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DANGEROUS GOODS SAFETY MANAGEMENT

Fire and Security Consulting Services advises clients that The Dangerous Goods Safety Management Act and Regulation commenced in Queensland on the 7th of May 2002.

The legislation will be enforced through the Department of Emergency Services with other agencies such as the Division of Workplace Health and Safety assisting with enforcement and administration. Occupiers of all workplaces are now required to be in compliance with this legislation.

WHAT ARE YOUR OBLIGATIONS?

Obligations have been placed on the Occupier of the workplace with requirements dependant on the classification of the site. There are four key site classifications based on the quantity of hazardous materials stored and/or handled:

- Minor Storage Workplaces
- Dangerous Goods Locations (DGL)
- Large Dangerous Goods Locations (LDGL)
- Major Hazard Facilities.

The greater the quantity of hazardous materials stored at the site the greater the number of compliance requirements imposed.

Note 1 – It is considered that “workplaces” also includes Class 2, 3, 4, 5, 6, 7a, 7b, 9a, 9b and 9c buildings.

WHAT SHOULD YOU DO?

CLASSIFY YOUR SITE

Occupiers of all premises must determine what legislative requirements they are to comply with by classifying their site. Reference should be made to schedule 1 and 2 of the regulations. You can find this detail at

www.legislation.qld.gov.au/LEGISLTN/CURRENT/D/DanGoSaManR01_001.pdf

NOTIFICATION OR LICENSING

If your site is classified as a Major Hazard Facility or Large Dangerous Goods Location there is a requirement to notify the Department of Emergency Services.

If you store flammable and/or combustible liquids and / or flammable gases above minor quantities as defined in **Australian Standard AS1940 – 2004 - The storage and handling of flammable and combustible liquids** and / or **AS1595 – 2002 The Storage and handling of LP Gas**, (accessible at <http://infostore.saiglobal.com/store/>), you are required to be licensed with your relevant local government authority.

HAZARD IDENTIFICATION AND RISK ASSESSMENT

Hazards associated with the storage and handling of stated dangerous goods or combustible liquids must be identified and an assessment undertaken to determine whether control measures are adequate to minimise the risk. The complexity of the risk assessment process will depend on:

- Quantity of hazardous materials stored and/or handled;
- Types of materials stored and/or handled (i.e. hazardous nature);
- Complexity of the systems; and
- Location of the site, among other things.

Risk assessment of minor stores should include at a minimum reference to the material safety data sheet for the substance taking into consideration the chemical properties. Risk assessment for

dangerous goods locations and major hazard facilities will require a more comprehensive approach taking into consideration recognised industry standards.

RISK MINIMISATION

Control measures to minimise risk should be based on the hierarchy of control measures. However, the legislation specifically defines some risk minimisation methods that should be considered. These include:

- Substitute hazardous materials with less hazardous ones;
- Reduce the quantity required to be stored and handled;
- Ensure protection of materials against impact;
- Provide information through material safety data sheets and other methods;
- Prevent interaction between incompatible materials;
- Provide spill control systems; and
- Provide personal protective equipment.

PLACARDING

If you are classified as a dangerous goods location or major hazard facility you must install a HAZCHEM outer warning placard at major entrances to your site. You may also be required to install an information placard depending on the quantity of goods stored and handled.

The Dangerous Goods Safety Management Act and Regulation commenced in **Queensland** on the 7th of May 2002. The legislation was introduced to provide a more consolidated and comprehensive approach to the management of hazardous materials in order to protect people, property and the environment. The key focus of the legislation is to ensure a consistent approach to managing major hazard facilities and locations that store stated dangerous goods or combustible liquids. This will be undertaken by moving away from a prescriptive approach in favour of a performance based or risk management approach in line with National standards (NOHSC). The legislation will be enforced through a Lead Agency being the Department of Emergency Services with other agencies such as the Division of Workplace Health and Safety assisting with enforcement and administration. **Occupiers of all workplaces are now required to be in compliance with this legislation.**

What Are Your Obligations?

Obligations have been placed on the Occupier of the workplace with requirements dependant on the classification of the site. There are four key site classifications based on the quantity of hazardous materials stored and/or handled:

1. Minor Storage in Workplaces (See Page 3 for guidance);
2. Dangerous Goods Locations (DGL);
3. Large Dangerous Goods Locations (LDGL); and
4. Major Hazard Facilities.

The greater the quantity of hazardous materials stored at the site the greater the number of compliance requirements imposed.

What Should You Do?

Classify Your Site

Occupiers of all premises must determine what legislative requirements they are to comply with by classifying their site.

Reference should be made to schedule 1 and 2 of the regulations.

Notification or Licensing

If your site is classified as a Major Hazard Facility or Large Dangerous Goods Location there is a requirement to notify the Department of Emergency Services. If you store flammable and/or combustible liquids of flammable gases above minor quantities as defined in Australian Standards AS1940 and / or AS1596, you are required to be licensed with your relevant local government authority.

Hazard Identification and Risk

Assessment

Hazards associated with the storage and handling of stated dangerous goods or combustible liquids must be identified and an assessment undertaken to determine whether control measures are adequate to minimise the risk. The complexity of the risk assessment process will depend on:

- Quantity of hazardous materials stored and/or handled;
- Types of materials stored and/or handled (i.e. hazardous nature);
- Complexity of the systems; and
- Location of the site, among other things.

Risk assessment of minor stores should include at a minimum reference to the material safety data sheet for the substance taking into consideration the chemical properties. Risk assessment for dangerous goods locations and major hazard facilities will require a more comprehensive approach taking into consideration recognised industry standards.

Risk Minimisation

Control measures to minimise risk should be based on the hierarchy of control measures. However, the legislation specifically defines some risk minimisation methods that should be considered. These include:

- Substitute hazardous materials with less hazardous ones;
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- Ensure protection of materials against impact;
- Provide information through material safety data sheets and other methods;
- Prevent interaction between incompatible materials;
- Provide spill control systems; and
- Provide personal protective equipment

Placarding

If you are classified as a dangerous goods location or major hazard facility you must install a HAZCHEM outer warning placard at major entrances to your site. You may also be required to install an information placard depending on the quantity of goods stored and handled.

MINOR STORAGE – COMBUSTIBLE AND FLAMMABLE LIQUIDS



The majority of workplaces and buildings will have quantities falling into the “Minor Storage” category. The pages are an extract (Note 2) from Australian Standard AS1940 – 2004 and should provide adequate guidance for storage practices and limitations. If not, a complete copy of AS1940 – 2004 should be referenced.

MINOR STORAGE FLAMMABLE GASES



The majority of workplaces and buildings will have quantities falling into the “Minor Storage” category. The pages are an extract (Note 3) from Australian Standard AS1596 – 2002 and should provide adequate guidance for storage practices and limitations. If not, a complete copy of AS1596 – 2002 should be referenced.

Note 1 – It is considered that “workplaces” also includes Class 2, 3, 4, 5, 6, 7a, 7b, 9a, 9b and 9c buildings.

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EXTRACT FROM AS1940 - 2004
STANDARD FOR THE STORAGE AND HANDLING OF FLAMMABLE AND COMBUSTIBLE LIQUIDS

SECTION 2 MINOR STORAGE

2.1 SCOPE OF SECTION

This Section specifies the criteria for 'minor storage' of flammable and combustible liquids, and the requirements for such storage.

Storage of flammable or combustible liquids in quantities not exceeding those listed in Table 2.1 and complying with the requirements of this Section, may be classified as minor storage and are exempted from the other sections of this Standard except as required by this Section.

The storage of minor quantities of liquids under conditions that do not comply with the requirements of this Section, or of quantities of liquids greater than those given in Table 2.1, shall comply with the requirements of other relevant Sections of this Standard.

Minor storage may exist as a part of a premises or complex in which no other flammable or combustible liquids exist, or may be part of a premises whose function is to use flammable or combustible liquids in processes or storage.

NOTES:

- 1 Workplace safety regulations and guidelines may apply even to quantities defined as minor storage.
- 2 For liquids with subsidiary risks, or in areas where decanting, package filling or processing occur, additional safety precautions (e.g. ventilation), may be required. Guidance may be found in relevant exposure standards, MSDS and product labels.

2.2 MINOR STORAGE QUANTITIES

2.2.1 Quantities allowable as minor storage

The quantities of flammable and combustible liquids allowable as minor storage are given in Table 2.1.

2.2.2 Quantities of Packing Group I

Flammable liquids of PG I, in containers larger than 2.5 L, shall not be kept in minor storage unless they are essential for daily operations and handled only by trained personnel.

2.2.3 Multiple minor storages

Where there is more than one minor storage on the same premises, such storages shall be separated by a distance of at least—

- (a) 20 m, if they are indoors; or
- (b) 15 m, if they are outdoors.

This distance shall be measured from the outermost package or tank in the minor storage (see Figure 2.1).

If two or more buildings are separated by at least 5 m of open space (i.e. an area without a roof and accessible for firefighting at all times), or by a concrete or double-brick wall capable of preventing the spread of a fire, a separate indoor minor storage quantity may be applied to each building.

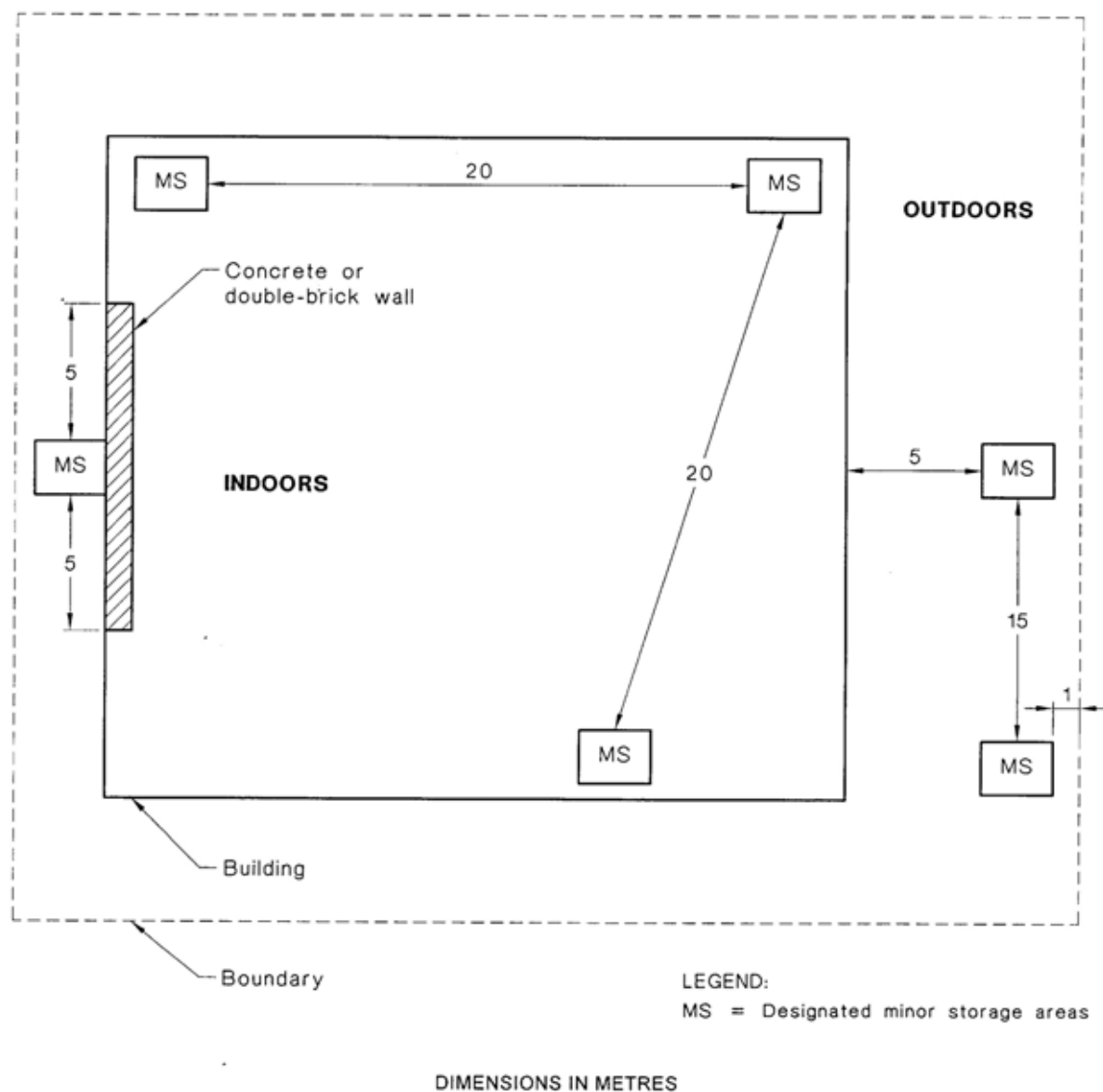


FIGURE 2.1 EXAMPLES OF LOCATIONS OF MINOR STORAGE

2.2.4 Separation between minor storage and other stores

A minor storage shall be separated from any other store of flammable and/or combustible liquids that is larger than minor storage by—

- (a) the distance to an on-site protected place (as given in Clause 4.3.1(b)); or
- (b) at least 5 m,

whichever is the greater.

This clause (Clause 2.2.4) does not apply to storage cabinets having a maximum capacity of 250 L.

2.2.5 Minor storage on open land

The following requirements and conditions shall apply to minor storage on open land having an area greater than 2 ha:

- (a) The storage shall be on land that is used, or intended to be used, for agricultural, horticultural, floricultural or pastoral purposes, including golf courses and national parks.
- (b) Liquids shall not be for sale or commercial distribution.
- (c) Liquids shall be kept at least 1 m away from any boundary, workshop, dwelling or protected place, body of water, watercourse or environmentally sensitive area.
- (d) The ground around the store shall be kept clear of combustible vegetation or refuse for a distance of at least 3 m.
- (e) Any potential flow of spillage shall be prevented from reaching a protected place, watercourse or property boundary by such means as the use of natural ground slope, or the provision of a diversion channel, kerb or bund.

2.2.6 Minor storage on construction sites

The requirements and conditions set out in Clause 2.2.5, with the exception of Item (a), shall apply to minor storage on construction sites.

TABLE 2.1
MINOR STORAGE

Location	Flammable liquids		Combustible liquids	Manufactured products
	PG I or PG II	PG III		
<i>Residential buildings of any type</i> Within a residence In a garage attached to a residence with a 60/60/60 FRL separating wall Outdoors, or in a shed or garage, separated from the residence or any other building by 1 m space Outdoors, uncovered, or in a shed or garage, separated from the residence or any structure or boundary by either 3 m of space or a wall having an FRL of 180/180/180 A supply tank for domestic oil-fired appliances installed in accordance with AS 1691 is excluded from any calculation of the quantity stored on the premises	5 L	25 L	50 L total C1 and C2	50 L
	25 L	50 L	100 L total C1 and C2	250 L
	100 L	250 L	500 L total C1 and C2	250 L
	250 L	250 L	500 L total C1 and C2	250 L
<i>Educational establishments (excluding laboratories)</i> For storage outdoors, or in sheds or attachments, the limits for the corresponding entry in residential buildings shall apply <i>Laboratories</i> (see Notes 1, 2 and 5)	5 L per 50 m ² of floor space	10 L per 50 m ² of floor space	500 L total C1 and C2 per 50 m ² of floor space	The limit for any manufactured product is the same as for a liquid of the same Packing Group
	50 L per 50 m ² of floor space, or 50 L in a room of up to 50 m ² of floor space	100 L per 50 m ² of floor space	200 L total C1 and C2	
	10 L per 50 m ² of floor space, but 5 L for any tenancy of less than 50 m ² area	25 L per 50 m ² of floor space, but 25 L for any tenancy less than 50 m ² area	500 L total C1 and C2 per 50 m ² of floor space but 500 L for any tenancy less than 50 m ² area	
<i>Commercial buildings</i> Indoors				

(continued)

TABLE 2.1 (continued)

Location	Flammable liquids		Combustible liquids	Manufactured products
	PG I or PG II	PG III		
<i>Hospitals</i> Indoors	10 L per 50 m ² of floor space	25 L per 50 m ² of floor space	500 L total C1 and C2 per 50 m ² of floor space	The limit for any manufactured product is the same as for a liquid of the same Packing Group
<i>Factories, workshops</i> Indoors	1 L per 2 m ² of floor space with no more than 250 L in any 500 m ² area	1 L per 1 m ² of floor space with no more than 500 L in any 500 m ² area	4 L per 1 m ² of floor space with no more than 2000 L in any 500 m ² area	In packages only—2000 L
<i>At commercial buildings, factories, workshops, hospitals and warehouses</i> Outside the building— (a) in attached outhouses or sheds if separated by a partition having an FRL of 60/60/60; or (b) outside, or in a detached shed or outhouse separated from the factory or workshop by at least 1 m	250 L As immediately above	As immediately above 1 400 L in tanks not over 700 L each, or in packages	2 500 L 5000 L	
<i>Shops</i>	As for factories and workshops (above) but no container for PG I or PG II liquid may exceed 20 L capacity			Flammable products: 10 000 L, of which no more than 2000 L are PG II, provided that storage is closed packages, not to be opened except for tinting paint for immediate sale
<i>Warehouses</i>	As for factories and workshops (above)			As for factories, workshops
<i>Service stations</i> Indoors	500 L total in packages Any packages kept in a sales area shall be unopened packages not over 20 L capacity	1 250 L total in tanks or packages	3000 L total C1 and C2	

(continued)

TABLE 2.1 (continued)

Location	Flammable liquids		Combustible liquids	Manufactured products
	PG I or PG II	PG III		
<i>Service stations</i>				
Outdoors		An additional 1000 L in packages can be kept outdoors		As for factories, workshops
<i>Open land</i>				
Outdoors above ground	5000 L	5000 L	10 000 L	
Underground tank(s)	5000 L	5000 L	10 000 L	As for shops
<i>Construction sites</i>	2 500 L	5000 L	10 000 L	As for shops

NOTES

- 1 In the case of laboratories, commercial buildings and the like, Table 2.1 is intended to cater for the day-to-day working stock in the laboratory or workroom. If these quantities are to be exceeded, it will be necessary to install a cabinet or major store facility according to the scale needed.
- 2 Laboratories that are constructed, operated and equipped in the form of a flammable liquid storage room and are used for the analysis of flammable liquids being processed are exempt from Table 2.1.
- 3 It is permissible to store at the same time on the same area, the maximum permissible allowance for each or all of the other packing groups of flammable liquids or classes of combustible liquids.
- 4 Where the maximum allowance is specified in terms of quantity per unit area, any arrangement which results in concentration at one point should be avoided. Such aggregation contravenes the intent of minor storage, which is dispersal, and proper storage provisions as in Section 4 could be necessary.
- 5 Materials being analyzed, used, mixed, blended or reacted upon on laboratory benches or in fume cupboards are exempt from the limitations of Table 2.1.

2.3 PRECAUTIONS APPLYING TO MINOR STORAGE

2.3.1 Location of minor storage

The following requirements and recommendations apply to the location of an indoor minor storage:

- (a) If the storage is located on a floor that is above the building's lowest floor (i.e. on a floor that is above the ground floor or basement), its location shall not jeopardize the safety of any areas on lower levels of the building or impede firefighting operations.
- (b) Flammable vapours and spilt liquids shall be prevented from escaping to any lower levels of the building.
- (c) Concentrated storage of liquids in any one area shall be avoided, so as to reduce the fire load and the potential rate of fire spread.
- (d) The storage area shall be adequately ventilated.
- (e) The build-up of flammable vapours should be avoided (see Clause 2.3.3 below).

2.3.2 Operations

The following handling requirements and precautions apply:

- (a) Persons who handle the liquids shall be fully aware of the hazards involved.
- (b) All storage areas shall be secured against access by unauthorized persons at all times.
- (c) Packages shall not be placed where they could hinder escape from a building in an emergency.
- (d) Care should be taken when decanting or transferring flammable liquids. Dispensing pumps or self-closing metal taps should be used, in order to reduce the hazards of splash filling, spillage and vapour escape.
- (e) Packages shall be kept closed when not in use. Packages containing flammable liquids should only be opened or decanted in well-ventilated areas and away from any potential ignition source.
- (f) The area in or around the minor storage shall be kept free of combustible materials and residues.
- (g) Any materials that might react dangerously if mixed shall be kept apart so that the possibility of reaction is minimized, e.g. fuel and pool chorine.
- (h) Liquids should not be stored near any hot surfaces, e.g. steam pipes, furnace walls or engines, or where they might be accidentally exposed to heat, e.g. from escaping steam.
- (i) Liquids should be transferred and moved in manner that reduces the likelihood of spillage, vapour escape or fire.

NOTE: Section 9 of this Standard deals with operational safety matters that may be pertinent to minor storage but which may be regarded as advisory.

2.3.3 Control of ignition sources (flammable liquids only)

Except for domestic premises, AS/NZS 2430.3.3 shall be consulted for hazardous atmosphere zoning if the volume of flammable liquids exceeds—

- (a) 100 L in closed containers;
- (b) 25 L for decanting purposes, e.g. petrol transfer to a motor vehicle or lawn mower;
- (c) 5 L in open containers for occasional use; or
- (d) 1 L in open containers for continuous use.

There shall be no ignition sources in any space in which a flammable mixture of vapour and air could be present.

WARNING: EVEN SMALL QUANTITIES OF FLAMMABLE LIQUID, IF SPILT, CAN CREATE A VAPOUR CLOUD THAT CAN TRAVEL CONSIDERABLE DISTANCES AND FLASHBACK.

2.3.4 Spillage control

All spills and leaks shall be cleaned up immediately. Any waste shall be disposed of safely and in accordance with the local regulations.

Liquids should not be allowed to reach ignition sources, stores of other chemicals, or combustible materials (e.g. timber and paper), or flow into drains or onto neighbouring land, or enter any creek, pond or waterway.

NOTES:

- 1 Precautions should be based at least on the loss of contents of the largest container kept.
- 2 A simple spillage kit may consist of—
 - (a) a metal bin with a tightly-fitting lid (plastics can be attacked by the liquid), partially filled with non-combustible absorbent such as vermiculite;
 - (b) broom, shovel, face shield, chemically-resistant boots and gloves; and
 - (c) a suitable respirator.
- 3 Oils of animal or vegetable origin can oxidize, with the generation of heat and the possibility of spontaneous ignition if they are absorbed onto combustible absorbents.

2.3.5 Fire protection and warning signs

At premises other than residences or farms, in locations where more than 100 L of flammable liquids, or more than 1000 L of combustible liquids are stored, or where flammable liquids are decanted, the following requirements apply:

- (a) At least one portable fire extinguisher, having a suitable rating for use with the range of materials being kept, shall be readily accessible and adjacent to the minor storage area. Where liquids are stored on open land, a fire extinguisher shall be provided if the liquids are decanted or transferred within 5 m of the storage.
- (b) In areas where flammable liquids are decanted, a sign bearing the words
DANGER — FLAMMABLE LIQUIDS — NO SMOKING — KEEP FIRE AWAY
 shall be displayed.

NOTE: Signs should comply with AS 1319.

For retail areas with customer access, this requirement shall apply if the liquids are decanted or transferred, or are in packages having capacities of more than 25 L.

2.4 MINOR STORAGE IN TANKS

2.4.1 Construction

Any tank that is intended for the storage of flammable or combustible liquid shall comply with AS 1692 or other appropriate specification. A Category 1 tank shall not be used for flammable liquid.

2.4.2 Installation

For underground tanks, the installation requirements of Clause 5.12 shall apply.

2.4.3 Maintenance

Tanks shall be inspected and maintained regularly.

EXTRACT FROM AS1596 2002 PERTAINING TO MINOR STORAGE OF LP GAS.

AS/NZS 1596:2002

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SECTION 2 MINOR STORAGE AND USAGE

2.1 APPLICATION

Any storage of LP Gas in quantities not exceeding those listed in Table 2.1 shall be classified as being minor storage and is exempted from other Sections of this Standard unless otherwise specified. The storage of quantities in excess of minor storage shall comply with the requirements of the Sections of this Standard as applicable.

Where the maximum allowance is specified in terms of quantity per unit area, any arrangement which results in concentration at one point should be avoided. Such aggregation contravenes the intent of minor storage, which is dispersal, and proper storage provisions as nominated in Section 6 could be necessary.

NOTES:

- 1 The underlying concept of minor storage is that quantities below a certain level are so small, or are so scattered and separated, that they present little real hazard, add little to a building's fire load and are generally unlikely to play a significant part in spreading a fire from place to place. The firefighting facilities required under normal building regulations are expected to cope adequately.
- 2 For certain industrial or commercial premises, workplace safety regulations or guidelines may apply even to quantities defined as minor in this Standard.

2.2 PRECAUTIONS

The following precautions shall be observed for any minor storage within the scope of this Section:

- (a) In Australia, the use of LP Gas cylinders and the retention of reserve or exhausted cylinders indoors shall be avoided where practicable. Where it is impracticable to provide an outdoors storage the use and storage of cylinders shall be subject to the limits and conditions specified in Table 2.1.

In New Zealand, the use and storage of cylinders indoors shall be subject to the limits and conditions of Table 2.1. The retention of reserve or exhausted cylinders indoors shall be avoided where practicable.

The total capacity allowed for any particular situation shall include cylinders in use, spare cylinders not in use and cylinders awaiting removal.

- (b) The storage shall not be in proximity to an ignition source.
- (c) Cylinder valves shall be kept closed when not in use.
- (d) Cylinders shall be stored in such a manner that the pressure-relief device is in communication with the vapour space.
- (e) Cylinders shall be protected against falling, damage and excessive temperature rise.
- (f) No combustible residues or waste material shall be permitted to remain in or around areas in which LP Gas cylinders are stored.
- (g) The storage area shall be adequately ventilated.
- (h) Cylinders shall not be stored in locations which jeopardize escape from the building in the event of fire.
- (i) Cylinders in a mixed cylinder storage shall be separated from any oxidizing gases by at least 3 m. This separation distance may be measured horizontally around a vapour barrier complying with the requirements of Clause 6.4.5.

- (j) In Australia, cylinders shall comply with AS 2030.1 and the coating identification mark requirements of Appendix D.

In New Zealand, cylinders shall be approved by the authority.

Persons who handle LP Gas should be made aware of the hazards involved.

NOTE: The requirements for cylinder storage in excess of minor storage are provided in Clause 6.6.

2.3 RESTAURANTS

Cylinders inside a restaurant shall be subject to the following additional requirements:

- (a) Cylinders shall be located and secured so that they are not liable to damage or dislodgment under normal conditions of use. Any trolley or stand used to house the cylinder shall be of metal construction and be of adequate stability.
- (b) When not in use (or awaiting immediate use) the cylinders shall be stored in compliance with Clause 6.6.
- (c) Cylinders and fittings shall be inspected for leaks prior to use and at the end of use.

NOTE: Requirements for non-refillable cylinders are provided in Clause 2.5.

2.4 LP GAS CYLINDERS ON TROLLEYS

LP Gas and oxygen cylinders may be stored together on trolleys for the purpose of LP Gas/oxygen cutting, brazing, melting, heating or similar purposes subject to—

- (a) the aggregate capacity of the cylinders on any trolley not exceeding 160 L; and
- (b) the aggregate capacity of LP Gas cylinders not exceeding 110 L.

2.5 NON-REFILLABLE CONTAINERS

The total capacity of non-refillable containers which can be stored indoors shall not exceed the following:

- (a) One hundred litres capacity in buildings which are frequented by the public except that for restaurants the total is limited to 50 L.
- (b) Three hundred litres in warehouses or similar buildings at any one location. If additional storage locations are required on the same floor within the same building then they shall be separated by at least 10 m.

Quantities in excess of the above would be treated as normal cylinder storage in accordance with Clause 6.6.

2.6 CYLINDER USE

The use of in situ fill cylinders and cylinders in decanting operations shall comply with the relevant requirements of Sections 6, 7, 8 and 11.

TABLE 2.1
MINOR STORAGE

Location	Cylinder storage limit
<i>Residential buildings of any type</i> Indoors, including on balconies Inside an outhouse or shed at least 1 m from dwelling Combined indoor and outdoor storage	12 L per tenancy (25 L in New Zealand) 25 L 500 L
<i>Education and exhibition buildings</i> Demonstration or display indoors Combined indoor and outdoor storage	Two 25 L cylinders per demonstration or display 500 L
<i>Trade training workshop</i> Indoors Combined indoor and outdoor storage	110 L 500 L
<i>Commercial or non-industrial buildings</i> (e.g. dental rooms, jewellers' workshops, laboratories, shops and recreation centres) Indoors Combined indoor and outdoor storage	12 L per tenancy (25 L in New Zealand) plus reserve gas up to 12 L in capacity (25 L in New Zealand) (excluding supply to a non-domestic mobile space heater) plus 25 L cylinder in use and 25 L cylinder spare if the application is of a short-term or temporary nature, e.g. temporary cooking for one single function Non-refillable containers 100 L in buildings frequented by public 500 L
<i>Restaurants</i> Indoors, including on balconies	50 L with each cylinder or non-refillable container not exceeding 12 L capacity (25 L in New Zealand)
<i>Warehouse</i> Indoors Combined indoor and outdoor storage	500 L in any 200 m ² of floor space. If floor area is less than 200 m ² the storage limit is reduced to 350 L (for storage >500 L see Clause 6.6). Cylinders may be manifolded in groups not exceeding 500 L. The banks shall be separated by at least 15 m Non-refillable containers 300 L at any one location. If additional storage locations are required on same floor in the same building they shall be separated by at least 10 m 500 L
<i>Industrial buildings</i> (excluding laboratories) Indoors Outdoors only Combined indoor and outdoor storage For laboratories, refer for to limits for commercial or non-industrial buildings	500 L in any 200 m ² of floor space. If floor area is less than 200 m ² the storage limit is reduced to 350 L (for storage >500 L see Clause 6.6). Cylinders may be manifolded in banks not exceeding 500 L. The banks shall be separated by at least 15 m 500 L 500 L
<i>Engine fuel indoors</i>	Limit as for industrial buildings irrespective of the type of premises

NOTES:

- Vehicle fuel containers installed in accordance with AS/NZS 1425 are not included in the aggregate capacity.
- Caution should be exercised where engines are used in poorly ventilated locations due to the potential for atmospheric pollutants and high noise levels.