



Town of Dennis Fire Department – Propane Safety

883 Route 28, West Dennis, MA 02670
508-398-0363

MA Fire Prevention Code for Propane Filling and Distribution: Chapter 69

69.1.4.4 Effective September 1, 2014, each person handling L.P gas in the quantities of 42 lbs. (ten gallon) or greater, shall be trained, at applicable level, in accordance with the Certified Employee Training Program (CETP) or other education programs acceptable to the State Fire Marshal.

69.1.4.4.1 Each person handling cylinders less than 42 lbs. shall receive annual training utilizing the program "Dispensing Propane Safely" published by the Propane Education and Research Council.

69.1.4.4.2 Certificates of completion shall be maintained by the employer for three years and a copy of said certificate shall be given to the trainee at the completion of each program.

69.1.4.4.3 Certificates of completion shall include the date of completion, the course name, and be signed by the instructor or provider. Such certificates shall be submitted to the AHJ upon request.

Propane Safety

Federal regulations for dispensing and refilling propane tanks are set by the National Fire Protection Agency (NFPA), the Department of Transportation (DOT) and the Occupational Safety and Health Administration (OSHA) and the MA State Fire Marshall (527 CMR 1). Regulations also vary for other types of propane tanks, including forklift cylinders and installed residential tanks.

Training

The NFPA requires documented training on propane handling procedures, with refresher training every year, for anyone who dispenses propane. DOT hazmat training complies with this standard, as does the National Propane Gas Association's Certified Employee Training Program (CETP) and the GAS Check training program. Other programs on safe propane handling procedures also may meet this requirement.

Safety Precautions

All of these agencies require following certain safety precautions when refilling propane tanks. OSHA mandates the use of protective equipment, such as gloves, to prevent freeze burns from propane contact. The NFPA and OSHA require propane dispensing equipment be kept at least 10 feet from other combustible materials and 25 feet from open flames and sparks. At least one fully charged, 18-pound,

B:C-rated fire extinguisher must be maintained at the filling area and employees must be trained on its use, with refresher training annually. Employees must know the location and procedures for using the emergency shutdown. They also must also know the emergency response plan, proper propane handling procedures and the properties and dangers of propane.

Equipment

According to the NFPA, propane dispensers must understand how to operate and maintain propane dispensing equipment, including the shutdown system. In addition, before refilling cylinders, the employee must prepare the equipment by slowly opening the liquid outlet valve and inspecting all equipment--hose, fittings, piping, valves, adapter threads--and checking for leaks.

Tank Inspection

Before a propane tank may be refilled, the DOT requires that it be inspected by the attendant. A propane cylinder may not be refilled if it is corroded; dented; bulging; damaged on valves, footings or valve protection; damaged from fire or misuse; leaking; missing an overfilling device; out of date. Out-of-date tanks may not be refilled and may only be requalified at a registered DOT facility. In addition, tanks that have been opened may need to be purged. If so, depending on the tank and dispensing operation, the tank may have to be set aside for purging by a trained employee at the proper facility.

Refilling

Propane tanks can be filled by weight or volume. But according to DOT regulations, propane tanks with less than 200 pounds capacity must be refilled by weight. The proper refilling procedure is detailed in the CETP handbook. While refilling, the propane tank and equipment may not be left unattended. After filling the tank, it should be plugged or capped before transfer to a customer. If the tank has been overfilled, do not give it a customer. Dispensing equipment must be shut down and secured when not in use. Missing or illegible labels on the cylinder must be replaced. Tanks weighing less than 100 pounds must have a customer warning/information label. Tanks that will be shipped must have compliant DOT labels.

Loading

Propane cylinders must be placed upright and properly secured to protect damage to valves and fittings. When loading multiple cylinders, the load must be evenly distributed. Straps, cables or ties should be used to secure the load. The DOT and OSHA require that securing equipment be inspected before each use. Passenger cars and trucks should not carry more than 90 pounds of propane and not more than 45 pounds in one tank, according to NFPA regulations.