

# CHARLESTON FIRE DEPARTMENT

## Fire Marshal Division

### Information Bulletin

## Storage of Portable LP Gas Container – Use or Resale



The following code sections from the 2015 International Fire Code regulate the position and placement of LP Gas container storage locations when the cylinders are awaiting use or resale. This information is not all-inclusive and is only intended to be used as a general guideline when planning the placement LP containers awaiting use or resale. General precautions include:

- No smoking within 25 feet of the storage area. The immediate area surrounding the storage containers shall be posted with a readily visible “No Smoking” sign.
- Enclosed containers shall be labeled to clearly indicate the storage of “Propane”.
- Combustible materials (weeds, grass, brush, other combustibles) shall be kept a minimum of 10 feet from the storage location.
- If the quantity of propane exceeds 720 lb at least one portable fire extinguisher will be located within 50 feet of the storage location. The extinguisher must have a minimum capacity of 18 lb dry chemical with a B:C rating.

**6109.12 Location of storage outside of buildings.** Storage outside of buildings of containers awaiting use, resale or part of a cylinder exchange program shall be located in accordance with Table 6109.12.

TABLE 6109.12  
SEPARATION FROM EXPOSURES OF LP-GAS CONTAINERS AWAITING USE,  
RESELL OR EXCHANGE STORED OUTSIDE OF BUILDINGS

QUANTITY OF LP-GAS STORED (pounds)	MINIMUM SEPARATION DISTANCE FROM STORED LP-GAS CYLINDERS TO (feet):						
	Nearest important building or group of buildings or line of adjoining property that may be built upon	Line of adjoining property occupied by schools, places of religious worship, hospitals, athletic fields or other points of public gathering; busy thoroughfares; or sidewalks	LP-gas dispensing station	Doorway or opening to a building with two or more means of egress	Doorway or opening to a building with one means of egress	Combustible materials	Motor vehicle fuel dispenser
720 or less	0	0	5	5	10	10	20
721 – 2,500	0	10	10	5	10	10	20
2,501 – 6,000	10	10	10	10	10	10	20
6,001 – 10,000	20	20	20	20	20	10	20
Over 10,000	25	25	25	25	25	10	20

For SI: 1 foot = 304.8 mm, 1 pound = 0.454 kg.

**6109.13 Protection of containers.** LP-gas containers shall be stored within a suitable enclosure or otherwise protected against tampering. Vehicle impact protection shall be provided as required by section 6107.4.

**Exception:** Vehicle impact protection shall not be required for protection of LP-gas containers where the containers are kept in lockable, ventilated cabinets of metal construction.

**6109.14 Alternative location and protection of storage.** Where the provisions of Section 6109.12 and 6109.13 are impractical at construction sites, or at buildings or structures undergoing major renovation or repairs, the storage of containers shall be as required by the fire code official.

**6109.15 LP-gas cylinder exchange for resale.** In addition to the other applicable requirements of this chapter, facilities operating LP-gas cylinder exchange stations that are accessible to the public shall comply with the following requirements.

1. Cylinders shall be secured in a lockable, ventilated metal cabinet or other approved enclosure.
2. Cylinders shall be accessible only by authorized personnel or by use of automated exchange system in accordance with section 6109.15.1.
3. A sign shall be posted on the entry door of the business operating the cylinder exchange stating “DO NOT BRING LP-GAS CYLINDERS INTO THE BUILDING” or similar approved wording.
4. An emergency contact information sign shall be posted within 10 feet of the cylinder storage cabinet. The content, lettering, size, color and location of the required sign shall be as required by the fire code official.

**6109.15.1 Automated cylinder exchange stations.** Cylinder exchange stations that include an automated vending system for exchanging cylinders shall comply with the following additional requirements:

1. The vending system shall only permit access to a single cylinder per individual transaction.
2. Cabinets storing cylinders shall be designed such that cylinders can only be placed inside when they are oriented in the upright position.
3. Devices operating door releases for access to stored cylinders shall be permitted to be pneumatic, mechanical or electrically powered.
4. Electrical equipment inside of or within 5 feet of a cabinet storing cylinders, including but not limited to electronics associated with vending operations, shall comply with the requirements for Class I, Division 2 equipment in accordance with NFPA 70.
5. A manual override control shall be permitted for use by authorized personnel. On newly installed cylinder exchange stations, the vending system shall not be capable of returning to automatic operation after a manual override until the system has been inspected and reset by authorized personnel.
6. Inspections shall be conducted by authorized personnel to verify that all cylinders are secured, access doors are closed and the station has no visible damage or obvious defects, which necessitate placing the station out of service. The frequency of the inspections shall be as specified as the fire code official.

All storage locations for LP gas must be protected against accidental impact from vehicles. Impact protection must be in accordance with International Fire Code Section 312.

All locations must be approved prior to installation. Contact the City of Charleston Fire Department – Fire Marshal Division at (843)724-3429 for additional information.