

**THE CORPORATION OF THE TOWNSHIP OF WARWICK**

**BY-LAW NUMBER 33 OF 2008**

**(Being a By-law to Regulate Wind Energy Conversion Systems)**

**WHEREAS** the Council of the Township of Warwick ('Township') is empowered under section 130 of the Municipal Act, 2001, R.S.O, as amended, to pass by-laws regulating matters for purposes related to the health, safety and well-being of the inhabitants of the Town;

**AND WHEREAS** the Council of the Township of Warwick may pass by-laws to prohibit and regulate public nuisances, including matters that, in the opinion of the Town, are, or could become or cause public nuisances under Section 128 of the Municipal Act 2001, R.S.O. 2001, as amended;

**AND WHEREAS** the Council of the Township of Warwick considers the establishment of wind energy conversion systems in the Township to be or have the potential to become or cause public nuisances by compromising the health, safety and well-being of the inhabitants of the Township through issues including but not necessarily limited to noise emissions, visual impact, and structural failure;

**NOW THEREFORE** the Municipal Council of the Corporation of the Township of Warwick enacts as follows:

**1. DEFINITIONS:**

For the purposes of this by-law:

- a) **"Wind turbine"** means a wind turbine as defined in By-law 54 of 2000, passed under Section 34 of the Planning Act, R.S.O.
- b) **"Person"** means the registered owner or any individual, firm or corporation having control over, or possession of any portion of the building or property under consideration and including the persons in the building or property.
- c) **"Township"** means the Municipal Corporation of the Township of Warwick or the geographic area of the Township of Warwick as the context requires.
- d) **"Sensitive Use"** means the nearest wall of any institutional use or house on a separate property or the nearest property line of any vacant residential lot, mobile home park, campground or land in an Institutional or Open Space (OS1 or OS2) Zone, as identified in By-law 54 of 2000, being the Township's comprehensive Zoning By-law.

**2. APPLICATION:**

This By-law shall apply to all lands within the geographic limits of the Corporation of the Township of Warwick.

**3. PROHIBITIONS:**

- a) Except where a minor variance has been granted by the Township's Committee of Adjustment under Section 45(1) of the Planning Act, R.S.O., no person shall install a wind turbine except in compliance with the minimum setbacks and size restrictions contained in By-law 54 of 2000, being the comprehensive Zoning By-law.
- b) Except where stated to the contrary in a Site Plan Agreement entered into with the Township under Section 41(2) of the Planning Act, R.S.O. or a resolution passed by the Township's Council, the colour of a wind turbine and its tower shall be white, off-white, light grey or light blue.
- c) Except where stated to the contrary in a Site Plan Agreement entered into with the Township under Section 41(2) of the Planning Act, R.S.O. or a resolution passed by the Township's

Council, no lighting shall be permitted on a wind turbine or its tower.

- d) No person shall erect a wind turbine with a total height exceeding 45m, including the highest reach of the blades, without completing and submitting an “Aeronautical Obstruction Clearance Form” to Transport Canada.
- e) No person shall erect a wind turbine with a rotor diameter in excess of 6m or a height in excess of 31m measured to the rotor hub without first entering into a Site Plan Agreement with the Township as required by By-law 22 of 2005.
- f) A wind turbine shall have no climbable parts within 3m of the base and have any supporting guy wires clearly marked to a height of 1.8m above the ground.
- g) No person shall erect a wind turbine except upon obtaining any required building permit and in accordance with applicable manufacturer design, C.S.A. standards, any engineered design, and/or industry standards and having consideration for site soil conditions.
- h) No person shall permit the operation of a wind turbine that emits noise either intermittently or regularly that, in the opinion of the Town, constitutes a nuisance to sensitive uses.
- i) Notwithstanding, subclause h) shall not apply where a person completes an Environmental Assessment process required by a Provincial or Federal agency prior to the erection of the wind turbine, or where a person is able to display, to the satisfaction of the Town, that under varying wind speeds, the noise emissions from the wind turbine as measured at sensitive uses are below acceptable noise levels as set out in Appendix A to this By-law.

**4. OFFENCES AND PENALTIES:**

- a) Any person who is in violation of any provisions of this by-law, upon conviction is guilty of an offence, and shall be liable to a fine pursuant to the Provincial Offences Act, R.S.O. 1990, c.P.33 as amended
- b) Any person in violation of Section 3 h) of this by-law shall prevent the rotation of the wind turbine until the criteria contained in Section 3 i) are satisfied. This shall not apply to prevent the operation of the turbine for the purpose of measuring sound emissions. If the wind turbine does not comply with Section 3 i) or no efforts are made within a reasonable time to determine compliance with Section 3 i), the wind turbine including tower shall be removed.
- c) Should any section, clause or provision of this By-law be held by a court of competent jurisdiction to be invalid, the validity of the remainder of this by-law shall not be affected.

**5. SHORT TITLE:**

This by-law shall be known as the “Wind Turbine By-law”.

**6. EFFECTIVE DATE:**

This By-law comes into force and effect upon the date of final passing thereof.

READ A FIRST AND SECOND TIME THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2008

**READ A THIRD TIME AND PASSED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2008**

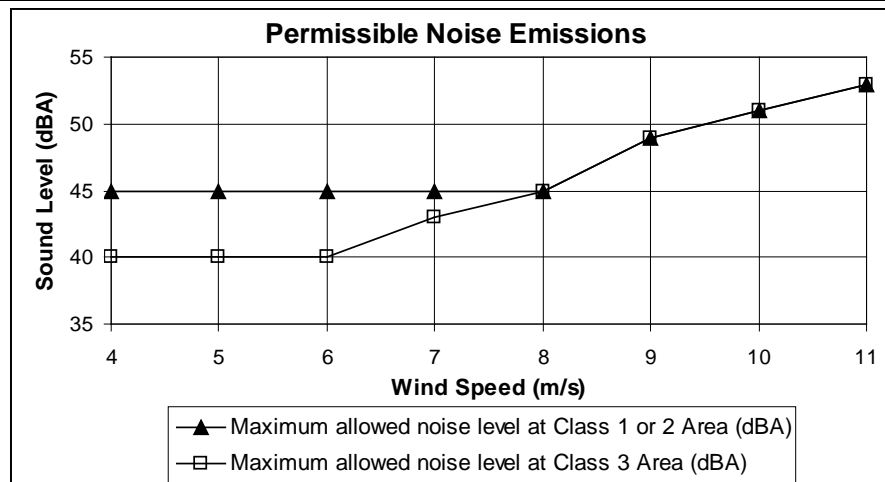
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Mayor – Todd Case

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Administrator-Treasurer – Don Bruder

## APPENDIX A – NOISE EMISSION LIMITS

1. For the purpose of this appendix, the following definitions shall apply:
  - a) “Class 1 Area” – means an area with an acoustical environment typical of a major population centre, where the background noise is dominated by the urban hum.
  - b) “Class 2 Area” – means an area with an acoustical environment that has qualities representative of both Class 1 and Class 3 Area, and in which a low ambient sound level, normally occurring only between 11:00pm and 7:00am in Class 1 Areas, will typically be realized as early as 7:00pm.  
 Other characteristics which may indicate the presence of a Class 2 Area include:
    - i) absence of urban hum between 7:00pm and 11:00pm.
    - ii) evening background sound level defined by natural environment and infrequent human activity; and
    - iii) no clearly audible sound from stationary sources other than from those under consideration.
  - c) “Class 3 Area” – means a rural area with an acoustical environment that is dominated by natural sounds having little or no road traffic, such as the following:
    - i) a small community with less than 1000 population;
    - ii) agricultural area;
    - iii) a rural recreational area such as a cottage or resort area; or a wilderness area.
2. Noise emissions from a wind turbine, under varying wind speeds, shall not exceed the following levels as measured at a sensitive use, as defined in this by-law.

Wind Speed (m/s)	4	5	6	7	8	9	10	11
Maximum allowed noise level at Class 1 or 2 Area (dBA)	45	45	45	45	45	49	51	53
Maximum allowed noise level at Class 3 Area (dBA)	40	40	40	43	45	49	51	53



3. Where the sound of a wind turbine is characterized by pure tones such as whistling, thumping, particular frequencies or identifiable patterns heard through background sound that is otherwise loud enough to mask those sounds, the permitted noise level shall be decreased by 5 decibels for the wind speed or speeds at which such sounds occur.
4. Any requirements or methods under this by-law or appendix that are not described or self-evident, shall take direction from the Ontario Ministry of the Environment (MOE) publication titled “Interpretation for Applying MOE NPC Technical Publications to Wind Turbine Generators”.