

50.7 Mobile and Temporary Cooking Operations

50.7.1 General

50.7.1.1 Mobile and temporary cooking operations shall comply with Section 50.7.1 and the applicable section for the type of cooking being performed.

50.7.1.2 Where required by the AHJ, permits shall be required for the location, design, construction and operation of mobile and temporary cooking operations.

50.7.1.3 Portable Fire Extinguishers

50.7.1.3.1 Portable fire extinguishers shall be provided per NFPA 96 for cooking operations.

50.7.1.3.2 A minimum of one 2A:10BC portable fire extinguisher shall be provided when a generator or other fuel fired appliance is used.

50.7.1.3.3 When wood or charcoal is being used, a minimum of one 2A portable fire extinguisher or an approved hose line shall be provided.

50.7.1.4 Mobile or temporary cooking operations shall be separated from buildings or structures, combustibles, materials, vehicle and other cooking operations by a minimum of 3 ft (1 m).

50.7.1.5 Tents

50.7.1.5.1 Mobile or temporary cooking shall not take place within tents occupied by the public.

50.7.1.5.2 Tents shall comply with NFPA 102.

50.7.1.5.3 Seating for the public shall not be located within any mobile or temporary cooking vehicle.

50.7.1.6 Mobile or temporary cooking operations shall not block fire department access roads, fire lanes, fire hydrants or other fire protection devices and equipment.

50.7.1.7 Communications. A method of communication to emergency personnel shall be accessible to all employees.

50.7.1.8 Training

50.7.1.8.1 Prior to performing mobile or temporary cooking operations, workers shall be trained in emergency response procedures including:

- (a) proper use of portable fire extinguishers and extinguishing systems
- (b) proper method of shutting off fuel sources
- (c) proper procedure for notifying the local fire department
- (d) proper refueling
- (e) how to perform leak detection
- (f) fuel properties

50.7.1.8.2 Refresher training shall be provided every year.

50.7.1.8.3 Initial and refresher training shall be documented and made available to the AHJ upon request.

50.7.1.9 Internal Combustion Power Sources

50.7.1.9.1 Electric generator and internal combustion power sources used for mobile or temporary cooking shall comply with this section.

50.7.1.9.2 Fueling. Fuel tanks shall be of adequate capacity to permit uninterrupted operation during normal operating hours.

50.7.1.9.2.1 Mobile cooking operations licensed by the Florida Department of Business and Professional Regulation prior to the adoption of this Code are exempt from this requirement. However, if there are any alterations, modifications, and/or replacements to the generator, the fuel tank shall be brought into compliance with 50.7.1.9.2.

50.7.1.9.3 Refueling. Refueling shall be conducted only when not in use.

50.7.1.9.3.1 Generators designed for refueling during use (while operating) are exempt from 50.7.1.9.3. Refueling during use shall follow the manufacturer procedures for such refueling.

50.7.1.9.4 Protection. Internal combustion power sources shall be isolated from contact with the public by either physical guards, fencing, or an enclosure.

50.7.1.9.5 Fueling from a container shall be permitted when the engine is shut down and engine surface temperature is below the autoignition temperature of the fuel.

50.7.1.9.6 Portable generators shall be positioned so that the exhaust is directed as follows:

(1) At least 5 ft (1.5 m) in any direction away from any openings or air intakes and means of egress

(2) Away from any building

(3) Away from any mobile or temporary cooking vehicle or operation

50.7.1.10 Where applicable, electrical appliances, fixtures, equipment or wiring shall comply with NFPA 70.

50.7.1.11 Charcoal/wood burning

50.7.1.11.1 Mobile or temporary cooking operations that utilize wood or charcoals shall comply with NFPA 96 Section 14.9

50.7.1.11.2 An approved carbon monoxide detector shall be installed where mobile cooking operations are performed in an enclosed area.

50.7.2 Mobile Cooking

50.7.2.1 Mobile cooking operations and equipment shall comply with NFPA 96, 50.7.1 and this section.

50.7.2.2 LP-Gas Systems

50.7.2.2.1 Cylinders shall be secured in an upright position to prevent tipping over.

50.7.2.2.2 Gas systems on mobile cooking vehicles shall comply with NFPA 58 and this section.

50.7.2.3 Leak Detection

50.7.2.3.1 Gas systems shall be inspected prior to each use by a worker trained in accordance with 50.7.1.8 training.

50.7.2.3.2 Leak detection testing shall be documented and available to AHJ upon request.

50.7.2.3.3 Where a gas detection system has been installed, it shall be tested every month.

50.7.2.3.4 Leak detection shall be performed every time a new connection or a change in cylinder is made to any gas system.

50.7.2.4 LP-Gas Systems on Vehicles (Other Than Engine Fuel Systems)

50.7.2.4.1 Application. Section 50.7.2.4 shall apply to the following:

- (1) Non-engine fuel systems on all vehicles.
- (2) Installations served by exchangeable (removable) cylinder systems and by permanently mouthed containers.

50.7.2.4.2 Non Application. Section 50.7.2.4 shall not apply to the following:

- (1) Systems installed on mobile homes.
- (2) Systems installed on recreational vehicles.
- (3) Cargo tank vehicles, including trailers and semitrailers, and similar units used to transport LPGas as cargo, which are covered by Chapter 9.
- (4) LP-Gas engine fuel systems on the vehicles, which are covered by Chapter 11 of NFPA 58.

50.7.2.4.3 Container Installation Requirements.

50.7.2.4.3.1 Containers shall comply with 50.7.2.4.3.1 (A) through 50.7.2.4.3.1 (D)

(A) ASME mobile containers shall be in accordance with one of the following:

- (1) A MAWP of 312 psig (2.2 MPag) or higher where installed in enclosed spaces of vehicles.
- (2) A MAWP of 312 psig (2.2 MPag) or higher where installed on passenger vehicles.
- (3) A MAWP of 250 psig (1.7 MPag) or higher for containers where installed on the exterior of non-passenger vehicles.

(B) LP-Gas fuel containers used on passenger-carrying vehicles shall not exceed 200 gal (0.8 m³) aggregate water capacity.

(C) The capacity of individual LP-Gas containers on highway vehicles shall be in accordance with Table 50.7.2.4.3.1(C).

Table 50.7.2.4.3.1(C)

Maximum Capacities of Individual LP-Gas Containers Installed on LP-Gas Highway Vehicles

(D) Containers designed for stationary service only and not in compliance with the container appurtenance protection requirements of 5.2.6 of NFPA 58 shall not be used.

50.7.2.4.3.2 ASME containers and cylinders utilized for the purposes covered by Section 50.7.2.4 shall not be installed, transported, or stored (even temporarily) inside any vehicle covered by Section 50.7.2.4, except for ASME containers installed in accordance with 50.7.2.4.3.4(I), chapter 9, or DOT regulations.

50.7.2.4.3.3 The LP-Gas supply system, including the containers, shall be installed either on the outside of the vehicle or in a recess or cabinet vapor-tight to the inside of the vehicle but accessible from and vented to the outside, with the vents located near the top and bottom of the enclosure and 3 ft (1m) horizontally away from any opening into the vehicle below the level of the vents.

50.7.2.4.3.4 Containers shall be mounted securely on the vehicle or within the enclosing recess or cabinet.

(A) Containers shall be installed with road clearance in accordance with 11.8.3 of NFPA 58.

(B) Fuel containers shall be mounted to prevent jarring loose and slipping or rotating, and the fastenings shall be designed and constructed to withstand, without permanent visible deformation, static loading in any direction equal to four times the weight of the container filled with fuel.

(C) Where containers are mounted within a vehicle housing, the securing of the housing to the vehicle shall comply with this provision. Any removable portions of the housing or cabinet shall be secured while in transit.

(D) Field welding on containers shall be limited to attachments to non-pressure parts such as saddle plates, wear plates, or brackets applied by the container manufacturer.

(E) All container valves, appurtenances, and connections shall be protected to prevent damage from accidental contact with stationary objects; from loose objects, stones, mud, or ice thrown up from the ground or floor; and from damage due to overturn or similar vehicle accident.

(F) Permanently mounted ASME containers shall be located on the vehicle to provide the protection specified in 50.7.2.4.3.4(E).

(G) Cylinders shall have permanent protection for cylinder valves and connections.

(H) Where cylinders are located on the outside of a vehicle, weather protection shall be provided.

(I) Containers mounted on the interior of passenger-carrying vehicles shall be installed in compliance with Section 11.9 of NFPA 58. Pressure relief valve installations for such containers shall comply with 11.8.5 of NFPA 58.

50.7.2.4.4 Installation of Container Appurtenances.

50.7.2.4.4.1 Container appurtenances shall be installed in accordance with the following:

(1) Pressure relief valve installation of ASME containers installed in the interior of vehicles complying with Section 11.9 of NFPA 58 shall comply with 11.8.5 of NFPA 58.

(2) Pressure relief valve installations on ASME containers installed on the outside of vehicles shall comply with 11.8.5 of NFPA 58 and 50.7.2.4.3.3.

(3) Main shutoff valves on containers for liquid and vapor shall be readily accessible.

(4) Cylinders shall be designed to be filled in either the vertical or horizontal position, or if they are the universal type, they are permitted to be filled in either position.

(5) All container inlets, outlets, or valves installed in container inlets or outlets, except pressure relief devices and gauging devices, shall be labeled to designate whether they communicate with the vapor or liquid space.

(6) Containers from which only vapor is to be withdrawn shall be installed and equipped with connections to minimize the possibility of the accidental withdrawal of liquid.

50.7.2.4.4.2 Regulators shall be installed in accordance with 6.8.2 of NFPA 58 and 50.7.2.4.4.2(A) through 50.7.2.4.4.2(E).

(A) Regulators shall be installed with the pressure relief vent opening pointing vertically downward to allow for drainage of moisture collected on the diaphragm of the regulator.

(B) Regulators not installed in compartments shall be equipped with a durable cover designed to protect the regulator vent opening from sleet, snow, freezing rain, ice, mud, and wheel spray.

(C) If vehicle-mounted regulators are installed at or below the floor level, they shall be installed in a compartment that provides protection against the weather and wheel spray.

(D) Regulator compartments shall comply with the following:

(1) The compartment shall be of sufficient size to allow tool operation for connection to and replacement of the regulator(s).

(2) The compartment shall be vapor-tight to the interior of the vehicle.

(3) The compartment shall have 1 in.² (650 mm²) minimum vent opening to the exterior located within 1 in. (25 mm) of the bottom of the compartment.

(4) The compartment shall not contain flame or spark-producing equipment.

(E) A regulator vent outlet shall be at least 2 in. (51 mm) above the compartment vent opening.

50.7.2.4.5 Piping

50.7.2.4.5.1 Piping shall be installed in accordance with 6.9.3 of NFPA 58 and 50.7.2.4.5.1(A) through 50.7.2.4.5.1(M).

(A) Steel tubing shall have a minimum wall thickness of 0.049 in. (1.2 mm).

(B) A flexible connector shall be installed between the regulator outlet and the fixed piping system to protect against expansion, contraction, jarring, and vibration strains.

(C) Flexibility shall be provided in the piping between a cylinder and the gas piping system or regulator.

(D) Flexible connectors shall be installed in accordance with 6.9.6 of NFPA 58.

(E) Flexible connectors longer than the length allowed in the code, or fuel lines that incorporate hose, shall be used on where approved.

(F) The fixed piping system shall be designed, installed, supported, and secured to minimize the possibility of damage due to vibration, strains, or wear and to preclude any loosening while in transit.

(G) Piping shall be installed in a protected location.

(H) Where piping is installed outside the vehicle, it shall be installed as follows:

(1) Piping shall be under the vehicle and below any insulation or false bottom.

(2) Fastening or other protection shall be installed to prevent damage due to vibration or abrasion.

(3) At each point where piping passes through sheet metal or a structural member, a rubber grommet or equivalent protection shall be installed to prevent chafing.

(I) Gas piping shall be installed to enter the vehicle through the floor directly beneath or adjacent to the appliance served.

(J) If a branch line is installed, the tee connection shall be located in the main gas line under the floor and outside the vehicle.

(K) Exposed parts of the fixed piping system either shall be of corrosion-resistant material or shall be coated or protected to minimize exterior corrosion.

(L) Hydrostatic relief valves shall be installed in isolated sections of liquid piping as provide in Section 6.13 of NFPA 58.

(M) Piping systems, including hose, shall be pressure tested and proven free of leaks in accordance with Section 6.14 of NFPA 58.

(N) Piping installations completed by a licensed installer prior to the adoption of this Code, may be approved by the AHJ.

50.7.2.4.5.2 There shall be no fuel connection between a tractor and trailer or other vehicle units.

50.7.2.4.6 Equipment Installation. Equipment shall be installed in accordance with Section 6.18 of NFPA 58, 50.7.2.4.6.1, and 50.7.2.4.6.2.

50.7.2.4.6.1 Installation shall be made in accordance with manufacturer's recommendations and, in the case of approved equipment, as provided in the approval.

50.7.2.4.6.2 Equipment installed on vehicles shall be protected against vehicular damage as provided for container appurtenances and connections in 50.7.2.4.3.4(E).

50.7.2.4.7 Appliance Installation on Vehicles

50.7.2.4.7.1 Subsection 50.7.2.4.7 shall apply to the installation of all appliances on vehicles. It shall not apply to engines.

50.7.2.4.7.2 All appliances covered by 50.7.2.4.7 installed on vehicles shall be approved.

50.7.2.4.7.3 Where the device or appliance, such as a cargo heater or cooler, is designed to be in operation while the vehicle is in transit, means, such as an excess-flow valve, to stop the flow of gas in the event of a line break shall be installed.

50.7.2.4.7.4 Gas-fired heating appliances shall be equipped with shutoffs in accordance with 5.20.7(A) of NFPA 58, except for portable heaters used with cylinders having a maximum water capacity of 2.7 lb (1.2 kg), portable torches, melting pots, and tar kettles.

50.7.2.4.7.5 Gas-fired heating appliances, other than ranges and illuminating appliances installed on vehicles intended for human occupancy, shall be designed or installed to provide for a complete separation of the combustion system from the atmosphere inside the vehicle.

50.7.2.4.7.6* Where unvented-type heaters that are designed to protect cargo are used on vehicles not intended for human occupancy, provisions shall be made to provide air from the outside for combustion and dispose of the products of combustion to the outside.

50.7.2.4.7.7 Appliances installed in the cargo space of a vehicle shall be readily accessible whether the vehicle is loaded or empty.

50.7.2.4.7.8 Appliances shall be constructed or otherwise protected to minimize possible damage or impaired operation due to cargo shifting or handling.

50.7.2.4.7.9 Appliances shall be located so that a fire at any appliance will not block egress of persons from the vehicle.

50.7.2.4.7.10 A permanent caution plate shall be affixed to either the appliance or the vehicle outside of any enclosure, shall be adjacent to the container(s), and shall include the following instructions:

CAUTION:

(1) Be sure all appliance valves are closed before opening container valve.

(2) Connections at the appliances, regulators, and containers shall be checked periodically for leaks with soapy water or its equivalent.

(3) Never use a match or flame to check for leaks.

(4) Container valves shall be closed when equipment is not in use.

50.7.2.4.7.11 Gas-fired heating appliances and water heaters shall be equipped with automatic devices designed to shut off the flow of gas to the main burner and the pilot in the event the pilot flame is extinguished.

50.7.2.4.8 General Precautions.

50.7.2.4.8.1 Mobile units including mobile kitchens and catering vehicles that contain hot plates and other cooking equipment shall be provided with at least one approved portable fire extinguisher rated in accordance with NFPA 10, Standard for Portable Fire Extinguishers, at not less than 10-BC.

50.7.2.4.8.2 Where fire extinguishers have more than one letter classification, they shall be considered as meeting the requirements of each letter class.

50.7.2.4.9 Parking, Servicing, and Repair.

50.7.2.4.9.1 Where vehicles with LP-Gas fuel systems used for purposes other than propulsion are parked, serviced, or repaired inside buildings, the requirements of 50.7.2.4.9.2 through 50.7.2.4.9.4 shall apply.

50.7.2.4.9.2 The fuel system shall be leak-free, and the container(s) shall not be filled beyond the limits specified in Chapter 7 of NFPA 58.

50.7.2.4.9.3 The container shutoff valve shall be closed, except that the container shutoff valve shall not be required to be closed when fuel is required for test or repair.

50.7.2.4.9.4 The vehicle shall not be parked near sources of heat, open flames, or similar sources of ignition, or near unventilated pits.

50.7.2.4.9.5 Vehicles having containers with water capacities larger than 300 gal (1.1 m³) shall comply with the requirements of Section 9.7 of NFPA 58.

50.7.2.4.10 Containers shall be designed, fabricated, tested, and marked (or stamped) in accordance with the regulations of the U.S. Department of Transportation (DOT); the ASME Code, Section VIII, "Rules for the Construction of Unfired Pressure Vessels"; or the API-ASME Code for Unfired Pressure Vessels for Petroleum Liquids and Gases, except for UG-125 through UG-136.

(A) Used containers constructed to specification of the Association of American Railroads shall not be installed.

(B) Adherence to applicable ASME Code case interpretations and addenda that have been adopted and published by ASME 180 calendar days prior to the effective date of this code shall be considered as compliant with the ASME Code.

(C) Where containers fabricated to earlier editions of regulations, rules, or codes listed in 5.2.1.1 of NFPA 58, and of the Interstate Commerce Commission (ICC) Rules for Construction of Unfired Pressure Vessels, prior to April 1, 1967, are used, the requirements of Section 1.4 of NFPA 58 shall apply.

50.7.2.4.10.1 Containers that show excessive denting, bulging, gouging, or corrosion shall be removed from service.

50.7.2.4.11 Where a hose or swivel-type piping is used for liquid transfer, it shall be protected as follows:

(1) An emergency shutoff valve shall be installed at the railroad tank car end of the hose or swivel-type piping where flow into or out of the railroad tank car is possible.

(2) An emergency shutoff valve or a backflow check valve shall be installed on the railroad tank car end of the hose or swivel-type piping where flow is only into the railroad tank car.

(3)* Where a facility hose is used at a LP-Gas bulk plant or industrial plant to transfer LP-Gas liquid from a cargo tank vehicle in non-metered service to a bulk plant or industrial plant, the facility hose or the facility shall be equipped with an emergency discharge control system that provides a means to shut down the flow of LP-Gas caused by the complete separation of the facility hose within 20 seconds and without the need for human intervention.

50.7.2.4.11.1 After installation or modification, piping systems (including hose) shall be proven free of leaks by performing a pressure test at not less than the normal operating pressure.

50.7.2.4.12 General Location of Cylinders.

50.7.2.4.12.1 Cylinders in storage shall be located to minimize exposure to excessive temperature rises, physical damage, or tampering.

50.7.2.4.12.2 Cylinders in storage having individual water capacity greater than 2.7 lb (1.1 kg) [nominal 1 lb (0.45 kg) LP-Gas capacity] shall be positioned so that the pressure relief valve is in direct communication with the vapor space of the cylinder.

50.7.2.4.12.3 Cylinders stored in buildings in accordance with Section 8.3 of NFPA 58 shall not be located near exits, near stairways, or in areas normally used, or intended to be used, for the safe egress of occupants.

50.7.2.4.12.4 If empty cylinders that have been in LP-Gas service are stored indoors, they shall be considered as full cylinders for the purposes of determining the maximum quantities of LP-Gas permitted by 8.3.1, 8.3.2.1, and 8.3.3.1 of NFPA 58.

50.7.2.4.12.5 Cylinders shall not be stored on roofs.

50.7.2.4.13 Protection of Valves on Cylinders in Storage.

50.7.2.4.13.1 Cylinder valves shall be protected as required by 5.2.6.1 and 7.2.2.5 of NFPA 58.

50.7.2.4.13.2 Screw-on-type caps or collars shall be in place on all cylinders stored, regardless of whether they are full, partially full, or empty, and cylinder outlet valves shall be closed.

50.7.2.4.13.3 Valve outlets on cylinders less than 108 lb (49 kg) water capacity [nominal 45 lb (20 kg) propane capacity] shall be plugged, capped, or sealed in accordance with 7.2.2.5 of NFPA 58.

50.7.2.4.14 Transportation of Cylinders.

50.7.2.4.14.1 Cylinders having an individual water capacity not exceeding 1000 lb (454 kg) [nominal 420 lb (191 kg) propane capacity], when filled with LP-Gas, shall be transported in accordance with the requirements of Section 9.3 of NFPA 58.

50.7.2.4.14.2 Cylinders shall be constructed as provided in Section 5.2 of NFPA 58 and equipped in accordance with Section 5.7 of NFPA 58 for transportation as cylinders.

50.7.2.4.14.3 The quantity of LP-Gas in cylinders shall be in accordance with Chapter 7 of NFPA 58.

50.7.2.4.14.4 Cylinder valves shall comply with the following:

(1) Valves of cylinders shall be protected in accordance with 5.2.6.1 of NFPA 58.

(2) Screw-on-type protecting caps or collars shall be secured in place.

(3) The provisions of 7.2.2.5 of NFPA 58 shall apply.

50.7.2.4.14.5 The cargo space of the vehicle shall be isolated from the driver's compartment, the engine, and the engine's exhaust system.

(A) Open-bodied vehicles shall be considered to be in compliance with this provision.

(B) Closed-bodied vehicles having separate cargo, driver, and engine compartments shall be considered to be in compliance with this provision.

(C) Closed-bodied vehicles, such as passenger cars, vans, and station wagons, shall not be used for transporting more than 215 lb (98 kg) water capacity [nominal 90 lb (41 kg) propane capacity], but not more than 108 lb (49 kg) water capacity [nominal 45 lb (20) kg) propane capacity] per cylinder, unless the driver and engine compartments are separated from the cargo space by a vaportight partition that contains no means of access to the cargo space.

50.7.2.4.14.6 Cylinders and their appurtenances shall be determined to be leak-free before being loaded into vehicles.

50.7.2.4.14.7 Cylinders shall be loaded into vehicles with flat floors or equipped with racks for holding cylinders.

50.7.2.4.14.8 Cylinders shall be fastened in position to minimize the possibility of movement, tipping, and physical damage.

50.7.2.4.14.9 Cylinders being transported by vehicles shall be positioned in accordance with Table 50.7.2.4.14.9.

50.7.2.4.14.10 Vehicles transporting cylinders where the total weight is more than 1000 lb (454 kg), including the weight of the LP-Gas and the cylinders, shall be placarded as required by DOT regulations or state law.

50.7.3 Temporary Cooking

50.7.3.1 Temporary cooking operations and equipment shall comply with NFPA 96, 50.7.1 and this section.

50.7.3.2 Temporary cooking equipment and installations shall comply with NFPA 58.

50.7.3.3 Deep fat fryers, fry-o-laters, or other appliances having combustible liquids heated by LP Gas, solid fuels or electricity shall be protected by an approved hood fire suppression system, or other approved means of extinguishment in the event of fire.

50.7.3.4 Mobile cooking operations licensed by the Florida Department of Business and Professional Regulation prior to the adoption of this Code shall not be required to comply with the provisions of 50.7.3 until January 1, 2020.

50.7.4 A battery powered audible flammable / combustible gas detector shall be installed in all enclosed compartments where gas appliances, piping or cylinders are present.