

16 HAZARDOUS SUBSTANCES RULES

16.1 ACTIVITIES

16.1.1 PERMITTED ACTIVITIES

The following activities shall be Permitted Activities, provided that they comply with all of the Site Development Standards specified below.

- 1 The use and/or storage of hazardous substances which are not identified in Schedule 1.
- 2 The use and/or storage of hazardous substances identified in quantities not exceeding those specified in Column A of Table 1 for the relevant zone.
- 3 The use of explosives (Class 1a and 1b in Schedule 1) in all Zones.
- 4 The use and/or storage of hazardous substances for the purpose of temporary military activities, provided the following codes of practice are complied with:

Ammunition and Explosive Regulations Volume One
Hazardous Substances and New Organisms Act 1996
NZP2 - Safety in Training

- 5 The storage and use of hazardous substances for the purpose of treating water for consumption in all zones (refer to Hazardous Substances and New Organisms Act 1996 and/or the approved industry Code of Practice).
- 6 The retail sale of petrol (up to 100,000 litres in underground tanks) and diesel (up to 50,000 litres storage in underground tanks), and the retail sale of LPG (up to 6 tonnes, single vessel storage) provided the following Codes of Practice are complied with:
 - Design, Installation and Operation of Underground Petroleum System (*Department of Labour (1992)*)
 - Code of Practice for Design, Installation and Operation of Underground Petroleum Storage System (*Department of Labour (1992)*)
 - Supplement No 1 Management of Existing Underground Petroleum Storage Systems (*Department of Labour (1995)*)

16.1.2 DISCRETIONARY ACTIVITIES

The following activities shall be Discretionary Activities in respect of the matter specified:

- 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 of Table 1 for the relevant zone.
- 2 The manufacturing of hazardous substances.

Note: 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 shall be a Discretionary Activity.

- 3 Any activity specified as a permitted activity which does not comply with any one or more of the Site Standards specified below.

16.1.3 NON-COMPLYING ACTIVITIES

The following activities shall be Non-Complying Activities:

- 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.

16.1.4 PROHIBITED ACTIVITIES

The following activities shall be Prohibitive Activities:

1. Nuclear Power Generation

16.2 SITE DEVELOPMENT STANDARDS

- 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; for example, 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; for example, 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, or for the storage of petrol or diesel in underground tanks provided that the installation and operation of such tanks comply with the Codes of Practice set out in Rule 16.1.1.6.

- 2 To achieve 16.2 (1), the following specifications shall apply:
 - a) the volume of any secondary containment system shall be 100% of the maximum volume of the hazardous substance to be stored, used, loaded or unloaded when the site is roofed or;
 - b) the volume of any secondary containment system shall be 120% of the maximum volume of the hazardous substance to be stored, used, loaded or unloaded when the site is unroofed;
 - c) 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 container (eg. tank), and the containment from the direct leakage from any primary container;
 - d) 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;

- e) the integrity of the primary and secondary containment systems shall be maintained at all times.
- 3 The storage of petrol or diesel in above ground tanks in Rural Zones shall be exempt from Rules 16.2 (1) and (2), providing the tank is at least 20m away from any natural water course or water race.
- 4 The storage of diesel in above ground tanks in association with residential activities shall be exempt from Rules 16.2 (1) and (2).
- 5 Collection of hazardous substances for disposal purposes, or for subsequent use, shall be in containers that seal and contain the hazardous substances collected, and shall be clearly and correctly identified.
- 6 All hazardous substance sites shall be adequately signposted according to the Code of Practice for "Warning Signs for Premises Storing Hazardous Substances" of the New Zealand Chemical Industry Council.
- 7 Any use, storage of radioactive material, including radiation machines, comply with conditions set by the National Radiation laboratory.
- 8 The use and mixing of agrichemicals in the field shall be exempt from Rules 16.2 (1) and (2), providing that all mixing of agrichemicals comply with the Agrichemical Users Code of Practice.

Notes: *These Rules are in addition to, and not in substitution for the Site Development and Critical Zone 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.*

The Canterbury Regional Council requires a landuse consent to use, erect, construct, place, alter, extend, remove or demolish in, on, under or over land, any container, or part of any container, of a volume greater than 1000 litres, for the purpose of storing, transferring, or using petroleum compounds, chlorinated hydrocarbons, brominated hydrocarbons or timber treatment chemicals and 2500 litres for diesel.

16.3 NON-NOTIFIED RESOURCE CONSENTS

In accordance with section 77D RMA 1991, an application for resource consent required by the following **Site Development Standards** under Rule 2.4 are precluded from public notification (s95A RMA 1991) and limited notification (s95B RMA 1991) subject to sections 95A(2)(b), 95A(2)(c), 95A(4), 95B(3) and 95C of the Act:

- 1 The use, storage, or disposal of hazardous substances in Table 1 - exceeding Column A Quantity Limits, but not exceeding Column B Quantity Limits for the Business, Rural, Oamaru Airport and Omarama Airfield Zones.
2. Where the activity does not comply with Site Development Standards 1-6.

16.4 RESOURCE CONSENTS - ASSESSMENT MATTERS

16.4.1 GENERAL

- 1 The following Assessment Matters are methods or matters included in the District Plan, in order to enable the Council to implement the Plan's policies and fulfil its functions and duties under the Act.
- 2 In addition to the applicable provisions of the Act, the Council shall also apply the relevant *Assessment Matters* set out in Clause 16.4.2 below.
- 3 In the case of *Discretionary Activities*, where the exercise of the Council's discretion is restricted to the matter(s) specified in a particular standard(s), the assessment matters taken into account shall only be those relevant to that/those standard(s).

16.4.2 ASSESSMENT MATTERS

In considering whether or not to grant consent or impose conditions, the Council shall have regard to, but not be limited by, the following assessment matters:

- 1 The extent to which the proposed activity and the proposed site poses a risk to the environment, and in particular:
 - a) The sensitivity of the surrounding natural and physical environment. Depending on the scale of the proposal this may include separation distances to people-sensitive activities (particularly activities such as schools, rest homes, hospitals, shopping centres etc.) or to sensitive natural resources (eg. aquifers, streams, wetland, habitats).
 - b) The number of people potentially at risk from the site.
 - c) The risk to adjacent property.
 - d) Cumulative effects of hazardous facilities in the area.
 - e) Site drainage and off site infrastructure (eg stormwater, sewer type and capacity).
 - f) Transportation safety - including method of transportation, quantities and types of hazardous substances transported, and proposed transport routes.
 - g) The vulnerability of the site to natural hazard events.
- 2 The extent to which the proposed activity can avoid or mitigate any undue risk. Methods can include site lay out, site management and spill contingency planning, transport methods and routes, monitoring and maintenance schedules.
- 3 The ability of the proposed activity to be established at an alternative location or for the activity to undertake alternative methods, when it is likely that an activity will result in any significant adverse effects on the environment.
- 4 The extent to which the proposed site is accessible from the major roading network to avoid heavy traffic volumes in local roads (particularly residential local roads); and the extent to which the proposed site's entry and exit points may pose a problem with existing intersections.

- 5 The extent to which the activity can comply with the Site and Zone Standards for the relevant zone in question.
- 6 Any other matters that may need conditions to ensure that particular measures are undertaken so that any risk posed by the proposal is avoided or satisfactorily mitigated.

SCHEDULE 1: CLASSIFICATION OF HAZARDOUS SUBSTANCES FOR THE PURPOSES OF RULE 16.1

Class	Characteristics	Examples Including but not limited to:
1 Explosives	<p>1 <u>Explosives</u> An explosive substance or waste 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 1b below).</p> <p>1a</p> <p>1b as in 1a but with restricted use in the manufacture or reloading of small arms cartridges; or for the storage of flares.</p>	<p>1a Nitrate mixtures, nitro compounds, chlorate mixtures, ammunition/ detonators (excluding those for small arms use).</p> <p>1b gunpowder, or nitro compound adapted and exclusively used for cartridges for small arms; or for flares.</p>
2 Gases	<p>2.1 <u>Flammable Gases</u> 2.1a LPG 2.1b Any other Gases which at 20°C and a standard pressure of 101.3 kPa:</p> <ul style="list-style-type: none"> • are ignitable when in a mixture of 13% or less by volume with air, or • have a flammability range with air of at least 12% regardless of the lower flammability limit. <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>2.1a LPG 2.1b Acetylene, hydrogen, methane.</p>
	<p>2.2 <u>Toxic Gases</u> Gases which are known or are presumed to be toxic or corrosive to humans because they have an LC₅₀ value equal to or less than 5,000 ml/m³ (ppm) when tested in accordance with procedures defined in Para 6.5(c) of the United Nations Recommendations on the Transport of Dangerous Goods, 7th revised edition, or its subsequent revisions</p>	<p>2.2 Chlorine, sulphur dioxide, ammonia, methyl bromide.</p>

	2.3	<u>Non-flammable, Non-toxic Gases</u> Gases which are stored or transported under a pressure not less than 280kPa at 20°C, or as refrigerated liquids, and which: <ul style="list-style-type: none"> • are asphyxiant-gases which dilute or replace the oxygen normally in the atmosphere, or • are oxidising-gases which may, generally by providing oxygen, cause or contribute to the combustion of other material more than air does, or • have neither asphyxiant nor oxidising characteristics 	2.3	Argon, helium, oxygen, nitrogen, carbon dioxide, freons, nitrous oxide
3 Flammable Liquids	3	<u>Flammable Liquids</u> Liquids, or mixtures of liquids, or liquids containing solids in solution or suspension, having the following flammability limits:		
	3a	Flash point <23°C	3a	Petrol, adhesives, ethyl and methyl alcohols, acetone, benzene, butylamine, MIBK.
	3b	Flash point 23°C; <61°C	3b	Kerosene, styrene monomer, cyclohexanone, turpentine, butyl methacrylate, chlorobenzene, ethoxyethanol.
	3c	Flash point 61°C	3c	Diesel, petroleum oils.
	3u	Storage of 3a, b and/or c in underground tanks.		
4 Flammable Solids	4.1	<u>Flammable Solids</u> 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.	4.1	Red phosphorus, ammonium picrate, picric acid, monomethamine nitrate, nitrocellulose, trinitrobenzene, magnesium alloys.
	4.2	<u>Substances or wastes liable to spontaneous combustion</u> Substances or wastes that are liable to spontaneous heating during transport, or heating up on contact with air, and then being liable to catch fire.	4.2	Yellow or white phosphorus, magnesium alkyls, dithionites.
	4.3	<u>Substances which in contact with water, emit flammable gases</u> Substances or wastes which by interaction with water are liable to become spontaneously flammable or give off flammable gases in dangerous quantities.	4.3	Alkali metals eg sodium, potassium, lithium; calcium, magnesium, metal hydrides, metal carbides

5 Oxidising Substances	5.1 <u>Oxidising Substances</u> 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.	5.1 Chromates, bromates, chlorates, chlorites, nitrates, permanganates.
	5.2 <u>Organic Peroxides</u> Organic substances or wastes which contain the bivalent O=O structure and are thermally unstable substances which may undergo exothermic self-accelerating decomposition.	5.2 Any organic peroxide (includes peroxy and per compounds). Perdicarbonates, butyl peroxyphthalate, cumene hydroperoxide, bezoyl peroxide
6 Corrosives	6 <u>Corrosives</u> 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.	6 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. Phenolsulphonic acid, hydroxylamine sulphate, hexyl-trichlorosilane, ethanolamine.
7 Agrichemicals	7 <u>Agrichemicals</u> Substances 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, any other liquid prior to an application.	7 Bipyridyls, di-nitrophenols, phenoxy compounds, organophosphates, carbamates, organochlorines and other agrichemicals listed in the schedules set out in the Toxic Substances Act 1979.
8 Miscellaneous	8.1 <u>Timber Preservatives</u> Preservatives used in the treatment of timber. 8.2 <u>Chlorinated Solvents</u>	8.1 Copper, chromium, arsenic, boron, and other water-borne preservatives. Light organic solvent preservatives, anti sapstain chemicals. 8.2 Bromodichloromethane, Trichloroethane, Chlorodibromomethane 1,1,1 - Trichloroethene, Tetrachloroethene, Trichloromethane, Tetrachloromethane, Tribromomethane.

**TABLE 1: QUANTITY LIMITS FOR HAZARDOUS SUBSTANCES IDENTIFIED IN SCHEDULE 1
RESIDENTIAL, RURAL RESIDENTIAL AND LAKE AVIEMORE SETTLEMENT ZONES**

District Plan Category	Column A	Column B
1a	Nil ¹	Nil
1b	15kg	15 kg
2.1a, 2.1b, 2.2, 2.3	250 litres	12,000 litres
3a	50 litres ²	-
3b, 3c	3,000 litres	-
3u	10,000 litres ³	-
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
6.0	20 litres	20 litres
7 - Residential Zone	10 litres	10 litres
7 - Rural Residential Zone	50 litres	50 litres
8.1	20 litres	20 litres
8.2	20 litres	20 litres

BUSINESS, OAMARU AIRPORT AND OMARAMA AIRFIELD ZONES

District Plan Category	Column A	Column B
1a	25 kg	-
1b	50 kg	-
2.1a	12,000 litres	40,000 litres
2.1b, 2.2, 2.3	12 000 litres	40,000 litres
3a	3,000 litres	-
3b, 3c	3,000 litres	-
3u	100,000 litres	-
4.1	50 kg	-
4.2, 4.3	1,000 kg	-
5.1	1,000 kg	-
5.2	25 kg	-
6	1000 litres	-
7	5,000 litres	-
8.1	20 litres	-
8.2 Business 1, 2, 3, 6, H	200 litres	-
8.2 Business 4 & 5	1,000 litres	-

- Notes**
- 1 The use of explosives is permitted in all zones but is subject to the Explosives Act and any subsequent legislation. The storage and disposal of explosives is a non-complying activity in the Rural Residential, Residential, Zones.
 - 2 The 50 litre restriction does not apply to petrol and other 3a flammable liquids contained in a fuel tank of an internal combustion engine.
 - 3 Irrespective of this volume permitted by the Council, the Canterbury Regional Council requires a landuse consent to use, erect, construct, place, alter, extend, remove or demolish in, on, under or over land, any container, or part of any container, of a volume greater than 1000 litres, for the purpose of storing, transferring, or using petroleum compounds, chlorinated hydrocarbons, brominated hydrocarbons or timber treatment chemicals and 2500 litres for diesel.

RURAL ZONES AND MACRAES MINING ZONE

District Plan Category	Column A	Column B
1a	2.5 kg	-
1b	15 kg	-
2.1a	12,000 litres	40,000 litres
2.1b, 2.2, 2.3	250 litres	-
3a	2,000 litres	-
3b , 3c	3,000 litres	-
3u	10,000 litres	-
4.1	10 kg	-
4.2, 4.3	1,000 kg	-
5.1	1,000 kg	-
5.2	10 kg	-
6	100 litres	-
7	1,000 litres	-
8.1	20 litres	-
8.2	20 litres	-

TOWNSHIP ZONE

District Plan Category	Column A	Column B
1a	Nil	-
1b	15kg	-
2.1a	12000 litres	12000
2.1b, 2.2, 2.3	250 litres	-
3a	2,000 litres	-
3b, 3c	3,000 litres	-
3u	10,000 litres	-
4.1	10 kg	-
4.2, 4.3	100 kg	-
5.1	100 kg	-
5.2	5 kg	-
6	100 litres	-
7	1000 litres	-
8.1	20 litres	-
8.2	20 litres	-