



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

1200 New Jersey Avenue, SE
Washington, DC 20590

March 21, 2024

Mr. Rex Railsback
Safety Consultant
DOT Training Solutions
P.O. Box 25311
Overland Park, KS 66225

Reference No. 23-0009

Dear Mr. Railsback:

This letter is in response to your January 30, 2023, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to cargo tank void spaces. Specifically, you wish to clarify the question from a previously issued letter of interpretation (Reference No. 22-0028).

You state in your email that you "... did not intend to ask if the void space between compartmented cargo tanks built with double bulkheads, between compartments, was considered a 'compartment'." Rather, you intended to ask whether the individual tanks of a multi-tank cargo tank motor vehicle (CTMV)—utilizing double bulkheads between tanks which remain at atmospheric pressure during leakage and pressure test—are considered adjacent cargo tanks, as it relates to §§ 180.407(g)(1)(vi) and (h)(1).

The answer is yes. As noted in our previous letter of interpretation (Reference No. 22-0028), §§ 180.407(g)(1)(vi) and (h)(1) both state that "**each cargo tank of a multi-tank cargo tank** motor vehicle must be tested with the adjacent cargo tanks empty and at atmospheric pressure" (emphasis added). In addition, §§ 180.407(g)(1)(vi) and (h)(1) do not contain provisions specifically excepting CTMVs configured with bulkheads.

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

Sincerely,

A handwritten signature in blue ink, appearing to read "S. Andrews".

Steven Andrews
Acting Chief, Regulatory Review and Reinvention Branch
Standards and Rulemaking Division

Pollack

23-0009

From: [INFOCNTR \(PHMSA\)](#)
To: [Dodd, Alice \(PHMSA\)](#)
Cc: [Hazmat Interps](#)
Subject: FW: Ref. Hazmat letter of interpretation 22-0028
Date: Wednesday, February 1, 2023 8:42:04 AM
Attachments: [22-0028.pdf](#)

Good morning Alice,

Please see the below interpretation request for Rex Railsback.

He has some additional information that was not included in his original request and he is asking for another one based on this information that was not in his original request.

Let me know if you need anything.

Regards,

-Breanna

From: Rex Railsback <rex@dottrainingsolutions.com>
Sent: Monday, January 30, 2023 10:37 AM
To: INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov>
Cc: Matthew Freeman <matt@dottrainingsolutions.com>
Subject: Ref. Hazmat letter of interpretation 22-0028

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Mr. Foster or designee,

We apologize for any misunderstanding of our question ref. 180.407 (g)(1)(vi) and 180.407 (h)(1) as it relates to “adjacent compartments” and “void spaces”, to which you responded to in your letter of interpretation 22-0028, on January 24, 2023 . We did not intend to ask if the void space between compartmented cargo tanks built with double bulkheads, between compartments, was considered a “compartment”. Our questions is, are the individual tanks, of a multi-tank cargo tank, utilizing double bulkheads between tanks, which remain at atmospheric pressure, during leakage and pressure test, considered adjacent cargo tanks, as it relates to 180.407(g)(1)(vi) and 180.407(h)(1)?

Our understanding is that the “air gap” caused by the double bulkhead, along with the required open drain holes, and the fact that each “air gapped” tank, is gauged separately, during a leakage or pressure test, means that each tank of a multi-tank cargo tank, built with “air gapped” double bulk heads, would not be considered as adjacent tanks, as it relates to 180.407(g)(1)(vi) and 180.407(h)

(1).

The double bulkheads, remaining at atmospheric pressure, while each tank of a multi-tank cargo tank is pressurized to the required test pressure, would allow each tank to be tested as single tanks due to being surrounded by atmospheric pressure.

We are requesting 22-0028 be revisited with the above information and responded to in writing. If this is not feasible, we are requesting the above question, be responded to with a new written letter of interpretation. The original requester, Randy Decker and I both represent DOT Training Solutions. My contact information is below.

Respectfully

Rex C. Railsback

Safety Consultant

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U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
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1200 New Jersey Avenue, SE
Washington, DC 20590

January 24, 2023

Mr. Randy Decker
Safety Consultant
DOT Training Solutions
P.O. Box 25311
Overland Park, KS 66225

Reference No. 22-0028

Dear Mr. Decker:

This letter is in response to your March 17, 2022, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the testing and inspection requirements for multi-compartment Department of Transportation (DOT) specification cargo tanks. In your email, you state that §§ 180.407(g)(1)(vi) and 180.407(h)(1) of the HMR require that each cargo tank of a multi-tank cargo tank motor vehicle be pressure-tested and leakage-tested respectively, with the adjacent cargo tanks empty and at atmospheric pressure. Furthermore, you ask whether a void at atmospheric pressure between double bulkheads—as described in your email—may be considered an adjacent compartment for the purposes of pressure and leakage testing under § 180.407.

The answer is no. Sections 180.407(g)(1)(vi) and (h)(1) both state that “each cargo tank of a multi-tank cargo tank motor vehicle must be tested with the adjacent **cargo tanks** empty and at atmospheric pressure.” Under § 178.345-1(c), the HMR define a “void” as “the space between tank heads or bulkheads and a connecting structure.” Therefore, a “void” does not meet the definition of a cargo tank.

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

Sincerely,

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