

**TOWNSHIP OF SOUTH MIDDLETON
CUMBERLAND COUNTY, PENNSYLVANIA**

ORDINANCE NO. 01 OF 2009

AN ORDINANCE OF THE TOWNSHIP OF SOUTH MIDDLETON,
CUMBERLAND COUNTY, PENNSYLVANIA, AMENDING ZONING ORDINANCE
No. 3 OF 2007, AS AMENDED, TO PROVIDE FOR PROVISIONS
REGULATING TO THE CONSTRUCTION, ERECTION, REPAIR, PERMITTING
AND DECOMMISSIONING OF WIND ENERGY FACILITIES
AS A CONDITIONAL USE

SECTION 1. INTRODUCTION

NOW THEREFORE, BE IT ENACTED AND ORDAINED BY THE BOARD OF SUPERVISORS OF SOUTH MIDDLETON TOWNSHIP that this Ordinance constitutes and be considered an amendment to the South Middleton Township Zoning Ordinance, Ordinance No. 3 of 2007, as amended.

SECTION 2. PURPOSE

The purpose of the Ordinance is to provide for the construction and operation of Wind Energy Facilities in South Middleton Township, subject to reasonable conditions that will protect the public health, safety and welfare.

SECTION 3. The following definitions shall be added to as follows:

- a. "Applicant" is the person or entity filing an application.
- b. "Facility Owner" means the entity or entities having an equity interest in the Wind Energy Facility, including their respective successors and assigns.
- c. "Operator" means the entity responsible for the day-to-day operation and maintenance of the Wind Energy Facility.
- d. "Hub Height" means the distance measured from the surface of the tower foundation to the height of the Wind Turbine hub, to which the blade is attached.

- e. "Occupied Building" means a residence, school, hospital, church, public library or other building used for public gathering that is occupied or in use when the permit application is submitted.
- f. "Personal Stand-Alone Wind Turbines" are wind turbines constructed primarily for use on the property upon which the Wind Turbine is located in accordance with Article XVI.
- g. "Shadow Flicker" means alternating changes in light intensity caused by the moving Wind Rotor blade casting shadows on the ground and stationary objects.
- h. "Turbine Height" means the distance measured from the surface of the tower foundation to the highest point of the Wind Rotor.
- i. "Wind Turbine" means a wind energy conversion system that converts wind energy into electricity through the use of a wind turbine generator, and includes the nacelle, rotor, tower, and pad transformer, if any.
- j. "Wind Energy Facility" means an electric generating facility, whose main purpose is to supply electricity, consisting of one or more Wind Turbines and other accessory structures and buildings, including substations, meteorological towers, electrical infrastructure, transmission lines and other appurtenant structures and facilities.
- k. "Non-Participating Landowner" means any landowner except those on whose property all or a portion of a Wind Energy Facility is located pursuant to an agreement with the Facility Owner or Operator.

Definitions shall be arranged alphabetically and the section renumbered accordingly.

SECTION 4. The following text shall be added as follows:

502.(12) Personal Stand-Alone Wind Turbines subject to Article XVI.

SECTION 5. The following text shall be added as follows:

602.(17) Personal Stand-Alone Wind Turbines subject to Article XVI.

SECTION 6. The following test shall be added as follows:

702.(9) Personal Stand-Alone Wind Turbines subject to Article XVI.

SECTION 7. The following text shall be added as follows:

802.(13) Personal Stand-Alone Wind Turbines subject to Article XVI.

SECTION 8. The following text shall be added as follows:

902.(17) Personal Stand-Alone Wind Turbines subject to Article XVI.

SECTION 9. The following text shall be added and Section 1201(2)(n) be renumbered to 1202(1)(o) as follows:

1202.(1)(n) Personal Stand-Alone Wind Turbines subject to Article XVI.

SECTION 10. The following text shall be added as follows:

1202.(2)(o) Personal Stand-Alone Wind Turbines subject to Article XVI.

1202.(2)(p) Accessory Structures and Uses customarily incidental to the Conditional Use.

SECTION 11. The following text shall be added and Section 1302(2)(g) shall be renumbered to 1302(2)(h) as follows:

1302.(2)(g) Wind Energy Facilities subject to Article XVI.

SECTION 12. The following text shall be added and Section 1303(2)(j) renumbered to 1303(2)(k) as follows:

1303.(2)(j) Wind Energy Facilities subject to Article XVI.

SECTION 13. The following text shall be amended to read as follows:

1601. Height Regulations

(1) Where a lot has frontage on two or more streets or other public rights-of-way, the height limitation shall apply only as measured from the curb level along the street or way with a higher elevation above sea level.

(2) Chimneys, flues, towers, spires, cupola domes, pole masts, antennas, barns, silos, wind energy facilities and personal stand alone wind turbines shall be exempt from height limitations of this Ordinance provided their location is not in the required yard and except as limited by specific provisions of Article XVI.

SECTION 14. The following text shall be added as follows:

1648. Wind Energy Facilities

1. Applicability

- a. Personal Stand-alone Wind Turbines constructed primarily for use on the property upon which the Wind Turbine is located are permitted in all zoning districts as a conditional use, although secondary to the principal use of the property, and shall conform to the following requirements:
 - i. Any structure supporting the Wind Turbine, including guideposts and cables, and above ground fuel storage tanks shall be independent of any occupied structure and located a minimum distance of the Turbine Height plus ten (10) feet from any existing aerial utility line or occupied dwelling, and shall not be more than seventy-five (75) feet in height.
 - ii. The minimum distance between the Wind Turbine and any property line shall not be less than twice the Turbine Height.
 - iii. The minimum distance between the ground and the lowest point of the Wind Rotor blade shall be twenty (20) feet.
 - iv. All electrical or utility lines shall be buried underground.
 - v. One Wind Turbine shall be permitted per lot, and all energy produced from such turbine shall be used on the lot.
 - vi. The Wind Turbine shall be enclosed by a six (6) foot fence with locking gate or the base of the Wind Turbine shall not be climbable for a distance of twelve (12) feet.
 - vii. The use of Personal Stand Alone Wind Turbines shall be limited to properties containing five (5) acres or more.
 - viii. Audible sound from a Personal Stand Alone shall not exceed fifty-five (55) dBA, as measured at the exterior of any occupied building on a non-participating landowner's property. Methods for measuring and reporting acoustic emissions from Wind Turbines and the Wind Energy Facility shall be equal to or exceed the minimum standards for prevision described in AWEA Standard 2.1 – 1989 titled *Procedures for the Measurement and Reporting of Acoustic Emissions from Wind Turbine Generation Systems Volume 1. First Tier.*
 - ix. The wind turbine as well as any structure used to support the wind turbine shall comply with the Uniform Construction Code as may be amended from time to time.
2. Wind Energy Facilities constructed prior to the effective date of this Ordinance shall not be required to meet the requirements of this Ordinance; provided that

any physical modification to an existing Wind Energy Facility that materially alters the size, type and number of Wind Turbines or other equipment shall require a permit under this ordinance and meet the requirements of the UCC.

3. A Wind Energy Facility shall be permitted in the I-2 and I-3 Zoning Districts as a conditional use subject to the following criteria:
 - a. Any physical modification to an existing and permitted Wind Energy Facility that materially alters the size, type and number of Wind turbines or other equipment shall require a conditional use permit modification under this Ordinance. Like kind replacements shall not require a permit modification.
 - b. The design of the Wind Energy Facility shall conform to applicable industry standards, including those of the American National Standards Institute. The applicant shall submit certificate of design compliance obtained by the equipment manufacturers from Underwriters Laboratories, Det Norske Veritas, Germanischer Lloyd Wind Energies or other similar certifying organizations.
 - c. The Wind Energy Facility shall comply with the Pennsylvania Uniform Construction Code, 34 PA Code §403.1 – 403.142 as may be amended from time to time..
 - d. All Wind Energy Facilities shall be equipped with a redundant braking system. This includes both aerodynamic over speed controls (including variable pitch, tip, and other similar systems) and mechanical brakes. Mechanical brakes shall be operated in a fail-safe mode. Staff regulation shall not be considered a sufficient braking system for over speed protection.
 - e. All electrical components of the Wind Energy Facility shall conform to relevant and applicable local, state and national codes, and relevant and applicable international standards.
 - f. Wind Turbines shall be a non-obtrusive color such as white, off-white or gray.
 - g. Wind Energy Facilities shall not be artificially lighted, except to the extent required by the Federal Aviation Administration or other applicable authority that regulates air safety.
 - h. Wind Turbines shall not display advertising, except for identification of the turbine manufacturer, Facility Owner or Operator.

- i. On-site transmission and power lines between Wind Turbines shall be placed underground.
- j. The design of buildings and related structures shall, to the extent reasonable, use materials, colors, textures, screening and landscaping that will blend the Wind Energy Facility into the natural setting and existing environment.
- k. A clearly visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substations.
- l. Visible, reflective, colored objects, such as flags, reflectors, or tape shall be placed on the anchor points of guy wires and along the guy wires up to a height of ten (10) feet from the ground.
- m. All access doors to Wind turbines and electrical equipment shall be locked or fenced, as appropriate, to prevent entry by non-authorized persons.
- n. The minimum distance between the ground and any part of the Wind Rotor blade shall be thirty (30) feet.
- o. To limit climbing access, a six (6) foot high fence with a locking gate shall be placed around the Wind Energy Facility, or the Wind Turbines' climbing apparatus shall be limited to no lower than twelve (12) feet from the ground, or the Wind Turbines' climbing apparatus shall be fully contained and locked within the tower structure.
- p. Wind Turbines shall be set back from the nearest occupied building or non-occupied building on the participating landowner's property a distance not less than the greatest normal boundary setback requirements for the zoning district or 1.1 times the Turbine Height, whichever is greater. The setback distance shall be measured from the center of the Wind Turbine base to the nearest point on the foundation of the occupied building or non-occupied building.
- q. Wind Turbines shall be setback from the nearest occupied building or non-occupied building located on a non-participating landowner's property a distance of not less than two (2) times the Turbine Height, as measured from the center of the Wind Turbine base to the nearest point on the foundation of the occupied or non-occupied building.
- r. All Wind Turbines shall be setback from the nearest property line a distance of not less than the normal setback requirements for that zoning classification of 1.1 times the Turbine Height, whichever is greater. The setback distance shall be measured to the center of the Wind Turbine base.

- s. All Wind Turbines shall be setback from the nearest public road a distance of not less than 1.1 times the Turbine Height, as measured from the right-of-way line of the nearest public road to the center of the Wind Turbine base.
- t. Audible sound from a Wind Energy Facility shall not exceed fifty-five (55) dBA, as measured at the exterior of any occupied building on a non-participating landowner's property. Methods for measuring and reporting acoustic emissions from Wind Turbines and the Wind Energy Facility shall be equal to or exceed the minimum standards for provision described in AWEA Standard 2.1 – 1989 titled *Procedures for the Measurement and Reporting of Acoustic Emissions from Wind turbine Generation Systems Volume I. First Tier*.
- u. The Facility Owner and Operator shall not be permitted to allow any shadow flicker to any occupied building on a non-participating landowner's property.

4. Use of Public Roads

- a. The applicant shall identify all state and local public roads to be used within the Township to transport equipment and parts for construction, operation or maintenance of the Wind Energy Facility.
- b. The Township Engineer or a qualified third party engineer hired by the Township and paid for by the applicant, shall document road conditions prior to construction. The engineer shall document road conditions again thirty (30) days after construction is complete or as weather permits.
- c. The Township may bond the road in compliance with state regulations.
- d. Any road damage caused by the applicant or its contractors shall be promptly repaired at the applicant's expense.
- e. The applicant shall demonstrate that it has appropriate financial assurance to ensure the prompt repair of damaged roads.

5. Local Emergency Services

- a. The applicant shall provide a copy of the project summary and site plan to local emergency services, including paid or volunteer Fire Department(s).
- b. Upon request, the applicant shall cooperate with emergency services to develop and coordinate implementation of an emergency response plan

for the Wind Energy Facility (appropriate fees may be required as determined by the Township).

6. Signal Interference

- a. The applicant shall avoid any disruption or loss of radio, telephone, television or similar signals, and shall mitigate any harm caused by the Wind Energy Facility.

7. Liability Insurance

- a. There shall be maintained a current general liability policy covering bodily injury and property damage with limits of at least \$1 million per occurrence and \$1 million in the aggregate. Certificates shall be made available to the Township upon request.

8. Decommissioning

- a. The Facility Owner and Operator shall, at its expense, complete decommissioning of the Wind Energy Facility, or individual Wind Turbines, within twelve (12) months after the end of the useful life of the Facility or individual Wind Turbines. The Wind Energy Facility or individual Wind Turbines will be presumed to be at the end of its useful life if no electricity is generated for a continuous period of twelve (12) months.
- b. Decommissioning shall include removal of Wind turbines, buildings, cabling, electrical components, roads, foundations to a depth of thirty-six (36) inches, and ANY other associated facilities.
- c. Disturbed earth shall be graded and re-seeded, unless the landowner requests in writing that the access roads or other land surface areas not be restored.
- d. An independent and certified Professional Engineer shall be retained to estimate the total cost of decommission ("Decommissioning Costs") without regard to salvage value of the equipment, and the cost of decommissioning net salvage value of the equipment ("Net Decommissioning Costs"). Said estimates shall be submitted to the Township after the first year of operation and every fifth year thereafter.
- e. The Facility Owner or Operator shall post and maintain Decommissioning Funds in an amount equal to Net Decommissioning Costs; provided that at no point shall Decommissioning Funds be less than one hundred (100) percent of Decommissioning Costs. The Decommissioning Funds shall be posted and maintained with a bonding company or Federal or Commonwealth chartered lending institution chosen by the Facility Owner or Operator and participating landowner posting the financial security,

provided that the bonding company or lending institution is authorized to conduct such business within the Commonwealth and is approved by the Township.

- f. Decommissioning Funds may be in the form of a performance bond, surety bond, letter of credit, corporate guarantee or other form of financial assurance as may be acceptable to the Township.
- g. If the Facility Owner or Operator fails to complete decommissioning within the period prescribed above, then the landowner shall have six (6) months to complete decommissioning.
- h. If neither the Facility Owner or Operator nor the landowner complete decommissioning within the periods prescribed by above, then the Township may take such measures as necessary to complete decommissioning. The entry into and submission of evidence of a participating landowner agreement to the Township shall constitute agreement and consent of the parties to the agreement, their respective heirs, successors and assigns that the Township may take such action as necessary to implement the decommissioning plan.
- i. The escrow agent shall release the Decommissioning Funds when the Facility Owner or Operator has demonstrated and the Township concurs that decommissioning has been satisfactorily completed, or upon written approval by the Township in order to implement the decommissioning plan.

9. Public Inquiries and Complaints

- a. The Facility Owner and Operator shall maintain a phone number and identify responsible person for the public to contact with inquiries and complaints throughout the life of the project.
- b. The Facility Owner and Operator shall make reasonable efforts to respond to the public's inquiries and complaints.
- c. The Facility Owner and/or Operator shall keep a record of all such inquiries and complaints and shall submit a report thereof to the Township not less than quarterly.

10. Remedies

- a. It shall be unlawful for any person, firm, or corporation to violate or fail to comply with or take any action which is contrary to the terms of this Ordinance, or any permit issued under this Ordinance, or cause another to

violate or fail to comply, or to take any action which is contrary to the terms of this Ordinance or any permit issued under this Ordinance.

- b. If the Township determines that a violation of this Ordinance or the permit has occurred, the Township shall provide written notice to any person, firm, or corporation alleged to be in violation of this Ordinance or permit. If the alleged violation does not pose an immediate threat to public health or safety, the Township and the parties shall engage in good faith negotiations to resolve the alleged violation. Such negotiations shall be conducted within thirty (30) days of the notice of violation.
- c. If after thirty (30) days from the date of the notice of violation, the Township determines in its discretion that the parties have not resolved the alleged violation, the Township may institute civil enforcement proceedings or any other remedy at law to ensure compliance with this Ordinance or permit.

11. Application for Wind Energy Facilities

- a. Among other things, the application shall contain the following:
 - i. A narrative describing the proposed Wind Energy Facility, including an overview of the project; the project location; the approximate generating capacity of the Wind Energy Facility; the approximate number, representative types and height or range of heights of Wind Turbines to be constructed, including their generating capacity, dimensions and respective manufacturers, and a description of ancillary facilities.
 - ii. An affidavit or similar evidence of agreement between the property owner and the Facility Owner or Operator demonstrating that the Facility Owner or Operator has the permission of the property owner to apply for necessary permits for construction and the operation of the Wind Energy Facility and setting forth the applicant's and property owner's name, address and phone number.
 - iii. Identification of the properties on which the proposed Wind Energy Facility will be located, and the properties adjacent to where the Wind Energy Facility will be located.
 - iv. A site plan showing the planned location of each Wind Turbine, property lines, setback lines, access road and turnout locations, substation(s), electrical cabling from the Wind Energy Facility to the substation(s), ancillary equipment, buildings, and structures, including permanent meteorological towers, associated

transmission lines and layout of all structures within the geographical boundaries of any applicable setback.

- v. Documents related to decommissioning.
- vi. Other relevant studies, reports, certifications and approvals as may be reasonably requested by the Township to ensure compliance with this Ordinance.
- vii. Throughout the permit process, the applicant shall promptly notify the Township of any changes to the information contained in the conditional use permit application. Changes to the pending application that do not materially alter the initial site plan may be adopted without a renewed public hearing.

SECTION 15. SEVERABILITY

The provisions of this Ordinance shall be severable, and if any provision hereof shall be declared unconstitutional, illegal or invalid, such decision shall not affect the validity of any of the remaining provisions of this Ordinance. It is hereby declared as the legislative intent of the Township that this Ordinance would have been amended as if such unconstitutional, illegal or invalid provision or provisions had not been included herein.

SECTION 16. REPEALER

All Ordinances or parts of Ordinances conflicting or inconsistent with the provisions of this Ordinance hereby adopted are hereby repealed.

DULY ENACTED AND ORDAINED this 22nd day of January 2009, by the Board of Supervisors of South Middleton Township in public session as duly assembled.

BOARD OF SUPERVISORS
SOUTH MIDDLETON TOWNSHIP

Attest:

BRYAN A. GEMBUSIA, Chairman

SANDRA A. QUICKEL, Secretary

WALTER G. REIGHARD, Vice Chairman

JAMES N. BAKER

RONALD L. REEDER

THOMAS E. FALEY