



Baker, Yul <yul.baker@dot.gov>

Fwd: Letter of Interpretation Request

1 message

INFOCNTR (PHMSA) <infocntr.infocntr@dot.gov>

Thu, Mar 26, 2026 at 4:17 PM

To: "Baker, Yul (PHMSA)" <yul.baker@dot.gov>, Hazmat Interps <hazmatinterps@dot.gov>

Good afternoon,

Please see the below interpretation request.

Let us know if you need anything,

Janaye

----- Forwarded message -----

From: **Hicks, Trevor L. (KSC-KPLSS-8420)[Amentum Services, Inc]** <trevor.l.hicks@nasa.gov>

Date: Thu, Mar 26, 2026 at 12:22 PM

Subject: Letter of Interpretation Request

To: phmsa.hm-infocenter@dot.gov <phmsa.hm-infocenter@dot.gov>

Hello,

I am writing to request a formal interpretation of the phrase "lading corrosive to the tank" as used in 49 CFR §180.407(c).

Our operations utilize MC 338 cargo tank motor vehicles constructed of 304L stainless steel for the transportation of nitrogen tetroxide and hydrazine under Special Permits DOT-SP 03121 and DOT-SP 10631. In evaluating compliance with §180.407(c), we are seeking to better understand how PHMSA determines whether a lading is considered corrosive to the tank.

From an engineering standpoint, corrosion in pressure vessels is typically quantified as wall loss over time, expressed in mils per year (MPY). Available material compatibility data for 304L stainless steel in contact with hydrazine and nitrogen tetroxide indicates corrosion rates of less than 0.01 MPY under controlled conditions. Published laboratory testing and compatibility studies reviewed by our organization support similarly low corrosion rates.

Given these findings, we respectfully request clarification on the following:

Does PHMSA apply any specific quantitative criteria (e.g., corrosion rate thresholds) when determining whether a lading is "corrosive to the tank" for purposes of §180.407(c)?

In the absence of defined thresholds, what factors or considerations are used to make this determination (e.g., uniform corrosion, localized corrosion mechanisms, material compatibility, or service conditions)?

How should operators evaluate and document that a lading is not corrosive to the tank material in order to ensure compliance with §180.407(c)?

Our intent is to ensure that our inspection and maintenance practices are aligned with the regulatory intent and that we are applying §180.407(c) appropriately based on sound engineering and material compatibility principles.

We appreciate your time and consideration of this request and look forward to your guidance.



Trevor Hicks

Design and PVS Engineer

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