23 APPENDIX 3- HAZARDOUS SUBSTANCES RULES

23 ITEM	PERMITTED	CONTROLLED
1. Use or Storage of Hazardous Substances	(i) The use or storage of hazardous substances are permitted activities if they ; (a) are not listed in Schedule 1 or (b) are listed in Schedule 1 but their quantities are below those specified in Column A of Schedule 2 for Permitted Activities in the relevant Environmental Area; and (c) comply with all legislation and regulation requirements Provided that: The use or storage of hazardous substances is permitted if it is a consequence of temporary military training (no longer than twenty eight days at any one time) and complies with relevant NZ Defence Force "Codes of Practice".	(ii)Not Applicable
2. Manufacture of Hazardous Substances	(i) Not Applicable NB: 1. The treatment, discharge and disposal of hazardous substances are controlled by Regional Council Plans. 2. These rules do not apply to the transport of hazardous substances, which is covered by separate legislation.	(ii) Not Applicable

DISCRETIONARY	ASSESSMENT CRITERIA	EXPLANATION
(iii) The use or storage of hazardous substances that contravene a permitted condition are a discretionary activity.	(i) Applicable to all activities: (a) The extent to which the proposed activity and the proposed site poses a risk to the environment, and in particular: (i) 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 (e.g.. aquifers, streams, wetland, habitats). (ii) The number of people potentially at risk from the site. (iii) The risk to adjacent property. (iv) Cumulative effects of hazardous facilities in the area. (v) Site drainage and off site infrastructure (e.g. stormwater, sewer type and capacity). (vi) Transportation safety including method of transportation, quantities and types of hazardous substances transported, and proposed transport routes.	The Council has determined the types and quantities of hazardous substances that can be used as of right in the various Environmental Areas of the District. If an operator uses quantities of hazardous substances greater than which have been prescribed in Schedule 2, a consent is required The following matters were considered when compiling Schedule 1 and Schedule 2: (i) the types of hazardous substances that are commonly used or stored in the District and pose a risk to the community or the environment; (ii) the use of rules to ensure containment of hazardous substances stored as of right in the District; (iii) the controls that are in place from existing legislation such as the Dangerous Goods Act and the Explosives Act.
(iii)The manufacturing of hazardous substances is a discretionary activity	(b) The extent to which the proposed activity can avoid or mitigate any undue risk. Methods can include site configuration and location of materials, site management and spill contingency planning, transport methods and routes, monitoring and maintenance schedules. (c) 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. (d) 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.	Irrespective of Schedule 1 and Schedule 2, the Council considers that the manufacturing of hazardous substances will require a consent. This is because the manufacturing of hazardous substances is often a complex process that involves using large quantities of hazardous substances. In addition to restricting the volumes of hazardous substances to be used and stored, and the introduction of appropriate site standards, the Council considers it should retain the right to use enforcement provisions where the manufacturing, use, storage, disposal of, and transportation of hazardous substances is likely to have an adverse effect on the District's environment.

23.1.1 SCHEDULE 1 - CLASSIFICATION OF HAZARDOUS SUBSTANCES

Class	Characteristics	Examples Including but not limited to:
1. EXPLOSIVES	**1 Explosives** **1a** 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). **1b** as in 1a but with restricted use in the manufacture or reloading of small arms cartridges; or for the storage of flares.	**1a** Nitrate mixtures, nitro compounds, chlorate mixtures, ammunition/ detonators (excluding those for small arms use). **1b** gunpowder, or nitro compound adapted and exclusively used for cartridges for small arms; or for flares.
2. GASES	**2.1 Flammable Gases** **2.1a** LPG **2.1b** Any other Gases which at 20ºC and a standard pressure of 101.3 kPa: *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. This class includes aerosols containing flammable propellants if the contents include more than 45% by mass or more than 250g of flammable components. **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. **2.3 Non-flammable, Non-toxic Gases** Gases which are stored or transported under a pressure not less than 280kPa at 20oC, or as refrigerated liquids, and which: • 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.	**2.1a** LPG **2.1b** Acetylene, hydrogen, methane. **2.2** Chlorine, sulphur dioxide, ammonia, methyl bromide **2.3** Argon, helium, oxygen, nitrogen, carbon dioxide, freons, nitrous oxide.
3 FLAMMABLE LIQUIDS	**3 Flammable Liquids** Liquids, or mixtures of liquids, or liquids containing solids in solution or suspension, having the following flammability limits: **3a** Flash point <23ºC **3b** Flash point ³23ºC; <61oC	**3a** Petrol, adhesives, ethyl and methyl alcohols, acetone, benzene, butylamine, MIBK. **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 Flammable Solids** Solids or wastes other than those classified as explosives, which under suitable conditions, i.e. impact, friction, heat, ignition, will burn or self react with extreme intensity (excludes coal). **4.2 Substances or wastes liable to spontaneous combustion** 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. **4.3 Substances which in contact with water, emit flammable gases** Substances or wastes that by interaction with water are liable to become spontaneously flammable or give off flammable gases in dangerous quantities.	**4.1** Red phosphorus, ammonium picrate, picric acid, monomethyamine nitrate, nitrocellulose, trinitrobenzene, magnesium alloys. **4.2** Yellow or white phosphorus, magnesium alkyls, dithionites. **4.3** Alkali metals e.g. sodium, potassium, lithium; calcium, magnesium, metal hydrides, metal carbides
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. **5.2 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.	**5.1** Chromates, bromates, chlorates, chlorites, nitrates, permanganates. **5.2** Any organic peroxide (includes peroxy and per compounds). Perdicarbonates, butyl peroxyphthalate, cumene hydroperoxide, bezoyl peroxide.
6 TOXIC AND INFECTIOUS SUBSTANCES	**6.1 Poisonous (toxic) Substances** These are substances liable either to cause death or serious injury or to harm human health if swallowed or inhaled or by skin contact, and which are confirmed to fall within the following toxicity classification: Oral toxicity LD_{50} (mg/kg) Solids <200 Liquids <500 Dermal toxicity LD50 (mg/kg) < 1000 Inhalation toxicity dust/ mist LC_{50} (mg/l) <10 Inhalation toxicity vapours: If > 0.2 LD_{50} and LD_{50} < 5,000 ml/m^3 **Note:** LC_{50}, LD_{50} and "V" are defined in Chapter 6 of the United Nations Recommendations on the Transport of Dangerous Goods, 7th revised edition, or its subsequent revisions.	**6.1** Arsenic compounds, cadmium compounds, lead salts, mercury salts and amalgams, cyanides, methyl bromide, acrylamide, phenols, chlorophenols, aniline, oxalates, chlorinated solvents.
7 AGRICHEMICALS	**7 Agrichemicals** Substances having a toxicity as specified in 6, but formulated specifically for agricultural and forestry activities, (including aquaculture), and including but not limited to herbicides,	**7** Biprydyls, di-nitrophenols, phenoxy compounds, organophosphates, carbamates, organochlorines.

	fungicides, pesticides.	
8 CORROSIVES	**8 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	**8** Acids such as; nitric, sulphuric, hydrochloric, hydrofluoric acids; tricholoro 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

SCHEDULE 2 - QUANTITY LIMITS FOR HAZARDOUS SUBSTANCES IDENTIFIED IN SCHEDULE 1.

TOWNSHIP, RESIDENTIAL AND RURAL-RESIDENTIAL ENVIRONMENTAL AREAS	
Schedule 1 Class	**Column A**
1a[1] storage only	Nil
1b[1] storage only	15kg
2	250 litres
3a	50 litres[2]
3b, 3c	1200 litres
3u	Nil
4.1	10 kg
4.2, 4.3	100 kg
5.1	100 kg
5.2	5 kg
6	1 kg
7 Township, Residential & Open Space Only	10 litres
7 Rural Residential Only	50 litres
8	20 litres
COMMERCIAL AND INDUSTRIAL ENVIRONMENTAL AREAS	
Schedule 1 Class	**Column A**
1a[1] storage only	25 g
1b[1] storage only	50 kg
2	250 litres
3a	3,000 litres
3b, 3c	3,000 litres
3u	20,000 litres
4.1	50kg
4.2, 4.3	1,000 kg
5.1	1,000 kg
5.2	25 kg
6	200 litres
7	500 kg
8	1000 kg

RURAL ENVIRONMENTAL AREAS	
Schedule 1 Class	**Column A**
1a[1] storage only	2.5 kg
1b[1] storage only	15 kg
2	250 litres
3a	2,000 litres
3b	3,000 litres
3c	5,000 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	200 litres
7	300 kg
8	400 litres

Notes

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

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.