MULTI-MUNICIPAL WIND TURBINE WORKING GROUP

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RE: HEALTH CANADA WIND TURBINE NOISE STUDY

AN OPEN LETTER TO

The Right Honourable Stephen Harper, Prime Minister pm@pm.gc.ca
The Honourable Rona Ambrose, Minister of Health minister min

Contradictions and bias undermine credibility of the Health Canada Wind Turbine Noise Study

The Multi-municipal Wind Turbine Working Group is comprised of elected municipal councillors and appointed citizens from parts of Southern Ontario where approximately 30% of industrial wind turbines are concentrated. Over the past several years we have received a growing number of delegations from constituents whose health has been adversely affected by proximity to the wind turbines. It is not easy to listen to people who continue to suffer from ringing and pressure in the ears, pounding vibrations in the head and chest, nausea, dizziness and the ongoing inability to sleep. Their stories are especially disturbing because we know these people; we know they are not lying; and it is our responsibility under the Municipal Act to protect their health.

We are dismayed that the recently released Health Canada Wind Turbine Noise and Health Study has ignored the distress of real people by hiding behind meaningless "estimated" noise projections and predictive modeling rather than first making professional clinical observations based on the histories of actual sufferers. Investigation of anecdotal evidence is the foundation of all medicine. The Health

Canada study summary contains no reference to the growing body of research that contradicts the main theme of the summary. Our Grey-Bruce Medical Officer of Health, Dr. Hazel Lynn has found 18 peer-reviewed studies that "provide reasonable evidence . . . that an association exists between wind turbines and distress in humans". The Brown County (Wisconsin) Board of Health has declared its wind turbines a "public health nuisance" and a "human health hazard for all people . . . who are exposed to Infrasound/Low Frequency Noise and other emissions potentially harmful to human health".

Key findings contradict summary of results

The key findings have been released without data for verification and without peer review. Epidemiologists have pointed out that the study lacks scientific credibility. Gaps, biases and errors in methodology make it unreliable. For example, only 1234 out of the 2004 dwellings selected responded to the survey compromising its validity. Only 20% of the homes studied were "near" turbines. And yet homes up to 10 kilometres away *were* included, diluting the results from the homes near the turbines. And the serious issues of low frequency noise, cyclical sound and amplitude modulation were simply overlooked.

At the same time, the study contradicts itself. It found that wind turbine noise is "statistically related to several self-reported health effects including blood pressure, migraines, tinnitus, dizziness, and disturbed sleep". And yet the key findings which have been widely publicized claim that "no evidence was found to support a link between exposure to wind turbine noise and any of the self-reported illnesses". Does Health Canada no longer advocate the precautionary principle which calls for rigorous caution when the safety of any group is even remotely threatened, acknowledging that lack of full scientific certainty should not be used as a reason for postponing measures to protect them?

It is our belief that that the premature marketing of the key findings has been a disservice to the people of Canada, an insult to those who continue to suffer the adverse effects of the turbines, and has resulted in loss of respect and credibility for Health Canada. We await your explanation as to how Health Canada came to its conclusion that there are no health problems when obviously there are.

Yours truly,

Mark Davis, Chair Deputy Mayor, Arran-Elderslie

References

Ambrose S.E, Rand, R.W (December 2011), Adverse Health Effects Produced By Large Industrial Wind Turbines Confirmed, The Bruce McPherson Infrasound and Low Frequency Noise Study.

Arra I, Lynn H, Barker K, et al. (2014-05-23 11:51:41 UTC) Systematic Review 2013: Association Between Wind Turbines and Human Distress. Cureus 6(5): e183. doi:10.7759/cureus.183.

Bray W and James R. (2011). "Dynamic measurements of wind turbine acoustic signals, employing sound quality engineering methods considering the time and frequency sensitivities of human perception". Proceedings of Noise-Con 2011, Portland, Oregon, 25-27 July 2011. Curran Associates, 2011.

Cooper, S. The Measurement of Infrasound and Low Frequency Noise for Wind Farms (amended version). 5th International Conference On Wind Turbine Noise Denver 28-30 August 2013. Steven Cooper The Acoustic Group Pty Ltd, Sydney, NSW, 2040.

Enbom H & Enbom I (2013) "Infrasound from wind turbines: An overlooked health hazard," Läkartidningen, vol. 110 pp. 1388-89.

Hanning C & Evans A (2012) "Wind turbine noise", British Medical Journal 344, e1527.

James R. Opening Statement Nov 18, 2013 hearing. BluEarth Project, Bull Creek, Alberta.

Krogh C, Gillis L, N. Kouwen N, and Aramini J. (2011) "WindVOiCe, a self-reporting survey: adverse health effects, industrial wind turbines and the need for vigilance monitoring." Bull. Sci. Tech. Soc. 31 334-339.

Kugler K, Wiegrebe L, Grothe B, Kössl M, Gürkov R, Krause E, Drexl M. 2014 Low-frequency sound affects active micromechanics in the human inner ear. *R. Soc. open sci.* 1: 140166.

Nissenbaum M, Armani J & Hanning D. (2012) "Effects of industrial wind turbine noise on sleep and health", Noise and Health 14, 237-243.

Phillips C. (2011) "Properly interpreting the epidemiologic evidence about the health effects of industrial wind turbines on nearby residents", Bull. Sci. Tech. Soc. 31 303-315.

Salt, Alec N. and Lichtenhan, Jeffery T. "How Does Wind Turbine Noise Affect People? The many ways by which unheard infrasound and low-frequency sound from wind turbines could distress people living nearby are described". *Acoustics Today*, A publication of the Acoustical Society of America, Vol. 10, Issue 1, Winter, 2014.

Schomer P, Erdreich J, Boyle J, Pamidighantam P. A proposed theory to explain some adverse physiological effects of the infrasonic emissions at some wind farm sites. 5th International Conference on Wind Turbine Noise, Denver, 28-30 August 2013.

Shepherd D, McBride D, Welch D, Dirks K and Hill E. (2011) "Evaluating the impact of wind turbine noise on health-related quality of life", Noise and Health 13, 333-339.

Walker B, Hessler G, Hessler D, Rand R, Schomer P (2012), A Cooperative Measurement Survey and Analysis of Low Frequency and Infrasound at the Shirley Wind Farm in Brown County, Wisconsin, Report number 122412-1.

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