



U.S. Department of Transportation  
**Pipeline and Hazardous Materials  
Safety Administration**

1200 New Jersey Ave, S.E.  
Washington, D.C. 20590

JUL -9 2009

Mr. Douglas M. Poland  
Godfrey & Kahn, S.C.  
One East Main Street,  
P.O. Box 2719  
Madison, WI 53701-2719

Ref. No. 09-0138

Dear Mr. Poland:

This responds to your June 1, 2009 letter requesting clarification of the applicability of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) to fuel systems. Specifically, you ask whether a ground heating/thawing trailer unit ("heating trailer unit") is subject to the HMR. Your letter describes a heater affixed to a trailer chassis and connected to a fuel tank with a maximum capacity of 125 to 250 gallons also affixed to the trailer. The fuel tank is housed separately from the heater and will supply a diesel fuel blend to the heater through a fixed connecting hose. You note in a subsequent telephone discussion with a member of my staff that the flash point of the diesel fuel blend will range from 108 °F to 120 °F.

It is the opinion of this Office that if the fuel system for the heating trailer unit meets the requirements for fuel systems under 49 CFR §§ 393.65 and 393.67 of the Federal Motor Carrier Safety Administration's Federal Motor Carrier Safety Regulations (FMCSRs) and is not used as packaging for hazardous materials (e.g., a cargo tank), then the heating trailer unit is subject only to the FMCSRs. If the fuel system does not meet the FMCSRs requirements, then the offering and transportation of the heating trailer unit is subject to the HMR.

Your questions are paraphrased and answered below. Note that the answers are based on the presumption that the fuel system you describe does not conform to the FMCSRs.

Q1. Is the heating trailer unit eligible for exceptions in § 173.220?

A1. No, the heating trailer unit is considered a cargo tank as defined in § 171.8 and subject to the applicable cargo tank requirements.

Q2. Is the heating trailer unit subject to marking, labeling, and placarding requirements when transported by highway with fuel in the tank?

A2. Yes, the heating trailer unit is subject to applicable marking, labeling, and placarding requirements.

Q3. Is the heating trailer unit subject to marking, labeling, and placarding requirements when transported by highway without fuel in the tank?

A3. No, however, we note that an empty packaging containing the residue of a hazardous material is regulated in the same manner as when it previously contained a greater quantity of the hazardous material (see § 173.29). Thus, if the tank has not been cleaned and purged to remove all residue of the fuel, then it is subject to applicable marking, labeling, and placarding requirements.

Q4. How would the responses to the first three questions change if instead, the heater is supplied by two separate fuel tanks each with a capacity less than 119 gallons where the fuel tanks are connected by a hose when the heater is operated but not connected during the course of transportation?

A4. If the fuel tanks were not connected during transportation and acted as separate packagings, the two separate fuel tanks would be considered non-bulk packagings. The heating trailer unit would not be eligible for the exceptions in § 173.220 because the fuel tanks would not be component parts of the heater (i.e., the mechanical equipment). The offeror would be subject to all applicable HMR requirements for authorized non-bulk packaging for the diesel fuel blend, as well as applicable marking, labeling, and placarding requirements. However, based on the information provided regarding the flashpoint of the fuel, the fuel tanks are eligible for the exceptions for combustible liquids specified in § 173.150.

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

Sincerely,



Charles E. Betts  
Chief, Standards Development  
Office of Hazardous Materials Standards

Der kinderen  
§ 172.101  
§ 173.220  
Applicability  
09-0138

June 1, 2009

Edward Mazzullo  
Director Office of Hazardous Materials Standards  
Pipeline and Hazardous Materials Safety Administration  
Attn: PHH-10  
U.S. Department of Transportation, East Building  
1200 New Jersey Avenue, SE  
Washington, D.C. 20590-0001

Dear Mr. Mazzullo:

We are writing with a question about the applicability of 49 C.F.R. § 173.220, 49 C.F.R. § 172.300 et. seq., 49 C.F.R. § 172.400 et. seq., and 49 C.F.R. § 172.500 et. seq. to a ground heating/ground thawing machine manufactured as—and designed to be transported as—a trailer.

The ground heating/ground thawing trailer unit in question (the “heater”), is designed to aid cold-weather construction work by quickly, safely, and evenly heating large areas of ground. The heater is composed of several interconnected parts that are separately affixed to an underlying trailer chassis. These parts include a heating mechanism, a pump, and a fuel tank.

The heating mechanism (the part of the heater that actually provides heat) is used to heat a non-hazardous and environmentally safe fluid. The fluid is pumped through a closed, recirculating system including several thousand feet of industrial hose that is designed to be unspooled and spread in rows across the worksite to be heated. The heater steadily increases the heat of this fluid as it repeatedly cycles from the hose, through the heating mechanism, and back through the hose again.

The heating mechanism is connected to a fuel tank with a maximum capacity between 125 and 250 gallons. The fuel tank is housed separately from the heating mechanism, and is designed to supply a diesel fuel blend to the heating mechanism through a fixed connecting hose. The heating mechanism cannot operate without drawing fuel from the tank.

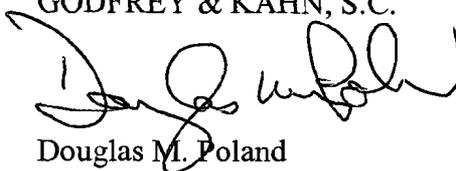
Questions:

1. Does this heater fall within any exception under 49 C.F.R. § 173.220?
2. Is this heater subject to any marking, labeling, or placarding requirements under 49 C.F.R. § 172.300 et. seq., 49 C.F.R. § 172.400 et. seq., or 49 C.F.R. § 172.500 et. seq. when being transported on roadways with fuel in the tank?
3. Is this heater subject to any marking, labeling, or placarding requirements under 49 C.F.R. § 172.300 et. seq., 49 C.F.R. § 172.400 et. seq., or 49 C.F.R. § 172.500 et. seq. when being transported on roadways without any fuel in the tank?
4. How, if at all, would the answers to questions 1 through 3 change if the heater included two smaller fuel tanks with a maximum capacity of less than 119 gallons each, connected to each other with a fuel hose during stationary operations but not connected during transportation, instead of single fuel tank with a maximum capacity of between 125 and 250 gallons?

Thank you for your attention to this request. Please do not hesitate to call or email us using the contact information provided if you require additional information to respond to this inquiry.

Sincerely,

GODFREY & KAHN, S.C.



Douglas M. Poland