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NSW Department of Planning
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submitted via email to toby.philp@planning.nsw.gov.au

I am writing to express my serious concerns about the consequences of building the proposed wind development at Flyers Creek, in that specific location given the surrounding population. I am familiar with specific concerns of some of the residents who live in the area, who have contacted me seeking advice, and I am aware that there are a number of individuals who are noise sensitive, and are likely to be significantly adversely impacted by the audible noise alone, on the basis of current knowledge. In addition there are facilities such as a primary school, which will inevitably be adversely impacted should this development go ahead as proposed in the plans as submitted by Infigen.

The Waubra Foundation's longstanding and well founded suspicions that infrasound and low frequency noise are highly likely to be playing a part in the serious adverse health effects being reported by residents of wind turbine developments have been confirmed by the measurements obtained by Mr Steven Cooper, Acoustician, inside and outside the homes of residents between 2 and 5km of Infigen's Capital and Woodlawn Wind Developments, which were submitted as part of the Flyers Creek submission from the Flyers Creek community group.

These results have been given even further weight by the coincidental release yesterday of Mr Robert Rand and Mr Steven Ambrose's Report and Study from Falmouth, USA, funded by philanthropist Bruce McPherson, where large wind turbines have resulted in the same familiar symptoms of "wind turbine syndrome" and consequent serious health problems in the neighbouring residents, which have resulted in home abandonment. Mr Ambrose and Mr Rand themselves suffered the immediate onset of symptoms within 20 minutes of being inside one of the homes. Their report is downloadable from the following website,
(<http://www.windturbinesyndrome.com/news/2011/acousticians-confirm-wind-turbine-syndrome/>)
and I have also attached it to this submission.

It is clear that the accurate measurement of infrasound and low frequency noise inside the affected people's homes (ie full sound and vibration spectrum) in addition to the audible sound (in dBA) is urgently required at all existing wind developments. This needs to be done, together with concurrent relevant clinical studies, in the areas of sleep, cardiology/hypertension, neuroscience, endocrinology, otology, psychology, and other relevant disciplines, to properly investigate the range of problems being reported.

The distance over which symptoms are being reported is out to at least 10km from multiple sites including Waubra in Victoria and Waterloo in South Australia, and may prove to be even further. As the effect of ongoing exposure is cumulative and the apparent inevitability of worsening symptoms, we can expect on the basis of experience both internationally and in Australia that over time, the numbers of affected people will only increase.

In the meantime it is imperative that an immediate conservative precautionary approach to siting turbine developments is adopted by relevant authorities, including the NSW Planning Department, until it is clear what a safe setback distance is. Such advice is clearly outlined in the Waubra Foundation's **Explicit Cautionary Notice**, which was sent to the NSW Government Ministers and Health and Planning Departments soon after it was released on 29th June, 2011. This document is also attached to this submission, and is downloadable from our website at www.waubrafoundation.com.au.

By way of background, the Waubra Foundation was formed in 2010 specifically to advocate for rigorous independent research, to help those people whose health has been seriously adversely affected by large wind turbines, and I became the Medical Director in July 2010. My interest in this topic was stimulated after finding out that there was a wind development planned for the hills near my home, and that the reported adverse health impacts were being described in Australia as well as internationally. Prior to this I was ignorant of any connection between adverse health impacts and wind turbines, and unreservedly supported this technology.

Neither the Waubra Foundation nor myself are "anti-wind" despite being frequently and misleadingly described as such, and despite some of our directors holding strong personal views as individuals, based on their personal professional training in engineering and economics. We are, however, strongly urging that a precautionary approach must be adopted, as has been suggested by the National Health and Medical Research Council. On the basis of our field research, that distance is currently 10km but this may well prove to be insufficient as the turbines increase in size.

My personal quest for information has led to now serious concerns about this technology's reported effects on hundreds of people I am now aware of around the world who have been seriously harmed by living, working or visiting close to large wind turbines. There are a growing number of health professionals and engineers, scientists and acousticians who share my concerns, many of whom have been working in this field for some years. I have been advised by a Danish Medical contact, Dr Mauri Johansson, that representatives of the Danish Medical Association met on 13th December, 2011, and overwhelmingly decided to vote for medical research into these problems. A very recent press release, which describes the concerns of some of the Danish Acoustic and Medical professionals about the current situation is attached.

I have attached my submission to the Federal Senate Rural Wind farm inquiry, http://www.aph.gov.au/senate/committee/clac_ctte/impact_rural_wind_farms/submissions.htm (submission number 390 and additional materials no 33) which gives further detail of those specific health problems being reported. Since this was written in February 2011, I have interviewed more residents, and been contacted by other individuals affected by infrasound and low frequency noise from other sources, both in Australia and internationally.

I also refer to a recent DVD which the Waubra Foundation have produced, and which is available to be viewed and downloaded on the following website: <http://www.wind-watch.org/video-waubra.php>, called "Wind Turbines & Public Health, A Time to Act". This video "document" forms part of my submission.

Affected residents who are “crying out for help”, are being consistently ignored by all levels of government and bureaucracy in Australia. They are frequently vilified, ridiculed, and pejoratively called liars, “nutters”, NIMBY’s or described as being jealous because they are not getting income from wind turbines. This is unfortunately being perpetuated by enthusiastic supporters of the wind industry, including public health and health professionals, who have not actually spoken to these rural residents, nor have they spoken to their treating doctors to properly assess whether or not there is a problem requiring research.

In fact, these vulnerable rural residents are increasingly sick, and just want to be able to sleep in their beds at night, stay in their homes, and farm their lands without also becoming ill.

The consistent excuse for this official denial of any problem is that “there is no evidence” of the health effects, despite:

- an abundance of adverse case reports around the world (Professor Carl Phillips) <http://www.wind-watch.org/documents/properly-interpreting-the-epidemiologic-evidence-about-the-health-effects-of-industrial-wind-turbines-on-nearby-residents/>
- systematically collected data by Dr Amanda Harry (UK, 2003) and Dr David Iser (Toora, Australia, 2004)
- a landmark peer reviewed study by an American Paediatrician Dr Nina Pierpont, (2009) (see submission number 13, submitted to the Australian Federal Senate inquiry, at the following weblink: http://www.aph.gov.au/senate/committee/clac_ctte/impact_rural_wind_farms/submissions.htm)
- numerous papers in journals and presented at conferences by acousticians independent of the wind industry reporting that low frequency noise and infrasound are being emitted from these large wind turbines, (eg Moller & Pedersen <http://www.windturbinesyndrome.com/news/2011/the-bigger-they-are-the-more-lfn-denmark/> , James & Bray, <http://www.windturbinesyndrome.com/news/2011/why-big-winds-noise-measurements-are-a-big-fat-lie/>)
- a historic body of knowledge which clearly implicates low frequency noise and infrasound in causing the exact physiological and psychological phenomena we are seeing in these rural residents, (in the NIEHS report of the Toxicology of Infrasound 2001, and papers such as Qibai & Shi (blood pressure <http://www.windturbinesyndrome.com/news/2010/blood-pressures-elevating-dangerously-after-nighttime-wind-turbine-exposure-australia/>) and Leventhall, Benton & Pellear (report for DEFRA go to <http://archive.defra.gov.uk/environment/quality/noise/research/lowfrequency/> and then scroll down to the following heading: [A review of published research on low frequency noise and its effects](#)); with specific reference to page 49 where the symptoms of “low frequency noise syndrome” are listed; and
- an increasing number of concerned doctors, scientists, acousticians and others who are choosing to speak out about these problems, and who are all saying there is a need for proper research to investigate these problems thoroughly, for example <http://www.windturbinesyndrome.com/news/2011/wind-energy-and-health-special-issue-of-science-journal/>, and <http://www.wind-watch.org/documents/summary-of-new-evidence-adverse-health-effects-and-industrial-wind-turbines-august-2011/>

Importantly, the legal system is starting to recognise the problems, and it too has highlighted the need for research. The first court judgement where these adverse health effects have been acknowledged, was handed down in Ontario in July 2011.

I have quoted from that judgement below:

“This case has successfully shown that the debate should not be simplified to one about whether wind turbines can cause harm to humans. The evidence presented to the Tribunal demonstrates that they can, if facilities are placed too close to residents. The debate has now evolved to one of degree.”

p 207, Environmental Review Tribunal, Case Nos.: 10-121/10-122 Erickson v. Director, Ministry of the Environment, Dated this 18th day of July, 2011 by Jerry V. DeMarco, Panel Chair and Paul Muldoon, Vice-Chair, <http://www.ert.gov.on.ca/english/decisions/index.htm>

The CEO of the Australian National Health and Medical Research Council, Professor Warwick Anderson, made his concerns about the current situation quite clear when he stated in his oral evidence to the Australian Federal Senate Inquiry into Rural Wind Farms, 31st March 2011 reported in Hansard:

- **“we do not say that there are no ill effects.** We definitely do not say it that way” (p88)
- **“I do want to make a point to anybody who is relying on this (Rapid Review).**
We regard this as a work in progress. We certainly do not believe that this question has been settled” (p87)
- **“we believe authorities must take a precautionary approach to this.** That is what we do say in medicine anyhow, but **this is very important here because of the very early stage of the scientific literature”** (p87)
- **“the absence of evidence does not mean that there might not be evidence in the future”** (p86)
- **“we are aware of some papers that have since been published”** (p86)

I have quoted at length from Professor Anderson’s testimony, because of the way the summary statement of the NHMRC’s Rapid Review of July 2010 has been used and is still being used by politicians and elected officials around the country to assert that wind turbines are completely safe. It is quite clear from Professor Warwick Anderson’s evidence that the NHMRC in fact do NOT consider that wind turbines are safe, and that research is required.

The Federal Senate Inquiry report tabled in June 2011 in Federal Parliament indeed recommended research “as a priority”, and it also recommended that the impact of noise and vibration inside dwellings should be taken into account, that an independent complaints mechanism should be established, amongst others. The report can be found at http://www.aph.gov.au/senate/committee/clac_ctte/impact_rural_wind_farms/report/index.htm

Some of these recommendations clearly fall under the jurisdiction of the states, but almost 6 months on, NO GOVERNMENT, State or Federal, has done anything about implementing these recommendations. This is putting the health of vulnerable rural Australians at serious risk, both now and in the future, and is unacceptable. It is a fundamental failure of “the state” and our democracy when private citizens have to resort to funding the sort of acoustic data collection required to identify the problems.

I would suggest the inaction of elected officials, and the public servants which advise them, is also somewhat reminiscent of “Nero fiddling while Rome burns”, given the planned deployment of wind turbines in Australia with the passing of the Clean Energy Legislation by the Federal government, without the appropriate planning safeguards in place informed by properly conducted acoustic and medical research.

In the almost six months since our Explicit Cautionary Notice was issued as a warning to government planning departments in particular, these concerns have increased, particularly from information received from residents who have been seriously impacted by the Waterloo wind development in

the mid north of South Australia, where 3MW Vestas turbines have made a number of the local resident's lives so unbearable that they have either abandoned their homes to live in a shed, a caravan, or have relocated from their homes to other towns. Many of these residents lived over 3km away from the nearest turbine. Some have moved after advice from their treating doctor.

What has happened at Waterloo in South Australia should serve as a warning of the consequences of placing wind turbines too close to rural residents. Apart from all the other manifestations of Wind Turbine Syndrome which Dr Pierpont and others including myself have described, the Waterloo residents' sleep deprivation is extreme, their mental health is collectively severely affected, and the cardiovascular health of some of them is so bad that their treating doctors have advised them to move away and not return, unless the turbines are not turning, because of the worsening angina, hypertension (high blood pressure) and erratic diabetes control (which is stable when away from operating wind turbines). These effects have also been described internationally, in Europe and in Ontario.

The fact that these events are occurring is unmistakeable, and is being noted by these resident's rural doctors. All these doctors can do currently is recommend that their patients move away, as there is no "treatment" apart from safer siting of wind turbines AWAY from residential rural communities. For many residents, their home is their only asset. This adds enormously to the already significant stress they are under, and in turn compounds the mental health problems these residents experience. When this is coupled with the reduced access to health services generally which rural residents experience (doctors, allied health services, mental health services, access to ambulance), the cumulative impact on these individuals, their communities and their families is a huge burden.

Dr Nina Pierpont's study clearly documents the adverse effects on the health, wellbeing and learning of the children in her study, and given her qualifications as a paediatrician she is eminently qualified to discuss these. To date I have had limited information about the specific observed effects on children in Australia, however what I have heard directly from the children, their parents and their teachers in Australia, their problems are identical to the problems which Dr Pierpont described in her study.

Professor Arline Bronzaft, the world renowned expert on the effect of noise on children, shares those concerns, in both her submission to the Federal Senate inquiry and in her article in a recent journal on the effects of wind turbines on health (Bulletin of Science & Technology, Canada). The observed effects on children are profound, and these current proposed guidelines do nothing to protect the health and wellbeing of one of the most vulnerable groups in the community. On the basis of Dr Pierpont and Professor Bronzaft's concerns, and our field research I am very concerned about the effects on the children's health, cognition and learning, given that this proposed development will be so close to the school premises.

Wind developers well know there are adverse health problems, and have known for some years. Some of their employees have admitted this to various residents who have pushed them – they state that they are doing this because "the law allows it". The techniques of silencing sick and vulnerable rural residents by use of confidential agreements has historically been very effective at keeping the "adverse health story" out of the gaze of public health authorities globally, perpetuating their ignorance of the problems, and delaying the necessary medical and acoustic research which will confirm these direct causation pathways. This has been done either in court (such as Julian and Jane Davis recently in the UK High Court), or privately in agreements, such as those with Mrs Trish Godfrey of Waubra (further details of relevant media articles available via wind-watch.org or on request). I am aware of a number of other individuals both in Australia and internationally whose health has been sometimes permanently damaged who have signed such agreements.

I am also aware of families of wind turbine hosts becoming ill and being silenced by similar clauses in their lease contracts. These people are universally angry that the wind company has lied to them about “no health effects”, especially when frail and vulnerable members of their families become sick – their children and their elderly frail parents. They are also very worried that their neighbours may well sue them, as they have been advised that in these contracts it is the landholder, not the wind developer or operator, who is likely to be held liable for damage to the health of neighbours. It is this fear, which perpetuates their silence, and so the myth that “turbine hosts do not get sick” continues to flourish in some quarters.

I am told by some of the rural residents currently seriously affected by noise and vibration at Waterloo and Mt Bryan, that the EPA noise expert has told them that “there are no problems with noise from wind turbines anywhere in the world”. They tell me that their complaints are rarely investigated, by either the EPA or the wind developers, and that when they are, the developers NEVER provide the noise data to the residents. On one occasion, one of the residents was informed that they could not have the data, as “they might use it to commence legal action”.

I have been advised by my colleagues internationally that this is a global practice – quite cynical, as the developers and the acousticians know that rural residents rarely have the money to employ both their own independent acoustician (if they can find one) or to take on the wind developer in a legal case. This is additionally difficult if you are sick. When you do, if you “succeed”, as Julian and Jane Davis have done in the UK with their case which was recently settled in the UK High Court, the temptation for these desperate and sick vulnerable residents to settle out of court in a binding confidential agreement is overwhelming. This means that the judgement is never awarded, a precedent is never established, and the abuses are continued. On a global scale....

It is unacceptable to continue to “shoot the messengers” and to “vilify the victims”. This is precisely what has been happening globally, and locally, and it needs to stop immediately, and people’s legitimate concerns addressed. The research must be done as a matter of urgency, and a precautionary approach adopted in the meantime.

I have attached a number of documents of relevance.

I would like to make a formal presentation in person to the Department of Planning, and request that if further relevant information becomes available before this time that this information is accepted by the Department of Planning.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'S. Laurie', with a stylized flourish at the end.

Dr. Sarah Laurie, Medical Director