

# Seattle Fire Department

## Permit Conditions

8202-STO  
8202-R

### LPG - Tanks and Containers

This permit shall be kept on the premises designated herein at all times and shall be readily available for inspection by the fire code official. [SFC 105.3.5]

**Storage, handling and transportation of liquefied petroleum gas (LP-gas) and the installation of LP-gas equipment pertinent to systems for such uses shall comply with SFC Chapter(s) 1, 3, 9, 39, 61, and NFPA 54 and 58.**

#### GENERAL:

1. The smoking or carrying of a lighted pipe, cigar, cigarette, or any other type of smoking paraphernalia, including "vaping pens" is prohibited within 25 feet of LPG storage or use. (SFC 310.1)
2. The *fire code official* is authorized to order the posting of "No Smoking" signs in a conspicuous location in each structure or location in which smoking is prohibited. The content, lettering, size, color and location of required "No Smoking" signs shall be *approved*. (SFC 6107.2, 310.3)
  - a. See *Seattle Municipal Code 10.64* for requirements for posting "No Smoking" signs in public places
3. A posted "No Smoking" sign shall not be obscured, removed, defaced, mutilated or destroyed. (SFC 310.4)
4. LP- gas containers, cylinders, tanks and systems which could be exposed to physical damage shall be protected from vehicular damage by guard posts or other *approved* means. (SFC 5003.9.3 and 6107.4)
5. LP- gas containers, cylinders and tanks shall be designed, fabricated, tested, marked with the specifications of manufacture and maintained in accordance with the regulations of DOT 49 CFR or the ASME *Boiler and Pressure Vessel Code*, Section VIII. (NFPA 58: 5.2)
6. Stationary LP- gas containers, cylinders and tanks shall be marked with the name of the gas and as specified in NFPA 704. Markings shall be visible from any direction of approach. (SFC 5003.5)
7. Areas used for the storage, use and handling of LP- gas containers, cylinders, tanks and systems shall be secured against unauthorized entry and safeguarded in an *approved* manner. (SFC 5003.9.2)
8. LP-gas containers, cylinders and tanks shall be secured to prevent falling caused by contact, vibration or seismic activity. (SFC 5003.2.8)
9. LP- gas containers, cylinders and tanks designed for protective caps, collars or other protective devices shall have the caps or devices in place except when the containers, cylinders or tanks are in use or are being serviced or filled. (SFC 5003.10.1)
10. LP- gas containers, cylinders and tanks and systems in storage or use shall be separated from materials and conditions which pose exposure hazards to or from each other. (SFC 5003.9.8)
11. LP- gas containers, cylinders, tanks and systems shall not be located where they could become part of an electrical circuit. LP- gas containers, cylinders, tanks and systems shall not be used for electrical grounding. (SFC 5003.9.4 and 5003.9.5)

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8202-STO  
8202-R

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12. Service, repair, modification or removal of valves, pressure-relief devices or other *LP-gas* container, cylinder or tank appurtenances shall be performed by trained personnel. (NFPA 58: Section 4.4)
13. *LP-gas* containers, cylinders and tanks which have been exposed to fire shall be removed from service. (NFPA 58: Section 5.2.1.2)
14. Leaking, damaged or corroded *LP-gas* containers, cylinders and tanks shall be removed from service. (NFPA 58: Section 5.2.3.2 and 5.2.3.4)
15. *LP-gas* containers shall not be filled or maintained with *LP-gas* in excess of either the volume or weight, determined by the water capacity marked on the container. (SFC 6106.2)
16. Safety devices on *LP-gas* containers shall not be tampered with or made ineffective. (SFC 6107.1)
17. Weeds, grass, brush, trash and other combustible materials shall be kept a minimum of 10 feet from *LP-gas* tanks or containers. (SFC 6107.3)
18. A portable fire extinguisher with a minimum rating of 40-BC shall be located a minimum of 10 feet from and a maximum travel distance of 30 feet from portable *LP-gas* containers. (SFC 6108.2, Table 906.1)
19. *LP-gas* containers whose use has been temporarily discontinued shall be disconnected from appliance piping, have *LP-gas* container outlets, except relief valves, closed or plugged, and be positioned with the relief valve in direct communication with the *LP-gas* container vapor space. (SFC 6110.1)
20. *LP-gas* containers to be placed permanently out of service shall be removed from the site. (SFC 6110.2)
21. Above ground cylinders shall not be in contact with the soil. (NFPA 58: 6.8.2.2)
22. Vehicular protection shall be provided as required by the *fire code official*. Enclosures exposed to probable vehicular damage, including forklift traffic, driveways or parking areas shall be suitably protected on all four sides by guard posts or other approved methods. (SFC 6109.13)
23. Containers installed underground; NOT subjected to vehicle traffic shall be installed at least 6 inches below grade. (NFPA 58: 6.8.6.1)
24. Containers installed underground, within 10 feet of possible vehicle traffic, shall be installed 18" underground or vehicular barrier protection shall be provided. (NFPA 58: 6.8.6.1)
25. Fire District Restrictions. Storage and use of *LP-gas* containers having an individual capacity in excess of 239 pounds water capacity [nominal 100 pounds *LP-gas* capacity] and all stationary installations are prohibited in the Fire District. (SFC 6104.2)  
  
Exception: *Containers and stationary installations up to 500 gallons LP-gas capacity west of Alaskan Way*
26. *LP-gas* containers shall be located away from buildings, public ways, and lot lines according to Table 6104.3 in the Seattle Fire Code. (SFC Table 6104.3)

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LP-Gas Container Capacity (water gallons)	Minimum Separation Between LP-Gas Containers and Buildings, Public Ways or Lot Lines of Adjoining Property that can be built upon		Minimum separation between LP-Gas Containers (feet)
	Mounded or underground LP-Gas containers (feet)	Above-ground LP-Gas containers (feet)	
Less than 125	10	5	None
125 to 250	10	10	None
251 to 500	10	10	3
501 to 2,000	10	25	3
2,001 to 30,000	50	50	5
30,001 to 70,000	50	75	(0.25 of sum of diameters of adjacent LP-gas containers)
70,001 to 90,000	50	100	
90,001 to 120,000	50	125	

#### RELATED TO CONTAINERS IN STORAGE

27. Containers in storage having individual water capacities greater than 2.7 pounds (1lb LP-Gas capacity) shall be positioned with the pressure-relief valve in direct communication with the vapor space of the container. (SFC 6109.3)
28. LP-gas containers stored in buildings in accordance with Sections 6109.9 and 6109.11 shall not be located near *exit access doors, exits, stairways* or in areas normally used, or intended to be used, as a *means of egress*. (SFC 6109.4)
29. Empty LP-gas containers, previously used, shall be considered as full containers for the purpose of determining the maximum quantities of LP-gas. (SFC 6109.5)
30. LP-gas containers that are not connected for use shall not be stored on roofs. (SFC 6109.6)
31. LP-gas containers shall not be stored in a basement, pit or similar location where heavier-than-air gas might collect. (SFC 6109.7)
32. Storage of LP-gas, outside in cylinder cages shall meet the following:
  - a. At least 10 feet from openings into buildings including inoperable windows
  - b. At least 10 feet from any combustible material.
  - c. At least 20 feet from any motor vehicle fuel dispenser. (SFC 6109.12 and Table 6109.12)
33. LP-gas containers shall be stored within a suitable enclosure or otherwise protected against tampering. Vehicle impact protection is not required for protection of containers that are kept in lockable, ventilated cabinets or metal construction. (SFC 6109.13)

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8202-STO  
8202-R

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USING LP-GAS FOR PLANT EXTRACTION:

34. LP-gases shall not be released to the atmosphere except when allowed in NFPA 58 Section 7.3. (SFC 3903.6)
35. Any room or area where LP-gas is used for extraction shall be provided with a flammable gas detection system. (SFC 3905.1)
36. Any room or area where LP-gas is used for extraction shall be provided with an exhaust ventilation system. (NFPA 58: 10.2.2)
37. A building permit issued by the Seattle Department of Construction and Inspections (SDCI) is required for any modifications made to the building. If the occupancy of the building using flammable or combustible liquids for plant extraction is other than a Group F-1, a building permit for a change of occupancy is required from SDCI. If the quantity of hazardous materials exceeds the maximum allowable quantities per Chapter 50 of the SFC, the occupancy is required to be a Group H and will require the installation of automatic fire sprinkler system in addition to other safety features depending on the specific hazards within the building.
38. An electrical permit issued by SDCI is required any time electrical wiring is installed, altered, extended, or connected to any electrical equipment.
39. A mechanical permit issued by SDCI is required for the installation of mechanical equipment such as exhaust or fume hood systems.
40. A plumbing permit issued by Public Health-Seattle & King County is required for the installation of gas piping.

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## LPG - Tanks and Containers

### City of Seattle Map of Fire District

**Black Region**

Fire District (Temporary Permit Required)

**Grey Region**

Outside the Fire District (Validation Number Required)

