

17 October 2012

Dear [REDACTED],

Waterloo Wind Farm Noise Complaints: the EPA's Statutory Responsibility

I refer to your letter of 2 October 2012 which I received with great disappointment.

Your letter completely overlooks my request to have you meet with affected residents at Waterloo.

The residents at Waterloo have already had experience with [REDACTED] and have no confidence that he is either prepared to listen with any sincerity to the complaints raised; or that he has the qualifications necessary to identify the source of the problem, which is both serious and real. Waterloo residents have no desire to meet with or speak to [REDACTED]; nor do I.

In one example [REDACTED] was overheard by one resident complaining about turbine noise, [REDACTED], admitting (while setting up testing equipment at her home) that the turbine noise at her residence did not comply with the EPA guidelines: [REDACTED] swore an affidavit to that effect which was filed in the ERD Court in the matter of Quinn v AGL on 27 April 2012. [REDACTED], I understand, has denied making the statement. I am happy to provide you with a copy of the sworn affidavit.

In another example, [REDACTED] prepared a report dated 2 December 2011 based on measurements taken at [REDACTED] residence on 16 November 2011.

Incredibly, the data was gathered **only** during the daytime **and for** a limited period of **5 hours**; 8.00am to 3.00pm. How on Earth a meaningful conclusion can be reached on such a pitifully limited data set recorded during the daytime is beyond me: leading independent acoustic experts I have spoken to were gobsmacked. The most serious aspect of affected residents' complaints concerns sleep deprivation and arousal; not likely to be an issue between 8.00am and 3.00pm. One of the problems is that the guidelines set the noise criteria as 40bBA or 5dBA above background, whichever is the greater. At night-time in quiet rural environments, like Waterloo, the background levels fall below 15dBA which means the turbine noise is permitted by the guidelines to be 25dBA above the true background levels.

As another example, in the report generated by [REDACTED] (page 9, note 3) he states that: "1/3 octave band analysis does not demonstrate the presence of a tone" which I understand to be a statement related to the penalty for "tonality" as set out in the EPA guidelines. Whether the noise generated by wind turbines is "tonal" so as to attract the 5dBA penalty cannot be determined using 1/3 octave band analysis, as any competent acoustic engineer will tell you, and requires narrow band analysis as per IEC Standard 61400-11, the standard referred to in the EPA guidelines.

The affected residents at Waterloo deserve much better from the statutory body expressly established to protect them from "noise pollution" as defined by the EPA Act. The "locus for the EPA" insofar as it relates to protecting households from excessive noise is established by

that Act; the establishment, monitoring and enforcement of appropriate noise guidelines in respect of wind farms falls squarely within that “locus” as you put it.

The guidelines were drafted by Sonus ([REDACTED]) acoustic consultants retained exclusively by wind farm developers. The base limit for the noise criteria set in the 2007 guidelines of 35dBA was increased in the 2009 guidelines (at the insistence of Sonus - acting on behalf of the developers they represent) to 40dBA. There is, and was, no scientific or other proper justification for that increase; an increase which can only be described as a gross relaxation of the noise standards, aimed at permitting wind farm developers to site ever larger and more powerful turbines even closer to rural homes.

The EPA is ready, willing and able to issue Environment Protection Orders to prevent the creation of excessive noise in all manner of industrial and domestic situations (panel beaters working too late; music venues allowing bands to play too late; lawn mowers starting too early). I read with amusement (and frustration) a Sunday Mail story a month or so ago about the EPA issuing such an order against a couple in the suburbs of Adelaide whose lovemaking antics were loud enough to annoy the neighbours. The EPA’s lack of interest and action in relation to complaints from excessive wind turbine noise can only be explained by institutional bias or, perhaps, worse.

The EPA continues to assert, as does your letter, that there have never been any noise compliance issues at wind farms operating in SA.

Those assertions are maintained by the authority for which you are responsible despite the fact that AGL, the operator of the “Hallett 2” wind farm near Mount Bryan, shut down 16 of its 34 wind turbines during most of 2011 because of non-compliance. And despite the fact that one of AGL’s turbine hosts near Jamestown has complained so bitterly to AGL that it has had the 5 or 6 turbines closest to his home shut down for most of the last 3 months.

In your letter you refer to obtaining expert input to assist you with responding to my letter. I would be pleased to know who that expert was.

If the expert you are referring to was [REDACTED] then I suggest you might seek proper independent advice from an acoustic engineer not engaged by the wind developers (ie other than Marshall Day, Vipac, AECOM, Sonus and Resonante). I suggest you speak with Steve Cooper of the Acoustic Group Pty Ltd, the author of the (critical) assessment of the “noise assessment” prepared by Truenergy’s acoustic consultants in relation to its Stony Gap application, recently refused by the Regional Council of Goyder on noise and health grounds.

In your letter you say that the EPA also does not have evidence that low-frequency sound/infrasound is present in the Waterloo Wind Farm area at high levels, or is associated with operation of the wind farm. The absence of that evidence is explained by the fact that the EPA has never bothered to gather it and has simply relied upon the untested assertions made by the acoustic consultants routinely engaged by the wind farm developers.

Mr Cooper has carried out detailed noise assessments at Waterloo and elsewhere demonstrating beyond all doubt that wind turbines generate high levels of low frequency noise and that the same low frequency noise is present inside the bedrooms of people complaining about sleep arousal, deprivation and other adverse health effects.

These measurements have been replicated by a number of independent acoustic engineers elsewhere in Australia and in the US, Canada and Europe; and reported in recent scientific papers (see below). Excessive low frequency noise is not a “qualitative concern”, as you put it, but a demonstrated and measurable fact. However, measuring it requires more than 5 hours testing in a paddock during the day time.

In your letter you also direct me to yet another literature review, this time from the Massachusetts Department of Environmental Protection and Department of Public Health, which you suggest shows there are no adverse health impacts arising from turbine generated low frequency noise (I note again that the EPA still claims turbines do not generate infrasound or significant levels of low frequency noise, despite never having those claims independently verified).

I suggest that the EPA is obliged to inform itself of the actual field and scientific studies being carried out and reported on this issue. For example I direct your attention to the following papers very recently published in scientific journals:

- Wind Turbine Infra and Low-Frequency Sound: Warning Signs That Were Not Heard (Richard James) Bulletin of Science, Technology & Society 32(2), p108-127;
- Wind Turbine Acoustic Investigation: Infrasound and Low-Frequency Noise A Case Study (Ambrose, Rand & Krogh) Bulletin of Science, Technology & Society 32(2), p128-141.

In addition, papers delivered by Malcolm Swinbanks and Alec Salt at the Internoise Conference in New York on 19-22 August 2012 conclude that the thresholds for audibility of low frequency turbine noise are much lower than previously understood and, even at low levels, low-frequency turbine noise has physiological effects. Again, this is not a question of “qualitative concerns” as you put it. If you cannot find these papers (which one would think the EPA should already have) I will forward them to you. Please let me know if you do not have access to them.

I point out these matters because the many rural people adversely affected by excessive wind turbine noise in SA, including high levels of low frequency noise, deserve protection from the Environmental Protection Authority.

I also point these matters out because the EPA has a statutory and common law duty to protect people unluckily situated too close to industrial wind farms; or any industrial noise source, for that matter.

I am aware of numerous groups of adversely affected rural people in SA and other States who have sought and obtained legal advice about instituting proceedings in nuisance and negligence against turbine hosts, developers, planning authorities and the EPA seeking substantial damages for the loss of the use and enjoyment of their homes and properties. Four homes have been abandoned without any compensation (so far) at Waterloo alone. Residents of at least 2 other homes are desperate to leave, but because they have nowhere to go and a lack of resources, they continue to stay and suffer. [REDACTED] finds it necessary to leave the area for several days at a time to get sleep and recover or when the weather conditions and wind direction result in ongoing adverse effects for her in her home.

The EPA is unlikely to avoid liability in damages by maintaining “a watching brief” on the Guidelines, as you put it. The liability of the Authority in damages for nuisance, negligence and/or breach of statutory duty will be determined on the evidence from those people who have abandoned their homes or people who are unable to enjoy their homes for “rest and repose”, as is their common law right. The EPA’s noise guidelines are obviously wrong if people cannot live or sleep in their own homes. Planning authorities and developers rely on those guidelines which the EPA is responsible for.

As I have said, the Waterloo community has no confidence in [REDACTED] as his efforts to protect our community have been abysmal, at best.

Once again I request a meeting with you and the affected residents.

Your personal attendance at a meeting with affected and concerned residents may well assist the EPA’s case (in any future litigation) as a demonstration of actual concern for its legal and moral responsibilities, and as a contrast to the indifference shown so far.

I look forward to hearing from you in order to arrange the meeting proposed.

Yours faithfully

Mrs Mary Morris

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