

# Maintaining your LPG tank

Domestic premises



# Key information for LPG tank siting

Safety is a fundamental value for our business, and part of our commitment to our customers is to ensure they stay safe. This information pack will help you keep your LPG tank sited in line with the requirements set by our trade association, Liquid Gas UK.

It's essential that you take good care of your installation and the area around it, which will ensure we can continue delivering your gas safely. If you don't look after your tank and surrounding area, you could be financially liable for any remedial work.

The information and diagrams within this pack show how far away your tank should be kept from buildings, boundaries, screenings (such as fences and walls), fixed sources of ignition, power cables and other potential hazards in your garden (such as weeds rubbish and combustible materials) which can reduce ventilation around the tank and are a fire risk.

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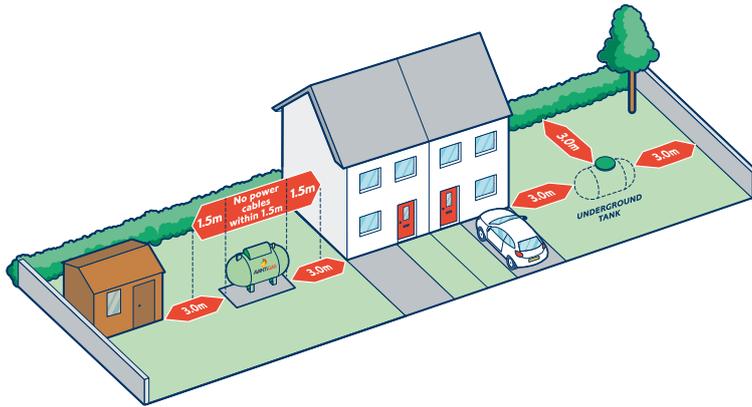


# Tank positioning

## A typical domestic installation

The most common LPG tank sizes on domestic premises are between >500 to 2,500 water capacity, and these need to have a 3 metre separation distance from many of the hazards listed. Some larger capacity tanks have a greater distance.

**You can find your tank size by checking your tank's data plate under 'water capacity'.**



To help you navigate the section below, firstly please see what tank size is on your property. Distances are taken from the nearest surface area of the tank for above ground tanks and from the centre of the lid on underground tanks.

### MINIMUM SEPARATION DISTANCES FOR ABOVE GROUND TANKS

Typical water capacity (L)	Distance (m)*
150 to 2,500**	3
>2,500 to 9,000	7.5

### MINIMUM SEPARATION DISTANCES FOR UNDERGROUND TANKS

Typical water capacity (L)	Distance (m)*
>500 to 4600**	3

\*In some instances, distances can be reduced by installing a suitably designed fire wall.

\*\*This is our most common size range for our domestic customers.



# Tank positioning

## A typical domestic installation

### SEPARATION ZONE

**Buildings including outbuildings and greenhouses.**

**Property boundaries.**

**Electrical items, eg cables, lighting and sockets.**



**Deep rooted trees and long grass.**

**Sources of ignition, eg pilot lights and generators.**

**Anything with the ability to ignite, eg wood pallets, general waste, bins and paper products.**

### BUILDINGS, INCLUDING SHEDS, GREENHOUSES AND WOOD STORES

Buildings and outbuildings should be positioned at least the separation distance from the LPG tank. This is to ensure access and ventilation to minimise risk of fire or build-up of gas in case of a gas leak.

If you are planning any building works around the gas tank, please get in touch and we will be happy to advise you so that any works do not compromise the installation and to ensure we can still deliver to you.

**Under no circumstances should you move the LPG tank.**



# Screening

Safe access around the tank is required to carry out inspections and check the condition of the tank on all sides. Incorrectly positioned vegetation and screening accelerates corrosion, trapping moisture in the area, and restricts access. Proper ventilation around the tank disperses moisture and, in the event of a gas leak, will help disperse the gas so it can safely evaporate.

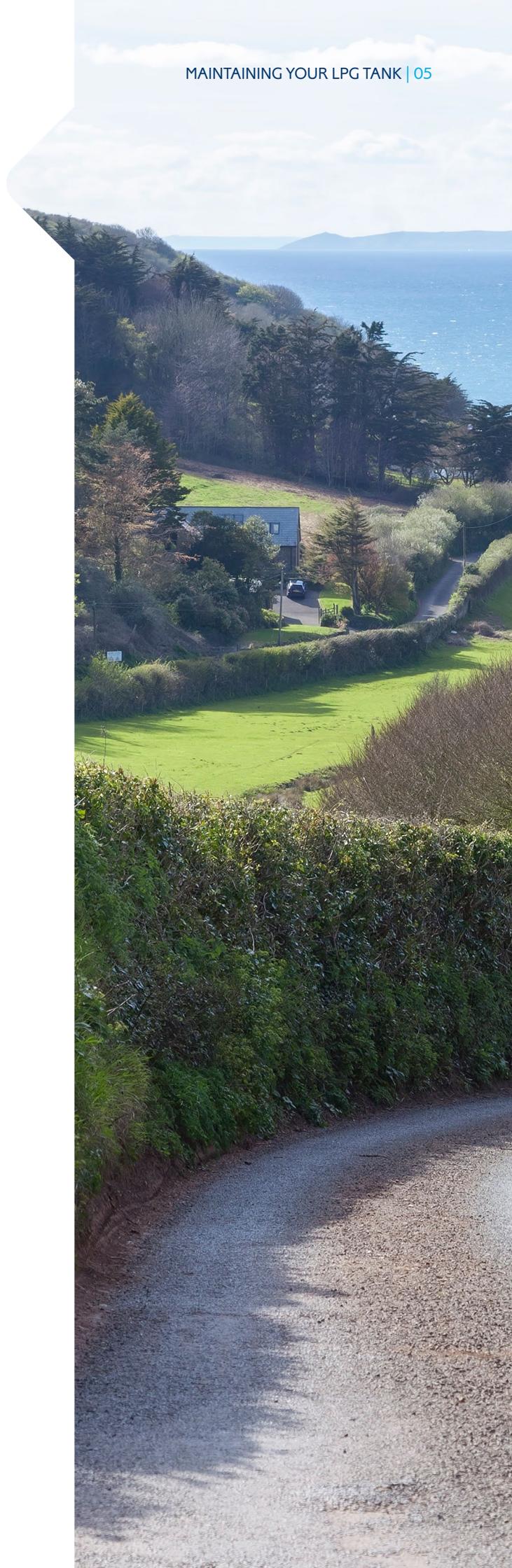
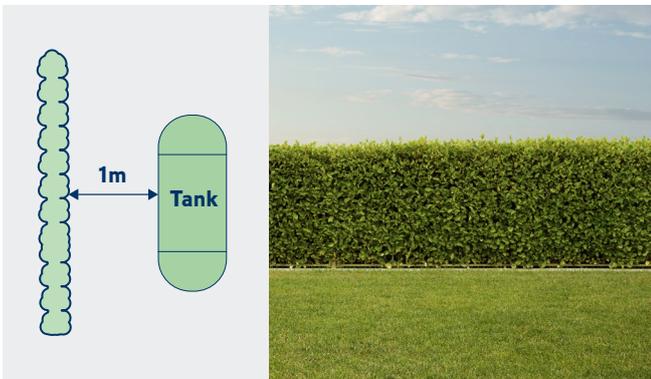
Screening is permitted within the separation distances and can be an aesthetic benefit to the installation. Any screening must ensure that access routes for the filling and maintenance of the tank and ventilation is preserved. Line of sight is required from the tank to the delivery vehicle.

**Screening should be located at least 1 metre from the LPG tank and should not obstruct more than 50% of natural ventilation around the tank including that at low level.**

It may be located on one or more sides of the tank depending on the screening type used, examples of screening types and installation guidance is outlined here:

## EVERGREEN SHRUBS OR TREES

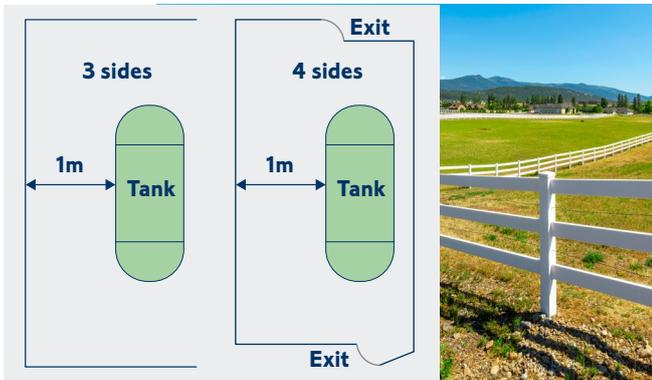
Evergreen shrubs or trees can present a fire risk and need to be carefully positioned and maintained to ensure that they do not restrict access and that they do not grow nearer than 1 metre to the LPG tank, including the area above. Ensure they are only on one side of the tank, and that the other three sides are free of vegetation to the separation distance.



# Screening

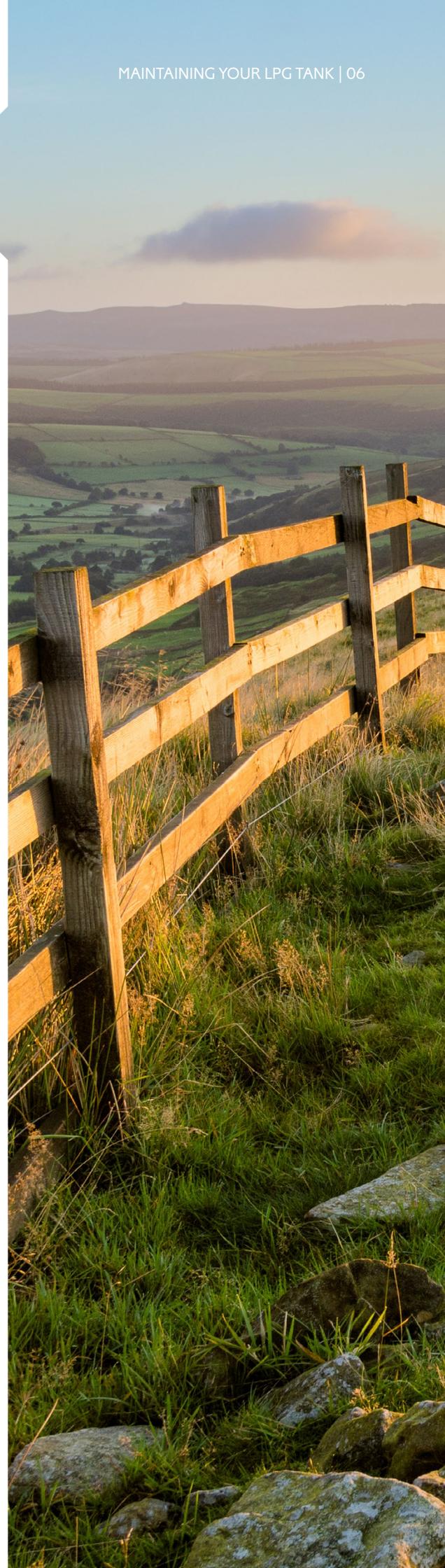
## OPEN RANCH STYLE FENCING

- Open ranch style fencing which obstructs no more than 50% of natural ventilation through the screened part can be installed on three sides around the tank, with the fourth side being left clear for ventilation and delivery hose access.
- If there are also at least two quick means of exit, that are equivalently ventilated, then open ranch style fencing can be installed on all four sides. Gates need to be installed on opposite sides. These should open outwards and be easily and immediately openable from inside. They should not be self-locking, and should provide unobstructed means of escape.



## CLOSED PANEL FENCING

Closed panel screening (including a fire wall) which obstructs more than 50% of natural ventilation through the screened part, can be installed on two sides only (the third and fourth sides should be left clear for ventilation and delivery hose access).



# Vehicle protection

Vehicle protection is required if vehicles could have access to the tank. Protection should be provided by suitable raised kerbs, bollards, barriers or other suitable means. The construction should take into account the site layout and the likely speed and size of vehicles which have access. Vehicle protection should be installed **at least 1 metre away** to ensure access is available for inspections and delivery.

**Some examples:**

## ARMCO BARRIERS



## BOLLARDS



## LARGE BOULDERS



# Vegetation and combustible materials

Excessive vegetation and combustible material (such as pallets, bins, rubbish and wood storage) could present a fire risk and hinder safe access to the tank. Vegetation should be cut back, removed and maintained to ensure access is available at all times. Combustible materials, including single skinned oil tanks, should be stored outside your separation distance.

- Chemical weed killers (such as chlorates) or any other method that might provide a source of ignition should not be used in these areas.
- For underground tanks, low level vegetation should be kept at least a 1.5 metre distance and any trees or deep-rooted shrubs should not be within 3 metres from the centre of the LPG tank lid.
- Deep-rooted shrubs can cause damage to the underground tank structure.

To maintain the tank area, ensure that vegetation is maintained and remove combustible materials within the separation zone.



# Ensuring your gas tank is compliant

**LPG is stored as a liquid under pressure, and LPG vapour is denser than air and can be extremely hazardous if not stored correctly. The following DOs and DON'Ts are some of the things you can do to ensure your gas tank and the surrounding area are compliant.**

## DO

- ✓ Protect from vehicles. Ensure adequate protection against the potential damage from vehicles.
- ✓ Keep the separation zone around the tank clear of weeds, rubbish and combustible materials.
- ✓ Get in touch with us for guidance if you plan to make any changes to the area of your installation, including access to the tank.
- ✓ Keep access routes clear to your property, such as roads driveways and paths. Ensure overhanging trees, hedgerows and roads are well maintained and clear for delivery vehicles.
- ✓ Keep the tank itself and it's surrounding area clear of vegetation and any obstacles so our drivers can access safely.
- ✓ Ensure your tank is positioned the separation distance away from any unsealed/un-trapped drains, gullies or decking. LPG is heavier than air so any leaks will accumulate in areas without adequate ventilation.
- ✓ Wash your tank with warm soapy water, should you choose to clean it, and rinse thoroughly to avoid corrosion.
- ✓ Ensure your Emergency Control Valve (the lever on your pipework) is on the external boundary wall of your property, and accessible at all times.

## DON'T

- ✗ Don't build over pipework to and from the tank.
- ✗ Don't build above or near the installation, or erect any building or structure. Buildings, outbuildings, sheds and greenhouses should be placed at least the separation distance away from your tank.
- ✗ Don't let vegetation grow near the installation or allow any deep-rooted shrubs, trees or hedges and weeds to grow within the separation zone around the tank.
- ✗ Don't have any source of ignition or flammable materials within the separation zone around the tank.
- ✗ Don't paint any part of the installation, this may affect the amount of heat absorbed by the tank and cause the release of gas vapour from the pressure relief valve.
- ✗ Don't construct over an underground tank including driveways.
- ✗ Don't interfere with or modify any part of the installation.
- ✗ Don't park or drive in the area directly above an underground tank.
- ✗ Don't allow water or sediment to build up under the underground tank lid. Drainage around underground tanks should be managed as AvantiGas cannot make a delivery when there is water under the tank lid. Any costs relating to the failure of the gas supply and the replacement of damaged equipment is your responsibility.



# Important safety information

## GENERAL GUIDANCE FOR PIPEWORK

Metallic pipework buried in the ground can corrode over time resulting in gas leaks.

Buried metallic pipework, especially when running at medium pressure, should be replaced with materials such as polyethylene (plastic) which won't corrode.

For more information on pipework and to carry out a safety check please visit:

[www.liquidgasuk.org/safety/pipework-safety-check](http://www.liquidgasuk.org/safety/pipework-safety-check)

## EMERGENCY CONTROL VALVES (ECV)

A readily accessible emergency control valve must be provided and positioned externally at the point of entry to the building to enable the supply of LPG to be cut off readily in the event of an emergency.

Conservatories or other buildings should never be built or positioned over emergency control valves.

If your emergency control valve is inside the property it should be relocated by a qualified LPG gas safe engineer.

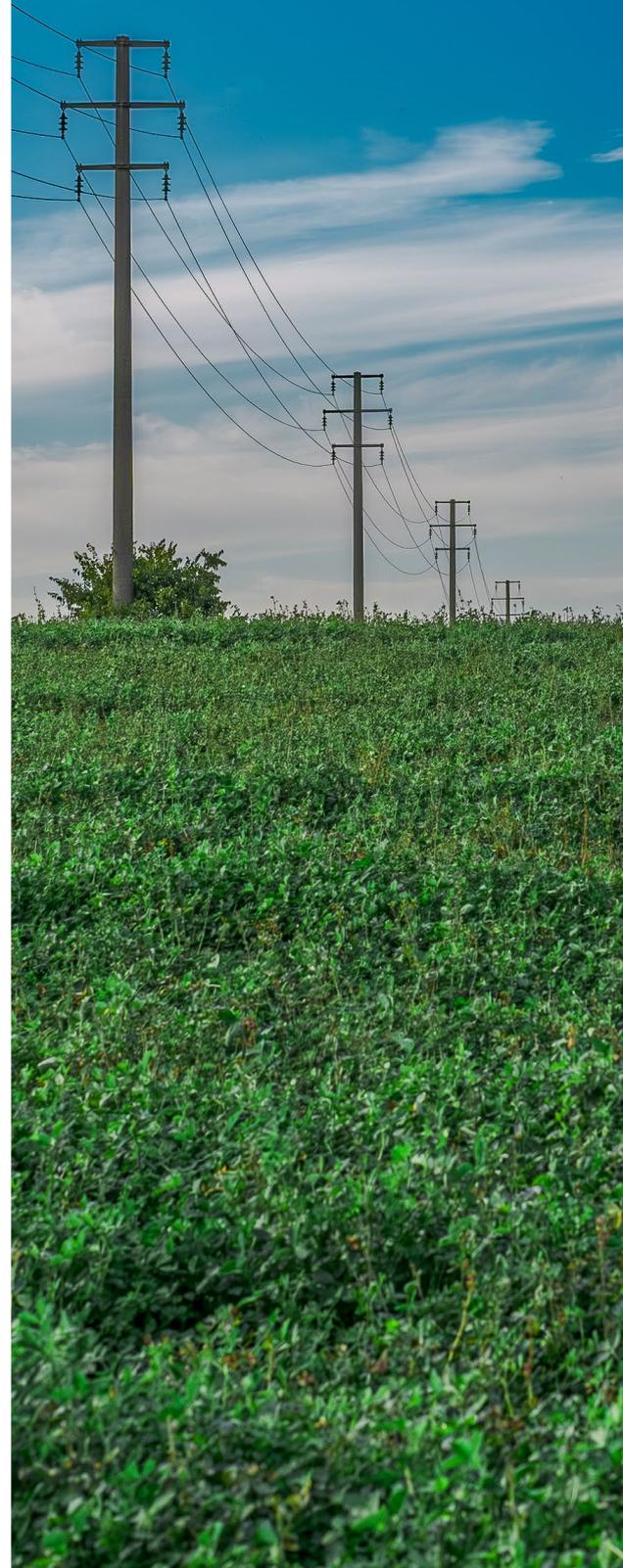
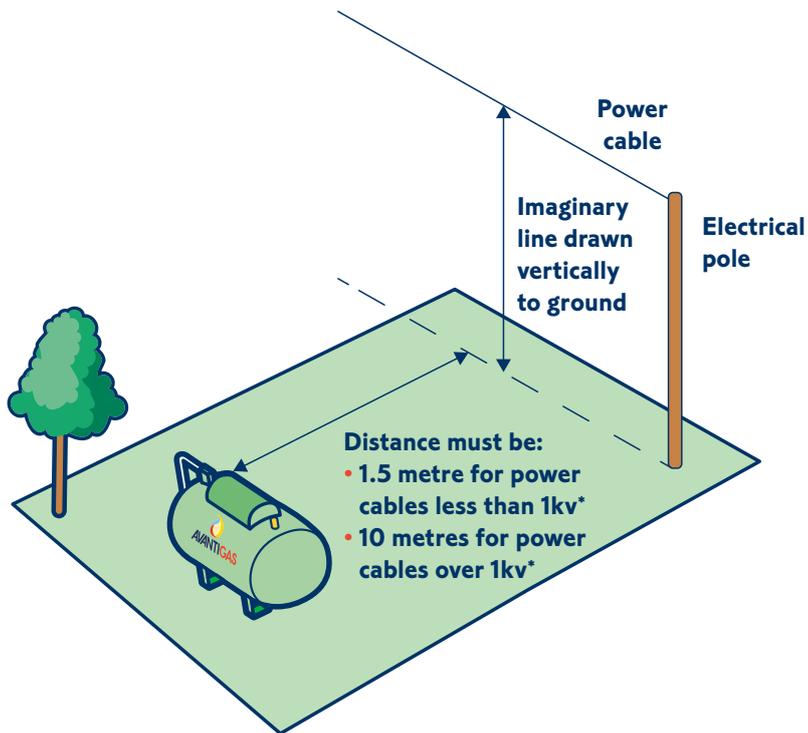
## I CAN SMELL GAS, WHO DO I CALL?

In an emergency - for any outdoor gas leak or major fire please contact AvantiGas on **0808 178 2009**. In the case of a fire call **999** notifying them that the fire involves LPG.



# Power cables

Power cables should be positioned at a safe distance from **above ground** LPG tanks. Distances are taken from an imaginary line where the cable would fall vertically to ground.



\*Distances taken from the closest surface of the tank.

# FAQs

## THERE IS AN EMERGENCY CONTROL VALVE (ECV) AT THE TANK, WHY DO I NEED ONE AT THE PROPERTY?

There is a considerable amount of gas held in the supply pipes, having the emergency control valve located on the outside wall at the premises allows gas from the supply pipe to the premises to be isolated.

## HOW OFTEN ARE LPG TANKS TESTED?

To demonstrate compliance with Pressure Systems Safety Regulations, AvantiGas has a written scheme of examination. Our domestic sites undergo a periodic statutory inspection by a gas safe LPG engineer at ten-year intervals. Tanks are also inspected visually by our delivery drivers. Underground tanks additionally undergo a cathodic protection test on a 3-yearly basis.

## I'VE BEEN TOLD THAT THE SITING OF MY LPG TANK DOES NOT COMPLY, WHAT SHOULD I DO?

Please get in touch with us to arrange for a site survey to be carried out. AvantiGas follow guidance from our industry body, Liquid Gas UK, which gives guidance on the safe storage of LPG. These distances are followed as part of best practice, and as part of our safety obligation to our customers and employees.

## I HAVE AN AVANTIGAS LPG TANK, WHAT EQUIPMENT DOES AVANTIGAS OWN?

AvantiGas own the LPG tank and the immediate pipework from the tank up to and including the first stage regulator. All equipment after this point including but not limited to; regulators, pipework and valves, is owned by the customer. It is the responsibility of the customer to maintain sites in accordance with Liquid Gas UK Codes of Practice.

## CAN I PAINT MY LPG TANK?

No, customers can not paint or decorate their LPG tank. AvantiGas retains ownership of the LPG vessel. Vessels should not be modified on the basis of safety as colour modification may result in an increase of heat absorption.



# Additional information for underground tanks

On underground tanks the green lid should be level with the area around it, and not be lower than the surrounding area. The lid should not be modified, altered or damaged. This is for proper ventilation and to ensure that access to the tank is safe. The surrounding area up to 1.5 metres should be gravel, shingle or soil, and not be paved over or concreted. This is because we periodically inspect tanks and their cathodic protection, which alongside tank coating prevents corrosion, and we need access to the ground below the surface to do this.

## INCORRECT TURRET    CORRECT TURRET



### Water or sediment should not be present under the lid.

If there is a permanent presence of water a French drain can sometimes be installed to direct the water from the area.

## HOW TO INSTALL A FRENCH DRAIN

- Dig a trench approximately 5-6" (13-15cm) wide by 8-12" (20-30cm) deep around the turret and away from the tank area to a purpose-built soakaway or the nearest drain point.
- Lay perforated plastic pipe in the trench.
- Backfill the trench with gravel.
- The part of the trench that leads away from the tank should ideally be on a downward gradient so that gravity naturally helps the flow of water through the drainage system.

Once all the above steps are taken, any excess water will drain through the gravel, through the holes in the plastic pipe and flow down to the soakaway or drain point.

