# LPG CANISTER

The following guidelines are extracted from the HSE recommendations. NAReS recommend that each member group/society take these guidelines into to consideration when building camps whether modern, caravans, authentic or any other. This guidance is aimed at small-scale users of LPG in cylinders. For the purposes of this sheet, the term 'cylinders' includes disposable cartridges.

#### Hazards

LPG (propane or butane) is a colourless liquid which readily evaporates into a gas. It has no smell, although it will normally have an odour added to detect leaks. When mixed with air, the gas can burn or explode when it meets a source of ignition. It is heavier than air, so it tends to sink towards the ground. LPG can flow for long distances along the ground, and collect in drains, gullies and cellars. LPG is supplied in pressurised cylinders to keep it liquefied. The cylinders are strong and not easily damaged, although the valve at the top can be vulnerable to impact. Leaks can occur from valves and pipe connections, most likely as a gas. Liquid LPG can cause cold burns to the skin.

#### **Precautions**

# Cylinders not fixed in position

For cylinders not fixed in position, you should:

- keep all cylinders in a safe, well ventilated place, preferably in the open air, and away from occupied buildings, boundaries and sources of ignition and of heat;
- make sure the cylinders are properly secured and are kept upright.

## For all installations

Whether the cylinders are fixed in position or not, there are a number of precautions to take. You should:

- keep rubbish and anything combustible well away from the cylinders, and keep weeds and grass in the vicinity cut down. Don't use a chlorate-based weedkiller, as it can be a fire hazard;
- not allow any electrical equipment, vehicles, bonfires, barbecues or other sources
  of ignition near the cylinders. Exceptions are items purpose designed to use LPG,
  such as gas-fired barbecues;
- not smoke when changing cylinders;
- keep people not involved with the installation well away from it, particularly children;
- keep vehicles well away from the installation;
- make sure that the pipework or flexible hose from the cylinders to the point of use is protected against accidental damage, and is properly supported. For underground piping, make sure you know the route it takes, and avoid putting anything in the ground which may damage the pipework;
- report any equipment failure or damage to your supplier without delay, and ask them for advice about what you should do.

## **Deliveries**

If you have cylinders delivered, make sure you order the right number and type of replacements. Don't order more than you need, as you may not have space to keep them safely. On a delivery day, make sure the parking area is clear for the delivery vehicle. Keep away from the vehicle while the cylinders are being handled.

## If a fire or leak occurs

In the event of a fire or leak, take the following action:

- Dial 999 to call the fire brigade. Tell them LPG cylinders are on the premises.
- Tell everybody to leave the premises and go to a safe place well away from the installation. If you have a fire alarm, activate it.
- If it is safe to do so, turn off all LPG appliances.
- If you think you have an LPG leak at a cylinder or the associated pipework, call the LPG supplier so they can come and make safe. If an LPG appliance is leaking or is not working properly, ask a Gas Safe registered gas fitter to check it.
- If the leak is indoors, open all the doors and windows.
- Do not switch any lights or electrical equipment on or off, as this may cause a spark.
- A leak in the pipework can be stopped by closing the valve on the cylinder or on the piping manifold, but only do this if you approach the cylinders safely.

# Fire fighting

Don't try to put out a fire involving LPG – leave it to the fire brigade. It is safer to evacuate everyone from the area. An overheated cylinder can explode. If you have fire-fighting equipment for use on wood, rubbish etc., make sure that you know it, and that it is maintained regularly don't try to extinguish burning LPG. A fire involving grass, rubbish etc., can be tackled with a fire extinguisher or hose reel if it is safe do do so. Always call the fire brigade first. If the fire is near the cylinder or pipework, or if you cannot put it out quickly – LEAVE IT.

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