

Gas Standards and Safety

Guidance Note

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Storing and Using LP Gas at Public Events

Table of Contents

Storing and Using LP Gas at Public Events.....	1
1. Introduction.....	4
2. Documentation and notification	4
2.1 Training records.....	4
2.2 Risk assessment documentation.....	4
3. Responsibilities.....	5
3.1 Event organisers.....	5
3.2 Appliance hire.....	5
3.3 Stall holders/catering vendors.....	5
4. Emergency planning.....	6
Developing an emergency plan.....	6
5. Fire protection	6
5.1 Fire extinguisher	6
5.2 Cylinder and components.....	6
5.2.1 Gas supplier/owner	6
5.2.2 Minimisation of change over	7
5.2.3 Connecting and change over.....	7
6. Temporary outdoor ventilation	7
7. Temporary outdoor adequately ventilated areas – minor storage.....	7
7.1 Temporary outdoor areas – poorly ventilated area or exceeding minor storage	7
7.2 Temporary indoor structures – minor storage limits.....	8
7.3 Temporary indoor structures – exceeding minor storage limits	8
8. Appliance ventilation.....	8
9. Gas appliances.....	8
9.1 Appliance stability	9
9.2 Cartridge fuelled appliances	9
9.3 Portable ring and wok burners.....	10
9.4 Multiple appliances supplied from a single source.....	10
9.5 Clearance from combustible material and surfaces	11
9.6 Hot water units.....	11
9.7 Heaters	11
10. Components.....	12
10.1 LP gas hoses	12
10.2 Regulators.....	12
11. Cylinders	12
11.1 Access and exists.....	12
11.2 Stabilising cylinders.....	13

11.3 Distance from ignition source	14
12. Groups of temporary structures.....	14
13. Mobile catering vehicles and trailers.....	15
Notes	16
14. Gas Safety Checklist	17
Gas Safety Checks	17
Other considerations – permits for temporary occupancy	18
For more information.....	18
Acknowledgment.....	18

1. Introduction

This is a Guide for minor storage and use of liquefied petroleum gas (LP Gas) at public events such as:

- festivals
- sporting events
- church and school fetes
- local markets
- other non-profit groups

The aim of the Guide is to:

- make sure there is an acceptable level of gas safety; and
- reduce the possibility of gas-related incidents.

LP Gas should be stored and used in accordance with section 2 of AS/NZS1596 *The storage and handling of LP Gas – Minor storage and usage*. This makes sure that LP Gas quantities are below levels that increase risk including the spread of fire. . This also helps fire services if there is an incident. Where it is not possible to store LP Gas within minor storage limits, other sections of AS/NZS1596 apply.

Event organisers and LP Gas users have a legal duty of care to provide a safe operational environment. Both organisers and users should be identifying, assessing and managing potential risks.

All gas installations and therefore gas storage must comply with Gas Safety Regulations and relevant Standards.

2. Documentation and notification

Event organisers should make sure documented work safety procedures are in place for using LP Gas at public events. These procedures should include:

- storing and handling cylinders when not in use
- cylinder connection and changeover
- leak testing
- lighting appliances
- turning off appliances
- emergency equipment procedure
- emergency management plan

2.1 Training records

Event organisers must:

- make sure everyone has appropriate training
- keep training records

2.2 Risk assessment documentation

Risks involved with the LP gas storage and use should be assessed and the risk assessment results kept on site.

3. Responsibilities

3.1 Event organisers

The event organiser is responsible for:

- the safety management system for using LP Gas at an event
- carrying out regular inspections of the operation and facilities before and during the event
- making sure a suitable competent and experienced person is overseeing all LP Gas activities. This includes lighting and extinguishing appliances.
- training personnel to safely use appliances. This includes how to put out fires.
- completing and keeping the risk assessment documentation.
- making sure operators prepare and keep gas installation records and safety arrangements. This includes the site gas safety checklist.
- making sure catering vendors use LP Gas safely.
- making sure LP Gas is stored and handled correctly. This includes safety standards, as well as safety and emergency procedures.
- communicating with:
 - fire services,
 - regulatory authorities,
 - gas companies,
 - catering vendors and
 - appliance equipment hirers.
 - Be aware it can take time to get advice from these groups.
- making sure all mobile catering vehicles and relocatable kitchens are fitted with compliance plates.

3.2 Appliance hire

A person who owns and hires out appliances, equipment and LP Gas cylinders must make sure:

- only certified appliances are available for hire
- appliances are suitable for use in commercial environments
- appliances are in good working order and condition when supplied
- appliance maintenance and inspection details are available if requested
- help catering vendors develop safe procedures for all equipment and LP Gas cylinders

3.3 Stall holders/catering vendors

Stall holders and catering vendors should nominate competent people to be responsible for the safe use of LP Gas for the duration of the event. This includes developing the gas safety plan for their stall/facility and meeting all the requirements. The gas safety plan should include:

- type and position of gas appliances:
 - allow only certified appliances
 - maintained appliances are in good working order and fit for purpose
- arrangement of gas supply
 - cylinder size, numbers, location and any associated pipe work
- location of fire-fighting equipment
 - working extinguishers and fire blankets

- clearances and separations
 - clearances from flammable materials and ignition sources
- confirmation all site personnel are instructed in:
 - operating appliances correctly
 - facility emergency procedures
 - emergency gas supply isolation
 - emergency evacuation
 - site emergency procedures
 - emergency evacuation
 - emergency contact details
 - emergency assembly points
- confirmation the event organiser has received the facility gas safety plan before the event.

4. Emergency planning

Developing an emergency plan

In taking all steps to avoid the risk of an incident, occurring it is important to plan for an emergency situation. When write an emergency plan it should include how a site or facility, and its occupants will manage an emergency.

An effective emergency plan includes:

- agreed emergency management roles and responsibilities including initial response and recovery after the initial incident.
- strategies and systems arrangement of the site

The level of detail in the emergency plan depends on how complex the risk is on site.

5. Fire protection

First response in any emergency - minimise the threat to life and property.

Adequate and appropriate fire protection should be available in any catering operation.

It is **important** to have fire protection equipment available when using LP Gas around other flammable materials. Position fire extinguishers and fire blankets to allow access to the site in the event of a fire.

Train staff to safely use fire protection equipment.

If there is fire and/or smoke, activate the emergency plan immediately. If the fire cannot be extinguished safely and quickly, evacuate everyone from the area and contact emergency services on **000**.

5.1 Fire extinguisher

Have dry chemical fire extinguisher, type 2A60B(E), available to use on a LP Gas fire

5.2 Cylinder and components

5.2.1 Gas supplier/owner

The LP Gas supplier should make sure:

- Safe delivery of cylinders to a safe and complying location. Refer to AS/NZS1596 *The storage and handling of LP Gas – Minor Storage*
- Cylinder valve connections are fit for purpose and in good working order.

5.2.2 Minimisation of change over

Plan for replacing gas cylinders. Develop a schedule for replacing cylinders at the end of each day when there are less people on site. Talk with appliance hirers and work out how long an appliance can operate on a cylinder.

5.2.3 Connecting and change over

Connecting the hose and regulator to a cylinder is a common risk. Pay special attention and make sure:

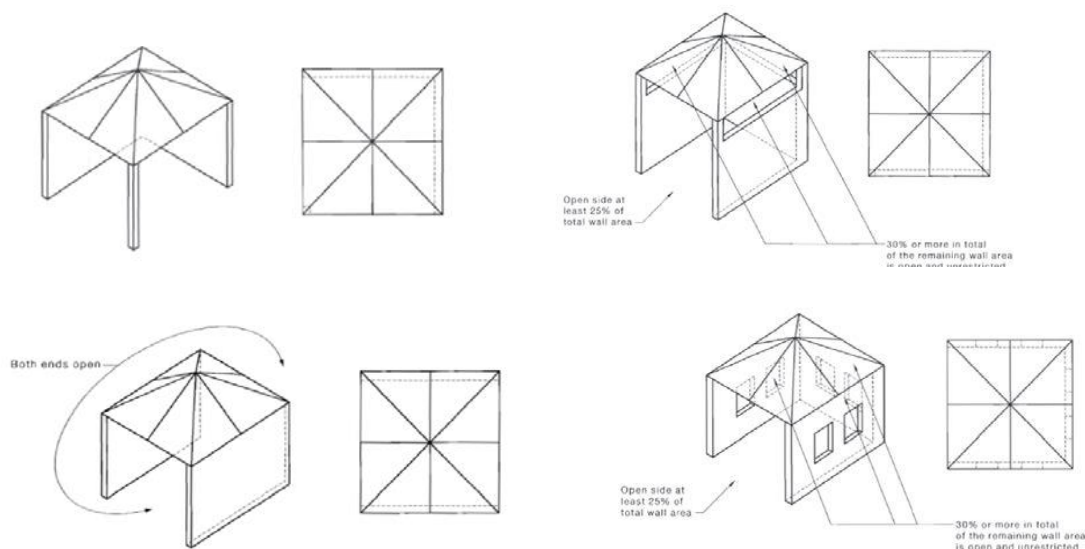
- an appropriate connection/change over procedure is developed
- the procedure includes leak testing with soapy water solution
- personnel are adequately instructed in the procedure
- only competent and trained people do the work

6. Temporary outdoor ventilation

A marquee, tent, booth, awning or structure not located within a building may be classified as a semi-outdoor area if it meets the following criteria:

- two sides open; or
- one side open equal to 25% of the total wall area and 30% the remaining total wall area open and unrestricted.

Examples of outdoor areas



7. Temporary outdoor adequately ventilated areas – minor storage

You can store gas within adequately ventilated areas (see Part 6) as long as:

- the total quantity is not larger than 60kg and
- the maximum cylinder size is not larger than 15kg with one cylinder per appliance

7.1 Temporary outdoor areas – poorly ventilated area or exceeding minor storage

If the area does not meet the ventilation requirements and/or storage quantities exceed minor storage limits:

- you must locate cylinders outside of the enclosure
- the maximum total quantity is 180kg

- the maximum cylinder size is 45kg
- connect all appliances
 - to one gas supply point (one appliance to one cylinder); or
 - to a manifold and supply provided by multiple cylinders through one regulator

Note: a licensed gas-fitter must install manifolded cylinders. The gas-fitter must fit a compliance tag and submit a Gas Fitting Notice.

7.2 Temporary indoor structures – minor storage limits

You can store gas within enclosures or buildings not classified as semi outdoor areas as long as:

- the quantity of gas is not larger than 1kg per 1m² of floor area with a total maximum quantity of 30kg and
- the maximum cylinder is not larger than 15kg with one cylinder per appliance.

7.3 Temporary indoor structures – exceeding minor storage limits

Store cylinders outside buildings or temporary structures if the storage quantity or cylinder size is larger than the minor storage limits. Refer to 7.1 and 7.2 of this Guide.

8. Appliance ventilation

Gas appliances installed in temporary structures need to be ventilated. This is to ensure correct and safe operation of the gas appliances. This is also to maintain safe ambient conditions and allows venting for any potential gas escapes. Adequate ventilation can be achieved by natural means using high and low level ventilation openings.

The size of ventilation openings (without any restrictions) for both high and low level (in square centimetres) is calculated using AS/NZS 5601.1 *Gas installations General installations*.

- Refer to Gas Standards and Safety fact sheet A Guide for Gas Appliances Air Requirements (FS137). Visit www.justice.tas.gov.au

If the total appliance gas consumption exceeds the allowable gas consumption, you will need extra ventilation. Contact a licensed gas-fitter for advice on sizing and installing any necessary ventilation.

9. Gas appliances

Use certified gas appliances at an event. Display a certification badge or compliance/data plate certification number on appliances.

Examples of approved appliance certification plates





Appliances used at a public event must display a certification badge. Appliances certified **for outdoor use only** must not be installed or used indoors. Solid top barbeques in well-ventilated areas are exempt.

Not acceptable



Homemade appliance not - certified

Acceptable



Certified solid top barbeque

9.1 Appliance stability

Stand appliances on a flat stable surface. Benches (or similar) should be on a flat stable surface and be non-combustible, unless certified by the appliance manufacturer. Secure appliances on benches to prevent movement.

9.2 Cartridge fuelled appliances

Do not use appliances fuelled by disposable butane cartridges at a public event.

Not acceptable



Acceptable



9.3 Portable ring and wok burners

Install portable ring and wok burners into a stable sturdy stand.

Not acceptable



Acceptable

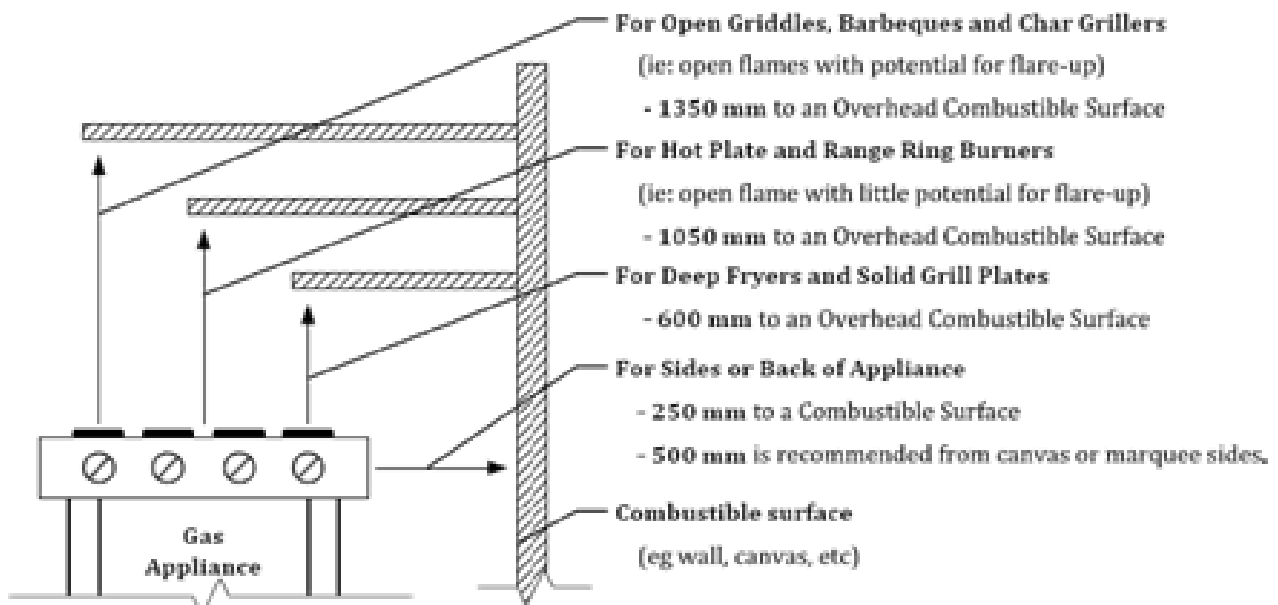


9.4 Multiple appliances supplied from a single source

Multiple appliances supplied from a single gas source must be rigidly manifolded by a licensed gas-fitter. The gas-fitter must fit a compliance tag and submit a Gas Fitting Notice.



9.5 Clearance from combustible material and surfaces



9.6 Hot water units

A licensed gas-fitter should install all hot water units. The gas-fitter must tag and complete a Gas Fitting Notice.

Protect gas pipe work or hoses to prevent a tripping hazard. Gas hoses should not restrict any access or exit ways.

9.7 Heaters

Portable heaters certified for outdoor use should not be installed or used indoors. This includes quasi-outdoor areas. Such areas are designed to be sufficiently waterproofed to allow the installation of an appliance certified for indoors only.

Not acceptable appliance indoors



10. Components

10.1 LP gas hoses

Hoses should:

- be in good condition
- be connected to prevent entanglement and tripping
- be suitable and certified
- be short as possible – not exceeding 3 metres in length
- be of continuous length
- only supply one appliance each
- not be kinked or strained

A hose assembly must not pass through the appliance panel or casing unless specifically manufactured.

Not acceptable



Hose kinked and under strain

Acceptable



No hose strain

10.2 Regulators

For non-portable appliances, two stage regulators with over pressure protection are acceptable. Appliances certified as portable and connected directly to a cylinder not larger than 15kg, can have a single stage regulator.

11. Cylinders

11.1 Access and exists

It is recommended to have a clear walkway around cylinders of 1.2 metres

Not recommended



Recommended



11.2 Stabilising cylinders

All cylinders must be stable and secure to prevent them from being knocked over. Direct the cylinder relief valve away from the appliance, combustible materials or any potential ignition source.

You can stabilise the cylinder by:

- securing the cylinder to a permanent structure
- placing smaller cylinders in a secure/stable container
- securing larger cylinders with chains to stakes or star pickets
- fixing it in a metal trolley secured to prevent tilting
- any other appropriate methods

Not acceptable



Not clear from combustibles or secure



Secured to other cylinders

Acceptable



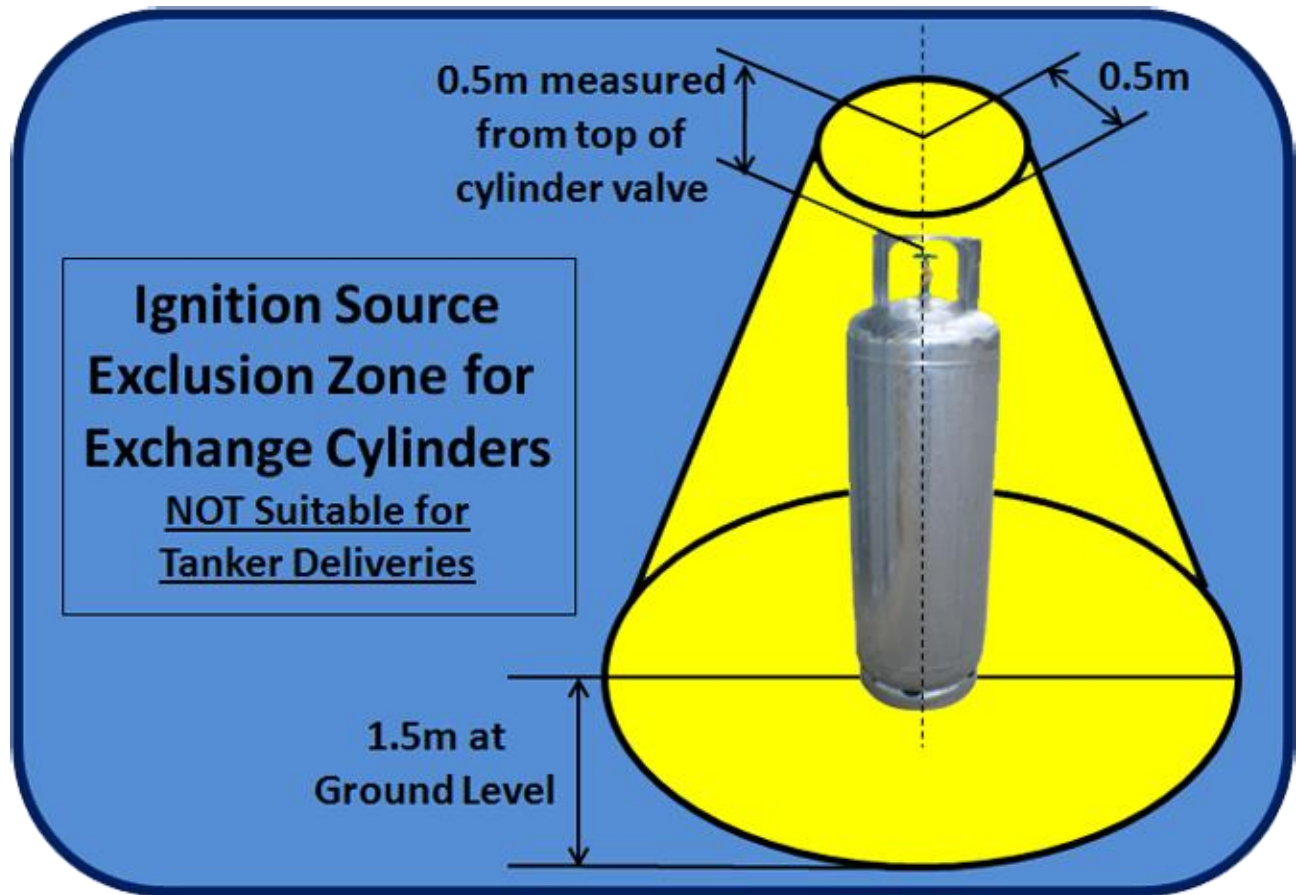
Secured and clear of combustibles



Secured and on a stable base

11.3 Distance from ignition source

Locate cylinders in use 1.5 metres from ignition sources such as electrical equipment or objects that may produce excessive heat. This may include gas appliances. Portable appliances certified with provision for cylinders are acceptable.

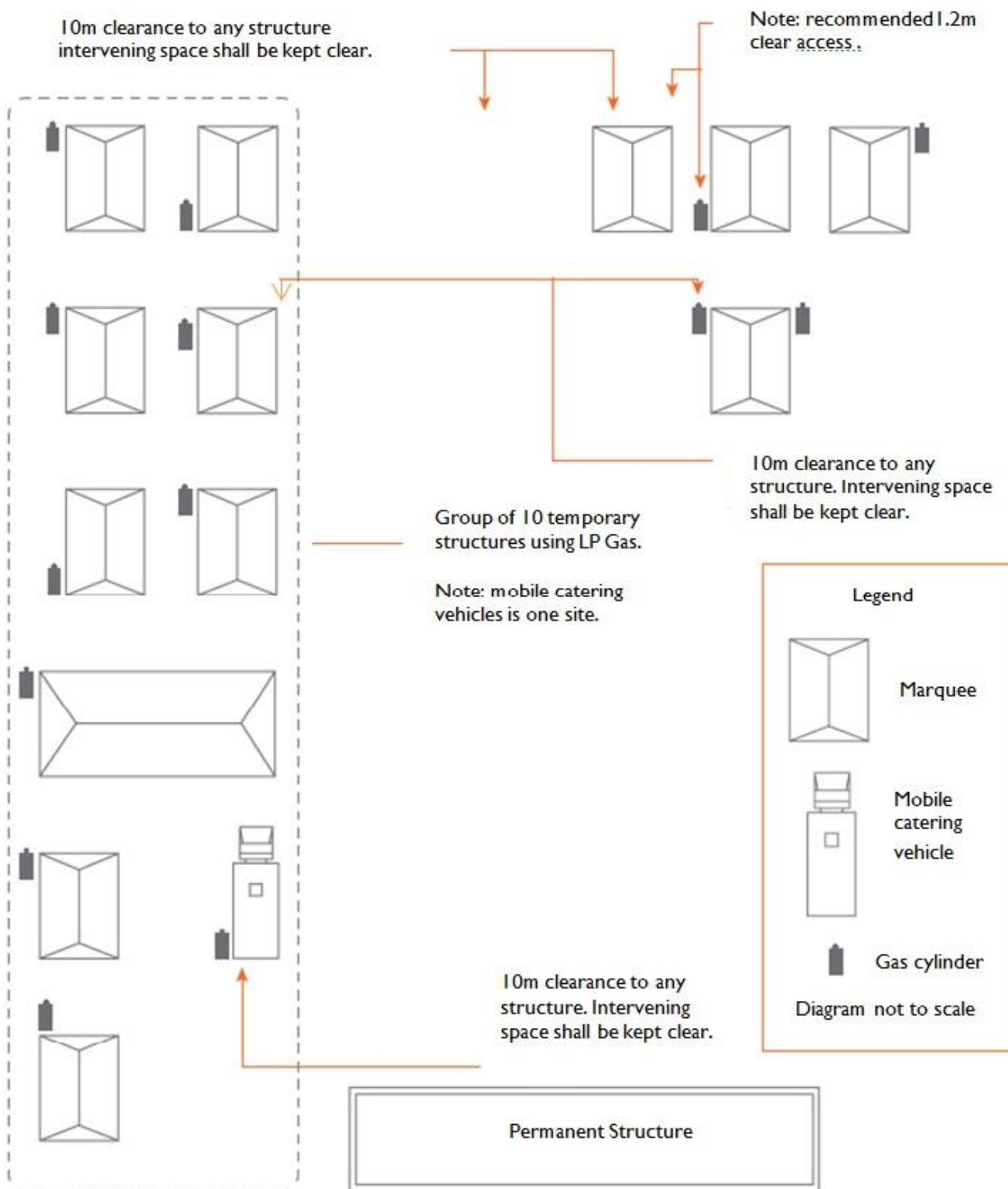


12. Groups of temporary structures

A maximum of 10 temporary structures (such as marquees, stalls or tents) can be grouped together if any structure is using LP Gas.

Separate groups by at least 10 metres. Keep the space between these groups clear.

Include mobile catering vehicles and trailers in the total for any groups of mobile structures.



13. Mobile catering vehicles and trailers

Gas installations in mobile catering vehicles, trailers or the like must be installed by a licensed gas-fitter in accordance AS/NZS 5601.2. A legible compliance tag must be affixed to the vehicle by the gas-fitter.

Notes

14. Gas Safety Checklist

This checklist can be used by anyone using gas at a public event. This includes suitably qualified personnel. The checklist should form part of any safety plan.

Event:

Name:

Stall number / registration number:

Signature: Date:

Gas Safety Checks

Check details	Yes	No	Action if No
Appliances Certified			
Appliances in good working condition			
Safety devices working			
Controls working and marked			
Appliances hoses acceptable			
Area appropriately ventilated area			
Clearance from combustible surfaces			
Suitable clearance from appliance to cylinders			
Consumer pipework compliant and compliance plate fitted and current.			
Regulator in good condition			
Regulator hose in good condition			
Single/Individual hose per appliance			
Hoses protected from damage			
Hoses not a tripping hazard			
Hoses not more than 3 m in length			
Cylinder connections checked for leaks			
Cylinders secured			
Cylinders located away from flammable materials			
Cylinders located away from ignition sources			
Cylinders not in exit or path of travel			
Cylinder quantity and size not exceeded			

Keep the checklist at the stall for viewing by authorised personnel or the event organiser if requested.

Other considerations – permits for temporary occupancy

A temporary occupancy permit is issued under the *Building Act 2016*. The permit allows the use of an existing building or a temporary structure for a short term activity such as a public or a private event. You need a permit if you intend to:

- temporarily use an existing building which is not the normal permitted use. An example is holding a market in a warehouse.
- operate an event, function or market using temporary structures such as booths, tents, marquees, seating stands or stages.

The owner or event organiser must apply to the council for a temporary occupancy permit.

For more information

For more information you can contact the Consumer, Building and Occupational Services, Gas Standards and Safety Unit on 1300 654 499

Acknowledgment

Gas Standards and Safety acknowledges the use of information from the Energy Safe Victoria publication *Public Events, Catering Vendors Information Pack and code of practice for the safe use of LP Gas* in the production of this Guidance Note.

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