



## The keeping and use of LPG in vehicles such as mobile catering units.

This guidance covers the use of LPG cylinders (usually propane or butane) kept on or fitted to the vehicle and fixed tanks that are refilled for cooking (but not where LPG is used for vehicle fuel)

### Hazards:

- A risk of fire and explosion due to leakage/release of LPG into confined space of a vehicle or damage to the cylinder
- Difficulty in breathing due to leaking LPG displacing air or formation of toxic gases due to incomplete combustion if there is inadequate ventilation. LPG is odourised so may be detected by smell

### Controls

- Ensure all equipment is properly installed and inspected by a competent person
- Make sure the possibility of leakage is kept to a minimum (use rigid pipework, adequately supported and protected against accidental damage)
- Use pipework compatible with LPG and keep it as short as possible. Support it at 1m intervals (copper pipework at 0.5m intervals)
- Ensure adequate ventilation at high and low levels (install flues if necessary)
- Secure cylinders in a ventilated position in the open air, but not so that they are accessible to tampering or damage from other vehicles
- Cylinders can be stored in ventilated recessed compartments gas tight to the inside of the vehicle and with 30 minute fire resistance to internal walls
- Keep cylinders 1m away from openings into the vehicle and sources of ignition
- Ensure all staff are instructed in emergency procedures - keep appropriate fire fighting equipment i.e. a dry powder fire extinguisher, and a fire blanket if frying
- Don't keep more than one reserve cylinder if possible (on or with the Unit)
- Keep combustible materials (rubbish, cardboard boxes etc) away from cylinders
- Locate appliances so they do not prevent means of escape in case of a fire
- Adopt safe systems of work i.e. clear/safe instructions on changing cylinders and using appliances, no smoking near cylinders etc. Ensure staff are instructed and informed about the dangers of LPG and action to be taken in emergencies

A visual check of containers, pipework, appliances, vents and flues should be made daily. A simple written procedure and checklist may be appropriate.

Proprietary leak testing devices or soapy water can be used to test for leaks. This is ONLY appropriate for LPG. (NEVER use for testing any other gases such as Oxygen cylinders as this may cause an explosion).

For further information contact Environmental Services (01386 565233), Corgi engineer or the LPG or appliance supplier or manufacturer

## Pipework and Joints

- Pipework to the regulator should be as short as possible to allow flexibility
- Ensure the regulator (which is high pressure) is supported, correctly matched for the gas and sized for the appliances in use
- Where pipes pass through walls or partitions they should be protected from damage i.e. by rubber grommets and if under vehicles install pipes to avoid mechanical damage i.e. from stones
- Do not use flexible tubing where temperatures are over 50°C unless braided or armoured tubing is fitted.
- Tubing should be provided with integral threaded ends, or secured by crimping or by using a suitable hose clip.

## Appliances

- Ensure they are secured to the vehicle
- Flame failure devices are recommended for all appliances
- All LPG pipes must have an easily accessible shut-off valve or tap immediately before the appliance
- Appliances should be sited so that they do not prevent a means of escape in the case of a fire or other emergency

## Catering Appliances

### Fryers

- Automatic high temperature limiting devices must be fitted (cuts off gas supply to main burner if frying medium temperature >230°C) as well as a
- Automatic temperature control device fitted to control the temperature of the frying medium to a maximum 205°C – alternatively a tap or valve to control the burner with visual temperature device.
- Easily cleanable, non-corrodible, non-combustible, canopy or ventilation hood and flue to the outside air.

### Ventilation

- All compartments with LPG appliances must have unobstructed vents (apart from mesh for preventing pest entry) at high and low levels in addition to the windows, hatches and roof lights.

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