WAUBRA FOUNDATION

11th May, 2012

WIND TURBINE ACOUSTIC POLLUTION ASSESSMENT REQUIREMENTS

On behalf of the many people around the world, suffering acute and chronic health damage from living near wind turbines, the Waubra Foundation demands that relevant authorities initiate:

- ***full frequency spectrum acoustic monitoring inside and outside the homes and workplaces of people claiming health problems caused by the proximity of operating wind turbines;***

- ***the monitoring must be conducted for sufficient time, under the weather and wind conditions indicated by victims as being contributive to their symptoms;***

- ***measurements must specifically include, infrasound and low frequency noise, (dBZ or dBLin, dBA, dBC, & dBG).***

The noise monitoring must be performed by accredited acousticians demonstrably independent of the wind industry, approved by the sufferers, and in a manner that will avoid any deliberate manipulation of turbine operation to reduce the acoustic emissions during testing. The results (including all the raw data and associated sound files) must be made available to all parties.

The Rationale for These Demands

- Most health practitioners are well aware of the links between chronic severe sleep deprivation[1] chronic stress[2] and poor physical and mental health. This is exactly what residents living near wind turbines are experiencing,[3] together with other specific symptoms directly correlating with acute exposure to this sound energy.[4,5,6,7]

- Knowledge of the damage to health from exposure to infrasound [8] and low frequency noise [9] (ILFN) has been known for many years. Despite this, little is known about the current exposure levels of residents to ILFN emissions from wind turbines inside their homes.

- The link between chronic exposure to low frequency noise and chronic physiological stress, even when asleep, was clearly highlighted by Professor Leventhall et al in 2003.[10]

- Most medical practitioners have been unaware of the problems associated with exposure to ILFN. This ignorance has not been helped by acousticians and others calling such problems "annoyance" without accurate clinical diagnoses.[11]

- These symptoms have been reported to occur specifically with exposure to operating wind turbines by medical practitioners since 2003.[12,13,14,15,16,17] Symptoms have been reported by acousticians, health practitioners and residents from countries including Denmark, Sweden, Germany, United Kingdom, France, United States, Canada, New Zealand and Australia.

- Symptoms have been reported historically up to 4 km from the nearest wind turbine, and more recently characteristic symptom patterns have been reported at distances up 10km away from the nearest wind turbine[18]. This is described especially with larger wind turbines (eg 3MW), and on occasions even further away, where turbines are sited at altitude[19] or near expanses of water.

- These health problems consistently worsen over time, until the exposure ceases. Families are being advised by their treating doctors to leave their homes in order to regain their health. Many have nowhere else to go, and cannot sell their homes, so they become homeless "wind farm refugees". Others remain trapped, unable to move[20].

- Professors Moller and Pedersen, from the University of Aalborg in Denmark, have confirmed that larger more powerful wind turbines emit more low frequency sound waves as a proportion of their sound emissions[21]. These emissions are known to easily penetrate through the walls, roofs, and windows of homes and workplaces, due to the lower transmission loss of low frequencies.

- Recent acoustic survey work in the USA (Falmouth) [22] and Australia (NSW) [23] has confirmed that low frequency noise **and** pulsatile infrasound emitted by wind turbines have been measured inside the homes and workplaces of sick people, and occur when they are experiencing the symptoms of Wind Turbine Syndrome.

- Currently governments around the world do not require measurement of the full sound and vibration spectrum, do not require measurement **inside** homes and workplaces, do not require evaluation of sleep or other disturbances, but instead limit almost all assessment to audible noise (dBA) only, **outside** homes and workplaces.

Summary

The plight of people made ill by wind turbine acoustic pollution has been universally ignored by their respective governments.

The current noise assessment practices and standards are incompetent and unacceptable, and must be changed to include full spectrum acoustic monitoring inside homes and workplaces as a matter of urgency.

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