

APPENDIX D

Proposed District-wide Noise Rules & Definitions

PROPOSED DISTRICT-WIDE NOISE RULES

In the Matamata-Piako District Plan, add the following new noise rules in Part B (Rules), Section 5 (Performance Standards – All Activities), Chapter 5.2 (Noise):

5.2.14 Noise Insulation: Noise Sensitive Activities within the Waitoa Dairy Factory Noise Emission Control Boundary

1. Any habitable room in a new building accommodating a noise sensitive activity or any alteration(s) to an existing building accommodating a noise sensitive activity constructed within the Noise Emission Control Boundary for the Waitoa Dairy Factory must be designed, constructed, and maintained to meet an internal noise level of 35dB L_{Aeq (15min)} inside bedrooms and 40dB L_{Aeq (15min)} inside all other habitable rooms. If windows and doors are required to be closed to satisfy this condition, then an adequate supply of outdoor air is to be provided by a 'mechanical ventilation system' to each bedroom and/or habitable room.

Compliance must be achieved by, prior to the construction of any noise sensitive activity, submission of an acoustic design certificate from a suitably qualified and experienced acoustician to Council demonstrating that the prescribed internal noise levels will be achieved. The building must be designed, constructed, and maintained in accordance with the design certificate.

It is preferable that a design certificate is based on a specific noise survey conducted at the location of the dwelling. Such a survey is to be conducted during the busiest period for the Waitoa Dairy Factory (August to November). If this is not feasible then external noise levels in Table 1 are to be used for the acoustic design of the building facade.

Table 1: Façade Noise Level for Design of Buildings Inside the Noise Emission Control Boundary

-		Octave Band Centre Frequency (Hz)						dBA
	<u>63</u>	<u>125</u>	<u>250</u>	<u>500</u>	<u>1000</u>	<u>2000</u>	<u>4000</u>	<u>uda</u>
Façade incident sound pressure level (dB re 20uPa)	<u>60</u>	<u>55</u>	<u>52</u>	<u>45</u>	<u>43</u>	<u>39</u>	<u>33</u>	<u>49</u>

Noise levels must be measured and assessed in accordance with the requirements of New Zealand Standard NZS 6801:2008 "Acoustics – Measurement of Environmental Sound" and New Zealand Standard NZS 6802:2008 "Acoustics - Environmental Noise".

For the purposes of this rule, a mechanical ventilation system means:

- a. An outdoor air system complying with the requirements of the Building Code (NZS 4303) for mechanical ventilation (refer Clause G4). This is to provide a minimum level of air quality; **and**
- b. <u>A mechanical heating/cooling system (eg. heat pump) designed by a suitably qualified engineer.</u>
 This is to provide thermal comfort. The heating/cooling system must:
 - i. <u>be capable of maintaining an internal temperature of 18C° in all bedrooms at all times with all bedroom doors closed.</u>
 - ii. <u>be capable of maintaining a maximum internal temperature of 22°C in all other habitable rooms</u> at all times with all bedroom doors closed.
 - iii. be designed to NIWA 2.5% design weather dataset.

- iv. <u>allow the on/off operation to be controlled by the occupant.</u>
- v. <u>allow the set temperature of each heating/cooling unit to be controllable between 18°C to 25°C by the occupant.</u>
- c. System noise must be designed so that the combined level from the outdoor air system (satisfying clause 1(a)) and heating/cooling system (satisfying clause 1(b) does not exceed 35dB L_{Aeq(30s)} in bedrooms and 40dB L_{Aeq(30s)} in other habitable rooms.
- 2. All assessments, mitigation, and certification required to be undertaken under Rule 5.2.14(1) above shall be at a cost in all matters of the owner of the land on which the building is proposed to be erected/ altered.

Principal reason: The intent of Rule 5.2.14(1)(b)(ii) is to ensure that heating/cooling from bedrooms cannot be used to satisfy the thermal comfort criteria in other rooms.

Rule 5.2.15 Noise sensitive activities in the vicinity of the Waitoa Dairy Factory Noise Emission Control Boundary

1. Where there is conflict between the noise standards in Rules 5.2.6 and 5.2.11, and the Waitoa Dairy Factory DCP rules, the Waitoa Dairy Factory DCP rules shall apply.

PROPOSED DEFINITIONS

In the Matamata-Piako District Plan, add the following new definitions in Part B (Rules), Section 15 (Definitions):

Habitable room means any room used for the purposes of teaching or used as a living room, dining room, sitting room, bedroom, office, or other room specified in the Plan to be a similarly occupied room.

Bedroom means any habitable room used predominantly for sleeping.

Noise sensitive activity means:

- a) any residential activity (including visitor accommodation and retirement accommodation)
- b) any educational activity
- c) any healthcare activity
- d) any congregations within places of worship or marae.