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# POST ENGAGEMENT PREFERRED OPTION UPDATE REPORT TO DISTRICT PLAN COMMITTEE

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**DATE:** 24 October 2018

**TOPIC NAME:** Noise & Vibration

**SCOPE DESCRIPTION:** Post Engagement Update on Preferred Option for Noise & Vibration

**TOPIC LEAD:** Vicki Barker

**PREPARED BY:** Vicki Barker

## EXECUTIVE SUMMARY

*Summary of Preferred Option Endorsed by DPC for Further Engagement:*

*That noise and vibration is managed by amended provisions within the Proposed District Plan to enable improved and continued management of noise and vibration as set out in the recommendations in section 7.2 of this report, and that the CIAL related provisions be further considered and amended as required in consultation with CIAL.*

*Summary of Feedback Received:*

*Stakeholder/landowner feedback:*

- Managing noise between zones and suggestions included: setbacks; noise standards; consistency about where noise is measured; and noise contours/buffers (i.e. in relation to strategic infrastructure).
- General support to increase the night time noise limit in the Living Zone and decrease it in the Rural zone (so long as rural productive activities continue to be exempt), and for updating references to NZ Standards and the hours that noise rules apply;
- Horticulture NZ and Federated Farmers provided feedback around rules for bird scaring devices and frost fans;
- IPort do not agree with vibration limits as vibration can be dealt with as part of consents;
- Support for noise limits not applying in road and rail corridors;
- CIAL seek that SDC to continue to work with them on revised provisions.

*Public feedback:*

- Most do not agree with changes to noise limits as it's an issue now which is not well managed;
- Most considered that specific noise levels for activities are only needed if close to residences and they not be to the detriment of existing activities;
- Exemptions are supported for emergency services, special events, agriculture, and some also sought exemptions for noise-producing activities such as go-kart clubs and rifle ranges, and established motorsport facilities;
- The majority considered there should be vibration limits for certain activities as vibration is intrusive.



<i>Recommended Option Post Engagement:</i>	<i>That the Preferred Option previously endorsed by DPC progresses to the 'Drafting and Section 32 Evaluation Phase'.</i>
<i>DPC Decision:</i>	<i>That the Preferred Option previously endorsed by DPC progresses to the 'Drafting and Section 32 Evaluation Phase'.</i>

## 1.0 Introduction

### 1.1 Overview of Preferred Option Endorsed by DPC

Option 2 is the endorsed preferred option, which is to update and amend the noise and vibration provisions to improve clarity and effectiveness. The key noise issues where amendment is required include:

- Reference to updated NZ Noise Standards and acoustic parameters and the addition of construction noise provisions
- Amended day time and night time hours when noise limits apply
- Changes to where the noise limits are applied
- Not applying limits to the road and rail corridor
- Increasing the restrictive Living Zone night time noise limit and the  $LAF_{max}$  limit
- Reducing the current high Rural Zone day time noise limit
- Amendments to noise rules for specific activities (Temporary Military Training Activities, powered watercraft, audible bird scaring devices) and consideration of new rules for rifle ranges, quarrying, frost fans and powered motorsport
- Better management of noise at the interface between zones
- Reconsidering the existing noise exemptions
- Providing limits for residential development in Business Zones
- Amendments to airport related provisions in consultation with Christchurch International Airport Limited (CIAL)
- Amendments to state highway related provisions in consultation with NZTA
- Amendments to policies and definitions
- Provisions to better address vibration effects

## 2.0 Summary of Feedback Received

### 2.1 Partner Feedback

#### **Environment Canterbury**

The only partner feedback received was from ECan who support the consideration of noise limits and rules to manage reverse sensitivity effects between activities and zones, in particular within the 50dBA Ldn airport noise contour for Christchurch International Airport.

### 2.2 Stakeholder/Landowner Feedback

Feedback was received from the following parties and is summarised by theme below:

- Oil Companies (Z Energy Ltd, BP Oil NZ Ltd and Mobil Oil NZ Ltd)
- Horticulture NZ
- CIAL
- IPort (IPort/Rolleston Industrial Holdings Ltd/Rolleston Industrial Development Ltd)
- New Zealand Defence Force (NZDF)<sup>1</sup>
- Coolpak Coolstores Ltd (Coolpak)
- Metroport
- Canterbury District Health Board (CDHB)
- Federated Farmers

***Proposal to increase the night time noise limit in Living Zones and decrease the day time noise limit in the Rural Zone***

The Oil Companies support this proposed change given the existing noise limits are inconsistent with guideline levels and the latest version of NZS 6802. CDHB also agree with these changes provided that rural assessment locations are at notional and not site boundaries. CIAL supports the Living Zone night time limit change.

Horticulture NZ questions why the exiting 60dB limit is inappropriate and whether problems have arisen due to this limit, or if changes are proposed only based on achieving greater consistency with other areas (and the NZ Standard).

Coolpak opposes reducing the day time noise limit in the Rural zone as this zone anticipates a higher level of noise than the Living Zone, which would impact negatively on rural activities anticipated in the zone (farm machinery).

***Whether specific noise rules are required for specific activities***

Horticulture NZ have provided some principles that should be taken into account when drafting a revised bird scaring device rule. In short, they are seeking a permitted activity rule subject to conditions which recognise seasonal/intermittent use and that they are an important part of rural production. Horticulture NZ also provided examples of frost fan provisions for Council to consider if such a rule is proposed.

Federated Farmers advised that for bird scaring devices the members indicated they use gas-powered versions as they are efficient and economical (sound like a shot-gun), crop farmers use them to protect their produce and livelihood, they usually run them over the summer months only (November to March) and from sunrise to sunset (7am to 7pm), and set them at varying intervals (once every 5 minutes to a few times an hour). Federated Farmers advised no complaints have been made to them but they noted they could become an issue with encroaching lifestyle blocks in rural areas. They commented the Hurunui rule approach may work (setback and a noise limit at notional boundary of a dwelling).

***Management of noise between zones***

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<sup>1</sup> It is of note that the NZDF feedback aligns with that provided at the Preferred Options Report Stage and therefore has not been repeated in this report.

- **Setbacks** - Horticulture NZ consider there needs to be significant setbacks for dwellings between the rural and residential boundaries and also for dwellings in the rural area. A setback of 30m from the boundary should be a minimum as a permitted activity and potentially greater between zones.
- **Noise performance standards (set at appropriate levels)** - IPort consider standards to be the best means of managing noise between zones.
- **Port zone and noise contours or buffer zones<sup>2</sup>** - Metroport is seeking a Port Zone and noise contours to limit the noise that can be produced and to restrict noise sensitive development within the contours. IPort also agree that consideration should be given to those parts of the District that are strategically important and require some flexibility in terms of noise generating and/or night time activity that may be incompatible with adjacent residential activity. For example, in relation to the two inland ports buffer zones within the adjacent rural areas could control residential development and limit potential reverse sensitivity effects (like airport noise contours). CDHB also supports rules such as buffer zones to manage noise effects between noisy and noise-sensitive zones and around infrastructure, as such rules can avoid adverse health effects occurring.
- **Measurement at the notional boundary of the nearest dwelling and not the site boundary** - Coolpak has experienced difficulty with the different application of noise limits as they currently stand - the Rural Zone noise is assessed at the notional boundary of a dwelling and the Business 2A zone requires assessment at any point within the boundary of any site in the Rural zone (which also differs to the other Business zones which assesses noise at the notional boundary). Coolpak seek noise in the Business 2A zone be assessed at the notional boundary of a dwelling consistent with the other zones and an effects based approach (i.e. a dwelling in the rural zone is the sensitive activity).

#### ***Application of and inconsistency of noise limits***

The Oil Companies are concerned with the proposal to amend the rules so that the noise limits are determined by the zoning of the site receiving the noise and not the site generating the noise, as such a change might result in reverse sensitivity effects for existing activities in lower amenity zones (i.e. a service station in a business zone adjoining residential zoned land), or at least result in altered or unrealistic expectations around the level of noise that should be experienced by activities in an adjoining more sensitive zone. While the Oil Companies recognise that some existing activities can rely on existing use rights, in terms of noise, such reliance can be difficult to demonstrate. If the Council adopts this approach, it would need to carefully consider these issues and whether the land development pattern and existing zone layout within the Selwyn District lends itself to such an approach to noise limits.

Coolpak are concerned with inconsistencies between zone limits and note that the Rural zone permits noise emissions up to 45dBA L10 at night at the notional boundary and the Business 2A zone permits 40dBA L10 during the night measured at the site boundary, which is an anomaly. They are seeking consistency by raising the noise limit for the Business 2A zone to equal the Rural zone with measurement at the notional boundary.

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<sup>2</sup> Note that LPC are also seeking noise contour boundaries (based on the consented Inland Port) as detailed in the Preferred Options Report.

Federated Farmers support an amendment to the rules so that the noise limits are determined by the zoning of the site receiving the noise and not the site generating the noise, but with further thought as to the implications of this change coupled by changes to the noise limits. Reverse sensitivity is a particular concern.

### ***Exemptions***

Horticulture NZ seeks to ensure that the exemption for primary production activities from noise standards in the Rural Zone is retained. An exemption is common in many district plans and is important in providing for primary production activities in the rural zone. CDHB supports a review of the list of exemptions from the noise limits.

### ***Vibration***

IPort do not agree with introducing vibration limits in relation to construction activities in particular as such activities that generate vibration typically require consent which can consider vibration effects (discretionary consent status or assessment criteria). Where activities are permitted and comply with noise standards, they consider vibration does not need to be regulated and vibration rules would add uncertainty, complexity and cost. Conversely, CDHB supports updating and including vibration limits for specific activities.

### ***Updating references to NZ Standards and acoustic parameters***

The Oil Companies, CIAL, CDHB and Federated Farmers support an update of references to the current NZ Noise and Vibration Standards and acoustic parameters consistent with industry best practice and the current New Zealand noise standards. CIAL and Federated Farmers also support reference to the NZ Construction Standard.

### ***Hours***

Horticulture NZ, Coolpak, CIAL, and Federated Farmers support amending the times for day and night to be more consistent with the NZ Standards and other plans.

The CDHB recommends that rather than just extending the daytime period from 0700h to 2200h, consideration should be given to the introduction of an evening period (1900h to 2200h) for residential amenity, applying to sound received in residential zones and at rural dwellings so that graduated noise limits can be used to maintain more protection in the evening than during the day. This evening transition period is an option in NZS 6802 and used in some other districts.

### ***Road and Rail Corridors***

The Oil Companies support not applying noise limits at the boundary between a site and the road corridor and do not consider it appropriate to take into account the noise levels at the boundary of a road corridor when assessing an application. CDHB also supports the framing of noise limits so they do not apply in road corridors as they are not noise-sensitive and supports reviewing the rules for new sensitive activities around State Highways (and CIAL) to ensure that new sensitive activities are avoided or are adequately protected from adverse noise effects.

### ***CIAL***

Seek explicit objectives and policies that recognise and provide for strategic infrastructure and seek acoustic attenuation for permitted rural dwellings within the 55dBA contour. CIAL are also concerned about the use of notional boundaries in the Rural zone associated with the 50dBA Ldn noise contour, which they consider is inappropriate in terms of the measurement of airport noise.

## 2.3 Public Feedback

Overall there were 11 public respondents to the public consultation survey questions. Key responses are summarised below.

### ***Proposal to increase the night time noise limit in Living Zones and decrease the day time noise limit in the Rural Zone***

Ten of the eleven respondents do not agree with the proposed changes. The leading concern of respondents is that noise is an issue now in townships in particular which is not being effectively monitored and enforced, so increasing the night time noise level would offer less protection. Several respondents referred to the noise from student flats and events being disruptive to sleep and that management of noise is important for health reasons.

### ***Whether specific noise rules are required for specific activities***

The feedback was mixed. One respondent considered that specific motorsport noise levels are needed as such activity is currently subject to the Rural noise limits. Another commented that specific rules are only needed if activities are close to residences, and another replied yes, but not to the detriment of pre-existing activities ex. Waihora Gun Club, Motorsport Park.

### ***Exemptions***

Three respondents considered there should be no exemptions and two considered exemptions should only apply to emergency services. Other exemptions mentioned included special events (if they have a permit), stock production, dairying, boarding kennels, go-kart clubs, rifle ranges, animals, and motorsport (two established in Selwyn that operate for limited times and need provisions to control new development in relation to these existing motorsport activities).

### ***Vibration***

Ten of the eleven respondents consider there should be vibration limits for certain activities. The key piece of feedback was that vibration and base sounds are just as intrusive as loud music. Need to be able to measure this impact and manage it.

## 3.0 Analysis of Feedback Received

All of the feedback is considered consistent with the endorsed preferred options with respect to the matters addressed above which will be considered further in drafting, with the exception of the following dissenting views discussed below.

### 3.1 Changes to Noise Limits

In response to Horticulture NZ and Coolpak feedback, it is noted that the 60dB limit is inconsistent with neighbouring plans and as rural production activities are exempt from the limit and are proposed to continue to be, they will not be negatively impacted by any reduction in the Rural daytime limit. Most of the public respondents did not agree with the proposed changes; however most were concerned with better enforcement which is a matter outside of the District Plan. No change is considered necessary with respect to the endorsed preferred option which is to consider amended noise levels more consistent with the NZ Standards and other districts (and revised exemptions).

### 3.2 Application of and inconsistency of noise limits

The Oil Companies are concerned with the proposal to amend the rules so that the noise limits are determined by the zoning of the site receiving the noise and not the site generating the noise as such a change might result in reverse sensitivity effects for existing activities in lower amenity zones (i.e. a service station in a business zone adjoining residential zoned land). The implications of such a change will need to be considered further in consultation with Council's acoustic consultants and the revised zone limits, but no change to the endorsed preferred option is proposed.

### 3.3 Vibration

In terms of vibration provisions, IPort do not agree with introducing vibration limits in relation to construction activities in particular as such activities that generate vibration typically require consent which can consider vibration effects (discretionary consent status or assessment criteria). Conversely the public feedback considers that specific limits should be introduced. These differing viewpoints will be taken into account when drafting a package of provisions which is unlikely to include wide-ranging limits, but may include limits associated with specific activities not captured by other provisions (i.e. noise limits). Overall, the feedback is broadly aligned with the preferred option in that a package of provisions should be considered and no change is proposed to the preferred option.

### 3.4 CIAL

CIAL seek the imposition of acoustic attenuation for permitted rural dwellings within the 55dBA contour and retain concern about the use of notional boundaries in the Rural zone associated with the 50dBA Ldn noise contour, which they consider is inappropriate in terms of the measurement of airport noise.

There is an existing rule in the Plan which requires acoustic attenuation associated with dwellings which is proposed to be retained (Rule 3.8.1). Furthermore, the notional boundary rule in the Rural zone to which CIAL have expressed concern does not relate to the airport contours so appears to be a misunderstanding<sup>3</sup>.

No change to the endorsed preferred option which includes ongoing liaison with CIAL to amend draft provisions is necessary. CIAL have undertaken to provide Council with draft amendments to the existing CIAL related provisions to improve their effectiveness.

### 3.5 Exemptions

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<sup>3</sup> Clarification was sought from CIAL but a response was not received at the date this report was finalised.



Some public survey respondents considered there should be no exemptions and two considered exemptions should only apply to emergency services. Other exemptions mentioned included go-kart clubs and rifle ranges.

As identified in the Preferred Options Report, it is considered that there should continue to be exemptions as some activities are anticipated in the District and would be unduly constrained if noise was limited (such as emergency services and agriculture); however the list of such exemptions needs to be refined to ensure it is fit for purpose. Activities with a high potential to generate noise such as rifle ranges and go-kart clubs are not considered appropriate for exemptions. Overall, no change to the endorsed approach is recommended.

## 4.0 West Melton Rifle Range

Separate to the Baseline and Preferred Options Report and Public Engagement, the New Zealand Defence Force (NZDF) has advised Council they are considering advancing option(s) to protect the West Melton Rifle Range from reverse sensitivity effects from noise-sensitive development in the vicinity, given it is a noise-generating activity. The site is currently designated.

The Options being considered include: an objective and policy framework that recognises the strategic importance of the West Melton Rifle Range; a new extended 'buffer' designation over private land based on noise modelling; an overlay also over private land based on noise modelling which would restrict dwelling numbers and density; and no complaints covenants to restrain new activities from complaining about the adverse effects of an existing activity (i.e. condition of consent or a private agreement and can be registered on titles).

NZDF are currently working with Council to establish and justify a preferred approach, and have been requested to supply the necessary and appropriate information to support their preferred approach by mid-January 2019 should they wish to proceed.

The options have the potential to constrain development and affect private property owners and therefore should any of the options be advanced by NZDF, targeted landowner engagement will be required.

## 5.0 Recommended Option Post Engagement

The Project Team recommends that:

- The Preferred Option previously endorsed by DPC progresses to the 'Drafting and Section 32 Evaluation Phase'.