U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

OCT 14 1998

Mr. Don Kilgore
Sales Manager
Fort Vale
8560 Katy Freeway, Suite 160
Houston, Texas 77024

Ref. No: 98-0116

Dear Mr. Kilgore:

This is in response to your letter dated June 1, 1998, requesting clarification on reclosing pressure relief valves on MC 307 cargo tanks under § 180.405 (h) of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180).

A "properly functioning" reclosing pressure relief valve is one that functions according to the specification in the HMR. There is a difference between repair, refurbishment and replacement. Internal parts such as o-rings or valve seats may be replaced. If external threads are galled or stripped to an extent that the pressure relief valve can no longer meet the performance requirements in the original specification (e.g., MC 307), the valve must be replaced. Until August 31, 1998, a replaced valve could be in conformance either with the requirements for the pressure relief valve at the time the specification became superceded (see § 178.342), or with the requirements for the pressure relief valve for the DOT 407 cargo tank motor vehicle (see § 178.347). After August 31, 1998, replacement valves must meet the requirements in § 180.405 (h)(2). A frangible and/or fusible cap may be used in conjunction with the reclosing pressure relief valve after August 31, 1998, as long as the original air flow requirements for the specification are met.

In response to your question on calculating air flow, the pressure relief device system must limit the internal pressure of the cargo tank to 130% of the MAWP as per the original specification requirements. The pressure relief device must be rated at a pressure no less than 130% of the MAWP and no more than the test pressure of the cargo tank.

I hope this satisfies your request.

Sincerely,

Delmer F. Billings
Chief, Standards Development
Office of Hazardous Materials Standards

FORT VALE

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FAX MESSAGE

To:	U. S. DEPARTMENT OF TRANSPORTATION	Date:	June 1, 1998
Fax No:	1-202-366-3753	Ref:	
From:	Don Kilgore	No. of pgs.:	2

Attn: Edward Mazzullo

Dear Edward,

The regulations will change, after August of this year, for reclosing Pressure Relief Vents on MC307 cargo tanks. I have heard several different opinions as to application of the regulations. I am requesting clarification. They are as follows.

Section D, Subpart E, 180.405

(h) Pressure Relief Systems. Properly functioning reclosing pressure relief valves...

#1 What is the definition of a "properly functioning"...? If a valve requires a new o-ring, does that constitute replacement? If the threads on the body are galled or stripped, then is that cause for placement? Is there a difference between repair, refurbish and replacement? As one of the major suppliers of these valves, what repair or replacement parts can we supply, if any, after August 31, 1998?

(h)(2) After August 31, 1998, replacement of any reclosing pressure relief valve must be capable of reseating to a leak-tight condition after a pressure surge, and the volume of lading released may not exceed one liter. Specific performance requirements for these pressure relief valves are set forth in 178.345-10(b)(3) of this subchapter.

#2 Does this mean that a frangible and/or fusible cap cannot be used in conjunction with the reclosing pressure relief valve after August 31, or is it the intent of the law to insure that MC307 Cargo Tanks are equipped with reclosing pressure relief valve that provide a reduced spillage in rollover conditions?

Yes

Kim Kuetgen 6/19/98

(h)(3) As provided in paragraph (c)(2) of this section, the owner of a cargo tank may elect to modify reclosing pressure relief devices to more recent cargo tank specifications. However, replacement devices constructed to the requirements of 178.345-10 of this subchapter must provide the maximum venting capacity required by the original specification to which the cargo tank was designed and constructed.

#3 How does this related to the formula by which we calculate airflow? Should the vent limit the internal pressure of the cargo tank to 130% of MAWP as per the original design criteria of the MC307 or should the airflow of the vent be calculated at 150% of MAWP as would apply to a DOT407 cargo tank?

Your attention and response to these issues is greatly appreciated.

Sincerely,

Don Kilgore IKR

Don Kilgore
Sales Manager

DK:kr

Until August 31, 1998, a replaced valve could be in conformance either with the requirements for the pressure relief valve at the time the specification became superceded (§ 178.342), or with the requirements for the pressure relief valve for the DOT 407 cargo tank motor vehicle (§ 178.347).

9/23/98

Charlie - sentence above is suggested "replacement" for the 4th sentence in the 2nd ¶.

Ron K