

**PROPOSED RULE 1177. LIQUEFIED PETROLEUM GAS TRANSFER AND DISPENSING**

(a) Purpose

The purpose of this rule is to reduce emissions of volatile organic compounds (VOC) associated with the transfer and dispensing of liquefied petroleum gas (LPG).

(b) Applicability

This rule applies to the transfer of LPG from any cargo tank or stationary storage tank into any other cargo tank, stationary storage tank, or portable storage tank with a water capacity of four (4) gallons or more.

(c) Definitions

For the purpose of this rule the following definitions shall apply:

- (1) **BOBTAIL TRUCK** is a vehicle that is equipped with a cargo tank without a trailer and is used to deliver propane.
- (2) **CARGO TANK** is a container that is used to transport LPG and that is either mounted on a conventional truck chassis or is an integral part of a cargo transporting vehicle, such as a bobtail, mobile fueler or rail tank car.
- (3) **CONNECTOR** is any hose, fitting or coupling that is used to facilitate the transfer of LPG from one container to another.
- (4) **CONTAINER** is any vessel, including cylinders, stationary tanks, portable tanks, and cargo tanks, used for the transporting or storage of LPG.
- (5) **CYLINDER** is a container designed, constructed, tested and marked in accordance with U.S. Department of Transportation (DOT) specifications, Title 49, Code of Federal Regulations or in accordance with a valid DOT special permit.
- (6) **DRY BREAK COUPLING** or **DRY DISCONNECT COUPLING** is a device or component that forms a secure connection and is used to prevent loss of LPG vapors.
- (7) **FIXED LIQUID LEVEL GAUGE** is a liquid level indicator that uses a positive shutoff vent valve to indicate that the liquid level in a container being filled has reached the point at which the indicator communicates with the liquid level in the container.

- (8) INSPECTION is a survey of components according to the US EPA Reference Method 21 using an appropriate analyzer, calibrated with methane, which shall be calibrated prior to use on the date of the inspection.
- (9) LIQUIDTIGHT is a liquid leak rate not exceeding three drops per minute.
- (10) LOW EMISSION CONNECTOR is a LPG transfer component that is designed to result in a maximum emission release of four (4) cubic centimeters of LPG when disconnected.
- (11) LPG or LIQUEFIED PETROLEUM GAS is an organic compound having a vapor pressure not exceeding that allowed for commercial propane that is composed predominantly of the following hydrocarbons, either by themselves or as mixtures: propane, propylene, butane (normal butane or isobutane) and to a lesser extent butylenes, and that is stored and transported under pressure in a liquid state.
- (12) LPG BULK LOADING FACILITY is a facility where the primary function is to store LPG for further distribution and has a stationary storage tank with a water capacity of 10,000 gallons or more.
- (13) LPG TRANSFER AND DISPENSING FACILITY is a mobile fueler or a stationary facility consisting of one or more stationary storage tank and associated equipment which receives, stores and either transfers or dispenses LPG to stationary storage tanks, cargo tanks, or portable tanks.
- (14) LPG VAPOR RECOVERY OR EQUALIZATION SYSTEM is a system installed on an LPG tanker truck or a rail tank car that facilitates the transfer of liquid LPG and allows for the collection and recovery of LPG vapors displaced or emitted from the stationary storage tank, or cargo tank when LPG is transferred to or from the tanker truck or rail tank car.
- (15) LPG VAPORS are the organic compounds in vapor form as well as entrained liquid LPG displaced during LPG transfer and dispensing operations.
- (16) MOBILE FUELER is any tanker truck or trailer, including a bobtail truck, that is used to transport LPG stored in an onboard cargo tank.
- (17) OWNER/OPERATOR is any person who owns, leases, or operates an LPG transfer and dispensing facility.
- (18) PERFORMANCE TEST is the first test or series of tests performed on a new or altered certified LPG vapor recovery system to demonstrate

compliance with the manufacturer standards upon completion of construction or alteration of the vapor recovery system.

- (19) PORTABLE CYLINDER is a container that is designed, constructed, tested and marked in accordance with U.S. Department of Transportation (DOT) specifications, Title 49, Code of Federal Regulations or in accordance with a valid DOT special permit. Examples of portable cylinders that contain LPG include those used with small hand torches, forklifts, barbecue grills, agricultural weed burners and recreational vehicles.
  - (20) PORTABLE STORAGE TANK is a container or cylinder designed to be moved readily, as opposed to a container or cylinder designed for stationary installations.
  - (21) RAILROAD TANK CAR is mobile platform designated for transport over rail mounted with a cargo tank having a nominal water capacity of 30,000 gallons.
  - (22) STATIONARY CYLINDER is the largest DOT approved cylinder and is typically used in residential, commercial and industrial applications.
  - (23) STATIONARY STORAGE TANK is an above-ground container that is used for the storage of LPG, including, but not limited for residential, commercial or industrial usage.
  - (24) VALVE is a device that regulates or isolates the fluid flow in a pipe, tube, or conduit by means of an external actuator.
  - (25) VAPORTIGHT means the detection of less than 10,000 ppm hydrocarbon concentration, as determined by EPA Method 21, using an appropriate analyzer calibrated with methane.
- (d) Equipment and Operation Requirements
- (1) LPG transfer at LPG Bulk Loading Facilities  
Effective July 1, 2012, a person shall not transfer, allow the transfer or provide equipment for the transfer of LPG, from any cargo tank to a stationary storage tank or from any stationary storage tank to a cargo tank unless the following conditions are met:
    - (A) The receiving stationary storage tank or receiving cargo tank is equipped with a fixed liquid level gauge with a number 72 orifice

(0.025 inch) or smaller orifice when the LPG transfer is to or from a bobtail truck.

- (B) Any railroad tank car or tanker truck equipped with an LPG vapor recovery or equalization system is maintained and operated according to the manufacturer's specifications.
- (C) All vapor return lines and liquid lines are properly connected between the cargo tank and the stationary storage tank during LPG transfer and all associated connectors are maintained in a vapor tight and liquid tight condition.
- (D) All fixed facility hoses are equipped with vapor tight caps.
- (E) All dry break couplings and low emission connectors are equipped with vapor tight seals and vapor tight caps.
- (F) The transfer hose assembly, which includes the hose, fittings and gaskets, is properly maintained in order to prevent vapor leakage.
- (G) Each vapor tight cap is in a closed position except when the transfer hose, low emission connector or dry break coupling it serves is actively in use.

(2) LPG transfer to stationary tanks, cargo tanks, or vehicle fuel tanks

Effective July 1, 2012, an owner/operator of a LPG transfer and dispensing facility shall not transfer LPG into any stationary tank or vehicle fuel tank unless the following conditions are met:

- (A) All owned or leased cargo tanks and stationary storage tanks are fitted with low emission connectors.
- (B) All owned or leased cargo tanks are equipped with a fixed liquid level gauge with a number 72 orifice (0.025 inch) or smaller orifice when the LPG transfer is to a bobtail truck.
- (C) All leased or owned stationary storage tanks are equipped with a fixed liquid level gauge with a number 72 orifice (0.025 inch) or smaller orifice in accordance with the following:
  - (i) Replace 50 percent of all fixed liquid level gauges by July 1, 2012.
  - (ii) Replace the remaining 50 percent of all fixed liquid level gauges by July 1, 2014.

(3) **LPG Transfer into Portable Storage Tanks**

A person shall not transfer, allow the transfer of, or provide equipment for the transfer of LPG into any portable storage tank unless the following conditions are met:

- (A) Effective July 1, 2012, the dispenser used to fill the portable tank is equipped with a low emission connector.
- (B) Effective July 1, 2016, each portable tank is equipped with a fixed liquid level gauge with a number 72 orifice (0.025 inch) or smaller orifice.

(e) **Operator Inspection Program Requirements**

(1) The owner/operator of any LPG transfer and dispensing facility shall:

- (A) Visually check all components involved with the transfer of LPG once daily, including checking for the presence of LPG odorant.
- (B) Effective January 1, 2012, conduct a quarterly inspection, as defined in paragraph (c)(8), of all components involved in the transfer of LPG .
- (C) Implement a training program for any employee that conducts the visual check or inspection, including:
  - (i) Written training procedures
  - (ii) A periodic training schedule
  - (iii) A written record of the dates of training provided for each employee.
  - (iv) A record of the upcoming training schedule

(2) Any equipment or component which is identified as leaking or defective during daily visual checks or quarterly inspections shall be removed from service, repaired, brought into compliance and an entry of such defect and repair activity shall be entered into the repair logs before being returned to service.

(3) Any leak or defect that is discovered during a visual check and subsequently repaired shall not constitute a violation of this rule.

(f) **Reporting Requirements**

(1) The owner/operator of a LPG bulk loading facility, or LPG transfer and dispensing facility shall submit the facility's annual LPG purchase volume

and dispensing volume to the District, no later than 30 days after the end of each calendar year, in a format approved by the Executive Officer.

- (2) The owner/operator of a LPG bulk loading facility shall submit to the District an annual inventory of all facility components associated with the transfer or storage of LPG no later than 30 days after the end of each calendar year. This inventory shall include the following:
  - (A) The specific storage or transfer equipment or operation involved;
  - (B) The manufacturer and identification number of each component; and,
  - (C) The manufacturer and identification number of each new component replaced during the reporting year.

(g) Recordkeeping Requirements

- (1) The owner/operator of a LPG transfer and dispensing facility or a LPG bulk loading facility shall keep a record of the facility's monthly LPG purchase volume and dispensing volume.
- (2) A person who performs the installation of components, inspections as defined by paragraph (c)(8), repairs or testing at any LPG transfer and dispensing facility or any LPG bulk loading facility, including, but not limited to, the activities of normal operation and maintenance and performance testing, shall provide the owner/operator with all records listed below, as applicable, at the end of each day when the service is provided. The owner/operator shall maintain on-site, for a period of at least two years, all records listed below, and any other test results or maintenance records that are required to demonstrate compliance. All records shall be made available to the Executive Officer upon request.
  - (A) Records of all components installed, defective components identified or repaired during visual checks and inspections.
  - (B) Repair logs, which shall include:
    - (i) Date and time of each repair;
    - (ii) The name of any person who performed the repair and, if applicable, the name, address and phone number of their employer;
    - (iii) A description of the service performed; and,
    - (iv) Each component that was installed, repaired, serviced or removed, including, but not limited, to the component

identification information and component manufacturer name.

(h) Exemptions

The provisions of this rule shall not apply to the transfer of LPG into any container with a water capacity less than four (4) gallons.