

Multi-Municipal Wind Turbine Working Group

Thursday, December 14, 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, December 14, 2017 at the Chesley Fire Hall.

Participating Municipalities Present:

Municipality	Name of Members in attendance
Arran-Elderslie	Mark Davis (Vice-Chair), Doug Bell, Keith Stelling
Brockton	Steve Adams, Dean Leifso, Philip Englishman
Central Huron	Alex Westerhout
Chatsworth	Scott Mackey, Elizabeth Thompson, Tony Clark
Georgian Bluffs	Dwight Burley
Grey Highlands	Stewart Halliday (Chair)
Kincardine	Randy Roppel
Meaford	André den Tandt
West Grey	Carol Lawrence

Participating Municipalities Absent:

Bluewater
Huron-Kinloss
Northern Bruce Peninsula
South Bruce Peninsula
Wainfleet
West Lincoln

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
Wayne Couture	Huron-Kinloss
Dave Hemingway	Central Huron
Norma Schmidt	Kincardine
Gary Fohr	Grey Highlands
Doug Dingeldein	Grey Highlands
Rick Chappell	Ministry of Environment and Climate Change
Andrew Barton	Ministry of Environment and Climate Change

1. ADOPTION OF THE AGENDA

Moved by: Alex Westerhout
 Seconded by: Randy Roppel

That the Agenda for the Multi-Municipal Wind Turbine Working Group meeting of December 14, 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: Dwight Burley
Seconded by: André den Tandt

That the Multi-Municipal Wind Turbine Working Group adopt the minutes of the last Committee Meeting held October 12th, 2017, as circulated.

Carried

4. DELEGATIONS

The length of delegations have been extended by the Chair for the purpose of this presentation, as the Committee has requested that the MOECC representatives attend a Committee meeting. This section of the meeting was video recorded by Dave Hemingway.

Stewart welcomed Rick Chappell, District Manger and Andrew Barton, District Supervisor of Ministry of Environment and Climate Change in Owen Sound to the meeting.

4.1 Rick Chappell, District Manager from Owen Sound, Ministry of the Environment and Climate Change and Andrew Barton, the District Manger, Ministry of the Environment and Climate Change attended the meeting and presented a Powerpoint Presentation titled "Renewable Energy and Wind Turbine Facility Approvals" which dealt with Complaints, both Health and Noise and Ministry Compliance Approach both Proactive and Reactive Compliance Activities and Qualitative and Quantitative Noise Assessment.

Rick asked Andrew to present the Powerpoint Presentation to the Committee.

Andrew reviewed what requires a Renewable Energy Approval and pre-September 2009 it was ECA where the proponent had to complete an environmental assessment and post-September 2009, REA established for renewable energy projects established minimum setbacks, acoustic assessment reports, etc. Andrew reviewed the rules for the

Environmental Review Tribunal (ERT) and key information that is found in Wind Facility Approval REA.

Andrew continued reading the PPT presentation and reviewed issues of Complaints such as noise, shadow flicker, health and safety lights. Under the Grey Bruce Health Unit heading Andrew mentioned about the report in 2013 that Dr. Hazel Lynn and Dr Ian Arra prepared "Association Between Wind Turbine Noise and Human Distress." The points Andrew stated were that the review demonstrated that an association exists between wind turbines and distress in humans, but not that wind turbines caused distress; the review noted that "the distress could be due to factors other than actual noise exposure"; the review concluded that there was a creditable link between turbines and distress that warranted further research.

Another slide referencing Health Canada's study stated that Health Canada's mandate includes science-based advice to federal departments and provinces on the potential impacts of wind turbine noise on community health and well-being. Further stated that in 2014 Health Canada published their summary of results (final results published in 2016). Health Canada indicated that the findings do not support a link between wind turbine noise and health impacts including sleep disturbance, chronic health conditions, perceived stress and quality of life. The findings did indicate an increase in community annoyance as noise from wind turbines increases.

Andrew reviewed the Council of Canadian Academies (referred to as CCA) stated that it is an independent, not-for-profit organization that began in 2005 and supports independent, authoritative, and evidence-based expert assessments that inform public policy development in Canada. The slide stated that in 2015 the CCA released a report titled "Understanding the Evidence: Wind Turbine Noise" The report determined that for most of the identified symptoms the evidence is inadequate to draw a direct link between wind turbine noise and a negative health effect. However the report claims that there is sufficient evidence of a causal relationship between exposure to wind turbine noise and annoyance.

Low Frequency and Infrasound - This slide stated that components of wind turbine sound, including infrasound and low-frequency sound, have not been shown to present unique health risks to people living near wind turbines. The Health Canada study states that "The level of low frequency noise and infrasound were found to be below levels that would be expected to cause harm to human health." In April 2015, the International Wind Turbine Noise Conference was held in Glasgow and findings at that conference indicated that there was no scientific evidence to indicate that exposure to infrasound at the levels experienced can directly impact human health. Infrasound and low frequency noise are subjective areas for which the ministry continues to monitor scientific

literature. The ministry is also monitoring the development of a new international standard being proposed by the International Electrotechnical Commission (IEC) regarding the measurement of infrasound and low frequency noise.

Tonal Noise and Amplitude Modulation - This slide stated that tonality is addressed in the Compliance Protocol. If tonality is discovered through the complaint process or acoustic audit then an assessment is warranted. If the assessment confirms a tone meriting a penalty then the penalty as described in the Protocol is applicable. Noise assessments of wind turbines includes aerodynamic noise and other noises (interaction of multiple turbines) that may be described as "amplitude modulation". Amplitude modulation does not attract a 5dB penalty. All audible noise emitted from a wind facility will form part of the noise assessment. The MOECC will continue to review literature and research projects throughout the world in order to be informed of the most updated understanding of this issue.

Technical Assessment and Standards Development - The ministry continues to actively review emerging peer reviewed scientific, health, acoustics and engineering studies to strive for continuous improvement relating to wind turbines. As new information comes to light, we will review and amend our requirements as appropriate. The ministry's Technical Assessment and Standards Development Branch, provides toxicological, engineering and risk assessment expertise in support of ministry policies, regulations and programs including the renewable energy program. The Technical Assessment and Standards Development Branch is one of the branches within the ministry that the District Office staff seek advice from when responding to queries on peer reviewed scientific, health, and engineering studies relating to noise from wind turbines.

Ministry Compliance Approach - Compliance Inspections - Pre-Construction Inspection is conducted after REA issued but prior to construction, ensure wind facility owner/operator understands their REA conditions and requirements. Post-Construction Inspection is conducted within a year of operation, ensure wind turbines are constructed in the approved locations; ensure all non-participating receptors have been identified and ensure that the various conditions of the approval and legislation are being met.

Compliance Strategy - for issues of non-compliance staff are encouraged to use both voluntary and mandatory abatement tools - Voluntary Abatement Tools - proponent takes actions to address issues identified Mandatory Abatement Tools - ministry issuance of an instrument (i.e. ticket, order, referral) to address the incident or violation.

Proactive Compliance Activities - ministry initiated site visits, visits are conducted at a variety of times (not limited to office hours), the

Environment Officer makes proactive visits to facility to undertake field observations (qualitative assessment), if the Environment Officer notes a potential impact from wind turbine noise a quantitative assessment is made using a noise meter.

Reactive Compliance Activities - A qualitative assessment should be the first step in evaluating complaints. This involves talking to the complainant and making field observations. May be conducted concurrently with ministry noise monitoring, may be repeated on multiple occasions particularly if there are complaints about additional factors or if there is a change in facility operation.

Quantitative Noise Assessment - two types of noise monitoring can be conducted at a sensitive receptor and/or complainant's residence; 1. Attended screening measurements - conducted and data reviewed by ministry staff 2. Unattended noise monitoring - equipment set up by ministry staff, acoustic recordings taken by resident over 1 week period, data reviewed by ministry Noise Engineers. Results of noise monitoring is used to inform whether a more comprehensive assessment is warranted and/or if a Noise Abatement Action Plan is required. Best time to conduct noise monitoring is during times when: background sound level is very low; <4 mps wind speed; no biota or leaves; turbine(s) is/are operating near maximum capacity (85% or greater).

This was the end of the PPT presentation. Rick and Andrew made themselves available for questions from the Committee.

The notes taken from Question and Answer section of the video recording is an attachment to these minutes.

4.2 Bill Palmer's presentation was put forward to the January meeting.

5. BUSINESS ARISING FROM THE MINUTES

6. NEW BUSINESS

7. FOR INFORMATION

8. DATE AND LOCATION OF NEXT COMMITTEE MEETING

The next meeting date is scheduled for Thursday, January 11, 2018, 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: Dwight Burley

That the meeting be adjourned to the call of the Chair.
The meeting was adjourned at 8:39 p.m.

Carried

Original Signed by

Stewart Halliday, Chair

Original Signed by

Teresa Gowan, Recording Secretary