Wind Farm Living EDUCATING THE LAWYERS Series

Lesson 25: They Cheat you out of your Quiet Background

Part of the enjoyment of your land is sleeping under a quiet background noise level.

The noise at night is often as low as 8-15 decibels.

Wind farms have a licence to emit turbine noise above these quiet levels.

In Victoria, wind farms have a licence to emit noise above 40dB for 90% of the time, with no maximum noise level.

There is no maximum noise level in a 40dB LA90.

Wind companies know their wind farm will cause harm to your health including sleep disturbance.

Their self-written reports are manufactured to show compliance – and then rubber-stamped.

Noise Compliance Starts with Background Testing

Background data is gold.

It shows the level of noise before the wind farm is built.

The higher the background level the easier it is for them to cheat compliance.

They need access to your background data to manufacture bogus compliance.

Access to your Background Data is the first step in the cheating process.

They will try every tactic to access your land.

Never let any strange company onto your land to monitor noise. It's a trap.

You have to be cleverer than them.

Don't let them claim you are obstructive and uncooperative.

Show you are cooperating by stating in writing:

> "Access to our land is conditional upon the company handing over the raw noise and wind data straight from the meter".

A letter from their lawyer outlining the conditions of access to your land will make them run a mile.

They will never hand over the raw noise and raw wind data.

You can then say you haven't blocked access to your land. You have been helpful and cooperative.

This is How they Cheat Compliance Reports:

1. They never report the inaccuracy of the Monitor.

Figure 1 below shows the measured noise against the real noise.
Noise Monitors are inaccurate at low levels up to 28dB.
The measured noise **(green line)** is higher than the actual noise you hear **(red line)**.
The limitation of the monitor deems the noise levels measured within the **blue-shaded** area non-compliant with the standard.
Wind farms never declare the inaccuracy of monitors or uncertainty of measurements in their reports.
They obtain their permits on slim margins of compliance with no declaration of the monitor uncertainty.

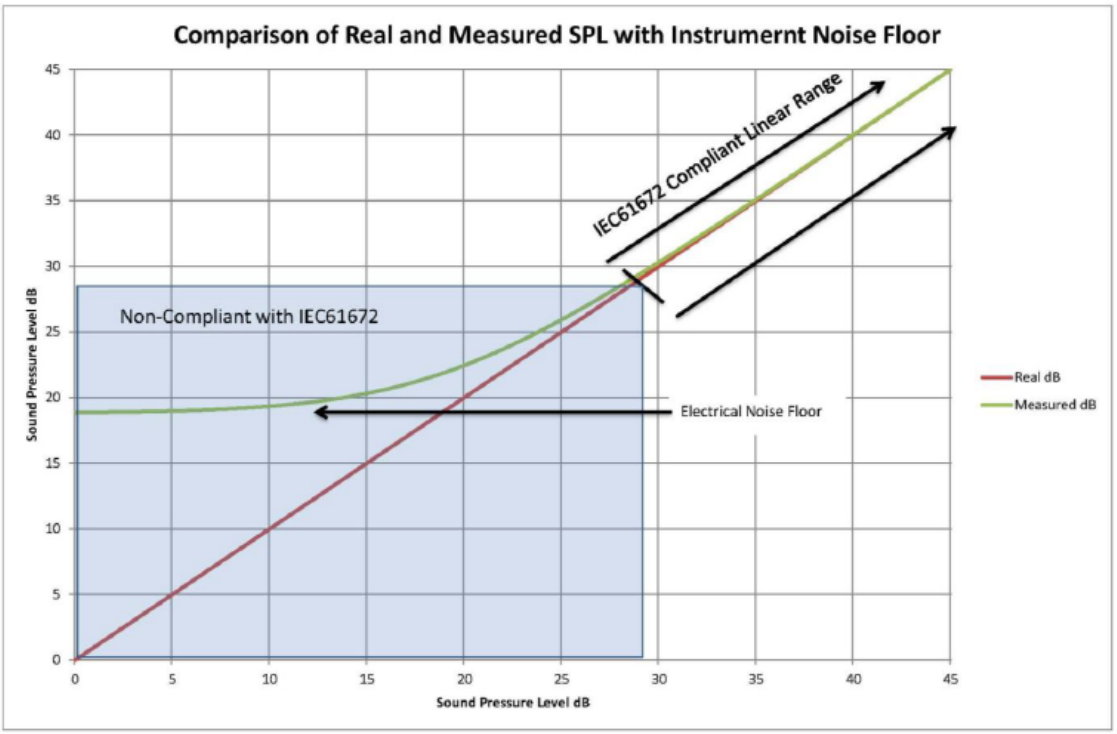


FIGURE 1

2. Microphone Windshields

Wind passing over a microphone creates noise.
(Try blowing across a microphone to hear the noise).

This wind effect across the microphone increases background measurements.

Under the Standard, acousticians are required to use the best available standard windshield to reduce the wind effect on the microphones.

But some wind farm acousticians cheat.

They use poor-quality windshields during background testing and then better equipment when the wind farm is built.

For example,
At Woolsthorpe Wind Farm a poor-quality Rion WS10 was used for background testing when the better-quality Rion WS15 was readily available as a standard model.

The background levels would be artificially increased simply due to the wind effect.

The WS15 windshield would have provided a better reduction in the wind noise effect across the microphone resulting in a more accurate reading of background noise levels.

Rion WS10 Inferior Wind Shield

Rion WS15 Outdoor All-weather Windshield

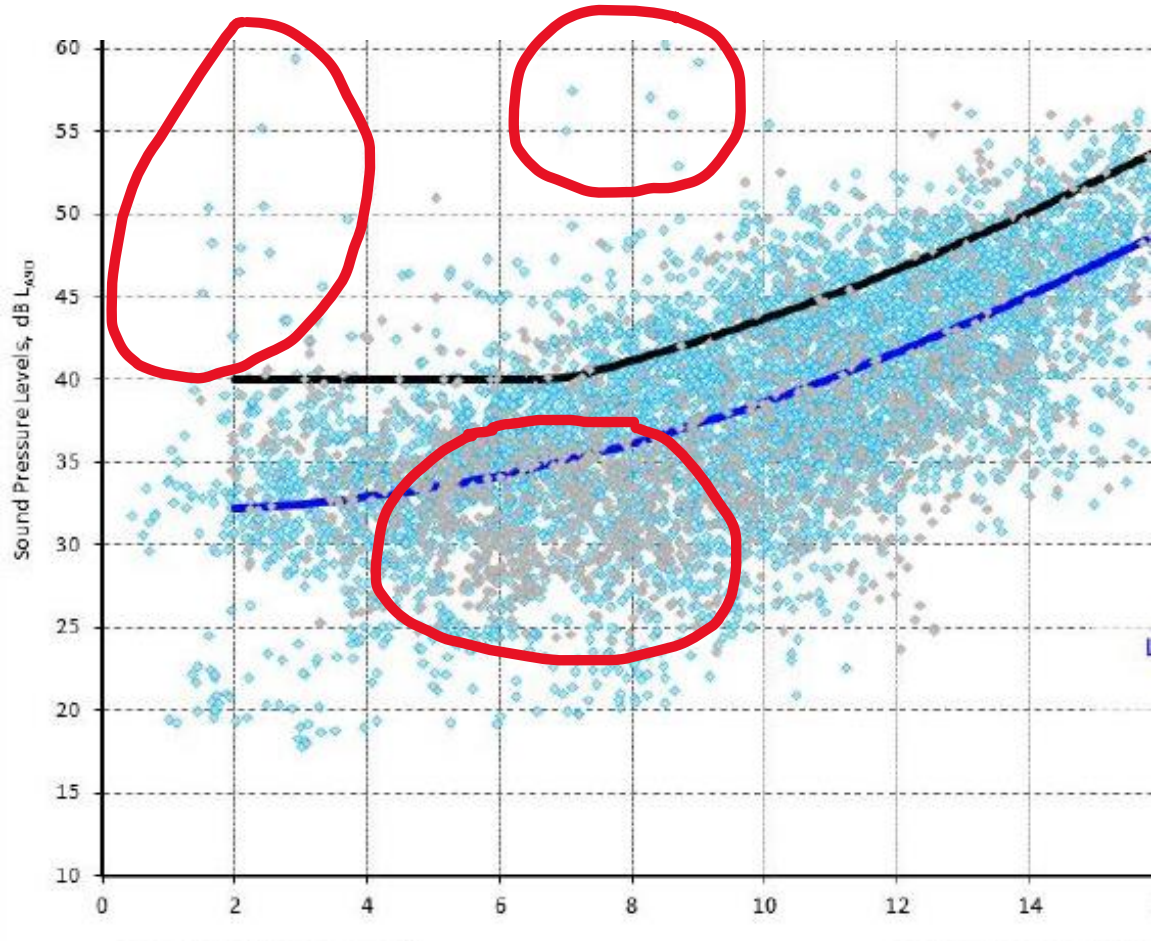
The higher the background levels the louder the wind farm
In Victoria, a compliant noise limit starts at 40dB LA90, but only if the background level is 35dB LA90 and below.
Wind farms manipulate the data points to artificially increase the background levels above 35dB(A) to trigger the +5dB rule. This allows them to increase the compliance limit.

3. They Fiddle with the Trend Line

The background trend line is an arbitrary line that the acousticians can fiddle with.

Wind farm acousticians will delete low data points or retain high extraneous noise data such as insect or rain and hail to manufacture a higher background level.

Acousticians cheat and draw the background trend line in favour of the wind farm.



Here is a wind farm acoustician's graph with a large amount of low background data points deleted and high extraneous data points retained.

The only reason an acoustician would delete low background data points is to raise the background trend line.

The only reason to retain high extraneous noise data points is to increase the background trend line.