

WIND TURBINES
Resolution #2008-018
(11-19-2008)

Section 520.11 Purpose:

The purpose of this Resolution is to establish general guidelines for the location of wind turbine generators (WTG) and anemometer towers in Elizabeth Township, Miami County, Ohio. This Resolution recognizes that in some instances, under carefully controlled circumstances, it may be in the public interest to permit the placement of (WTG) in certain areas of Elizabeth Township in Miami County. The Township also recognizes the need to protect the scenic beauty of Elizabeth Township from unnecessary and unreasonable visual interference, noise radiation, and that (WTG) may have negative health, safety, welfare, and aesthetic impacts upon adjoining and neighboring uses. As such this Resolution seeks to:

1. Protect residential and agricultural areas from potential adverse impact of wind turbine generators.
2. Permit (WTG) in selected areas by on-site residential, commercial, or industrial users; Subject to the terms, conditions, and provisions hereof.
3. Ensure the public health, welfare, and safety of the Elizabeth Township residents in connection with (WTG).
4. Avoid potential damage to real and personal property from the (WTG) or anemometer Towers or the failure of such structures and related operations.

Section 520.12 Procedure:

Any proposed construction, erection, or siting of a (WTG) or anemometer shall be permitted only by issuance of a Conditional Use Permit in accordance with Section 1002 of this resolution, as amended hereof unless said (WTG) meets the requirements of Section 520.14.

Section 520.13 Definitions:

Definitions for the purposes of the regulation of residential, commercial, and industrial use of (WTG).

Accessory Structure: Structures such as sheds, storage sheds, pool houses, unattached garages, and barns.

Anemometer: An instrument that measures the force and direction of the wind.

Clear Fall Zone: An area surrounding the wind turbine unit into which the turbine and/or turbine components might fall due to inclement weather, poor maintenance, faulty construction methods, or any other condition causing the turbine failure that shall remain unobstructed and confined within the property lines of the primary parcel where the turbine is located. The purpose being that if the turbine should fall or otherwise become damaged, the falling structure will be confined to the primary parcel and will not fall onto dwellings or accessory buildings, or otherwise intrude onto a neighboring property.

Cowling: A streamlined removable metal that covers the turbine nacelle.

Nacelle: A separate streamlined metal enclosure that covers the essential mechanical components of the turbine.

Primary Structure: For each property, the structure that one or more persons occupy the majority of the time on that property for either business or personal reasons. Primary structures include structures such as residences, commercial buildings, hospitals, and day care facilities. Primary structures exclude structures such as hunting sheds, storage sheds, pool houses, unattached garages, and barns.

Professional Engineer: A qualified individual who is licensed as a Professional Engineer in the State of Ohio.

Wind Power Turbine Owner: The person or persons who own the wind turbine structure.

Wind Power Turbine Tower: The support structure to which the turbine and rotor are attached.

Wind Power Turbine Height: The distance from the rotor blade at its highest point to the top surface of the Wind Power Generating Facility (WPGF) foundation.

Section 520.14 Residential Wind Turbines

Elizabeth Township recognizes the importance of clean, sustainable and renewable energy sources. To that end, Elizabeth Township, Miami County, Ohio permits the use of residential wind turbines under the following regulations to ensure that the safety and welfare of all Elizabeth Township residents is met.

1. Wind turbines shall be a *permitted use* under the following conditions.
 - A. The maximum height of the turbine shall be 100 feet. For purposes of this particular zoning item, maximum height shall be considered the total height of the turbine system including the tower, and the maximum vertical height of the turbine blades. Maximum height therefore shall be calculated measuring the length of prop at the maximum vertical rotation to the base of the tower.
 - B. Setbacks: The following shall apply in regards to setbacks. Any turbine erected on a parcel of land will need to establish a "clear fall zone" from all neighboring property lines and structures, as well as any structures on the parcel intended for the turbine. A turbine will need to be erected and placed in such a manner that if it were to fall, whatever direction the fall occurs, would be contained solely on the property where the turbine is located, and would not strike any structure including the primary dwelling, and any accessory buildings or uses.
 - C. Aesthetics: The turbine, including the prop blades turbine, cowling, and tower shall be painted white, gray, or sky blue. Logos or other identification markers other than those of the manufacturer and model type shall not be permitted anywhere on the turbine or tower.
 - D. Maintenance: Wind turbines must be maintained in good working order. Turbines that become inoperable for more than six (6) months must be removed by the owner within thirty (30) days of the issuance of zoning violations. Removal includes all apparatuses, supports, and other hardware associated with the existing wind turbine.

520.15 Permits:

- A. A permit shall be required before construction can commence on an individual wind turbine system.
- B. As part of the permit process, the applicant shall inquire with the Miami County Planning and Zoning Department as to whether or not additional height restrictions are applicable due to the units location in relation to the Dayton International Airport.
- C. Applicant shall then provide the Elizabeth Township Zoning Inspector the following items and/or information when applying for a permit:
 1. Location of all public and private airports in relation to the location of the turbine, as well as any applicable FAA restrictions that may be applicable to the turbine.
 2. An engineering report that shows:
 - A. The total size and height of the unit.
 - B. The total size and depth of the units mounting pad.
 - C. An average decibel rating for the particular model.
 - D. A list and/or depiction of all safety measures that will be on the unit including anti-climb devices, and lighting protection.
 - E. Data specifying the kilowatt size and generating power of the unit.
 - F. Evidence of "Clear fall zone" with the manufacturer recommendations.
 3. A site drawing showing the location of the unit in relation to existing structures on the Property, roads and other public right-of-ways, and neighboring properties.
 4. Color of the unit as well as location and size of the manufacturers identifying logos shall be include in the plan.
 5. A maintenance schedule as well as a dismantling plan that outlines how the unit will be dismantled if necessary will be part of the permit.

Adopted 11-19-2008