



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

August 21, 2023

Mr. Arthur Fleener
Fleener Consulting LLC
3741 Mathews Rd
Ames, IA 50014

Reference No. 23-0014

Dear Mr. Fleener:

This letter is in response to your February 27, 2023, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the installation of U.S. Department of Transportation (DOT) 400-series cargo tank pressure relief devices (PRDs) on Motor Carrier (MC) 300-series cargo tank motor vehicles (CTMVs). Specifically, you state that the Pipeline and Hazardous Materials Safety Administration (PHMSA) has issued conflicting guidance pertaining to the requirements for a DOT 400-series PRD when installed on an MC 300-series CMTV. You included a copy of a final rule published by PHMSA on June 18, 2018—issued under Docket No. PHMSA-2013-0225 (HM-218H)—in response to appeals of a previously published final rule. You interpret this “Correcting Amendments” rulemaking as stating that a DOT 400-series PRD can be installed on an MC 300-series tank, but it must meet the venting capacity and set pressure requirements of the original specification of the 300-series tank. You also include a PHMSA letter of interpretation (Ref. No. 17-0065) which you interpret as stating that a person may install a DOT 400-series PRD on an MC 300-series cargo tank, but the PRD would not be required to function like an MC 300-series PRD.

We have paraphrased and answered your questions as follows:

- Q1. You state that your understanding of the June 18, 2018, “Correcting Amendments” rulemaking is that a modified PRD on an MC-307 CTMV is required to meet the set pressure requirements of the original specification, which is to open at not less than the cargo tank maximum allowable working pressure (MAWP) and not more than 110% of the MAWP, reseating at a pressure of no less than 90% of the MAWP. You have included preamble language from the June 18, 2018, “Correcting Amendments” rulemaking which states that “while the HMR permits DOT 400-series PRDs to be installed on MC 300-series CTMVs, the PRDs must still meet the venting capacity and set pressure requirements of the original specification, in accordance with §§ 173.33(d)(3) and 180.407(h)(2).” You ask whether your understanding is accurate.
- A1. Your understanding of the June 18, 2018, “Correcting Amendments” rulemaking is not correct. The June 18, 2018, “Correcting Amendments” rulemaking did not amend § 180.407(j) or any other regulatory text related to the permitted use of modified PRDs on MC 300-series CTMVs. However, in an effort to respond to some ongoing questions around those provisions, we acknowledge that some incorrect and some imprecise preamble language was used in that rulemaking. First, the correct citations in the

preamble language you included should have read, “§§ 173.33(d)(3) and 180.405(h)(3).” Second, the preamble language is imprecise when it states that modified PRDs on MC 300-series tanks must still meet the venting capacity and set pressure requirements of the original specification. To be clear, the venting capacity of the original specification must be met as stated in §§ 173.33(d)(3) and 180.405(h)(3), but nowhere in the HMR does it require the set pressure of the original specification to be met. Finally, as explained in letter of interpretation (Ref. No. 17-0065), a modified PRD installed on an MC-307 CTMV would be required to open between 120% and 132% of the MAWP and reclose at not less than 108% of the MAWP, (see § 180.407(j)(1)(ii)(B)).

- Q2. You ask whether the June 18, 2018, “Correcting Amendments” rulemaking supersedes the PHMSA letter of interpretation (Ref. No. 17-0065) which states that an MC-307 PRD modified to conform to DOT-407 specifications on a 30 psig MAWP CTMV would be required to open between 36 psig (120% of MAWP) and 39.6 psig (132% of MAWP), as prescribed in §§ 180.407(j)(1)(ii)(B), 178.347-4(c), and 178.345-10(d)(1).
- A2. As stated in answer A1, PHMSA acknowledges that there is incorrect and imprecise preamble language in the June 18, 2018, rulemaking. Furthermore, the referenced letter of interpretation remains accurate (Ref. No. 17-0065).

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

Sincerely,

A handwritten signature in blue ink that reads "T. Glenn Foster". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

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

From: [art fleener](#)
To: [Dodd, Alice \(PHMSA\)](#); [DerKinderen, Dirk \(PHMSA\)](#); [Ciccarone Michael \(PHMSA\)](#)
Cc: [art fleener](#)
Subject: Request for interp
Date: Monday, February 27, 2023 6:24:45 PM

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.

I would like to request an official interpretation for the below.

Pressure relief devices (PRD) on the old MC 306, 307 and 312 series cargo tanks continue to be a confusing issue for the industry with lack of consistent guidance from the USDOT.

This is an important issue for companies that own, test and inspect these cargo tanks. There are thousands of these older tanks still in service and these companies have a lot of liability if they install or pass a cargo tank without the correct PRD. This is also an enforcement issue without clear guidance.

When the USDOT made the change from the 300 series cargo tanks to the most recent 400 series there was a desire by the USDOT to require the PRD's for the 300 series cargo tanks to meet the new 400 series surge criteria and being able to reset without losing more than 1 liter of product. At that time, it was not intended for the PRD's installed on a 300 series cargo tank to function at the higher set to open and reset pressures of the 400 series cargo tanks.

I and others thought that this issue was finally and officially settled with the Federal Register dated 06/18/2018 and we have been following that official guidance.

The Federal Register dated 06/18/2018 states: PHMSA has received some inquiries regarding the new provisions of 180.407(j) and how they relate to other sections pertaining to CTMV's. Therefore, PHMSA seeks to clarify that while 180.407(j) permits DOT 400 series pressure relief devices to be installed on MC 300 series CTMV's the pressure relief devices must still meet the venting capacity and set pressure requirements of the original specification, in accordance with 173.33(d)(3) and 180.407(h)(2).

Based on the above guidance that was published in the Federal Register it clearly states that a 400 series PRD can be installed on a 300 series tank, but it has to meet the venting capacity AND set pressure requirements of the original specification of the 300 series tank.

With MC 307 reclosing pressure relief valves, they must open at not less than the cargo tank MAWP and not more than 110% of the cargo tank MAWP and must reseal to a leak tight-condition at no less than 90% of the cargo tank MAWP.

Based on the FR dated 06/18/2018 a MC 307 cargo tank that has had a 407 PRP

installed must meet the venting capacity and set pressure requirements of a MC 307. A MC 307 cargo tank equipped with a 407 reclosing pressure relief valves, must open at not less than the cargo tank MAWP and not more than 110% of the cargo tank MAWP and must reseal to a leak tight-condition at no less than 90% of the cargo tank MAWP.

PHMSA has issued letters of interpretations that were written prior to and contradict the 06/18/2018 FR. In these prior letters of interpretation such as 17-0065, PHMSA states that you can put a 407 PRD on a 307 cargo tank, and that PRD would NOT have to function like a MC 307 PRD. That interp tells us that a MC 307 with a 407 PRD would be required to open between 120% to 132% of the MC 307 MAWP. This is not constant to the most recent guidance of the 06/18/2018 Federal Register.

Companies following the 06/18/2018 Federal Register which is the official journal of the federal government are at odds with other companies that are follow older PHMSA interp letters that are in conflict, including the interp letter of 17-0065.

Question: Is the Federal Register dated 06/18/2018 where PHMSA clarifies that 400 series pressure relief devices can be installed on MC 300 series CTMV's and the pressure relief devices must still meet the venting capacity and set pressure requirements of the original specification accurate? Which for a MC 307 cargo tank would require the PRD to open at not less than the cargo tank MAWP and not more than 110% of the cargo tank MAWP and must reseal to a leak tight-condition at no less than 90% of the cargo tank MAWP, no matter the PRD?

Question: Does the Federal Register dated 06/18/2018 providing guidance on the 300 series cargo tanks PRD's supersede prior PHMSA interp letters that are still available on PHMSA website and that are in conflict?

Thank you

Art Fleener
Fleener Consulting LLC