

## Rule 5.1 Noise

### Rule Statement

The noise rule manages the emission and mitigates the effects of noise to ensure that there are no adverse effects on individuals and the wider community. The rule focuses on protecting amenity values in residential areas by ensuring that industrial, commercial, community or recreation activities meet acceptable noise levels when measured on residential properties.

The rule recognises that increasing diversity of activity throughout the city has the potential to impact negatively on the aural standard of existing areas. The standards are designed to minimise these changes and where residential activity moves into commercial areas to ensure that they insulate themselves against these higher noise levels.

The rule also addresses road traffic noise and requires that where new arterial roads are constructed, specified noise standards are met. Controlling noise from existing roads or the protecting the upper stories of residential activities may be impracticable because of effectiveness, costs or aesthetics. In these cases, residential activities are required to provide acoustic treatment to ensure that acceptable internal noise levels are achieved.

### Expected Outcome

Ensure that the community is protected from the adverse effects of noise and that residential amenity values are maintained.

### Means of Compliance

The following standards and assessment criteria are additional to those established within each zone. Where an activity cannot meet these standards, its activity status is established within the Failure to Meet Standards section of the relevant zone.

Regard must be had to all Objectives and Policies which may be relevant to any proposed activity subject to this Rule. This includes, but shall not be limited to, Policy Section 7.4 Noise.

#### ***ADVISORY NOTE - Excessive or Unreasonable Noise***

*Notwithstanding the rules relating to noise set out below, Section 16 of the RMA imposes a duty to avoid unreasonable noise and:*

- *where excessive noise occurs then an excessive noise direction may be issued under Section 327 of the RMA,*
- *where unreasonable noise occurs then Council may take action under Section 16 of the RMA to avoid the effects of such noise.*

### 5.1.1 General Standards

The following general standards apply to all Permitted and Controlled Activities.

#### a) Measurement of Noise

Noise levels shall be measured in accordance with NZS 6801:1999 "*Acoustics - Measurement of Environmental Sound*" and assessed in accordance with NZS 6802:1991 "*Assessment of Environmental Sound*."

#### b) Maximum Noise Levels

Activities (excluding residential activities but including home occupations), in any zone except the Recreation Environment Zone, Recreation General Zone, Recreation Major Zone and Major Facilities Zone shall not exceed the following noise levels when measured at any point at or within the boundary of any site in the Residential Zone.

Monday to Saturday	Noise levels measured in L10	Noise levels measured in Lmax
0600hr – 0700 hr	45 dBA	-
0700hr – 2000 hr	50 dBA	-
2000hr – 2300 hr	45 dBA	-
2300hr – 0600 hr	40 dBA	75 dBA
<b>Sunday &amp; public holidays</b>		
0700hr – 2300 hr	45dBA	-
2300hr – 0700 hr	40dBA	75 dBA

#### c) Construction Noise

- i) Rule 5.1.1 b) shall not apply to construction noise.
- ii) All construction noise shall comply with the provisions of NZS 6803: 1999 "*Acoustics – Construction Noise*" and shall be measured and assessed in accordance with NZS6803: 1999.

#### d) Noise from activities within the Industrial Zone

Subject to Rule 5.1.1 b), any activity within the Industrial Zone shall not exceed a noise level of 65 dBA (L10) at or as near as practicable to the boundary of any other site within the Industrial Zone.

#### e) Non-Industrial Activities in the Industrial Zone

Any Office, Retail Activity, Health Care Service, Community Centre, Place of Assembly, Marae or Education and Training Facility, except where ancillary to an industrial activity, shall:

- i) Be designed, sited, and constructed to ensure noise received at any boundary of the site activity shall be reduced by 20 dBA when received in any internal room.

**f) Residential Activities in Commercial and Industrial zones**

- i) Any habitable room in new residential activities established (after 30 October 1999) in the City Centre Zone, Suburban Centre Zone or Commercial Service Zone or Industrial Zone shall meet an internal L10 noise level of 45 dBA at all times.
- ii) Where an internal noise level for a habitable room can only be met with doors and windows closed, then an alternative means of ventilation must be provided in accordance with the Building Act 1991.
- iii) An acoustic design certificate will be required to show how the required noise standard will be met.

**g) Noise from activities within the Recreation Zones and Major Facilities Zone**

- i) Activities, other than Special Events and excluding crowd noise, within the Recreation Environment Zone, Recreation General Zone, Recreation Major Zone or the Major Facilities Zone shall not exceed the following noise levels when measured at any point at or within the boundary of any site in Residential Zone:

0700hr – 2300hr	55dBA L10
2300hr – 0600hr	40dBA L10
0600hr – 0700hr	45dBA L10

**h) Noise from Special Events**

The noise from Special Events, including testing or practice involving the use of electronic sound amplification, shall not exceed the following noise levels when measured at any point at or within the boundary of any site in the Residential Zone on more than 5 times a year:

- i) 1000hr – 2300hr                      75dBA L10
- ii) The L<sub>max</sub> for all activities shall not exceed 85dBA when measured over any 15 minute period between 1000hr – 2300hr.
- iii) Testing or practice involving the use of electronic sound amplification shall be limited to a maximum duration of 3 hours. The Special Event itself shall be limited to 4 hours in duration. There shall be at least 2 hours separation between the practice/testing and the event itself.
- iv) The public will be notified of each Special Event not less than 14 days prior to the event. The notice should inform the public of:
  - the nature of the event
  - proposed dates and start and finish time
  - possible alternative dates in the event of postponement

**i) Design and Construction of New Arterial Roads**

New major or minor arterial roads which adjoin the Residential Zone or Future Urban Zone shall be designed and constructed to meet the following noise standard at a point 3 metres within the boundary of any adjoining site and at any point up to 2.8m above ground level:

- Any new major or minor arterial road (constructed after October 30 1999) where frontage access is limited or restricted - 60 dBA L10 (18 hours)
- Other new major or minor arterial roads (constructed after October 30 1999) – 65 dBA L10 (18 hours).

**j) Residential Activities Adjoining Major and Minor Arterial Roads**

- i) Any habitable rooms in new residential activities or the construction of new habitable rooms or extensions to habitable rooms in existing residential activities shall meet an internal L10 (18 hour) noise level of 40dBA, where constructed on a site adjoining:
  - an existing major or minor arterial road (constructed before October 30 1999) specified as a High Noise Route in Appendix 5.1-1
  - a new major or minor arterial road (constructed after October 30 1999) which has been designated and only where habitable rooms are located above the height of 2.4m above ground level.
- ii) Where an internal noise level for a habitable room can only be met with doors and windows closed, then an alternative means of ventilation must be provided in accordance with the Building Act 1991.
- iii) An acoustic design certificate will be required to show how the required noise standard will be met.

## Performance Assessment

### 5.1.2 Assessment Criteria

In determining any resource consent, Council shall have regard to the expected outcome for this rule and the relevant underlying zone, to any related objectives and policies, and to the following.

**a) General Criteria**

- i) The sensitivity of the receiving environment to the effects of the noise and the effects of the noise on the receiver, especially where the affected activity has a component where people need to sleep or concentrate.
- ii) The nature of the locality or zone and the activities within it (including traffic and pedestrian activity) and level of background noise.
- iii) The location of the activity in relation to any nearby residential activities and the extent to which the noise generated will affect the amenity values of surrounding residential activities.
- iv) The nature of the noise emissions likely to be generated and the disturbance this may cause to people in the vicinity, including:
  - audible characteristics (tonal quality and frequency)
  - expected times and duration of the noise.

- v) Whether the design and location of the building and ancillary activities which generate noise incorporate noise mitigation techniques.
- vi) Whether the design of residential activities and their surrounds adjoining to arterial roads and in commercial and industrial zones include noise mitigation techniques.
- vii) Whether any construction or use of roads may cause adverse noise effects and the extent to which such effects can be adequately mitigated by treatment of the road, surrounding environment or receiving sites including noise bunding, fencing, road surfacing and acoustic treatment of buildings used for residential activities.
- viii) Whether the activity will contribute to the cumulative effects of noise.
- ix) Whether the number, timing, and duration of special events and the length of time for which the specified noise levels will be exceeded, particularly at night, taking into account the likely disturbance that may be caused.
- x) Whether the adverse effects on the surrounding neighbourhood of the special event are mitigated.

# Appendix 5.1-I High Noise Routes

