



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

SEP 12 2019

1200 New Jersey Avenue, SE
Washington, DC 20590

Mark B. Hawk
Packaging Management Council Coordinator
8116 Villa Grande Lane
Knoxville, TN 37938

Reference No. 19-0058

Dear Mr. Hawk:

This letter is in response to your May 6, 2019, letters requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the testing requirements for flexible Intermediate Bulk Containers (IBCs).

We have paraphrased and answered your questions as follows:

- Q1. You ask what the manufacturer can do to demonstrate that a flexible IBC design type packaging is “capable of withstanding” the vibration test in accordance with § 178.819(a) other than actually performing the vibration test.
- A1. The manufacturer must use its discretion to meet this requirement. Determining whether a flexible IBC is capable of withstanding the vibration test may be based on institutional knowledge, prior experience, modeling, or other data. Ultimately, it is the manufacturer’s responsibility to ensure the flexible IBC can meet the requirement, which may include performance of the vibration test, or another method.
- Q2. You ask whether the methods outlined in § 173.461(a) may be used for other packagings specified in the HMR.
- A2. See A1. For a flexible IBC design type packaging, using one of the methods listed in § 173.461(a) may satisfy the requirement.
- Q3. You ask where Part 173, Appendix C is referenced in the HMR.
- A3. While not specifically cited, Appendix C was included in Part 173 because of the reference to the vibration test required for non-bulk packagings in § 173.24a(a)(5).

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

Dirk Der Kinderen
Chief, Standards Development Branch
Standards and Rulemaking Division

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19-0058

May 6, 2019

Standards and Rulemaking Division
Pipeline and Hazardous Materials Safety Administration (PHMSA)
U.S. Department of Transportation (DOT)
East Building
1200 New Jersey Avenue, SE
Washington, CE 20590-0001

Subject: Request for Clarification Concerning Methods Showing Compliance for DOT Capability Requirements

Dear Sir/Madam:

Clarifications to the questions below are requested as to the method(s) allowed by the DOT/PHMSA for an offeror of DOT authorized packagings to meet respective capability requirements.

Question 1:

What methods are authorized to show compliance for capability requirements for authorized DOT specification or UN standard packagings besides physical testing?

Throughout the DOT regulations for most authorized packagings, both performance tests and capability requirements are stipulated. Obviously, for many capability requirements, performing testing of the authorized packaging with the appropriate contents would prove the capability requirements are met. However, are there other methods besides performance testing that show compliance for capability requirements, and if so, where in the regulations are these methods indicated?

Though there are many examples, one specific example is for a flexible Intermediate Bulk Container (IBC) to be capable of meeting the Vibration Test per 49 CFR 178.819. In this reference it is stated in 178.819(a): "General. The vibration test must be conducted for the qualification of all rigid IBC design types. Flexible IBC design types must be capable of withstanding the vibration test." Besides testing, how is an offeror to comply with the "capable of withstanding" part of this regulation? This question was asked of the PHMSA's Hazardous Materials Information Center recently and the only response provided was to actually perform the Vibration Test.

Question 2:

If the response from the PHMSA's Hazardous Materials Information Center concerning the flexible IBC design is accurate, why isn't the requirement for rigid IBC and flexible IBC design types the same? If the response is not accurate, how is the Vibration Test capability requirement to be met for a new flexible IBC design without actually performing Vibration Test?

Concerning the above, 49 CFR 173.461(a) authorizes four methods to show compliance of Specification 7A Type A packaging design requirements specified in 49 CFR 178.350 for both capability requirements and performance tests.

Question 3: Can the methods authorized in 49 CFR 173.461(a) be used for other authorized packagings within the DOT regulations (e.g., DOT specification packagings, UN standard packagings, Industrial Type packagings)? And if so, where in the DOT regulations is this authorization stipulated?

Your clarification of these issues will be appreciated.

Respectfully,

A handwritten signature in black ink that reads "Mark B. Hawk". The signature is written in a cursive, flowing style.

Mark B. Hawk
Packaging Management Council Coordinator
8116 Villa Grande Lane,
Knoxville, TN 37938
Phone: 865-250-3300

May 6, 2019

Standards and Rulemaking Division
Pipeline and Hazardous Materials Safety Administration (PHMSA)
U.S. Department of Transportation (DOT)
East Building
1200 New Jersey Avenue, SE
Washington, CE 20590-0001

Subject: Request for Clarification Concerning the Application of Appendix C to Part 173 – Procedure for Base-level Vibration Testing

Dear Sir/Madam:

A clarification is requested as to the application of Appendix C to Part 173 – Procedure for Base-level Vibration Testing. A search has been performed of the DOT regulations as to where the subject appendix was used or referenced and nothing was found. In addition, the PHMSA's Hazardous Materials Information Center was contacted and they could not provide a reference or use for Appendix C to Part 173 within the DOT regulations.

Your clarification as to any reference(s) to Appendix C to Part 173, or it's application would be appreciated.

Respectfully,



Mark B. Hawk
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