



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

JUL 22 2014

Mr. Kitt Ferraz  
Environmental Compliance Engineer  
Gruene Environmental Companies  
P.O. Box 142389  
Austin, TX 78714

Ref. No.: 14-0100

Dear Mr. Ferraz,

This is in response to your May 22, 2014 email requesting clarification on shipment of residues under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). You state your company receives 70% Nitric Acid, UN 2031, in 1H1 plastic drums from overseas for use in its operations. You state these shipments to you are prepared in accordance with the requirements of the International Maritime Dangerous (IMDG) Code. Your questions are paraphrased and answered as follows:

Q1. Once the drums are emptied (to the best of your ability) of all useable material, you would like to send the drums for recycling and reconditioning. You ask if you can send the drums "as is", or if it is necessary to rinse the drums of all remaining residue prior to transportation.

A1. The requirements for empty packages in § 173.29 state that empty packages containing the residue of a hazardous material must be offered and transported in the same manner as when they previously contained a greater quantity of the hazardous material unless the packages are sufficiently cleaned of residue and purged of vapors to remove any potential hazard, or are refilled with a material that is not subject to the HMR to an extent that nullifies any hazard. However, as a 1H1 drum is not an authorized package for this material under the HMR, the 1H1 drums must comply with the requirements of § 173.29(b) and be offered as empty packagings. There are differences between the IMDG Code and HMR packaging authorizations for Nitric acid *other than red fuming, with at least 65 percent, but not more than 70 percent nitric acid*, UN 2031. While the IMDG Code authorizes the use of 1H1 plastic drums with a non-removable head drum for a period not to exceed two years from the date of manufacture of the drums, the HMR do not.

According to § 171.1(c), transportation begins when a carrier takes physical possession of a hazardous material for the purposes of transporting it and continues until the hazardous material is delivered to the destination indicated on a shipping paper, package marking, or other medium. The only portion of transportation allowed in accordance with the IMDG Code, as authorized in § 171.22(a), is the portion up until delivery to the destination indicated

on a shipping paper, package marking, or other medium. Under the scenario provided, transportation of the drums in accordance with the IMDG Code ends upon delivery at the initial destination. For subsequent transportation of your material the package must conform to the requirements of the HMR (unless destined for export via vessel and offered again in accordance with the IMDG Code).

Q2. You state you sometimes receive 1H1 drums containing 70% Nitric Acid, UN 2031 that have never been opened, but that have been deemed to no longer meet specifications or have passed its expiration date. You currently transfer the material to 1A1 drums authorized in § 173.158 and ship them as waste. You ask if your 1H1 drums would still fall under the IMDG Code regulations and could be shipped in their original container as they have never been opened.

A2. See A1. As 1H1 drums are not authorized packages for this material under the HMR, further transportation of this material not made in conjunction with transportation that authorizes use of the IMDG Code must be done in accordance with HMR packaging requirements provided in § 173.158.

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

Sincerely,



Shane C. Kelley  
Acting International Standards Coordinator  
Standards and Rulemaking Division

**Drakeford, Carolyn (PHMSA)**

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≈ 173.29  
\$ 173.158

**From:** INFOCNTR (PHMSA)  
**Sent:** Thursday, May 22, 2014 5:05 PM  
**To:** Drakeford, Carolyn (PHMSA)  
**Cc:** INFOCNTR (PHMSA)  
**Subject:** FW: request for interpretation

Residue  
14-0100

**Importance:** High

Hi Carolyn,

We received the following request for a letter of interpretation. Please let us know if you have any questions.

Thanks.

-Adam

**From:** Kitt Ferraz [<mailto:kferraz@grueneenviro.com>]  
**Sent:** Tuesday, May 20, 2014 4:42 PM  
**To:** PHMSA HM InfoCenter  
**Subject:** re: request for interpretation  
**Importance:** High

Mr. Charles E. Betts  
Director, Standards and Rulemaking Division  
US DOT/PHMSA (PHH-10)  
1200 New Jersey Avenue, SE Building, 2<sup>nd</sup> Floor  
Washington, DC 20590

Dear Sir,

Our company provides support services to a large semi-conductor manufacturing facility. They receive 70% Nitric Acid (UN2031) from overseas for use in their operations. The material is received in 55 gallon poly containers that are rated as 1H1 and are covered under the International Maritime Dangerous Goods regulations as part of the movement is by vessel. Once the drums are emptied (to the best of their ability), of all usable material we would like to then send these drums for recycling and reconditioning at an approved facility.

May we send these drums "as is" or is it necessary to rinse these drums of all remaining residue prior to transport?

Additionally on occasion we receive some of these drums that have never been opened. The customer has determined that the material is either past its expiry date or no longer meets specification. Again, this is 70% Nitric Acid (UN2031) in 1H1 containers that have been shipped from overseas and meet all IMDG regulations. Current practice has been to transfer this material to 1A1 containers and then ship as waste. This is done to meet the requirements of 173.158. However, since the containers are still intact and have never been opened would they still fall under the IMDG regulations and be shipped as waste in their original containers?

Your assistance with this is sincerely appreciated.

Sincerely,

Kitt Ferraz  
Environmental Compliance Engineer  
Gruene Environmental Companies



*Working Towards a Gruener Environment*

*Kitt Ferraz*

Environmental Compliance Engineer

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