## 16.2 Hazardous Substances Rules

The rules recognise that hazardous substances can be transported and used without adversely affecting the environment. Further, small quantities of hazardous substances can be stored, provided that certain performance standards are met regarding containment and information. Greater quantities will require specific assessment depending on the nature of the substance, the site and the conditions of storage. The quantities appropriate are dependent on the nature of the particular substance and the level of risk it poses to the particular environment.

## **16.2.1** Purpose

## 16.2.2 Activities

### 16.2.2.1 Permitted Activities

The following shall be **Permitted Activities**, provided that they comply with all of the Site Standards specified below:

- (i) The use and transportation of hazardous substances.
- (ii) The storage of hazardous substances which are **not** identified in Schedule 1.
- (iii) The storage of hazardous substances identified in Schedule 1, in quantities not exceeding those specified in Column A of Table 1 for the relevant zone.

## 16.2.2.2 Discretionary Activities

- (i) The following shall be **Discretionary Activities**:
  - (a) The 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:

- (b) The manufacturing of any hazardous substance.
- (ii) The following shall be **Discretionary Activities**, with the exercise of the Council's discretion being restricted to the matter(s) specified in the standard which is not complied with:
  - (a) Any activity specified as a Permitted Activity, which does not comply with any one or more of the Site Standards Specified below.

## 16.2.2.3 Non-Complying Activities

The following shall be Non-Complying Activities:

 The storage of hazardous substances identified in Schedule 1 in quantities exceeding those specified in Column B of Table 1 for the relevant zone

## 16.2.3 Non-Notification of Applications

An application for resource consent for the following matters may be considered without the need to obtain the written approval of affected persons and need not be notified in accordance with Section 93 of the Act, unless the Council considers special circumstances exist in relation to any such application:

- (i) Applications for the exercise of the Council's discretion in respect of noncompliance with the Site Standards.
- (ii) Applications for Discretionary Activities for the storage of hazardous substances in the Business, Town Centre, Corner Shopping Centre, Industrial and Rural Zones, which exceed the quantity limits in Column A of Table 1 but do not exceed the quantity limits in Column B.

## 16.2.4 Standards

### 16.2.4.1 Site Standards

- (i) All areas or parts of sites where solid and/or liquid hazardous substances (including waste) are stored, loaded or unloaded shall be safely contained.
- (ii) To achieve (i) above, the following specifications are required:
  - (a) The volume of any containment system shall be 100% of the maximum volume of the hazardous substance to be stored, loaded or unloaded when the site is roofed;
  - (b) The volume of any containment system shall be 120% of the maximum volume of the hazardous substance to be stored loaded or unloaded when the site is unroofed:
  - (c) The 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 container.
  - (d) The containment system shall be sealed with impervious materials that are resistant to breakdown from the particular hazardous substances, which they are designed to contain;
  - (e) The containment system and its sealment shall be maintained as and when necessary.
- (iii) Collection of hazardous substances for disposal purposes, or for subsequent use, shall be in containers that seal and contain the hazardous substances collected.

# 16.3 Resource Consents - Assessment Matters - Hazardous Substances

### 16.3.1 General

- (i) 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.
- (ii) In addition to the applicable provisions of the Act, the Council shall also apply the relevant *Assessment Matters* set out in Clause 2 below.
- (iii) In the case of Discretionary Activities where the exercise of the Council's discretion is restricted to the matters specified in a particular standard, the assessment matters taken into account shall only be those relevant to that/those standard(s).

### 16.3.2 Assessment Matters

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

- (i) 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, and shopping centres etc) or to sensitive natural resources (eg. aquifers, streams, and 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.
- (ii) The extent to which the proposed activity can avoid or mitigate any undue risk. Methods can include site layout, site management and spill contingency planning, transport methods and routes, monitoring and maintenance schedules.
- (iii) 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.
- (iv) The extent to which the proposed site is accessible from the major roading network to avoid heavy traffic volumes on 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.
- (v) The extent to which the activity can comply with the Site and Zone Standards for the relevant zone in question.
- (vi) Any other matters that may need conditions to ensure particular measures are undertaken so any risk posed by the proposal is avoided or satisfactorily mitigated.
- (vii) The need for the site to be adequately signed according to the Code of Practice for "Warning Signs for Premises Storing Hazardous Substances" of the New Zealand Chemical Industry Council.

## **SCHEDULE 1: CLASSIFICATION OF HAZARDOUS SUBSTANCES**

CLASS		CHARACTERISTICS A	EXA	MPLES - INCLUDING BUT NOT LIMITED TO:
1 EXPLOSIVES	<b>1</b> 1a	Explosives  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).	1a	Nitrate mixtures, nitro compounds, chlorate mixtures, ammunition/ detonators (excluding those for small arms use).
	1b	as in 1a but with restricted use in the manufacture or reloading of small arms cartridges; or for the storage of flares.	1b	gunpowder or nitro compound adapted and exclusively used for cartridges for small arms; or for flares.
2 GASES	<b>2.1</b> 2.1a 2.1b	Flammable Gases LPG Any other Gases which at 20°C and a standard pressure of 101.3 kPa:  • are ignitable when in a mixture of 13% or less by volume with air, or  • have flammability ranges with air of at least 12% regardless of the lower flammability limit.  This class includes aerosols containing flammable propellants if the contents include more than 45% by mass or more than 250g of flammable components.	2.1a 2.1b	LPG Acetylene, hydrogen, methane.
	2.2	Toxic Gases Gases which are known or are presumed to be toxic or corrosive to humans because they have an LC $_{50}$ value equal to or less than 5,000 ml/m $^3$ (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.	2.2	Chlorine, sulphur dioxide, ammonia, methyl bromide.
	2.3	Non-flammable, Non-toxic Gases Gases which are stored or transported under a pressure not less than 280kPa at 20°C, or as refrigerated liquids, and which:	2.3	Argon, helium, oxygen, nitrogen, carbon dioxide, freons, nitrous oxide.
	atme • are cont	asphyxiant-gases which dilute or replace the oxygen normally in the osphere, or oxidising-gases which may, generally by providing oxygen, cause or tribute to the combustion of other material more than air does, or e neither asphyxiant nor oxidising characteristics.		

CLASS CHARACTERISTICS A EXAMPLES - INCLUDING BUT NOT LIMITED TO:

# **HAZARDOUS SUBSTANCES - RULES**

3 FLAMMABLE LIQUIDS	3 3a 3b 3c 3u	Flammable Liquids  Liquids, or mixtures of liquids, or liquids containing solids in solution or suspension, having the following flammability limits:  Flash point <23°C  Flash point >23°C; <61°C  Flash point >61°C  Storage of 3a, b and/or c in underground tanks.	3a 3b 3c	Petrol, adhesives, ethyl and methyl alcohols, acetone, benzene, butylamine, *paint and MIBK.  Kerosene, styrene monomer, cyclohexanone, turpentine, butyl methacrylate, chlorobenzene, ethoxyethanol.  Diesel, petroleum oils.
4 FLAMMABLE SOLIDS	4.1	Flammable Solids 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.  Substances or wastes liable to spontaneous combustion	4.1	Red phosphorus, ammonium picrate, picric acid, monomethyamine nitrate, nitrocellulose, trinitrobenzene, magnesium alloys.  Yellow or white phosphorus, magnesium alkyls,
		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.		dithionites.
	4.3	Substances which in contact with water, emit flammable gases	4.3	Alkali metals eg sodium, potassium, lithium; calcium, magnesium, metal hydrides, metal carbides.
		Substances or wastes which by interaction with water are liable to become spontaneously flammable or give off flammable gases in dangerous quantities.		

# **HAZARDOUS SUBSTANCES - RULES**

CLASS		CHARACTERISTICS A	EXA	AMPLES – INCLUDING BUT NOT LIMTIED TO
5 OXIDISING SUBSTANCES	5.1	Oxidising Substances  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	Organic Peroxides  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	Corrosives  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, hydroxlamine sulphate, hexyltrichlorosilane, ethanolamine.
7 AGRICHEMICALS	7	Agrichemicals  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.
8 MISCELLANEOUS	8.1	Timber Preservatives  Preservatives used in the treatment of timber.  Chlorinated Solvents	8.1	Copper, chromium, arsenic, boron, and other water-borne preservatives. Light organic solvent preservatives, anti sapstain chemicals.  Bromodichloromethane, Trichloroethane, Chlorodibromomethane 1,1,1 – Tricholoroethene, Tetrachloroethene, Trichloromethane, Tetrachloromethane, Tribromomethane.

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

RESIDENTIAL, RURAL LIFESTYLE AND RURAL RESIDENTIAL ZONES, NORTHLAKE SPECIAL ZONE, ACTIVITY AREAS 1, 2A, 2B, 2C, 4, 6 & 7 OF THE REMARKABLES PARK ZONE AND ARROWTOWN SOUTH SPECIAL ZONE.

Schedule 1 Class	Column A	Column B
1a <sup>1</sup> – storage only	Nil	Nil
1b <sup>1</sup> – storage only	15kg	15kg
2	250 litres	10,000 litres
3a <sup>2</sup>	50 litres	50 litres
3b, 3c	1200 litres	1200 litres
3u	1200 litres -	1200 litres –
	3b,3c only	3b, 3c only
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 – except for Residential	10 litres	10 litres
and Rural Lifestyle		
7 – Rural Residential	30 litres	50 litres
and Rural Lifestyle only		
8.1	20 litres	20 litres
8.2	20 litres	20 litres

BUSINESS, TOWN CENTRE, CORNER SHOPPING CENTRE, AIRPORT MIXED USE AND INDUSTRIAL ZONES, AND ACTIVITY AREA 5 OF THE REMARKABLES PARK ZONE

Schedule 1 Class	Column A	Column B
1a <sup>1</sup> – storage only	25 kg	-
1b <sup>1</sup> – storage only	50kg	-
2	250 litres	-
3a	3,000 litres	-
3b, 3c	3,000 litres	-
3u	50,000 litres	-
4.1	50 kg	-
4.2, 4.3	1,000 kg	-
5.1	1,000kg	-
5.2	25kg	-
6	1000 litres	-
7	5000 litres	-
8.1	20 litres	-
8.2 – Except for Industrial	200 litres	-
8.2 – Industrial Only	1,000 litres	-

RURAL, RESORT, GIBBSTON CHARACTER, HYDRO GENERATION, RURAL VISITOR ZONE, BENDEMEER, PENRITH PARK ZONES AND ACTIVITY AREAS 3 AND 8 OF THE REMARKABLES PARK ZONE

Schedule 1 Class	Column A	Column B
1a <sup>1</sup> – storage only	2.5kg	-
1b <sup>1</sup> – storage only	15kg	
2	250 litres	-
3a <sup>2</sup>	2,000	-
3b, 3c	3,000 litres	_
3u	10,000 litres	-
4.1	10 kg	-
4.2, 4.3	1,000kg	_
5.1	1,000kg	-
5.2	10kg	_
6	1,000 litres	-
7	1,000 litres	-
8.1	20 litres	-
8.2	20 litres	_

- **Notes:** 1. The use of high explosives is a permitted activity in all zones, but is subject to the Explosives Act and any subsequent legislation.
  - 2. The 50 litre restriction does not apply to petrol and other flammable 3a flammable liquids contained in a fuel tank of an internal combustion engine.

#### **TOWNSHIP ZONE**

Schedule 1 Class	Column A	Column B
1a <sup>1</sup> – storage only	Nil	-
1b – storage only	15 kg	-
2	250 litres	10,000 litres
3a	50 litres <sup>2</sup>	3,000 litres
3b,3c	1,200 litres	-
3u	1200 litres –	60,000 litres
	3b,3c only	
4.1	10kg	-
4.2, 4.3	100 kg	-
5.1	100 kg	-
5.2	5kg	-
6	100 litres	-
7	10 litres	-
8.1	20 litres	-
8.2	20 litres	_