

**32****RULES FOR NOISE AND VIBRATION****Activities Table***Policy 15.4.4*

<b>32.1</b>	<b>Activities</b>	<b>All Zones</b>
	Any activity (except in the Speedway Area and an Organised Fireworks Display at Trentham Memorial Park) which complies with the noise and vibration standards in rules 32.3 to 32.6	<b>P</b>
	Any activity (except in the Speedway Area and an Organised Fireworks Display at Trentham Memorial Park) which does not comply with the noise and vibration standards in rules 32.3 to 32.6	<b>NC</b>

<b>Key</b>	<b>P</b> Permitted activity which complies with standards for permitted activities specified in the Plan
	<b>NC</b> Non complying activity

**Standards for Permitted Activities****32.2 Noise from the Speedway Area and from Organised fireworks Displays***Policy 7.4.6*

Noise standards which relate specifically to the Speedway Area and to an Organised Fireworks Display at Trentham Memorial Park (in the Open Space Zone) are specified in Chapter 21 and are not subject to the noise and vibration standards of Chapter 32 herein.

**32.3 Noise from construction and demolition***Policies 4.4.6, 15.4.4*

The maximum noise levels from construction -or demolition activities, measured at or within the boundary of any site (other than the source site) in the Residential and Open Space Zones, and immediately outside dwellings in the Rural Zone, shall not exceed the following levels:

<b>Mon to Sat 7:00am - 7:00pm</b>		<b>All other times, Sundays &amp; public holidays</b>	
$L_{eq}dBA$	$L_{max}dBA$	$L_{eq}dBA$	$L_{max}dBA$
<b>75</b>	<b>90</b>	<b>45</b>	<b>75</b>

<b>Notes</b>
Noise levels shall be measured in accordance with the requirements of NZS 6803:1999 Acoustics – Construction Noise.
The definitions of dBA, $L_{eq}$ and $L_{max}$ are those found in NZS 6803:1999.

### 32.4 Noise from temporary military training

Policies 4.4.6,  
15.4.4

Temporary military training activities are permitted in all zones subject to the following noise limits not being exceeded at any point within 20m of a dwelling, residential institution or educational facility:

<b>Time of day</b>	<b><math>L_{10}dBA</math></b>	<b><math>L_{max}dBA</math></b>
6am – 7.30am	<b>60</b>	<b>75</b>
7.30am – 6pm	<b>75</b>	<b>90</b>
6pm – 8pm	<b>70</b>	<b>85</b>
8pm – 6am	<b>55</b>	<b>70</b>

In addition, all temporary military training activities shall be conducted so that the airblast overpressure arising from the use of explosives, ammunition or pyrotechnics does not exceed 120dBC at any point within 20m of a dwelling, residential institution or educational facility.

### 32.5 Noise from all other activities

Policies 4.4.6,  
15.4.4

The following noise rules shall not apply to:

- Normal agricultural and forestry practices undertaken for a limited duration.
- Normal residential activities such as lawn mowing.
- Noise generated by sirens and alarms used by emergency services.

All activities, other than those specified above, shall not exceed the following noise standards:

	Mon to Sat 7:00am – 7:00pm		All other times, Sundays & public holidays	
	L <sub>10</sub>	L <sub>max</sub>	L <sub>10</sub>	L <sub>max</sub>
<b>dBA</b>				
Maximum noise levels measured at or within the boundary of any site (other than the source site) in the Residential, Rural and Open Space Zones.	<b>50</b>	-	<b>40</b>	<b>70</b>
Maximum noise levels measured at or within the boundary of any site (other than the source site) in the Business and Special Activity Zones.	<b>65</b>	-	<b>45</b>	<b>75</b>

### Notes

- Noise levels shall be measured in accordance with the requirements of NZS 6801:1991 Measurement of Sound, and assessed in accordance with the requirements of NZS 6802:1991 Assessment of Environmental Sound.
- Noise levels shall be measured with a sound level meter complying with International Standard IEC 60651 (1979): Sound Level Meters, Type 2.
- Adjustments for special audible characteristics, if present, as provided for in clauses 4.3 and 4.4 of NZS 6802:1991, shall apply and will have the effect of imposing a maximum permitted noise level 5dBA more stringent than the L<sub>10</sub> levels stated above. This condition shall not apply to impulse noise emissions arising from firing and detonation activities at the Trentham Ranges.
- The definitions of dBA, dBC, L<sub>10</sub> and L<sub>max</sub> are those found in NZS 6802:1991.

## 32.6 Vibration standards

Policies 4.4.6,  
15.4.4

Vibration from any site due to blasting shall not exceed a peak particle velocity of 5mm/sec measured in the frequency range 3-12Hz at any point within 20m of a dwelling, residential institution or educational facility.

Airblast overpressure from blasting shall not exceed a peak sound pressure level of 120dBC at any point within 20m of a dwelling, residential institution or educational facility.

The airblast overpressure shall be measured in accordance with the requirements of NZS 6801:1991 Measurement of Sound and the Australian Standard AS 2187.2 1993: Explosives – Storage, transport and use. The lower limiting frequency of the measuring instruments shall be reported.

The measurements shall be assessed in accordance with the requirements of the Australian Standard AS 2187.2 1993: Explosives – Storage, transport and use.

## Matters for Consideration

**32.7** Matters that may be relevant in the consideration of any resource consent may include the following:

### Noise and vibration

- The length of time, and the level by which, the standards will be exceeded, particularly at night, and the likely disturbance that may be caused.
- The nature and location of nearby activities and the effects they may experience.
- The topography of the site, and the neighbouring areas, and any influence this may have on noise or vibration transmission.
- The effects on residential activities, particularly night time effects.
- Any opportunities to avoid, remedy or mitigate the noise or vibration.
- The effectiveness of, and in particular the certainty provided by, any conditions or controls that might be imposed on the activity.