MULTI-MUNICIPAL WIND TURBINE WORKING GROUP

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April 22, 2022

Dear Mayor and Members of Council,

The mandate of the Multi Municipal Working Group (MMWTWG) is to share, discuss and advocate best practices and other means to address mutual concerns regarding proposals to locate and install industrial/commercial wind generation facilities to all the relevant Government Ministries and Agencies.

At the April 14, 2022 meeting of the Multi-Municipal Wind Turbine Working Group passed the following resolution:

Agenda Number: 7.2.4 Resolution No. MMWTWG-2022-17 Title: Setback Recommendation Date: Thursday, April 14, 2022

Moved by: Bill Palmer - Citizen - Municipality of Arran-Elderslie Seconded by: Bob Purcell - Mayor - Municipality of Dutton Dunwich

To address concerns related to noise and the public safety of citizens, the Multi Municipal Wind Turbine Working Group recommends that the following setbacks from wind turbines should be adopted in each municipality:

- 1. 2000 metres from any wind turbine and any noise receptor, including homes, schools, places of worship, and locations where citizens go for relaxation, such as parks and community centres.
- 2. 1200 metres from any wind turbine and the lot line of any nonparticipating citizen, or a place where a citizen can access, such as public roadways, or waterways.

Further, that the Recording Secretary is empowered to prepare a letter to all municipalities in Ontario and the responsible Ministries, (Ministry of the Environment Conservation and Parks, and Ministry of Municipal Affairs) to be signed by the chair of the MMWTWG for immediate release.

CARRIED

Through changes made to the Planning Act in 2019, the province returned powers to municipalities to ensure that they have the final say on energy projects in their community. Proponents of new projects need to confirm that their project is permitted by the municipalities' zoning bylaws. Now that there are reports that sites are being sought for new wind turbines, it is timely that municipalities review the provisions in their zoning bylaws and update them as appropriate.

Key elements in zoning bylaws are setbacks between activities. While experience with the existing wind turbine projects in Ontario and changes in other jurisdictions indicate that the current provincial setbacks are inadequate to protect health of nearby residents. Municipalities are free to establish their own setbacks used in local bylaws. It is in this context that the MMWTWG is providing these recommendations to your municipality.

Attached is a summary of information related to setbacks. It includes a review of different setbacks based on a review by the Polish Public Institute of Health as well as information on setbacks used in other jurisdictions. The 2000 m setback from noise receptors is designed to provide protection from audible noise as well as low frequency noise and infrasound which travels greater distances that could occur from multiple turbines permitted by the current setback of 550 metres. Similarly, although 1200 metres may be a larger distance than we have observed significant pieces of blades travel from the towers, it provides a buffer to give protection from fire, or shadow flicker, that can cause problems further than blade pieces fall.

The Multi-Municipal Wind Turbine Working Group invites the participation of all municipalities across Ontario. To obtain details regarding the group's mandates, Terms of Reference and how to be come a Member, please reach out to our Recording Secretary, Julie Hamilton at <u>deputyclerk@arran-elderslie.ca</u>. Size in numbers provides a louder voice to be heard!

Warmest Regards, On behalf of the Chair, Tom Allwood

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Julie Hamilton, Recording Secretary Deputy Clerk Municipality of Arran-Elderslie, 1925 Bruce Road 10, PO Box 70 Chesley, ON NOG 1L0 519-363-3039 ext. 105 deputyclerk@arran-elderslie.ca c. Honourable David Piccini, Minister of Environment, Conservation and Parks, <u>minister.mecp@ontario.ca</u>, Honourable Steve Clark, Minister of Municipal Affairs and Housing, <u>minister.mah@ontario.ca</u>

Encl.

Setback Information

Current Ontario Rules – Regulation 359/09

Receptors	550 metres	Audible noise only based on 40 dBA
Property Lines	Blade length plus 10 metres	Typically 60 metres

Polish Public Health Institute Review Audible Noise .5 to .7 km No adjustments for pulsing/tonal quality Total Noise 1.0 to 3 km Includes low frequency noise & pulsing/tonal adjustments Shadow Flicker 1.2 to 2.1 km Depends on height of turbine Ice Throw .5 to .8 km Fragments of ice thrown from blades **Turbine Failure** .5 to 1.4 km Potential distance for blade fragments

Examples of Setbacks

Jurisdiction	Set-back	Comments
Dutton-Dunwich, ON	2,000 M	To receptors
Mason County, Kentucky	1,600 M	To property line
Caratunk County, Maine	2,414 M	To property line
Wyoming	1,110 M	5.5 X height to property line
Bavaria, Germany	2,073 M	10 X hub height plus blade length
Sachsen, Germany	1,380 M	10 X hub height
Northern Ireland	1,386 M	10 X rotor diameter
Poland	2,073 M	10 X hub height plus blade length