

# Code of Practice for The Safe Use of LPGas at Public Events In Victoria



1 October 2009



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## INTRODUCTION

**This Code of Practice applies to the use of Liquefied Petroleum Gas (LPGas) at Public Events; such as major sporting and entertainment events, festivals, school and church fetes, local markets and other non-profit group functions.**

Organisers of Public Events have a Duty of Care under the Occupational Health and Safety legislation to provide a safe operational environment. As far as reasonably practicable, people are not to be exposed to risks arising from the running of the event. The definition of this duty is broad. Pro-active attention by organisers may be achieved by a process of identification, assessment and control of safety risk.

General OHS requirements are published by WorkSafe. For further information refer to the WorkSafe publication *'Advice for Managing Major Events Safely'*, available from the WSV website [www.worksafe.vic.gov.au](http://www.worksafe.vic.gov.au).

In relation to gas safety, this can be achieved by ensuring that all gas installations are safe and are certified as complying with current Regulations and Safety Standards

The intent of the following guidelines is to ensure an acceptable level of gas safety and minimise the possibility of gas-related incidents.

**This document is to be read in conjunction with AS/NZ 1596, AS 5601 and WorkSafe *'Advice for Managing Major Events Safely'* and all relevant codes within.**

**The Following Organisations have been involved in formulating this Code of Practice:**

Working Committee:

- Australian LPGas Association,
- Country Fire Authority,
- Energy Safe Victoria,
- LPGas Companies (Elgas Ltd, Kleenheat Gas Pty Ltd, Origin Ltd, Supagas Pty Ltd, United Gas Pty Ltd)
- Metropolitan Fire Brigade, and
- WorkSafe Victoria

Attendees at Document Review Session:

- Harry the Hirer Pty Ltd
- Melbourne 2010 Cycling
- Melbourne City Council
- Melbourne Racing Club
- Safe Not Sorry Pty Ltd
- Spotless Group Ltd
- THA Consulting
- Transplumb Pty Ltd

Written Submission and Comments by:

- Australian Grand Prix Corporation
- Victoria Racing Club Ltd

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## 1. DEFINITIONS

For the purpose of this document the following definitions apply:

### 1.1 Acronyms

CFA	Country Fire Authority
ESV	Energy Safe Victoria
GFN	Gasfitting Notice – a notice required to be submitted to ESV by an authorised person for any gas fitting installation
LPGA	Liquefied Petroleum Gas Association Australia
MFB	Metropolitan Fire Brigade
WSV	WorkSafe Victoria

### 1.2 Certified Appliances

A gas burning appliance is Certified when the Appliance has been assessed and approved by;

- i. An independent certifying body (eg AGA, SAI Global, IAPMO)
- ii. A body accepted by Energy Safe Victoria, or,
- iii. Energy Safe Victoria

### 1.3 Cartridge Operated Appliances

Appliance usually used in domestic situations and fuelled by a disposable butane gas cartridge. These are not approved for use at Public Events by this Code of Practice.

### 1.4 Decanting

A procedure in which the liquid phase of LPGas is transferred from one cylinder to another by utilising the difference in pressure between two cylinders. Decanting is not an approved practice at Public Events.

### 1.5 Mobile Catering Vehicle

A vehicle utilising LPGas, that is either self-propelled or towed:

- in which food is prepared. It shall be fitted with a fire blanket and a suitable portable extinguisher, or
- to supply hot water ablution services.

Such vehicles shall display either:

- i. An Energy Safe Victoria Compliance Plate, or

A compliance plate that is supplied by the ESV after they are provided with a Gas Fitting Notice for the vehicle and they have conducted an inspection, to ensure the vehicle meets the appropriate standard (details for this inspection and approval appointments are available from ESV). The plates are presently dated for 3 or 5 years life and the vehicle will require reinspection after this time.

The Compliance Plate to be securely positioned on the vehicle in a readily accessible and visible position, beside the Vehicle Identification Plate, or beside the gas equipment storage or appliance.

- ii. Interstate equivalent compliance plate

A certificate standard that is issued from a interstate regulatory system that ensures that the Mobile Catering Vehicle complies with the appropriate installation standard.

## **1.6 Responsible People Or Organisations**

### Event Organiser

Person who is in control of event

### Appliance Hirer

Person who owns and hires out appliances, equipment, LPGas cylinders, etc

### Catering Vendors

Person in charge of a vendor site

### Gas Supplier

Company who supplies LPGas

### Authorised Person

Person who has been licensed or registered by the Plumbing Industry Commission.

Person may include an individual or a company.

## **1.7 Risk Assessment**

The application of a systematic approach to identify hazards, assessing their risk, and determining controls to minimise risk at the event.

## **1.8 Structures**

### Assembly Building

A building, such as a hall, pavilion or assembly building used for an event (ie. church, school or sporting club hall)

#### Permanent Structure

A permanent building or structure, including carport type structures, gazebos and rotundas

### Outdoor Temporary Structure

An awning, marquee, booth, tent, See **Figure 1 Examples Of Outdoor Temporary Structures For LPGas Appliances.**

Note: an Installation that does not comply to the definition of Outdoor is to be classified as Indoor.

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**Figure 1 Examples Of Outdoor Temporary Structures For LPGas Appliances**

A marquee, tent, booth, awning, or a structure with

- 2 sides open: or
- 1 side open equal to 25% of the total wall area, and 30% of the remaining total wall area is open and unrestricted.

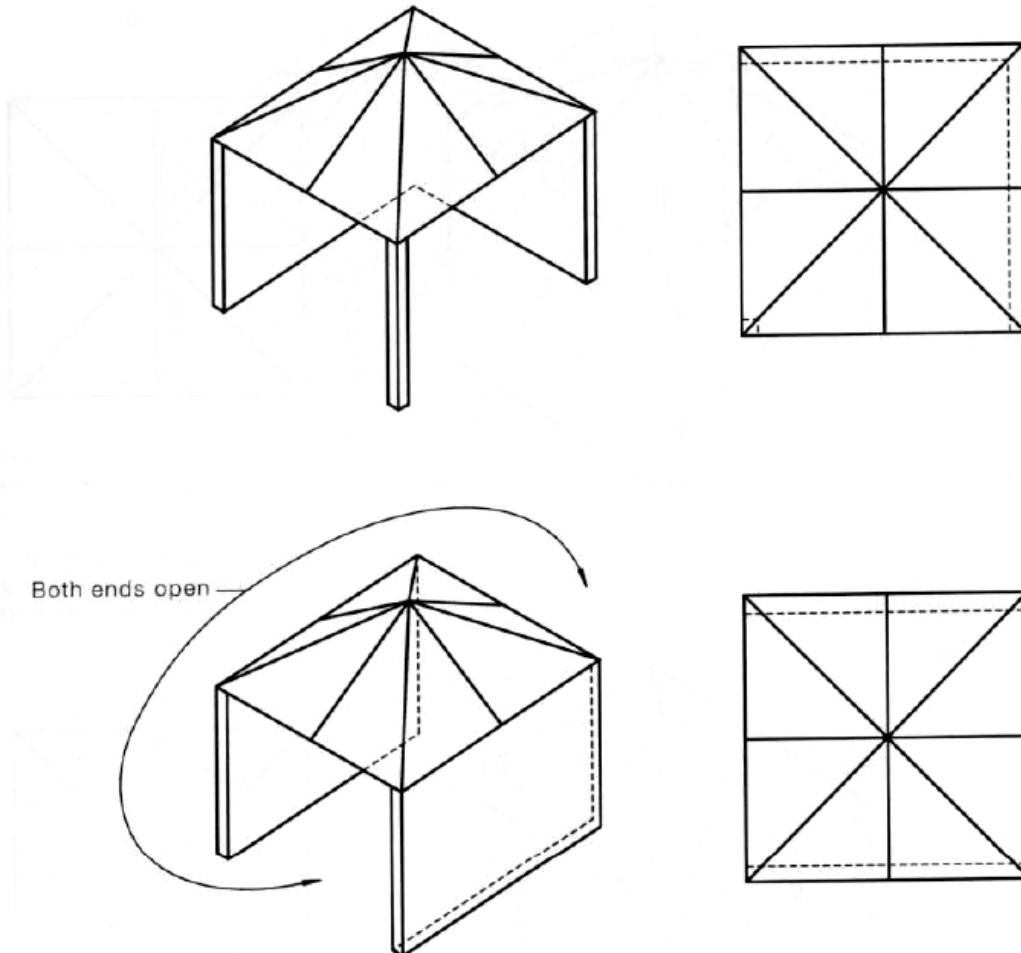
A marquee, tent or booth set up in the interior section of a building, would be classed as indoors.

Indoor appliances may be located in the interior of structures when supplied with adequate ventilation.

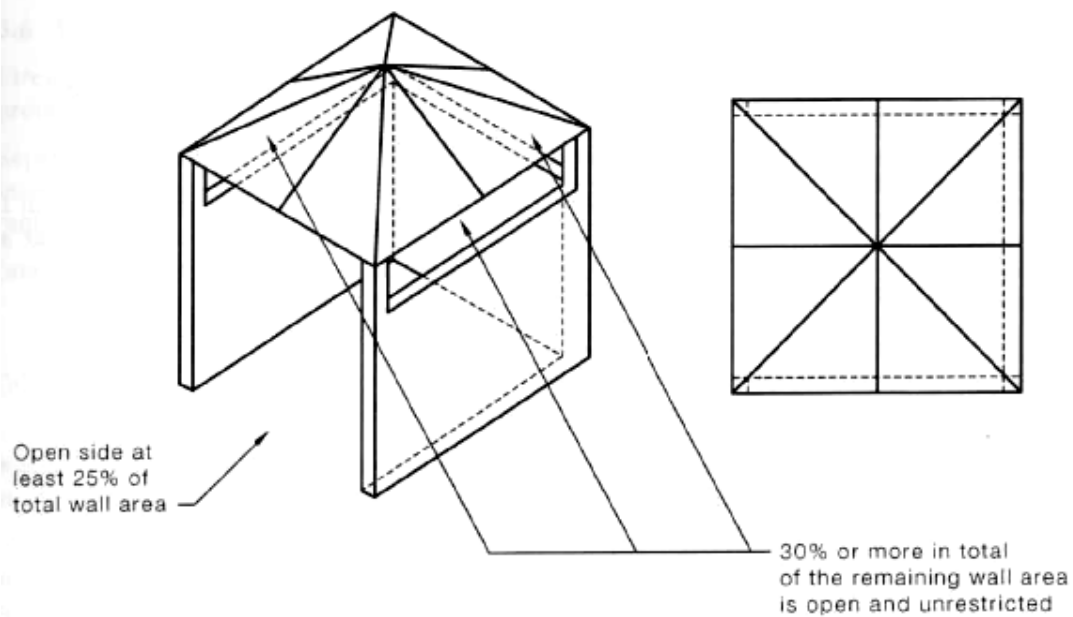
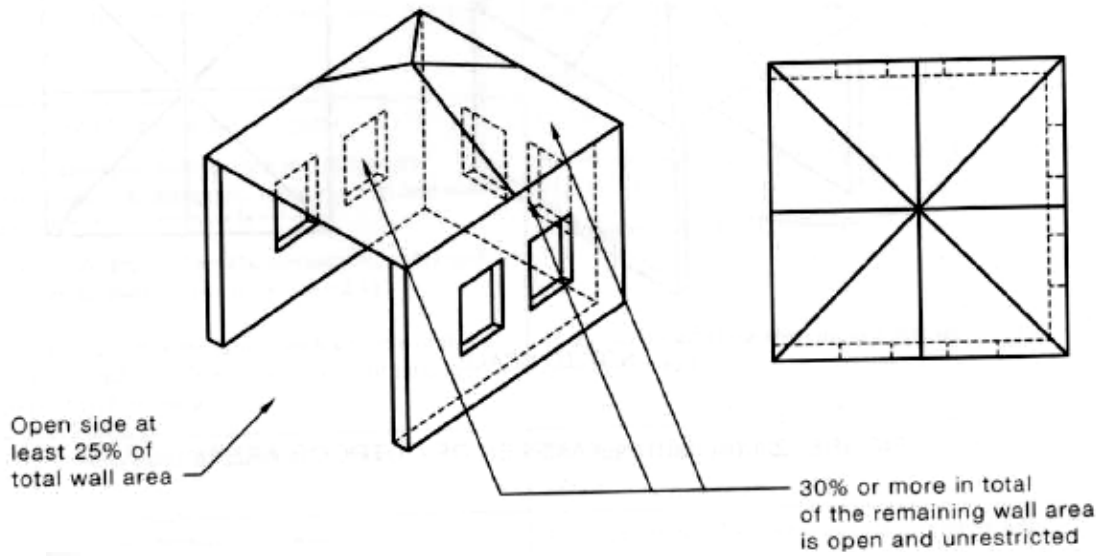
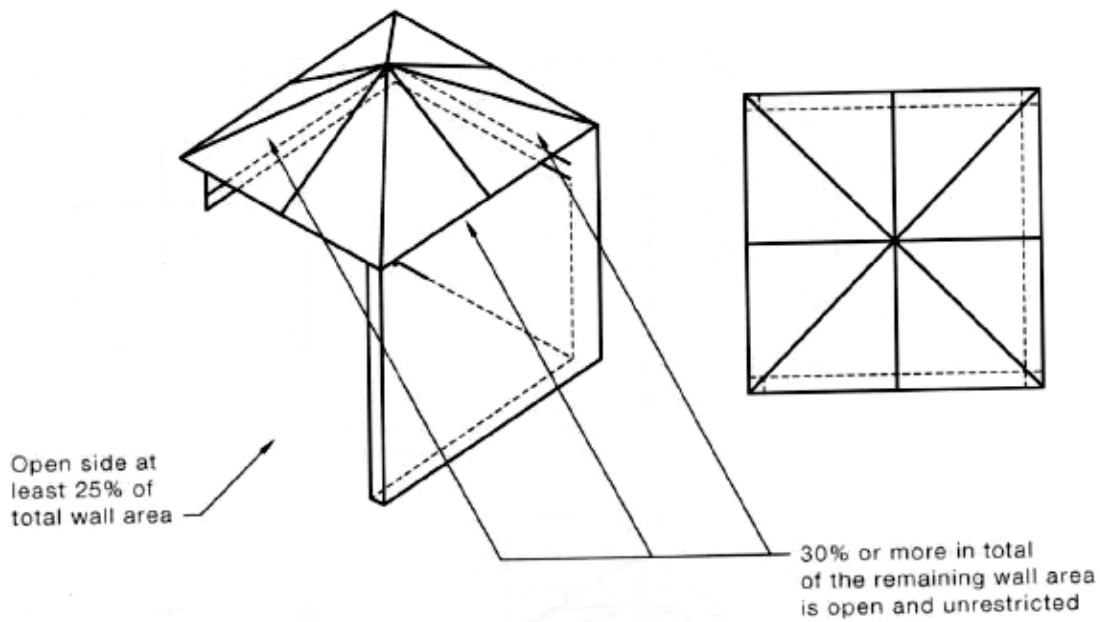
Outdoor appliances may be located outdoors, or be installed in the interior of structures meeting the requirements of these drawings.

Cylinders may be located in the interior of marquees, tents or booths if they comply to the requirements of **Table 1 LPGas Allowable Quantity And Cylinder Size.**

Examples of Outdoor Areas:







## **2. DOCUMENTATION AND NOTIFICATION**

### **2.1 General**

Throughout these guidelines, reference will be made to procedures, records and other forms of documentation that would be considered critical to the safe operation. The purpose of documentation is threefold and shall:

- Provide a clear and consistent understanding of the decision making process
- Give concise information to those instructing others of safe work practices, and
- Provide records of what has been done in the event of an incident and the follow up

The following provides an overview of what documentation should be kept.

### **2.2 Procedures**

It is standard in all workplaces that safe work practices are developed for all tasks, particularly those involving some inherent safety risk, and that all personnel carrying out these tasks are adequately trained. Event organisers and employers must ensure documented procedures for various tasks associated with the use of LPGas in catering operations are in place, including

- Storage and handling of cylinders whilst not in use
- Cylinder connection and changeover
- Leak testing
- Lighting of appliances
- Turning Off appliances
- Emergency equipment procedures and Emergency Management Plans.

### **2.3 Training Records**

In addition to the procedures themselves, records must be kept to demonstrate that all those required to undertake a particular task have received instructions in the specific safe method.

### **2.4 Inspections By Event Organiser**

Inspections shall be carried out on a routine basis prior to operation and throughout the duration of the Event by the Event Organiser or their delegate.

These inspections and resulting actions must be documented and records kept for 12 months.

### **2.5 Regulatory Inspections And Approvals**

During the Event it is likely that different Regulatory Authorities may conduct inspections. Where improvements or changes are requested, the completion of these tasks must be noted and kept as a record for 12 months.

### **2.6 Risk Documentation**

A risk assessment shall be undertaken and kept on site as a reference should any changes occur, or to address any concerns raised by Regulatory or other personnel.

### **2.7 Other Documentation**

Documents concerning the design, implementation and operation of the Event, the following information shall be kept as a record for 12 months.

- Kitchen design layouts, including the location of appliances and quantity of LPGas
- Emergency Service or Regulatory Authority notifications
- Equipment provider maintenance or inspection records (or a signed statement from the Appliance Hirer that such records for all equipment are held at his premises)
- Photographs or other visual documentary evidence

### 3. ASSOCIATED RISKS

#### 3.1 Risks Associated With The Use Of LPGas

LPGas is the fuel of choice for many catering vendors. LPGas is stored under pressure in cylinders. Because of the amount of energy stored in a cylinder, care must be taken to minimise the quantity in use or in storage at events. AS/NZS 1596 *The Storage and Handling of LPGas* provides maximum allowable quantities for each type of structure or facility. LPGas is heavier than air. If allowed to leak LPGas will settle at low level and is slow to disperse.

LPGas cylinders are often heavy and awkward to handle. This should be considered in the safe manual handling of cylinders at all times and referenced in the event risk assessment.

#### 3.2 Use Of Equipment

All catering equipment should be suitable for commercial and robust use that can be expected at events.

### 4. RESPONSIBILITIES

#### 4.1 Event Organiser

The Event Organiser has the overall responsibility for the Safety Management System for the safe provision and use of LPGas at the Event

That person shall:

- Ensure a suitably competent and experienced person is in place to oversee all LPGas activities.
- Ensure the overall event Risk Assessment and documentation is completed and retained.
- Ensure that records and safety arrangements of gas installations shall be prepared and retained by their operators including the site Gas Safety Check List (as per Appendix A *Example Gas Safety Check List*).
- Ensure the requirements under the Victorian *Dangerous Goods (Storage and Handling) Regulations* are complied to regarding, if necessary: placarding, preparation of a Manifest, seeking a Fire Protection Report and notification (refer to Appendix B *Regulatory storage Levels requiring Action* under the *Victorian Dangerous Goods (Storage and Handling) Regulations*).
- Ensure that catering vendors meet their obligations for safe use of LPGas.
- Ensure that storage and handling of LPGas is properly managed at the event (including provision of safety standards, safety procedures and emergency procedures).
- Liaise with Fire Services, Regulatory Authorities, gas companies, catering vendors and appliance hires as appropriate. The Event Organise should be aware that where formal advice is required it may take some time for provision of the advice.
- Ensure Mobile Catering Vehicles are fitted with a compliance plate.

#### 4.2 Catering Vendor

The catering vendor shall designate a suitably competent and experienced person to be responsible for the safe use of LPGas for the period over which their catering services are provided at the event.

That person shall ensure that:

- A plan of their catering facility is prepared, including the types and numbers of catering equipment, the positioning and arrangements of the equipment, and gas supply, and supplied to the Event Organiser for inclusion into the Site's emergency management plan. The plan shall be supplied to the event organiser.
- The necessary clearances & separations, venting & air supply, and fire fighting equipment are maintained.
- Catering staff are instructed and competent in LPGas safety procedures, including the connecting and changing over of gas cylinders, storage of unused and used cylinders, and shutting off appliances when not in use, and records kept.
- Appliances are supplied and installed safely (including verification from the supplier that the appliances are fit for purpose and properly maintained).
- Gasfitting Notices are issued for LPGas installations as required.
- Only Certified Appliances are used.
- If appliances are owned by the catering vendor, records of maintenance and inspection are updated and kept for each appliance.
- All catering site personnel are instructed in and can implement the emergency management plan, and
- A check list as per Appendix A shall be completed prior to the commencement of the Event and passed to the Event Organiser.

Whilst some Catering Vendors will own equipment, many will also hire LPGas appliances and cylinders. Notwithstanding the responsibilities of the Appliance Hirers, the Catering Vendor shall also carry out inspections of the LPGas equipment to ensure that no damage has been caused during its installation or use. These inspections shall be carried out prior to the first use of equipment, and on a daily basis prior to commencement of operations.

#### **4.3 Appliance Hirer**

The Appliance Hirer shall ensure that:

- All appliances available for hire shall be Certified
- Appliances shall be suitable for use in a commercial environment (see Clause 3.2)
- Details of maintenance and inspection relating to individual appliances can be made available upon request,
- Assistance is given to the Catering Vendor in the development of safe procedures for all equipment and LPGas cylinders.
- Appliances are in good working order and condition when supplied.

#### **4.4 Gas Supplier**

The LPGas Supplier shall ensure that:

- Cylinders are delivered in a safe manner to a safe and complying location as designated in the site Safety Management Plan
- Cylinders, valves and connections are fit for purpose and in good working condition.

#### **4.5 Energy Safe Victoria**

Energy Safe Victoria (ESV) oversees the safe use of gas appliances, their connection, location and use at events and the connection to LPGas cylinders. An ESV inspector may attend prior to or during the event. If any unsafe or non-complying situation is found, the Event Organiser shall be notified to take appropriate action. ESV inspectors may liaise with the WSV and Fire Authorities on gas safety matters.

#### **4.6 WorkSafe Victoria (WSV)**

WSV regulates all workplace OH&S related safety matters including the storage and handling of LPGas (when not connected to an appliance) at Public Events. WorkSafe inspectors may liaise with the ESV and Fire Authorities on gas safety matters.

#### **4.7 MFB/CFA**

The Victorian Fire Authorities provide written advice on emergency plans and fire protection equipment. Fire Officers may liaise with the ESV and the WSV on gas safety matters. (refer to Clause 10)

## 5. OPERATIONAL CONSIDERATIONS FOR SITE SAFETY MANAGEMENT

### 5.1 LPGas delivery and storage

Consideration shall be given to the delivery of LPGas cylinders to and on the site.

For delivery of cylinders, a clear access is to be provided. In many cases the Gas Supplier will unload the cylinders in one location. Full cylinders shall be stored in a safe and compliant location. Personnel should be available to immediately distribute the cylinders if appropriate.

Reserve or depleted cylinders shall be stored safely in a compliant, designated area.

### 5.2 Connection And Change Over

The act of connecting the hose and regulator to the cylinder is a common risk. It is for this reason that special attention must be paid to ensure that:

- An appropriate connection/changeover procedure is developed
- The procedure includes leak testing with a non-ammonia based soapy water solution
- Personnel are adequately instructed in the procedure
- Only persons competent, and trained in the procedure are permitted to do that work

### 5.3 Minimisation Of Changeovers

It is recommended that a schedule be developed whereby LPGas cylinders are replaced at the end of each day when there are less people on site. Appliance Hirers should be consulted to determine the appropriate length of time that an appliance can operate on any cylinder, and planning for replacement shall be based on this.

### 5.4 Movement Of Appliances Or Cylinders Whilst Connected And/Or In Operation

At no time shall any appliance or cylinder once connected be moved. Movement of either can cause stress on the joints and may damage the connection. Always ensure that equipment is turned off and the cylinder valve is closed and cylinder disconnected prior to moving.

### 5.5 Turn Off At The Cylinder

If at any stage a potential leak is identified, it is important that the supply is isolated. This can best be achieved by closing the cylinder valve. Where cylinders are located externally, it is a requirement that each cylinder and/or the regulator is identified clearly against the appliance it supplies to make isolation of that appliance possible in an incident.

### 5.6 Lighting Of Appliances

Personnel operating an appliance shall be trained in its safe operation, including the lighting procedure for the appliance.

## 6. GAS APPLIANCE INSTALLATION AND CONNECTION

### 6.1 General

Selection and operation of appropriate equipment is one of the most important factors in controlling the safety of LPGas in temporary catering operations. All appliances used at an event shall be certified and have the operating instructions fastened to the appliance, or a manual or procedure provided.

### 6.2 Certified Appliances

All appliances shall display their approval badge as being certified. Refer to **Figure 2 Examples of Appliance Approval Badges** for examples of Appliance Approval Badges as attached to appliances.

If any appliance does not bear an approval badge it shall not be used at a Public Event. It is a breach of the Victorian *Gas Safety (Gas Installation) Regulations* to connect an LPGas cylinder to an appliance that has not been certified.

If an appliance does not display an approval badge, ESV should be contacted and an arrangement made to determine its suitability before the Event.

**Figure 2 - Examples of Appliance Approval Badges**



### 6.3 Domestic Appliances

It is recommended that domestic appliances not be used at public events due to their lighter construction.

### 6.4 Safety Devices

Appliances can include various safety devices, designed to protect the user. These may include flame safeguard systems, thermostats, over temperature cut-offs and excess flow valves. Therefore, safety devices shall not be interfered with or removed.

### 6.5 Conversion Of An Appliance

In some cases it may be necessary to convert an appliance from natural gas to LPGas. The appliance must be suitable and certified once converted as any alteration will void its Certification.

### 6.6 Appliance Location

An LPGas appliance shall not be installed or used

- i. Internally, if it is certified for outdoor installation (except where clause 6.13 applies); or
- ii. Outdoors, unless it is certified for outdoor installation, and/or accepted by the manufacturer for such installations

Note:

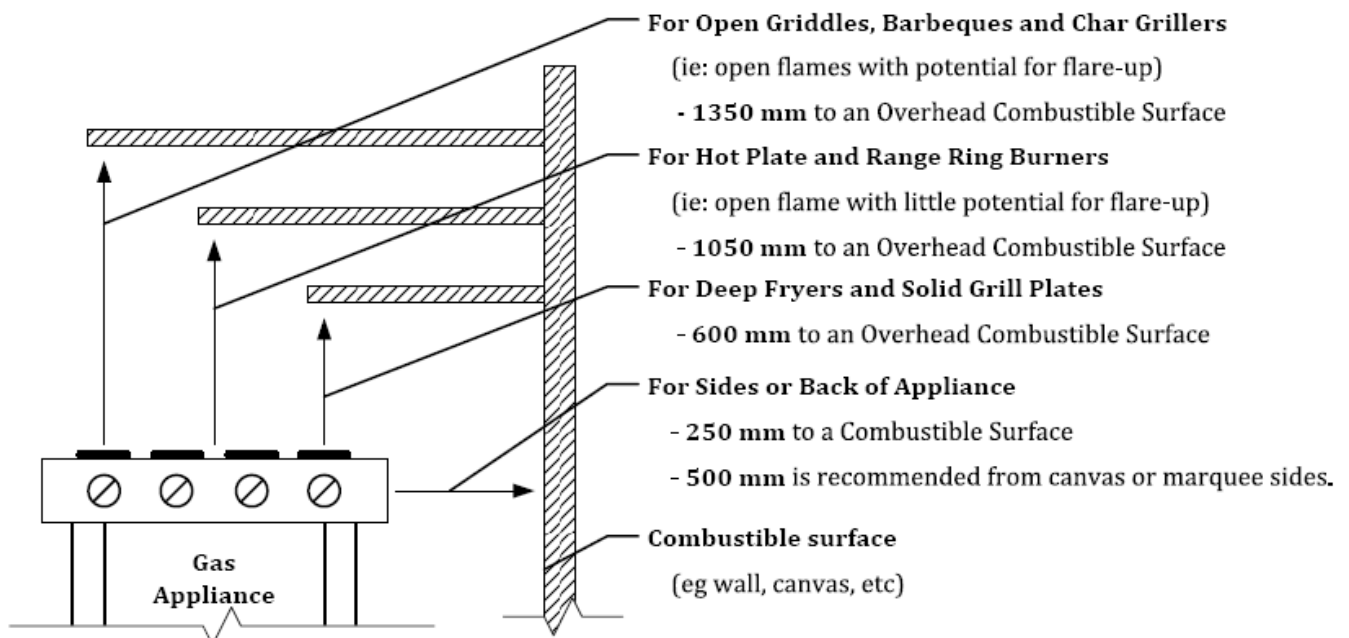
OUTDOOR LPGAS APPLIANCES SHALL NOT BE USED IN MARQUEES, TENTS, BOOTHS UNLESS THE MARQUEES/TENTS/BOOTHS MEET THE CRITERIA FOR AN OUTDOOR TEMPORARY STRUCTURE

See Figure 1 for examples of Outdoor Temporary Structures

### 6.7 Clearance from Combustible Materials (including walls, canvas, curtains etc.)

Appliances shall be installed with the clearance distances from combustible materials as detailed in *Figure 3 Appliance Clearances from Combustible Materials*.

**Figure 3 Appliance Clearances from Combustible Materials**



### 6.8 Maximum Operating Pressure

The maximum operating pressure to be supplied to any appliance shall not exceed 3 kPa unless otherwise approved by ESV.

### 6.9 Specific LPGas Appliance Requirements

Gas appliances shall be installed in accordance with the manufacturer's relevant instructions. Where there is any conflict between the manufacturer's instructions and the requirements of this document, the matter shall be referred to ESV for a ruling.

### 6.10 Hot Water Units

All hot water units shall be installed by an Authorised Person.

### 6.11 Heaters

Portable gas heaters certified for outdoor use shall not be used indoors.

## 6.12 Ring Burners / Portable Wok Burners

Appliances on benches or similar shall be secured to prevent movement and shall be on a non-combustible surface unless approved otherwise by the appliance manufacturer.

The use of ring burners / portable wok burners shall only be allowed where they are installed into a stable, sturdy stand, clear of combustible materials (above and below) at all times. The ESV may approve the use of these appliances if the arrangements are agreed before the event.

## 6.13 Solid Plate Barbeques

A Solid Plate Barbeque certified for outdoor use may be located in a well ventilated, indoor location at Public Events.

## 6.14 Appliance Ventilation

High and low level ventilation openings in a structure shall be provided to ensure adequate combustion air, dilution of combustion products and venting of any gas escape.

The required size of the high and low level openings shall each be (without any restrictions) calculated as follows:

*The area of ventilation openings required, both high and low, (in square centimetres) is calculated by multiplying the total gas consumption, in MJ/h, in the area to be ventilated, by a factor of 3. (as an example an appliance using 25 MJ/h shall have ventilation openings 75 sq cm at each of the high and low free ventilation areas (25 x 3 sq cm))*

# 7. CYLINDERS AND COMPONENTS

## 7.1 Minimising LPGas Storage And Usage

Wherever practicable minimise the total number of cylinders in use.

There shall be clear access to each cylinder at all times, sufficient to allow access to facilitate immediate closing of the cylinder valve in the event of a leak.

## 7.2 Stabilisation Of Cylinders

Any cylinder connected to an appliance shall be in an upright position, with the relief vent directed away from the appliance or combustible materials, and stabilised where appropriate to minimise the chances of the cylinder being knocked over or the cylinder connection being strained.

Stabilisation can be achieved by;

- Securing the cylinders to a permanent structure
- Placing smaller cylinders inside a crate (plastic crates are acceptable for public events as defined in this Code of Practice, however those made of wood, cardboard or other combustible materials are not). Care must be taken that the valve and regulator are not impacted or obstructed by the structure and that the crate or box is open type.
- Securing larger cylinders with chains to a stake or star pickets
- Fixed to a metal trolley that can be secured to prevent tilting
- Or other appropriate methods.

## 7.3 Distance From Ignition Source

Cylinders in use shall be separated from ignition sources such as: electrical equipment or other objects that may produce sparks, ignition or excessive heat.

*Figure 4 Clearance From Cylinder* shows the clearance distances required from any exchange cylinder connection.

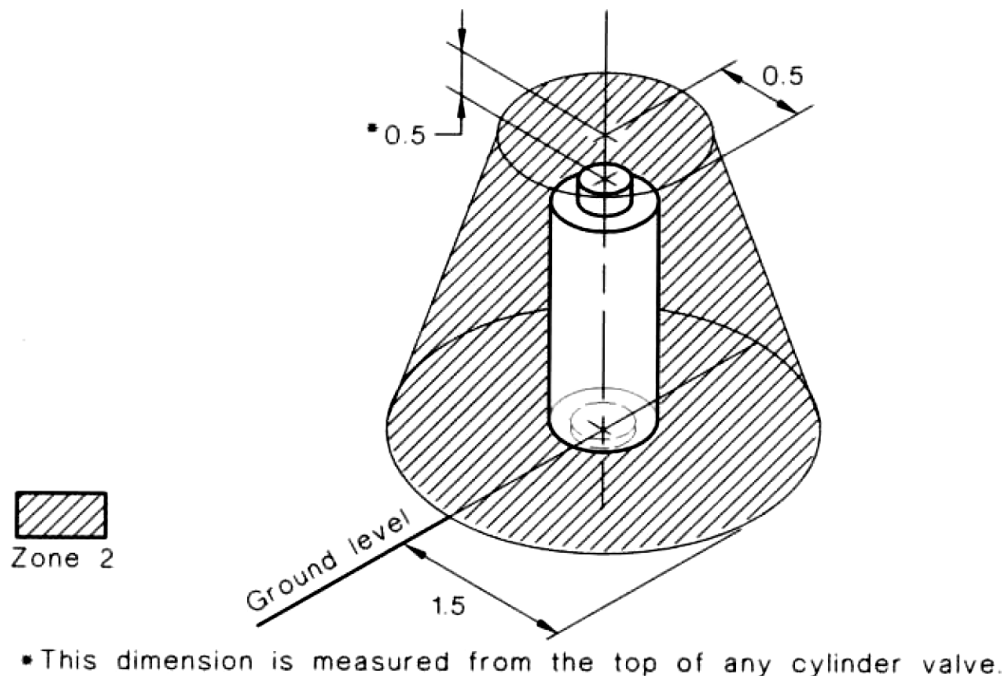
An appliance shall not be located within 1.5 m of the cylinder,

This requirement does not apply to the location of a flame or igniters of a gas appliance and its supplying cylinder where:



- The cylinder capacity does not exceed 12.5 kg (See Appendix B), and
- Both the cylinder and the appliance are located outdoors, either as a fixed installation or as a portable or mobile appliance unit, and
- Heat from the appliance will not cause the design temperature of the cylinder to be exceeded

**Figure 4 Clearance From Cylinder**



#### 7.4 Walkways And Egress Routes

A minimum of 1.2 metre clear walkway width should be available for all egress routes.

#### 7.5 Ventilation

All cylinders are to be provided with adequate ventilation.

Ventilation can be achieved in a number of ways and should ensure that there is no possibility for a build up of LPGas vapours should any leakage occur.

#### 7.6 Regulators

Installed appliances are required to be fitted with two stage regulators with over pressure protection.

If an appliance is certified as portable, a single stage regulator will suffice. These are only acceptable for portable appliances supplied from a cylinder not exceeding 15 kg and connected directly to a cylinder.

The cylinder regulator shall provide a maximum 3 kPa outlet pressure with all appliances operating unless otherwise approved by the ESV.

For installed appliances, the cylinder regulator shall be fixed to an adequate support independent of the cylinder and mounted with the diaphragm vertical and the vent pointing downwards. Regulators shall be connected to the cylinder by pipe work in accordance with AS 5601.

The positioning of any regulator pressure relief shall be such that it points away from potential ignition sources.

#### 7.7 Gas Hoses

LPGas supply hose should be connected to the back of the appliance wherever possible to prevent persons being tangled in, or tripping over, the hose.

Flexible hose length shall be kept as short as possible and not exceed a maximum length of 3 m. The hose type shall suit the application and shall be of a continuous length (with no joints). An Authorised Person or component supplier can advise on this. Hoses should be regularly inspected and replaced if damaged or deteriorated in any way

### **7.8 Setting Up And Dismantling**

Permanent connections shall be made and unmade by an Authorised Person. A GFN shall be provided for this work by the Authorised Person.

If piping is on the ground, it shall be protected from physical damage and trip hazards by having a protective cover over the pipe, or supported above ground by secure brackets or fixtures.

## **8. GAS LIMITS WITHIN BUILDING AND STRUCTURES**

### **8.1 General**

This section explains the quantity and size of cylinders permitted for the different structure types for events. Refer to *Table 1 LPGas Allowable Quantity And Cylinder Size* for the allowable LPGas and cylinder quantities for each type of building.

### **8.2 Permanent Structure With Permanent LPGas Installation**

The gas installation to these buildings shall be carried out by an Authorised Person and shall comply with the Australian Standard: AS 5601 Gas Installations.

**Table 1 LPGas Allowable Quantities And Cylinder Sizes**

Location	Quantity
<p>1-Temporary outdoor structures (eg. marquees, tents, booths, or under awnings) are classed as outdoors for cylinder use and location (Note: Not classed as outdoors for appliance location)</p>	<p>Maximum total quantity; 60 kg Maximum cylinder size: 15 kg Totals include indoor and outdoor</p>
<p>2-Temporary outdoor structure Exceeding quantity and/or cylinder size in 1. (marquees, tents, booths, or under awnings are not classed as outdoors for cylinder use and location when exceeding limits in 1)</p>	<p>Maximum total quantity: 270 kg Maximum cylinder size: 45 kg No cylinders indoors All appliances connected from the one gas supply (ie. If more than one cylinder, cylinders to be manifolded and supplied through the one regulator) Only to be installed by an Authorised Person where manifolded (These quantities can only be exceeded with the prior approval of ESV before the event)</p>
<p>3 – Outdoors. No Structure Including open area under one roof with number of Catering Vendors (per each catering vendor stall)</p>	<p>Same as 1 &amp; 2 above 15m gas free separation zone applies (see note below)</p>
<p>4 -Temporary structure indoors A building with a roof and three or more walls</p>	<p>Maximum total quantity: 10 kg per 10m<sup>2</sup> of floor area, with a total quantity of 30 kg Maximum cylinder size: 15 kg (If the quantity of gas or cylinder size is required to exceed the limit allowed, the cylinders shall be installed externally)</p>
<p>5 – Permanent building with temporary gas installation (eg. Container type building used ofr catering. Refer to 7 &amp; 8 if assembly building)</p>	<p>Same as 1,2 &amp; 4 above depending on quantity of gas and whether indoors or outdoors</p>
<p>6 - Permanent buildings with permanent gas installation</p>	<p>Installation shall be installed by an Authorised Person to Gas installation standard AS 5601</p>
<p>7 - Assembly Buildings indoors where the floor area is less than or equal to 200 m<sup>2</sup></p>	<p>Maximum total quantity; 45 kg per 50m<sup>2</sup> floor area, up to a total quantity of 180 kg. Maximum cylinder size: 45 kg. (If the quantity of gas or cylinder size is required to exceed the limit allowed, the cylinders shall be installed externally)</p>
<p>8 - Assembly Buildings indoors where the floor area is greater than 200 m<sup>2</sup></p>	<p>Maximum total quantity: 210 kg of LPGas per 200m<sup>2</sup> of floor area applies. Such groups of cylinders shall be separated by at least 15 m (If the quantity of gas or cylinder size is required to exceed the limit allowed, the cylinders shall be installed externally) (In-situ cylinders shall be outdoors)</p>

Notes:

1. Gas quantities for cylinders are for generic cylinder sizes (not water capacity)
2. Groups of Temporary Structures in Which Gas is Used

Where temporary structures are grouped together, eg. A group of marquees, stalls or tents at a market, there shall be a maximum of 10 such structures using LPGas in any such group.

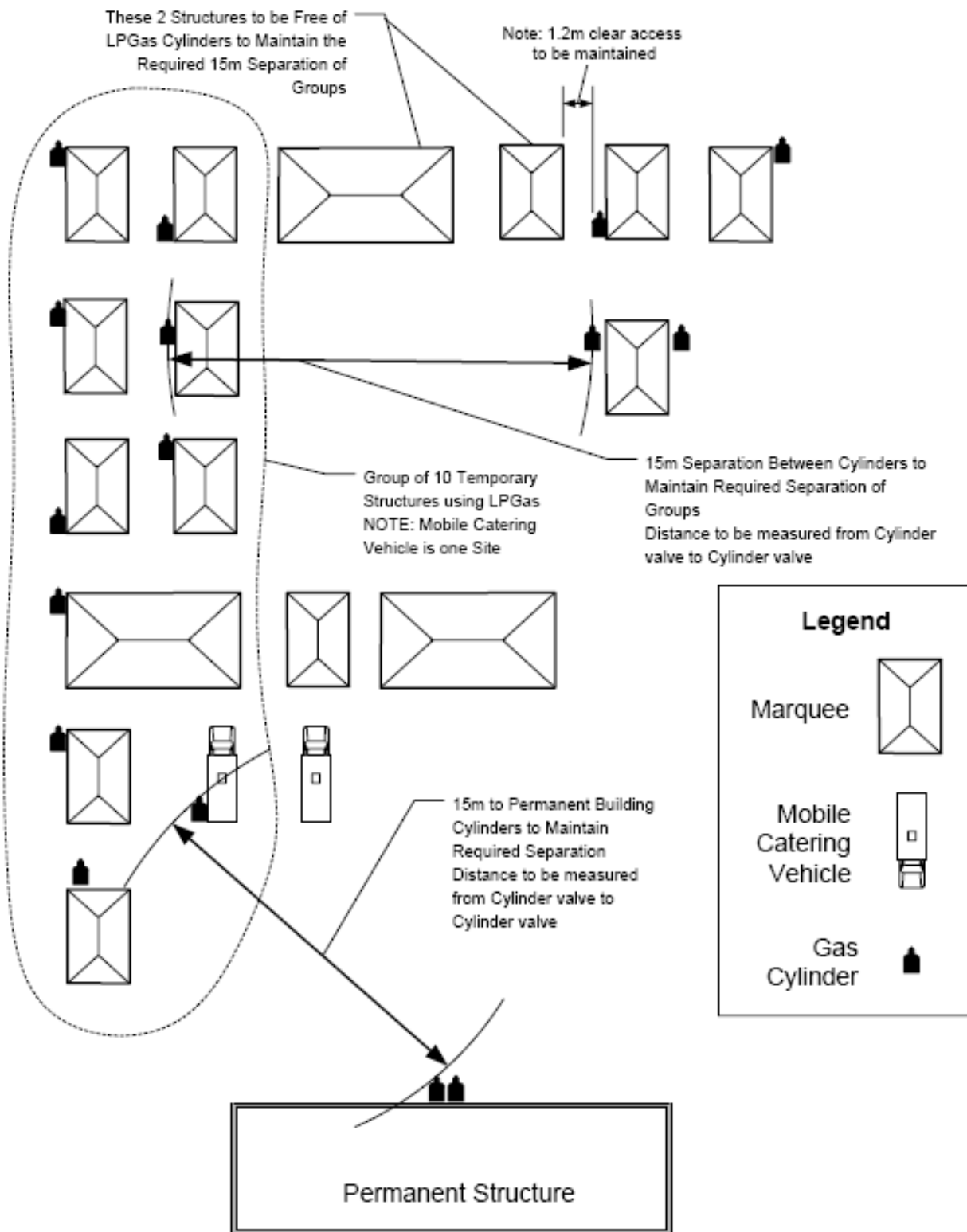
Groups of temporary structures using LPGas shall be separated by at least 15 m. The intervening space may be occupied by temporary structures in which no flammable gas or flammable liquids are kept. **See Figure 5 Description of Separation Distances between Groups.**

3. Mobile catering vehicles are counted as a structure when determining the number of structures in a group.

See **Clause 9 MOBILE CATERING VEHICLES.**

- 4 FOR APPLIANCE LOCATION - A TEMPORARY STRUCTURE IS NOT DEFINED AS OUTDOORS UNLESS IT COMPLIES WITH **Figure 1 Examples Of Outdoor Temporary Structures For LPGas Appliances.**
-

**Figure 5 Description of Separation Distances between Groups**



## 9. MOBILE CATERING VEHICLES

A mobile catering vehicle located amongst temporary structures shall be classed as a temporary structure for the purpose of the number of groups of structures allowed for the gas free separation zone.

## 10. EMERGENCY PLANNING

### 10.1 Emergency Plan

Whilst all steps may be taken to avoid the risk of an incident occurring, it is important that planning for any emergency situation be formalised. An **Emergency Plan** is a written document detailing how a site / facility and its occupants will manage an emergency. An effective emergency plan consists of the preparedness, response and recovery activities and includes the agreed emergency management roles, responsibilities, strategies and system arrangements of the site. The level of detail in the emergency plan will depend on the complexity of the risks on site.

Additional information can be obtained at:

[www.cfa.vic.gov.au](http://www.cfa.vic.gov.au)

[www.mfb.vic.gov.au](http://www.mfb.vic.gov.au)

### 10.2 Emergency Services Notification

In the event of an emergency occurring, the relevant emergency services should be contacted immediately.

### 10.3 Fire Protection

The first response in any emergency situation is to attempt to minimise the threat to life and property.

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

Where LPGas is to be used and other combustible materials are in the vicinity, it is imperative that fire extinguishers and fire blankets are available, and positioned in a manner that will allow access to them in the event of a fire.

It is import to ensure that all personnel, who may be required to use fire protection equipment such as fire extinguishers and blankets, be correctly trained in their safe use.

If the fire cannot be extinguished safely and expediently, it is recommended that all persons should evacuate the area.

### 10.4 Fire Extinguishers

It is recommended the Dry Chemical Fire Extinguishers, type 2A60B(E) be available for use on LPGas fires.

## Events, festivals, Markets

### Gas Safety Check List

This check list is for use by stall holders and authorised personnel.  
The check list should form part of the stall holders safety plan

Event Name .....

Stalls Holders Name .....

Stall Number .....

Mobile Catering Vehicle Compliance Number .....

Stall Holders Signature ..... Date .....

Gas Safety	Yes	No	Action if No
<b>Appliances</b>			
Only certified appliances in use	<input type="checkbox"/>	<input type="checkbox"/>	_____
Service history available	<input type="checkbox"/>	<input type="checkbox"/>	_____
In good working condition	<input type="checkbox"/>	<input type="checkbox"/>	_____
Safety devices not tampered with	<input type="checkbox"/>	<input type="checkbox"/>	_____
Taps and knobs in good condition and marked	<input type="checkbox"/>	<input type="checkbox"/>	_____
Not on a combustible surface	<input type="checkbox"/>	<input type="checkbox"/>	_____
In a well vented location	<input type="checkbox"/>	<input type="checkbox"/>	_____
Clearances from LPGas cylinder	<input type="checkbox"/>	<input type="checkbox"/>	_____
External appliances not in an internal location	<input type="checkbox"/>	<input type="checkbox"/>	_____
Appliance pressure does not exceed 3 kPa	<input type="checkbox"/>	<input type="checkbox"/>	_____
Appliance number match appropriate supply cylinder	<input type="checkbox"/>	<input type="checkbox"/>	_____
Consumer piping acceptable	<input type="checkbox"/>	<input type="checkbox"/>	_____
Hoses for appliance acceptable	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Regulators and hoses</b>			
Regulators in good condition	<input type="checkbox"/>	<input type="checkbox"/>	_____
Regulator hose of approved material	<input type="checkbox"/>	<input type="checkbox"/>	_____
Hoses in good condition	<input type="checkbox"/>	<input type="checkbox"/>	_____
Protected from accidental damage	<input type="checkbox"/>	<input type="checkbox"/>	_____
Hoses less than 3 m in length	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Cylinders</b>			
Cylinder within 10 year test date	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cylinder in good condition	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cylinder connections checked for leaks	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cylinders secured	<input type="checkbox"/>	<input type="checkbox"/>	_____
Located away from flammable materials and ignition source.	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cylinder not blocking exit or path of travel	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cylinder quantity not exceeded	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cylinder size not exceeded	<input type="checkbox"/>	<input type="checkbox"/>	_____

This check sheet should be kept at stall for viewing by authority, or handed to event organiser if requested.

Authority name who viewed this form ..... Date .....

**This Sheet is available from the ESV web site [www.esv.vic.gov.au](http://www.esv.vic.gov.au)**

## **Appendix B Regulatory storage Levels requiring Action under the Victorian Dangerous Goods (Storage and Handling) Regulations**

The Victorian Dangerous Goods (Storage and Handling) Regulations require the Occupier (the Event Organiser) to do certain things as the amount of Dangerous Goods on the Site increases. Care should be taken to understand the requirements, as the type and quantity of Dangerous Goods on the site will change these requirements as the risk profile of the site changes with increasing quantities.

Considering LPGas alone, the quantities of material on site are specified against the following requirements are (all quantities in water capacity of all LPGas vessels unless noted):

<b>Placarding of the Site</b>	Required if the on-site quantity exceeds 500 L of LPGas (approximately 250 kg)
<b>Preparation of a Manifest</b>	Required if the on-site quantity exceeds 5,000 L of LPGas (approximately 2,500 kg)
<b>Emergency Services Advice</b>	(Fire protection and emergency planning) Required if the on-site quantity exceeds 5,000 L of LPGas (approximately 2,500 kg)
<b>Notification of Storage &amp; Handling</b>	Required if the on-site quantity exceeds 5,000 L of LPGas (approximately 2,500 kg)

### **Explanation of the Requirements:**

Placards provide visual warning to the emergency services authority of the hazards associated with the dangerous goods at the sites. The Event Organiser must ensure that the site is placarded if dangerous goods are stored in bulk or in a quantity that exceeds the quantity specified above.

A Manifest provides the emergency services authority with written information on the quantity, type and location of dangerous goods stored and handled on the site, to enable them to respond appropriately if called to an incident. The manifest must be kept on the premises in a place that is easily accessible to the emergency services authority as agreed with them.

Emergency Service written advice must be obtained if the Event Organiser intends to define and install fire protection and emergency planning for the event. The Event Organiser request the written advice of the emergency services authority in relation to the design and must have regard to that written advice when establishing the system. (NOTE: the provision of written advice by the fire authorities will require some pre-event planning and time).

Under the Victorian Dangerous Goods Storage Regulations, Sites that store and handle certain amounts of dangerous goods are required to notify the Authority of this fact, this includes Events of a temporary nature. It should be noted that the notification should be submitted 30 days before the event to allow for sufficient processing time.

More information on these requirements can be obtained on the WorkSafe Website: [www.worksafe.vic.gov.au](http://www.worksafe.vic.gov.au) or by contacting your local WorkSafe Office on 1800 136 089.



## Appendix C Approximate Capacities Of Cylinders For LPGas

<b>Nominal mass of LPGas in cylinders kg</b>	<b>Approximate volume (water capacity) of cylinder Litres</b>
3	7
4.5	11
5	13
9	22
10	26
13.5	32
15	36
18	44
45	108
90	200
190	454
210	499