

Wind Farm Living EDUCATING THE LAWYERS Series

Lesson 17: Lived Experience Nuisance occurs at a Compliant Noise Level

The Bald Hills Judge identified that noise nuisance occurs even if compliance has been established.

The Judge noted a compliant noise under the Permit or EPA is” *not directed to intermittent loud noise from wind turbines, and provide no means of determining whether a wind farm produces unreasonably annoying noise in certain weather conditions, or on a particular night.*”

Lived experience evidence is the reality of the mis-match between compliance and nuisance.

Lived experience noise nuisance occurs at a so called “compliant noise level” because at this level 40dB is exceeded for 90% of the time.

The wind industry never admits to noise nuisance. They always turn the conversations to compliance. They gaslight the neighbours with talk of “compliant levels” – when they know a compliant level allows for noise nuisance.

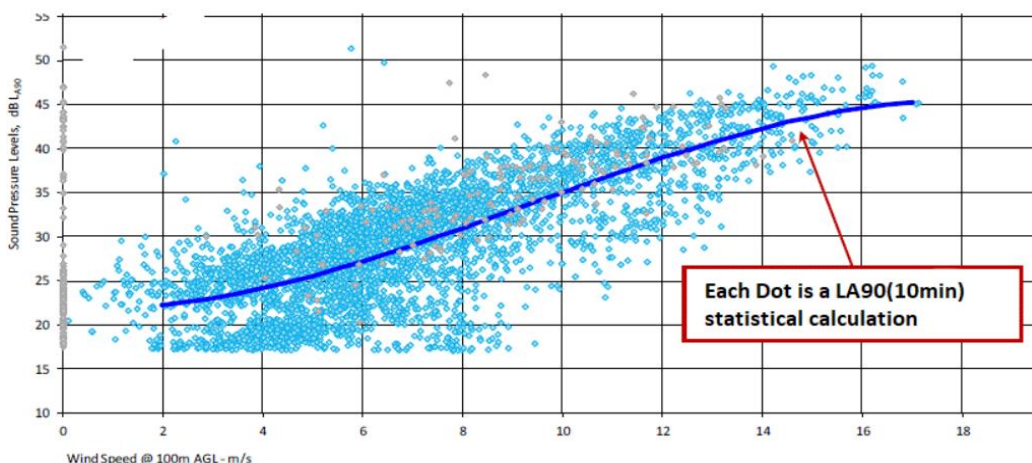
The gaslighting.

- the EPA is concerned with pollution not nuisance,
- the EPA’s pollution standard is based on the New Zealand Standards (NZS),
- the NZS does not identify noise nuisance,
- wind farm permits are silent on nuisance,
- wind companies always claim they are compliant for noise, they will never admit to nuisance.
- and the Responsible Authority has no idea.

The Judgment: 334(C)

Even if Bald Hills had been able to establish compliance with the noise conditions in the permit at the plaintiffs’ houses, this would not have been determinative of reasonableness. The noise limits under the permit and the Environment Protection Regulations are at the higher end of the range applied in Australia. Significantly, while the NZ Standard and condition 19(a) limit the extent to which continuous underlying noise levels are increased by wind turbine noise, they are not directed to intermittent loud noise from wind turbines, and provide no means of determining whether a wind farm produces unreasonably annoying noise in certain weather conditions, or on a particular night. [The Bald Hills judgement](#)

Hidden in every compliance graph (dot graph) is evidence of noise nuisance.



A dot on a Dot Graph could potentially identify noise nuisance because each dot is a LA90(10min) statistical calculation.

And hidden in a LA90(10min) statistical calculation is potential **noise nuisance evidence.**

How does the statistical calculation work

Noise is measured over a number of hours and separated into 10 minute periods.

The noise data is loaded onto a software program (utilising Excel spreadsheets).

Each 10 minute period of noise data is re-shuffled in order from highest to lowest in a 90:10 split.

90% high noise levels : 10% low noise levels.

The LA90(10min) is the split point.

It represents the lowest (quietest) noise levels.

In a 40dB LA90(10min) level, 40dB is the split.

90% of the noise you hear is above 40dB and 10% of noise is below 40dB.

In a 35dB LA90(10min) level, 35dB is the split.

90% of the noise you hear is above 35dB and 10% of noise is below 35dB.

Therefore a LA90(10min) level represents the quietest 10% of noise in a 10 minute period of measurement.

The wind industry gaslights you.

They say the noise you hear is a compliant noise level – they say 40dB is the maximum limit you will hear – they say it's only as loud as a fridge.

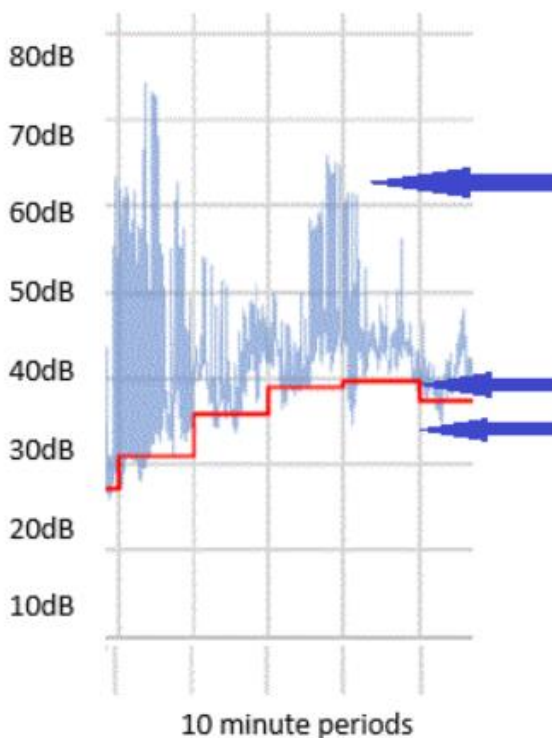
When in fact 90% of the noise you hear is higher than 40dB.

and there is no Maximum Noise Limit.

In reality – Wind turbine noise is loud

- On the noise monitoring graph, the blue spikes represent the noise you hear.
- The red line is the LA90 level (the split point) – this is the noise they say you hear.
- The red line is the gaslighting level.
- And there is no maximum noise limit – a wind farm can be as loud it likes and still be compliant.

Noise Monitoring



The blue spikes are the noise recordings. (The noise you hear)
The red lines are the LA90(10min) statistical levels. (The noise they say you hear).

At a 40dB LA90(10min) level – 40dB is the split point.

- 90% of the noise is above 40dB, or
- 90% of the noise is noise nuisance.

AND ONLY

- 10% of the noise is below 40dB, or
- 10% of the noise is supposed to be acceptable for sleeping.

40dB LA90(10min) represents the quietest 10% of noise in a 10min period of noise monitoring.

The very nature of 40dB LA90 – means that 90% of the noise is louder than 40dB and therefore a potential nuisance.