



U.S. Department
of Transportation

1200 New Jersey Avenue SE
Washington, DC 20590

**Pipeline and Hazardous
Materials Safety
Administration**

AUG 24 2011

Mr. Thomas Goss
Recycling Strategist
Triumvirate Environmental
61 Innerbelt Road
Somerville, MA 02143

Reference No. 11-0085

Dear Mr. Goss:

This is in response to your April 5, 2011 letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) concerning whether non-reusable solid-rated hazardous materials packagings may be used multiple times to ship various hazardous materials. We have paraphrased your questions and answered them in the order you provided.

- Q1. Do the HMR permit a UN-certified, non-bulk, solid-rated shipping container with an "NRC" marking to be reused multiple times if the container otherwise appears appropriate for multiple reuse?
- A1. Under the HMR, there is no specific marking on a "UN" packaging that designates the packaging can be used only one time to ship hazardous materials. Except for packagings made of paper (except fiberboard), plastic film, or textile, which cannot be reused (see § 173.28(b)(3)), non-reusable containers, as this term is defined in § 171.8, marked with the letters "NRC" may be reused to contain any material that is not required to be shipped in a DOT specification or UN standard packaging (see § 173.28(e)). Please note, a reused packaging must be in such condition that it is capable of passing all performance tests represented by the packaging markings. In addition, plastic drums and jerricans used as single packagings or outer packagings of composite packagings are authorized for reuse only when they are marked with a minimum thickness in millimeters in a permanent manner (e.g., embossed) (see §§ 173.28 and 178.503(a)(9)). Prior to rulemakings this agency issued in 1990 and 1991 to align the HMR with international requirements, the letters "STC" (single trip container) and "NRC" (nonreusable container) were used as markings on certain, now obsolete, DOT specification non-bulk packagings that restricted the use of those packagings (see Docket No. HM-181). Currently, the only packaging required to have an NRC marking under the HMR is the DOT 39 cylinder (see § 178.65(i)(2)(ii)).

- Q2. Section 173.28(e) contains the statement “A packaging marked as NRC according to DOT specification or UN standard requirements of Part 178 of this subchapter....” However, there do not appear to be any references to the “NRC” marking in 49 CFR Part 178, Subpart L, “Non-bulk Performance-Oriented Packaging Standards.” Does that imply that the “NRC” marking is not applicable to this container type?
- A2. See Answer A1.
- Q3. Is a container manufacturer’s decision to mark the letters “NRC” onto a shipping container based on specific qualifying criteria that is defined by DOT or any other regulatory agency?
- A3. In addition to requiring the NRC marking under § 178.65(i)(2)(ii) for a DOT 39 cylinder, the HMR also authorize the transportation of radioactive hazardous materials in packagings approved by the Nuclear Regulatory Commission (NRC) that include as part of its specification marking the letters “NRC.” For further information on these requirements, see § 172.203(d)(7), and the introductory paragraph and paragraph (b) of § 173.471.
- Q4. Does § 173.28(e) give container manufacturers overriding discretion to determine whether or not a drum can be reused multiple times for shipments of hazardous material regardless of whether or not a container is appropriate for reuse by all other standards?
- A4. Under § 173.28(e), a packaging manufacturer may use his or her discretion to determine if a non-reusable DOT specification or UN standard packaging marked “NRC” may be used multiple times to ship a hazardous material under two conditions. The first is the material being shipped is not required to be in a DOT specification or UN standard packaging. In this instance, a non-bulk drum packaging need only conform to the requirements of §§ 173.24 and 173.24a. The second is the packaging must meet the applicable criteria prescribed in § 173.28 for its design and type.
- Q5. Can a container manufacturer grant written approval for ongoing container reuse to a specific container user which overrides a permanent “NRC” indication on a container that they manufacture?

A5. The answer is no. Obtaining written permission to use a container in a manner that is not prescribed in the HMR can only be obtained through issuance of a special permit or approval issued by this agency's Associate Administrator for Hazardous Materials Safety, or other designated U.S. Department of Transportation official. The application process is described in 49 CFR Part 107, Subparts B (Special Permits) and H (Approval).

I hope this satisfies your request.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Glenn Foster". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

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

April 5, 2011

Mr. Charles E. Betts
Director, Office of Hazardous Material Standards
U.S. DOT/PHMSA (PHH-10)
1200 New Jersey Avenue, SE East Building, 2nd Floor, Washington, DC 20590-0001

Edmonson
§ 173.28(e)
Reuse
11-0085

Dear Mr. Betts,

I have several questions for the DOT relevant to section 173.28(e) of 49 CFR as related to solid-rated containers reused multiple times to ship non-bulk quantities/volumes of various hazardous materials.

Context

Currently we own and operate a facility where UN-certified, non-bulk, solid-rated containers filled with inner bottles of various hazardous materials are received and emptied in a permitted repackaging/bulking procedure. Our clients present the various hazardous materials to our field staff at remote locations. Our field staff is responsible for packaging and transporting these materials back to our facility. The shipping containers that our field staff members use are purchased from outside brokers, manufacturers and reconditioners, and come in various size, shape and composition.

As a result of our facility repackaging/bulking process we are left with an excess quantity of empty shipping containers which are currently discarded as solid waste. As an alternative to disposing of these empty containers, we are exploring the possibility of returning the containers to our supply warehouses so that they can be reused by our field staff multiple times to ship our clients' hazardous materials in accordance with guidance provided in 49 CFR 173.28.

We have discovered that some of the solid-rated, shipping containers that we receive, empty and intend to reuse are marked with the letters "NRC". If you omit the language in 173.28(e) of 49 CFR, many of these containers are physically appropriate for multiple reuses pending an inspection prescribed by DOT in 49 CFR 173.28(a).

We are aware that the language in 49 CFR 173.12(c) allows us relief from the provisions contained in 49 CFR 173.28 under certain circumstances. It is our understanding that the language contained in 173.12(c) would not apply to the situation that I have described above because it is our intent to reuse shipping containers more than once.

I am hopeful that you can answer some questions that this issue has raised.

Questions

1. Does an "NRC" marking prevent us from reusing a UN-certified, non-bulk, solid-rated shipping container multiple times even if the container otherwise appropriate for multiple reuses?
2. 49 CFR 173.28(e) contains the statement "A packaging marked as NRC according to DOT specification or UN standard requirements of part 178 of this subchapter..." However, there does not appear to be any references to the "NRC" marking in Subpart L "Non-bulk Performance – Oriented Packaging Standards". Does this imply that the "NRC" marking is not applicable to this container type?
3. Is a container manufacturer's decision to apply the letters "NRC" onto a shipping container based on specific qualifying criteria that is defined by DOT or any other regulatory agency?
4. Does 49 CFR 173.28(e) give container manufacturers overriding discretion to determine whether or not a drum can be reused multiple times for shipments of hazardous material regardless of whether or not a container is appropriate for reuse by all other standards?
5. Can a container manufacturer grant written approval for ongoing container reuse to a specific container user which overrides a permanent "NRC" indication on a container that they manufacture?

Thank you for your attention in this matter. I anxiously await your response.

Sincerely,



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