

**Please acknowledge receipt of this letter.**

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June 15, 2016

Copy sent by mail

Dear Prime Minister Justin Trudeau, Minister Dr. Jane Philpott, Assoc. Deputy Minister Paul Glover;

**Re: Open Letter - Industry compliance with Radiation Emitting Devices Act (REDA) and wind turbine investigation**

The purpose of this letter is to formally request a meeting with the Minister of Health and staff to discuss compliance by the wind turbine industry with the Radiation Emitting Devices Act and wind turbine industry compliance obligations, and the need to conduct an investigation of complaints relating thereto.

We have included Associate Deputy Minister Glover in this letter because he met with Dr. Robert McMurtry, F.R.C.S.(C), F.A.C.S. and researchers Carmen Krogh, BSc Pharm and Beth Harrington, BMus in July 2009 where he was made aware of the suffering that was already taking place in rural Ontario as a result of wind turbine installations.

Your Government has committed to listen to the people of Canada with respect to climate change. Mr. Trudeau's Open Letter to Canadians dated November 4, 2015 states: "Our country faces many real and immediate challenges – from a struggling middle class to the threat of climate change. If we are to overcome these obstacles, Canadians need to have faith in their government's honesty and willingness to listen. That is why we committed to set a higher bar for openness and transparency in Ottawa." [1]

We wish to take this opportunity to help you realize a safe approach to your climate change goals.

During the past eight years, the steady expansion of industrial wind technology as a source of clean energy for Canadians has resulted in adverse health events in affected communities in Canada. [2,3]

Many in Ontario and elsewhere have logged serious health complaints with proponents/operators of wind turbine projects, provincial and federal government ministries as well as wind turbine manufacturers. These serious health complaints are a result of the harmful acoustical waves and radio/electromagnetic energy emitted by industrial wind turbines which are located in proximity to homes. As previous ministers and current Minister Philpott have been informed, the adverse effects of wind turbines are not trivial.

### **HEALTH CANADA'S WIND TURBINE NOISE AND HEALTH STUDY DESIGN**

Health Canada's wind turbine noise and health [WTNH] study Design 2012 states: "The study will be conducted on a sample of 2000 dwellings randomly selected from those located near 8 to 12 WT installations in Canada." [4] [Emphasis added]

Some parents and commentators have advised Health Canada about their concerns for their children. Yet Health Canada excluded children under 18 in its WTNH study. [5] This exclusion has resulted in an unassessed cluster of a vulnerable young population.

As a result of the random selection process, we also note that 93 homes where elderly members of the community lived, were coded "out of scope" because the study subject was over 79 years of age. Despite the fact that it is recognized Canada has an aging population, this vulnerable population cluster was also not assessed. [6]

In addition, it appears that Health Canada's WTNH study did not establish pre-turbine baseline objective measurements to be compared with the measurements taken during the study. Indicators such as cortisol, blood pressure and highly disruptive sleep patterns (HDS) before and after exposure to wind turbines are crucial to assessing true health outcomes. The study design could have included objective measurements in zones where wind turbines were operating, removing the individual(s) from wind turbine exposure for a period of time (30 days or more), followed by a reassessment of the complainant upon return.

We question why Health Canada - when it had the opportunity - did not conduct individual investigations of the actual complaints rather than a stated randomized epidemiological study of a broad population while excluding children under 18 and the elderly over 79. Investigations of specific complaints are far more revealing than randomized selection. The Government of Canada had been made aware of the health issues. During the study design phase those raising health issues were not given the opportunity to be represented on the design committee in order to share collective knowledge and expertise about living with IWTs on a daily basis. During the comments phase, requests to be included in the research were dismissed by Health Canada on the basis that these individuals could be considered biased.

### **HEALTH CANADA'S WTNH STUDY**

The study was a stated cross-sectional randomized epidemiological study under the former government and it concluded revealed that high annoyance as a result of wind turbine emissions was "statistically significant". [7]

High community annoyance leads to a myriad of health outcomes including stress related symptoms such as chronic sleep disturbance, elevated blood pressure, cardiac events and depression. This is expressed in the WHO Lares study which studied the effects of noise on children:

One of the main conclusions of this work is that for noise induced sleep disturbances, traffic noise annoyance and neighbourhood noise annoyance, the identified health effects are independent of socioeconomic status and housing conditions. The elevated relative risks are expressed in the cardiovascular system, the respiratory system and the musculoskeletal system, as well as through depression. [8] [Emphasis added]

Lares also states:

Annoyance is defined as a feeling of discomfort which is related to adverse influencing of an individual or a group by any substances or circumstances. Annoyance express itself e. g. by malaise, fear, threat, trouble, uncertainty restricted liberty experience, excitability or defencelessness. With chronically strong annoyance a causal chain may exist between the three steps health - annoyance – disease.

The World Health Organizations comments on children and their vulnerability to noise:

#### VULNERABLE GROUPS OF CHILDREN

The fetus and babies

Preterm, low birth weight and small for gestational age babies

Children with dyslexia and hyperactivity

Children on ototoxic medication [9]

And that:

Children, noise and health

Impairment of early childhood development and education caused by noise may have lifelong effects on academic achievement and health. Studies and statistics on the effects of chronic exposure to aircraft noise on children have found:

Consistent evidence that noise exposure harms cognitive performance; consistent association with impaired well-being and motivation to a slightly more limited extent; moderate evidence of effects on blood pressure and catecholamine hormone secretion [10]

#### **RADIATION EMITTING DEVICES ACT**

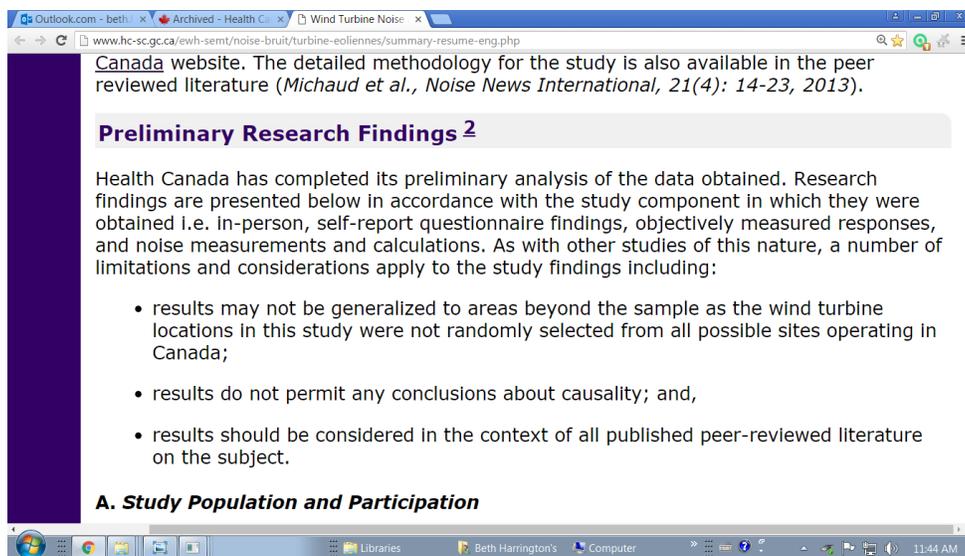
In 2014 Health Canada's WTNH study Principle Investigator Dr. David Michaud testified under oath during an Ontario Environmental Tribunal Review appeal of a renewable energy approval of a wind project. During testimony he stated that Health Canada's *Consumer and Clinical Radiation Protection Bureau* is the authority under which Health Canada's WTNH study was conducted. Dr. Michaud also confirmed industrial wind turbines fall under the Radiation Emitting Devices Act. [11]

## Consumer and Clinical Radiation Protection Bureau (CCRPB)

The Consumer and Clinical Radiation Protection Bureau is responsible for the administration of the *Radiation Emitting Devices Act*, which addresses radiation safety issues for X-ray and non-ionizing radiation devices. The *Act* covers devices used in consumer and industrial applications, as well as medical devices.

CCRPB assesses, monitors and assists in the reduction of the health and safety risks associated with radiation exposure from devices, undertakes research into the biological effects of ionizing and non-ionizing radiation, develops guidelines, standards and safety codes, provides radiation safety inspections of federally-regulated facilities containing radiation-emitting devices, and provides advice on potential health impacts of sources of environmental noise. The Bureau also provides radiation protection and safety advice to other federal departments, such as Industry Canada, Transport Canada, Solicitor General, the Labour Programme of Human Resources and Social Development Canada, etc., in support of their mandated activities. [12]

Though Health Canada's WTNH study was called a randomized epidemiology study, Health Canada's preliminary results state something different and clarified that results cannot be generalized beyond the sample locations studied. [13]



The Radiation Emitting Devices Act [REDA] is the federal law under which Health Canada's approximately \$2.2m research was conducted. The REDA specifically states that radiation is a form of acoustical waves.

The REDA states:

6. (1) Where a person who is the manufacturer or importer of a radiation emitting device becomes aware, after the device has left the person's premises, of the fact that the device
  - (a) does not comply with the standards, if any, prescribed under paragraph 13(1)(b) and applicable thereto, or

- (b) creates a risk to any person of genetic or personal injury, impairment of health or death from radiation by reason of the fact that it
  - (i) does not perform according to the performance characteristics claimed for it,
  - (ii) does not accomplish its claimed purpose, or (iii) emits radiation that is not necessary in order for it to accomplish its claimed purpose, the person shall forthwith notify the Minister. [14]

The REDA states the device [wind turbine] must comply with the standards prescribed and that the Minister is to be notified of non-compliance or defect and may investigate. However according to Access to Information and Privacy [ATIP] requests of at least 10 wind projects, not one importer/proponent/operator or manufacturer has reported complaints to the Minister from the population as required by the REDA.

Some reporting health complaints have been notified by the Minister of Health, Canada that there are presently no standards for wind turbines. This seems highly irregular considering the rising number of wind projects in the past 8 years and the ever increasing number of complaints.

The Standards Council of Canada SCC the CAN/CSA-IEC 61400-11:13 **Wind turbines** — Part 11: Acoustic noise measurement techniques (IEC 61400-11:2012, IDT) claims:

Through the collaborative efforts of Canadian standardization network members, standardization is **helping to advance the social and economic well-being of Canada and to safeguard the health and safety of Canadians**. The network's efforts are overseen by SCC. The principal objectives of SCC are to foster and promote voluntary standardization as a means of advancing the national economy, supporting sustainable development, benefiting the health, safety and welfare of workers and the public, assisting and protecting the consumer, facilitating domestic and international trade, and furthering international cooperation in relation to standardization. [Emphasis added]

## **HEALTH INVESTIGATION**

Exposure to wind energy installations has been imposed without consent on many rural residents including those who have signed this letter. Chronic exposure without remedy to the emissions from wind turbines has caused a deleterious loss of well-being and damage to health and safety.

When it comes to industrial wind turbines, federal and provincial authorities have a poor track record in protecting our physical and mental health, social well-being and safety.

We therefore want investigations of each of our situations through patient-oriented research such as is provided by Health Canada under the SPOR Strategy for Patient-Oriented Research.

**Canada's Strategy for Patient-Oriented Research (SPOR)** is about ensuring that the right patient receives the right intervention at the right time.

**Patient-oriented research** refers to a continuum of research that engages patients as partners, focusses on patient-identified priorities and improves patient outcomes. This research,

conducted by multidisciplinary teams in partnership with relevant stakeholders, aims to apply the knowledge generated to improve healthcare systems and practices. [15]

Last December Dr. Philpott dedicated \$12.5 million to the Chronic Pain Network.

**Patient-oriented research** refers to investigation that engages patients as partners, puts a focus on patient-identified priorities and improves patient outcomes. This research, conducted by multidisciplinary teams in partnership with relevant participants, aims to apply the knowledge produced to improve healthcare systems and practices. [16]

On March 31 2016, \$12.5 million was granted to McMaster for research on patient oriented research. It reiterated the role of patient oriented investigative research that focuses on individual patients.

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On May 2, 2016 Dr. Philpott granted \$2 million to University of Toronto to investigate environmental factors' impacts on health. Again, the focus is on investigation.

Four researchers at the University of Toronto and its affiliated research centres are receiving \$2-million each to investigate how environmental factors can impact health. The funding from the Canadian Institutes of Health Research was announced today by federal health minister, the Honourable Jane Philpott. [18]

These grants support the benefit of investigating how environmental factors impact patient outcomes which wind turbine-affected communities did not receive through Health Canada's WTNH study.

We request a meeting with you, Minister Philpott and your staff to hear our concerns and adverse effect complaints first-hand. Continuing to support more wind projects in proximity to homes, will likely result in an increase of affected families, including children and the elderly.

Thank you for your time and attention to this urgent matter. In the new spirit of "willingness to listen" we look forward to scheduling a meeting with you and representatives who have researched and expressed concern on this matter and with representation of those who have signed this letter.

Most sincerely,

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On behalf of:

Andrew, Bill

Andrew, Suzanne

Armstrong, Kay  
Ashbee, Barbara  
Bartlett, Susan  
Beaudry, Patricia Bond  
Beaudry, Raymond  
Black, Joan  
Black, John  
Brindley, Darlene  
Brindley, Ross  
Broniek, Denise  
Broniek, Ethan  
Broniek, Marlo  
Broniek, Robert  
Carroll, Barbara  
Chechovsky, Jeanne  
Commaert, Melissa  
Correia, Joe  
Correia, Joey  
Correia, Shellie  
Couture, Wayne  
Crawley, Paulette  
DeHaan, Claudia  
DeHaan, Dave  
DeHaan, Nellie  
DeHaan, Peter  
DeHaan, Steve  
Docken, Derwin  
Drennan, Patricia

Drennan, Shawn  
Ducharme, Doug  
Eadie, Anne  
Eadie, Doug  
Engel, Ann  
Engel, Ed  
Ernst, Pam  
Foster, Helen  
Foster, Jessica  
Foster, Rachel  
Fraser, Sandy  
Frayne, Anita  
Frayne, Paul  
George, Bob  
Gillis, Lorrie  
Gillis, Peter  
Gorman, Barbara  
Groves, Linda  
Groves, Steve  
Hartman, Jason  
Hartman, Melanie  
Haygarth, Lynn  
Hayward, Martina  
Horton, Gerry  
Horton, Nikki  
Horton, Owen  
Horton, Wyatt  
Howard, Anne Marie

Hughes, Debbie  
Huneniuk, Christina  
Hunter, Karen  
Jackie Vainik  
Jackson, Deana  
Jackson, Glen  
Jackson, Renate  
Jelinski, Eric PEng  
Johnson, David  
Johnston, Stephana  
Kay, Elizabeth  
Kay, Malcolm  
Kellar, Patti  
Kelly, Ann  
Kelly, Charlie  
Kelly, John  
Kirby, Philip  
Krane, Jame  
Krane, Jean  
Krane, Michael  
Krane, Nora  
Krane, Sylvia  
Krane, William P.  
Lamb, Kevin  
Leitch, Mike  
Lewand, Chuck  
Lewand, Robbie  
Libby, David

Lindsay, Aaron  
Lindsay, Gary  
Lindsay, Lyndsay  
Lindsay, Lynn  
Lormand, Dennis  
MacKinnon, Agnes  
MacKinnon, George  
MacLeod, Eric  
MacLeod, J. Stewart  
MacLeod, Peter  
MacLeod, Sandy  
Maidment, Floyd  
Martin, David  
Martin, Judy  
McComb, Carter  
McComb, Colton  
McComb, Lora  
McComb, Scott  
McComb, Sienna  
McLean, Catherine  
McNeilly, Anne  
Melady, Jeanne  
Melady, June Anne  
Melick, Bill  
Metzger, Bridget  
Metzger, Marc  
Metzger, Martin  
Metzger, Matt

Metzger, Monika  
Metzger, Sabrina  
Miller, Jeffrey  
Miller, Stephen  
Muller, Matt  
Muller, Michael  
Muller, Michelle  
Muller, Suzanne  
Nernberg, Clarence  
Nolan, Dan  
Nolan, Rhonda  
Ogilvy, Lyn  
Patti Hutton  
Pauchuk, Cheryl  
Pauchuk, Leane  
Pauchuk, Michele  
Pentland, Emma  
Pentland, Eugenia  
Pentland, George  
Pentland, Isabelle  
Pentland, Opal  
Pentland, Paul  
Pentland, Pearl  
Pentland, Queenie  
Pentland, Rosemary  
Portz, Bernd  
Portz, Ursula  
Reist, Marilyn

Reist, Wayne  
Retzima, Heather  
Rogers, Linda  
Rogers, William  
Ryan, Gerry  
Ryan, Karen  
Schmalz, Elaine  
Schmalz, Greg  
Schmalz, Kelly  
Schmalz, Kimberly  
Schmalz, Kristen  
Schmidt, Norma  
Schmidt, Ron  
Scholman, Hope  
Scholman, Lisa  
Scholman, Marisa  
Seeliger, Bert  
Seeliger, Virginia  
Small, David  
Smith, Trix  
Sommer, Pauli  
Sprott, Heather  
Sprott, Robin  
St. Armand, Doris  
Stachura, Carla  
Stachura, Mike  
Stauttner, Ruth  
Steep, Andrew

Steep, Claire  
Steep, David  
Steep, Marian  
Steep, Paul  
Steep, Shawn  
Stelling, Keith  
Stewart-Love, Virginia  
Teeter, Bev  
Teeter, Irvine  
Thompson, Rachel  
Van Den Bosch, Len  
Van Ooteghem, Aaron  
Wallis, Barbara  
Whitmore, Bruce  
Whitmore, Margaret  
Whitworth, Ted  
Whitworth, Tracey  
Wyls, Brenda  
Wyls, Glen  
Wyls, Kent  
Wyls, Kiera  
Zinkan, Peter  
Zinkan, Ruthann

We also mourn the loss of those who reported adverse effects since 2008 but are no longer with us:

Basser, Barbara  
Basser, Louis  
Colling, David  
Marshall, Ernie

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