FIRE DEPARTMENT - CLASS 1 • FIRE AND ENVIRONMENTAL PROTECTION DIVISION 500 Castro Street • City Hall • 4th Floor • Mountain View • California • 94041-2010 650-903-6378 • Fax 650-962-1430

GUIDELINES FOR STORAGE AND USE OF PORTABLE PROPANE/ LIQUEFIED PETROLEUM GAS (LPG) FOR OUTDOOR HEATERS

Authority Cited: California Fire Code (CFC)

REQUIREMENTS

1. Propane/LPG Heaters in Use:

- a. LPG heaters shall be listed and approved, and installed and maintained in accordance with the manufacturer's instructions. [CFC Section 603.4.2.2.]
- b. LPG heaters in use shall be separated from combustibles, including umbrellas and street trees, as set forth in the manufacturer's product listing but not less than five feet (5'). In the absence of an owner's manual stating otherwise, the horizontal and vertical clearances shall be not less than five feet (5'). [NOTE: Most heaters have distance requirements stated on a permanently attached plate.] [CFC Section 603.4.2.1.3]
- c. LPG heaters shall not be stored or used at a location less than five feet (5') from the building. [CFC Section 603.4.2.1.2]
- d. Structures such as walls, solid fences, earth or concrete barriers, and other similar structures shall be avoided around or over LPG heaters. [NOTE: The base of the heater contains the LPG cylinder, and the presence of such structures can create significant hazards such as pocketing of escaping gas, interference with the application of cooling water by firefighters, and the redirection of flames against the LPG cylinders.]
- e. LPG heaters are prohibited inside tents and temporary membrane structures, on exterior balconies, and inside any occupancy when connected to the fuel gas container. [CFC Section 603.4.2.1.1]
- f. Sources of ignition shall be prohibited within proximity of any LPG heater. "NO SMOKING" signs shall be conspicuously posted at affected locations. [CFC Sections 305.1 and 310.3]

- g. LPG heaters shall not be located within five feet (5') of exits or exit discharges. [CFC Section 603.4.2.1.4]
- h. LPG heaters shall not be located on a public sidewalk.

2. Propane/LPG Cylinders in Storage:

- a. LPG cylinders shall not be stored or used in buildings open to the public. [CFC Sections 6103.2.1 and 6109.9]
- b. LPG cylinders shall be located in a manner which minimizes exposure to excessive temperature rise, physical damage, or tampering. [CFC Section 6109.2]
- c. LPG cylinders shall not be located on roofs. [CFC Section 6109.6]
- d. LPG cylinders shall not be located in basements, pits, or similar locations where heavier-than-air gas might collect. [CFC Section 6109.7]
- e. When exposed to probable vehicular traffic, LPG cylinders shall be suitably protected from impact. [CFC Section 6109.13]
- f. LPG cylinders shall be stored or used in an upright position. Cylinder outlet valves shall be closed or plugged. [CFC Section 6109.8]
- g. LPG cylinder storage outside of buildings shall be located at least five feet (5') from any doorway or opening in a building frequented by the public where occupants have at least two exits. For buildings or sections of buildings having only one exit, the location of such storage from the doorway or opening shall be at least ten feet (10').
- h. The maximum quantity of LPG cylinders allowed in storage shall not exceed the number of heaters in use at the business. For example, if two heaters are in use at a business, a maximum of two replacement LPG cylinders are allowed to be stored.
- i. Stored LPG cylinders shall be protected by either:
 - i. An enclosure with at least a six-foot (6') high industrial-type fence; or
 - ii. A lockable, ventilated metal locker or rack that prevents tampering with valves and pilferage of the cylinder. [CFC Section 6109.13]

[NOTE: Contact the City Community Development Department (Planning Division) prior to purchasing or installing any type of exterior enclosure. A solid fence is not allowed because it is important to allow air to circulate freely.]

j. Structures such as walls, solid fences, earth or concrete barriers, and other similar structures shall be avoided around or over LPG cylinders.

[NOTE: The presence of such structures can create significant hazards such as pocketing of escaping gas, interference with the application of cooling water by firefighters, and the redirection of flames against the LPG cylinders.]

3. Types of Heaters Prohibited/Allowed by the City's Community Development Department (Planning Division):

Figure 1—Prohibited Figure 2—Allowed Figure 3—Trial Figure 4—Trial