



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

1200 New Jersey Avenue, SE
Washington, DC 20590

September 24, 2026

Rod “Chip” Moser
Chief, Transportation Compliance/Registration
Public Utilities Commission of Ohio
180 E Broad Street
Columbus, OH 43215

Reference No. 25-0137

Dear Mr. Moser:

This letter is in response to your October 8, 2025 email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) on cargo tanks and the performance requirements to prevent accumulation of material impairing the operation of the pressure relief systems. Specifically, you ask about the applicability of § 178.345-10(b)(6) as it relates to pressure relief device (PRD) components.

We have paraphrased and answered your questions as follows:

- Q1. What part of the pressure relief device, *e.g.*, the “rain cap,” does § 178.345-10(b)(6) apply to?
- A1. Section § 178.345-10(b)(6) refers to the entire pressure relief system, rather than an individual PRD or an individual PRD component. Under § 178.345-10(b)(1), a primary pressure relief system consists of one or more reclosing pressure relief valves (devices), and a “rain cap” or cover may be either a component of the PRD or a separate element of the broader system.¹
- Q2. Does missing an “upper housing hole plug” as part of a PRD as shown in the example schematic provided constitute a violation of § 178-345-10(b)(6)?
- A2. The requirement found in § 178.345-10(b)(6) is intended to ensure the pressure relief system is “mounted, shielded and drainable” to minimize the accumulation of material that could impair its operation. Noncompliance is determined on a case-by-case basis,

¹ See, for example, § 178.345-10(b)(1), “each cargo tank must be provided with a primary pressure relief system consisting of one or more reclosing pressure relief valves.”

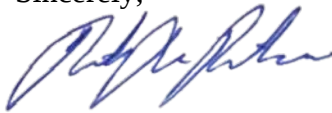
considering not only the cargo tank design, but also the conditions and environment in which the cargo tank will be in use. If the absence of a single component, such as a the one you describe, affects the operation or discharge capability of the pressure relief system—by the accumulation of material that allows freezing, corrosion, or blockage—it may result in non-compliance.

Q3. Is it a violation if the “rain cap” is in place but the rubber plug is missing?

A3. See answer A2.

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 "Dirk Der Kinderen".

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

From: [INFOCNTR \(PHMSA\)](#)
To: [Baker, Yul \(PHMSA\)](#)
Cc: [Hazmat Interps](#)
Subject: Written Interpretation Request
Date: Thursday, October 9, 2025 13:47:09
Attachments: [image001.png](#)
[GIRARD VALVES \(1\).pdf](#)

Good afternoon,

Please see the following interpretation request. Let us know if you need anything else.

Best,

Janaye

From: Rod.Moser@puco.ohio.gov <Rod.Moser@puco.ohio.gov>
Sent: Wednesday, October 8, 2025 10:37 AM
To: PHMSA HM InfoCenter <PHMSAHMInfoCenter@dot.gov>
Cc: Bradley.Long@puco.ohio.gov; Michael.Barker@puco.ohio.gov
Subject: Written Interpretation Request

You don't often get email from rod.moser@puco.ohio.gov. [Learn why this is important](#)

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.

This is a request for a written interpretation for clarification of the Hazardous Materials Regulations (HMR Parts 171-180), specifically 178-345-10(b)(6). That section states....

“The pressure relief system must be mounted, shielded and drainable so as to minimize the accumulation of material that could impair the operation or discharge capability of the system by freezing, corrosion or blockage.”

Three questions:

1. What part of the PRD is this sub-section referring to ? Is it referring to the “rain cap” specifically or any portion of the PRD in general ? For instance, if a rain cap retaining screw was found to be missing would that also constitute a violation ?
2. Does the lack of a rubber “upper housing hole plug,” shown as Item #1 on the

attached schematic for a Girard 407 PRD, constitute a violation of 178-345-10 sub-section (b)(6) in regard to protecting the device from “freezing, corrosion, or blockage?”

3. If the rain cap is in place but the rubber plug is missing is this a violation ?

This is not specifically addressed in any FMCSA/PHMSA Inspector training documents I have reviewed. Nor is the rubber plug mentioned in any manner in TTMA RP No. 81. Lastly, other than the schematic, the only mention of the rubber plug on the PRD manufacturer’s website is their offer to sell replacements at 0.84 cents.



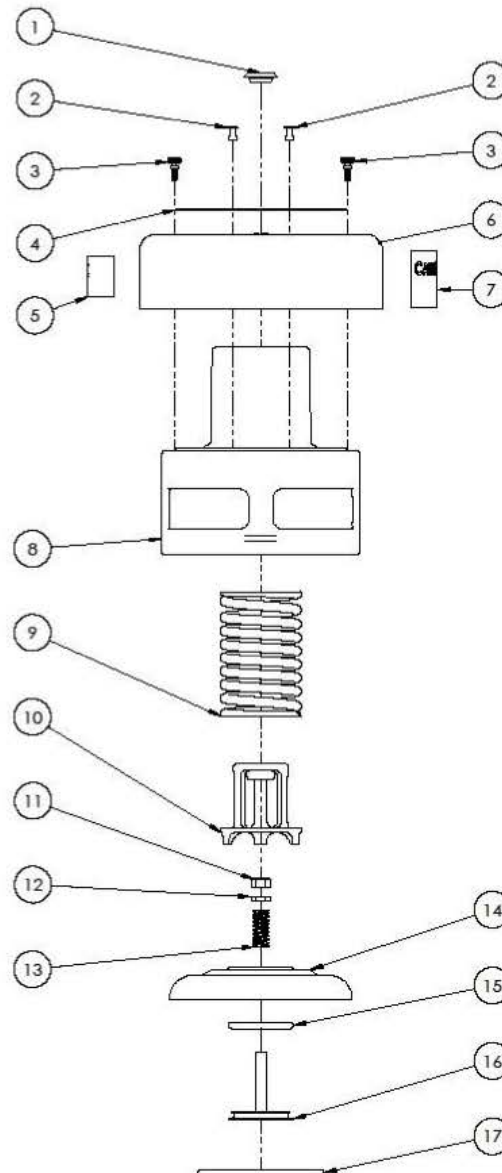
Rod “Chip” Moser
Chief, Transportation Compliance/Registration
180 E Broad Street
Columbus, Ohio 43215
D: 614.995.1847 C: 614.306.9729
Rod.Moser@puco.ohio.gov

This message and any response to it may constitute a public record and thus may be publicly available to anyone who requests it.

The State of Ohio is an Equal Opportunity Employer and provider of ADA services.

Exploded View of Product

DOT 407 Combination Pressure/Vacuum Relief Vent



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	GB19000	VENT, UPPER HOUSING HOLE PLUG	1
2	GB98030	RIVET	4
3	GB03020	RAIN COVER RETAINING SCREW	2
4	GB02054	407 VENT 4 INCH RATING DISC 25#	1
5	GO40100	NAMEPLATE, VENT, METAL	1
6	GB03010	VENT RAIN COVER	1
7	GO40130	GE CAUTION LABEL, SPRING, PEEL & STICK	1
8	GB04002	DOT407 COMBO LOW PROFILE UPPER HOUSING 25#	1
9	GB05200	25-30 PSI VENT PRESSURE SPRING	1
10	GB25000	VENT WITH VACUUM SPRING RETAINER	1
11	GR05010	M8 HEX LOCK NUT	1
12	GR05000	M8 HEX JAM NUT	1
13	GR06000	IM VACUUM SPRING	1
14	GB06060	VENT, POPPET, FOR VACUUM	1
15	GB07715	DOT407 TEF-O-SIL O-RING COMBO	1
16	GB09000	WV VACUUM POPPET	1
17	GB07000	VENT O-RING	1
18	GB18000	VENT 3" THREADED LOWER HOUSING	1
19	GM30010	3" TEFLON O-RING GASKET	1
20	GB50005	VENT 407 3.0" SWVL HSG, SEMI	1
21	GM30050	SWIVEL GASKET	1
22	GB20000	VENT 3"TTMA FLANGED LOWER HOUSING	1
23	GM32100	3CFE 8-HOLE 3" GASKET ASSEMBLY	1
24	GB21000	VENT 3" ANSI FLANGED LOWER HOUSING	1
25	GM32150	3" ANSI FLANGE GASKET FULL FACE	1
26	GB13010	VENT LOW PROFILE MITER LOWER HOUSING	1
27	GB17000	PRESSURE VENT LOW PROFILE WELD-IN LOWER HOUSING	1
28	GB12010	VENT LOW PROFILE STUB END LOWER HOUSING	1
29	GB11010	VENT 4" THREADED LOW PROFILE LOWER HOUSING	1
30	GM40000	4TR GASKET TEFOSIL 4"	1
31	GB50000	VENT 407 4" SWIVEL HOUSING	1
32	GB14010	VENT 4" TTMA FLANGED LOWER HOUSING	1
33	GM42100	407 TTMA GASKET ASSEMBLY	1
34	GB15010	VENT 4" ANSI FLANGED LOWER HOUSING	1
35	GB16000	ANSI GASKET	1