Post-turbine Update

Submission: Industrial Wind Turbines can Harm Humans

Health and Social-economic impacts reported in Ontario

Health Canada Wind Turbine Noise and Health Study

Health Impacts and Exposure to Wind Turbine Noise: Research Design and Noise Exposure Assessment

Submitted by Carmen Krogh, BScPharm

February 4, 2013

Author's Note: On November 23, 2012, a submission was made on request and on behalf of twelve or more families residing in Ontario prior to start up of operations of the facility. The project has been operational for just over a month and this submission is intended to provide a post-turbine update. Information regarding this submission has been verified by the families. Any errors or omissions are unintended.

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Submitted by Carmen Krogh, BScPharm

February 4, 2013

To:

The Honourable Leona Aglukkaq Minister of Health Health Canada <u>minister_ministre@hc-sc.gc.ca</u>

Copy:

The Right Honourable Stephen Harper Prime Minister of Canada pm@pm.gc.ca

David S. Michaud, PhD Principal Investigator david.michaud@hc-sc.gc.ca

February 4, 2013

Dear Minister Aglukkaq,

Re: Health Canada Wind Turbine Noise and Health Study

Pre and Post Wind Turbine Update Health Canada: Industrial Wind Turbines can Harm Humans Health and Social-economic impacts reported in Ontario February 4, 2013 Any errors or omissions are unintended

1 Background

This submission is being made on behalf of twelve or more families (41 including children plus 8 additional family members from time to time) who have requested I make a submission on their behalf.

The project in question became operational on or about December 12, 2012. The preturbine submission stated the residents reported that "their livelihood (economic), culture and heritage, health (human, environmental, domestic and wild animals), and home are at risk as a result of a proposed wind development in Ontario."

During the construction phase, the families reported quality of life had been negatively affected due to construction activities and that stress, anxiety and socio-economic issues including the lack of acknowledgement of proponents and authorities regarding risks to health, social economic impacts, quality of life and livelihood were occurring.

2 Purpose

The purpose of the November 23, 2012 submission was to inform Health Canada, the study team and others that prior to the turbines operating, there were reports of stress, anxiety, depression, frustration, financial burdens, and social impacts on the community. The lack of resolution of their concerns and other health related issues were also reported during the pre-turbine stage.

This post-turbine update indicates that the issues reported by the families are still present and that there is a sentiment regarding a lack of social justice and remedy available.

I have provided a copy of my comments to The Right Honourable Stephen Harper, Prime Minister of Canada, Dr. David Michaud, Principle Investigator.

This submission is intended to contribute to the consultation process and study design for the *Health Canada Wind Turbine Noise and Health Study* and to request an inquiry-investigation on health and social-economic impacts prior to finalizing the study design.

3 Disclaimer

The contents of this submission should not be used to infer any bias for or against wind energy.

This submission is not to be associated with and/or used to characterize any individual and/or organization.

I have received no financial support for the research, authorship, and/or publication of this submission.

4 Introduction

This is the first time submissions have been made where families were interviewed prior to the start-up of the wind energy facility and re-interviewed after it became operational.

I continue to be in contact with those reporting the serious health and social-economic consequences that are occurring when industrial wind facilities are proposed in a quiet rural area and in close proximity to residents.

My intention is to maintain contact and monitor the families regarding health and socialeconomic impacts. An update will be provided to Health Canada periodically.

The families request that that information is made public without the names of the families.

The World Health Organisation's definition of health states:

": "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" $^{\rm 1}$

Many jurisdictions, including the Canadian federal, provincial, and territorial governments and health officials have accepted WHO's definition of health (Health Canada, 2004, vol. 1, p. 1-1)." 2

5 Particulars

The families reported in the November 23, 2012 submission that:

"This project is 10 turbines – 9 @ 106 dba, 1 @ 105 dba. The closest turbine is 724m and all other homes (ones that would be included in this study) are within 2km of turbines. As well, two homes will receive excessive flicker. A transformer station is part of the infrastructure. In the developer's application to the Energy Board no transformer station was mentioned. Several submissions have been made to Health Canada reporting health effects associated with a transformer station. ^{3,4} The project is situated in an area that is prime agriculture 1 and 2, core greenland, wetland, forests that provide habitat for a significant variety of wildlife including SARA, a great variety of birds and bats monarch butterflies which are now also at risk ,several tributaries of a river meandering throughout, cultivated acreage, significant dairy, beef, poultry, and

pig farms will be impacted by the turbines, a historic roadscape has been desecrated by the construction, the charms of century old farms destroyed, electromagnetic fields can be caused by the joint use hydro poles, potential interference with telecommunications and satellite service, and other repercussions too numerous to mention.

6 January 17, 2013:

In the November 23, 2012 submission, the families reported that for 3 years, they initiated and participated in many activities to "fight" the wind project.

The families reported that during the pre-turbine phase "No one from Health Canada or the local jurisdiction has investigated the impacts that are being imposed on these families."

During a recent follow-up interview, it is apparent the lack of caring and remedy is still affecting these families.

At this early stage, the families stated they did not want to be assuming that changes in health that they were observing were attributed to the start up of wind turbines. The hope was that no one would be affected and they would escape the negative issues.

However, residents reported:

"They could hear the turbines but it was hard to tell how this correlated to the sensations. Sometimes the turbines were loud and disrupted them when outside.

Some reported there was a pressure in the house and their heads feel like it would blow off. Some report headaches that are not typical for them.

Some are fatigued and feel they are not achieving restorative sleep. Some wake up during the night and have difficulty getting back to sleep.

There is a sense that normally excellent cognitive function is being affected and it is hard to concentrate at times.

One resident reported being insulin dependent and uncharacteristically glucose values are off substantively. The resident has experienced panic attacks, chest pressure and difficulty breathing associated with sudden awakenings. The spouse reports pain in the jaw and ears. In both these cases, this is has not been a normal occurrence.

One resident has been to the emergency room with chest pains and other symptoms characteristic of a heart attack.

One resident reported that the sound mimics a truck is coming down the road but it never gets there and never passes by.

It was noted that additional stress occurs when one family member is affected and the non effected members do not take that seriously.

One resident reports the noise resonates off the garage into the home. In addition, the air now pulsates and the resident worries there will be a loss of enjoyment of the deck in the summer.

Some nights you hear a loud thumping – sometimes a screeching noise. I had a poor sleep and woke up with a horrible headache.

It was noted the red blinking lights on the wind towers and the white ones on the met tower are very intrusive. In addition, due to poor siting at an intersection, the lights are "blinding" on the transformer station making driving at night a hazard.

Regarding the visual intrusion, a resident noted that "I seize up and get angry because it reinforces that my government, neighbours and township have put me in harm's way and I am suffering but powerless to do anything about it. My spouse is having a terrible time with panic attacks and I am having terrible headaches and pains in my head and body. There is no word from the MOE.""

Observations about animals and birds include [these changes are being observed throughout the project area]:

"Dogs that normally are not barkers now bark, some constantly. Some dogs face the turbine near the home and bark. In some cases, the dogs shake their heads and try to "burrow" in the homeowner's lap. These actions are not characteristic of the owners' dogs.

There are no signs of deer in the normally well deer-populated wood lots and areas where they have normally congregated for years. The "routes" / "trails" that are normally taken by the deer and which can be observed by deer tracks in the snow are no longer present.

The flocks of birds that normally populated areas and trees are no longer present. For example, blackbirds, cardinals, snow bunting, chickadees, and a family of hawks are gone."

7 Conclusion

The installation of industrial wind energy facilities occurs in predominantly quiet rural areas.

Non-consenting residents that have had the wind turbines imposed in close proximity to their homes are reporting health and social issues.

Canada-wind Wind Vigilance monitoring and long term surveillance systems are lacking to track the health and social-economic consequences associated with the industrial wind energy facilities in non-consenting communities.

To date, the voices of those adversely affected by operating and proposed wind turbine facilities in rural Canada have not been heard. An inquiry to investigate wind turbines and the health and social-economic issues would provide the opportunity to obtain first hand knowledge from the "New Experts" who are currently exposed; who have been exposed in the past; or will be exposed in the future; to wind energy facilities.

Health Canada should consider the harm currently being reported as described in this submission, and the future risks expected with the proliferation of more wind energy projects.

I note that Health Canada's "Mission and Vision" includes:

"Health Canada is the federal department responsible for helping the people of Canada maintain and improve their health.

Health Canada is committed to improving the lives of all of Canada 's people and to making this country's population among the healthiest in the world as measured by longevity, lifestyle and effective use of the public health care system." 5

And that Health Canada's "Objectives" include:

"By working with others in a manner that fosters the trust of Canadians, Health Canada strives to:

- Prevent and reduce risks to individual health and the overall environment;
- Promote healthier lifestyles;

- Ensure high quality health services that are efficient and accessible;
- Integrate renewal of the health care system with longer term plans in the areas of prevention, health promotion and protection;
- Reduce health inequalities in Canadian society; and
- Provide health information to help Canadians make informed decisions." ⁶

The following passages describe the impact of imposing a new noise source on quiet rural communities:

"There was an arrogant attitude and lack of consideration of the families being intruded upon during the construction phase - "they acted like they owned it".

Incidents of trespassing on private property, and a serious incident regarding damage to a driveway that almost resulted in an accident occurred.

As well, there are still strong feelings that the construction phase which occurred 7 days a week, 24 hours a day - the lights, the noise, the traffic dust, disruption, safety issues, the monitoring/following of residents by the developer's security which caused anxiety in several of the women, the presence of workers unknown to the community in close proximity to homes at night which affected one woman, the interference with farming activities, safety issues such as trucks driving at high speed and the general lack of respect and general courtesy towards the residents will not be soon forgotten.

Imposing these on us is poorly received.

It was predicted that the world would end December 12, 2012, and for us, this was the end of our world. Our day ended December 12, 2012 – the day the wind turbines started turning."

•••

"I have a difficult time looking at the wind turbines surrounding me. They are always in my view. I have no peace at home and this makes me angry. I used to love my surroundings – I loved my view. Now it has been taken away. I loved the country. I came here from Toronto to get peace and quiet. The wind turbines do not belong here – you can't hide them. They represent the deceit, the corruption, the loss of rights. They are noisy and loud, there is a swooshing noise, and they wake you up and you can't get back to sleep. It's winter and this is with the windows closed. I am nervous about what it will be like in the summer with the windows open. I worry about the children who live near by and the other children in other communities. If they have problems concentrating or learning, they get one chance at this. How can the government do this to us?"

To conclude, health related issues are being reported. The social issues reported pre-turbine are still prevalent.

The 12 or more families (41 members including children plus 8 additional family members from time to time) request that Health Canada become involved to assist with resolution in the event health, social economic impacts, quality of life and livelihood continue to be negatively affected.

Respectfully submitted on behalf of twelve or more families (41 including children plus 8 additional family members from time to time),

Carmen Krogh, BScPharm Ontario Cell 613 312 9663 carmen.krogh@gmail.com

³ Whitworth_Submission_Health Canada study_wind turbines_ August 31, 2012 and Sept 20 2012

⁴ Brindley_Health Canada Submission Nov 21 2012 FINAL

⁵ Health Canada, About Health Canada, About Mission, Values, Activities, Retrieved from <u>http://www.hc-sc.gc.ca/ahc-asc/activit/about-apropos/index-eng.php</u>, Cited August 24, 2012

⁶ Health Canada, About Health Canada, About Mission, Values, Activities, Retrieved from <u>http://www.hc-sc.gc.ca/ahc-asc/activit/about-apropos/index-eng.php</u>, Cited August 24, 2012

¹ World Health Organization. (1948). Preamble to the constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948. Cited Krogh, CME, (2011), Industrial Wind Turbine Development and Loss of Social Justice? Bulletin of Science Technology & Society 2011 31: 321, DOI: 10.1177/0270467611412550, http://bst.sagepub.com/content/31/4/321

² World Health Organization. (1948). Preamble to the constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948. Cited Krogh, CME, (2011), Industrial Wind Turbine Development and Loss of Social Justice? Bulletin of Science Technology & Society 2011 31: 321, DOI: 10.1177/0270467611412550, http://bst.sagepub.com/content/31/4/321