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November 22, 2021

**Re: Please acknowledge receipt of this email**

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A quote from a news conference held September 29, 2021 by Ontario Chief Medical Officer of Health, Dr. Kieran Moore concerning vaccine hesitancy states

@ColinDMello

Ontario's CMOH is asked whether the province should be more aggressive in combating vaccine misinformation: He says there will be a "vocal minority" in opposition whether it's WIFI, 5G or wind turbines or vaccines. "In a democracy that is enabled and appropriate." #onpoli

In response to a question from a CTV news reporter that was limited to combating vaccine misinformation Ontario's Chief Medical Officer of Health (CMOH) equated vaccine misinformation with misinformation on various other matters including wind turbines. While it is certainly clear that there is widespread vaccine misinformation that is in no way the case for industrial wind turbines (IWTs). For Ontario's CMOH to equate the two matters is inconsistent with the volumes of peer-reviewed research available that demonstrate serious harm to human health.

Dr. Moore is the Chief Medical Officer of Health for all of Ontario and it is therefore incumbent on him to be aware of the research available. It is unimaginable that Dr. Moore is not aware of the more than a decade of on-going issues caused by wind projects that are sited too close to homes in rural Ontario. Despite the volume of literature available, Dr. Moore co-authored a

response to the College of Family Physicians of Canada publication (CFP) titled 'Adverse health effects of industrial wind turbines'. Dr. David Colby is co-author of this response with Dr. Moore. Dr. Colby is also a co-author of the wind industry-backed publication for CANWEA (Canadian Wind Energy Association) and AWEA (American Wind Energy Association) of 2009 titled: 'Wind Turbine Sound and Health Effects: An Expert Panel Review'.

While in the response to the CFP article both doctors asserted they were doing their duty as physicians and public health officers, they virtually dismissed the debilitating health conditions wind turbine neighbours were suffering:

*“As physicians, it is our responsibility to ensure that we are scientific and evidence-based in our approaches, and that we do not contribute to misinformation. Andrew Wakefield's fraudulent 1998 paper on the alleged link between the MMR vaccine and autism, and the ensuing vaccine scare it created, clearly demonstrates the potential for physicians to create alarm and influence public opinion within the general population” ...*

*Competing Interests: None declared. [1]*

This is a red herring and a disturbing trend. It could contribute towards a perceived bias in favour of wind energy - Dr. Colby and Dr. Moore have both appeared on behalf of the Ministry of Environment during legal appeals to Ontario's Environmental Review Tribunals [2,3,4]. Both testified against Ontario citizens who provided testimonial evidence under oath of serious harm to health and noise annoyance which is considered an adverse health effect by Health Canada and the World Health Organization [5,6,7]. Indeed it must be said here that with limited involvement of the Public Health office, through the Green Energy Act roll out, the Ministry of Environment has led the policy initiative to install industrial wind turbines.

I and two other colleagues arranged our own meetings with the Deputy Minister(s) of Health (Canada) and Ontario to inform them of the dire situation facing many already living with wind turbines pre-GEA and those who would be exposed in the future. In my presentation to the Standing Committee on General Government Regarding Bill 150: Green Energy and Green Economy Act April 22, 2009 I informed the committee stating:

**Deputation to the Standing Committee on General Government  
Regarding Bill 150: Green Energy and Green Economy Act  
April 22 2009**

The World Health Organization in a 2000 publication (“Community Noise” by Berglund et al) made the following observations:

- "Since A-weighting underestimates the sound pressure level of noise with low frequency components, a better assessment of health effects would be to use C-weighting"
- "It should be noted that a large proportion of low frequency components in a noise may increase considerably the adverse effects on health"
- "The evidence on low frequency noise is sufficiently strong to warrant immediate concern" <sup>2</sup>

As of 2018, documents obtained through a Freedom of Information (FOI) request demonstrate rural residents living near wind energy facilities have submitted about 6,000 Incident Reports/complaints to Ontario's Ministry of Environment [8]: these Incident Reports continue to be submitted. A review of documents and wind energy developers' noise impact reports found that over 30,000 Ontario homes are located within 1,500 metres of an IWT [9]. While the average Canadian household in 2018 consisted of 2.9 people [10], by applying a conservative factor of 2.5 as an approximation of the number of people living in an Ontario home, there are approximately 92,000 people exposed to levels of noise, vibration, shadow flicker, and other factors that had not been previously encountered in their rural living environment [8]. This estimated total of 92,000 is widely distributed throughout Ontario rural areas and is closely equivalent to South Nepean's population of 92,920 - the sub-area of Ottawa - the Nation's Capital [11], Based on testimony under oath by the Ministry of Environment's expert that stated "in the range of about 35 to 40 dBA ... about six percent of people will be annoyed or very annoyed ... above 40 dBA, that number jumps to about 20 percent" and that "6 percent is "not trivial"" [12]. As a result, there is an increased risk of adverse health effects and morbidity [7] from noise annoyance for approximately 18,500 people ( $92,920 \times 0.20 = 18,584$ ).

Some, such as: babies, infants, children not yet in school, mothers and care givers of these children, elderly and those who may be unwell and/or may not be mobile could be exposed to these noise levels up to 24 hours a day, 7 days a week. As a requirement of the Green Energy Act each wind turbine installation application had to pass an Environmental Assessment before it was approved which included a noise assessment. This noise assessment is generally performed through predictive computer modelling.

If the thousands of Incident Reports/complaints about adverse effects on human health and the environment were confined to an urban setting of 92,000 people, it is suggested that the CMOH and provincial authorities would have initiated mitigation and resolved the issues being raised by rural residents years ago.

If Dr. Moore had taken the time to review the many studies and reports published on wind turbine effects in the past decade it is highly unlikely he would have made the recent statement with such negative rhetoric about rural residents forced to live in the environs of industrial wind installations to a TV audience.

His comment is consistent with his June 2013 testimony while appearing at the Ostrander Point ERT in reference to the first and only CMOH literature review of May 2010 by a previous CMOH titled: The Potential Health Impacts of Wind Turbines [2]. Dr. Moore stated under oath:

A. Okay. Well, I agree with the CMOH report that basically says sound levels from wind

turbines at common residential setbacks are not sufficient to cause hearing impairment or other direct adverse health effects. I have reviewed that document and some of the background literature, and I concur with our Chief Medical Officer of Health.

ERT Case Nos. 13-002/13-003

ENVIRONMENTAL REVIEW TRIBUNAL

When asked by ERT judge about the plausibility of a biological mechanism to cause witnesses' complaints, Dr. Moore confirmed his witness statement under oath [2]:

"In my review, I have found no new evidence since the CMOH Report to change the statement 'There is still no biologically plausible mechanism to cause the witnesses' complaints from wind turbines.'"

ERT Case Nos. 13-002/13-003

ENVIRONMENTAL REVIEW TRIBUNAL

While Dr. Moore focussed on “direct effects”, he neglected the indirect pathway of annoyance, sleep disturbance, stress and other factors that are described by the World Health Organization. Since both the direct and indirect pathways converge forming a biological mechanism [13. pg 62], the statement given to the Tribunal is limited in scope. In addition, the Decision of the first appeal of an ERT held under the GEA stated:

The Tribunal has found above that “serious harm to human health” includes both direct impacts (e.g., a passer-by being injured by a falling turbine blade or a person losing hearing) or indirect impacts (e.g., a person being exposed to noise and then exhibiting stress and developing other related symptoms). This approach is consistent with both the WHO definition of health and Canadian jurisprudence on the topic. [14. Pg 190]

ERT-based evidence plus the evidence of FOI Incident Reports indicate how the predictions of adverse health have become a reality [15]. Despite warnings from staff about problems prior to enacting legislation supporting rapid development of more wind power projects, the government proceeded with the Green Energy Act [GEA] in 2009. According to the Ministry’s own field officer in 2010, noise setback distances were unsafe for human habitation.

April 9, 2010

**MEMORANDUM**

**TO:** Jane Glassco and Dave Bray  
District Manager Supervisor  
Guelph District Office Guelph District Office

**FROM:** Cameron Hall  
Senior Environmental Officer, Guelph District Office

**Re:** Comments - March 1, 2010 draft document, "Renewable Energy Approvals  
Technical Bulletin Six Required Setbacks for Wind Turbines"

If a 5 dB adjustment is added to the 3 to 5 dBA error in the computer modelling results, then the acceptable sound level at the receptor would be 30 to 32 dBA (40 dBA minus 10 or 8 dB). Observations by several Provincial Officers at the Melancthon Ecopower Wind Plant indicate sound levels at the receptors below 35 dBA and in the range of 30 to 32 dBA would not cause or be likely to cause adverse effects in the opinion of the Provincial Officers. As such, it appears reasonable to suggest the setback distances should be calculated using a sound level limit of 30 to 32 dBA at the receptor, instead of the 40 dBA sound level limit.

While Ontario IWT projects are modeled at 40 dBA, some will be affected at 35 dBA. In addition, the Ontario REAs allow up to 51 dBA with increased wind speeds resulting in an exceedency of the 40 dBA level. [6]

A Health Canada report titled Guidance for Evaluating Human Health Impacts in Environmental Assessment: NOISE states:

In reviewing an EA, Health Canada emphasizes only those endpoints that have demonstrated a reasonable causal relationship between noise exposure and adverse human health effects. In the context of an environmental assessment, the associations that have been reported between noise exposure and hearing loss, sleep disturbance, interference with communication, noise complaints and a high level of annoyance are particularly relevant (WHO 1999, 2011). The information and knowledge that Health Canada makes available is based on the following: the modelled changes between the existing and predicted daytime and night-time sound levels (for construction, operation and decommissioning activities); predicted noise-level changes at specific receptor locations (see Appendix G) where people are or will be present; the characteristics of the noise (e.g. impulsive or tonal); and/or the type of community (e.g. urban, suburban or quiet rural area) [16].

A number of research projects were still appearing throughout the early stages of the Green Energy Act roll-out including some by regional Medical Officers of Health in Ontario as reported in this paper:

...studies were conducted between 2010 and 2015 by the Ontario Research Chair in Renewable Energy Technologies and Health, a group funded in 2010 by the Ontario

Ministry of Environment. During the Chair's 5-year study, the Ontario government approved numerous wind turbine projects that initiated operations.

A communiqué from the Medical Officer of Health, while sympathetic to the ongoing concerns said that the study analysis would not provide enough information to be able to state "whether or not the presence of wind turbines have an adverse effect on the PUBLIC health" and suggested that individuals seek resolution through the courts (emphasis of "PUBLIC" by the Medical Officer of Health). It was reported that reasons given for not participating included that due to the lack of the health unit's regulatory authority to shut down the turbines, there was no point to participate in the study [17].

As I am aware of Dr. Moore's appearances at two Ontario ERTs where 'Bradford Hill' was a significant portion of his testimony, I wish to bring the reader's attention to a recently published Review article on the Bradford Hill Criterion Description called 'Wind turbines and adverse health effect: Applying Bradford Hill's criteria for causation'. [9] The review concludes:

Based on our analysis of clinical, biological, and experimental evidence and its concordance with the nine BH criteria, we conclude that there is a high probability that emissions from IWTs, including infrasound and LFN, result in serious harm to health in susceptible individuals living and/or working in their proximity. These effects can be attributed to IWT-related events such as recurring sleep disturbance, anxiety and stress, and likely others. [18].

Dumbrille et al note that:

Incontrovertible proof of causation has tended to be an elusive goal. The debate of determining causality associated with placing IWTs near family homes is similar to past controversies around the debate of causality from the use of tobacco products and from worker exposures to asbestos and coal. The "best available evidence" is the current standard, and it is our contention that the Bradford Hill criteria are that standard. [18]

Dr. Moore's gratuitous affront quoted above is not helpful. Certainly it will not advance the government's agenda and from the evidence is not worthy of the position he holds. One cannot but wonder if he might not be best served by being more reflective and less arrogant in his public remarks.

Sincerely,

Robert Y. McMurtry

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