



U.S. Department  
of Transportation

**Research and  
Special Programs  
Administration**

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

AUG 2 2002

Mr. Noel McKim  
Vice President of Engineering  
Proco, Inc.  
700 Proco Trail  
Kingsville, TX 78363

Dear Mr. McKim:

This further responds to your letter, dated February 7, 2001, requesting clarification of cargo tank specification requirements in the Hazardous Materials Regulations (HMR, 49 CFR Parts 171-180). This is to advise you of additional information received subsequent to my response of March 12, 2001, concerning your design modification to equip cargo tanks with a rotating agitation system.

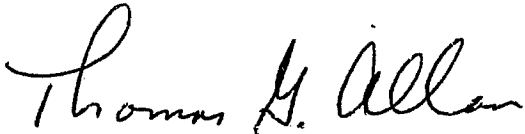
Regarding your design of cargo tanks that incorporate an internal auger, part of which extends through the front and rear head, I am in receipt of a report of a safety review conducted at your Kingsville facility by a representative of the Federal Motor Carrier Safety Administration. As part of this safety review, Structural Engineer Peter Chang was asked to determine the adequacy of the auger seal on the tank shell, specifically to consider whether the seal constitutes a part of the tank body as referenced in § 178.345-9(h) of the HMR. Mr. Chang reported that in this design the seal (a Teflon gasket) clearly is not as strong and heat resistant as the material used to form the tank head. Mr. Chang added, however, that this small seal does not function as part of the tank structure and there is no need for it to conform to § 178.345-9(h).

Based upon Mr. Chang's technical review, I am rescinding my letter of March 12, 2001 (file reference number 01-0041). It is the opinion of this office, therefore, that the seal is not subject to the requirement in § 178.345-9(h). The seal, however, must be capable of withstanding, without failure or leakage, pressure tests appropriate to the cargo tank specification to the same extent as those tests apply to gaskets on pumps, pressure relief devices, and the like. To that end, it is my understanding that you intend to notify owners of Proco Auger Trailers to add a special service advisory to the trailer's operations manual. Basically, the advisory would call for the vehicle operator to inspect the packing glands before transporting any hazardous material, as well as each time the operator performs a "walk-around" inspection, as specified in 49 CFR 392.7. In

event of an actual or apparent leak, the operations manual guidance would advise the operator to stop the leak by tightening the bolts holding the packing gland. In addition, the operator of the cargo tank would be advised to replace the packing gland when it gets within 1/8-inch of bottoming out. I believe that your advisory guidance, when followed, should help to assure that leakage does not occur during transportation.

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

Sincerely,

A handwritten signature in cursive script that reads "Thomas G. Allan". The signature is written in black ink and is positioned above the printed name and title.

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

