

## SECTION 11: NOISE RULES

Note: The “grey-out” highlighted text indicates the provisions which have been appealed to the Environment Court. All other provisions are operative and have legal effect.

This part of the Plan contains rules and performance standards relating to noise. This includes the requirements in terms of the maximum noise levels for activities and acoustic insulation requirements for buildings. It is noted Section 8: Rural Industrial Zone contains site-specific noise provisions, which are in addition to the provisions in this Section.

### 11.1 CATEGORIES OF ACTIVITIES

#### 11.1.1 PERMITTED ACTIVITIES

- (a) All activities provided that they comply with the relevant performance standards in Section 11.2.

#### 11.1.2 CONTROLLED ACTIVITIES

None.

#### 11.1.3 RESTRICTED DISCRETIONARY ACTIVITIES

- (a) Unless listed elsewhere in the District Plan, any activity which does not comply with one or more of the performance standards in Section 11.2.

Matters to which the Council restricts its discretion:

- (i) Avoiding, remedying or mitigating of actual or potential effects deriving from non-compliance with the particular performance standards(s) that is not met.

#### 11.1.4 DISCRETIONARY ACTIVITIES

None.

#### 11.1.5 NON COMPLYING ACTIVITIES

None.

#### 11.1.6 PROHIBITED ACTIVITIES

None.

## 11.2 PERFORMANCE STANDARDS – PERMITTED ACTIVITIES

*[D P Ellerton appealed against the use of the site boundary measurement at sites zoned Rural, and seeks the notional boundary measurement position be used at receiving sites zoned Rural in the District Plan] <sup>1</sup>*

The following Performance Standards apply to all permitted activities, except those exempt from the standards as set out in Section 11.2.1.

Except where otherwise expressly provided for, noise is to be measured and assessed in accordance with NZS 6801:2008 Acoustics - Measurement of Environmental Sound and NZS 6802:2008 Acoustics – Environmental Noise.

### 11.2.1 ACTIVITIES THAT ARE EXEMPT FROM THE NOISE PERFORMANCE STANDARDS

*[Tararua Wind Power Ltd appealed seeking that wind farms complying with NZS 6808:2010 Acoustics – Wind farm Noise be added to the list of exclusions from the noise performance standards] <sup>2</sup>*

The following activities are exempt from the specific noise performance standards but which shall be controlled separately by reference to and Sections 16 and 17 of the RMA and by the application of relevant New Zealand Noise Standards where these are applicable:

- (a) Aircraft being operated during or immediately before or after flight, except for helicopter noise as part of a Temporary Military Training Activity as set out in Rule 11.2.1011.2.8.
- (b) Vehicles being driven on a road (within the meaning of Section 2(1) of the Transport Act 1998), or within a site as part of or compatible with a normal residential activity.
- (c) Trains on rail lines (public or private), including at railway yards, railway sidings or stations. However, this exemption does not apply to the testing (when stationary), maintenance, loading or unloading of trains.
- (d) Sounds specifically generated by construction, maintenance and demolition activities which shall be assessed, managed and controlled by reference to NZ S6803:1999 Acoustics – Construction noise.
- (e) Farming activity, intensive farming, forestry planting and forestry harvesting in the Rural Zone.
- (f) Residential activities in Residential or Rural Zones with the exception of noise associated with power generation, heating, ventilating or air conditioning systems, or water pumping/treatment systems of any kind.
- (g) Crowd noise at a park or reserve.
- (h) Motorcraft operating on the surface of waterbodies.
- (i) Any warning device or siren used by emergency services for emergency purposes (and routine testing and maintenance).

<sup>1</sup> Appeal – D P Ellerton – ENV-2016-WLG-000074

<sup>2</sup> Appeal – Tararua Wind Power Ltd – ENV-2016-WLG-000078

### 11.2.2 RURAL ZONE AND TOWNSHIP ZONE

1. Noise generated by any activity in the Rural Zone and Township Zones shall not exceed the following noise limits when measured at any point within the boundary of any other Rural Zoned or Township Zoned site:

7am to 7pm 55dBA  $L_{Aeq}$  (15 min)

7pm to 10pm 50dBA  $L_{Aeq}$  (15 min)

10pm to 7am 45dBA  $L_{Aeq}$  (15 min)

10pm to 7am 75dBA  $L_{Amax}$ <sup>3</sup>

2. Noise generated by any activity in the Rural Zone shall not exceed the following noise limits at any point within any Residential Zoned site:

7am to 7pm 50dB  $L_{Aeq}$  (15 min)

7pm to 10pm 45dB  $L_{Aeq}$  (15 min)

10pm to 7am 40dB  $L_{Aeq}$  (15 min)

10pm to 7am 70dB  $L_{Amax}$

3. In the Rural Zone and Township Zone in the following locations:

- (i) Within 80m (measured from the nearest painted edge of the carriageway) of a State Highway where the posted speed limit is 70km/hr or greater, any habitable room in a new building containing a noise sensitive activity shall be designed, constructed and maintained to meet an internal noise level of 40 dB  $L_{Aeq}$  (24 hour).
- (ii) Within 60m (measured from the nearest edge of the rail corridor) of the railway line, any habitable room in a new building containing a noise sensitive activity shall be designed, constructed and maintained to meet an internal noise level of:
  - (i) 35dBA  $L_{Aeq}$  (1 hour) inside bedrooms with ventilating windows open.
  - (ii) 40dBA  $L_{Aeq}$  (1 hour) inside other habitable rooms with ventilating windows open.

Compliance with Rule 11.2.2.3 shall be achieved by an acoustic design certificate from a suitably qualified acoustic engineer being provided to Council, prior to the construction of any building containing a noise sensitive activity, demonstrating that the above internal sound levels will be achieved. The building will be designed, constructed and maintained in accordance with the design certificate.

Where the noise level specified in Rule 11.2.2.3 cannot be met with ventilating windows open, a ventilation system shall be installed for the habitable room(s).

Note: For the purpose of this rule. Ventilation System means a system complying with the Building Code (NZS 4303) for mechanical ventilation (refer Clause G4). This rule will ensure a minimum level of mechanical ventilation with ventilating windows closed.

4. Any habitable room in a new building containing a noise sensitive activity located within the Noise Area Boundary identified for the Fonterra Whareroa Dairy Manufacturing Site or Fonterra Kapuni Dairy Manufacturing Site shown in Sections 8.5.1 or 8.8.2 of this Plan shall be

<sup>3</sup> Appeal – D P Ellerton – ENV-2016-WLG-000074

designed, constructed and maintained to achieve an internal design level of 35 dB  $L_{Aeq}$  (1 hour) with the windows closed.

### 11.2.3 RESIDENTIAL ZONE

- Noise generated by any activity in the Residential Zone shall not exceed the following noise limits when measured at any point within any other Residential Zoned site:

7am to 7pm	50dB $L_{Aeq}$ (15 min)
7pm to 10pm	45dB $L_{Aeq}$ (15 min)
10pm to 7am	40dB $L_{Aeq}$ (15 min)
10pm to 7am	70dB $L_{Amax}$

- Any habitable room in a new building containing a noise sensitive activity within 40m (measured from the nearest painted edge of the carriageway) of State Highway 3 or 45 where the posted speed limit is 70km/hr or greater shall be designed, constructed and maintained to meet an internal noise level of 40 dB  $L_{Aeq}$  (24 hours).
- Within 60m (measured from the nearest edge of the rail corridor) of the railway line, any habitable room in a new building containing a noise sensitive activity shall be designed, constructed and maintained to meet an internal noise level of:
  - 35dBA  $L_{Aeq}$  (1 hour) inside bedrooms with ventilating windows open.
  - 40dBA  $L_{Aeq}$  (1 hour) inside other habitable rooms with ventilating windows open.

Compliance with Rule 11.2.3.2 and 11.2.3.3 shall be achieved by an acoustic design certificate from a suitably qualified acoustic engineer being provided to the Council, prior to the construction of any building containing a noise sensitive activity, demonstrating that the above internal sound levels will be achieved. The building will be designed, constructed and maintained in accordance with the design certificate.

Where the noise level specified in Rule 11.2.3.2 or 11.2.3.3 cannot be met with ventilating windows open, a ventilation system shall be installed for the habitable room(s).

Note: For the purpose of this rule. Ventilation System means a system complying with NZS 4303:1990 for mechanical ventilation (refer Clause G4). This rule will ensure a minimum level of mechanical ventilation with ventilating windows closed.

### 11.2.4 COMMERCIAL ZONE

- Noise generated by any activity in the Commercial Zone shall not exceed the following noise limits at any point within any other site in the Commercial Zone:

All times	65dB $L_{Aeq}$ (15 min)
All times	90dB $L_{Amax}$

- Any habitable room in a new dwelling unit in the Commercial Zone shall be designed, constructed and maintained to meet an internal noise level of:
  - 35dB  $L_{Aeq}$  (1 hour) inside bedrooms with ventilating windows open.

- (ii) 40dB  $L_{Aeq}$  (1 hour) inside other habitable rooms with ventilating windows open.

Compliance with Rule 11.2.4.2 shall be achieved by an acoustic design certificate from a suitably qualified acoustic engineer being provided to the Council, prior to the construction of any noise sensitive activity, demonstrating that the above internal sound levels will be achieved. The building will be designed, constructed and maintained in accordance with the design certificate.

Where the noise level specified in Rule 11.2.4.2 cannot be met with ventilating windows open, a ventilation system shall be installed for the habitable room(s).

Note: For the purpose of this rule. Ventilation System means a system complying with the NZS 4303:1990 for mechanical ventilation (refer Clause G4). This rule will ensure a minimum level of mechanical ventilation with ventilating windows closed.

3. Noise generated by any activity in the Commercial Zone shall not exceed the following limits when measured at or within the boundary of any Rural Zoned site, or Residential Zoned site:

Rural Zoned site:	7am to 7pm	55dB $L_{Aeq}$ (15 min)
	7pm to 10pm	50dB $L_{Aeq}$ (15 min)
	10pm to 7am	45dB $L_{Aeq}$ (15 min)
	10pm to 7am	75dB $L_{Amax}$
Residential Zoned site:	7am to 7pm	50dB $L_{Aeq}$ (15 min)
	7pm to 10pm	45dB $L_{Aeq}$ (15 min)
	10pm to 7am	40dB $L_{Aeq}$ (15 min)
	10pm to 7am	70dB $L_{Amax}$ <sup>4</sup>

4. Noise from the operation of emergency generators are exempt from the noise limits in Rule 11.2.4.

### 11.2.5 INDUSTRIAL ZONE

1. Noise generated by any activity in the Industrial Zone shall not exceed the following noise limits at any point within any other site in the Industrial Zone:

At all times 65dB  $L_{Aeq}$  (15 min)

At all times 90dB  $L_{Amax}$

2. Any habitable room in a new dwelling unit in the Industrial Zone shall be designed, constructed and maintained to meet an internal noise level of:

- (i) 35dB  $L_{Aeq}$  (1 hour) inside bedrooms with ventilating windows open.

- (ii) 40dB  $L_{Aeq}$  (1 hour) inside other habitable rooms with ventilating windows open.

Compliance with Rule 11.2.5.2 shall be achieved by an acoustic design certificate from a suitably qualified acoustic engineer being provided to the Council, prior to the construction of any noise sensitive activity, demonstrating that the above internal sound levels will be

<sup>4</sup> Appeal – D P Ellerton – ENV-2016-WLG-000074

achieved. The building will be designed, constructed and maintained in accordance with the design certificate.

Where the noise level specified in Rule 11.2.5.2 cannot be met with ventilating windows open, a ventilation system shall be installed for the habitable room(s).

Note: For the purpose of this rule. Ventilation System means a system complying with the NZS 4303:1990 for mechanical ventilation (refer Clause G4). This rule will ensure a minimum level of mechanical ventilation with ventilating windows closed.

3. Noise generated by any activity in the Industrial Zone shall not exceed the following noise limits at any point within the boundary of any Rural Zoned site or Residential Zoned site:

7am to 7pm 55dB L<sub>Aeq</sub> (15 min)

7pm to 10pm 50dB L<sub>Aeq</sub> (15 min)

10pm to 7am 45dB L<sub>Aeq</sub> (15 min)

10pm to 7am 75dB L<sub>Amax</sub><sup>5</sup>

### 11.2.6 RURAL INDUSTRIAL ZONE

- The noise standards set out in the Appendix of Section 8 shall apply to activities in the areas of the Rural Industrial Zone referred to and described in that Appendix.
- Where these standards specifically refer to previous versions of NZS 6801:2008 and NZS 6802:2008 then measurement and assessment shall continue to be made in accordance with those versions, otherwise measurement and assessment shall be made in accordance with the 2008 version of those standards, ie NZS 6801:2008 and NZS 6802:2008 respectively.
- All other activities in the Rural Industrial Zone shall be subject to the provisions in Section 11.2.2 except those that are exempt under Section 11.2.1 and except the 1968 Decision Area as shown on the Vector, Kapuni Decision Areas Plan (Appendix 1 of Section 8).

### 11.2.7 PARKS AND RESERVES

- Noise generated by any activity in any park or reserve shall not exceed the following noise limits at any point within the boundary of any Rural, Township or Residential Zoned site:

7am to 7pm 50dB L<sub>Aeq</sub> (15 min)

7pm to 10pm 45dB L<sub>Aeq</sub> (15 min)

10pm to 7am 40dB L<sub>Aeq</sub> (15 min)

10pm to 7am 65dB L<sub>Amax</sub>

### 11.2.8 HAWERA AERODROME – NOISE SENSITIVE ACTIVITIES

- Any new noise sensitive activity or addition(s) to an existing noise sensitive activity constructed inside the Hawera Aerodrome Outer Control Boundary (OCB) shown on Planning Maps (Special

<sup>5</sup> Appeal – D P Ellerton – ENV-2016-WLG-000074

Map 1) shall be designed, constructed and maintained to meet an internal noise level of 40 dB  $L_{dn}$  in habitable rooms with ventilating windows open.

The acoustic insulation shall be based on an external aircraft noise level for a given location determined by interpolating between the OCB (55 dB  $L_{dn}$ ) and the 65 dB  $L_{dn}$  contour. For each octave band the linear decibel level can be determined by adding the following adjustment to the overall A-weighted outdoor  $L_{dn}$  level.

External Aircraft Noise Octave Band Adjustments for Sound Insulation Design

63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz
6	5	0	-3	-6	-8	-11

Compliance with Rule 11.2.8.1 shall be achieved by an acoustic design certificate from a suitably qualified acoustic engineer being provided to the Council, prior to the construction of any noise sensitive activity, demonstrating that the above internal sound levels will be achieved. The building will be designed, constructed and maintained in accordance with the design certificate.

Where the noise level specified in Rule 11.2.8.1 cannot be met with ventilating windows open, a ventilation system shall be installed for the habitable room(s).

Note: For the purpose of this rule. Ventilation System means a system complying with the Building Code (NZS 4303) for mechanical ventilation (refer Clause G4). This rule will ensure a minimum level of mechanical ventilation with ventilating windows closed.

### 11.2.9 HAWERA AERODROME – AIRCRAFT OPERATIONS

1. Aircraft operations at Hawera Aerodrome shall be managed so that the 90 day average day night noise level ( $L_{dn}$ ) from aircraft operations does not exceed 55dB  $L_{dn}$  outside the Outer Control Boundary (OCB) shown on the Planning Maps. Aircraft noise will be measured in accordance with NZS 6805:1992.

Noise from aircraft operations shall be monitored every three years commencing three years following the Plan becoming operative by one of the following methods:

- (i) Continuous in-field noise monitoring at one location over a busy 90 day period (typically summer). Monitoring does not need to occur on the OCB but shall be at a suitable location to enable compliance with the limit at the OCB to be determined.
- (ii) Noise contours calculated using the Integrated Noise Model or suitable equivalent and records of actual aircraft activity over a busy 90 day period (typically summer).

Monitoring and assessment of compliance with the noise limit shall be carried out by a suitably qualified acoustic specialist and the results shall be reported to the Council.

Once noise from aircraft operations reaches 54 dB  $L_{dn}$  at any location on the OCB the monitoring described above shall be undertaken and reported to the Council annually.

### 11.2.10 TEMPORARY MILITARY TRAINING ACTIVITIES

1. Temporary military training activities are only subject to the standards in Rule 11.2.10. They are exempt from the standards in Rules 11.2.2 – 11.2.9.

2. The use of guns, mortars or any other explosive devices shall comply with the following requirements.

Type of Military Noise	Time (on all days)	Separation distance to <u>the notional boundary of any building containing a noise sensitive activity</u>	
Live firing of weapons and single or multiple explosive events	7am to 7pm	1,500m minimum	Less than 1,500m if conditions (i) and (iii) below are complied with
	7pm to 7am	4,500m minimum	Less than 1,500m if conditions (ii) and (iii) below are complied with
Firing of blank ammunition	7am to 7pm	750m minimum	Less than 750m if conditions (i) and (iii) are complied with
	7pm to 7am	2,250m minimum	Less than 2,250m if conditions (ii) and (iii) are complied with

The below standards are to be complied with if minimum separation distances in the above table cannot be met.

- (i) Day time (7am to 7pm) noise levels must not exceed a peak sound level of 120dBC when measured at or within the notional boundary of any building containing a noise sensitive activity.
  - (ii) Night time (7pm to 7am) noise levels must not exceed a peak sound level of 90dBC when measured at or within the notional boundary of any building containing a noise sensitive activity.
  - (iii) A noise management plan is prepared by a suitably qualified acoustic engineer and provided to the Council at least 15 working days prior to the activity taking place. The noise management plan must contain as a minimum:
    - A description of the site and activities, including times, dates and duration of the activities, and the nature and location of the proposed training activities
    - Methods to minimise the noise disturbance for activities sensitive to noise including the location, orientation and timing of noisy activities
    - A map showing potentially affected activities sensitive to noise and predicted peak sound pressure noise levels for each of these locations
    - A programme for notification and communication with the occupiers of activities sensitive to noise at least seven days before the activity is commenced
    - A method for following up complaints received by the Council during and after the event and any proposed debriefings with Council officers.
  - (iv) Notice is provided to the Council at least 48 hours prior to the commencement of the activity, specifying whether the activity involves live firing and/or the use of explosives, or firing of blank ammunition; the location of the activity and the boundaries within which the activity will take place, and distances to buildings housing noise sensitive activities; and the timing and duration of the activity.
3. Mobile noise sources, excluding those in the table above, shall comply with the noise limits set out in Tables 2 and 3 of NZS 6803:1999 Acoustics – Construction Noise, with reference to ‘construction noise’ taken to refer to other, mobile noise sources.



Note: For the purpose of this performance standard, mobile noise sources include (but are not limited to) sources such as personnel, light and heavy vehicles, self-propelled equipment, and earthmoving equipment.

4. Fixed (stationary) noise sources, excluding those in the table above, shall not exceed the following noise limits when measured at any point within any land zoned Residential or at within the notional boundary of a building housing any noise sensitive activity in any other Zone:

7am to 7pm	55dBA $L_{Aeq}$ (15 min)
7pm to 10pm	50dBA $L_{Aeq}$ (15 min)
10pm to 7am	45dBA $L_{Aeq}$ (15 min)
10pm to 7am	75dBA $L_{Amax}$

Note: For the purpose of this performance standard, fixed (stationary) noise sources include (but are not limited to) noise sources such as power generation, heating, ventilation or air conditioning systems, or water or wastewater pumping/treatment systems.

5. Noise generated by helicopter landing areas shall comply with the noise limits set out in NZS 6807:1994 Noise Management and Land Use Planning for Helicopter Landing Areas.