

Part 11 Health and Safety

1.0 Control of Noise

Updated 14 November 2005

Guide to using these rules

Step 1 Establish which zone the activity is in, and then whether this zone is a Group 1, 2 or 3 zone, or a Rural Quarry Zone (Clause 1.3.2).

Step 2 Having established what group the zone is in, then determine whether the noise generated by the activity will exceed the standards specified in Table 1 for that zone.

Step 3 If the activity does not meet any of the development standards specified (Group 1 and 3 zones only) application will need to be made for a resource consent, assessed as a discretionary activity, with the exercise of the Council's discretion limited to noise matters only.

Step 4 If the activity does not meet any of the relevant critical standards specified, (Group 1, Group 2 and Rural Quarry Zones only) application will need to be made for a resource consent, assessed as a non-complying activity.

Note: Where an activity on a site adjoins a site which is in another zone group, the more restrictive standard applies on the site boundary. This rule applies on the opposite side of intervening roads or railways. (See Clause 1.3.1 (b))

Step 5 Check whether any general exclusions to the rules apply (Clause 1.2.3) or any specific exceptions to the zone rules (Clause 1.3.4):

- (a) Ruapuna Raceway or Carrs Road Raceway
- (b) Entertainment Precinct
- (c) Outdoor concerts and events
- (d) Temporary and short term events

If the activity does not meet the standard specified in clause 1.3.5(b) application will need to be made for a resource consent assessed as a discretionary activity with the exercise of the Council's discretion limited to noise matters only.

If the activity does not meet the relevant standards specified in clause 1.3.5(a), (c) and (d) application will need to be made for a discretionary activity.

If all of the relevant standards are met, the activity shall be a permitted activity in respect to noise.

1.1 Statement

Updated 22 May 2006

Noise is one of the principal factors which can adversely affect appreciation of amenity. Noise is a complex "effect" which can be difficult to assess objectively, but which has become part of district scheme planning and now resource management.

The rules recognise that the underlying pattern of land use activities has given rise to different noise environments within the city. These range from "quiet" living, open space and rural environments, to "noisy" business or quarry environments, for example. Some zones have a "transitional" noise character between these two environments. In reality there are numerous complicating factors affecting "background" or ambient noise in these environments, including traffic movement. In general, the rules are aimed at ensuring noise levels from particular activities do not greatly exceed the ambient levels in the zone concerned. However, the rules also recognise that where existing commercial, industrial or recreation activities adjoin living environments, there will be a greater level of noise intrusion than in living areas generally. Similarly, there will also be greater noise intrusion near major transport infrastructure, such as arterial roads, railways and airports. The rules focus on four factors; the average noise level over a 24 hour period; cyclic variations within this period; day and night levels (the latter being more sensitive) and finally the maximum levels acceptable.

The rules applicable are city rule standards for zones, incorporating the above factors, and developed with regard to New Zealand Standard 6801. There are three levels of standards set out in the City Plan with specified exceptions based on particular activities or the sensitivity of the zone environment to noise intrusion. The controls on exceeding noise levels depend generally on the sensitivity of the zone environment.

The rules on noise do not apply to motor vehicles, trains or aircraft, and a limited range of other activities as set out in Clause 1.2.3. Control of these effects is either inappropriate under the scope of the Act, or can be more appropriately dealt with under the provisions of the enforcement powers in Part 12 of the Act. However, some work will be undertaken in the future on road noise impacts in respect of road surfacing, as part of dealing with traffic noise.

New Zealand Transport Agency is participating in the development of guidelines on road traffic noise and it is intended that these will apply to state highway improvements adjacent to residential buildings, general residential activities and teaching environments.

Some particularly noisy activities (e.g. quarrying, aircraft testing and motor sports) unavoidably involve exclusions, separation distances or specific standards to deal with their particular noise effects.

Specific provisions relating to requirements for protection from aircraft noise are contained separately in the Rural 2, 4, 5, 6 and Quarry Zones, Living 1, 2, 5 and Living 1E Zones, part of the Business 5 Zone, Special Purpose (Airport) Zone, Special Purpose (Wigram) Zone and Open Space 3D Zone.

This section also includes a rule limiting the amount of aircraft noise that can be generated by aircraft movements associated with Christchurch International Airport. At the 65dBA Ldn noise contour, CIA will be required to limit aircraft noise to 65 dBA Ldn. This limit equates to the utilisation of the existing runways at full capacity.

Environmental results anticipated

- (a) Minimised effects of noise in or on residential environments including from noise sources in other zones, but with potentially higher noise outcomes on the interface with noise generating environments such as the International Airport, arterial roads, railways, business zones, existing commercial activities and specialised recreation activities.
- (b) The establishment of non residential activities in living zones and other noise sensitive zone environments, but only where these have noise levels compatible with the surrounding amenities of occupants in the living zone environment.
- (c) The protection of the health and amenity of workers and visitors from excessive noise in business environments, while recognising potentially higher noise intrusion in these environments.
- (d) The protection of rural, open space and passive recreational environments from unreasonable noise, particularly where this would detract from the amenities of residents and passive recreation.
- (e) The avoidance of exposure to airport noise through limitations on the number of potential dwellings able to establish in proximity to the International Airport, recognising the high noise levels generated from the operations at these facilities.
- (f) Maintenance and enhancement of amenity values and the quality of the environment for people living near Christchurch International Airport by management of aircraft operations so as to limit noise to a specified maximum level.
- (g) The avoidance of exposure to noise from specialised noisy activities such as quarries, motor sports and aircraft engine testing facilities, by limitations on the location of dwellings in close proximity to these activities, or noise attenuation at source, or a combination thereof.
- (h) The protection, to the maximum extent practicable, of residences from noise resultant from rural land use practices, such as bird scaring devices, helicopter frost clearance and other rural land use management activities, through policies in the Plan and enforcement action where appropriate, rather than city plan rules.

- (i) A higher degree of protection from noise during night hours throughout the city, when the effects of noise intrusion are greatest.
- (j) The protection of amenities from noise which may be intermittent but of high impact, or of a character duration or timing which creates particular disturbance.

1.2 General rules

Updated 14 November 2005

1.2.1 Measurement, calculation and application of sound levels

Updated 26 August 2016

For the purposes of the application of these rules, and except where otherwise stated, measurement and calculation of the levels of sound emission from any activity shall be as follows:

- (i) method of sound level measurement and descriptions and definitions used shall be in accordance with NZS 6801:1991 "Measurement of Sound";
- (ii) when calculations are necessary for the prediction of sound level emissions from an activity for the purposes of design or assessment of the activity, then the calculations shall be applied at the boundaries of the site which contains the activity, except as provided for under Clause 1.3.1(b).

For the purpose of applying these rules, the noise level standards shall apply at any point on and beyond the boundary of the site containing an activity generating noise, except as provided under Clauses 1.3.1 and 1.3.5.

Except where otherwise defined in these rules, "boundaries" means the boundaries of a "site" as defined in this Plan; or the boundaries of any lease or other agreement with the land owner; and the vertical extension of these boundaries. Where these rules refer to any location on or beyond the boundaries, this shall be deemed to include any one or more locations on a boundary, or beyond a boundary.

1.2.2 Special provisions for the control of noise

Updated 14 November 2005

Where an activity, which because of its unusual or specialised character or levels of noise effects; and for which it would be impracticable to specify standards, and/or which circumstances could not have been foreseen by the Plan, generates excessive noise, the Council may, notwithstanding whether or not the activity complies with these rules or is subject to the exclusions under Clause 1.2.3, initiate procedures under Part 12 of the Act (Declarations, enforcement and ancillary powers) and in particular under section 327 of the Act.

1.2.3 Exclusions

Updated 09 January 2015

The rules in Clauses 1.3.1, 1.3.2, **1.3.4 (with the exception of construction noise in Clause (m))** and Tables 1 and 2 do not apply to:

- (a) traffic noise on "roads" (as defined in the Transport Act 1962);
- (b) trains, including at railway yards, railway sidings or stations; and tramways existing at the date of notification of the City Plan;
- (c) aircraft testing and aircraft maintenance where this is carried out within the Special Purpose (Airport) Zone;
- (d) helicopter landing and takeoff within the Special Purpose (Airport) Zone or which are permitted activities in the Special Purpose (Wigram) zones; and up to three takeoffs and three landings per year in any site in the Open Space 2 Zone, or ten in the Open Space 3, 3A, 3B, or 3C zones; or elsewhere at any time for medical or emergency purposes;
- (e) jet boating (on the Waimakariri River only);
- (f) farm vehicles and farm equipment (except fixed motors or equipment);
- (g) sports events not involving the use of powered machinery, amplification, or explosives as defined in Schedule 1 of the Hazardous Substances Rules (Part 11, Clause 3); and non-commercial private social gatherings;
- (h) domestic animals (including dogs, cats, poultry and caged birds);
- (i) construction activities;
- (j) spontaneous social activities and children's play (but not including pre-schools in Living Zones);
- (k) temporary military training activities.
- (l) aircraft movements.

Note: Rule 1.3.6 controls noise from aircraft operations.

1.2.4 Aircraft noise

Updated 22 May 2006

1.2.4.1 Aircraft noise exposure

Updated 22 May 2006

Special rules relating to requirements for protection from aircraft noise in the vicinity of the Christchurch International Airport are contained in the Rural 2, 4, 5, 6 and Quarry Zones, Living 1, 2, 5 and Living 1E Zones and the Open Space 3D Zone.

1.2.4.2 Aircraft noise monitoring

Updated 22 May 2006

CIAL shall annually provide the Council's Environmental Services Manager the result of calculations based upon monitored aircraft movements for the preceding year and the known noise characteristics of those aircraft. These calculations will be performed by a person with appropriate qualifications and experience in airport noise modelling and acoustics assessments. The provided results shall be verified by noise measurements and shall be in the form of a 65dBA Ldn contour representing the noise created by aircraft operations over that year (other than movements of a kind excluded in the Aircraft Noise Rule 1.3.5) superimposed upon a copy of the plan forming Appendix 3 to Part II of this Plan. The measurement of aircraft sound exposure and the resultant derivation of a 65 dBA Ldn shall be in accordance with NZS 6805:1992.

1.3 Specific rules - Noise control

Updated 14 November 2005

1.3.1 Standards for the control of noise on zone boundaries

The provisions in 1.3.2 and 1.3.3.1 apply only to noise standards in Table 1 in Clause 1.3.3 that are specified for groups of zones according to the zone environment and its sensitivity to noise. They do not apply to special standards for quarry zones, to standards for the Central City, or to exceptions for land use activities generating higher noise levels.

Development Standards

(a) Where an activity is located on a site included in one particular zone grouping (Clause 1.3.2), and adjoins the boundary of a site included in another zone grouping, the noise standards applicable at the common boundary of the sites shall be those of the zone grouping that has the lower (more restrictive) specified noise standard.

Note: Where a site is divided by a zone boundary then each part of the site divided by the zone boundary shall be treated as a separate site for the purpose of these rules.

(b) For the purposes of these rules, for that part of a site adjoining a Special Purpose (Road), Special Purpose (Pedestrian Precinct) or Special Purpose (Rail) zone, any zone directly opposite the site on the other side of the road, rail or pedestrian precinct zone shall be regarded as the adjoining zone boundary and the provisions of clause 1.3.1(a) shall apply.

(c) In the case of any activity within the Rural (Quarry) Zone, the noise standards in these rules shall be applied at the boundaries of any site where mineral extraction activities (including the operation of motor vehicles on the site) are carried out, or at the notional boundary of any dwelling site.

Notwithstanding Clause 1.3.1(a), for the purposes of these rules;

(i) The requirements applicable at the boundary of the Business 4 Zone (Peer/Athol/Brodie Streets) may be exceeded by no more than 5dBA (night-time only).

(ii) The Group 1 zone noise limits shall apply to noise from any site in the Business 8 Zone that is received at or within the boundaries of any property in the Living 1 Zones, or at the notional boundary of any dwelling in the Open Space 2 and Rural 5 Zone.

Note : For the purposes of this rule the notional boundary of any dwelling site shall be a line 20m metres from the facade of any dwelling or the legal boundary where this is closer to the boundary.

1.3.2 Noise standards - Zone groupings and sites containing scheduled activities for all zones outside the Central City

(a) Group 1 Zones (most noise sensitive zones) include:

- All living zones except the Living 5 Zone
- All rural zones (except Rural Quarry Zone)
- Business 4T Zone
- All conservation zones
- All open space zones, **except** the Open Space 3 and 3B Zones and that part of Open Space 3D (Isaac Conservation Park) Zone where quarrying is provided for in the Plan (ICP/Q Activity Area)
- All cultural zones
- Special Purpose (Hospitals) Zone
- Special Purpose (Ferrymead) Zone - Areas A, B and C
- All scheduled activities except scheduled service stations and fire stations
- All parts of the Special Purpose (Road) or Special Purpose (Rail) Zones within 50m of a living or rural zone boundary

(b) Group 2 Zones (moderately noise sensitive zones) include:

- Living 5 Zone
- Business 1, 2, 2P, 3B, 4, 4P, Retail Park and 6 zones (except Moorhouse Central BRP Zone, as identified in (c) below)
- Special Purpose (Ferrymead) Zone - Area D
- Special Purpose (Landfill) Zone
- Special Purpose (Transfer Station) Zone
- Scheduled service stations and fire stations
- Open Space 3 and 3B Zones

(c) Group 3 Zones (least noise sensitive zones) include:

- Business 3, 5, 8 and Retail Park Zones (Moorhouse Central only, being the area bounded by Moorhouse Avenue, the railway corridor, Antigua Street and Colombo Street)
- Business 7 Zone
- Special Purpose (Airport) Zone
- Any part of the Special Purpose (Road) or Special Purpose (Rail) Zone which is more than 50m from a living or rural zone boundary
- Special Purpose (Wigram) Zone
- Cultural 3 zone
- Conservation 3 Zone

1.3.3 Noise Standards for all zones outside the Central City

(a) Any activity which complies with any relevant development or critical standards specified in Table 1 shall be a permitted activity.

(b) Development Standards

Any activity which does not comply with any relevant development standards specified in Table 1 shall be a discretionary activity, with the exercise of the Council's discretion limited to matters related to noise.

(c) Critical Standards

Any activity which does not comply with any relevant critical standards specified in Table 1 shall be a non-complying activity.

(d) Explanation of Noise Standards in Table 1

For the purposes of these rules, when sound emissions from any activity are being calculated, measured or assessed, the following sound classifications and descriptions shall be used with reference to NZS 6801 : 1991 "Measurement of Sound":

(i)	Steady sound	L 10 (1 hour)
(ii)	Steady sound operating over a 24 hour period	Ldn

(iii)	Steady sound level with stepped variations of level	L eq (1 hour)
(iv)	Cyclic sound	L eq (1 hour)
(v)	Fluctuating sound	L eq (1 hour)
(vi)	Any sound emission	L max
(vii)	"Daytime" means 0700 - 2200 hours, except in the Rural (Quarry) Zone where it means 0700 - 1800 hours Mondays to Saturdays inclusive.	
(viii)	"Night time" means 2200 - 0700 hours, except in the Rural (Quarry) Zone where it means 1800 - 0700 hours.	
(ix)	"Sunday" means any Sunday or other day defined in New Zealand law as a Sunday.	

	Development Standards				Critical Standards			
		Daytime	Night-time	Ldn		Daytime	Night-time	Ldn
Group 1 Zones								
(including scheduled activities) Refer Clause 1.3.2 (a)	L 10	49dBA	42dBA	50dBA	L 10	60dBA	48dBA	59dBA
	L eq	50dBA	41dBA		L eq	57dBA	49dBA	
	L max	75dBA	65dBA		L max	85dBA	75dBA	
Group 2 Zones	N/A				L 10	60dBA	48dBA	59dBA
(including scheduled activities) Refer Clause 1.3.2 (b)					L eq	57dBA	49dBA	
					L max	85dBA	75dBA	
Group 3 Zones		Daytime	Night-time	Ldn	N/A			
Refer Clause 1.3.2 (c)	L 10	60dBA	48dBA	59dBA				
	L eq	57dBA	49dBA					
	L max	85dBA	75dBA					
Rural (Quarry) Zone and Open Space 3D (Isaac Conservation Park) Zone ICP/Q Activity Area only	N/A					Daytime Mon-Sat	Night-time and Sunday	Ldn
					L 10	55dBA	40dBA	54dBA
					L max	n/a	75dBA	

1.3.3.1 Acoustic insulation - Living 3 and 4 Zones outside the Central City

Updated 31 July 2012

Any new habitable space within any residential unit, traveller' accommodation, or elderly persons' housing complex:

- (a) Within 20 metres of the edge of the nearest marked traffic lane of a Collector Road, or
- (b) Within 40 metres of the edge of the nearest marked traffic lane of a Minor Arterial, or Major Arterial Road

shall achieve a minimum external to internal noise reduction of 30 dBA (Dtr, 2m, nT).

Note: Compliance with this rule may be achieved by ensuring any construction is in accordance with the acceptable solutions listed in Part 11, Appendix 1. In the Living 3 and Living 4 Zones outside the Central City no alternative ventilation is required in situations where the rule is only met with windows closed. Alternatively, compliance with the rule can be achieved through certification by a qualified acoustic engineer that the design is capable of achieving compliance with the performance standard.

Where no traffic lane is marked, the distances stated shall be measured from 2m on the roadward side of the formed kerb. The location of Collector Roads and Minor and Major Arterial Roads is identified in Appendices 3 and 4 to Part 8.

1.3.4 Noise Standards for all zones within the Central City

Updated 29 January 2015

- (a) For the purposes of this rule any activity which complies with the relevant standards within this rule shall be a permitted activity.
- (b) Any activity which does not comply with the relevant standards in this rule shall be a restricted discretionary activity, with the exercise of the Council's discretion limited to the listed Assessment Matters related to noise.
- (c) Discretionary Activities

Any residential activity or travellers' accommodation within a Category 1 precinct shall be a discretionary activity.

(d) For the purposes of this Rule:

- (i) "Sunday" means any Sunday or other day defined in New Zealand law as a Sunday.
- (ii) "Discrete" means not directly associated with a premises or site.

(e) For the purposes of this Rule, where a site in the Central City on which an activity is located adjoins a legal road, open space or conservation zone, or any combination of these, the measurement and assessment point for noise shall be at the far side of the legal road, open space or conservation zone, or the combination of these.

(f) For the purposes of this Rule, where an activity is located within the Central City, and adjoins the boundary of a site included in another zone grouping outside the Central City, the noise standards applicable at the boundary of the sites shall be those of the zone grouping that has the lower (more restrictive) specified noise standard.

(g) For the purposes of (f), where the site on which the activity is located adjoins a legal road, any site in another Category or zone on the other side of the road that is directly opposite the activity site shall be regarded as the adjoining site.

(h) For the purposes of this Rule, Category 1 and Category 2 areas are those areas set out on Planning Map 39H "Noise Environments". Category 3 covers the remainder of the Central City.

(i) For the purposes of this Rule, resource consents for activities operating after 2300 hours in Category 3 areas in Mixed Use Zones which do not comply with any relevant standards specified in Table 2 shall be limited in duration to 7 years. For the avoidance of doubt, further resource consents for an additional 7 year term, or shorter duration, can be sought.

Table 2 - Central City Noise Standards

(a) Category 1:

Higher Noise Level Entertainment and Hospitality Precincts

(i) Noise emitted by any activity within a Category 1 precinct shall not exceed the following levels when received at any other premises or site within a Category 1 precinct, except that this shall not include noise from people in outdoor areas of licensed premises that comply with the outdoor area setback (clause I).

Activities other than discrete outdoor entertainment events	LAeq (15 min)	0700-0300 hrs	0300-0700 hrs
		60 dB	60 dB
	LAFmax	85 dB	75 dB
Discrete outdoor entertainment events	LAeq (15 min)	65 dB (24 hour assessment period)	
	LAFmax	Daytime 85 dB	Night-time 85 dB

(ii) Noise emitted by any activity in a Category 1 Entertainment and Hospitality Precinct shall not exceed:

- (a) The limits specified for Category 2 areas when received at any premises or site within any Category 2 area; or
- (b) The limits specified for Category 3 areas when received at any premises or site within any Category 3 area.

(b) Category 2:

Lower Noise Level Entertainment and Hospitality Precincts

(i) Noise emitted by any activity in a Category 2 precinct shall not exceed the following levels when received at any other premises or site within a Category 2 precinct, except that this shall not include noise from people in outdoor areas of premises licensed for the sale, supply and/or consumption of alcohol that meet the specified outdoor area setback (clause I) between 0700 hours and 2300 hours for the Victoria Street area shown on Map 39H, and between 0700 hours and 0100 hours for the remainder of Category 2.

For areas excluding the Victoria Street area on Map 39H	LAeq (15 min)	0700-0100 hr 60 dB	0100-0700 hrs 50 dB
	LAFmax	85 dB	75 dB
For the Victoria Street area shown on Map 39H	LAeq (15 min)	0700-2300hr 55 dB	2300-0700 hrs 50 dB
	LAFmax	85 dB	75 dB
<p>(ii) Noise emitted by any activity in a Category 2 Entertainment and Hospitality Precinct shall not exceed:</p> <p>(a) The limits specified for Category 1 areas when received at any premises or site within any Category 1 area; or</p> <p>(b) The limits specified for Category 3 areas when received at any premises or site within any Category 3 area.</p>			
<p>(c) Category 3 areas:</p> <p>All Central City areas other than Category 1 and 2 Entertainment and Hospitality Precincts</p>			
<p>(i) Noise emitted by any activity in a Category 3 area of the Central City shall not exceed the following levels when received at any other premises or site within a Category 3 area, except that this shall not include noise from people in outdoor areas of premises licensed for the sale, supply and/or consumption of alcohol up to a maximum size of 50m², in the Mixed Use, Central City Business and Business 1 Zones between 0700 and 2300 hours.</p>			
	LAeq (15 min)	0700-2300 hrs 55 dB	2300-0700 hrs 45 dB
	LAFmax	85 dB	75 dB
<p>(ii) Noise emitted by any activity in a Category 3 Entertainment and Hospitality Precinct shall not exceed:</p> <p>(a) The limits specified for Category 1 areas when received at any premises or site within any Category 1 area; or</p> <p>(b) The limits specified for Category 2 areas when received at any premises or site within any Category 2 area.</p>			

Advice Note:

Compliance with the noise limits in Table 2 relating to entertainment and hospitality activities may require assessment of the ability of individual site design and building construction to attenuate noise to the required level e.g. noise lobbies, "sound ceilings" or other means, or certification by an experienced acoustic consultant.

(j) Sound Insulation

Any residential unit, elderly persons' housing unit or complex or travellers' accommodation, shall achieve a minimum external to internal noise reduction of:

(i) Category 2 areas:

- 35 dB Dtr, 2m, nTw + Ctr for bedrooms
- 30 dB Dtr, 2m, nTw + Ctr for other habitable spaces

(ii) Category 3 areas adjoining the Category 1 area:

- 35 dB Dtr, 2m, nTw + Ctr for bedrooms
- 30 dB Dtr, 2m, nTw + Ctr for other habitable spaces

(iii) Category 3 areas zoned Living, if within 75m of a Category 1 or 2 area or the Stadium (Designation 7) and not already covered by (ii):

- 30 dB Dtr, 2m, nTw + Ctr for bedrooms

(iv) Category 3 areas zoned Central City Business, Mixed Use and Business 1 and not already covered by (ii):

- 30 dB Dtr, 2m, nTw + Ctr for bedrooms

Note: Compliance with this performance standard can be achieved by:

i. Conformance with the schedule of typical building construction set out in Appendix 1 to Part 11; or

ii. An acoustic design certificate signed by a suitably qualified acoustic engineer stating the design proposed is capable of achieving compliance with the above performance standard.

(* Refer to Vol. 3, Part 1, Definitions: External Sound Insulation Level)

For the purposes of this Rule, "habitable space" in relation to health facilities and educational facilities includes rooms which are normally occupied frequently or for extended periods.

(k) Central City Living 4B, 4C and Central City Residential Zone and Living 5 Zones - Protection of Noise Sensitive Activities

Any bedrooms within any residential unit, travellers' accommodation, or elderly persons' housing unit or complex, within 40 metres of the edge of the nearest marked traffic lane of a Main Distributor, Local Distributor or Arterial Road as defined in Part 8, Appendix 4B, shall achieve a minimum external to internal noise reduction of 30 dBA Dtr, 2m, nTw + Ctr.

Note: Compliance with this Rule may be achieved by ensuring any construction is in accordance with the acceptable solutions listed in Part 11, Appendix 1. Alternatively, compliance with the Rule can be achieved through certification by a qualified acoustic engineer that the design is capable of achieving compliance with the performance standard.

Where no traffic lane is marked, the distances stated shall be measured from 2m on the roadward side of the formed kerb. The location of Distributor Streets and Avenues is identified in Appendix 4b - Central City: Transport Environments in Volume 3 Part 8.

(l) Licensed Premises' Outdoor Areas

(i) Outdoor areas of premises licensed for the sale, supply and/or consumption of alcohol located within Category 1 or 2 precincts shall be set back by at least 25 metres from the boundary of any premise or site that is a Category 3 area zoned Living or Central City Mixed Use, except that this shall not apply to sites that adjoin areas designated as Stadium (Designation 7) on Map 39J. For the avoidance of doubt, the 25 metre setback can include any legal road, open space or conservation zone, or any combination of these.

(m) Construction Noise

At any site in the Central City, the development standards in Tables 3a and 3b shall apply to construction work as defined in NZS 6803:1999 Acoustics- Construction Noise ("the Standard"), when measured and assessed in accordance with the Standard.

All construction noise shall be managed in general accordance with the Standard. For construction work that is carried out at any location for longer than 14 consecutive days, a Construction Noise Management Plan (CNMP) shall be implemented which follows the recommendations of Section 8 and Annex E of the Standard.

Any activity that does not comply with the relevant development standards specified in Table 3a or 3b shall be a discretionary activity, with the exercise of the Council's discretion limited to matters related to construction noise (refer to section 11 Clauses 1.4.2 - 1.4.4).

TABLE 3a

Limits for construction noise received at any other site which contains a residential activity, travellers' accommodation, education activity, hospital, health facility, elderly persons' housing unit or complex.

Table 3a							
Time of Week	Time Period	Duration of Work					
		Typical duration (dBA)		Short-term duration (dBA)		Long-term duration (dBA)	
		Leq	Lmax	Leq	Lmax	Leq	Lmax
Weekdays	0630-0730	60	75	65	75	55	75
	0730-1800	75	90	80	95	70	85
	1800-2000	70	85	75	90	65	80
	2000-0630	45	75	45	75	45	75
Saturdays	0630-0730	45	75	45	75	45	75

	0730-1800	75	90	80	95	70	85
	1800-2000	45	75	45	75	45	75
	2000-0630	45	75	45	75	45	75
Sundays and Public holidays	0630-0730	45	75	45	75	45	75
	0730-1800	55	85	55	85	55	85
	1800-2000	45	75	45	75	45	75
	2000-0630	45	75	45	75	45	75

TABLE 3b

Development standards - limits for construction noise received at any occupancy or activity not controlled by Table 3a

Table 3b			
Time Period	Duration of Work		
	Typical duration	Short-term duration	Long-term duration
	Leq (dBA)	Leq (dBA)	Leq (dBA)
0730-1800	75	80	70
1800-0730	80	85	75

In Tables 3a and 3b, "Duration of Work" is defined as follows:

- "Short-term duration" means construction work at any one location for up to 14 consecutive days
- "Typical duration" means construction work at any one location for more than 14 consecutive days but less than 20 consecutive weeks
- "Long-term duration" means construction work at any one location for more than 20 consecutive weeks

1.3.5 Special exceptions to these rules

Updated 26 August 2016

- Open Space 3 Zone (Ruapuna Motorsport Park and Carrs Road Raceway)
Notwithstanding the provisions of Clause 1.3.3 and Table 1 the following exception shall apply:

Community standards
Any activity which exceeds the standard specified below, shall be a discretionary activity.

- Carrs Road Raceway

- On not more than 120 days in any one calendar year, excluding Christmas Day and Boxing Day, operational noise levels shall not exceed 85dBA L max and 65 dBA L 10 (1 hour) between 0900 and 1700 hours except that these noise limits shall apply between 0900 and 1800 hours for official kart racing events that are fixed in the published annual calendar of the Christchurch Kart Club.
- Operational noise levels of 85dBA L max and 65 dBA L 10 (1 hour) shall apply between the hours of 1300 and 1700 on one weekday in each week that is fixed in the published annual calendar of the Christchurch Kart Club.

For the purpose of this rule

- All noise levels are to be applied at the notional boundary of a residential unit, where "notional boundary" is defined in NZS6801:1991 "Measurement of Sound" as . . . "a line 20 metres from the facade of any rural dwelling or the legal boundary where this is closer to the dwelling."
- Any reference to weekday shall mean between Monday and Friday excluding public holidays.
- "Official kart racing events" shall mean those that comply as a KartSport New Zealand race meeting with a status of Group A to Group G event. Such events are identified, sanctioned and conducted in accordance with the KartSport New Zealand rules.

(ii) Ruapuna Motorsport Park

1. Activity at Ruapuna Motorsport Park shall occur in accordance with the following standards in Tables 1 - 4 limiting the Permitted Activities, Frequency/Days Per Year, Boundary Logger Noise Levels and Hours of Operation, subject to Rules 2 - 8 below:

Table 1 Raceway Noise Standards

Permitted Activity	Days of the Week	Maximum Number of calendar days per year	Boundary Noise Logger Noise Limits		Hours of Operation
			LAeq (15min)	LAFmax	
Motor vehicles using the Racetrack except motor racing vehicles, and not operating above 100 km/h	Mondays	50	65 dB	85 dB	0900 - 1800 hours
Motor racing vehicles using the Racetrack	Any day except Mondays	90	65 dB	90 dB	0900 - 1800 hours Except on 5 days Friday to Sunday 0900 - 2000 hours
		75	70 dB	90 dB	
		120 of which no more than 50 days shall occur from Tuesday to Friday inclusive	80 dB	95 dB	
Drag racing vehicles using the Racetrack	Any day except Mondays	5	80 dB	105 dB	0900 - 1800 hours
Special Interest Vehicles using the Racetrack	Any day except Mondays	6 as part of any permitted activity listed in this table	90 dB	105 dB	Maximum of 90 minutes per day 1000 - 1700 hours

Table 2 Speedway Noise Standards

Permitted Activity	Days of the week	Maximum Number of calendar days per year	Boundary Noise Logger Noise Limits		Hours of Operation
			LAeq (15min)	LAFmax	
Speedway race meeting	Any day except Mondays	15	80 dB	95 dB	1800 - 2200 hours
Speedway practices	Any day except Monday	5	80 dB	95 dB	1200 - 1800 hours

Table 3 Remote Controlled Vehicle Track Noise Standards

Permitted Activity	Days of the week	Maximum Number of calendar days per year	Boundary Noise Limits		Hours of Operation
			LAeq (15min)	LAFmax	
Electric remote controlled vehicles using the Track	Any day except Mondays	No limit	65 dB	90 dB	0900 - 1800
Non-electric remote controlled vehicles using the Track	Any day except Mondays	50	65 dB	90 dB	0900 - 1800

Table 4 All other activities Noise Standards

Permitted Activity	Days of the week	Maximum Number of calendar days per year	Boundary Noise Limits		Hours of Operation
			LAeq (15min)	LAFmax	
All other activities associated with a motorised sports facility at Ruapuna including operation of any PA system, maintenance or management of the Motorsport Park, pilot vehicles used to manage or control activities, vehicles entering, parking within or leaving the Motorsport Park	Any day	No limit	50 dB	75 dB	0700 - 2200
	Any day	No limit	40 dB	65 dB	2200 - 0700

2. There shall be a minimum of 10 weekend calendar days scheduled between 31 October and 31 March per annum, of which at least 4 shall be scheduled between 2 January and 31 March, where there shall only be activities permitted in Table 4.

3. (a) Motor Racing shall not be scheduled to occur at the Raceway and Speedway at the same time.

(b) Where Drag Racing is scheduled to occur on a day where there are other activities scheduled to occur on the racetrack, it shall be allowed to occur on the same day provided that the events do not occur at the same time. For the avoidance of doubt, a day of Drag Racing that occurs on the same day as one of the other 120 high noise days in Table 1 will be treated as two separate days for the purpose of accounting for the maximum number of calendar days per year allocated for these activities.

4. The following exemptions will apply to Rules 1-3 above:

- a. Rule 1 shall not apply to emergency services vehicles;

- b. Where the need to wait for a replacement ambulance to arrive on site causes the start or finish time of any activity on the track to be delayed, the hours of operation may be extended for up to an hour.
- c. Where a New Zealand Speedway title event has experienced unavoidable delays, the hours of operation may be extended for up to an hour to complete the New Zealand Speedway title event on up to 4 occasions per year;
- d. Where the Speedway race programme for a New Zealand Speedway title event is unable to be completed due to adverse weather conditions, the programme may be completed the following calendar day, and may commence from 2pm, on up to 4 such events per year.

5. Any activity at the Raceway, Speedway, or Remote Controlled Vehicle Trace exceeding 40dB LAeq(15min) and 65dB LAFmax shall be a non-complying activity on the following days:

- a. Good Friday
- b. Easter Monday
- c. Between 25 and 31 December
- d. New Year's Day
- e. ANZAC Day

This rule applies in addition to any allowance for noise free Mondays in Rule 1 above.

6. For the purposes of rules 1-5 above:

- a. Noise from Ruapuna Motorsport Park shall be measured in accordance with New Zealand Standard NZS 6801:2008 Acoustics - Measurement of environmental sound, and assessed in accordance with NZS 6802:2008 Acoustics - Environmental noise, except that any penalty for audible characteristics and/or duration (paragraphs 6.3 and 6.4) shall not apply.
- b. A permanent noise logger shall be established at Ruapuna Motorsport Park, at a position selected by the Council, and shall be operated and maintained by the Council.
- c. The noise limits specified in Rule 1, Table 1 and 2 apply at the permanent noise logger. Data from the permanent noise logger will be deemed sufficient to determine compliance with Rule 1, Table 1 and Table 2, subject to verification that noise is attributable to activities at the Ruapuna Motorsport Park. Verification is to be confirmed by the Council.
- d. The noise limits specified in Rule 1 Table 3 and Table 4 apply at the boundary of the Ruapuna Motorsport Park.
- e. The lessees of the Ruapuna Motorsport Park shall maintain a log of racing, training, practicing, testing and all other events. The log is to be made available to the Council upon request and should include as a minimum: the type of activity, event name if applicable, and start/finish times.
- f. A year shall mean the 12 month period from 1 July to the following 30 June.

7. Noise Management Plans

The lessee or lessees of facilities within the Ruapuna Motorsport Park shall prepare, maintain and operate in accordance with a Noise Management Plan for the operation of the Speedway (including the Remote Control Car Track) and a Noise Management Plan for the operation of the Raceway. Each initial Noise Management Plan shall be submitted to the Head of Planning and Strategic Transport of the Council for certification by a suitably qualified and experience person (appointed by the Head of Planning and Strategic Transport) in writing that the Noise Management Plan gives effect to this rule within three months of this rule becoming operative. Any subsequent iterations of the Noise Management Plans will not require certification.

Notwithstanding the process and timing for review of the Noise Management Plans specified in the Plans, the Council may review either one or both Noise Management Plans in consultation with the lessees and the Community Liaison Committee. The Council shall provide adequate notice and state the reasons for the review, and any reviewed plan shall be recertified by the suitably qualified and experienced person appointed by the Head of Planning and Strategic Transport.

The respective Noise Management Plans shall each address and include:

- a. Objectives which are consistent with and which will contribute to achievement of Volume 3, Objective 14.6 and Volume 3, Policy 14.6.1 to maintain the operation of the facility whilst not increasing, and if possible reducing adverse noise effects on the environment.
- b. A clear description of the physical resources and facilities located at the Raceway or Speedway.
- c. A comprehensive description of the range of activities conducted at the Raceway or Speedway, including a requirement than an annual calendar of Race Dates be prepared and made publicly available for both the Raceway and Speedway prior to the commencement of each raceway season. In addition a calendar of all the activities proposed for each calendar month showing the times and noise category of each activity shall be prepared, maintained, and made publicly available prior to the beginning of that calendar month. The calendars should:
 - i. Specifically identify dates for those weekend days required by Rule 2;
 - ii. Where possible, the calendar should include provision of late starting times at the Raceway on days when the Speedway is also holding a race event and identify dates for Special Interest Vehicles; and
 - iii. Be updated as soon as possible following the cancellation of any activity.
- d. Operating procedures for the Raceway or Speedway. These procedures are to ensure activities at the Raceway and Speedway comply with Rules 1-6.
- e. Measures and initiatives for the management of vehicle noise and public address systems to achieve the Noise Management Plan objectives, including to ensure, where relevant, consistency with the requirements of the New Zealand Motorsport Manual.
- f. A description of the methods proposed to record the type, scale, frequency and duration of activities and events, including the monitoring of noise levels.
- g. Protocols for the sharing of data from noise monitoring. This shall include a requirement to provide regular reporting of activities to the public, Council and Community Liaison Committee with regard to compliance with Rules 1-6, including a running tally of each category of event held in each year.
- h. Protocols for responding to, addressing, and reporting on noise exceedances recorded by noise monitoring.
- i. Identification of management responsibilities and personnel, including contact details.
- j. The protocol for receiving, processing and responding to noise complaints. This shall include a requirement that the complainant be advised of the outcome of any complaint.
- k. The process and timing for review of the respective Noise Management Plans.
- l. As a schedule, a copy of the Council's Monitoring Guidelines for Ruapuna Motorsport Park. The Guidelines shall record the methodology that the Council will utilise for:
 - i. How monitoring at the boundary is to occur for the activities undertaken in accordance with Rule 1, Tables 3 and 4; and
 - ii. Analysing noise data from the boundary noise logger for the purpose of assessing compliance with Rules 1-6 (for example, to eliminate outliers in the data set, such as overflying aircraft); and
 - iii. Subsequently investigating any non-compliances identified in that analysis, including through discussion with the lessees of facilities within the Park; and
 - iv. Ensuring that the boundary noise logger is calibrated to accurately record noise at the Raceway and the Speedway.
- m. The matters required by Rule 8 below.

8. Community Liaison Committee

(a) The lessees, with support from the Council, shall form and operate a Community Liaison Committee. The following matters shall be set out in each Noise Management Plan:

- (i) Committee membership, roles, and appointment procedures. The Committee shall comprise an independent chairperson appointed by the Council, 3 members from the local Templeton residents, 2 members from the Canterbury Car Club, 1 member from Christchurch Speedway Association, and 1 member from the Council;
- (ii) The frequency of meetings, which shall be a minimum of four times per year, or as agreed by the Committee;
- (iii) Administration responsibilities, and procedures;
- (iv) Dispute resolution procedures.

(b) if local Templeton residents do not wish to form a Community Liaison Committee that shall not comprise a breach of these rules on the part of the Council or the lessees.

(c) The Community Liaison Committee may consider any adverse effect arising from the activities at the Motorsport Park.

(b) Outdoor amplified music concerts and events

Community standards

Any activities which exceed the standards specified below, shall be a **discretionary activity**.

- (i) Notwithstanding the provisions of Clause 1.3.2, the following exceptions shall apply to outdoor concerts and events in Jade Stadium, Queen Elizabeth II Park and Addington Showgrounds.

In the case of outdoor amplified music concerts or events undertaken outside any buildings, not exceeding 3 days in any one calendar year, the sound level from activities on the land measured or assessed on an hourly basis at any one of the standard monitoring sites shall not exceed 65dBA L **10** between the hours of 0900 and 2230 on any occasion and the maximum sound level at such a point shall not exceed 85dBA L **max** during such times. Outside these days and times the levels shall meet those for the rest of the relevant zone.

(ii) Notwithstanding the provisions of Clause 1.3.3 **and 1.3.4** and Tables 1 **and 2** the following exceptions shall apply to outdoor concerts and events **held in the following venues:**

Hagley Park, City Mall, Victoria Square, New Regent Street, **The Square.**

Noise from events shall not exceed the following limits when measured or assessed at any other property or place beyond the boundaries of the venue:

Hagley Park

i. On up to 30 days per year, of which only 5 days may include music events extending beyond 22:30 (10.30pm). In any case, no event shall commence before 09:00 (9:00am) or finish later than 23:30 (11:30pm), except for New Year's Eve which shall finish at no later than 00:30 (12:30am) on New Year's Day.

a. Events on 5 days which may extend beyond 22:30 (10:30pm):

75 dB LAeq (15 min) 1 hour assessment period, and

85 LAF max.

b. Events on the further 25 days:

70 dB LAeq (15 min) 1 hour assessment period, and

85 LAF max.

Except that fireworks which are part of any event shall be exempted from the LAF max limits.

ii. Any other event shall not exceed the following limits when measured or assessed at any other property or place beyond the boundaries of the venue:

a. Daytime:

50 dB LAeq (15 min) 1 hour assessment period, and

85 dB LAFmax.

b. Night-time:

41 dB LAeq (15 min) 1 hour assessment period, and

75 dB LAFmax.

The Square and Victoria Square

On up to 120 days per year for The Square and 20 days for Victoria Square, provided that any event shall not commence before 09:00 (9:00 am) or finish later than 22:30 (10:30pm) on any of those days:

70 dB LAeq (15 min) 1 hour assessment period, and

85 LAF max.

City Mall and New Regent Street

On up to 80 days per year for City Mall and 20 days for New Regent Street, provided that any event shall not commence before 09:00 (9:00 am) or finish later than 22:30 (10:30pm) on any of those days:

55 dB LAeq (15 min) 1 hour assessment period, and

85 LAF max.

Outside these days and times the levels shall meet those for the rest of the appropriate zone.

For the purpose of this rule, any reference to "days" shall mean "days in any calendar year".

(iii) Notwithstanding the provisions of Clause 1.3.3 and Table 1 the following exceptions shall apply to outdoor recreational activities permitted by Part 8 Clauses 9.3.4 (a) in Areas A of the Special Purpose (Wigram) zone.

In the case of recreation events in the above areas not exceeding a total of 30 days in any one calendar year, provided that no more than three events be held in any one calendar month, the sound level from activities on the land measured or assessed on an hourly basis at or beyond the boundary of the site shall not exceed 65dBA Leq(1hr) between the hours of 0900 and 2230 on any occasion and the maximum sound level at such a point shall not exceed 85dBA L **max** during such times. Outside these days and times the levels shall meet those for the rest of the appropriate zone.

Clarification of clause 1.3.4(c) :

For the purposes of this rule, "outdoor amplified music concert or event" means any activity for any purpose, and undertaken outside any buildings which principally involves the use of musical amplification which is clearly audible at any other site or place, and includes any amplification system checks but excludes events at which music or music amplification is incidental to the primary activity, or is absent.

Jade Stadium:

- 350m to 550m from the southern boundary of the park;
- 20m to 230m from the eastern boundary;
- 200m to 500m from the northern boundary of the park.

Queen Elizabeth II Park:

- 20m to 130m from the north-eastern boundary of the park.

Addington Showgrounds:

- Within 200m of the north-east boundary of the showgrounds.

(c) Temporary and short term events

Community standard

Any activity which exceeds the standards specified above shall be a discretionary activity **except that** :

Notwithstanding the provisions of Clause 1.3.3 and Table 1, the following exceptions shall apply to temporary or short term community events involving amplified music in the Cultural 1 Zone (Arts Centre only); the Cultural 2, 3 and 4 Zones; the Open Space 3B Zone (Riccarton and Addington Racecourses only); and the Open Space 2 Zone.

(i) Between the hours of 0900 and 1900 the sound level measured or assessed on an hourly basis at or beyond the boundary of the site, shall not exceed 65dBA L 10 on any occasion, and the maximum sound level at such a point shall not exceed 85dBA L max , and:

(ii) This exemption shall only apply on a maximum of 3 days in any one calendar year and one day per month; and outside these days and times the standards specified in the relevant zones (Clause 1.3.3 and Table 1) shall apply.

(d) Special Purpose (Landfill) Zone

Notwithstanding the provisions of Clause 1.3.3 and Table 1 the following exception shall apply:

Any activity, which does not comply with any one or more of the critical standards for Group 2 Zones under Clause 1.3.3, shall be a non-notified controlled activity, with the Council's control limited to noise effects on recreational and residential activities.

1.3.6 Aircraft Noise

Updated 22 May 2006

Critical Standard

CIAL shall manage the Christchurch International Airport so that the noise from aircraft operations does not exceed Ldn 65 dBA outside the Ldn 65dBA airport noise contour shown in Appendix 3 of Part 11.

Noise from aircraft operations shall be based on noise data from the Integrated Noise Model (INM) and records of actual aircraft operations at CIA. The noise level shall be calculated over the busiest three month period of the year.

Aircraft operations means:

- the landing and take off aircraft at CIA
- aircraft flying along any flight path associated with a landing or take off at CIA

The following activities are excluded from the definition of Aircraft Operations;

- aircraft operating in an emergency for medical or national / civil defence reasons
- air shows
- military operations not associated with the Antarctic programme
- aircraft using the airport as an alternative to a scheduled airport elsewhere
- aircraft taxiing
- aircraft engine testing

Exceedence by up to 1dBA of the noise limit is permitted provided CIAL demonstrates at the request of, and to the satisfaction of, the Council that any such exceedence is due to a atypical weather patterns

1.4 Assessment matters for resource consents

1.4 Assessment matters for resource consents

Updated 14 November 2005

1.4.1 General

Updated 14 November 2005

- The matters contained in Section 104 and 105, and in Part II of the Act, apply to consideration of all resource consents for land use activities.
- In addition to the matters contained in (a) above, the Council shall also apply the relevant assessment matters set out in Clause 1.4.2 below to discretionary activities.

1.4.2 Assessment matters for all zones including those within the Central City

Updated 09 January 2015

In considering any application relating to exceeding specified noise levels or duration of noisy events, the Council shall, in deciding whether or not to grant consent or impose conditions, have regard to the following assessment matters.

- The location of any nearby residential units, and the degree to which the amenities of residents may be adversely affected.
- The nature of the zone **and noise Category** within which the noise generating activity is located and its compatibility with the expected environmental results for that zone.
- The nature of any adjoining zone **and noise Category**, (where applicable) and the compatibility of the noise generating activity with the expected environmental results for that zone.
- The length of time for which specified noise levels will be exceeded, particularly at night, with regard to likely disturbance that may be caused.
- The likely adverse impacts of noise generating activities both on and beyond sites, on a site, on visitors, users of business premises, or on public places in the vicinity.
- The extent to which the noise may detract from enjoyment of any recreation or conservation area.
- The maximum level of noise likely to be generated, and the disturbance this may cause to people in the vicinity.
- The nature, character and frequency of the noise likely to be generated, and the disturbance this may cause to people in the vicinity.

- (i) Whether the noise generated would be of such a level as to create a threat to the health or well-being of persons living or working in the vicinity.
- (j) The proposals made by the applicant to reduce noise generation, including:
 - reduction of noise at source;
 - alternative techniques or machinery which may be available;
 - insulation of machinery or cladding used in the building;
 - mounding or screen fencing/walls;
 - hours of operation.
- (k) **For the central city:**
 - **The management of outdoor areas, including by closing outdoor serving areas, turning off outdoor heaters, turning off outdoor speakers, minimising the size of outdoor areas;**
 - **The management of external doors and windows and other avenues for noise to emanate from within a building; and**
 - **Any other management required to address issues such as rubbish and recycling disposal.**
- (l) The presence of planting as a means of visually screening the noise source, and reducing "perception" of noise.
- (m) The value and nature of entertainment activities and their benefit to the wider community, having regard to the frequency of noise intrusion and the practicality of mitigating noise, or utilising alternative sites.
- (n) The extent to which achieving the standard is practicable, given any existing activities which create noise, particularly on the interface with commercial, industrial or recreational activities.
- (o) The extent to which achieving the standard is practicable where the existing noise environment is subject to significant noise intrusion from road, rail or air transport activities.
- (p) Any relevant standards, codes of practice or assessment methods based on sound acoustic principles, including, when appropriate, NZS 6802:1991 "Assessment of Environmental Sound" **for all areas except the Central City and NZS 6802:2008 "Acoustics - Environmental Noise" and NZS 6803:1999 "Acoustics - Construction Noise" for the Central City.**
- (q) **For the Central City only, the level of noise from the activity in relation to ambient noise in its vicinity.**
- (r) **For the Central City only, the reasonableness of the noise in terms of recommendations and guidelines for community health and amenity and sleep protection in terms of NZS 6802:2008 "Acoustics - Environmental Noise and the World Health Organisation's Guidelines for Community Noise.**

1.4.3 Assessment Matters for Central City Business and Mixed Use Zones and the B1 Zone within the Central City - Protection of Noise Sensitive Activities

Updated 31 July 2012

- (a) **The impact of any residential accommodation or educational activity that does not provide the required noise insulation on the ability of existing or future permitted business activities to operate or establish without undue constraint.**
- (b) **The location of any nearby business activities and the degree to which the amenities of the noise sensitive activities may be adversely affected.**

1.4.4 Assessment Matters for Central City Living 4B and 4C and Central City Residential Zone and Living 5 Zones - Protection of Noise Sensitive Activities

Updated 29 January 2015

- (a) **The extent to which a reduced level of acoustic insulation may be acceptable due to mitigation of adverse noise impacts through other means, e.g. screening by other structures, or distance from noise sources.**
- (b) **The ability to meet the appropriate levels of acoustic insulation through alternative technologies or materials.**
- (c) **The provision of a report from an acoustic specialist which provides evidence that the level of acoustic insulation is appropriate to ensure the amenity of present and future residents of the site.**

1.5 Reasons for rules

Updated 12 March 2012

The primary elements of the noise rules are:

- (a) The setting of a standard for zones where sensitivity to noise is likely to be high (Zone Group 1).
- (b) The setting of standards for zones where there is likely to be moderate or low sensitivity to noise and where there is greater potential for noise generation from activities within the zones (Zone Groups 2 and 3).
- (c) Relevant standards, codes of practice or assessment methods based on sound acoustic principles, including when appropriate NZS 6802 "Assessment of Environmental Sound".

These are then applied in terms of the zones and zone boundaries. The point of noise measurement has been defined to ensure that the noise levels can be required to comply on the boundary of any adjoining site, or at any point beyond the boundary to cover situations where the noise level is exceeded beyond the immediate boundary, except where roads are the boundary and the point of measurement can be directly opposite (as there are few adverse effects of noise on roads from adjoining land). The approach taken is to ensure that noise impacts are minimised in noise sensitive zones (such as living zones) or at the boundaries of these zones. In other zones noise levels are contained to acceptable levels but recognising that higher than "residential" noise levels are inevitable as part of the range of activities undertaken (e.g. business zones). There are specified exceptions in unavoidably high noise environments (e.g. motor sport venues) and for outdoor events such as concerts. A third exception relates to a defined precinct in the Cashel Street/Oxford Terrace area where high noise levels are associated with an aggregation of inner city bars.

Where adjoining sites are in different zone groups (with different standards) the lower, or more restrictive standard applies to the common zone interface to protect the amenities of the more sensitive zone. This is also extended to apply where zones adjoin across roads or railways, e.g. a living zone opposite a business (industrial) zone. A special exception is provided for the Business 4 Zone (Feltex) in Peer Street, which over the years has been surrounded by subsequent housing development and would have difficulty in meeting the standards in the Plan for a site adjoining a Living 1 Zone boundary. Accordingly, it may exceed the standards by up to 5dB(A) for night-time levels.

Noise is a matter which can be specifically addressed under the Act and is a key element of amenity values. Excessive noise is one of the environmental indicators that is most commonly recorded in complaints about adverse effects of activities. Control is required to ensure that activities do not create noise which disturbs enjoyment of residential properties, sleep, the use of public places, intrudes into the natural environment, or is of such a level that it is injurious to health.

In those areas where very high noise is periodically an unavoidable outcome, then the length of exposure to that noise, and adequate separation distances for residences are required.

The sound levels for use in determining the point at which an examination of the actual sound levels produced, or predicted to be produced, by an activity were chosen from information on average actual levels occurring in Christchurch in situations where no significant noise complaints were being received, or where no significant source of noise was apparent. In general terms they could be considered to be sound levels at which the majority of persons would consider the sound level to be reasonable. This does not mean that they are actual levels that exist, without complaint, in each and every circumstance in every area to which they apply. Where possible they are levels which are not influenced by passing traffic and could be seen to represent sound levels experienced close to buildings in living zones rather than at the boundary. They are indicative of the levels above which there is a need to examine more closely the source of the sound for possible mitigation measures.

The rules are set with regard to the provisions of the New Zealand Standard NZS 6801: 1991 Measurement of Sound, and in general measurements to determine compliance with the standards contained in the Plan must be undertaken in accordance with these standards as applicable. It should be appreciated that noise performance standards provide some degree of certainty for the design of new buildings and equipment to meet the standards and for those in a possible recipient situation to know what the expected sound levels in the particular area could be in the future. Compliance with such standards may not mean that there are not complaints regarding noise from certain activities but such cases can be investigated under the provisions of the Act.

Account is also taken of the ambient, or background noise levels in the vicinity in setting the three levels of noise comprising the industrial and residential standards. The former takes account of the needs to balance the economic realities of business activities - the latter emphasises the dominance of "peace and quiet" in a living environment.

Two basic standards have been developed, in recognition of the differing sensitivities to noise which are considered likely within the three main zone groupings. The standards for the most sensitive zone group are correspondingly more stringent than for the other two groups and this is reflected by the status given to activities which exceed the standards. On this basis, activities which produce noise in excess of the specified standard would be:

- non-complying within the most noise sensitive and moderately sensitive zone groupings; but
- discretionary within the least noise sensitive zones.

Specialised provision has been made for noise standards in quarry zones because of the particular noise problems associated with rural quarrying and processing of aggregates. This recognises some unavoidable noise intrusion, but seeks to minimise noise effects by hours of operation and specified noise standards relevant to quarries. Similarly, for motorsports and events of a periodic nature such as outdoor concerts, where exceeding the ordinary noise standards is inevitable (and compliance practically impossible) more liberal provision is made to strike a balance between residents' rights and the need for the public to enjoy entertainment. In these cases, exemptions have been provided, but are limited by the hours of operation and number of days. Scheduled activities have been included as they require special recognition within the zone environments, as is the case with other rules applying to them (refer Vol 3, Part 9, Clause 3).

It is recognised that the presence of existing commercial, industrial and recreational activities on the interface with living environments means that a higher degree of noise intrusion will occur in these locations.

A major reason for this graduated system of control is to ensure that a combination of zoning, and the noise control rules, creates a buffer where possible between noisy environments and noise sensitive environments. While this of necessity simplifies the complexity of the noise environment in the city, it is the most appropriate mechanism having regard to the need to provide certainty for the community and developers, adequate provision for enforcement and administration, and to avoid unduly complicated controls. Notwithstanding any controls of this plan, some noise may still be perceived as intrusive.

The Plan recognises that there will be some unavoidable noise impacts associated with transport infrastructure, particularly arterial roads, railways and airport activities. These will be recognised in the consideration of resource consents for activities in proximity to such facilities, but will not mean that such activities can use existing noise environments as an "umbrella" for significantly increasing noise intrusion in these areas.

It will be noted from Clause 1.2.3 that there are a significant number of exclusions from the rules controlling noise because setting standards is impracticable in these circumstances, and where it is more sensible for the Council to apply enforcement provisions for excessive noise specified in Part XII of the Act. However, further work on noise effects, both in New Zealand and overseas, may eventually result in additional forms of regulatory control where this is the most practicable option.

Rule 1.3.5 addresses aircraft noise via a separate critical standard limiting noise from aircraft operations to 65 dBA Ldn at the 65 dBA Ldn airport noise contour. There are specified exceptions e.g. engine testing, aircraft operating in an emergency for medical or national/civil defence reasons, military operations not associated with the Antarctic programme, and air shows.

Setting the limit for airport noise at the 65 dBA Ldn provides a long term safeguard for the maintenance and enhancement of amenity values and the quality of the environment for people living near the airport. While the limit is unlikely to be approached for more than 10 years, it is appropriate to include the rule in the plan at this time so that the airport operator can work towards limiting noise associated with aircraft operations.

The rule is consistent with New Zealand Standard 6805:1992 which recommends the use of a dual approach by both controlling land uses around airports and setting limits on the amount of noise generated by aircraft movements.

Noise from engine testing is not included in the noise limits on aircraft operations due to the distinct noise profiles of the separate activities, and the fact that engine testing is subject to the requirements of the Christchurch International Airport Bylaws 1989 approved by the Governor General in the Christchurch International Airport Bylaws Approval Order 1989. Some unscheduled operations are exempt because they are infrequent events beyond the control of the airport authority, with potential for commercial operators to be constrained if this exemption is not provided for.

For the purpose of this clause "engine testing" means ground running of engines for maintenance purposes (not associated with immediate flight operations). "Military Operations" includes operations by the Royal New Zealand Air Force and foreign armed forces (exempted by S4 and S4A of the Resource Management Act 1991).

The administration of the rules will require a strong emphasis on the provision of adequate information, so that compliance or otherwise with the standards can be determined upon inquiry.

That CIAL will produce a noise management plan including the following provisions:

- (a) setting out procedures for monitoring and demonstrating compliance with the noise control rule in the City Plan and for mitigation and review of noise control lines incorporated in the Plan once noise levels are approaching projected levels;
- (b) a comprehensive noise complaints procedure for Christchurch International Airport;
- (c) procedures for amendment to the contents and implementation of the noise management; and
- (d) formalising the engine testing bylaw in the noise management plan.

2.0 Control of glare

Updated 14 November 2005

Guide to using these rules

- Step 1** Establish which zone the activity is in, and then whether the zone is in a Group 1, 2 or 3 zone (Clauses 2.3.2, 2.3.3 or 2.3.4).
- Step 2** Having established what group the zone is in, then determine whether the glare generated by illumination from the activity will exceed the standard specified for that group of zones.
- Step 3** If the activity does not meet any of the community standards specified application will need to be made for a resource consent, assessed as a discretionary activity.
- Step 4** If all of the relevant standards are met, the activity shall be a permitted activity in respect to glare.

Note: Clause 2.3.3 includes scheduled activities.

2.1 Statement

Updated 14 November 2005

Apart from natural glare from the sun, there are two types of glare which may create adverse effects. These are glare from artificial illumination (interior/exterior lighting, sports field lighting,

security lighting, advertising, etc.); and reflective glare from structures.

Rules on glare are based on the premise that light should be directed and controlled such that it does not create adverse effects within the boundaries of adjoining properties. The standards are set to three levels of glare, which in this context is more correctly referred to as light spill, the first being a "residential level" (4.0 lux), the second a "buffer level" (10.0 lux) and the third an "industrial level" (20.0 lux). The purpose of these standards is to operate in conjunction with the zoning pattern and the expected environmental outcomes in these zones to ensure a level of glare acceptable in the local environment. The level of glare is particularly controlled in zones which are sensitive to glare nuisance (e.g. living zones) but with more flexibility within (for example), business zones, where greater use of lighting for security, operational, advertising or display purposes is often required.

The rules are also expected over time, and in conjunction with improved lighting design, to reduce the amount of reflected light into the atmosphere at night, and more efficient use of energy for lighting.

Attention is drawn to the powers held by the Civil Aviation Authority which can require the removal or modification of lighting which poses a navigational or safety hazard for aircraft. The Council advises anyone considering a development with a large scale lighting component in the area shown in Appendix 2, Part 11 to consult with the Civil Aviation Authority prior to development and thereby ensure the development will not pose a hazard for aircraft.

Environmental results anticipated

- (a) Minimised effects of glare particularly within residential and rural environments, and the limiting of glare in other areas such that it does not create nuisance to persons in those zones.
- (b) Avoidance of hazards to motorists or aircraft movements from illumination or glare.
- (c) Control of glare from advertising that would create obtrusive visual impacts to living zones.
- (d) High periodic levels of glare within zones where illumination is operationally necessary (e.g. sports facilities) but in a manner which ensures that illumination is contained within the site and not dispersed on to adjoining land.
- (e) A gradual reduction in the level of reflected light into the atmosphere through improved efficiency and direction of lighting.

2.2 General rules

Updated 14 November 2005

2.2.1 Containment of light spill

Updated 14 November 2005

All exterior lighting shall be directed away from adjacent properties and roads.

2.2.2 Point of measurement - Lux spill

2.2.2 Point of measurement - Lux spill

Updated 14 November 2005

All standards for the following rules relating to lux spill (horizontal and vertical) shall be measured either at a point 2 metres inside the boundary, or at the closest window, whichever is the nearer, of the property affected by glare from the activity on the site from which the glare originates.

2.2.3 Special provisions for the control of glare

Updated 14 November 2005

Notwithstanding that a source of glare may be excluded from the application of these rules (eg. reflected glare) the Council may initiate action under Part XII of the Act where this is appropriate.

2.3 Specific rules - Control of glare

Updated 14 November 2005

2.3.1 Standards for the control of glare and zone groupings; exclusions from rules:

Updated 14 November 2005

- (a) Notwithstanding that an activity may comply with the specified glare standard for the zone in which it is located, it must also comply with the standard required at the point of measurement on an affected site in another zone grouping where a lower (more restrictive) standard is specified, whether or not there is a common boundary between the sites. Where a site is divided by a zone boundary then each part of the site divided by that boundary shall be treated as a separate site for the purpose of these rules.
- (b) These rules do not apply to:
 - reflected glare from structures or vehicles
 - glare from the lights of vehicles, trains, trams and aircraft
 - glare from the lights of traffic signals or navigation aids
 - glare from the short term or temporary community events and activities on land owned by the Council, where its consent as owner has been granted
 - glare from short term or temporary community events and activities in the Cultural zones, the Special Purpose Ferrymead and Wigram zones, the Open Space 3A zone, the Open Space 3B zone (Addington and Riccarton Racecourses only) and the Open Space 3C zone.

2.3.2 Glare standards - Group 1 Zones

Updated 30 September 2008

Zones most sensitive to glare:

Group 1 Zones include:

- All living zones
- All rural (except Rural Quarry) zones
- All conservation zones
- Open Space 1 and 3C Zones
- All cultural zones (except Christchurch Polytechnic - Central City site)
- Special Purpose (Hospital) Zone

- Special Purpose (Ferrymead) Zone - Areas A, B and C

(a) Community standard

Any activity which results in a greater than 4.0 lux spill (horizontal and vertical) of light, shall be a discretionary activity.

Note : Please note the exclusions to this rule in Clause 2.3.1(b).

2.3.3 Glare standards - Group 2 Zones (including scheduled activities)

Updated 09 January 2015

Group 2 Zones include:

- Rural Quarry Zone
 - **Central City Mixed Use Zone and Central City (South Frame) Mixed Use Zone**
 - All open space (except OS1 and OS3C) zones
 - Business 1, 2, 2P, 3B, 4, 4T and Retail Park Zones (except Moorhouse Central BRP zone, as identified in 2.3.4 below)
 - Special Purpose (Landfill) Zone
 - Special Purpose (Transfer Station) Zone
 - Special Purpose (Ferrymead) Zone - Area D
 - All scheduled activities
- (a) Community standard

Any activity which results in greater than 10.0 lux spill (horizontal and vertical) of light, shall be a discretionary activity.

Note : Please note the exclusions to this clause in Clause 2.3.1 (b).

2.3.4 Glare standards - Group 3 Zones

Updated 15 October 2012

(Zones least sensitive to glare)

Group 3 Zones include:

- Business 3, 5, 4P, 6, 8 and Retail Park Zones (Moorhouse Central only, being the area bounded by Moorhouse Avenue, the railway corridor, Antigua Street and Colombo Street)
 - Business 7 Zone
 - Central City **Business** Zone
 - Special Purpose (Airport) Zone
 - Special Purpose (Wigram) Zone - Area A
 - Cultural 4 (Christchurch Polytechnic - Central City site)
- (a) Community standard

Any activity which results in a greater than 20.0 lux spill (horizontal and vertical) of light shall be a **discretionary activity** .

Note : Please note the exclusions to this clause in Clause 2.3.1 (b).

2.3.5 Effect of illumination on aircraft operations and arterial roads

Updated 14 November 2005

In addition to the standards applicable in Clauses 2.3.2 - 2.3.4, any activity which results in a greater than 2.5 lux spill (horizontal or vertical) of light from outside the Special Purpose (Road) Zone into any part of a road zone classified as an arterial road in Part 8 Appendix 3, or on any land outside the Special Purpose (Airport) Zone which is within 500 metres of the threshold of the main or cross runways at Christchurch Airport (except for navigation lighting) shall be a **non-complying activity**.

2.4 Assessment matters for resource consents

Updated 14 November 2005

2.4.1 General

Updated 14 November 2005

- (a) The matters contained in Sections 104 and 105 and in Part 2 of the Act, apply to consideration of all resource consents for land use activities.
- (b) In addition to the matters covered in 2.4.1 above, the Council shall have regard to the following assessment matters for discretionary activities.

2.4.2 Assessment matters

2.4.2 Assessment matters

Updated 14 November 2005

In considering whether or not to grant consent, or impose conditions, the Council shall have regard to the following assessment matters.

- (a) The extent to which additional light may adversely affect occupation of residential properties, particularly at night.
- (b) The location and size of the light source.
- (c) The type of lighting and whether it is intermittent flashing or moving.
- (d) The need for lighting to provide greater security for property or for the safety of members of the public.
- (e) The effect of lighting on traffic in terms of potential distraction to motorists.

- (f) Any measures, including lighting design, proposed to be taken to control the direction and spill of the lighting.
- (g) Any screening (solid or planting), or other measures to shield properties from lighting.
- (h) The potential for the lighting to create related adverse effects including reflective glare.
- (i) Whether any areas of cultural or natural significance will be affected by lighting.
- (j) The effect of lighting on aircraft approaching airports in terms of potential distraction or confusion, and any measures to ensure that non-aeronautical ground lights do not shine above the horizontal. The area subject to this assessment matter in relation to Christchurch International Airport is shown in Appendix 2, Part 11.

2.5 Reasons for rules

Updated 12 March 2012

Although some forms of glare cannot be readily controlled through rules in a plan, particularly reflective glare, the city plan contains measures to contain glare where activities create adverse glare effects because of illumination.

Rules in the plan are specified to deal with adverse effects from glare caused by illumination from properties, but not from street lighting. The adverse effects of glare are usually more apparent at night and may cause nuisance to residents or to traffic. Glare from outdoor advertising and from illumination of sports fields are a known form of nuisance. Illumination from street and security lighting is a more complex issue, as what may be a nuisance to some people is seen as necessary for security by others, such as property owners and pedestrians. It is a difficult issue in terms of determining the appropriate degree of regulation.

It is impracticable to set standards for reflective glare, because the circumstances under which it may arise (e.g. reflected from windows or roofs) are so variable. However, particular problems will instead be dealt with by way of enforcement procedures under Part XII of the Act as and when circumstances require.

The basis of the rules is to allow higher levels of glare in areas where activities of necessity, require lighting for functional, operational and security reasons (e.g. the Central City and Industrial Business Zones), and to minimise glare levels in sensitive environments such as living and rural zones. Accordingly exceeding 4.0 lux spill is a discretionary activity in the latter zones, and also on the boundaries of "glare sensitive" zones.

The rules also recognise "transitional zones" where activities associated with commercial or sporting activities, or for security, necessitates greater lighting (e.g. Business 2 and 4 Zones). Here the exceeding of 10 lux spill is a discretionary activity, whereas in some other business zones, and in the Central City the level is set at 20 lux spill reflecting the acceptance of higher light spill levels in these environments.

A general rule is also incorporated to require that the direction of light is adequately controlled at source to minimise any unnecessary spread over other properties or into the atmosphere.

Compliance will be checked inside the boundaries of affected properties outside the site, whether or not they are part of an adjoining zone or site, to achieve protection of amenities from above. Exclusions have been provided where the control of glare is impracticable from an operational or safety perspective, or where it is associated with temporary special events.

Special provision has been made to mitigate any adverse effects of lighting which could affect the safety of aircraft movements to and from the International Airport; and similarly for traffic using arterial roads.

3.0 Hazardous Substances

Updated 14 November 2005

Guide to using these rules

Step 1: Determine the type and quantity of hazardous substances to be manufactured stored, used and/or disposed of and the class of hazardous substances that it comes within as specified in Schedule 1.

Step 2: Establish what zone the activity is located within and whether it is a Group 1, 2, 3, or 4 zone as specified in Schedule 2.

Step 3: Check whether the proposed manufacturing, use, storage or disposal of hazardous substances complies with the development standards in Clause 3.3.3.

Step 4: If the proposed manufacturing, use, storage or disposal of hazardous substances complies with development standards in Clause 3.3.3 then the activity will be a permitted activity.

Step 5: If the proposed manufacturing, use, storage or disposal of hazardous substances does not comply with the development standards in Clause 3.3.3, then the activity will require a resource consent, assessed as a discretionary activity, with the exercise of the Council's discretion limited to the matters subject to that clause.

Step 6: If the manufacturing, use, storage or disposal of hazardous substances exceeds the quantities specified in Column B of Schedule 2, then the activity will require a resource consent assessed as a non-complying activity.

Step 7: If the proposed activity involves the manufacturing of hazardous substances, or the manufacturing, use, storage or disposal of infectious substances or radioactive material, it should be checked against Clauses 3.3.4(a), (b) and (c) (discretionary activity) and 3.3.5 (a), (b), (c) and (d) (non complying activity) and the necessary resource consent applied for.

Notes :

- (a) The relevance of other legislation and regional rules to the proposed use, storage or disposal of hazardous substances should also be ascertained.
- (b) Note that, on zone boundaries, the provisions of the more restrictive zone apply 30m within the boundary of the adjoining zone, and any non compliance shall be a discretionary activity (refer Clause 3.3.1 (b)).
- (c) Refer to Clause 3.3.6 for exceptions to the rules.

3.1 Statement

Updated 15 October 2012

Hazardous substances are an essential part of many business, agricultural and transport operations, and include a wide range of substances which may be hazardous depending on their volume, toxicity or risk of explosion.

The Act specifically identifies the use, storage, disposal and transportation of hazardous substances as matters which can be dealt with in district plans. This is reinforced by the Regional Policy Statement which pursuant to S.62(1)(ha) has identified the role of hazardous substance control as a district matter.

The rules in this section of the Plan deal primarily with the storage, use, disposal, and manufacturing of hazardous substances. It is recognised that in conjunction with the requirements of other legislation, the manufacturing, storage, use and disposal of hazardous substances is normally undertaken in a routine and safe manner by most business activities, and the risk to the public is low.

The transport of hazardous substances is addressed at a policy level (Statement of Objectives and Policies) and by assessment matters for rules relating to the manufacturing, use, storage and disposal of hazardous substances (and by implication movement to and from sites).

The use, storage and disposal of hazardous substances is categorised into a schedule related to the type or group of substances, toxicity and other adverse effects characteristic of the substances, and the volumes to be stored or used. This schedule, and the manufacturing of hazardous substances, are in turn related to the zoning pattern and four groups of these zones which range from those most sensitive (and unsuitable for hazardous substance use and storage) to those which are most suitable. The use of hazardous substances is also subject to other legislation, including the Hazardous Substances and New Organisms Act.

The Regional Council also has functions relating to hazardous substances, and in particular the effects of discharges of hazardous substances on groundwater, surface waters and coastal waters.

The Business 8 Zone is located over the Groundwater Recharge Zone west of the city. It is an expansion of the previous Business 4 and Business 5 zoning applying over the old Freezing Work site and its immediate surrounds. This previous zoning provided for a wide range of heavy industries including those able to store, use, manufacture, or dispose of significant quantities of hazardous substances, some of which have the potential to adversely effect groundwater. The Business 8 Zone contains specific restrictions on hazardous substances such that the range and volume of such substances is restricted to a level less than that which would have been realistically expected under the much smaller Business 5 zoning previously applying in this area.

Further refinement of standards to address the effects of the use and storage of hazardous substances will take place over the next few years as classifications and codes of practice are developed by the Environmental Risk Management Authority and further experience is gained.

Environmental results anticipated

- (a) Maintaining a safe environment for any affected residents and other persons, including those on site, from the manufacturing, use, storage, disposal and transport of hazardous substances.
- (b) The avoidance of contamination of surface or groundwaters from activities that involve manufacturing, use, storage, or disposal of hazardous substances.
- (c) The maintenance of high levels of protection from the adverse effects of hazardous substances in living zones.
- (d) The further development of business activities including those which require the use of hazardous substances, particularly where such use involves use of buffers, bunding, secure storage and handling, and other means of mitigating hazards.
- (e) Improved technology and methods of mitigating the effects of the manufacturing, use, storage, disposal and transport of hazardous substances.
- (f) The greater use of specified arterial road and rail links for the transport of hazardous substances, avoiding where possible local roads and areas containing concentrations of residences and public gatherings.
- (g) The containment of substances which are subject to risk of spillage within secure containers, bunds or covered storage, in order to reduce the hazards of toxicity or explosion.
- (h) the avoidance of groundwater contamination as a result of controls on the range and volume of hazardous substances able to be used, stored, manufactured, or disposed of in the Business 8 Zone over the Groundwater Recharge Zone.

3.2 General Rules information

Updated 14 November 2005

3.2.1 Relevant legislation

Updated 14 November 2005

In addition to rules in this plan applicable to hazardous substances, the provisions of the following legislation may also be applicable:

The Hazardous Substances and New Organisms Act 1996

The Medicines Act 1981

The Pesticides Act 1979*

The Health and Safety in Employment Act 1991

The Dangerous Goods Act 1974*

The Toxic Substances Act 1979*

The Radiation Protection Act 1965

The Explosives Act 1957*

* The new Hazardous Substances and New Organisms Act 1996 embodies the Pesticides Act, the Dangerous Goods Act, the Toxic Substances Act and the Explosives Act which have transitional status until they are replaced by regulations or codes of practice under the principal Act.

3.2.2 Reference to regional rules

Updated 15 October 2012

There are regional rules applicable to the storage of hazardous substances in underground and above ground tanks and in the coastal marine area. Any disposal of specified groups of hazardous substances may be subject to regional rules and/or regional resource consents. In particular, attention is drawn to the provisions of the Natural Resources Regional Plan, Chapter 4 (Water Quality). A number of business areas in the south and west of the City, including all of the Business 8 zone, overlie the Christchurch Groundwater Recharge Zone as identified in Chapter 4 of the NRRP. That NRRP contains separate provisions regulating hazardous substances which may have significant impacts on the status of industrial activities seeking to locate within these areas and within the Business 8 Zone, including a list of specific activities which are restricted from locating in areas overlying the groundwater recharge area due to their potential to contaminate the City's groundwater supply in the event of accidents or spillages.

The restrictions in the NRRP are additional to those in the City Plan, and it is emphasised that certain activities which may comply with the rules regulating hazardous substances under the City Plan may require resource consent from the Regional Council, or even be prohibited, under the NRRP.<

(Note: This is an interim situation until such time as a more integrated approach for dealing with Hazardous Substances consents can be developed with the Regional Council).

3.3 Specific rules - Manufacturing, use, storage and disposal of hazardous substances

Updated 14 November 2005

3.3.1 Classification of hazardous substances and zone groupings

Updated 14 November 2005

- (a) All hazardous substances shall be classified into the classes specified in Schedule 1 according to the characteristics specified for each class in that schedule. Each class includes, but is not limited to, the examples specified in the schedule. Where a hazardous substance can be classified into two or more of the Classes in Schedule 1, the applicable class shall be deemed to be the class with the lower/lowest quantity limits specified in Schedule 2 for the relevant zone. Where a site is divided by a zone boundary then each part of the site divided by that boundary shall be treated as a separate site for the purpose of these rules.
- (b) The zoning of sites containing activities which involve the manufacturing, use, storage or disposal of hazardous substances shall be grouped according to the zone groupings specified in Schedule 2. Where an activity is located on a site included in one zone grouping (as specified in Schedule 2) and is within 30m of the boundary of a site in another zone grouping having lower (more restrictive) quantity limits for that category of hazardous substances, the quantity limits applicable to that part of the site shall be those for the zone having the lower (more restrictive) quantity limits. Within this 30m setback any activity which fails to

comply with the volume standards in Schedule 2 shall be a discretionary activity. The provisions of this clause shall not apply to sites adjoining the Special Purpose (Pedestrian Precinct) Zone.

(also refer to clause 3.3.6)

(c) In respect of the quantity limits for hazardous substances specified in these rules, the limits shall apply to the total combined quality of each individual class of substance present on the site.

3.3.2 Permitted activities

Updated 14 November 2005

(a) Any individual activity which involves the use, manufacturing, storage or disposal of hazardous substances specified in Schedule 1 (Classification of hazardous substances), which complies with:

- all the development standards under Clause 3.3.3 and;
- all the community standards under Clause 3.3.4 and;
- all the critical standards under Clause 3.3.5 or;
- is otherwise exempted by Clause 3.3.6

shall be a permitted activity.

(also refer to Clause 3.2.1)

Note : not all exemptions under Clause 3.3.6 are permitted activities

3.3.3 Development standards

3.3.3 Development standards

Updated 14 November 2005

Any individual activity which involves the manufacturing, use, storage and/or disposal of hazardous substances, which does not comply with any one or more of the following shall be a discretionary activity, with the exercise of the Council's discretion limited to the matter(s) subject to that standard.

(a) Any individual activity which involves the manufacturing use, storage or disposal of hazardous substances specified in Schedule 1 (Classification of Hazardous Substances), shall not exceed the quantities specified in Column A.

This standard does not apply to Radioactive materials as defined in Clause 3.3.4 (c).

(also refer to Clause 3.3.6)

(b) All areas or parts of sites where hazardous substances (including waste) are manufactured stored, used, loaded or unloaded (except for the loading and unloading of gas bottles) shall be:

- (i) in the case of liquids (excluding LPG), paved so that any spillage will not escape into, or otherwise affect, topsoil or subsoil;
- (ii) protected against the effects of weather through site containment, roofing or any other method to prevent uncontrolled discharge or spillage from the site as a result of adverse weather conditions;
- (iii) sealed, or otherwise contained so that substances cannot escape or spill in an uncontrolled manner;
- (iv) in the case of aboveground storage or use of liquids (excluding LPG), imperviously sealed, banded or otherwise contained so that a spillage shall be confined totally within the site on which it occurs.

(c) To achieve (b) above, the following specifications are required:

- (i) the volume of any containment or bund shall be 100% of the maximum volume of the hazardous substances to be stored, used, loaded or unloaded when the site is roofed; or
- (ii) the volume of any containment or bund shall be 120% of the maximum volume of the hazardous substances to be stored, used, loaded or unloaded when the site is unroofed;
- (iii) the containment or bund should be designed in such a way as to ensure containment of any hazardous substances that spill due to the collapse of any container (e.g. tank), and the containment from the direct leakage from any container;
- (iv) the containment or bund shall be sealed with impervious materials that are resistant to breakdown from the particular hazardous substances which they are designed to contain;
- (v) the containment or bund and its sealment shall be maintained as and when necessary.

(d) Collection of hazardous substances for disposal purposes, or for subsequent use, shall be in containers that seal and contain the hazardous substances collected.

(e) All hazardous substance sites shall be adequately signposted according to the Code of practice for "Warning signs for premises storing hazardous substances 1988" of the New Zealand Chemical Industry Council.

3.3.4 Community standards

Updated 14 November 2005

(a) Any activity which involves the manufacturing of any hazardous substance on any site in the zones included in Groups 2 and 4 (Schedule 2) shall be a **discretionary activity**.

(b) Any individual activity, other than a health facility, which involves the manufacturing, use, storage or disposal of infectious substances, (being preparations (including wastes arising from such preparation processes) which contain viable micro-organisms or their toxins which are known or suspected to cause disease in animals or humans) shall be a **discretionary activity** on any site in the zones included in Groups 2 and 4 (Schedule 2).

(c) Any individual activity which involves the manufacturing, use, storage or disposal of radioactive material exceeding ten times the Type A package limit shall be a **discretionary activity** on any site in the zones included in Groups 2 and 4 (Schedule 2).

For the purpose of clauses 3.3.4(c) and 3.3.5(d), radioactive material is defined as being any substance which emits radiation (including alpha, beta, gamma, x-rays, neutrons, high energy electrons, protons and other atomic particles) containing a total activity of greater than 3000 becquerel with a concentration exceeding 100,000 becquerel per kilogram.

Note : For the purpose of clauses 3.3.4 (c) and 3.3.5 (d), the Type A package limits are set out in the IAEA Safety Standards Series Regulations for the Safe Transport of Radioactive Materials, 1996 Edition. This publication is available from the National Radiation Laboratory.

3.3.5 Critical standards

Updated 15 October 2012

(a) Any individual activity which involves the manufacturing, use, storage or disposal of hazardous substances specified in Schedule 1 (Classification of hazardous substances) which exceeds the quantities specified in Column B (where specified) of Schedule 2 for any site in the relevant zone shall be a **non**

complying activity .

(also refer to Clause 3.3.6)

- (b) Any activity which involves the manufacturing of any hazardous substance shall be a **non complying activity** on any site in those zones included in Groups 1 and 3 (Schedule 2).
- (c) Any individual activity, other than a health facility, which involves the manufacturing, use, storage or disposal of infectious substances as defined in 3.3.4(b) above as part of or associated with any industrial or commercial activity (including associated laboratory and research facilities) shall be a **non-complying activity** on any site in those zones included in Groups 1 and 3 (Schedule 2).
- (d) Any individual activity which involves the manufacturing, use, storage or disposal of radioactive material, as defined in 3.3.4 (c) above, exceeding the Type A package limit shall be a **non-complying activity** on any site in those zones included in Groups 1 and 3 (Schedule 2).
- (e) In the Business 7 Zone, excluding the area shown as hatched on the Part 3 Appendix 12 for mushroom farming, underground storage of hazardous substances shall be a non-complying activity.
- (f) In the Business 7 Zone, excluding the area shown as hatched on the Part 3 Appendix 12 for mushroom farming, the maximum volume of any single container for a liquid (excluding LPG) shall be 1200 litres.
- (g) In the Business 4 Zone that is subject to the Wigram Outline Development Plan area shown in Appendix Part 2, Volume 3 Appendix 3U/1, the volume of any containment or bund for hazardous substances shall be 120% of the maximum volume of hazardous substances to be stored, used, loaded or unloaded when the site is roofed.
- (h) In the Business 4 Zone that is subject to the Wigram Outline Development Plan area shown in Appendix Part 2, Volume 3 Appendix 3U/1, the volume of any containment or bund for hazardous substances shall be 150% of the maximum volume of hazardous substances to be stored, used, loaded or unloaded when the site is unroofed.
- (i) In the Business 8 Zone, the underground storage of hazardous substances shall be a non-complying activity.

3.3.6 Exceptions

Updated 15 October 2012

- (a) In Group 3 and 4 zones (apart from any site within the Business 8 Zone), and on sites containing scheduled service stations, the storage and retail sale of petrol, and the storage of aviation fuel (up to 100,000 litres storage in underground tanks) and diesel (up to 50,000 litres in underground tanks) shall be a controlled activity and will not require the written consent of other persons and shall be non-notified, in respect to Clauses 3.3.1(b), 3.3.3, (a), (b) and (c) and 3.3.5, provided that the "Code of Practice for the Design, Installation and Operation of Underground Petroleum Storage Systems" (Department of Labour, First Edition 1992) is complied with.
- (b) In Group 3 and 4 zones, and on sites containing scheduled service stations the storage and sale of LPG (up to 6 tonnes, single vessel storage) are a controlled activity and will not require the written consent of other persons and shall be non-notified, in respect to Clauses 3.3.1 (b), 3.3.3, (a), (b) and (c) and 3.3.5 provided that the "Australian/New Zealand Standard 1596 : 1997, Storage and Handling of LP Gas" is complied with. Where a resource consent is otherwise required for activities involving such storage and retail sale of petrol, diesel or LPG, this shall be assessed in accordance with the assessment matters in Clause 3.4.2.
- (c) In the case of the Cultural 4 Zone (University of Canterbury, Christchurch Polytechnic and Environmental Science and Research Institute sites only) the quantity standards shall apply to any individual department or facility within the zones containing hazardous substances, whether or not there is more than one department organisation within a site.
- (d) In the case of the Special Purpose (Airport) zone the quantity standards in Schedule 2 shall apply to leased sites or in the case where there is more than one facility on a leased site to individual facilities within the leased site.

In addition, the Special Purpose (Airport) Zone is exempt from the limits of class 3.1 and 3.2 Flammable liquids, and is permitted to store a combined total of 5 million litres of jet fuel and aviation gasoline.

An increase in the storage of these substances beyond these limits, within the Special Purpose (Airport) Zone, is a discretionary activity with the Council's discretion limited to the relevant Assessment Matters set out in Clause 3.4.2.

However, within the permitted activity level of 5 million litres, any change in the location or method of aviation fuel storage, or any modification or alteration of the storage facilities, in either case involving more than or equal to 100,000 litres of these substances, is a controlled activity. For the purpose of this rule each oil company facility is deemed to be a separate facility.

The matters over which control may be exercised are:

- The method of storage.
- The location and layout of the storage facility.
- The site management and spill contingency plan.
- The methods involved in transporting or otherwise moving the hazardous substances to and from the storage facility.
- Compliance with the "Code of Practice for the Design, Installation and Operation of Underground Petroleum Storage Systems".

Note : The quantities specified in Clause 3.3.6(d) above, exclude any fuel held in aircraft or road tankers, provided they are being used for the purpose of refuelling and not for long term storage.

(e) In the case of the Open Space 3 Zone (Ruapuna Raceway only) the provisions of the Hazardous Substances Rules shall not apply in respect to temporary aboveground storage of flammable liquids, provided that such liquids are stored safely in containers.

(f) Any electrical transformer installation with an oil capacity of less than 1500 litres is excluded from the provisions of Clauses 3.3.1(b), 3.3.3, and 3.3.5 where operated by a network utility operator, as defined under Section 166, RMA.

Any application by a network utility operator arising from this clause will not require the written consent of other persons, and shall be non-notified.

(g) That the Bayer New Zealand Limited site on Treffers Road being contained within Lot 2 DP55397, be exempt from the limits of Class 6.1.2 (Agrichemicals) and be permitted to store up to 10,000kg of Agrichemicals.

(h) In the case of the boundary between the Business 5 zone at Treffers Road/Wigram Road and the Open Space 3C zone (Agribusiness Centre) the provisions of rule 3.3.1(b) shall not apply.

(i) In the case of the Business 7 Zone, the Group 2 standards for hazardous substances under Schedule 2 of Part 11, Section 3, shall apply, except that on the land shown as hatched in Part 3, Appendix 12, mushroom farming activities shall comply with the Group 4 limits for hazardous substances under Schedule 2 of Part 11, Section 3.

3.4 Assessment matters for resource consents

Updated 14 November 2005

3.4.1 General

Updated 14 November 2005

- (a) The matters contained in Sections 104 and 105 and in Part II of the Act, apply to consideration of all resource consents for land use activities.

(b) In addition to the matters covered in (a) above, the Council shall also apply the relevant assessment matters set out in Clause 3.4.2 below to discretionary activities.

3.4.2 Assessment matters

Updated 14 November 2005

- (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 with regard to the scale of the proposal, including any need for 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 and other hazardous substances stored on the site;
 - (v) site drainage and off site infrastructure (e.g. stormwater, sewer type and capacity);
 - (vi) transportation safety, including the suitability of the site with regard to methods of transportation, quantities and types of hazardous substances transported, and proposed transport routes.
- (b) The extent to which the proposed activity can avoid or mitigate any undue risk, including site layout, 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 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.
- (e) The extent to which the activity can comply with the development controls for the zone in question.
- (f) 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.
- (g) Any relevant codes of practice introduced, or approved by, the Environmental Risk Management Authority; and pending these, any relevant codes applicable to hazardous substances.

3.5 Reasons for rules

Updated 15 October 2012

There is a strong degree of interrelationship between the rules relating to hazardous substances, so the reasons for them are set out together.

Hazardous substances have the potential to create both hazards and loss of amenity through potential for toxicity or explosion, related also to the volume of substances involved. There are also related potential adverse effects associated with potential to contaminate land or ground and surface waters; the visual or other impacts of specialised storage facilities; hazards or nuisance associated with the volume of transport required to sites; the routes taken to transport the substances; and possible odour nuisance.

The basis of the rules is the identification of hazardous substances by class and then by quantities, with four groups of zones. It is recognised that, with complementary codes of practice and the provisions of other legislation, the use, storage and disposal of hazardous substances is normally carried out in a manner which poses little risk to the public.

The standards applicable in the more sensitive environments (Group 1 and 2 Zones) including residential areas limit hazardous substances strongly by quantity. However standards in Group 2 zones are of a type or quantity appropriate in rural areas, reflecting relatively low dwelling densities, and a greater need for fuel and agrichemicals ancillary to farming operations.

The standards in the Group 3 zones reflect their location adjoining living and rural zones, but also the likelihood that greater quantities of hazardous substances may need to be stored or used in these zones. Greater flexibility is available through the discretionary activity assessment to consider the level of use or storage appropriate for the particular site. Within the Business 8 zone no underground storage is permitted in recognition of the potential risks to groundwater in this area.

The greater allowable levels of hazardous substances in Group 4 zones are of a type and quantity typically necessary in some industrial processes, and which would necessitate separation from sensitive environments. It also includes specialised activities which deal in both fuels and gases, as well as industrial and commercial business zones which are separated from residential areas, or other zones including major facilities such as the airport.

Because of the wide range of environments in the city, and the unavoidable "mix" of activities in some areas, it is impractical to expect a complete separation between residences and hazardous substances (eg. dwellings in commercial/industrial areas, or adjacent to service stations). However, a primary basis of the rules is the protection of safety, particularly through control on the range and volume of hazardous substances within and to the extent allowed by the zoning pattern, adjacent to areas of permanent accommodation (living zones). The rules also have a bearing (along with other legislation) on safety within sites and zones.

Special provision is made for tertiary institutions and the Airport having large "sites" and for the Bayer New Zealand site in relation to the quantity levels for Agrichemicals because of the unique nature of this facility. Special provision has also been made in the Business 7 Zone recognising the potential risk of contamination that hazardous substances pose to Christchurch groundwater. Additional provisions for the sites located in the Business 7 Zone will effectively manage and minimise the potential for contamination of the groundwater.

Special provision has also been made in that part of the Business 4 Zone located within the Wigram Outline Development Plan (Appendix Part 2, Volume 3 Appendix 3U/1) to recognise the potential risk of contamination by hazardous substances to the Christchurch groundwater. Additional provisions for sites located in the Business 4 Zone of the Wigram Outline Development Plan will effectively manage and minimise the potential for contamination of the groundwater.

In respect of the Airport, levels of jet fuel and aviation gasoline have been set that recognise the existing levels of storage capacity. However, within this level of storage capacity, changes in the method of storage or storage facilities, involving more than 100,000 litres are also subject to control.

Specified exceptions are also provided for (e.g. fuels contained in vehicles or locomotives and for motor racing events at Ruapuna) to ensure the rules can operate in a practicable manner, or where the character of a particular activity warrants exceptions to the general groups of standards. Finally, there is an exception for oil in small electrical transformer installations, of which many exist, a large number on poles, and where bunding is impracticable. This exemption is confined to recognised network utility operators approved under the Act.

The quantities specified (particularly in the Group 4 zones) also take into account the possibility that there may be other hazardous substances stored on the site or on other properties in the vicinity and that the cumulative effect of these substances can only be taken into account in an assessment of a resource consent. On zone boundaries, the standards applicable in the more sensitive zone extend 30m into the adjoining "less sensitive" zone to provide a degree of buffer protection. This distance equates to the approximate depth of a typical Living Zone site. Within this, non-compliance is a discretionary activity, providing a logical transition between, for example, Living Zones and Business Zone environments.

The manufacture of any hazardous substances clearly entails a higher extent of both storage and hazardous processes, necessitating a level of control and protection such that such activities are directed to "heavy" industrial which are isolated from areas of residential occupation.

Finally, the rules specify requirements for the containment of hazardous substances in circumstances where they may otherwise be a permitted activity. These requirements are a performance standard intended to achieve adequate mitigation of hazards through bunding or other means to contain potential spillages.

There is some overlap between District and Regional Council functions. While both the City Council and the Canterbury Regional Council will regulate underground and above ground fuel storage for example, the Regional Council's focus will be essentially on effects on ground, surface and coastal waters while the City Council will address amenity and safety matters. Applications for joint hearings will be encouraged to simplify administrative procedures.

"Codes of practice" are recognised in the standards and assessment matters. New or additional codes of practice may be specified by the Environmental Risk Management Authority. As the scope and content of these are unknown at this stage, a variation or plan change may be introduced if required.

The categories of standards and rules may be subject to further development and recent legislation and development of management practices evolve.

Special provision has also been made in that part of the Business 5 Zone located within the Outline Development Plan (Sir James Wattie Drive, Part 3, Appendix 21) to recognise the potential risk of contamination by hazardous substances to the Christchurch groundwater. Additional provisions for sites located in the Outline Development Plan will effectively manage and minimise the potential for contamination of the groundwater.

Schedule 1 - Classification of hazardous substances

Updated 14 November 2005

Schedule 1 - Classification of hazardous substances		
Class	Characteristics	Examples (including, but not limited to:)
1. Explosives	1. Explosives	
	1.1 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 1 (b) below).	1.1 Nitrate mixtures, nitro compounds, chlorate mixtures, ammunition/detonators (excluding those for small arms use).
	1.2 As in 1 (a) but with restricted use in the manufacture or reloading of small arms cartridges.	1.2 Gunpowder, or nitro compound adapted and exclusively used for cartridges for small arms.
2. Gases	2.1 Flammable gases	
	2.1.1 LPG	2.1.1 LPG
	2.1.2 Any other gases which at 20oC and a standard pressure of 101.3 kPa:	2.1.2 Acetylene, hydrogen, methane
	• 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	2.2 Chlorine, sulphur dioxide, ammonia, methyl bromide
	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 5,000ml/m ³ (ppm) when tested in accordance with procedures defined in para 6.5 (c) of the United Nations Recommendation on the Transport of Dangerous Goods, 7th revised edition, or its subsequent revisions.	
2.3 Non-flammable, non-toxic gases	2.3 Argon, helium, oxygen, nitrogen, carbon dioxide, freons nitrous oxide	
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 combustion of other material more than air does, or		
• have neither asphyxiant nor oxidising characteristics.		
3. Flammable Liquids	3. Flammable liquids	
	Liquids, or mixtures of liquids, or liquids containing solids in solution or suspension, having the following flammability limits:	
	3.1 Flash point <23oC	3.1 Petrol, adhesives, ethyl & methyl alcohols, acetone, benzene, butylamine, MIBK
	3.2 Flash point >23oC; <61oC	3.2 Kerosene, styrene monomer, cyclohexanone, turpentine, butyl methacrylate, chlorobenzene, ethoxyethanol
	3.3 Flash point >61oC	3.3 Diesel, petroleum oils
4. Flammable Solids	4.1 Flammable solids	4.1 Red phosphorus, ammonium picrate, picric acid, monomethylamine nitrate, nitrocellulose, trinitrobenzene magnesium alloys
	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.	
	4.2 Substances or wastes liable to spontaneous combustion	4.2 Yellow or white phosphorus magnesium alkyls, dithionites
	Substances or wastes that are liable to spontaneous heating during transport, or heating upon contact with air, and then being liable to catch fire.	

	4.3 Substances which in contact with water, emit flammable gases Substances of wastes which by interaction with water are liable to become spontaneously flammable or give off flammable gases in dangerous quantities.	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.	5.1 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. Toxic and Infectious Substances	6.1 Toxic substances	Arsenic compounds, cadmium compounds, lead salts, mercury salts and amalgams, cyanides, methyl bromide, acrylamide, phenols, chlorophenols, aniline, oxalates, chlorinated solvents
	6.1.1 Poisonous Substances Substances or wastes liable to cause death or serious injury or harm to human health if swallowed or inhaled or by skin contact, and which are confirmed to fall within the following toxicity classification: • Oral toxicity LD50 (mg/kg) • Solids <200 • Liquids <500 • Dermal toxicity LD50 (mg/kg) < 1000 • Inhalation toxicity dust/mist LC50 (mg/l) < 10 • Inhalation toxicity vapours: If ³ 0.2 LD50 and LC50 < 5,000 ml/m3 Note: LC50, and LD50 are as defined in Chapter 6 of the United Nations Recommendations on the Transport of Dangerous Goods, 7th revised edition, or its subsequent revisions.	
	6.1.2 Agrichemicals Substances having a toxicity as specified in 6, but formulated specifically for agricultural activities, (including aquaculture), and including, but not limited to herbicides, fungicides, pesticides.	Bipyridyls, di-nitrophenols, phenoxy compounds, organophosphates, carbamates, organochlorines
	6.2 Infectious Substances Substances, being preparations, present in any land use activity (other than a health facility) and including wastes from preparation processes, which contain viable micro-organisms or their toxins which are known or suspected to cause disease in animals or humans.	
7. Radioactive Material	No quantity limits, refer to Rule 3.3.4 (c). Radioactive substances and x-ray machines are also subject to specific legislation administered by the National Radiation Laboratory.	
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.	Acids such as: nitric, sulphuric, hydrochloric, hydrofluoric acids; trichloro acetic acid. Alkalis such as: sodium, potassium and lithium hydroxides, zinc chloride, zirconium tetrachloride, phosphorus pentoxide, ferric chloride, sulphur chlorides, silicon tetrachloride phenolsulphonic acid, hydroxylamine sulphate, hexyl-trichlorosilane, ethanolamine

Schedule 2 - Zone groupings for hazardous substances

Updated 15 October 2012

Schedule 2 - Zone groupings for hazardous substances			
Group 1	Group 2	Group 3	Group 4
• All living zones except Living 5 Zone	• All rural zones	• Living 5 Zone	• Business 3, 4P, 5 Zones

<ul style="list-style-type: none"> Special Purpose (Pedestrian Precinct) Zone Any parts of the Special Purpose (Rail) Zone within 25m of a living or rural zone boundary except for goods in transit 	<ul style="list-style-type: none"> All conservation zones Business 4 - the Musgroves site as shown on Appendix 10, Part 3. Special Purpose (Ferrymead) Zone - Areas A, B and C Special Purpose (Wigram) Zone - Area A 	<ul style="list-style-type: none"> Business 6 Zone (Johns Road) Business 1, 2, 2P, 3B, 4, 4T and Retail Park Zones except for the Musgroves site as shown on Appendix 10, Part 3. Business 5 Zone - that area covered by the Outline Development Plan - Sir James Wattie Drive - Appendix 21, Part 3 Business 8 Zone (2) Business 7 Zone excluding the area shown as hatched on Part 3 Appendix 12 for mushroom farming. Central City Business Zone Central City Mixed Use Zone Cultural 1, 2, 3 Zones All open space zones Special Purpose (Ferrymead) Zone - Area D All scheduled activities <p>(2) Refer to Clause 3.3.5(e)</p>	<ul style="list-style-type: none"> Business 6 Zone (Chanays) Business 7 zone area shown as hatched on Part 3 Appendix 12 for mushroom farming Sites containing designated electricity substations (1) Cultural 4 Zone Special Purpose (Airport) Zone (1a) Special Purpose (Hospital) Zone Any parts of the Special Purpose (Rail) Zone which are more than 25m from a living or rural zone boundary except for goods in transit <p>(1) Refer to Clause 3.3.6 (f)</p> <p>(1a) Refer to Clause 3.3.6 (d)</p>
--	---	---	---

Schedule 2 continued - Quantity limits for hazardous substances

Class	Group 1 Zones		Group 2 Zones		Group 3 Zones	Group 4 Zones
	A	B	A	B	A	A
1. Explosives						
1.1	0kg	-	2.5kg	-	2.5kg	50kg
1.2	15kg	-	15kg	-	15kg	50kg
2. Gases						
2.1.1	300kg	-	600kg	2000kg	2000kg	8000kg
2.1.2	100kg	250kg	100kg	250kg	250kg	250kg
2.2	10kg	250kg	10kg	250kg	1000kg	1000kg
2.3	100kg	250kg	100kg	250kg	250kg	1000kg
3. Flammable Liquids						
3.1 aboveground storage (1)	50l	-	2000l		3000l (4)	5000l (4)
underground storage	0l	-	2000l	-	5000l (4)	50000l (4)
3.2	100l		250l		3000l	5000l
3.3 aboveground storage	1000l	-	2000l	-	5000l (4)	30000l (4)
underground storage	1000l	-	2000l	-	30000l (4)	30000l (4)
4. Flammable Solids						
4.1	1.0kg	-	1.0kg	-	25kg	50kg

4.2	1.0kg	-	1.0kg	-	25kg	50kg
4.3	1.0kg	-	1.0kg	-	25kg	50kg
5. Oxidising Substances						
5.1	50kg	-	50kg	-	1000kg	2000kg
5.2	1.0kg	-	1.0kg	-	25kg	200kg
6. Toxic and Infectious Substances						
6.1.1 Poisonous Substances	1.0kg	-	1.0kg	-	200kg	2000kg (2) (3)
6.1.2 Agrichemicals	10kg	50kg	200kg	500kg	500kg	1000kg
7. Corrosives	10kg	-	10kg	-	1000kg	5000kg (2)

Note :

- (1) Not applicable to motor vehicle fuel tanks, or fuel tanks in locomotives.
- (2) These limits are subject to compliance with any Hazardous Facilities Screening Procedure (HFSP) recognised by the Environmental Risk Management Authority (ERMA)
- (3) Refer to Clause 3.3.6(g) in reference to the Bayer (NZ) site on Treffers Road.
- (4) Refer also to Clause 3.3.6(a) and (b)

Appendix 1 - Minimum construction requirements for all Central City Zones

Updated 09 January 2015

30 dB D tr.2m.nTw + Ctr	
Building Element	Minimum Construction Requirement
External walls of habitable rooms	<p>Walls with cladding: Minimum not to be less than 25 kg/m² being the combined mass of external and internal linings excluding structural elements (e.g. window frames or wall studs).</p> <p>Assumes minimum 100mm wall cavity. Minimum exterior cladding to be 20mm timber or 9mm compressed fibre cement sheet over timber frame (100mm x 200mm). Fibrous acoustic blanket (Batts or similar) required in cavity for all exterior walls. Interior: One layer of 13mm gypsum plasterboard.*</p> <p>Mass walls: 190mm concrete block, strapped and lined internally with 9.5mm gypsum plaster board OR 150mm concrete wall.</p>
Windows of habitable rooms	<ul style="list-style-type: none"> • Windows of up to 35% of floor area: 10/12/6 double glazing or 14 mm laminate glass or glazing systems of equivalent acoustic performance. • Window areas greater than 35% of floor area will require a specialist acoustic report to show conformance with the insulation rule. • Frames to be new aluminium window frames with compression seals or equivalent.
Pitched roof	<p>Cladding: 0.55mm profiled steel or tiles or 6mm corrugated fibre cement.</p> <p>Frame: Timber truss with 100mm acoustic blanket. Fibrous acoustic blanket (Batts or similar) required for all ceilings with combined mass of less than 25 kg/m².</p> <p>Ceiling: 13mm gypsum plaster board.</p>

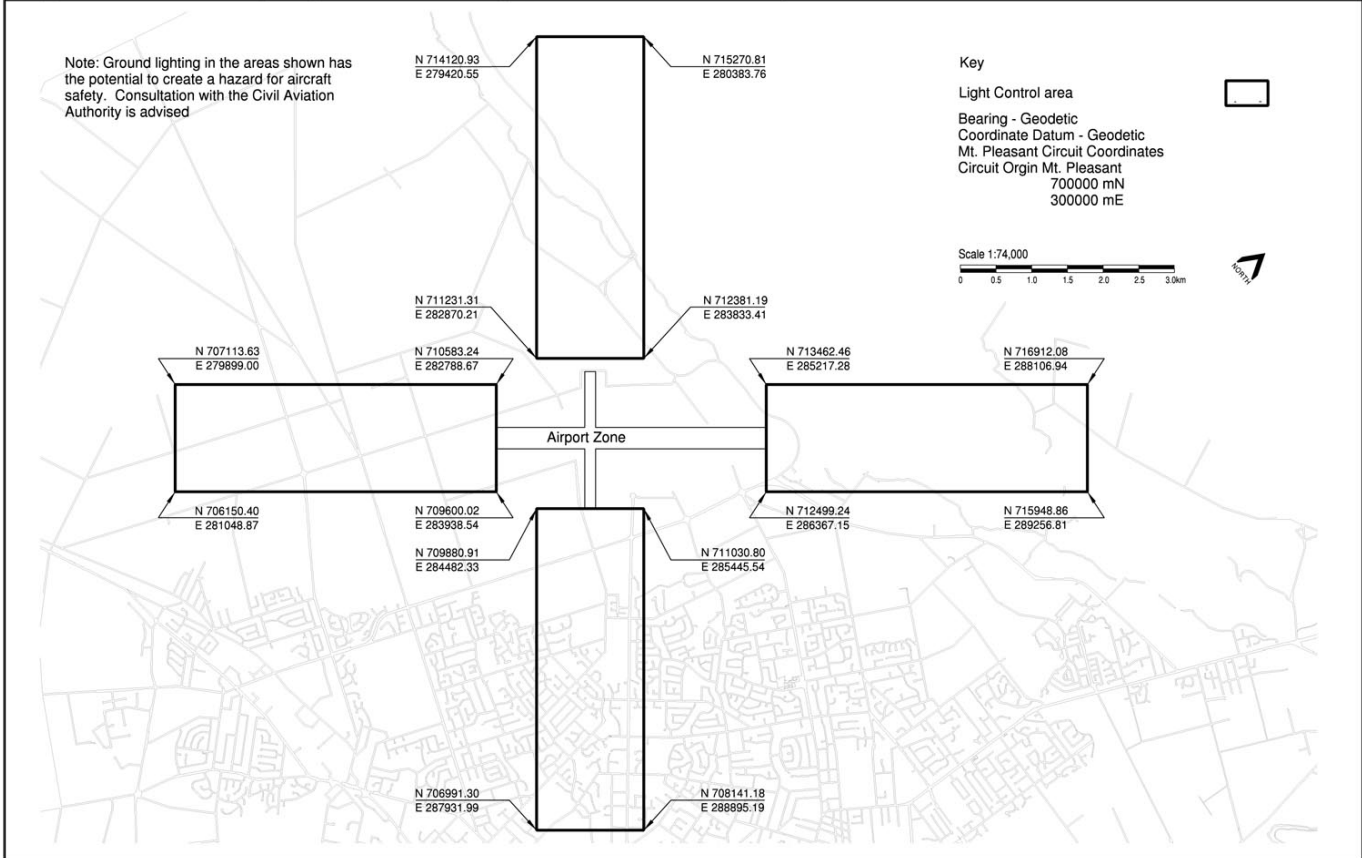
Skillion roof	<p>Cladding: 0.55mm profiled steel of 6mm fibre cement</p> <p>Sarking: 20mm particle board (no gaps).</p> <p>Frame: 100mm gap with acoustic blanket.</p> <p>Ceiling: two layers of 9.5mm gypsum plaster board (no through ceiling lighting penetrations unless correctly acoustically rated). Fibrous acoustic blanket (Batts or similar) required for all ceilings with combined mass 25kg/m².</p>
External Door to habitable rooms	Solid core door (min 24kg/m²) with weather seals (where the door is exposed to exterior noise).
35 dB D tr.2m.nTw + Ctr	
Building Element	Minimum Construction Requirement
External walls	<p>Either:</p> <p>External cladding with a surface mass not less than 23kg/m², ex 100 x 50 timber framing at 600mm centres, Fibrous thermal insulation,</p> <p>Internal lining of one layer 13mm thick high density Gypsum board (minimum 12kg/m²)</p> <p>Or:</p> <p>Any wall construction utilising at least 50mm thick concrete, Secondary timber strapping or wall framing not less than 50mm thick lined with at least 10mm thick gypsum board, and, Fibrous thermal insulation.</p>
Windows	<p>4/12/4 thermal double glazing, with, 6mm thick secondary pane at least 75mm from the outer glazing, and, Windows to be new aluminium frames with fixed panes or opening sashes with full compression seals.</p>
Pitched roof	<p>Profiled longrun steel or tiles, with minimum steel thickness of 0.4mm, Timber trusses at minimum 800mm centres, Fibrous thermal insulation, Ceiling lining of one layer 13mm thick high density Gypsum board (minimum 12kg/m²)</p>
Skillion roof	<p>Profiled long-run steel or tiles, with minimum steel thickness of 0.4mm, Timber framing at minimum 600 centres, Fibrous thermal insulation, Ceiling lining of two layers 13mm thick high density Gypsum board (minimum 12kg/m² each layer), Minimum cavity between roof and ceiling 200mm.</p>
External Doors	Specific acoustic design required.
Notes	
	<ul style="list-style-type: none"> * Where exterior wall cladding has a mass of greater than 25kg/m² (e.g. brick veneer or minimum 25mm stucco plaster), internal wall linings need to be no thicker than 10mm gypsum plasterboard Compliance with ventilation requirements of any other Act and these District Plan noise insulation requirements shall be concurrent. Ventilation should be provided in accordance with the provisions of the New Zealand Building Code G4 in a manner which does not compromise sound insulation. To this effect, relying on opening windows for ventilation will compromise the sound insulation performance provided by the District Plan standard. Alternative ventilation methods such as mechanical ventilation or passive methods should be considered. Inlets and outlets for passive and mechanical ventilation systems, and ventilation ductwork, are to be designed to incorporate acoustic insulation to ensure that the acoustic performance of the building facade achieves a minimum noise reduction consistent with Rule 1.3.4 in Part 11.

• In determining the insulation performance of roof/ceiling arrangements, roof spaces are assumed to have no more than the casual ventilation typical of the jointing, capping and guttering detail used in normal construction.

Appendix 2 - Ground lighting and aircraft safety

Updated 14 November 2005

Appendix 2. Ground lighting and aircraft safety (Part 11 Health and Safety)



Appendix 3 - 65 dBA Ldn Airport Noise Monitoring Contour - CIAL

Updated 14 January 2006

New Map - Appendix 3. 65 dBA Ldn Airport Noise Monitoring Contour - CIAL



Contents of this Section:

- 1.0 Control of Noise
 - 1.1 Statement
 - 1.2 General rules
 - 1.3 Specific rules - Noise control
 - 1.4 Assessment matters for resource consents
 - 1.5 Reasons for rules
- 2.0 Control of glare
 - 2.1 Statement
 - 2.2 General rules
 - 2.3 Specific rules - Control of glare
 - 2.4 Assessment matters for resource consents
 - 2.5 Reasons for rules
- 3.0 Hazardous Substances
 - 3.1 Statement
 - 3.2 General Rules information
 - 3.3 Specific rules - Manufacturing, use, storage and disposal of hazardous substances
 - 3.4 Assessment matters for resource consents
 - 3.5 Reasons for rules
- Schedule 1 - Classification of hazardous substances
- Schedule 2 - Zone groupings for hazardous substances
- Appendix 1 - Minimum construction requirements for all Central City Zones
- Appendix 2 - Ground lighting and aircraft safety
- Appendix 3 - 65 dBA Ldn Airport Noise Monitoring Contour - CIAL