



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

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

OCT 27 2000

Mr. David Fellows
Design Certifying Engineer
904 Hawks Hollow
DeLafield, Wisconsin 53018

Ref. No. 00-0277

Dear Mr. Fellows:

This responds to your letter, dated September 20, 2000, concerning installation of a non-metallic packing gland in the bulkhead of a specification cargo tank under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). You provided two news articles about cargo tanks manufactured with internal agitation systems that utilize this design feature.

As you noted in your July 5, 2000 letter on this subject, the HMR do not specifically prohibit a design modification of the type described in the articles. However, if a non-metallic seal or packing gland is utilized, it must be as strong and heat resistant as the material used for construction of the cargo tank (see § 178.345-9(h)). It is not clear from the information you provided that the cargo tanks described conform to this requirement. The Federal Motor Carrier Safety Administration intends to investigate further with cargo tank manufacturers and operators to ascertain whether these cargo tanks conform to HMR specification requirements and, if not, to advise manufacturers and operators on options for achieving compliance with the HMR.

I hope this information is helpful. If you have further questions, please do not hesitate to contact this office.

Sincerely,

Thomas G. Allan
Senior Transportation Regulations Specialist
Office of Hazardous Materials Standards



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Gorsky
 @ 178.345
 Cargo Tanks
 00-0277

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September 20, 2000

Mr. Thomas G. Allen
 Senior Transportation Regulations Specialist
 Office of Hazardous Materials Standards, RSPA.
 U. S. Department of Transportation
 400 Seventh Street S.W.
 Washington DC. 20590-0001

Ref. No. 00-0190

Dear Mr. Allen,

Thank you for your letter of August 9, 2000 regarding the appropriateness of installing a non-metallic packing gland in the bulkhead of a Specification cargo tank.

In your memo you indicated that it was difficult to evaluate the merits of such a design without seeing a picture or design specifications.

I am enclosing reprints of two articles on cargo tanks produced with this design feature. The articles are from Modern Bulk Transporter, and Trailer Body Builder, both published about 1995 or 1996.

I have no information that these cargo tanks have been involved in a hazardous materials incident. It appears that enclosing the external part of the mechanism in a secondary enclosure would be feasible.

My interest in this subject was brought about by questions I received from business associates and clients regarding the use of the through the shell rotating seal on Specification cargo tanks.

Thank you for your response.

Very truly yours,



David Fellows
 Design Certifying Engineer
 CT-5132

Enc. Two