



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

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

AUG 13 2013

Patrick Hallinean, CHMM
Regional Niche Manager
Triumvirates Environmental
200 Inner Belt Road
Sommerville, MA 02143

Reference No. 13-0093

Dear Mr. Hallinean:

This is in response to your May 1, 2013 e-mail requesting clarification on whether inner packages of Class 8 (corrosive) material may be placed inside of a flexible intermediate bulk container (IBC) and placed in transportation under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). You state your company would like to place caustic waste stream material in 1.8 liter containers and then place these containers along with sufficient cushioning to prevent significant movement inside a UN 13H4 woven plastic, coated flexible IBC with a liner.

The HMR do not authorize IBCs to contain inner packagings. However, the Pipeline and Hazardous Materials Safety Administration (PHMSA) does permit holders and parties to Department of Transportation Special Permit DOT-SP 12296 to use a UN 13H4 packaging as the outer packaging of lab pack waste hazardous materials provided the completed package meets the following conditions:

- The inner packagings of waste hazardous material conform to § 173.12(b)(2)(i);
- The inner packagings contain only hazard classes or divisions: 3 (flammable liquid), 4.1 (flammable solid), 4.2 (spontaneously combustible), 4.3 (dangerous when wet), 5.1 (oxidizer), 6.1 (poisonous), 8 (corrosive), and 9 (miscellaneous) waste hazardous material Packing Group (PG) I, II, or III materials that meet the following;
- The liner of the IBC must be a combination of multiple layers of encapsulated corrugation between inner and outer layers of woven coated polypropylene, with an inner 6 mil thick liner of polyethylene;
- The package must satisfactorily pass the performance tests prescribed in 49 CFR Part 178, Subpart O at the PG II performance level while loaded to 205 kg (452 pounds) and filled to 95% of its total capacity with solid material;
- The gross weight of the package must not exceed 205 kg; and
- Each packaging must be marked with the name of the manufacturer and location (city and state) of the facility where it is manufactured, or marked with a registration

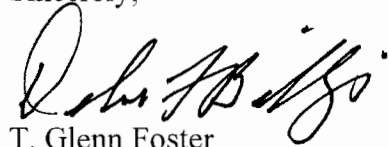
symbol designated by the Office of Hazardous Materials' Approvals and Permits Division for that specific manufacturing facility.

In addition, this packaging is limited to motor vehicle and domestic cargo vessel transportation only.

You also ask if your company may apply the requirements prescribed in § 178.955(g)(1) for a UN 51 flexible standard Large Packaging to a UN 13H4 packaging. The answer is no. Section 178.955(g)(1) permits Large Packagings to contain inner packagings of equivalent or similar design to those it was originally performance tested with provided these inner packagings meet specific design, performance, and packing criteria, such as § 173.36(b)(2) which states only flexible inner packagings may be used in UN 51H Flexible Large Packagings. However, you may wish to apply to PHMSA for permission to use the packaging under the terms of a special permit. To apply, you must submit an application to the Associate Administrator for Hazardous Materials Safety that conforms with the requirements prescribed in 49 CFR Part 107, Subpart B. In your application, you must provide justification that the packaging method you are considering achieves a level of safety that is equal to or greater than that required under the HMR. You may obtain information on the special permit and approvals applications process from our website at <http://www.phmsa.dot.gov/hazmat/regs/sp-a>, or by calling PHMSA's Approvals and Permits Division at (202) 366-4511.

I hope this satisfies your request.

Sincerely,



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

Drakeford, Carolyn (PHMSA)

Edmonson
\$178.900
Large Packagings
13-0093

From: INFOCNTR (PHMSA)
Sent: Thursday, May 02, 2013 2:35 PM
To: Drakeford, Carolyn (PHMSA)
Subject: FW: Request for Letter of Interpretation

Hi Carolyn,

This caller requested we submit his e-mail as a formal letter of interpretation.

Thanks,
Victoria

From: Hallinean, Patrick E. [<mailto:phallinean@triumvirate.com>]
Sent: Wednesday, May 01, 2013 12:45 PM
To: INFOCNTR (PHMSA)
Subject: Request for Letter of Interpretation

To whom it may concern:

I am writing you to request clarification on the shipment of inner containers of DOT corrosive material. The proposed method for shipping this caustic wastestream from the generator site is to place the 1.8 liter containers inside a UN13H4 rated FIBC with sufficient cushioning to prevent significant movement. This proposed method of packaging would meet all manufacturer closure and testing specifications. The generator would follow the regulations set forth in 49CFR 178.900 for large packagings as stated:

(1) Inner packagings of equivalent or smaller size may be used provided—

- (i) The inner packagings are of similar design to the tested inner packagings (*i.e.*, shape—round, rectangular, etc.);
- (ii) The material of construction of the inner packagings (glass, plastic, metal, etc.) offers resistance to impact and stacking forces equal to or greater than that of the originally tested inner packaging;
- (iii) The inner packagings have the same or smaller openings and the closure is of similar design (*e.g.*, screw cap, friction lid, etc.);
- (iv) Sufficient additional cushioning material is used to take up void spaces and to prevent significant movement of the inner packagings;
- (v) Inner packagings are oriented within the outer packaging in the same manner as in the tested package; and
- (vi) The gross mass of the package does not exceed that originally tested.

(2) A lesser number of the tested inner packagings, or of the alternative types of inner packagings identified in paragraph (g)(1) of this section, may be used provided sufficient cushioning is added to fill void space(s) and to prevent significant movement of the inner packagings.

The rating of the outer container can be seen below:



13H4/X/06 06/CAN/SYN-TEX/4-522/2450/1361

- Packaging Identification Code -- Woven plastic, coated Flexible Intermediate Bulk Container with a Liner.
- FIBC certified at Packing Group I Test Levels which covers Packing Groups I, II & III hazardous materials
- Month and Year of FIBC Manufacture
- Country authorizing allocation of the mark
- Manufacturer of FIBC
- Certificate Number
- Stack Test Load in kilograms
- Maximum permissible Net Mass in kilograms

At your earliest convenience please offer a letter of interpretation for shipping inner containers of caustic liquid in an FIBC.

Thank you

Patrick Hallinean, CHMM

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