

## 49 NOISE

### 49.1 Purpose

The purpose of this section is to manage the effects of noise in the District. Noise is part of the environment. While almost all activities give rise to some, noise can cause nuisance and give rise to adverse effects on amenity values and the health and wellbeing of people and communities. Adverse effects may arise where the location, character, frequency, duration and timing of noise is inconsistent or incompatible with anticipated or reasonable noise levels.

The Resource Management Act 1991 requires every occupier of land and every person carrying out an activity to adopt the best practicable option to ensure noise does not exceed a reasonable level, and the Resource Management Act 1991 defines noise to include vibration. "Reasonable" noise levels are determined by the standard of amenity and ambient noise level of the receiving environment and the Council provides direction on this through the prescription of noise levels for each Zone. Noise is also managed by the Council through the use of relevant New Zealand Standards for noise. Land use and development activities, including activities on the surface of lakes and rivers should be managed in a manner that avoids, remedies or mitigates the adverse effects of noise to a reasonable level.

In most situations, activities should consider the control of noise at the source and the mitigation of adverse effects of noise on the receiving environment. However, the onus on the reduction of effects of noise should not always fall on the noise generating activity. In some cases it may be appropriate for the noise receiver to avoid or mitigate the effects from an existing noise generating activity, particularly where the noise receiver is a noise sensitive activity.

Overflying aircraft have the potential to adversely affect amenity values. The Council controls noise emissions from airports, including takeoffs and landings, via provisions in this District Plan, and designation conditions. However, this is different from controlling noise from aircraft that are in flight. The Resource Management Act 1991 (RMA) which empowers territorial authorities to regulate activities on land and water affecting amenity values, does not enable the authorities to control noise from overflying aircraft. Noise from overflying aircraft can be controlled through section 29A of the Civil Aviation Act 1990.

Noise in relation to town centres is not addressed in this chapter, but rather in the Town Centres chapter. This is due to the town centre-specific complexities on noise in that zone, and its fundamental nature as an issue that inter-relates with all other issues in that zone.

### 49.2 Other Relevant Provisions

#### 49.2.1 District Wide

Attention is drawn to the rules elsewhere in the Plan that may apply in addition to the rules in this section. Where the following Zone rules are not achieved, then resource consent will be required in respect of that matter.

##### 49.2.1.1 All Zone Rules;

## 49.3 Objectives and Policies

49.3.1 **Objective 1 - To control the adverse effects of noise emissions to a reasonable level and manage the potential for conflict arising from adverse noise effects between land use activities.**

### Policies

49.3.1.1 Manage subdivision, land use and development activities in a manner that avoids, remedies or mitigates the adverse effects of unreasonable noise.

49.3.1.2 Avoid, remedy or mitigate adverse noise reverse sensitivity effects.

## 49.4 Activity Table

The following tables describe activities, standards and subsequent status of activity for resource consent purposes. Any activity that is not Permitted requires resource consent.

The following abbreviations are used in the tables:

P	Permitted	C	Controlled
RD	Restricted Discretionary	D	Discretionary
NC	Non Complying	PR	Prohibited

Sound levels shall be measured and assessed in accordance with NZS 6801:2008 Acoustics - Measurement of Environmental Sound and NZS 6802:2008 Acoustics - Environmental Noise, except where another Standard has been referenced in these rules, in which case that Standard should apply.

Any activities which are permitted, controlled or discretionary (restricted) in any section of the District Plan must comply with the noise standards in Tables 2 and 3 below, where that standard is relevant to that activity.

In addition to the above, the following activities listed in Table 1 shall be **permitted activities** in all zones (unless otherwise stated) provided they comply with any relevant noise standards in Table 3 below. For the avoidance of doubt, the following activities are exempt from complying with the noise standards set out in Table 2:

**Table 1 – Activities**

	<b>Activity</b>	<b>Activity Status</b>
49.4.1	Sound from vehicles on public roads or trains on railway lines (including at railway yards, railway sidings or stations).	P
49.4.2	Sound associated with people and vehicles at preschools (or similar) and schools during the period 0800h to 1800h, Monday to Friday, provided that outdoor parking and play areas are separated from any adjacent residential sections by a fence, wall, building or other structure at least 10 kg/m <sup>2</sup> , 2 metres high and without any gaps.	P
49.4.3	Any warning device that is activated in the event of intrusion, danger, an emergency or for safety purposes, provided that vehicle reversing alarms are a broadband directional type.	P
49.4.4	Sound arising from fire stations (including rural fire stations), fire service appliance sirens and call-out sirens for volunteer brigades.	P
49.4.5	Sound from temporary military training activities.	P
49.4.6	In the Rural General Zone and the Gibbston Character Zone sound from farming and forestry activities, bird scaring devices and frost fans, other than sound from stationary motors and stationary equipment.	P
49.4.7	Sound from aircraft movements within designated airports.	P
49.4.8	Sound from telecommunications cabinets in road reserve.	P

## 49.5 Rules

Sound from non-residential activities, visitor accommodation activities and sound from stationary electrical and mechanical equipment must not exceed the noise limits in Table 2 in each of the zones in which sound from an activity is received. The noise limits in Table 2 do not apply to assessment locations within the same site as the activity.

The noise limits contained in Table 2 below do not apply to sound from aircraft operations at Queenstown Airport.

Noise standards for town centre zones are not included in this chapter. Please refer to Chapter 10 Town Centres.

**Table 2: General Standards**

Rule Number	Standard				Non-compliance status
	Zones sound is received in	Assessment location	Time	Noise limits	
49.5.1	Rural General Zone (Note: refer 49.5.2 for noise received in the Rural General Zone from the Airport Mixed Use Zone). Gibbston Character Zone	Any point within the notional boundary of a residential unit	0800h to 2000h	50 dB $L_{Aeq(15\ min)}$	NC
			2000h to 0800h	40 dB $L_{Aeq(15\ min)}$ 75 dB $L_{AFmax}$	NC
49.5.2	Sound from the Airport Mixed Use Zone received in the Residential Zones and the Rural General Zone	At any point within the Residential Zone and at any point within the notional boundary in the Rural General Zone	0700h to 2200h	55 dB $L_{Aeq(15\ min)}$	RD Discretion is limited to the extent of effects of noise generated on adjoining zones.
			2200h to 0700h	45 dB $L_{Aeq(15\ min)}$ 75 dB $L_{AFmax}$	
49.5.3	Millbrook Resort Zone	Any point within the Residencies Activity Areas	0800h to 2000h	50 dB $L_{Aeq(15\ min)}$	NC
	Jacks Point Resort Zone		2000h to 0800h	40 dB $L_{Aeq(15\ min)}$ 75 dB $L_{AFmax}$	NC
49.5.4	Residential Zones (Note: refer 49.5.2 for noise received in the Residential Zone from the Airport mixed use zone). Residential Arrowtown Historic Management Zone Rural Living Zone Rural Residential Zone	Any point within any site	0800h to 2000h	50 dB $L_{Aeq(15\ min)}$	NC
			2000h to 0800h	40 dB $L_{Aeq(15\ min)}$ 75 dB $L_{AFmax}$	NC

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	<p>Townships Zones</p> <p>Waterfall Park Resort Zone</p> <p>Rural Visitor Zones</p> <p>Quail Rise Special Zone</p> <p>Meadow Park Special Zone</p> <p>Ballantyne Road Special Zone (excluding Activity Area C)</p> <p>Shotover Country Special Zone (Activity Areas 11a-1e, 4 and 5a-5e)</p> <p>Penrith Park Special Zone</p> <p>Bendameer Special Zone</p> <p>Mt Cardrona Station Special Zone (Activity Areas 2, 3 and 4)</p> <p>Kingston Village Special Zone (Activity Areas 1,3 and 4)</p> <p>3 Parks Residential Special Zone</p>				
49.5.5	Queenstown Airport Mixed Use Zone	At any point within the zone.	Any time	No limit	P
49.5.6	<p>Local Shopping Centre Zone</p> <p>Business Mixed Use Zone</p> <p>Shotover Country Special Zone (Activity Areas 2a-2c and 3)</p> <p>Mt Cardrona Station Special Zone</p>	Any point within any site	<p>0800h to 2200h</p> <p>2200h to 0800h</p>	<p>60 dB L<sub>Aeq(15 min)</sub></p> <p>50 dB L<sub>Aeq(15 min)</sub></p> <p>75 dB L<sub>AFmax</sub></p>	<p>NC</p> <p>NC</p>

	(Activity Area 1) Frankton Flats Special Zone 3 Parks Core Commercial Special Zone Ballantyne Road Special Zone (Activity Area C) 3 Parks Tourism and Community Special Zone				
49.5.7	Kingston Village Special Zone (Activity Area 2) 3 Parks Business Special Zone Industrial Zones	Any point within Activity Area 2 boundary	0800h to 2000h	60 dB $L_{Aeq(15\ min)}$	NC
			2000h to 0800h	50 dB $L_{Aeq(15\ min)}$ 75 dB $L_{AFmax}$	NC
49.5.8	Remarkables Park Special Zone	Any point within any site (other than below)	0700h to 2200h	55 dB $L_{Aeq(15\ min)}$	NC
			2200h to 0700h	45 dB $L_{Aeq(15\ min)}$ 75 dB $L_{AFmax}$	NC
		Any point within the boundary of Activity Areas of 2a, 3, 4, 5, 6, 7 and 8	0700h to 2200h	60 dB $L_{Aeq(15\ min)}$	NC
			2200h to 0700h	50 dB $L_{Aeq(15\ min)}$ 75 dB $L_{AFmax}$	NC
49.5.9	3 Parks Deferred Commercial Special Zone	At or within the notional boundary of any residential unit, other	0800h to 2000h	50 dB $L_{Aeq(15\ min)}$	NC
			2000h to 0800h	40 dB $L_{Aeq(15\ min)}$ 75 dB $L_{AFmax}$	NC

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		than residential units on the same site			
49.5.10	Frankton Flats B Zone (except for Activity Area C2)	Any point within the Zone	0800h to 2200h	65dBA L <sub>10</sub>	NC
			2200h to 0800h	65dBA L <sub>10</sub> 75dBA L <sub>max</sub>	
49.5.11	Frankton Flats B Zone Activity Area C2	At any point within Activity area C2	0800h to 2000h	65dBA L <sub>10</sub>	NC
			2000h to 0800h	65dBA L <sub>10</sub> 75dBA L <sub>max</sub>	

The standards in Table 3 are specific to the activities listed in each row. The following activities are exempt from complying with the noise standards set out in Table 2 and shall achieve the following relevant standard, where applicable:

**Table 3: Specific Standards**

Rule Number	Standard				Non-compliance status
	Activity or sound source	Assessment location	Time	Noise limits	
49.5.12	<p><b>Certain Telecommunications Activities in Road Reserve</b></p> <p>The Resource Management (National Environmental Standards for Telecommunications Facilities “NESTF”) Regulations 2008 provide for noise from telecommunication equipment cabinets located in the road reserve as a permitted activity,</p>	<p>Where a cabinet located in a road reserve in an area in which allows residential activities, the noise from the cabinet must be measured and assessed at 1 of the following points:</p> <p>(a) if the side of a building containing a habitable room is within 4 m of the closest boundary of the road reserve, the noise must be measured—</p> <p>(i) at a point 1 m from the side of the</p>	7000h to 22000h	50 dB L <sub>Aeq(5 min)</sub>	Refer NESTF
			22000h to 7000h	40 dB L <sub>Aeq(5 min)</sub>	
			22000h to 7000h	65 dB L <sub>AFmax</sub>	

	<p>subject to the specified noise limits.</p> <p>The noise from the cabinet must be measured in accordance with <i>NZS 6801: 2008 Acoustics – Measurement of environmental sound</i>, the measurement must be adjusted in accordance with <i>NZS 6801: 2008 Acoustics – Measurement of environmental sound</i> to a free field incident sound level, and the adjusted measurement must be assessed in accordance with <i>NZS 6802: 2008 Acoustics – Environmental noise</i>.</p>	<p>building; or</p> <p>(ii) at a point in the plane of the side of the building:</p> <p>(b) in any other case, the noise must be measured at a point that is—</p> <p>(i) at least 3 m from the cabinet; and</p> <p>(ii) within the legal boundary of land next to the part of the road reserve where the cabinet is located.</p>			
		<p>Where a cabinet is located in a road reserve in an area in which does not allow residential activities, the noise from the cabinet must be measured and assessed at 1 of the following points:</p> <p>(a) if the side of a building containing a habitable room is within 4 m of the closest boundary of the road reserve, the noise must be measured—</p> <p>(i) at a point 1 m from the side of the building; or</p> <p>(ii) at a point in the plane of the side of the building:</p> <p>(b) in any other case, the noise must be measured at a point that is—</p>	Any time	60 dB L <sub>Aeq(5 min)</sub>	
			2200h to 7000h	65 dB L <sub>AFmax</sub>	



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		<p>(i) at least 3 m from the cabinet; and</p> <p>(ii) within the legal boundary of land next to the part of the road reserve where the cabinet is located.</p>			
49.5.13	<p><b>Wind Turbines</b></p> <p>Wind farm sound must be measured and assessed in accordance with NZS 6808:2010 Acoustics - Wind Farm Noise.</p>	At any point within the notional boundary of any residential unit.	Any time	40 dB $L_{A90(10 \text{ min})}$ or the background sound level $L_{A90(10 \text{ min})}$ plus 5 dB, whichever is higher	NC
49.5.14	<p><b>Audible Bird Scaring Devices</b></p> <p>The operation of audible devices (including gas guns, audible avian distress alarms and firearms for the purpose of bird scaring, and excluding noise arising from fire stations).</p> <p>In relation to gas guns, audible avian distress alarms and firearms no more than 15 audible events shall occur per device in any</p>	At any point within a Residential Zone or the notional boundary of any residential unit, other than on the property in which the device is located.	Hours of daylight but not earlier than 6300h.	65 dB $L_{AE}$ shall apply to any one event	NC

	<p>60 minute period.</p> <p>Each audible event shall not exceed three sound emissions from any single device within a 1 minute period and no such events are permitted during the period between sunset and sunrise the following day.</p> <p>The number of devices shall not exceed one device per 4 hectares of land in any single land holding, except that in the case of a single land holding less than 4 hectares in area, one device shall be permitted.</p>	In any public place.	At any time	90 dB L <sub>AE</sub> is received from any one noise event	
49.5.15	<p><b>Frost fans</b></p> <p>Sound from frost fans.</p>	At any point within the notional boundary of any residential unit, other than residential units on the same site as the activity.	At any time	85 dB L <sub>AFmax</sub>	NC
49.5.16	<p><b>Vibration</b></p> <p>Vibration from any activity shall not exceed the guideline values given in DIN 4150-3:1999 Effects of vibration on structures at any buildings on any other site.</p>	On any structures or buildings on any other site.	Refer to relevant standard	Refer to relevant standard	NC
49.5.17	<p><b>Helicopters</b></p> <p>Sound from any helicopter landing area must be</p>	At any point within the notional boundary of any residential unit, other than residential	At all times	50 dB L <sub>dn</sub>	NC

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	<p>measured and assessed in accordance with NZ 6807:1994 Noise Management and Land Use Planning for Helicopter Landing Areas.</p> <p>Sound from helicopter landing areas must comply with the limits of acceptability set out in Table 1 of NZS 6807.</p> <p>For the avoidance of doubt this rule does not apply to designated airports.</p>	<p>units on the same site as the activity.</p> <p>*Note: The applicable noise limit in this rule and in rule 49.5.18 below for informal airports/landing strips used by a combination of both fixed wing and helicopters shall be determined by an appropriately qualified acoustic engineer on the basis of the dominant aircraft type to be used.</p>				
49.5.18	<p><b>Fixed Wing Aircraft</b></p> <p>Sound from airports/landing strips for fixed wing aircraft must be measured and assessed in accordance with NZS 6805:1992 Airport Noise Management and Land Use Planning.</p> <p>For the avoidance of doubt this rule does not apply to designated airports.</p>	<p>At any point within the notional boundary of any residential unit and at any point within a residential site other than residential units on the same site as the activity.</p> <p>*Note: The applicable noise limit in this rule and in rule 49.5.17 above for informal airports/landing strips used by a combination of both fixed wing and helicopters shall be determined by an appropriately qualified acoustic engineer on the basis of the dominant aircraft type to be used.</p>	At times	all	55 dB L <sub>dn</sub>	NC

49.5.19	<p><b>Construction Noise</b></p> <p>Construction sound must be measured and assessed in accordance with NZS 6803:1999 Acoustics - Construction Noise. Construction sound must comply with the recommended upper limits in Tables 2 and 3 of NZS 6803. Construction sound must be managed in accordance with NZS 6803.</p>	At any point within any other site.	Refer to relevant standard	Refer to relevant standard	D
49.5.20	<p><b>Motorised Craft</b></p> <p>Motorised craft on the surface of lakes and rivers must be operated and conducted such that a maximum sound level is not exceeded, when measured and assessed in accordance with Appendix 2.</p>	Refer Appendix 2	Refer Appendix 2	77 dB L <sub>ASmax</sub>	NC