



U.S. Department of Transportation
**Pipeline and Hazardous Materials
Safety Administration**

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

MAY 12 2011

Cherry Burke
Global Transportation Safety and Risk Management Leader
The Dow Chemical Company
2020 Dow Center
Midland, MI 48674 USA

Reference No.: 10-0252

Dear Ms. Burke:

This responds to your January 11, 2011 letter regarding the exception applicable to materials corrosive to aluminum or steel only found in 49 CFR 173.154 (d) of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Your questions are summarized and addressed below:

- Q1: If a bulk packaging is lined or coated with a material that prevents contact of the corrosive material with the steel, can the exception in § 173.154(d) be used?
- A1: The answer is no. The intent of § 173.154(d)(2) is to provide an exception to bulk packaging constructed of materials that will not react dangerously with, or be degraded by the corrosive material. This office does not believe that placing liners inside a steel bulk container would be in line with the intent of this exception.
- Q2: The exception for materials corrosive to steel in § 173.154(d)(2) applies just to bulk packagings, while the exception for materials corrosive to aluminum in § 173.154(d)(1) does not specify packaging size. Is this discrepancy intentional, and if so, why would only bulk packagings be excepted from the regulations for materials corrosive to steel, while both bulk and non-bulk packagings would be excepted from the regulations for materials corrosive to aluminum?
- A2: As you stated, section 173.154(d)(2) applies only to bulk packagings, while § 173.154(d)(1) applies to both bulk and non-bulk packagings. Typically, non-bulk packagings would be shipped on trailers with other containers that may be made of steel (possibly more so than aluminum). This office believes that in the event of a breach of the corrosive material, other containers in the trailer could be damaged.
- Q3: Does “bulk packagings” in § 173.154(d)(2) mean that the exception applies to any packages meeting the DOT definition of bulk (i.e. rail tank cars, cargo tanks, IBCs, and portable tanks)?

A3: The answer is yes. The exception in § 173.154(d)(2) would apply to any containers meeting the definition of a bulk packaging as defined in § 171.8.

I hope this satisfies your inquiry. Please contact us if we can be of further assistance.

Sincerely,

A handwritten signature in cursive script that reads "T. Glenn Foster". The signature is written in black ink and is positioned above the typed name.

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



Andrews
§173.154(d)
Exceptions
10-10252

The Dow Chemical Company
Midland, MI 48674
U.S.A.

January 11, 2011

Via E-Mail

Pipeline and Hazardous Materials Safety Administration
Attention: Office of Hazardous Materials Standards
Office of Hazardous Materials Technology
U.S. Department of Transportation
East Building, 1200 New Jersey Avenue, SE.
Washington, DC 20590-0001

Subject: **Interpretation Request 49 CFR 173.154 (d)**

Dear Ms. Freeman and Mr. Andrews:

The Dow Chemical Company respectfully requests an interpretation of the language in 49 CFR 173.154 (d). I am coming to you both directly as I understand you have been in discussions with Mr. Kevin Blackwell from FRA on this topic.

49 CFR 173.154 (d) reads:

(d) *Materials corrosive to aluminum or steel only.* Except for a hazardous substance, a hazardous waste, or a marine pollutant, a material classed as a Class 8, Packing Group III, material solely because of its corrosive effect—

(1) On aluminum is not subject to any other requirements of this subchapter when transported by motor vehicle or rail car in a packaging constructed of materials that will not react dangerously with or be degraded by the corrosive material; or

(2) *On steel is not subject to any other requirements of this subchapter when transported by motor vehicle or rail car in a bulk packaging constructed of materials that will not react dangerously with or be degraded by the corrosive material.* (emphasis added)

Our questions are specifically around (d) (2), as highlighted above.

- If the bulk packaging is lined or coated with a material that prevents contact of the corrosive material with the steel, can this exception be used?
 - Our understanding, consistent with many in industry, is that if the steel is protected against the corrosive effects of the material by a lining or a coating that prevents contact between the corrosive material and the steel, and does not react with the corrosive material, this meets the definition of “a bulk packaging constructed of materials that will not react dangerously with or be degraded by the corrosive material.”
- The exception for materials corrosive to steel applies just to bulk packagings, while the exception for materials corrosive to aluminum does not specify packaging size. Is this discrepancy intentional, and if so, why would only bulk packagings be excepted from the regulations for materials corrosive to steel, while both bulk and non-bulk packagings would be excepted from the regulations for materials corrosive to aluminum?



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- Does "bulk packagings" in (d) (2) mean that the exception applies to any packages meeting the DOT definition of bulk (i.e. rail tank cars, cargo tanks, IBCs, and portable tanks)?

Your help in clarifying this section of the regulations would be most appreciated. If I can provide any other information or clarification of my questions, please do not hesitate to contact me.

Sincerely,

Cherry Burke

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