



## CLARK COUNTY FIRE DEPARTMENT - FIRE PREVENTION BUREAU

4701 W Russell Rd, Las Vegas, NV 89118 • (702) 455-7316

Website: [Fire Department \(clarkcountynv.gov\)](http://Fire Department (clarkcountynv.gov))

Email: [FPPCQ@clarkcountynv.gov](mailto:FPPCQ@clarkcountynv.gov)

### Permit Submittal Guideline

## LIQUEFIED PETROLEUM GAS(LPG)

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 (LPG). Typical LPG is a blend of propane, propylene, butane, isobutene, or butylene. Permits are required per IFC sections 105.5.30 and 105.6.16. A temporary permit is required when LPG is used on a temporary basis for an outdoor event.

### PERMIT THRESHOLD:

PERMIT TYPE	THRESHOLD
ANNUAL RENEWABLE	30 GALLONS/ 127 LBS.
TEMPORARY	REQUIRED FOR ANY AMOUNT USED IN AN ASSEMBLY EVENT MAXIMUM SIZE =1.5 GALLONS/ 12LB WATER CAPACITY

### FOR PORTABLE LPG CONTAINERS AWAITING USE OR RE-SALE:

STORAGE TANK LOCATION	MAXIMUM STORAGE SIZE
INSIDE BUILDING WITH ACCESS TO PUBLIC	200 LBS
INSIDE BUILDING WITH NO ACCESS TO PUBLIC	300 LBS

### PERMIT TYPES:

STORAGE TYPE	PERMIT TYPE	PERMIT DURATION
STORAGE LPG > 30 GALLONS	ANNUAL RENEWABLE	1 YEAR * RENEWED ANNUALLY
TEMPORARY STORAGE LPG > 30 GALLONS	TEMPORARY	0-180 DAYS
LPG DISPENSED INTO TANK > 30 GALLONS	MOTOR FUEL DISPENSING	1 YEAR *RENEWED ANNUALLY
GROUP R-3	CONSTRUCTION * ONLY NEEDED FOR INITIAL INSTALL	6 MONTHS

### APPLICABLE CODES:

The following codes and standard apply to this permit.

- *International Fire Code, 2024 edition (IFC)*
- *Clark County Fire Code Amendments, 2024 edition (CCFC)*
- *Liquified Petroleum Gas Code, 2023 edition NFPA 58*

## **SUBMITTAL REQUIREMENTS:**

The requirements listed 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. All documents shall be printed to .PDF file and uploaded as a PLAN.

### **1. PROJECT INFORMATION:**

- Project name, address, and APN (Assessor's Parcel Number).
- Contractor's/Owner's contact information.
- **Information on storage tanks; ABOVE GROUND;**
  - State the total storage of LPG in gallons. Include tank and cylinder sizes
  - Include quantity, make, model, and size of the tank.
  - Provide a copy of manufacturer's specification sheets for the tank.
  - The tank storage method (rack or cabinet, and method of vehicle impact protection)
  - Show that pressure relief devices are provided.
  - See Appendix A for additional information on tank sizes
- **Information on storage tanks; BURIED**
  - State the total storage of LPG in gallons.
  - Include quantity, make, model, and size of the tank.
  - Provide a copy of manufacturer's specification sheets for the tank.
  - Provide buoyancy calculations for the tank.
  - Show the corrosion protective coating and cathodic protection.
  - Provide the anode maintenance schedule for the underground tanks.
  - Provide information to support the selection of specific anodes.
  - Show that pressure relief devices are provided.
  - For containers 4,000+ gallons Fire Protection as required by NFPA 58 section 6.29

### **2. SITE PLAN:** 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. Show the distances to any occupied properties, public gatherings or busy thoroughfares such as schools, hospitals, or athletic fields.
- Provide the location of required "No Smoking" signs when there is a point of transfer within 25ft.
- **For Commercial installation** indicate the fire extinguisher location and type:
  - Minimum capacity of dry chemical rated 2A-60BC / 10lbs for up to 720 lbs. of LPG.
  - For storage of greater than 720 lbs. must provide fire extinguisher rated 10A:80BC / 20 lbs. dry chemical capacity located within 50 ft.

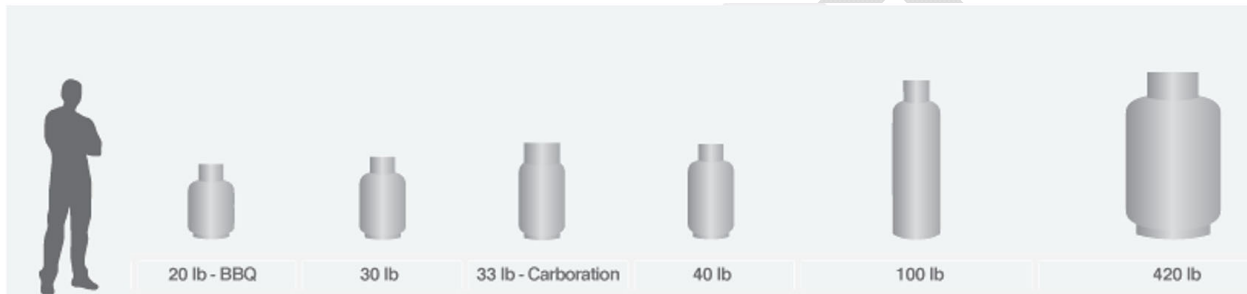
## APPENDIX A GLOSSARY

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.

**NOMINALLY:** Theoretical measurement that assumes the tank is filled to the maximum possible level. The total volume of water the tank can hold. Approximate (to account for liquid expansion/contraction of LPG). Example: A 20lb BBQ grill cylinder is nominally 5 gallons.

**LPG TANK STORAGE: GENERAL LPG TANK SIZE DESCRIPTIONS:**



LPG PORTABLE AND EXCHANGEABLE STORAGE TANKS			
TANK SIZE IN POUNDS	TANKS SIZE IN NOMINAL GALLONS	TANK DIAMETER	DESCRIPTION
1	.236	4"x4"x8"	SMALL CAMPING APPLIANCES
20	5	1'-6" tall x 1'-0" dia	PROPANE GRILLS, GENERATORS, PATIO HEATERS
33	8	2'-0" tall x 1'-0" dia	FORKLIFTS
100	25	4'-0" tall x 1'-6" dia	RESIDENTIAL APPLIANCES FOR RV
420	100	4'-0" tall x 3'-0" dia	HOME HEATING, DRYERS, FIREPLACES, POOL HEATERS



LARGE STATIONARY ABOVE GROUND/BURIED PROPANE TANKS			
TANKS SIZE IN GALLONS	TANK DIAMETER	CAPACITY	DESCRIPTION
500	5'-0" tall x 10'-0" long	HOLDS 400 GALLONS @ 80%	SMALL HOMES 2,500-4,500 SQ.FT.
1,000	5'-0" tall x 16'-0" long	HOLDS 800 GALLONS AT 80%	COMMERCIAL APPLIANCES, HEATING, TRANSPORT RE-FUELING