



LPG in industry

LPG is a highly flammable gas that will burn and may even explode when ignited. Anyone using LPG must know how to handle it safely, where to seek advice and what to do in an emergency.

If you use LPG you must:

- Have a fire evacuation plan, fire extinguishers and a first aid kit on hand.
- Make sure there are signs showing LPG is present and cylinders are labelled.
- Make sure that you and your staff are trained to use LPG safely.
- Make sure that you have a safety data sheet for LPG from your supplier.
- Make sure that you or a member of your staff are specifically responsible for the safe management of the LPG you have.

Limits for LPG indoors

Commercial premises that are a standalone building or share one wall with an adjacent premises must not have more than 10 kg of LPG for every 10 square metres of indoor floor area, up to a maximum of 100 kg.

In all other cases a maximum of 20 kg of LPG can be located indoors, irrespective of the floor area.

A commercial premises includes a hotel, bar, restaurant, public building, place of worship, shop, office or laboratory.

A factory or warehouse must not have more than 45 kg of LPG per 50 square metres of indoor floor area, up to a maximum of 180 kg and with a maximum cylinder size of 45 kg. Cylinders attached to a forklift truck need not be counted

Signs are required if you have:

- More than 50 kg of LPG inside a building.
- More than 250 kg outdoors.
- Any quantity in a refrigeration machinery room.

Signs may be purchased from health and safety product stockists. Your supplier will tell you what signs you need.

Installation

Twin-pack, multi-cylinder facilities and bulk storage tanks must comply with the hazardous substances legislation, the requirements of the Gas Act, and the health and safety in employment legislation.

All fixed gas appliances, including the pipes and hoses, must be installed by a licensed gasfitter. Ask the gas fitter for a certificate of compliance for the installation.

All cylinders over 13 kg must be securely held in place with chains and/or brackets. To prevent unauthorised access, cylinders with an aggregate quantity in excess of 100 kg of LPG should be secured in a lockable cage.

Sites with more than 100 kg

If your site has more than 100kg of LPG in one place, a test certifier must check the location is safe and issue a location test certificate. Your supplier will need to see your Location Test Certificate before they can supply LPG to you.

If you have LPG in several locations:

- they may be considered separately if they are more than five metres apart; and
- the area between is free of flammable or combustible materials such as waste materials or dry vegetation.

Locations that have less than 100 kg do not require a Location Test Certificate. However, you should not create multiple locations for the sole purpose of avoiding the need for one.

If your site has between 100 kg and 300 kg of LPG ongoing checks may be done by your supplier at their discretion. You must confirm that your supplier will do this. Otherwise, you must continue to use a test certifier to do the work.

If you have over 300 kg of LPG then a test certifier must renew your Location Test Certificate. It will be valid for one year but may be extended to three years. Ask your test certifier about an extension.



You can find a test certifier in your area by searching the test certifier database at www.epa.govt.nz.

Training

If you work with LPG, you should be trained and know what to do in an emergency.

An approved handler is required if a site has more than 100 kg and the LPG cylinders are not secure. Secure means that cylinder delivery, connection or disconnection is undertaken by your supplier.

Keeping safe

LPG leaks

Even a small gas leak can cause a serious fire. Make sure the appliances you use are safe by doing the following:

Check the connections

Inspect rubber seals, "O" rings and hoses for cracking or deterioration and replace any damaged parts.

Use the soapy water test

Each time you connect a cylinder, apply soapy water to the connections and turn on the cylinder. If bubbles appear, you have a leak.

Use your nose

LPG smells like rotten cabbage. If you can smell it, you have a leak.

Handle empty LPG cylinders with care

They contain vapour and are potentially dangerous.

Protecting people

- Avoid using any LPG appliance around children with respiratory problems.
- Stand away from the flame when operating the controls.
- Always keep your heater at least one metre away from anything that may catch fire.
- LPG appliances should not be used by children or infirm people. If you have young children or if there is a lot of foot traffic around your heater install a safety guard.
- When using heaters indoors, keep rooms well ventilated by leaving a window partially open to reduce condensation and allow heater emissions to dissipate.
- Keep appliance grills and vents clear of obstructions and free of lint and dust.
- Never use patio heaters or barbecues indoors.
- Never use your LPG cabinet heater in any bedroom, bathroom or small space.

In the event of fire

- Dial 111 for the Fire Service and tell them that LPG cylinder(s) are on the premises
- If it can be done safely, turn off the supply
- Leave the area

If you smell gas

- If it can be done safely, turn off the gas supply at the cylinder and turn off all gas appliances.
- Remove or extinguish potential ignition sources such as naked flames, cigarettes and electrical devices.
- Do not switch any electrical appliances on or off – this could cause a spark and ignite the gas.
- Open doors and windows to increase ventilation.
- If you cannot stop the leak, dial 111 and ask for the Fire Service.
- Do not reuse any defective cylinder or appliance until it has been tested and declared safe.

Approved Handler

If your staff swap over cylinders regularly one or more of them should become an approved handler.

To become an approved handler you must know about the safe use and handling of LPG, the equipment used and the hazardous substances legislation. A test certifier will issue you with a test certificate if satisfied with your qualifications.

An approved handler must always be available to give advice.



To find out more about storing and using LPG, talk to your supplier or check www.epa.govt.nz



Important contacts

Write the details of your LPG supplier here

Write the details of your LPG service agent here

Write the details of your test certifier here

Energy safety

0508 377 463

EPA Helpline

0800 376 234