

MEMO

<b>Project:</b>	Proposed District Plan – Hearing Stream 3 – Rural Environment	<b>Document No.:</b>	Mm 003		
<b>To:</b>	Central Hawkes Bay District Council	<b>Date:</b>	27 July 2022		
<b>Attention:</b>	Rowena Macdonald	<b>Cross Reference:</b>	-		
<b>Email:</b>	rowena@sageplanning.co.nz	<b>Project No.:</b>	20170771		
<b>From:</b>	Damian Ellerton	<b>No. Pages:</b>	3	<b>Attachments:</b>	No
<b>Subject:</b>	CHBPDP – Hearing Right of Reply				

We have been asked to comment on the following matters arising from Submissions before the Hearings Panel in Hearing Stream 3 concerning the Rural Environment. These issues are:

- Reference to “within the notional boundary” for the measurement and assessment of noise in Rural zones.
- What is the difference between SEL and  $L_{AE}$ .
- Should the HortNZ submission on audible bird scaring devices be adopted?
- If the agricultural aviation exemption from noise rules was extended from the recommended 14 days to a full exemption, what would the implication be?

**WITHIN THE NOTIONAL BOUNDARY**

Noise should be measured and assessed *within* the notional boundary of rurally zoned dwellings.

**SEL VS  $L_{AE}$**

The submission by HortNZ sought to increase the limit for audible bird scaring devices from 50dB  $L_{AE}$  to 65dBA SEL. The evidence by Lynette Wharfe for HortNZ then suggested the Noise Standard NOISE-S5 be amended to refer to 65dBA SEL. Verbal submission by Lynette Wharfe confused criteria from other District Plans which only use one criteria for bird scaring noise - whereas we are proposing two criteria which address the two different types of bird scaring technologies (impulsive vs wailing modulating siren).

There is no difference between SEL and  $L_{AE}$  – they are two different ways of saying the same thing. Below is the definition provided in NZS6802:2008:

**Sound exposure level or SEL, ( $L_{AE}$ )**    **Ten times the logarithm to the base 10 of the ratio of the A-frequency-weighted sound exposure to the square of the reference value**

We note our original advice to Council was to use SEL acoustic parameter and the PDP published for submission altered this to  $L_{AE}$ . That change is immaterial as noted above – as  $L_{AE}$  is the same as SEL – the point of contention is whether this is 50dBA or 65dBA for avian distress siren.

As previously advised, an increase in the limit to 65 dBA  $L_{AE}$ /SEL would amount to a significant increase in noise and result in an unreasonable level of noise to receivers in our opinion. We recommend our original recommended wording be retained, that consistently limits this type of noise to 50dBA, that states:

*Where audible sound is used over a short or variable time duration, no event may result in a noise level greater than 50dBA SEL when assessed within the notional boundary of any site within General Rural or Rural Production Zones, or within the site boundary of any residential zoned site.*

*A legible notice is fixed to the road frontage of the property on which is the device is being used, giving the name, address and telephone number of the person responsible for the operation of any such device(s).*

The difference between the above and the PDP is the adoption of SEL and correction to ensure noise is measured and assessed within the notional boundary of rural zoned site.

## **BIRD SCARING DEVICE**

The verbal submission by HortNZ recommended SEL acoustic criteria be used for audible bird scaring devices on the basis Hastings District Plan does. The use of the SEL acoustic parameter for percussive/instantaneous noise sources is technically incorrect because the type of noise is very short duration and SEL is “sound exposure level” which inherently requires a time component - of several seconds or even minutes in duration. The Lzpeak can most accurately represent the noise of impulsive instantaneous noise events.

In our opinion, a Lzpeak noise limit of 100dB is appropriate. A noise level of 100dB Lzpeak is loud and will be clearly audible at receiving properties within several hundred metres, and that is why our recommendation was and still is to limit the *number of events* as follows:

*Noise from audible explosive bird scaring devices shall only be operated between sunrise and sunset, and shall not exceed 100dB Lzpeak, when measured within the notional boundary of any rural zoned site, or within the site boundary of any residential zoned site.*

*Discrete sound events of a bird scaring device including shots or audible sound shall not exceed 3 events within a 1 minute period and shall be limited to a total of 12 individual events per hour.*

## **AGRICULTURAL AVIATION**

The purpose of the agricultural aviation exemption of 14 days per year was to allow this type of activity to occur at each rural property so they could undertake this work without concern about whether noise limits were being complied with. Many seasonal and temporary agricultural activities, such as the use of farm machinery and activity associated with livestock management, enjoy some exemption from standard noise limits for this same reasoning.

The 14 day exemption was suggested because under the Operative District Plan, no such exemption was made. This meant if Council received a complaint they would be duty bound to investigate. Such an investigation may be time consuming for the Council however would likely conclude the short term nature of the activity and that noise effects would be minimal. With the 14 day exemption this exercise becomes much simpler, for both the council and a potential complainant to understand

We understand the Hearings Panel may consider a full exemption for agricultural aviation which we would not support. We would not support a total exemption on the basis of:

- There was no evidence presented that suggested each rural property requires agricultural aviation services 365 days per year, or indeed any number of flying days per year. On the contrary, the high cost of this activity would imply to us that any customer of the agricultural aviation industry would want this work completed as quickly as possible.
- If a rural property does require more than 14 days of agricultural aviation services, this does not automatically require resource consent – it just requires checking that they are compliant with the noise levels in the District Plan. It is our expectation that the majority of airstrips in the District would be compliant.
- Unfettered agricultural aviation activity may generate significant noise effects, that would not be subject to compliance with NZS6805:1992. This could lead to unacceptable levels of noise being received by legitimately established rural households through unfettered usage allowed by Council.

We understand the reporting officer is recommending that noise from agricultural aviation movements be exempt from noise rules where the movements relate to primary production on the same site, but that noise controls will apply where a rural airstrip is used for other sites. This is an alternative way of achieving the outcome sought by the 14 day exemption rule. If a plane is being used simply to service its own land, the volumes of flights can be expected to be low, and for the noise associated with them to be reasonable in a rural context. Once an airstrip starts to be used to serve multiple properties, numbers of flights increase and it is appropriate for there to be some control to ensure noise does not become unreasonable.

The overall intention of the rule we recommended was to recognise that agricultural aviation operations are a necessary and important activity that occur in the rural zones and also can reasonably be expected to occur for some periods of time. Therefore, allowing some relaxation of the noise controls in the form of a 14 day exemption period as originally recommended, or exempting flights to service the same site, is considered warranted.

However, if aircraft movements are allowed to occur without controls they do have the potential to cause unacceptable annoyance effects. We consider that the Council has a responsibility to ensure this is managed appropriately and we have provided a mechanism to do so. This mechanism is applied commonly throughout New Zealand, and the use of NZS 6805 is the most appropriate method. We emphasise that in almost all rural agricultural aviation cases, compliance with NZS 6805 would be achieved.

An option we have been asked to consider is whether all agricultural aviation movements could be exempt from needing to comply with noise limits, with reliance simply being placed on s 16 to avoid unreasonable noise. The suggestion is that the Plan could refer to the Council having regard to NZS 6805 when determining whether the noise levels generated by an airstrip were reasonable.

Our opinion on this option is that this is likely to add an unnecessary burden on the Council to investigate what is or isn't reasonable, is open to potentially protracted challenge, and could involve costly assessment. In most cases the airstrips in question would likely not involve agricultural flight operations occurring for more than 14 days. With the 14 day exemption, it is simpler and therefore more pragmatic to carry out an investigation of compliance.

Overall, our position and recommendations have not changed and therefore we consider the 14 day exemption should be retained.