



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue SE
Washington, DC 20590

AUG 27 2015

Denise E. Ernest, CRCM
Project Manager
Compliance Plus Services, Inc.
PO Box 186
Hatboro, PA 19040

Ref. No.: 15-0072

Dear Ms. Ernest:

This is a response to your April 6, 2015 email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to offering and transporting non-bulk packages containing various amounts of nitric acid. In your email, you state that you understand it is the shipper's responsibility to properly classify a hazardous material and that the Pipeline and Hazardous Materials Safety Administration (PHMSA) does not perform this function, but that you would appreciate PHMSA's guidance with the following issues. Your questions are paraphrased and answered as follows:

- Q1. What packaging section is one referred to when shipping "UN3264, Waste Corrosive liquid, acidic, inorganic, n.o.s. (multiple technical names), 8, PG II" if nitric acid is one of multiple constituents causing the final solution to meet the definition of a Class 8 (corrosive) material?
- A1. Assuming the shipper has properly classified the solution as "UN3264, Waste Corrosive liquid, acidic, inorganic, n.o.s. (multiple technical names), 8, PG II" then the packaging section it should select from the § 172.101 Hazardous Materials Table (HMT) is § 173.202 (non-bulk packagings for liquid hazardous materials in Packing Group (PG) II).
- Q2. The shipping description, "UN2031, Nitric acid *other than red fuming with not more than 20 percent nitric acid*, 8, PG II," specifies not more than 20% nitric acid in the solution. Is this intended to be a range of 1%-20%? Is there a minimum percentage to be included in this shipping description (ex. anything <1%)?
- A2. In order to utilize the HMT entry of "UN2031, Nitric acid *other than red fuming with not more than 20 percent nitric acid*, 8, PG II," you must meet the following two conditions:

- (1) Nitric acid must be the predominant hazardous material in the solution that creates the corrosive hazard. The PG II corrosive hazard must be solely due to the concentration of nitric acid present in the solution and not from any other acidic materials in the solution. If the solution is a mixture of nitric acid with other acidic materials and they only meet the PG II corrosive hazard criteria due to the combination of the individual components present, then the proper shipping name should be “UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (technical names of acids)”; and
- (2) The amount of nitric acid must not exceed 20 percent.
- Q3. Would a material with the shipping description, “UN2031, Nitric acid *other than red fuming with not more than 20 percent nitric acid*, 8, PG II” (that does not contain sulfuric acid or hydrochloric acid as impurities), containing at least 1% nitric acid, be subject to the authorized packaging requirements listed in § 173.158?
- A3. Please see A2. If a shipper has properly classified a solution as “UN2031, Nitric acid *other than red fuming with not more than 20 percent nitric acid*, 8, PG II,” then the § 172.101 HMT directs the reader to § 173.158 as the appropriate packaging section for nitric acid in non-bulk packagings. Additionally, the § 172.101 HMT directs the reader to § 173.242 as the appropriate packaging section for nitric acid in bulk packagings.
- Q4. After having been placed in transportation, if a package containing a hazardous waste of nitric acid that is subject to § 173.158 is not contained in one of the authorized packages listed in § 173.158 and the material cannot be safely transferred into one of the appropriate authorized packages, would it be appropriate for the material to be placed into a salvage drum?
- A4. The answer is yes. As provided by § 173.3(c), packages of hazardous materials that are damaged, defective, or leaking; packages found to be not conforming to the requirements of Subchapter C of the HMR after having been placed in transportation; and, hazardous materials that have spilled or leaked may be placed in a metal or plastic removable head salvage drum that is compatible with the lading and shipped for repackaging or disposal under the conditions listed in (c)(1) through (7) of § 173.3 .
- Q5. If one can place the material referenced in Q4 into a salvage drum, must the salvage drum be made of stainless steel to comply with § 173.158(b)(1)?
- A5. As provided by § 173.3(c)(1), the salvage drum must be a UN 1A2, 1B2, 1N2 or 1H2 tested and marked for PG III or higher performance standards for liquids or solids and a leakproofness test of 20 kPa (3 psig), and a capacity may not exceed

450 L (119 gallons). Depending on the characteristics and concentrations of the nitric acid, these materials must be placed in a metal or plastic removable head salvage drum that is compatible with the lading and shipped for repackaging or disposal.

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

Sincerely,

A handwritten signature in cursive script, reading "T. Glenn Foster". The signature is written in black ink and includes a long horizontal flourish extending to the right.

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

Goodall, Shante CTR (PHMSA)

Nickels
173.158
Authorized Package
15-0072

From: Geller, Shelby CTR (PHMSA)
Sent: Thursday, April 09, 2015 2:47 PM
To: Hazmat Interps
Subject: FW: Request for a Formal Letter of Interpretation
Attachments: PHMSA Request for Letter of Interpretation.pdf

Hi Shante and Alice,

Attached is a request for a formal letter of interpretation. Please let me know if you need any more information.

Thanks,
Shelby

From: Denise E. Ernest [<mailto:desrtss@comcast.net>]
Sent: Monday, April 06, 2015 3:15 PM
To: PHMSA HM InfoCenter
Cc: Cunningham, Brad; Logan, Mike
Subject: Request for a Formal Letter of Interpretation

Dear U.S. DOT, PHMSA Office of Hazardous Materials Standards:

Please find attached to this email, a Request for a Formal Letter of Interpretation.

If you have any questions regarding this request, please feel free to contact me at 215-734-1414, or via electronic mail at dernest@CPS-2comply.com.

Thank you for your attention to this request.

Sincerely,

Denise E. Ernest

Denise E. Ernest, CRCM
Project Manager
Compliance Plus Services, Inc.
PO Box 186
Hatboro, PA 19040
PA Office 215-734-1414
PA Office Fax 215-734-1424
Cell Phone 856-981-5065
Site Address:
120 Gibraltar Road, Suite 210
Horsham, PA 19044

dernest@CPS-2comply.com



COMPLIANCE PLUS SERVICES
April 6, 2015



Via Electronic Mail

U.S. DOT
PHMSA Office of Hazardous Materials Standards
Attn: PHH-10
East Building
1200 New Jersey Avenue, SE.
Washington, DC 20590-0001

RE: Request for a Formal Letter of Interpretation

To Whom It May Concern:

Compliance Plus Services, Inc. ("CPS") is a consultant to a variety of clients in respect to EPA, DOT and OSHA regulations.

One of our clients has asked CPS to answer questions regarding the shipment of certain Waste Corrosive Liquids, Inorganic materials. Therefore, we are requesting a clarification of the applicable regulations as discussed in the sections below, in the form of a formal letter of interpretation.

It is understood that it is the shipper's responsibility to properly classify a hazardous material, and that the PHMSA Office does not perform that function. However, we appreciate your guidance with the following questions.

In selecting authorized packaging for shipments of non-bulk packages (other than lab packs) described as UN3264 Waste Corrosive Liquids, Acidic, Inorganic, N.O.S, 8, PG II., and assuming the Offerer/Generator has properly described and classified their hazardous material;

- If one of the listed technical names is identified as nitric acid, but the material does not contain sulfuric acid or hydrochloric acid, is it required to select an authorized specification package from CFR 49 173.158 or 173.202(c)?

I am including the section from the Hazardous Materials Table applicable to this question, for your reference.

G	Corrosive liquid, acidic, inorganic, n.o.s	8	UN3264	I	8	A6, B10, T14, TP2, TP27	None	201	243	0.5	2.5	B	40	
					II	8	B2, IB2, T11, TP2, TP27	154	202	242	1 L	30 L	B	40
					III	8	IB3, T7, TP1, TP28	154	203	241	5 L	60 L	A	40

- The shipping description, Nitric acid other than red fuming with not more than 20 percent nitric acid, 8, UN2031, PGII, specifies not more than 20% nitric acid in solution. Is this intended to be a range of 1%-20%? Is there a minimum percentage to be included in this shipping description (ex. anything < 1%)?
- Would a material with the shipping description, Nitric acid other than red fuming with not more than 20 percent nitric acid, 8, UN2031, PGII (that does not contain sulfuric acid or hydrochloric acid as impurities), containing at least 1% nitric acid, be subject to the authorized packaging requirements listed in 173.158?
- If a package containing a hazardous waste of nitric acid that is subject to 173.158 is not contained in one of the authorized packages listed in 173.158 and the material cannot be safely transferred into one of the appropriate authorized packages, would it be appropriate for the material to be over-packed into a salvage drum?
- If you can over-pack the material into a salvage drum, must the salvage drum be made of stainless steel to comply with 173.158(b)(1)?

Again, a copy of the section from the Hazardous Materials Table applicable to these questions follows for your reference:

Nitrating acid mixtures, spent <i>with more than 50 percent nitric acid</i>	8	UN1826	I	8, 5.1	A7, T10, TP2, TP13	None	158	243	Forbidden	2.5 LD	40, 66
Nitrating acid mixtures spent <i>with not more than 50 percent nitric acid</i>	8	UN1826	II	8	A7, B2, IB2, T8, TP2	None	158	242	Forbidden	30 LD	40
Nitrating acid mixtures <i>with more than 50 percent nitric acid</i>	8	UN1796	I	8, 5.1	A7, T10, TP2, TP13	None	158	243	Forbidden	2.5 LD	40, 66
Nitrating acid mixtures <i>with not more than 50 percent nitric acid</i>	8	UN1796	II	8	A7, B2, IB2, T8, TP2, TP13	None	158	242	Forbidden	30 LD	40
Nitric acid <i>other than red fuming, with at least 65 percent, but not more than 70 percent nitric acid</i>	8	UN2031	II	8, 5.1	A6, B2, B47, B53, IB2, IP15, T8, TP2	None	158	242	Forbidden	30 LD	66, 74, 89, 90
Nitric acid <i>other than</i>	8	UN2031	II	8	A6, B2,	None	158	242	Forbidden	30 LD	44,

<i>red fuming, with more than 20 percent and less than 65 percent nitric acid</i>				B47, B53, IB2, IP15, T8, TP2							66, 74, 89, 90	
Nitric acid <i>other than red fuming with not more than 20 percent nitric acid</i>	8	UN2031	II	8	A6, B2, B47, B53, IB2, T8, TP2	None	158	242	1 L	30 L	D	
+ Nitric acid, red fuming	8	UN2032	I	8, 5.1, 6.1	2, B9, B32, T20, TP2, TP13, TP38, TP45	None	227	244	Forbidden	Forbidden	D	40, 66, 74, 89, 90
Nitric acid <i>other than red fuming, with more than 70 percent nitric acid</i>	8	UN2031	I	8, 5.1	A3, B47, B53, T10, TP2, TP12, TP13	None	158	243	Forbidden	2.5 L	D	44, 66, 89, 90, 110, 111

Thank you for your attention to this request. If you have any questions or concerns regarding the questions posed, please feel free to contact me at your convenience at 215-724-1414.

Sincerely,

Denise E. Ernest, CRCM
Project Manager
Compliance Plus Services, Inc.

cc: Bradley Cunningham, Engineer, CPS
Michael D. Logan, VP, CPS