

Clark County Fire Department FIRE PREVENTION BUREAU

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PERMIT GUIDE LIQUEFIED PETROLEUM GAS

This guide is to assist in the permitting process for a temporary permit or an annual renewable operational permit for the storage or use of Liquefied Petroleum Gas – LP-gas. Typical LP-gas is a blend of propane, propylene, butane, isobutene, or butylene. An annually renewable operational permit is required per section 105.6.27 of the IFC. A temporary permit is required when LP-gas is used on a temporary basis such as for an outdoor event.

PERMIT TYPES:

- A. TEMPORAY PERMIT; LP-gas storage and use for a temporary event
 - **Permit Threshold:** An LP-gas Permit **is required for any amount** used in an Assembly occupancy (Use Group A). Note that use of LP-gas for demonstrations indoors is limited to a 12-pound water capacity container.
 - **Permit Duration:** Duration for temporary permit is 0-180 days.

B. ANNUAL RENEWABLE PERMIT; LP-gas permanent storage and use

- Permit Threshold: A LP-gas permit is required for all storage/use of LP-gas in excess of 30 gallons aggregate water capacity.
- Maximum LP-gas Storage size.
 - > within a building with access to the public is 200lbs/24 gallons water capacity
 - within a building with no access to public is 735lbs/88 gallons water capacity
- **Permit Duration:** Annual Renewable Permits are valid for one (1) year from the date issued and need to be renewed annually. Changes to the originally permitted quantities or storage arrangements must be recorded by submitting for a revision.

EXCEPTION TO RENEWABLE PERMIT: Individual containers of 500-gallon water capacity or less serving single family homes (Use Group R-3) do not require an annual renewable permit. A permit is only required for the initial installation.

ADDITIONAL PERMITS MAY BE NEEDED: When LP-gas is being dispensed into a vehicle tank such as motor fuel; a **Motor Fuel Dispensing Permit** must be obtained.

APPLICABLE CODES:

The following codes and standard apply to this permit.

• *International Fire Code*, 2018 edition (IFC)

Permit Guide: Liquefied Petroleum Gas, (cont'd)

- Clark County Fire Code Amendments, 2018 edition (CCFC)
- Liquified Petroleum Gas Code, 2017 Edition NFPA 58

Link to CCFC: See the amendments to codes using the link below:

https://cms8.revize.com/revize/clarknv/Building%20&%20Fire%20Prevention/Codes/ClarkCounty_FireCodeAmendmens2018.pdf?t=1598331770575&t=1598331770575

SUBMITTAL REQUIREMENT CHECKLIST:

The listed requirements in this guide are not intended to be all inclusive, nor do they entail a limit to the extent of the information, etc., which may be necessary to properly evaluate the submitted plans and documents. Not all items may apply to your project.

Construction Documents: Provide all applicable information that pertains to your permit.

- 1. Project name, address, and Assessor's Parcel Number (APN).
- 2. Contractor's/Owner's contact information.
- 3. Provide **Site Plan** of the building showing the following locations. Refer to separation distances in charts provided in IFC Table 6104.3/6109.12 and provide the storage tank(s) locations and **distances to the following items on your property that apply:**
 - Dimensions to nearest buildings or nearest habitable structure
 - Distance between storage tanks
 - Distance to doorways or openings
 - Clearances to combustibles (minimum 10 feet)
 - Distance to property lines to any properties occupied to public gatherings or busy throughfares such as schools, hospitals, or athletic fields
 - Distances to LP-gas dispensing station or motor vehicle fuel dispenser
 - Provide the location of required "No Smoking" signs when there is a point of transfer within 25ft.
 - Indicate the fire extinguisher location and type:
 - ➤ Minimum capacity of dry chemical rated 2A-60BC / 10lbs for up to 720 lbs. of LP-gas.
 - ➤ For storage of greater than 720 lbs. must provide fire extinguisher rated 10A:80BC / 20 lbs. dry chemical capacity located within 50 ft.

Provide information on Storage Tank(s):

- State the total storage of LP-gas in gallons
- Include quantity, make, model, and size of the tank
- Provide a copy of manufacturer's specification sheets for tank.
- Indicate the tank storage method; rack or cabinet, and method of vehicle impact protection.
- Indicate whether tank is indoors or outdoors and whether it is above grade or buried.
- Show the corrosion protection coating and cathodic protection and anode maintenance schedule for the underground tanks.
- Show that pressure relief devices are provided.
- See Appendix A for additional information on tank sizes

APPENDIX A GLOSSARY

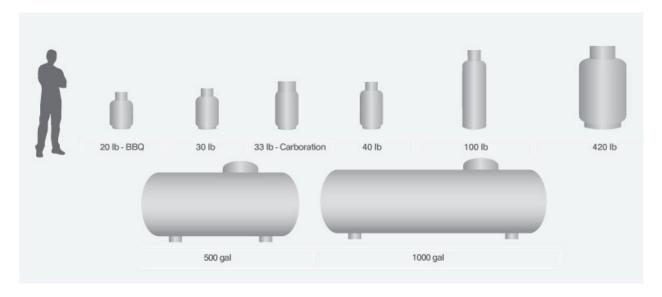
Propane tanks are typically referred to by their weight or how many pounds they weight when full.

LPG STORAGE: LPG Cylinders are designed to be filled to approximately 80% capacity. The 20% vapor space allows for the expansion of the product due to heat.

LPG TANK STORAGE: GENERAL LPG TANK SIZE DESCRIPTIONS:



1 LB



PROPANE TANK DESCRIPTION							
TANK SIZE	TANKS SIZE	TANK	PORTABLE	EXCHANGEABLE	ABOVE	BELOW	DESCRIPTION
IN LBS.	IN GALLONS	DIA.			GROUND	GROUND	
1	0.236	4"X 4"X 8"	Y	Y	Y	N	SMALL CAMPING APPLIANCES
20	5	1'-6" TALL X 1'-0" DIA	Y	Y	Y	N	PROPANE GRILLS, GENERATORS, PATIO HEATERS
33	8	2'-0" TALL X 1'-0" DIA	Y	Y	Y	N	FORKLIFT
100	25	4'-0" TALL X 1'-6" DIA	Y	Y	Y	N	RESIDENTIAL APPLIANCES FOR RV
420	100	4'-0" TALL X 3'-0" DIA	Y	Y	Y	N	HOME HEATING, DRYERS, FIREPLACES, POOL HEAT, WATER HEATER
N/A	500	5'-0" TALL X 10'-0"LONG	Y	Y	Y	Y	SMALL HOMES 2500-4500SQ.FT
		HOLDS 400 GALLONS @80%					
N/A	1,000	5'-0" TALL X 16'-0" LONG	Y	Y	Y	Y	COMMERICIAL APPLAINCES, HEATING, TRANSPORT RE-FUELING
		HOLDS 800 GALLONS @80%					