SECTION 344 SMALL WIND ENERGY SYSTEMS

A. Purpose: The purpose of this section is to promote the safe, efficient use of small wind energy systems, and to establish standards and procedures for the installation and operation of these systems within the township.

B. Definitions: Small Wind Energy System – A wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity of not more than 100 kW/1MW and which is intended primarily to reduce on site consumption of utility power by the property owner. Additional criteria:

1. Rotors 23 inches to 21 feet in diameter, mounted on a 65 to 140 foot tower.
2. Suitable for use by rural farms and/or residences in an Agricultural Zoning District.
3. Able to operate in areas with Class 2 to 3 wind resources.
4. Small wind energy systems shall only be installed on land owned by the applicant and shall be used solely by the applicant on that site.

Turbine – The parts of a wind system including the blades, generator and tail.

Tower Height – The height above grade of the fixed portion of the tower, excluding the wind turbine and blades.

C. Permitted Use: Small wind energy systems shall be a permitted use in an agricultural zoning district subject to the following requirements:

1. Notice – Notice of an application for installation of a small wind energy system shall be provided to the property owners within 300 feet of the property on which the system is to be located by regular mail, with certificate of mailing. Said notice shall be made within five days of the submission of the zoning permit application, and copies of the same shall be submitted to the zoning inspector or the permit application will be deemed to be incomplete.

2. Tower Height - Tower heights of not more than 140 feet shall be allowed on parcels of not less than five acres. For property sizes of five acres or more, there is no limitation on tower height, except as imposed by the FAA regulations, provided that the application includes evidence that the proposed height does not exceed the height recommended by the manufacturer or distributor of the system.

The system shall comply with all applicable Federal Aviation Administration requirements, including but not limited to Part 77 of Title 14 of the Code of Federal Regulations regarding installations close to airports.

3. Setbacks – No part of the small wind system structure, including guy wire anchors, may extend closer than the height of the tower including the wind turbine and blades.

Additionally the outer and innermost guy wires must be marked and clearly visible to a height of six feet above the guy wire anchors. The setback for the tower and wind turbine shall be the combined height of the tower and wind turbine plus ten feet.

4. Compliance with National Electric Code – All small wind energy system installations shall comply with the National Electric Code.

5. Compliance with the Ohio Building Code or Uniform Building Code – All zoning applications for small wind energy systems shall include standard drawings and an engineering analysis of the wind turbine structure, including the tower, base and footings. An engineering analysis of the tower showing compliance with the Ohio Building Code or Uniform Building Code and certified by a licensed professional engineer shall also be submitted. However, a wet stamp shall not be

required provided that the application demonstrates that the system is designed to meet the most stringent wind requirements.

6. Noise – Decibel levels for the system shall not exceed 60 dB(A) or in excess of 5 dB(A) above the background noise, whichever is greater, as measured at each property line, except during short-term events such as utility outages and severe windstorms.

7. Utility Notification – No small wind energy system shall be installed until evidence has been given that the utility company has been informed of the property owner's intent to install a small wind energy system.

8. Aesthetics – Wind turbines and towers shall be painted white, off white, or light gray to minimize visual impact upon the surrounding property owners. Neither the wind turbine nor the tower shall be used as a billboard or as an advertising device.

a. Tower climbing apparatus shall not be located within twelve feet of the ground;
b. A locked anti-climb device shall be installed and maintained; or
c. A tower capable of being climbed shall be enclosed by a locked, protective fence at least ten feet high with barbed wire fence.

All applications shall show a site plan for the wind turbine tower illustrating the fencing, signage, and color of the tower and wind turbine.