, the concern how do I determine which item to select and what if anything has to be annotated on the document. Again, 173.133 says only those items in Zones A and B must be annotated IAW 172.203m.

UN 1583 Chloropicrin mixtures n.os. 6.1

NA 1911 Diborane mixtures 2.1

UN 2983 Ethylene Oxide and propylene oxide mixtures, 3 (6.1)

UN 1614 Hydrogen cyanide, stabilized 6.1

UN 2478 Isocyanates, flammable, toxic n.o.s 3 (6.1)

UN 2285 Isocyanatobenzotrifluorides 6.1(3)

UN 3281 Metal carbonyls, liquid n.o.s 6.1

UN 3275 Nitriles, toxic, flammable n.o.s 6.1 (3)

UN3276 Nitriles, toxic liquid n.o.s 6.1

UN 3280 Organoarsenic compound, liquid n.o.s 6.1

UN 3279 Organophosphorus compound, toxic, flammable n.o.s 6.1(3)

UN 3278 Organophosphorus compound, toxic, liquid n.o.s 6.1

UN 1828 Sulfur chlorides, 8

These last items have a special provision of 6, which says they are inhalation hazards and must be communicated as such. Again, a poison gas label can be applied to the item, the concern is what if any requirement is there for the document per 172.203m (i.e. how do I determine which zone to communicate).

UN 1071 Oil gas, compressed 2.3 (2.1)

NA 9035 Gas identification set 2.3

UN 3169 Gas sample non pressurized, toxic , n.o.s , 2.3

UN 3168 Gas sample non pressurized, toxic, flammable , n.o.s , 2.3(2.1)

Respectfully

Vickie A. Lewis

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