



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

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

MAY 29 2002

Mr. Scott R. Burnside  
Special Projects Manager  
CGRS  
P.O. Box 1489  
Fort Collins, CO 80522

Ref. No. 02-0118

Dear Mr. Burnside:

This is in response to your letter of April 9, 2002 and subsequent telephone conversation with Ms. Sandra Webb of my staff concerning the testing and inspection requirements of specification cargo tanks in propane service under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you asked whether MC 331 cargo tanks constructed of quenched and tempered steel used for the transportation of propane must be internally inspected by the wet fluorescent magnetic particle method as specified for cargo tanks used for the transportation of anhydrous ammonia and liquefied petroleum gas.

As specified in § 180.407(g), all components of the cargo tank wall, as defined in § 178.320(a) must be pressure tested as prescribed by this paragraph. The inspection and test requirements in § 180.407(g) of the HMR consist of three parts: an external visual inspection, an internal visual inspection and a pressure test ( hydrostatic test or pneumatic test). Section 180.407(g)(3) provides the internal visual requirements for cargo tanks constructed to MC 331 specification used for the transportation of liquefied petroleum gas (LP-gas). You should be aware that propane is a liquefied petroleum gas. Thus, the internal inspection requirement by the wet fluorescent magnetic particle method as prescribed in 180.407(g)(3) is required to be performed in conjunction with the performance of the pressure test prescribed in this section.

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

Sincerely,

Delmer Billings  
Chief, Standards Development  
Office of Hazardous Materials Standards



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180.407



April 9, 2002

Mr. Edward Mazzullo  
Director of OHMS  
US DOT/ RSPA  
400 7<sup>th</sup> St  
Washington DC, 20590

Re: Interpretation; 49CFR 180.407(g)(viii)(3)

Dear Mr. Mazzullo;

CGRS, Inc. performs hydrostatic testing on MC331 cargo tanks that carry propane. The above referenced regulation applies specifically to anhydrous ammonia and liquefied petroleum gas but does not mention propane. There is a general description in the regulations stating, "any other hazardous materials that may cause corrosion stress cracking". Is it your agency's interpretation that propane causes corrosion stress cracking, are cargo tanks that transport propane required to be internally inspected using the wet fluorescent magnetic particle method?

Your Response to this inquiry is appreciated. If you have any questions regarding this letter please contact me at 970-493-7780.

Sincerely  
CGRS Inc.

Scott R. Burnside  
Special Projects Manager

cc: Mr. Ray Gassaway

Webb  
§ 180.407(g)(viii)(3)  
Cargo Tanks  
02-0118