



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

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

OCT 27 2006

Mr. Gary McDonald
Safety Code Enforcement Officer
Liquefied Petroleum Gas Administration
State of Oklahoma
2101 N. Lincoln Boulevard
Oklahoma City, Oklahoma 73105-4990

Ref. No.: 06-0028

Dear Mr. McDonald:

This responds to your letter concerning requirements applicable to the transportation of a trailer-mounted, oil field water-heating unit under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask whether the provisions of § 173.220 apply to the transportation of these water-heating units.

According to your letter, the water-heating unit includes an MC 330 cargo tank used as a fuel container to supply propane to burners for heating large amounts of water for oil-filled applications. The MC 330 tank may also be used to supply fuel to an engine mounted on the trailer that pumps water through the heater.

The provisions of § 173.220 do not apply to the situation you describe. Rather, the requirements of this section apply only to the transportation *as cargo* of internal combustion engines, self-propelled vehicles, mechanical equipment containing internal combustion engines, and battery-powered vehicles and equipment. If one of the water-heating units in question were transported on another motor vehicle as cargo, the exceptions in § 173.220 would apply.

A fuel tank meeting the requirements in the Federal Motor Carrier Safety Regulations (FMCSR) for fuel systems and used only for supplying fuel for the operation of a motor vehicle or its auxiliary equipment is not subject to regulation under the HMR with respect to its use on the vehicle (see FMCSR requirements at 49 CFR 393.65, 393.67 (for liquid fuel tanks), and 393.69 (for liquefied petroleum gas systems)). Such tanks must conform to all applicable marking requirements and must be maintained in accordance with NFPA/ASME standards for fuel systems.

In addition, if the cargo tank used as the fuel container is represented by the tank specification plate as meeting a DOT cargo tank specification, such as the MC 330 specification, it must conform to the applicable specification requirements in Part 178 of the HMR in effect at the time the vehicle was manufactured, including requirements for



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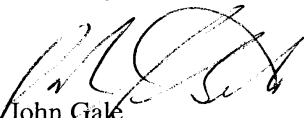
173.220

accident damage and rear-end tank protection, and the applicable requalification requirements in Part 180. These requirements apply regardless of whether the cargo tank is used as a fuel tank or to transport hazardous or non-hazardous materials in commerce. A manufacturer of a DOT specification cargo tank must hold a current ASME Certificate of Authorization and must be registered with DOT in accordance with Subpart F of Part 107 (see the definition for "manufacturer" in § 178.320).

With regard to your safety concerns, while these tanks may be larger than fuel tanks normally found on commercial motor vehicles, we are not aware of any specific safety issues that would warrant their being treated differently than other fuel tanks. You may wish to direct your concerns about the use of large fuel tanks to the Federal Motor Carrier Safety Administration.

I hope this information is helpful. If we can be of further assistance, please contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "John Gale", written over a light blue horizontal line.

John Gale
Chief, Standards Development
Office of Hazardous Materials Standards



STATE OF OKLAHOMA
LIQUEFIED PETROLEUM GAS ADMINISTRATION

Engrum
§173.220
Exceptions/Corg
06-0028 Tax

2-3-06

From: Gary McDonald
Safety Code Enforcement Officer
Oklahoma LP Gas Administration
Oklahoma City, OK

To: Edward T. Mazzullo
Director, Office of Hazardous
Material Standards

Sir,

I need a clarification of section 173.220, as it would apply to the following:

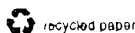
I have discovered a trailer mounted, oil field water-heating unit that has a 2400-gallon MC 330 tank mounted on the rear of the trailer.

The tank contains propane and is transported with between 0% and 80% capacity.

There are 3 similar units utilizing spec single barrel tanks with @ 2400 gallon capacity and at least one in service with the old non-spec twin barrel tanks with @ 900 gallon capacity each.

There are new similar units being constructed and offered for sale. They may be seen at www.chandlermfg.com. The photo link is on the bottom of the page, titled, Propane fired frac water heater.

The MC 330 tank is being used as a fuel container to supply propane to burners for heating large amounts of water for oil field applications and may also be used to supply fuel to an engine, also mounted on the trailer, which pumps the water through the heater.



I read several interpretation letters on the myregs.com web site and found some that indicated that the fuel tank exception could be utilized, however there were some differences and I was not sure if it would pertain to this particular situation.

If DOT allows this exception for fuel tanks in 173.220, as was claimed by the owner of the unit I inspected, it is going to create several safety concerns. I have listed a few of my major concerns.

1. The use of non-specification tanks being put back into service and utilized for transporting propane across state lines.
2. Utilization of 393.65(c) that requires fuel tanks to be attached in a workman like manner, instead of the stricter requirements in 180.413(d)(7) which requires the hold down devices be approved by a Design Certified Engineer.
3. The use of larger and larger "fuel" tanks in future units, we could possibly see a 10,500 gallon capacity tank being used.
4. The use of tanks that have not been tested or inspected as required by 180.407
5. Jurisdictional conflicts with states that have adopted NFPA 58, which states in the 2004 Edition, Section 6.21.3.1 that capacity of individual containers, not utilized as cargo tanks, shall not exceed 300 gallon.

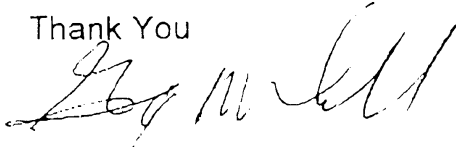
I do not feel that DOT anticipated the use of fuel tanks in the size range noted above when the exception was written.

Should exceptions be allowed where safety is concerned?

Please contact me if you need photos or other information.

lpqasinfo@lpqas.ok.state.us or 405-521-2458
or fax 405-521-6037

Thank You



Gary McDonald