Revised Safety Advisory: Emergency Discharge Control Equipment Installation on Cargo Tank Motor Vehicles Resulting in the Potential Loss of Vehicle Control

The Federal Motor Carrier Safety Administration (FMCSA), in conjunction with the Pipeline and Hazardous Materials Safety Administration (PHMSA), is issuing this safety advisory to provide notice of emergency discharge control equipment connected to and installed on cargo tank motor vehicles, which when improperly installed, do not operate correctly and can result in total loss of power to the cargo tank motor vehicle. This revised safety advisory updates and replaces the previous advisory of the same title that was originally issued on November 25, 2015.

Investigations conducted by PHMSA and the Railroad Commission of Texas identified cargo tanks in metered service transporting liquefied compressed gas to have improperly installed emergency discharge control equipment. Use of the improperly installed devices has resulted in unintentional shut down of the motor vehicle while in motion, resulting in loss of motive power, steering and braking functions.

Such loss of power poses an inherent risk to the driver of the cargo tank motor vehicle, the general public, property, and the environment. To reduce the likelihood of incidents involving unintentional shut down of motor vehicles in motion, owners and operators of motor vehicles with this emergency discharge control equipment should inspect the devices to ensure that they are installed properly and do not shut off the vehicle(s) while in motion. If not, the device must be refitted, and then inspected and certified by a Registered Inspector.

Emergency discharge control equipment should be unique to a particular cargo tank’s internal self-closing valve. Use of a system that can be operated by more than one wireless transmitter/receiver is not advisable. Additionally, activation of the emergency discharge equipment should not be able to shut off the motor vehicle while it is being driven. Emergency discharge control equipment on cargo tank motor vehicles in metered delivery service installed after July 1, 2001, must be installed under the supervision of a Registered Inspector. The Registered Inspector must certify that the remote control equipment is installed and tested in accordance with 49 CFR § 173.315(n)(3)(i) and the Registered Inspector must provide the certification to the owner of the cargo tank motor vehicle. An improperly installed device identified during required periodic annual inspections, must result in a failed inspection until the problem is corrected, and the device is properly inspected and certified.

It is recommended that motor carriers operating cargo tanks in liquefied petroleum gas service and cargo tank inspection facilities inspecting cargo tanks with emergency discharge control equipment conduct thorough inspections to ensure that the emergency discharge control equipment malfunction does not occur. Refer to the Hazardous Materials Regulations 49 CFR §§ 173.315(n)(3), 180.407(d)(2)(iv) and 180.405(m)(1) for detailed requirements.

For more information, or should you have a question concerning this Safety Advisory, please contact Paul Bomgardner, Chief, Hazardous Materials Division, at (202)493-0027, or by email at paul.bomgardner@dot.gov.