

Dr Stephen Chiles for QLDC – Summary of Evidence, 9 September 2016

District Wide - Hearing Stream 5

1. The noise rules in the notified version of Chapter 36 Noise (**notified chapter**) will generally result in the same degree of acoustics amenity as the noise rules in the Operative District Plan (**ODP**), and the majority of noise limits remain unchanged. These noise limits are slightly more stringent than guidance in NZS 6802:2008 *Acoustics - Environmental Noise*. However, they are consistent with some other districts, and I consider they should result in good residential amenity and provide protection from sleep disturbance.
2. For the majority of noise limits, the only change in the notified chapter, compared to the ODP, is that they have been moved from rules for each zone to the notified district wide chapter. I consider this move beneficial as it avoids inconsistencies and allows emphasis on the application of noise limits to zones where sound is received rather than from where it is generated. The measurement and assessment standards, and acoustics units used for noise limits in the ODP were updated by Plan Change 27A (**PC27A**). The majority of these have been rolled over into the notified chapter.
3. I consider there to be several areas where the noise rules in the notified chapter could be improved and I have detailed these in my evidence. Many of these matters arise from submissions and include changes to the noise rules, which are generally minor in nature. I also detail in my evidence several areas where I consider changes to noise rules sought in submissions to be inappropriate.
4. In my opinion, Ms Evans, Ms Banks and Mr Barr have set out appropriate recommendations with respect to all these matters in their respective reports. The only area where I consider there to be an issue with the redrafted rules, due to a lack of scope to make changes, is Redraft 36.5.6, Notified 36.5.7, where the rule is flawed and unworkable with contradictory noise limits applying.
5. I discuss below what I consider to be the key issues (both outstanding and resolved concerns).

Helicopters

6. There is no perfect method to assess and control helicopter noise in order to exactly account for its occasional short-term nature, compared to other sound sources. In my opinion, the guidance in the relevant New Zealand Standard (NZS 6807:1994 *Noise management and land use planning for helicopter landing areas*) generally defines an appropriate noise limit, which has been included in the notified chapter. This noise limit has been supplemented by additional controls on movement numbers in the rural zone, which is where most helicopter landing sites are located. I consider the noise limit for helicopters in the notified chapter to be appropriate without any modification.

Submitter evidence

7. I agree with Christopher Ferguson¹ that the “EIC” Activity Area of the Jacks Point Zone should have the same noise limits as the Village Activity Area.
8. With respect to the ventilation rules proposed by Christopher Day, Sheridan Roberts and Kirsty Sullivan for the Queenstown Airport Corporation:
- (a) I disagree there is any existing or likely future difference in ventilation system requirements in relation to town centres, airports or roads;
 - (b) I agree that the reference to G4 could be replaced, but I recommend the alternate requirement should be for at least 0.5 air changes per hour;
 - (c) I disagree that sound levels should be measured at 2 metres from a grille or diffuser and I consider that 1 metre is appropriate;
 - (d) I disagree that using a heat pump should avoid ventilation requirements; and
 - (a) I disagree with Mr Day that all references to “sound” should be changed to “noise”. The definitions chapter as notified states that acoustic terms shall have the same meaning as in NZS 6801:2008 *Acoustics - Measurement of Environmental Sound* and NZS 6802:2008 *Acoustics - Environmental Noise*. In accordance with these Standards, the terms “sound” and “noise” have generally been correctly applied in the notified chapter. Strictly, some instances of “noise” should be changed to “sound”, but I do not consider this materially affects interpretation of the notified chapter. Otherwise the terms are used correctly in the standards and rules.

¹ Jacks Point Residential No.2 Limited, Jacks Point Village Holdings Limited, Jacks Point Developments Limited, Jacks Point Land Limited, Jacks Point Land No. 2 Limited, Jacks Point Management Limited, Henley Downs Land Holdings Limited, Henley Downs Farm Holdings Limited, Coneburn Preserve Holdings Limited, Willow Pond Farm Limited (#762 and #1275) Jacks Point Residents and Owners Association (#1277).