U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

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

APR 30 2008

Mr. E. A. Altemos
HMT Associates, L.L.C.
Suite 300
603 King Street
Alexandria, Virginia 22314-3105

Ref. No.: 07-0132

Dear Mr. Altemos:

This responds to your June 15, 2007 letter, requesting clarification of requirements applicable to intermediate bulk containers (IBCs) under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask if a composite IBC may be fitted with more than one inner receptacle.

A composite packaging, including a composite IBC, is a packaging that consists of an outer packaging and an inner receptacle constructed so that they form an integral packaging that is filled, stored, shipped, and emptied as an integrated single unit. Standards for composite IBCs are set forth in § 178.707 of the HMR. In accordance with § 178.707(b)(1), a composite IBC consists of a rigid outer packaging enclosing a plastic inner receptacle, together with any service or structural equipment. An IBC must have a volumetric capacity between 0.45 cubic meters (450 L, 119 gallons, or 15.9 cubic feet) and not more than three cubic meters (3,000 L, 793 gallons, or 106 cubic feet) or a maximum net mass of not less than 400 kg (882 pounds) (see, § 178.700(c)(1)).

Although not specifically prohibited under the HMR, the plain language of the regulatory text applicable to composite IBCs suggests that we did not intend to permit an IBC to be fitted with two or more inner receptacles. In addition to the definition in § 178.707(b)(1), the specification references "the inner receptacle" in a number of places (see, for example, § 178.707(c)(1), (c)(2), (c)(3), (c)(3)(ii) and (c)(3)(iii)). Taken together, these references indicate that a composite IBC may contain only a single inner receptacle. Similarly, the capacity requirements specified in § 178.700(c)(1), which define the "body" of an IBC in terms of the "receptacle proper," indicate that IBCs of all types including composite IBCs, consist of a single receptacle, including openings and closures. Moreover, the capacity limitations specified in § 178.700(c)(1) are specified in terms of a composite IBC with a single inner receptacle and can not be applied directly to a packaging with multiple inner receptacles.

For the reasons outlined above, it is the opinion of this office that a composite IBC may not be fitted with more than one inner receptacle. A composite IBC fitted with two or more inner

receptacles may be authorized for the transportation of hazardous materials only under the terms of an approval or a special permit.

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

Sincerely,

Edward T. Mazzullo

Edward T. Mazzullo
Director, Office of Hazardous Materials Standards

Satterthwaite
§178.707
IBCs
07-0132

HMT ASSOCIATES, L.L.C.

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June 15, 2007

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Director, Office of Hazardous
Materials Standards (PHH-10)
Pipeline and Hazardous Materials
Safety Administration
Department of Transportation
1200 New Jersey Avenue, SE
East Building, 2nd Floor
Washington, D.C. 20590-0001

Dear Mr. Mazzullo:

This is to request your confirmation of my understanding of the provisions of the Department of Transportation's Hazardous Materials Regulations ("the HMR"; 49 CFR Parts 171-180) as they relate to composite intermediate bulk containers (IBCs). Specifically, it is my understanding from reviewing the applicable regulations that a composite IBC, for example, a type 31HA1 IBC (a composite IBC consisting of a plastic inner receptacle within a metal outer packaging), may not be constructed with more than one inner receptacle. That is, a composite IBC may be fitted with only one inner receptacle.

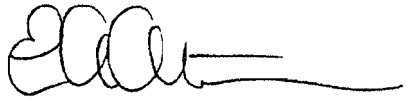
While this issue is not explicitly addressed in the HMR, I believe it is implicit from a number of provisions that a composite IBC may be fitted with only one inner receptacle. For example, the definition for "composite IBC" in § 178.707(b)(1) of the HMR states in pertinent part that a composite IBC "is an IBC which consists of a rigid outer packaging enclosing a plastic inner receptacle..." (emphasis added). In addition, in the description provided in § 178.707(a) of the various IBC type designations, each IBC type designation is described as a type of IBC with either "a rigid plastic inner receptacle" or "a flexible plastic inner receptacle" (emphasis added). Moreover, in the construction requirements for composite IBCs, in § 178.707(c)(3) the inner receptacle is referred to in the singular, for example "[t]he inner receptacle must be manufactured from plastic material of known specifications..." and "[t]he inner receptacle of 31HZ2 composite IBCs must consist of at least three plies of film" (emphasis added). Finally, in describing the required periodic inspection of composite IBCs, it states in § 180.352(b)(2)(iii) that "[t]he inner receptacle of a

composite IBC must be removed from the outer IBC body for inspection unless the inner receptacle is bonded to the outer body or unless the outer body is constructed in such a way (e.g., a welded or riveted cage) that removal of the inner receptacle is not possible without impairing the integrity of the outer body" (emphasis added).

Thus, in each of the above provisions reference to the inner receptacle is in the singular. On the other hand, if it were intended that more than one inner receptacle may be placed in the rigid outer packaging of a composite IBC, in each of the provisions cited above references to the inner receptacle presumably would have been in the plural (i.e., "inner receptacles" or "inner receptacle(s)"). This would be consistent with terminology used throughout the HMR, for example, the references to inner packagings in the definitions for "combination packaging" and "large packaging" in § 171.8, where it is intended that an outer packaging may contain more than one inner packaging or inner receptacle.

In summary, for the reasons outlined above, it is my understanding that implicit in the HMR provisions prescribing the definition, and construction and inspection requirements, for composite IBCs, is that a composite IBC may be fitted with only one inner receptacle. Your confirmation that my understanding in this regard is correct will be most appreciated. Thank you for your consideration of this matter, and please do not hesitate to contact me if you have questions concerning this request, or if you require additional information.

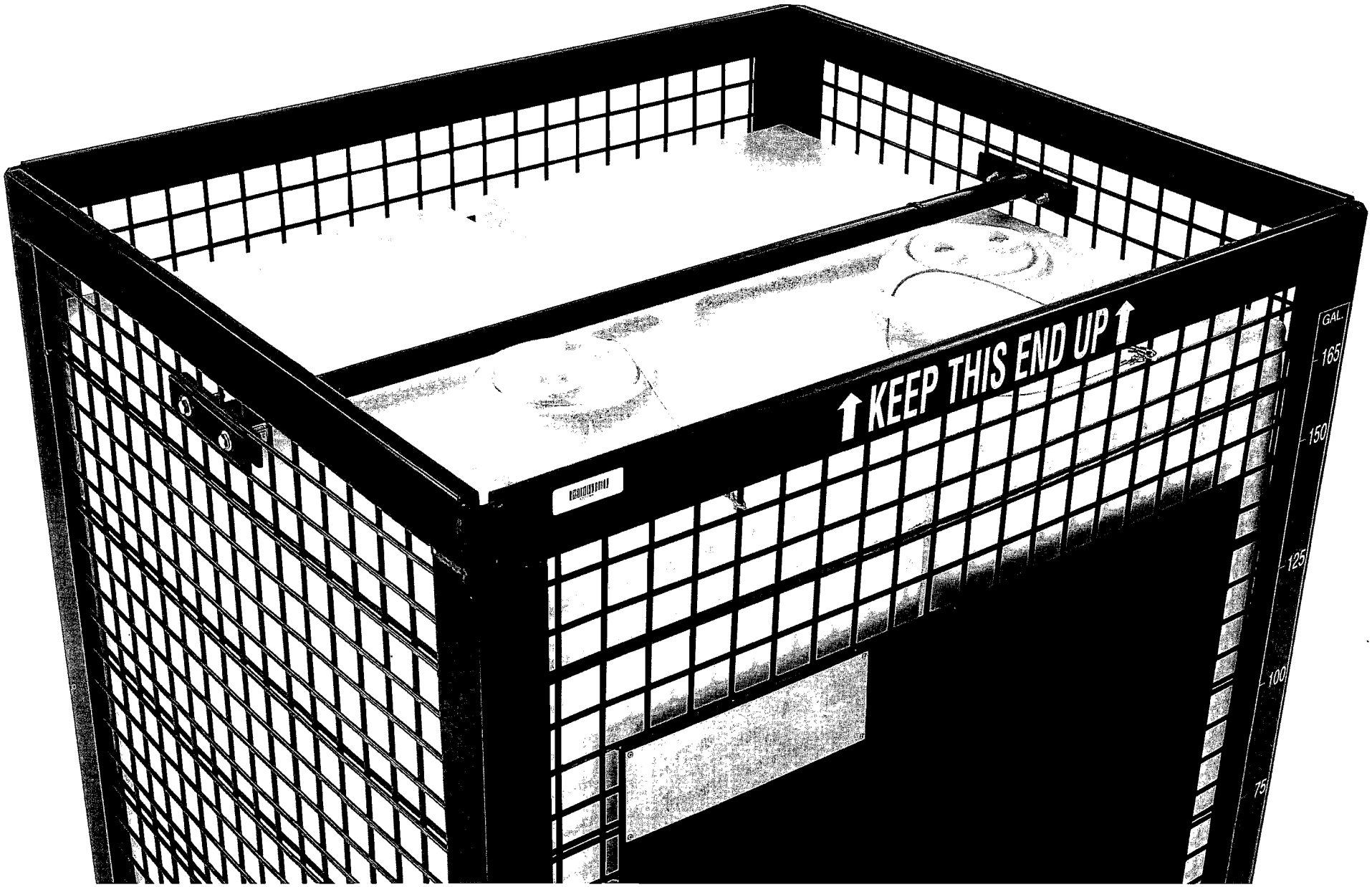
Sincerely,



E. A. Altemos

cc: Mr. Charles Hochman (PHH-20)
Mr. Don Burger (PHH-22)

CompositeIBCLetter.wpd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