

Section 2.11 Noise

Noise is a derivative of a range of activities in the District, however, it can cause nuisance and give rise to adverse effects on amenity values and the health and wellbeing of people and communities. Often adverse effects arise where the character, intensity, duration and timing of noise is inconsistent or incompatible with anticipated or reasonable noise levels. 'Reasonable' noise levels are determined by the standard of amenity and ambient noise level of the receiving environment and Council provides direction on this through the prescription of noise levels for each Zone. Noise is also managed by Council through the use of relevant New Zealand Standards for noise. 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. Subdivision, land use and development activities, including temporary activities and events, should be managed in a manner that avoids, remedies or mitigates the adverse effects of noise. Activities should consider the control of noise at the source and the mitigation of adverse effects of noise on the receiving environment. 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. The Resource Management Act 1991 defines noise to include vibration.

Objective NSE.1

To control the adverse effects of noise emissions and manage the potential for conflict between land use activities.

Policy NSE.1

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

Explanation: Subdivision, land use and development activities should take account of noise to avoid, remedy and mitigate adverse effects on amenity values and the health and wellbeing of people and communities. Noise generating activities can include certain industrial, agricultural and construction processes, together with the operation of the transport network and other infrastructure. It also includes temporary activities, including events and temporary military activities. Vibration from machinery and explosive devices as well as potentially causing damage to structures can interfere with comfort, working efficiency and, in some circumstances, with health and safety. Adverse effects of noise can be controlled at the source through the use of measures such as alternative techniques or machinery, insulation of machinery or buildings, boundary treatments and hours of operation. Adverse effects on the receiving environment can also be controlled through appropriate separation between noise generator and receiver, as well as attenuation measures such as physical buffers or building insulation. Council is aware that noise is a derivative of activity within the District and that much of this activity contributes to socio-economic wellbeing and growth, thus noise control measures should achieve a balance between reducing adverse effects of noise and the continued operation of noise generating activities without undue restriction.

Policy NSE.2

Avoid, remedy or mitigate reverse sensitivity effects arising from noise emissions.

Explanation: The District provides for a range of land use activities which can increase the potential for conflict between noise generating and receiving activities. Reverse sensitivity can occur where a proposed land use is not compatible with noise generated by neighbouring or nearby land use, particularly where the proposed land use is a noise sensitive activity. Council provides direction on this through the prescription of noise levels for each Zone and therefore the nature of activities which are anticipated for each Zone. Activities should achieve integration within the Zone and should also achieve integration with the wider environment. Activities located on the interface between Zones should also take account of any adverse effects on adjoining Zones. Noise sensitive activities should give particular consideration to the location, nature and design of their activity, including the implementation of noise attenuation measures such as physical buffers or building insulation.

Noise Rules

The Zone Sections of the District Plan apply in addition to any relevant district-wide rules such as those relating to Noise. If any of the Zone Rules detailed in the following sections are breached, the activity will require resource consent:

- Rural Zone - Section 3.1
- Urban Zone - Section 3.2
- Te Anau Residential B Zone - Section 3.3
- Industrial Zone - Section 3.4
- Fiordland/Rakiura Zone - Section 3.5
- Eweburn Zone – Section 3.6

Rule NSE.1 - Permitted Activities

All activities shall be Permitted Activities (unless specified below) provided that they comply with all of the relevant Noise Standards, Zone and district-wide rules.

Rule NSE.2 - General Standards

Noise Measurement - Noise 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.

Note: The only way to measure compliance with the plan is through the methods outlined above. No other method will be accepted.

Rule NSE.3 - Noise Standards Exemptions

The following activities are exempt from complying with the limits set out in the relevant zones:

- (a) Within the Rural and Eweburn Zones, any operational rural equipment which is mobile during its normal use and which is associated with primary production (including tractors and equipment towed by them, harvesters and farm vehicles).
- (b) Vehicles on public roads or trains on train lines (including at railway yards, railway sidings or stations).
- (c) Spontaneous social activities and children's play. For the avoidance of doubt this exemption does not apply to organised childcare facilities and schools.

- (d) Any warning device that is activated in the event of intrusion, danger, an emergency or for safety purposes.
- (e) Subject to the best practicable option always being adopted to minimise noise levels, noise arising from fire stations (including rural fire stations), fire service appliance sirens and call-out sirens for volunteer brigades.

Rule NSE.4 - Temporary Military Training Activities

Noise from temporary military training activities shall not exceed the limits set out in Table NSE.4 - Noise Standards for Temporary Military Training Activities.

Table 2 NSE.4 Noise Standards for Temporary Military Training Activities

Type of military noise source	Noise Control Standards		
	Time (Monday to Saturday)	Separation distance required to any dwelling, residentially zoned site, or building used for residential, educational or healthcare purposes	
1. Live firing of weapons and single or multiple explosive events	0700 to 1900 hours	At least 1,500 metres	Less than 1,500 metres if conditions (a) and (c) below are complied with
	1900 to 0700 hours	At least 4,500 metres	Less than 4,500 metres if conditions (b) and (c) below are complied with
2. Firing of blank ammunition	0700 to 1900 hours	At least 750 metres	Less than 750 metres if conditions (a) and (c) below are complied with
	1900 to 0700 hours	At least 2,250 metres	Less than 2,250 metres if conditions (b) and (c) below are complied with
<p>Conditions to be complied with if minimum separation distances for sources (1) and (2) cannot be met:</p> <ul style="list-style-type: none"> (a) Day time sound levels do not exceed a peak sound pressure level of 120 dBC when measured at or within the 20 metre notional boundary of any dwelling, residentially zoned site, building used for residential, educational or health care purposes. (b) Night time sound levels do not exceed a peak sound pressure level of 90 dBC when measured at or within the 20 metre notional boundary of any dwelling, residentially zoned site, building used for residential, educational or health care purposes. (c) The activity is undertaken in accordance with a Noise Management Plan prepared by a suitably qualified expert and approved by Council at least 15 working days prior to the activity taking place. The Noise Management Plan shall, as a minimum, contain: 			

Type of military noise source	Noise Control Standards		
	<ul style="list-style-type: none"> • A description of the site and activity including times, dates and nature and location of the proposed training activities. • Methods to minimise the noise disturbance at noise sensitive receiver sites such as selection of location, orientation, timing of noisy activities to limit noise received at sensitive receiver sites. • A map showing potentially affected noise sensitive sites and predicted peak sound pressure levels for each of these locations. • A programme for notification and communication with the occupiers of affected noise sensitive sites prior to the activities commencing, including updates during the event. • A method for following up any complaints received during or after the event and any proposed de-briefing meetings with Council. 		
3. Mobile noise sources, excluding sources (1) and (2)	Compliance with the noise limits set out in Tables 2 and 3 of NZS6803:1999 Acoustics - Construction Noise, with reference to 'construction noise' taken to refer to other, mobile noise sources		
Note: Mobile noise sources (other than firing of weapons) include sources such as personnel, light and heavy vehicles, self-propelled equipment, earthmoving equipment.			
4. Fixed (stationary) noise sources, excluding sources (1) and (2)	Time (Monday to Sunday)	Noise level at the 20 metre notional boundary of any dwelling, residentially zoned site, or building used for residential, educational or healthcare purposes	
	0700 to 1900 hours	55dB LAeq(15min)	n.a.
	1900 to 2200 hours	50dB LAeq(15min)	
	2200 to 0700 hours the next day	45dB LAeq(15min)	75dB LA Fmax
Note: Fixed (stationary) noise sources (other than firing of weapons and explosives) include noise sources such as power generation, heating, ventilation or air conditioning systems, or water or wastewater pumping/treatment systems.			

Rule NSE.5 - Temporary Activities/Events

Noise from outdoor events in a public place shall comply with the following standards:

1. A noise limit of 70 dB LAeq(15 min) measured at any point within the notional boundary of any property containing a dwelling.
2. All activities creating a noise level greater than permitted for the zone in which the activity is located, shall not be undertaken between 10.00 pm and 7.00 am.
3. No more than six events (days) are to be held on the property in any one calendar year.

Note: Rule NSE.5 does not apply to Temporary Military Training Activities or Jet Boat Racing Events as these are covered by Rule NSE.4 and Rule SWA.1(5)(d) respectively.

Rule NSE.6 - Noise From Helicopters

Noise from any helicopter landing pad shall comply with NZS 6807:1994 Noise Management and Land Use Planning for Helicopter Landing Pads.

Rule NSE.7 - Noise From Aircraft

Noise from aircraft shall comply with NZS 6805:1992 Airport Noise Management and Land Use Planning. Except that this Rule shall not apply to the Manapouri Airport operations which are provided for through a Designation.

Rule NSE.8 - Noise From Wind Turbines

Noise from wind turbines shall comply with NZS 6808:2010 Acoustics - Wind Farm Noise.

Rule NSE.9 - Audible Devices In Rural and Eweburn Zones

The operation of audible devices (including gas guns, audible avian distress alarms and firearms for the purpose of bird scaring) shall comply with the following standards within the hours of daylight but not earlier than 6.30 am:

1. A noise limit of 65 dB LAE shall apply to any one event when measured at any point within the Residential Zone and at any point within the notional boundary of any rural dwelling other than on the property in which the device is located.
2. In relation to gas guns, audible avian distress alarms and firearms no more than 15 audible events shall occur per device in any 60 minute period.
3. 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.
4. 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.
5. Provided no device shall be placed in such a manner that in any public place more than 90 dB LAE is received from any one noise event.

Rule NSE.10 - Vibration

Vibration emanating from any activity, shall not exceed the limits given in any of the following standards at any dwelling, residential activity, educational facility or office on any other property:

1. AS 2670.1-2001 Evaluation of human exposure to whole-body vibration - General requirements.
2. AS 2670.2-1990 Evaluation of human exposure to whole-body vibration - Continuous and shock induced vibration in buildings (1 to 80 Hz).
3. DIN 4150-3:1999 Effects of vibration on structures.

Note: This rule excludes vibration produced by Temporary Military Training Activities as this is controlled by the noise standards in Rule NSE.4.

Rule NSE.11 - Edendale Industrial Noise Control Boundary

Noise from any activity within the Edendale Noise Control Boundary (shown on the District Plan Maps) shall comply with Schedule 5.6.

Rule NSE.12 - Construction Noise

Construction noise shall comply with NZS 6803:1999 Acoustics - Construction Noise.

Rule NSE.13 - Frost Fans

Noise of frost control fans shall not exceed 55 dB [LAeq (10 min)] when assessed at the notional boundary of any dwelling on a separate lot under different ownership. The noise limit applies to the total noise from all frost control fans in the vicinity operating simultaneously. The noise limit includes a correction for the special audible characteristics of frost control fans and no further penalty shall be applied to measured or calculated noise levels.

Rule NSE.14 - Discretionary Activities

Noise generating activities that are unable to comply with or are not provided for by Rule NSE.4 - Rule NSE.14 are **Discretionary Activities**.

Rule NSE.15 - Shooting Ranges

Shooting Ranges, including but not restricted to those involving the use of rifles, shotguns and handguns, with respect to noise shall be **Discretionary Activities**.

Noise Non-Regulatory Method

Method NSE.1

Increase awareness and provide education on ways to reduce adverse effects of noise.