



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

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

AUG 25 2000

Mr. Ralph J. Mikida
Hazardous Materials Coordinator
FMC Corporation
1735 Market Street
Philadelphia, PA 19103

Ref. No. 99-0249

Dear Mr. Mikida:

I apologize for the delay in responding to your letter concerning the requirement in 49 CFR 173.31(d)(1)(vi) to carefully inspect a frangible (rupture) disc in a pressure relief device prior to each hazardous material shipment. This requirement has its origins in regulations of the Interstate Commerce Commission issued in 1921. The wording of this requirement was most recently revised in a final rule published on September 21, 1995, under RSPA's Docket Nos. HM-175A and 201 (60 Fed. Reg. 49098).

As the language of § 173.31(d)(1)(vi) states, the purpose of this type of inspection is to check "for corrosion or damage that may alter the intended operation of the device." For that reason, in response to a comment submitted in a separate rulemaking proceeding under Docket No. HM-216 (61 Fed. Reg. 28666, 28671; June 5, 1996), we stated in the preamble that RSPA and FRA believe in order to fully inspect a rupture disc (both top and bottom), the disc must be removed from the safety vent device. It has been FRA's experience that a rupture disc may appear normal on the top side, but be severely damaged or corroded on the bottom side.

You and others have raised concerns about the language of the present rule and its application to persons that forward a loaded tank car received from another location or return a tank car with residue. We anticipate initiating a rulemaking in the near future to address these concerns.

Sincerely,

for Thomas G. Allan
Edward T. Mazzullo

Director, Office of Hazardous
Materials Standards



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FMC Corporation

1735 Market Street
Philadelphia Pennsylvania 19103
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§ 173.31
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FMC

September 2, 1999

Mr. Edward Mazzullo
Director, Office of Hazardous Materials Standards
U.S. Department of Transportation
Research and Special Programs Administration
400 Seventh Street, SW
DHM-10
Washington, D.C. 20590

Re: Interpretation of 49 CFR, § 173.31 (d) (1) (vi)

Dear Mr. Mazzullo:

We are writing to outline concerns with a Department of Transportation (DOT) interpretation of the regulations referenced above. Section 173.31(d)(1) has to do with performing an "EXTERNAL visual inspection" to determine that a tank car is in proper condition and safe for transportation. This includes, as stated in § 173.31(d)(1)(vi), "The pressure relief device, including a careful inspection of the frangible disc in non-closing pressure relief devices, for corrosion or damage that may alter the intended operation of the device".

We understand that the DOT is interpreting § 173.31(d)(1)(vi) to require removal and inspection of both sides of a rupture disc each time a tank car is offered for transportation with product or residue. This position seems to come from the preamble of HM-216, a final rule unrelated to and which made no changes to this section. In HM-175A and 201, which established the wording in this section, the preamble made no mention of the external inspection requiring removal of the rupture disc and inspecting both the top and bottom. It did discuss the practical impossibility of having to remove and disassemble pressure relief valves.

Therefore, DOT is offering a contradictory interpretation of a section revised in a different docket. This not only confuses the regulated community, but also significantly revises the scope of a regulation without allowing for public comment. At a minimum, DOT should include the new interpretation in a new rule making.

In addition, we feel the time, cost , and possible adverse safety related consequences do not justify the benefits of removing the rupture disc to inspect the bottom side prior to each loaded and residue shipment. This is especially evidenced in the case of residue cars where they normally have 99% outage and the chance of a rupture disc non-accidental release is virtually non-existent.

- Many products have no corrosive effect upon the disc material that is selected by the shipper for their specific service and these discs only can fail by overpressure or mechanical damage. Continual disassembly/reassembly increases the likelihood of damage to the disc and/or its assembly hardware, as well as increase wear, and possible improper reassembly due to human error.

- Removing the rupture disc can increase the potential of contaminating the railcar. Some materials that react adversely to contamination may require additional cleaning prior to each reloading. Hydrogen peroxide, which FMC ships in railcars, could be an example of this. We also ship high purity grades of this material where even small amounts of contamination can lead to off spec product. Additional tank car cleaning could add to employee exposure time, environmental discharges, out-of-service time for the railcar, and costs.

We recommend that the shipper be required to determine the appropriate frequency for inspecting the product side of the disc, but not to exceed 5 years. This would be based on the product, the type and material of construction of the disc, the disc manufacturers recommendations, and the service history. This would be consistent with 49 CFR § 180.509 internal and service equipment inspection requirements for cars in corrosive service.

We respectfully request that you review the actions and consequences that can result from continual disassembly/reassembly of a railcar rupture disc.

Sincerely,



Ralph J. Mikida
Hazardous Materials Coordinator