

Multi-Municipal Wind Turbine Working Group

Thursday, April 13, 2017 at 7:00 p.m.
 Chesley Fire Hall
 211 1st Ave N., Chesley, Ontario

MINUTES

A meeting of the Multi Municipal Wind Turbine Working Group was held on Thursday, April 13, 2017 at the Chesley Fire Hall. The Chair, Stewart Halliday, welcomed new members from the Township of West Lincoln, Joann Chechalk and Dave Bylsma to the Committee.

Participating Municipalities Present:

Municipality	Name of Members in attendance
Arran-Elderslie	Mark Davis (Vice-Chair), Doug Bell
Brockton	Steve Adams, Philip Englishman
Central Huron	Alex Westerhout
Chatsworth	Scott Mackey, Tony Clark
Georgian Bluffs	Dwight Burley, Carol Barfoot
Grey Highlands	Stewart Halliday (Chair), Larry Close
Kincardine	Randy Roppel
Meaford	André Den Tandt
Northern Bruce Peninsula	Patricia Greig, Linda Weatherhead
South Bruce Peninsula	Ana Vukovic
West Grey	Carol Lawrence
West Lincoln	Joann Chechalk, Dave Bylsma

Participating Municipalities Absent:

Bluewater
Huron-Kinloss
Wainfleet

The following members of Staff were present:

Teresa Gowan	Arran-Elderslie	Secretary
Bill Palmer	Saugeen Shores	Technical Advisor

Others in attendance were:

Warren Howard	North Perth
Mike Stachura	Ashfield-Colborne-Wawanosh
Carla Stachura	Ashfield-Colborne-Wawanosh
Sheldon Weatherhead	Northern Bruce Peninsula
Dave Hemingway	Central Huron
Patti Kellar	Bluewater
Doug Ducharm	Bluewater
Heather Huffton	Grey Highlands
Gary Fohr	Grey Highlands

1. ADOPTION OF THE AGENDA

Moved by: Ana Vukovic
Seconded by: André den Tandt

That the Agenda for the Multi-Municipal Wind Turbine Working Group meeting of April 13, 2017 be received and adopted as distributed by the Recording Secretary.

Carried

2. DECLARATION OF PECUNIARY INTERESTS:

No disclosures of pecuniary interests were made by the Committee.

3. APPROVAL OF MINUTES

Moved by: Ana Vukovic
Seconded by: Randy Roppel

That the Multi-Municipal Wind Turbine Working Group adopt the minutes of the last Committee Meeting held March 9th, 2017, as circulated.

Carried

4. DELEGATIONS

4.1 Warren Howard addressed the Committee and presented a PowerPoint presentation titled "Observations on Regulation of Wind Noise Emissions." The presentation reviewed the MOECC approval process. Under EPA Section 9, a person shall not discharge a contaminant into any part of the natural environment if the discharge may cause an adverse effect. A contaminant means any sound, vibration, radiation or combination of any of them resulting directly or indirectly from human activities that causes or may cause an adverse effect. EPA definition of "adverse effect" means one or more of (a) harm or material discomfort to any person, (b) an adverse effect on the health of any person (c) impairment of the safety of any person or (d) loss of enjoyment of normal use of property. Warren reviewed the restrictions on adverse effects.

The presentation included reviewing REA approvals for audible noise performance limits for wind farms. Warren included a chart indicating infrasound levels in a citizen's home. He also reviewed EPA Remedies for Stop Orders, in that when the Director, upon reasonable and probable grounds, is of the opinion that a source of a contaminant constitutes an immediate danger to human health or the health of any person may issue a Stop Order. Warren stated that there have been a few first cases raised with the MOECC which have targeted a few straight-forward situations,

requesting an investigation under Section 14.1 to confirm the presence of infrasound, and requesting the issuance of a Stop Order to address health situations.

- 4.2 Stewart Halliday introduced Kevin Dooley to the Committee. There was an interview from the Dale Goldhawk radio show circulated to the members which included Kevin's background as an engineer with Pratt & Whitney Canada for 40 years and his work as an inventor with over 100 US patents. Kevin addressed the Committee to provide information on a device he is developing with Elwood Morris, a former co-worker at Pratt & Whitney, to suppress infrasound in homes. In 2014 they did some research work which led to a device to cancel infrasound inside a building.

Kevin explained to the Committee that there is natural infrasound which can occur due to barometric pressure changes. Natural infrasound is random and is measured the highest near large bodies of water, such as Niagara Falls. Natural infrasound doesn't measure easily in a home. Kevin explained that there is also cyclical infrasound which is a tonal type of noise such as a hum or whistle and can be below the frequency that we can hear. Cyclical infrasound penetrates homes much more readily than natural infrasound. Cyclical infrasound can get in a home anywhere that air can get in, it's in the movement of air that comes in and out of the house. They have developed a device that stabilizes the pressure in enclosed spaces. The device looks like a sound speaker and is about 15" square and 32" high. Kevin and his partner started beta testing this infrasound suppression system in a few homes in early 2016.

Kevin reviewed with the Committee the results of these three beta tests. The residents of the homes noticed a difference after the device was installed. These people were suffering severe effects of infrasound as they were unable to sleep or even stay in their homes due to the wind turbine infrasound. One individual suffered such severe ill effects of infrasound, that he was able to sleep inside his car as he was unable to sleep in his own home. Once the device was installed, the people noticed that they were able to sleep better and were able to stay in their homes. However, at one location when the wind came from the East, the effects of the infrasound reappeared. At another location, when there was a strong wind, the effects of infrasound came back. Kevin stated that since the beta tests, they have made improvements to the infrasound suppression device and hope to market it later this year.

- 4.3 Andy Metelka addressed the Committee and presented results of the study he conducted in Grey Highlands. Andy's company was hired to conduct acoustic testing of three homes near industrial wind turbines in Grey Highlands both before the wind turbines were turned on and after the wind turbines started turning. Andy stated that when he was able to begin his testing, the industrial wind turbines had already started

operating and he was unable to conduct the acoustic testing before they began operating.

Andy's acoustic tests were taken both indoors and outdoors. The homes were at varying distances from industrial wind turbines. Andy stated that the proposed standard testing for amplitude modulation is not going to work because the noise from industrial wind turbines are harmonically related. Andy set up the microphones at the three homes and left the system record continuously for three months. He was able to monitor the systems remotely. His data also included wind speed, direction and weather. He was able to measure low frequency infrasound and he was able to determine that it is the lowest frequency of a pulse that comes into the home. The pulse comes from when the industrial wind turbine blade passes in front of the tower.

Andy's visual presentation showed the location of the three homes in relation to industrial wind turbines, the type of home structure, and the location of his microphones for gathering the data. He showed a number of slides indicating the measurements of sound at each location. The data included all types of sound, including background noise such as crickets and day to day family living noise (e.g. doors closing, appliance noise, etc.). Andy was able to distinguish the levels of various sounds and noted that there was a definite spike in sound levels occurring at a constant rhythm which was attributed to the industrial wind turbines.

Andy advised that he was going to be attending the Wind Turbine Noise Conference in Rotterdam in May and will be presenting his data at that conference.

5. BUSINESS ARISING FROM THE MINUTES

5.1 Stewart Halliday advised the Committee that he was speaking with Ron Higgins, Mayor of the Township North Frontenac and who is also the Deputy Warden for the County of Frontenac. Stewart said that Ron Higgins has not proceeded any further with developing a wind turbine working group in his area. Ron Higgins stated that the new PC Energy Critic is Todd Smith an MPP for Prince Edward-Hastings which is close to his area. Ron Higgins stated that he was speaking to Todd Smith and he advised Ron that the PC party is interested in getting input for their policy platform for the next election. Stewart asked the Committee if there were some issues that they could put forth and he will personally deliver it to Ron Higgins who will forward to Todd Smith. A discussion followed about how to present ideas. A comment was made that only 4 or 5 crisp ideas that are politically saleable would be the best format. Stewart asked members to send ideas to the Recording Secretary. Stewart said that he needs feedback from the Committee to present ideas to Ron Higgins.

Warren Howard stated that discussions are going on now to determine policies for the PC party.

- 5.2 Stewart Halliday told Committee that we have agreed to contribute \$200.00 in memory of Dave Colling. Stewart will speak more with Wilf Gamble at the next Saugeen Conservation Authority meeting to determine where best to put this donation.
- 5.3 Stewart Halliday suggested a sub-committee be formed with approximately 5 committee members to come up with suggestions to use the reserve funds of the Committee. Keith Stelling suggested looking at the Terms of Reference with regard to using the funds. Once we determine how to use the funds, local councils may need to approve the use.
- 5.4 Mark Davis spoke with Bill Walker about issues the Committee have been dealing with and Mark suggested that maybe the easiest way for the PC party to say that most industrial wind turbines are non-compliant with their approvals. Bill Walker was going to contact Bill Palmer to get more detailed information. As of this meeting date, Bill Palmer had not heard from Bill Walker MPP.

6. NEW BUSINESS

- 6.1 Dave Hemingway advised the Committee that the video from the bus tour in June 2016 has been edited and he will be able to show the video at the May meeting. The Committee agreed that the people whom they visited on the bus tour be invited to view the video. The Recording Secretary will contact the people and invite them to the May meeting.

7. FOR INFORMATION

- 7.1 No discussion on updates from municipalities occurred at this meeting.

8. DATE AND LOCATION OF NEXT COMMITTEE MEETING

The next meeting date is scheduled for Thursday, May 11, 2017, at 7:00 p.m. at the Chesley Fire Hall, 211 1st Ave. N., Chesley.

9. RESOLUTION TO MOVE INTO CLOSED SESSION AND GENERAL NATURE THEREOF (includes appointed Councillor(s) and citizen appointee)

Not Required

10. RESOLUTION TO RECONVENE IN OPEN SESSION

Not Required

11. ADOPTION OF RECOMMENDATIONS ARISING FROM CLOSED SESSION (if any)

None

12. ADJOURNMENT

Moved by: Randy Roppel
Seconded by: Carol Barfoot

That the meeting be adjourned to the call of the Chair.
The meeting was adjourned at 9:10 p.m.

Carried

Original Signed by

Mark Davis, Vice-Chair

Original Signed by

Teresa Gowan, Recording Secretary