U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

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

AUG 1 2006

Mr. Frank Imperatore
Hazardous Materials Manager
Environmental, Health and Safety Services
Virginia Polytechnic Institute and State University
459 Tech Center Drive (0423)
Blacksburg, VA 24061

Ref. No.: 06-0145

Dear Mr. Imperatore:

This is in response to your June 26, 2006 letter concerning the use of Special Permits (DOT-SP 8445 and DOT-SP 13192) and exceptions for lab packs in § 173.12 under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Your questions are paraphrased and answered as follows:

Q1. Special Permit DOT-SP 8445 authorizes combination packagings containing certain hazardous wastes or hazardous substances in more than one hazard class. May a packaging prepared in accordance with DOT-SP 8445, which contains acetone, formic acid, and acrylamide, be described under one generic description from the § 172.101 table?

A1. No. Combination packagings containing individual receptacles with more than one class of hazardous material must be classed and described separately for markings and shipping papers.

Q2. How must a packaging prepared in accordance with DOT-SP 13192 containing various Division 6 1 cyanide materials be classed and described (i.e., individual descriptions or one generic description)?

A2. DOT-SP 13192 is not necessary for cyanide materials classed in Division 6.1. As provided by § 173.12(e), the provisions of § 177.848(c) do not apply to a cyanide material properly packaged in lab packs transported with Class 8 acidic material properly packaged in a lab pack or drums not exceeding 55 gallons when specific conditions are met (same restrictions specified in DOT-SP 13192). A lab pack containing various Division 6.1 materials may be described using a generic proper shipping name in accordance with § 173.12(b).

Q3. Copper cyanide and nickel cyanide are Division 6.1 PG II materials and sodium cyanide and potassium cyanide are Division 6.1, PG I materials. Is it true that copper cyanide and

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173.12

nickel cyanide may be offered for transportation and transported under the exceptions in § 173.12(b) and (e) but sodium cyanide and potassium cyanide may not?

A3. Your understanding is correct. The exception for waste materials in § 173.12(b) does not apply to materials classed as Division 6.1 PG I unless transported under the terms of a special permit (e.g., DOT-SP 13192). In addition, the exception in § 173.12(e) requires waste cyanides and waste cyanide solutions or mixtures to be packaged in accordance with § 173.12(b). Therefore, waste cyanides classed as Division 6.1, PG I may not take advantage of the exception from segregation requirements in § 173.12(e).

Q4. Sodium methylate is a Division 4.2 with a subsidiary hazard of Class 8, PG II and aluminum borohydride is a Division 4.2 with a subsidiary hazard of Division 4.3, PG I. Is it true that sodium methylate may be offered for transportation and transported under the exceptions in § 173.12(b) and (e) but aluminum borohydride may not?

A4. Your understanding is partially correct. The exceptions for waste materials in § 173.12(b) and (e) do not apply to materials classed as Division 4.2 PG I unless transported under the terms of a special permit (e.g., DOT-SP 13192). Section 173.12(e) provides an exception from segregation requirements for cyanides and acids; sodium methylate and aluminum borohydride are not considered to be cyanides or acids.

I hope this information is helpful. If you have further questions, please do not hesitate to contact this office.

Sincerely,

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

VirginiaTech

Environmental, Health and Safety Services
459 Tech Center Drive (0423)
Blacksburg, Virginia 24061
540/231-2982 Fax: 540/231-3944
E-mail: imperato@vt.edu
www.ehss.vt.edu

Pollack
§ 173.12
Hazardous Waste
06-0145

June 26, 2006

Mr. Edward T. Mazzullo
Director, Office of Hazardous Materials Standards
U.S. DOT/PHMSA (PHH-10)
400 7th Street S.W.
Washington, D.C. 20590-0001

Mr. Mazzullo:

I am requesting some clarification in regards to the use of Special Permits and 49CFR173.12.

It is my understanding that it is the shipper's responsibility per 49CFR173.22 to properly classify and describe a hazardous material in accordance with 172 and 173. Since I am getting conflicting information from my hazardous waste disposal vendors, and want to make sure that Virginia Tech is compliant with the hazardous material regulations, I am requesting assistance from your office.

Special Permit (DOT-SP 8445)

Special Permit (DOT-SP 8445) allows the grantee to transport various liquid or solid hazardous substances and hazardous wastes packed in inside plastic, glass, earthenware or metal containers, not exceeding one-gallon capacity, over-packed in a UN specification 1A2 or 1B2 metal drum, a UN 1G fiber drum or a UN1H2 plastic drum, not exceeding 220 liters (55-gallon) nominal capacity only for the purposes of disposal, re-packing or re-processing.

Virginia Tech generates the following material as waste for offsite shipment: acetone (1 gallon), formic acid (2 litters) and acrylamide (100 grams).

If these items were packaged in one outer package (drum) as per the requirements of Special Permit (DOT-SP 8445), which of the following is the correct proper shipping description for the outer package?

A. "Waste Flammable liquid, toxic, corrosive, n.o.s., 3 (6.1, 8), UN3286, PG II, (acetone, formic acid, acrylamide) (DOT-SP 8445)"

Or

B. "Waste Acetone, 3, UN1090, PG II (DOT-SP 8445)"
"Waste Formic acid, 8, UN1779, PG II (DOT-SP 8445)"
"Waste Acrylamide, solid, 6.1, UN2074 PG II (DOT-SP 8445)-Toxic"

Special Permit (DOT-SP 13192)

Special Permit (DOT-SP 13192) allows the grantee to transport in commerce of certain hazardous materials in lab packs and non-bulk packages, and provides relief from segregation requirements and certain marking requirements subject to the packaging and safety measures prescribed herein.

Virginia Tech generates the following material as waste for offsite shipment: sodium cyanide (500 grams), potassium cyanide (500 grams) and brucine (250 grams).

If the sodium cyanide and potassium were packaged in one outer package as per the requirements of Special Permit (DOT-SP 13192), which of the following is the correct proper shipping description for the outer package?

A. "Waste Cyanides, inorganic, solid, n.o.s., 6.1, UN1588, PG I, (Sodium cyanide, Potassium cyanide) (DOT-SP 13192)-Toxic "

Or

B. "Waste Sodium cyanide, solid, n.o.s., 6.1, UN1689, PG I, (DOT-SP 13192)-Toxic
"Waste Potassium cyanide, solid, n.o.s., 6.1, UN1680, PG I, (DOT-SP 13192) – Toxic"

If the sodium cyanide, potassium cyanide, and brucine were packaged in one outer package as per the requirements of Special Permit (DOT-SP 13192), which of the following is the correct proper shipping description for the outer package?

A. "Waste Toxic solid, inorganic, n.o.s., 6.1, UN3288, PG I, (Sodium cyanide, Potassium cyanide, Brucine) (DOT-SP 13192) – Toxic"

Or

B. "Waste Sodium cyanide, solid, n.o.s., 6.1, UN1689, PG I, (DOT-SP 13192) – Toxic"
"Waste Potassium cyanide, solid, n.o.s., 6.1, UN1680, PG I, (DOT-SP 13192)-Toxic"
"Waste Brucine, 6.1,UN1570, PG I, (DOT-SP 13192) --Toxic"

49CFR173.12

It is my understanding that cyanide waste like copper cyanide and nickel cyanide may be packaged and shipped per 49 CFR173.12 (b) and 49 CFR173.12 (e) but sodium cyanide and potassium cyanide may not. Is this correct?

My understanding is that both sodium cyanide and potassium cyanide are 6.1 PG I materials and prohibited per 49 CFR 173.12 (b)(3) while copper cyanide and nickel cyanide are 6.1 PG II materials and are not prohibited.

It is my understanding that Class 4.2 waste Sodium methylate may be packaged and shipped per 49 CFR173.12 (b) and 49 CFR173.12 (e) but Aluminum borohydride may not. Is this correct?

My understanding is that aluminum borohydride 4.2 PG I material and prohibited per 49 CFR 173.12 (b)(3) while sodium methylate is 4.2 PG II material and is not prohibited.

Your prompt reply would be greatly appreciated.

I thank you for your assistance in this manner.

Sincerely,

Frank Imperatore, CHMM
Hazardous Material Manager