U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

NOV 8 2005

Mr. Wade A. Winters
Regulatory Resources, Inc.
240 Joshua Rd
Kennewick, WA 99338

Ref. No.: 05-0228

Dear Mr. Winters:

This is in response to your September 19, 2005 letter concerning Industrial Packagings (Type 2 and Type 3) under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Your questions are paraphrased and answered as follows:

Q1. Given that an ISO 1496-1 freight container in compliance with § 173.411(b)(6) is authorized for use as a Type IP-2 or Type IP-3, may the same ISO 1496-1 freight container be certified as a DOT-7A packaging if the water spray and puncture test are performed?

A1. No. To be certified as a Type A package, the design must meet all the requirements of § 178.350. Although compliance with § 173.411(b)(6) and successful completion of the water spray and puncture test would satisfy the requirements of §§ 173.410 and 173.465, the design must still meet the requirements of §§ 173.403 and 173.412. It must also be noted that certification of the design is restricted to the content or contents specified in the test report or the analysis conducted. Expansion of the certification to contents with different physical properties would require further analysis.

Q2. If the design and testing documentation is not available for a foreign ISO 1496-1 certified freight container manufacturer, may the shipper assume that the design and testing criteria have been met?

A2. No. Under § 173.411(c), each offeror of an Type IP-2 or Type IP-3 must have on file (and maintain on file for at least one year) complete documentation of test and

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173.411(b)(6)

engineering evaluation or comparative data for the industrial package. If the information is unavailable for an ISO 1496-1 freight container, it may not be used as a Type IP-2 or Type IP-3 package.

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

Sincerely,

Hattie L. Mitchell

Hattie L. Mitchell
Chief, Regulatory Review and Reinvention
Office of Hazardous Materials Standards

Pollack
§173.411(b)(6).
Industrial Packagings
05-02.28

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September 19, 2005

Ms. Susan Gorsky
Office of Hazardous Materials Standards
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation
PHH-10
400 Seventh Street, SW
Washington, DC 20590

Dear Ms. Gorsky,

Regulatory Resources, Inc. (RRI) is a consulting and training company serving clients subject to the Department of Transportation (DOT) Hazardous Materials Regulations (HMRs) and the Environmental Protection Agency (EPA) solid and hazardous waste management regulation. One of our specialty areas covers the regulations for the safe transport of radioactive materials. Various Class 7 packaging questions have been raised in recent training classes and I'm seeking PHMSA's clarification on these. This particular request for clarification concerns freight containers authorized as Industrial packagings in 49 CFR 173.411.

The first of two questions concerns 49 CFR 173.411(b)(6). In this paragraph it states that freight containers may be used as Industrial packages Types 2 or 3 (Type IP-2) or (Type IP-3) provided that...industrial packaging Type 2 (IP-2) require the package to pass specified criteria when subjected to, or evaluated against, drop and stacking tests for Type A packages intended to contain solids (§173.465(c) and (d)). Type IP-3 packages are to be evaluated after being subjected to all Type A package design and test criteria for solids.

The adoption of the IAEA TS-R-1 regulations in Docket HM-230, January 26, 2004, allow an ISO 1496-1: "Series 1 Freight Containers — Specifications and Testing — Part 1: General Cargo Containers"; excluding dimensions and ratings, to be used as Type IP-2 and Type IP-3 as long as two specific requirements are met. Obviously, DOT has determined that the ISO 1496-1 testing is the same as or equivalent to the Type A package drop and stacking tests when evaluated against:

(A) no loss or dispersal of the radioactive contents; and
(B) no loss of shielding integrity which would result in more than a 20% increase in the radiation level at any external surface of the freight container.

Given that an ISO 1496-1 freight container in compliance with §173.411(b)(6) is authorized for use as, and so marked per §172.310(b), a Type IP-2 or Type IP-3 packaging, can this same ISO 1496-1 freight container be certified as a Type A DOT-7A packaging with only the additional design and test evaluation/performance for the water spray and puncture test considerations?

RRI's second question concerns the same paragraph where it states that an ISO 1496-1 freight container is certified as such by the information presented on the freight container's Container Safety Certificate (CSC) plate put in place by the original manufacturer. Many of these type of freight containers are manufactured in countries other than the U.S. The Hazardous Materials Regulations (HMR) §173.411(b)(6) allow the ISO 1496-1 freight container to be certified, pending qualifying conditions, as a Type IP-2 and Type IP-3 (see question above).

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The requirements in §173.411(c) specify that the user of any Type IP-2 or Type IP-3 package must maintain on file for at least one year after the latest shipment complete documentation of tests and an engineering evaluation or comparative data showing that the construction methods, packaging design, and material of constructions comply with that specification.

Concerns continue to surface by both package manufacturers and users of foreign made ISO 1496-1 freight containers regarding the inability to acquire the necessary §173.411(c) documentation from these foreign manufacturers. In some instances it appears that the foreign manufacturer may not possess the records on the freight container, and yet, these freight containers are certified and marked as ISO 1496-1 certified.

If specific design and testing documentation is not available from the foreign ISO 1496-1 certified freight container manufacturer, can a U.S. manufacturer or shipper apply §173.22(a)(3)(i) in determining that the ISO 1496-1 design and testing criteria have been met by the presence of the freight container's CSC specification plate?

Thank you for your time in these matters. Please contact me if I can answer any questions.

For Regulatory Resources, Inc.,

Wade A. Winters, CET, CHMM
President

WAW/lom