

## **6 GENERAL RULE**

### **6.9 HAZARDOUS SUBSTANCES**

#### **6.9.1 ISSUES, OBJECTIVES, POLICIES AND METHODS**

See Part B(5).

#### **6.9.2 RULES FOR HAZARDOUS SUBSTANCES**

##### **6.9.2.1 PERMITTED ACTIVITIES**

The following are permitted activities subject to complying with all the Performance Standards for the Zone and the General Rules:

- (1) The use and/or storage of hazardous substances identified in Schedule 1, in quantities not exceeding those specified in Column A of Table 1 for the relevant zone.
- (2) The use and/or storage of hazardous substances in the Industrial H Zone in quantities not exceeding those specified in Column A of Table 2.
- (3) The use of explosives (Class 1(a) and (b) in Schedule 1).

NOTE 1: Temporary military training activities by the New Zealand Military Defence Force. (The use of hazardous substances by the NZMDF for temporary military training activities is not considered as "storage").

NOTE 2: Refer to Regional Rules for additional controls on storage of petrol or diesel.

##### **6.9.2.2 CONTROLLED ACTIVITIES**

- (1) The use or storage of hazardous substances in the Industrial H Zone where that storage is part of a distribution or use network e.g. petrol or diesel, Council shall restrict its discretion to the environmental effects associated with the:

- alternative methods or technologies for containment or management
- flood hazard
- provision of a contingency plan in the event of spillage
- quantities of hazardous substances to be used or stored
- location on the site where the hazardous substances will be used or stored
- nature of containment provisions and use

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- the supply of information and monitoring
- degree of compliance with any relevant codes of practice or guidelines.

- (2) Provision of new or replacement storage tanks at service stations or Emergency Services Facilities in any zone, provided the replacement tanks do not exceed the existing capacity by more than 50%.
- (3) Pipelines for distribution of hazardous substances.

## **6.9.2.3 DISCRETIONARY ACTIVITIES**

The following are discretionary activities subject to complying with the General Rules.

- (1) The use and/or storage of hazardous substances identified in Schedule 1, in quantities exceeding those specified in Column A but not exceeding those specified in Column B (where specified) of Table 1 for the relevant zone.
- (2) Where Column B of Table 1 is denoted by a dash (-) the use and/or storage of hazardous substances identified in Schedule 1, in any quantities exceeding those specified in Column A of Table 1 shall be a discretionary activity.
- (3) The manufacture of any hazardous substance.
- (4) The use and/or storage of hazardous substances in the Industrial H Zone in quantities exceeding Column A in Table 2 when the use or storage is not intended to be part of a distribution or use network e.g. long term storage of any hazardous wastes.
- (5) Any activity specified as a permitted, controlled or discretionary activity which does not comply with any one or more of the Performance Standards in 6.9.3 Council's discretion will be restricted to the matter(s) specified in the standard which is not complied with.

Applications with the potential to adversely affect natural areas will be publicly notified.

NOTE: When considering applications for discretionary activities regard shall be had to the Performance Standards for the zone.

## **6.9.2.4 NON-COMPLYING ACTIVITIES**

The following activity, and all other activities in all zones using or storing hazardous substances are non-complying activities unless they are provided for by a General Rule.

- (1) The use and/or storage of hazardous substances identified in Schedule 1 in quantities exceeding those specified in Column B of Table 1 for the relevant zone (does not apply in the Industrial H Zone).

#### **6.9.2.5 NON NOTIFIED RESOURCE CONSENTS**

Subject to section 94(5) of the Resource Management Act, resource consents in relation to the following matters shall not be notified and the written approval of other persons need not be obtained:

- (1) Non compliance with Performance Standards 6.9.3(1)-6.9.3(2).
- (2) Where activities in Commercial 1, Industrial L and Rural 1 and 2 Zones exceed Column A Quantity Limits in Table 1 but do not exceed Column B Quantity Limits in Table 1 except where any site adjoins a Residential Zone.

#### **6.9.3 PERFORMANCE STANDARDS FOR HAZARDOUS SUBSTANCES**

- (1) Primary and secondary containment systems shall be employed whenever hazardous substances (including hazardous waste) are used or stored on all or part of a site.

For the purposes of this Plan, containment means the retention of a hazardous substance in a way that prevents the hazardous substance from uncontrolled entry into the surrounding environment. Primary containment means the primary container e.g. the primary containment for a can of petrol would be the can. Secondary containment means a structure or installation that contains the hazardous substance should the primary container fail e.g. secondary containment for a can of petrol could be the building it is stored in. For the purposes of this Rule, secondary containment systems are not required for the use or storage of any Class 2 Hazardous Substances (Gases) as referred to in Schedule 1 to these Rules.

- (2) To achieve 6.9.3(1) the following specifications shall apply:
  - (a) The volume of any secondary containment system shall be 100% of the maximum volume of the largest primary container of any hazardous substances to be stored, used, loaded or unloaded;
  - (b) The secondary containment system shall be designed in such a way as to ensure containment of any hazardous substance that

spills due to the collapse of any containers (e.g. tank) and the containment from the direct leakage from any primary container;

- (c) The primary and secondary containment systems shall be sealed with impervious materials that are resistant to breakdown from the particular hazardous substances which they are designed to contain;
  - (d) The integrity of the primary and secondary containment systems shall be maintained at all times.
- (3) The containment of hazardous substances for either disposal purposes or for subsequent use, shall be in containers that seal or are designed to contain the hazardous substances collected, and the container should be legibly and accurately marked.
- (4) Any use, storage of radioactive material, including radiation machines, shall comply with conditions set by the National Radiation laboratory.
- (5) The storage of less than 1000 litres of oil in transformers or switch gear for the purposes of the reticulation of electricity shall be exempt from Performance Standards 6.3.9(1) and (2).
- (6) Storage of petrol or diesel in volumes of less than 3000 litres in aboveground tanks in Rural Zones shall be exempt from Performance Standards 6.9.3(1) and (2) provided that the tank is at least 20 metres away from any natural water body or water race.
- (7) Storage of diesel in volumes of less than 250 litres in aboveground tanks in association with residential activities shall be exempt from Performance Standards 6.9.3(1) and (2).
- (8) Buildings containing hazardous substances, and hoses and taps for fuel delivery, shall be lockable.
- (9) Activities using or storing hazardous substances shall be set back from all site boundaries. The distance of the setback shall be the isolation distance required under the Dangerous Goods Act and the Building Act.
- (10) **Radio Frequency Standard**
- Exposure to radio frequency (RF) emissions shall not exceed that of NZS 2772.1 1999 (Radio Frequency Fields Part 1: Maximum Exposure Levels - 3kHz to 300 GHz).

NOTE 1: The Performance Standards are in addition to, and not in substitution for the

Performance Standards of the relevant zone, and other legislation that deals with hazardous substances, including the Dangerous Goods Act, Explosives Act, Toxic Substances Act, Medicines Act, Pesticides Act, Health and Safety in Employment Act or any subsequent legislation.

NOTE 2: Storage of hazardous substances in underground tanks may require a land use consent from the Canterbury Regional Council.

## SCHEDULE 1: CLASSIFICATION OF HAZARDOUS SUBSTANCES

CLASS	CHARACTERISTICS	EXAMPLES Including but not limited to:
1 Explosives	<p><b>1 Explosives</b></p> <p>1(a) An explosive substance or waste which is a solid or liquid that is, in itself, capable by chemical reaction of producing gas at such a temperature and pressure and at such speed as to cause damage to the surroundings (other than those specified in 1(b) below).</p>	<p>1(a) Nitrate mixtures, nitro compounds, chlorate mixtures, ammunition/detonators (excluding those for small arms use).</p>
	<p>1(b) As in 1(a) but with restricted use in the manufacture or reloading of small arms cartridges; or for the storage of flares.</p>	<p>1(b) Gunpowder or nitro compound adapted and exclusively used for cartridges for small arms; or for flares.</p>
2 Gases	<p><b>2.1 Flammable Gases</b></p> <p>2.1(a) LPG</p>	<p>2.1(a) LPG</p>
	<p>2.1(b) Any other Gases which at 20°C and a standard pressure of 101.3kPa:</p> <ul style="list-style-type: none"> <li>are ignitable when in a mixture of 13% or less by volume with air; or</li> <li>have a flammability range with air of at least 12% regardless of the lower flammability limit.</li> </ul> <p>This class includes aerosols containing flammable propellants if the contents include more than 45% by mass or more than 250g of flammable components.</p>	<p>2.1(b) Acetylene, hydrogen, methane.</p>
	<p><b>2.2 Non-flammable, Non-toxic Gases</b></p> <p>Gases which are stored or transported under a pressure not less than 280 kPa at 20°C, or as refrigerated liquids, and which:</p> <ul style="list-style-type: none"> <li>are asphyxiant-gases which dilute or replace the oxygen normally in the atmosphere, or</li> <li>are oxidising-gases which may, generally by providing oxygen, cause or contribute to the combustion of other material more than air does, or</li> <li>have neither asphyxiant nor oxidising characteristics.</li> </ul>	<p>2.2 Argon, helium, oxygen, nitrogen, carbon dioxide, freons, nitrous oxide.</p>

CLASS	CHARACTERISTICS	EXAMPLES Including but not limited to:
	<p><b>2.3 Toxic Gases</b> Gases which are known or are presumed to be toxic or corrosive to humans because they have an LC<sub>50</sub> value equal to or less than 5,000 ml/m<sup>3</sup> (ppm) when tested in accordance with procedures defined in paragraph 6.5(c) of the United Nations Recommendations on the Transport of Dangerous Goods, 7th revised edition.</p>	<p><b>2.3</b> Chlorine, sulphur dioxide, ammonia, methyl bromide.</p>
<b>3 Flammable Liquids</b>	<p><b>3 Flammable Liquids</b> Liquids, or mixtures of liquids, or liquids containing solids in solution or suspension, having the following flammability limits:</p> <p>3(a) Flash point &lt;23°C.</p> <p>3(b) Flash point ≤23°C; &lt;61°C.</p> <p>3(c) Flash point ≤61°C.</p> <p>3(u) Storage of 3(a), (b) and/or (c) in underground tanks.</p>	<p>3(a) Petrol, adhesives, ethyl and methyl alcohols, acetone, benzene, butylamine, MIBK.</p> <p>3(b) Kerosene, styrene monomer, cyclohexanone, turpentine, butyl methacrylate, chlorobenzene, ethoxyethanol.</p> <p>3(c) Diesel, petroleum oils.</p>
<b>4 Flammable Solids</b>	<p><b>4.1 Flammable Solids</b> Solids or wastes other than those classified as explosives, which under suitable conditions, ie impact, friction, heat, ignition, will burn or self react with extreme intensity.</p> <p><b>4.2 Substances or Wastes Liable to Spontaneous Combustion</b> Substances or wastes that are liable to spontaneous heating up on contact with air, and then being liable to catch fire.</p> <p><b>4.3 Substances which in Contact with Water Emit Flammable Gases</b> Substances or wastes which by interaction with water are liable to become spontaneously flammable or give off flammable gases in dangerous quantities.</p>	<p><b>4.1</b> Red phosphorus, ammonium picrate, picric acid, monomethylamine nitrate, nitrocellulose, trinitrobenzene, magnesium alloys.</p> <p><b>4.2</b> Yellow or white phosphorus, magnesium alkyls, dithionites.</p> <p><b>4.3</b> Alkali metals eg sodium, potassium, lithium, calcium, magnesium, metal hydrides, metal carbides.</p>

CLASS	CHARACTERISTICS	EXAMPLES Including but not limited to:
5	<b>Oxidising Substances</b>	
	<p><b>5.1 Oxidising Substances</b> Substances or wastes which, in themselves, are not necessarily combustible, but may, generally by yielding oxygen, cause or contribute to the combustion of other materials.</p> <p><b>5.2 Organic Peroxides</b> Organic substances or wastes which contain the bivalent O=O structure and are thermally unstable substances which may undergo exothermic self-accelerating decomposition.</p>	<p><b>5.1</b> Chromates, bromates, chlorates, chlorites, nitrates, permanganates.</p> <p><b>5.2</b> Any organic peroxide (includes peroxy and per compounds). Perdicarbonates, butyl, peroxyphthalate, cumene, hydroperoxide, bezoyl peroxide.</p>
6	<b>Corrosives</b> Substances or wastes which by chemical action, will cause severe damage when in contact with living tissue or, in the case of leakage will damage or destroy other material and goods or cause other hazards.	<b>6</b> Acids such as nitric, sulphuric, hydrochloric, hydrofluoric acids, trichloro acetic acid. Alkalis such as sodium, potassium and lithium hydroxides. Zinc chloride, zirconium tetrachloride, sulphur chlorides, silicon tetrachloride, phosphorus pentoxide, ferric chloride. Phenolsulphoric acid hydroxylamine sulphate, hexyltrichlorosilane, ethanolamine.
7	<b>Agrichemicals</b> Substances (including pastes, gels, powders, granules, dust or aerosols) formulated specifically for agricultural and horticultural activities (including aquaculture) and including but not limited to herbicides and fungicides. For the purpose of this Plan an agrichemical is considered a hazardous substance when it is at a concentration such that it requires mixing with water, oil, or any other liquid prior to an application.	<b>7</b> Bipyridyls, di-nitrophenols, phenoxy compounds, organophosphates, carbamates, organochlorines.
8	<b>Miscellaneous</b>	
	<p><b>8.1 Timber Preservatives</b> Preserves used in the treatment of timber.</p> <p><b>8.2 Chlorinated Solvents</b></p>	<p><b>8.1</b> Copper, chromium, arsenic, boron, and other water-borne preservatives. Light organic solvent preservatives, anti sapstain chemicals.</p> <p><b>8.2</b> Bromodichloromethane, Trichloroethane, Chlorodibromomethane 1,1,1 - Trichloroethene, Tetrachloroethene, Trichloromethane, Tetrachloromethane, Tribromomethane</p>

**TABLE 1: QUANTITY LIMITS FOR HAZARDOUS SUBSTANCES IDENTIFIED IN SCHEDULE 1**

**ALL RESIDENTIAL ZONES, RURAL 4\* ZONES, AND RECREATION 1 ZONE**

Schedule 1 Class	Column A	Column B
1(a) <sup>1</sup> - storage only	Nil	Nil
1(b) <sup>1</sup> - storage only	15 kg	15 kg
2	500 litres	10000 litres
3(a)	50 litres <sup>2</sup>	50 litres <sup>2</sup>
3(b), 3(c)	1200 litres	1200 litres
3(u)	Nil	Nil
4.1	10 kg	10 kg
4.2, 4.3	100 kg	100 kg
5.1	100 kg	100 kg
5.2	5 kg	5 kg
6	20 litres	20 litres
7	20 litres	20 litres
8.1	20 litres	20 litres
8.2	20 litres	20 litres

**COMMERCIAL 2 AND 3 ZONES AND RECREATION 2 ZONE**

Schedule 1 Class	Column A	Column B
1(a) <sup>1</sup> - storage only	Nil	-
1(b) <sup>1</sup> - storage only	15 kg	-
2	250 litres	10000 litres
3(a)	50 litres <sup>2</sup>	3000 litres
3(b), 3(c)	1200 litres	-
3(u)	Nil	50000 litres
4.1	10 kg	-
4.2, 4.3	100 kg	-
5.1	100 kg	-
5.2	5 kg	-
6	100 litres	-
7	10 litres	-
8.1	20 litres	-
8.2	20 litres	-

NOTE 1: The use of high explosives is a permitted activity in all zones, but is subject to the Explosives Act and any subsequent legislation.

NOTE 2: The 50 litre restriction does not apply to petrol and other 3(a) flammable liquids contained in a fuel tank of an internal combustion engine.

\* Excluding "farming" and "agricultural activities" in the Rural 4 Zone which are to be considered as if they were in Rural 1, 2 and 3 and Recreation 3 Zones.



## COMMERCIAL 1 AND INDUSTRIAL L ZONES

Schedule 1 Class	Column A	Column B
1(a) <sup>1</sup> - storage only	25 kg	-
1(b) <sup>1</sup> - storage only	50 kg	-
2	250 litres	40000 litres
3(a)	3000 litres	-
3(b), 3(c)	3000 litres	-
3(u)	20000 litres	-
4.1	50 kg	-
4.2, 4.3	1000 kg	-
5.1	1000 kg	-
5.2	25 kg	-
6	1000 litres	-
7	5000 litres	-
8.1	20 litres	-
8.2 - Commercial Zone 1 Only	200 litres	-
8.2 - Industrial Zone L Only	1000 litres	-

## RURAL 1, 2, 3 AND 5 ZONES AND RECREATION 3 ZONE

Schedule 1 Class	Column A	Column B
1(a) <sup>1</sup> - storage only	2.5 kg	-
1 b) <sup>1</sup> - storage only	15 kg	-
2	500 litres	10000 litres
3(a)	2000 litres	-
3(b), 3(c)	5000 litres	-
3(u)	10000 litres	-
4.1	10 kg	-
4.2, 4.3	1000 kg	-
5.1	1000 kg	-
5.2	10 kg	-
6	1000 litres	-
7	1000 litres	-
8.1	20 litres	-
8.2	20 litres	-

**TABLE 2: QUANTITY THRESHOLDS FOR HAZARDOUS SUBSTANCES IDENTIFIED IN SCHEDULE 1**

**INDUSTRIAL H ZONE**

<b>Schedule 1 Class</b>	<b>Column A</b>
1(a) <sup>1</sup> - storage only	25 kg
1(b) <sup>1</sup> - storage only	50 kg
2	250 litres
*3(a)	3000 litres
*3(b), 3(c)	3000 litres
*3(u)	20000 litres
4.1	50 kg
4.2, 4.3	1000 kg
5.1	1000 kg
5.2	25 kg
6	1000 litres
7	5000 litres
8.1	20 litres
8.2	1000 litres

\* For additions to existing bulk fuel storage depots in the Industrial H area located at the Port of Timaru area, no consent will be required for quantities up to 100000 litres.

NOTE: The use of high explosives is a permitted activity in all zones; but is subject to the Explosives Act and any subsequent legislation.