

ORDINANCE NO. 260

AN ORDINANCE OF EAST ROCKHILL TOWNSHIP ADDING A NEW PART 4 TITLED "ALTERNATIVE ENERGY SYSTEMS" IN CHAPTER 13, LICENSES, PERMITS AND GENERAL BUSINESS REGULATIONS, OF THE CODE OF ORDINANCES OF THE TOWNSHIP OF EAST ROCKHILL

WHEREAS, The Township of East Rockhill ("Township") is empowered to ensure the public safety, health and welfare pursuant to the Pennsylvania Second Class Township Code, 53 P.S. §65101 *et seq.*; and

WHEREAS, Section 1601 (53 P.S. §66601) of the Pennsylvania Second Class Township Code provides that the Board of Supervisors may adopt ordinances in which general powers of the Township may be exercised; and

WHEREAS, The Township is empowered to abate and prohibit nuisances on property pursuant to the Second Class Township Code, 53 P.S. §66529; and

WHEREAS, The Board of Supervisors of East Rockhill Township has determined that in order to protect the safety, health and welfare of the public, the use, placement, operation, maintenance and erection of certain alternative energy systems should be regulated in accordance with the Pennsylvania Second Class Township Code; and

WHEREAS, It is the purpose and scope of this Ordinance to provide regulations that govern the use, placement, operation, maintenance and erection of certain alternative energy systems in accordance with the Pennsylvania Second Class Township Code and all other applicable Pennsylvania law; and

WHEREAS, The East Rockhill Township Board of Supervisors, upon the recommendation of the East Rockhill Township Planning Commission, and pursuant to Pennsylvania law, hereby enacts and ordains the following Ordinance amending the East Rockhill Township Code of Ordinances by adding a new Part 4 to Chapter 13 titled Alternative Energy Systems.

NOW, THEREFORE, be it hereby *ENACTED* and *ORDAINED* by the East Rockhill Township Board of Supervisors as follows:

ARTICLE I.

Chapter 13 of the Code of Ordinances of East Rockhill Township, Licenses, Permits and General Business Regulations, is hereby amended by adding a new Part 4, Alternative Energy Systems, and said Part 4 shall read as follows:

PART 4

ALTERNATIVE ENERGY SYSTEMS

§13-401. Purpose.

The purpose of this Ordinance is to promote the use of alternative energy resources and to provide for the land development, installation and construction regulations for alternative energy systems in the Township of East Rockhill subject to reasonable conditions that will protect the public health, safety and welfare.

§13-402. Scope and Applicability.

1. This Ordinance applies to the alternative energy systems described herein to be installed and constructed after the effective date of this Ordinance and all applications for such alternative energy systems on existing structures or property. Alternative energy systems constructed prior to the effective date of this Ordinance shall not be required to meet the requirements of this Ordinance, unless otherwise stated herein, provided that any structural change, upgrade or modification to an existing alternative energy system that materially alters the size or placement of the existing alternative energy system shall comply with the provisions of this Ordinance.
2. Alternative energy systems may be erected, altered, maintained, used, or moved within the Township only when in accordance with the provisions of these regulations and any other applicable Township ordinances and regulations.
3. No person shall install, construct, or modify an alternative energy system without first obtaining from the Township the necessary permits and after paying the requisite fees.
4. All alternative energy systems shall primarily serve on-site energy needs unless otherwise approved by the East Rockhill Township Board of Supervisors.
5. All alternative energy systems shall be considered accessory uses to the principal use on the property.
6. Applications for alternative energy systems shall also comply with all applicable East Rockhill Township Zoning and/or Subdivision and Land Development Ordinance regulations.

§13-403. Definitions.

ALTERNATIVE ENERGY SYSTEM - a ground source heat pump, wind energy system, solar energy system, and/or outdoor solid fuel burning appliance.

BUILDING INTEGRATED WIND ENERGY FACILITY - a wind energy system facility designed to be permanently mounted on a building or other inhabitable structure,

including wind turbines of any rated nameplate capacity designed to be operated in direct contact with a building. Other wind energy system facilities primarily used for land-based applications which may be permanently mounted and operated on a building are also included in this definition.

CHIMNEY - any vertical structure enclosing a flue or flues that carry off smoke or exhaust from an outdoor solid fuel burning appliance.

CLEAN WOOD – wood that does not have paint, stains, or other types of coatings, and wood that has not been treated with substances, including, but not limited to, copper arsenate, creosote, or pentachlorophenol and wood pellets made from clean wood.

CLOSED LOOP GROUND SOURCE HEAT PUMP SYSTEM - a system that circulates an approved heat transfer fluid through pipes or coils buried beneath the land surface or anchored to the bottom in a body of water.

DOMESTIC WATER USE - water for household purposes, such as drinking, food preparation, bathing, washing clothes and dishes, flushing toilets, and watering lawns and gardens. Also called residential water use. The water may be obtained from a public supply or may be self supplied.

EPA OWHH PHASE 2 PROGRAM QUALIFIED MODEL – an outdoor solid fuel burning appliance that has been EPA OWHH Phase 2 Program qualified. The model has met the EPA OWHH Phase 2 Program particulate matter emission limits and is identified with the proper qualifying label and identification.

GROUND SOURCE HEAT PUMP SYSTEM (Also known as geothermal energy system) - a system that uses the relatively constant temperature of the earth or a body of water to provide heating in the winter and cooling in the summer. System components include closed loops of pipe, coils or plates; an approved fluid that absorbs and transfers heat; and a heat pump unit that processes heat for use or disperses heat for cooling; and an air distribution system. Open loop ground source heat pump systems are not permitted in East Rockhill Township.

HEAT TRANSFER FLUID – a Township approved non-toxic and food grade fluid such as potable water or other fluid approved by the Township for use in an outdoor solid fuel burning appliance.

HORIZONTAL GROUND SOURCE HEAT PUMP SYSTEM - a closed loop ground source heat pump system where the loops or coils are installed horizontally in a trench or series of trenches no more than 20 feet below the land surface.

HUB HEIGHT – the distance measured from the surface of the tower foundation to the height of the wind turbine hub, to which the blade is attached.

OPEN LOOP GROUND SOURCE HEAT PUMP SYSTEM - a system that uses groundwater as a heat transfer fluid by drawing groundwater from a well to a heat pump and then discharging the water over land, directly in a water body or into an injection well. Open loop ground source heat pump systems are not permitted in East Rockhill Township.

OUTDOOR SOLID FUEL BURNING APPLIANCE - also known as "Outdoor Woodfired Hydronic Heaters (OWHH)", "Outdoor Wood Boilers (OWB)" or "Water Stoves", etc., means any equipment, device or apparatus which is installed, affixed or situated outdoors, and not situate within a building intended for habitation by humans or domestic animals, which is used for the primary purpose of combustion of fuel to produce heat for energy as a heating system, or component thereof, which provides heat or hot water to the principal structure on the property, to a structure used for human or animal habitation on the property, or to any accessory uses or structures, including, but not limited to, greenhouses, conservatories and swimming pools located on the property.

SHADOW FLICKER – the visible flicker effect from a wind energy system when rotating turbine blades cast shadows on the ground and nearby structures causing the repeating pattern of light and shadow.

SOLAR COLLECTOR - a device or combination of devices, structure(s), or part of a device or structure that transforms direct solar energy into thermal, chemical, or electrical energy and that contributes significantly to a structure's energy supply.

SOLAR ENERGY - radiant energy (direct, diffuse, and/or reflected) received from the sun.

SOLAR ENERGY SYSTEM - any solar collector or other solar energy device, or any structural design feature, mounted on a building or on the ground, and whose primary purpose is to provide for the collection, storage, and distribution of solar energy for space heating or cooling, for water heating or for electricity.

SOLAR PANEL - a structure containing one or more receptive cells, the purpose of which is to convert solar energy into usable electrical energy, heat water, or produce hot air or perform any other similar function by way of a solar energy system.

TURBINE HEIGHT – the distance measured from the surface of the tower foundation to the highest point of the turbine rotor plane.

TURBINE ROTOR – a structure which contains the blades and hub that are used to capture wind for purposes of energy conversion. The wind rotor is usually located on a tower and, along with other generating and electrical storage equipment, forms the wind energy system facility.

VERTICAL GROUND SOURCE HEAT PUMP SYSTEM - a closed loop ground source heat pump system where the loops or coils are installed vertically in one or more borings below the land surface.

WIND ENERGY SYSTEM – an electric generating system, whose main purpose is to supply electricity, consisting of one or more wind turbines and other accessory structures and buildings, including substations, metrological towers, electrical infrastructure, transmission lines and other appurtenant structures and facilities.

WIND TURBINE – 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.

§13-404. Solar Energy Systems.

Solar energy systems include any solar collector or other solar energy device, or any structural design feature whose primary purpose is to provide for the collection, storage, and distribution of solar energy for space heating or cooling, for water heating or for electricity generation primarily for the structure(s) located on the property wherein the solar energy system is located. Solar energy systems shall not be the primary use of the property. Solar energy systems may be mounted on a building as a roof array or on the ground. Solar energy systems may include solar panels which, for purposes of this Section, are structures containing one or more receptive cells, the purpose of which is to convert solar energy into usable energy by way of a solar energy system. The following requirements shall apply, as applicable, to solar energy systems:

- A. No person shall install, construct, place and/or replace a solar energy system within East Rockhill Township without first applying for and receiving the appropriate permit from the Township and paying the requisite permit fee in full. No permit for such a solar energy system shall be issued until the plans and specifications have been approved by the Code Enforcement Officer and/or Township Engineer in accordance with this Ordinance, and all other requisite approvals needed under the Township Code of Ordinances have been secured.
- B. The solar energy system shall comply with the applicable area and dimensional regulations of the zoning district in which the solar energy system is installed if not otherwise specifically set forth herein.
- C. No adjacent property owner shall be required to remove or cut any plant, bush, crop, or tree nor shall any solar energy system be located so that any reflection is directed toward an adjoining property.
- D. Ground Arrays. Solar panels shall be permitted as ground arrays in accordance with the following:

- (1) Ground array solar panels shall be subject to a 75 foot setback from any property line, provided that no solar panel shall be located closer to the property line than 1.1 times the height of the solar panel.
- (2) Ground arrays shall not be permitted in a front yard.
- (3) Ground arrays shall be located and angled so that any reflection is directed away or is properly buffered from an adjoining property.
- (4) The highest point of a ground array structure shall not exceed a height of 20 feet.

E. Roof Mounts. Roof-mounted solar panels subject to the provisions of this Section are permitted in accordance with the following:

- (1) Permitted roof-mounted solar panels shall include integrated solar panels as the surface layer of the roof structure with no additional apparent change in relief or projection (the preferred installation), or separate flush-mounted solar panels attached to the roof surface.
 - (a) Any roof-mounted solar panels that are not integrated and/or separate flush-mounted shall comply with the following additional requirements and restrictions:
 - (i) Such other roof-mounted solar panels shall only be located on a rear- or side-facing roof, as viewed from any adjacent street.
 - (ii) Such other roof-mounted solar panels shall not exceed a height of three feet from the rooftop at any point. Solar panels installed on a building or structure with a sloped roof shall not project vertically above the peak of the roof to which it is attached, or project vertically more than three feet above a flat roof installation.
 - (iii) Applicant shall demonstrate to the satisfaction of the Township that the proposed use of roof-mounted solar panels is the only effective or possible means for utilizing solar energy on the property. Such information shall be certified by a professional deemed qualified by the Board of Supervisors and may be reviewed by any other Township Professional that the Board of Supervisors deems necessary.

- (2) No roof-mounted array shall exceed 35 feet in height, or the maximum height requirement of the zoning district wherein it is located, whichever is more restrictive.
 - (3) All roof installations shall require a structural analysis of the roof to certify the structural integrity of the roof for the proposed installation.
- F. The installation of a solar energy system shall conform to the Pennsylvania Uniform Construction Code, as amended, and to all other applicable regulations and industry standards, including those of the American National Standards Institute. Manufacturer's data and certificates of design compliance shall be submitted with the permit application and plan.
- G. All wiring shall comply with the applicable version of the National Electric Code (NEC), as amended. The local utility provider shall be contacted by the owner of the subject property to determine grid interconnection and net metering policies.
- H. Solar energy systems shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the system. In no case shall any identification be visible from the property line.
- I. The design of solar energy systems shall, to the extent reasonably possible, use materials, colors, textures, screening, and landscaping that will blend the facility into the natural setting and existing environment.
- J. Mechanical equipment associated with and necessary for the operation of the solar energy system shall be screened from any adjacent property that is residentially zoned or used for residential purposes. The screen shall consist of shrubbery and trees acceptable to the Township and/or Township Engineer and arranged in an informal manner.
- K. All solar energy system operators and owners must comply with any and all federal, state, and local regulations pertaining to solar energy and its collection for personal use.
- L. If any of the requirements herein conflict with federal and/or state requirements then the federal and/or state requirements shall govern unless the requirements of this Ordinance are more stringent in which case this Ordinance shall govern.
- M. This Ordinance applies to solar energy systems to be installed and constructed after the effective date of the ordinance, and all applications for solar energy systems on existing structures or property. Solar energy systems constructed prior to the effective date of this Ordinance shall not be required to meet the requirements of this Ordinance; provided however that any structural change, upgrade or modification to an existing solar energy system that materially alters

the size or placement of the existing solar energy system shall comply with the provisions of this Section.

- N. All solar energy system contractors applying for permits must submit proof of appropriate insurance in a manner, form and amount acceptable to the Township.

§13-405. Wind Energy Systems.

1. No person shall install, construct, place and/or replace a wind energy system within East Rockhill Township without first applying for and receiving the appropriate permit from the Township and paying the requisite permit fee in full. No permit for such a wind energy system shall be issued until the plans and specifications have been approved by the Code Enforcement Officer and/or Township Engineer in accordance with this Ordinance, and all other requisite approvals needed under the Township Code of Ordinances have been secured.
2. There shall be a maximum of one wind energy system on a single parcel of property.
3. Wind energy systems shall be set back from the nearest property line a distance of not less than the normal setback requirements for that zoning district or 1.1 times the overall height of the wind energy system, whichever is greater.
4. Wind energy systems shall not be located less than 100 feet from overhead utility and/or transmission lines.
5. Wind energy systems shall not be located less than 300 feet from a street right of way line.
6. Wind energy systems shall not be located less than 300 feet from a neighboring off site dwelling unit and/or structure.
7. In no case shall a wind energy system be located within a front yard or within the minimum required side and/or rear yards for the zoning district wherein it is located as required by the Township Zoning Ordinance.
8. Maximum height of all wind energy systems, including all moving and rotating parts, shall be 65 feet, measured from the undisturbed ground elevation at the base of the device to the highest point of the arc of the blade or to the top of the tower, whichever is greater, unless a greater restriction is imposed by FAA regulations.
9. The maximum wind energy system blade diameter shall be 30 feet.
10. The minimum distance between the undisturbed ground at the base of the wind energy system and any protruding blade shall be 15 feet, as measured at the lowest point of arc of the blades.

11. The operation of a wind energy system shall comply with all nuisance, noise and/or other applicable regulations of the Code of Ordinances of East Rockhill Township.
12. When a building is necessary for storage cells or related mechanical equipment, the building shall not exceed 150 square feet in area, shall not exceed eight feet in height, must not be located in any required front, side and/or rear yards under the Township Zoning Ordinance and shall be screened with plantings acceptable to the Township and/or Township Engineer and such plantings shall be arranged in an informal manner.
13. Wind turbines shall be a non-obtrusive, non-reflective color such as white, off-white or gray in order to blend the system into the natural setting and existing environment.
14. The owner of the wind energy system shall comply with all noise regulations of the Township and make every effort possible to prevent shadow flicker to any occupied building on a non-participating landowner's property. Shadow flicker at any occupied building on any adjacent property caused by a wind energy system located within 1,000 feet of the occupied building shall not exceed 30 hours per year.
 - A. Noise and/or shadow flicker provisions may be waived if the following conditions are met:
 - (1) Property owners may waive the noise and/or shadow flicker provisions of this Ordinance by signing a waiver of their rights. The waiver shall describe the properties benefited and burdened, and advise all subsequent purchasers of the burdened property that the waiver of sound or flicker limit shall run with the land and may forever burden the subject property.
 - (2) The written waiver shall notify applicable property owner(s) of the noise and /or flicker limits required by this Ordinance, describe how the wind energy system is not in compliance, and state that consent is granted for such non compliance.
 - (3) Any such waiver shall be signed by the applicant and the adjacent Landowner(s), and recorded in the Bucks County Recorder of Deeds Office.
15. Operation of a wind energy system shall comply with all other applicable ordinances of the East Rockhill Township Code of Ordinances.
16. The use of the wind energy system shall not interfere with the reception of any radio, television or other communication equipment and shall also not inhibit solar access to adjacent properties, and the owner of the wind energy system shall be required to mitigate any such interference caused by the operation of the wind energy system.

17. The applicant shall demonstrate that any noise emanating from the wind energy system complies with all Township noise regulations set forth within the East Rockhill Township Code of Ordinances, unless the requisite waiver is received.
18. No artificial lighting (unless required by the Federal Aviation Administration), signage (with the exception of warning signage at the base of the tower), or any forms of advertising shall be utilized or attached to the wind energy system.
19. All ground mounted electrical and control equipment shall be labeled or secured to prevent unauthorized access. The tower shall not provide steps or a ladder readily accessible to the public for a minimum height of 15 feet above the ground surface. All wind energy systems and associated buildings shall be enclosed by a fence, of a type and manner acceptable to the Township, at least four feet in height and located at least five feet from the base. All access doors and gates shall be locked to prevent entry by non-authorized persons.
20. A clearly visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.
21. Visible, reflective, colored objects, such as flags, reflectors, or tape shall be placed on the anchor points of guy wires and along guy wires up to a height of ten feet from the ground.
22. All wind energy systems shall be equipped with a redundant braking system. This includes both aerodynamic overspeed controls (including variable pitch, tip and other similar systems) and mechanical brakes. Mechanical brakes shall be operated in a fail-safe mode. Stall regulation shall not be considered a sufficient braking system for overspeed protection.
23. All proposed wind energy systems, whether freestanding or attached to another structure, shall be designed and engineered to provide for safe operation. Detailed engineering plans, prepared by a licensed professional engineer, shall be submitted with applications for approval. If an attached system is proposed, these engineering studies shall demonstrate to the satisfaction of the Township that the wind energy system shall not compromise the structural integrity of the building to which it is attached.
24. Landscaping acceptable to the Township and/or Township Engineer shall be required to help screen the wind energy system and related features.
25. Design and location of a wind energy system shall consider, to the greatest extent possible, the aesthetics of the surrounding environment. In no case shall a device be attached to a structure listed on any Registry of Historic Structures. The Township may require submission of illustrations and photos depicting the color, size, shape, and architectural features of the proposed wind energy system, together with a submission of color photographs of the proposed tower location taken from view of all adjoining properties and roads.

26. All electrical wiring and/or utility and transmission lines, other than wires necessary to connect the wind generator to the tower wiring, the tower wiring to the disconnect junction box, and the grounding wires, must be installed underground in accordance with the prevailing standards of the servicing utility company and the Township.
27. A wind energy system, including the tower, shall comply with all applicable state construction and electrical codes, the Pennsylvania Uniform Construction Code ("UCC") and the National Electrical Code, as amended. Prior to issuance of a permit for the installation of the wind energy system, the applicant must submit to the Township all documentation required by the Township Building Code Official to verify that the design of the device complies with the UCC, including, but not limited to, documentation of the structural integrity of the foundation, base, tower, and all appurtenant structures and the electrical design. Design information must be certified by a licensed professional engineer in the Commonwealth of Pennsylvania and/or the equipment manufacturer.

§13-406. Geothermal Energy Systems.

Geothermal Energy Systems or Ground Source Heat Pump Systems (GSHP) are grouped into two types: closed-loop and open-loop systems. The closed-loop systems circulate a fluid through a subsurface loop of pipe and then to the heat pump. Open-loop systems circulate groundwater to the heat pump and then discharge it. Closed loop systems are permitted within East Rockhill Township with the appropriate permit. Open loop systems are not permitted in East Rockhill Township.

- A. No person shall: (1) construct or install a GSHP; (2) dig, bore, drill, replace, modify, repair and/or destroy a well that is, is intended to be, or was part of a GSHP; or, (3) make any other excavation that may intersect groundwater without first applying for and obtaining the appropriate permit from the Township and paying the requisite permit fee in full. A permit is required for any GSHP within East Rockhill Township. Only closed loop systems are permitted within East Rockhill Township. No open loop system shall be permitted within East Rockhill Township. Application for a permit for the drilling of a well and/or the installation and/or construction of a GSHP shall be made to the Township Code Enforcement Officer. No permit for such a well and/or GSHP shall be issued until the plans and specifications have been approved by the Code Enforcement Officer and/or Township Engineer in accordance with this Ordinance, and all other requisite approvals needed under the Township Code of Ordinances have been secured. A site plan shall be submitted with the application for a GSHP and shall include the following:

- (1) Type of GSHP being proposed.
- (2) Type of piping and fluid proposed for the GSHP.
- (3) Type of grouting used for the GSHP.

- (4) Location and catalog of all trees within 25 feet of the proposed GSHP.
 - (5) Location of all municipal and private stormwater facilities within 500 feet of the proposed GSHP.
 - (6) Location and type of all underground utilities, and all above ground utilities, with clearance to overhead obstructions within 25 feet of the proposed GSHP.
 - (7) Location of all existing and proposed water supply wells and septic systems within 200 feet of the proposed GSHP.
 - (8) Location of all other existing and proposed GSHPs, and distances to the buildings being served.
 - (9) Statement of method to protect curb, sidewalk, and driveway during construction of the GSHP, as applicable.
 - (10) For existing developed sites, statement of proposed method of entry and exit from the site for drilling equipment, and a plan to prevent soil/dirt from getting onto Township roads and/or a plan to remove such soil/dirt.
 - (11) Location of any surface water body, including wetland, watercourse, or pond within 100 feet of the proposed GSHP.
 - (12) Location of all natural resources and other protected land within 25 feet of the proposed GSHP, including, but not limited to, required open space, steep slopes, floodplain, woodlands and wetlands.
- B. GSHP Systems shall be designed and constructed in accordance with the International Ground Source Heat Pump Association (IGSHPA) Installation Standards, as amended, and found at Section 6.3, References, of the Ground Source Heat Pump Manual of the Pennsylvania Department of Environmental Protection, as amended.
- C. The perimeter of the GSHP subsurface loops shall meet the following minimum isolation requirements:
- (1) One hundred (100) feet from any existing or proposed drinking water wells.
 - (2) Twenty-five (25) feet from any existing or proposed individual or community on-lot sewage disposal system including any primary or alternate drainfield sites.
 - (3) Twenty-five (25) feet from property lines and rights-of-way.

- (4) Twenty-five (25) feet from existing or proposed structures.
- D. The subsurface loop of the GSHP system must comply with the following:
- (1) The subsurface loop piping must be made of polyethylene or a similar substitute material approved by the Township. All joints shall be sealed by heat fusion or IGSHPA certified process.
 - (2) GSHP systems shall be equipped with an automatic shutdown device to prevent circulating fluids or oil leaks from migrating.
 - (3) Visual and audible alarms shall be installed in the building or structure in the event of a system malfunction or leakage.
 - (4) Warning labels shall be prominently posted near the interior mechanical system.
 - (5) Only water or a mixture of water and food-grade propylene glycol that is specifically approved by the Township may be used as the circulating fluid within the GSHP.
- E. A written plan shall be submitted to the Township and provide for the operation and periodic inspection of the GSHP system and should include:
- (1) Provisions for any GSHP system leaks or releases to be reported by the owner to the Township and local police department within two hours of the discovery, and the owner shall covenant and agree to take all necessary action to minimize any fluid release to the ground and to promptly repair any system leaks.
 - (2) A system closure plan for use in the event of the discontinuance of the use of the GSHP system.
- F. The installation specifications and drawings for the GSHP system shall be submitted to and reviewed by the Code Enforcement Officer and/or Township Engineer.
- G. GSHP well drilling shall only be undertaken by a Pennsylvania licensed well driller.
- H. Wells shall be grouted to protect against degradation or contamination of the groundwater or intermingling of separate aquifers in accordance with the procedures recommended by the IGSHPA.

- I. Prior to activation of a GSHP system, the Pennsylvania licensed well driller and/or system installer shall provide to the Township:
 - (1) An accurate written drilling record and a written geologic log.
 - (2) An accurate record of the grouting used for each well.
 - (3) As-built plans and related documentation for each system and well location.
 - (4) Written documentation of the GSHP system testing and certification.
- J. The depth of the tubing or heat transfer element must be at least thirty (30) inches below the surface of the ground.
- K. Ground source heat pump systems shall not encroach on public drainage and/or stormwater, utility, roadway or trail easements.
- L. The GSHP shall be properly maintained in accordance with manufacturer's specifications, the installer's specifications, and any applicable Federal, State and local laws. The owner of the GSHP shall submit an annual inspection report certifying the integrity of the system.

§13-407. Outdoor Solid Fuel Burning Appliances.

- 1. Any person desiring to install an outdoor solid fuel burning appliance within East Rockhill Township shall be required to obtain the requisite permit from the Township and shall pay the requisite fee. The permit application shall be signed by all owners of the property on which the outdoor solid fuel burning appliance will be located and the contractor installing the appliance. No permit for such an outdoor solid fuel burning appliance shall be issued until the plans and specifications have been approved by the Code Enforcement Officer and/or Township Engineer in accordance with this Ordinance, and all other requisite approvals needed under the Township Code of Ordinances have been secured.
- 2. The requirements set forth in this Section do not apply to the following:
 - A. Grilling or cooking using charcoal, wood, propane or natural gas in cooking or grilling appliances; and/or
 - B. Burning in a stove, furnace, fireplace or other heating device located within a building or structure used for human habitation.
- 3. Unless specific written approval has been obtained from the Township and PA Department of Environmental Protection (PA DEP), the following materials may not be burned in an outdoor solid fuel burning appliance (Appliance) under any circumstances:

- A. Rubbish or garbage including, but not limited to, food wastes, food wraps, packaging, animal carcasses, paint or painted materials, furniture, composite shingles, construction and demolition debris or other household or business wastes.
 - B. Waste oil or other oily wastes except used oil burned in a heating device for energy recovery subject to applicable PA DEP regulations.
 - C. Asphalt and products containing asphalt.
 - D. Treated or painted wood including, but not limited to plywood, composite wood products or other wood products that are painted, varnished or treated with preservatives, or any other wood that does not meet the definition of Clean Wood.
 - E. Any plastic material including, but not limited to, nylon, PVC, ABS, polystyrene or urethane foam, and synthetic fabrics, films and containers.
 - F. Rubber including tires and synthetic rubber-like products.
 - G. Any material that is not recommended for burning by the manufacturer of the appliance.
 - H. Newspaper, cardboard, particleboard or any paper with ink or dye products.
 - I. Lawn clippings or yard waste.
 - J. Any hazardous waste.
 - K. Coal.
 - L. Manure.
 - M. Waste petroleum products.
4. Fuel burned in any new or existing outdoor solid fuel burning appliance shall only be Clean Wood, natural untreated wood, wood pellets from Clean Wood, approved corn products, approved biomass pellets or other fuels specifically permitted by the Township and the manufacturer's instructions.
 5. No person shall install an outdoor solid fuel burning appliance that is not an EPA OWHH Phase 2 Program qualified appliance.
 6. No outdoor solid fuel burning appliance shall be located on a lot consisting of less than one acre.

7. No outdoor solid fuel burning appliance shall be located less than 150 feet from any property and/or lot line.
8. No outdoor solid fuel burning appliance shall be located less than 200 feet from any occupied structure not located on the lot on which the appliance will be located.
9. The applicant shall provide documentation confirming that the manufacturer certifies that the proposed chimney height is safe and appropriate for the proposed use and location. The maximum height of the outdoor solid fuel burning appliance stack or chimney shall not exceed the maximum height requirement in the specific zoning district wherein the appliance is located.
 - A. For new outdoor solid fuel burning appliances, no person shall install such an appliance unless it has a permanently attached chimney with a minimum chimney height of ten feet above the ground and at least two feet above the highest peak of any residence located less than 150 feet from the appliance, unless otherwise restricted by the manufacturer's certification and/or approved by the Township.
 - B. For existing outdoor solid fuel burning appliances that have been the subject of a complaint and/or violate the Township's nuisance regulations relating to smoke and/or odors, no person shall continue to use or operate such an appliance until such nuisance has been resolved and unless it has a permanent attached chimney with a minimum chimney height of ten feet above the ground and at least two feet above the highest peak of any residence located less than 500 feet from the appliance, unless otherwise restricted by the manufacturer's certification and/or approved by the Township..
10. No person shall use or operate a new or existing appliance unless it complies with all existing federal, state and local regulations, as applicable, including, but not limited to, the following:
 - A. 25 Pa. Code Section 121.7, as amended – Prohibition of Air Pollution
 - B. 25 Pa. Code Section 123.1, as amended – Fugitive Emissions
 - C. 25 Pa. Code Section 123.31, as amended – Odor Emissions
 - D. 25 Pa. Code Section 123.41, as amended – Visible Emissions
 - E. Section 8 of the APCA, 35 P.S. Section 4008, as amended – Unlawful Conduct
 - F. Section 13 of the APCA, 35 P.S. Section 4013, as amended – Public Nuisances
11. All appliances shall be installed, operated, and maintained in strict compliance with the manufacturers' instructions and guidelines for the appliance. In the event that a conflict

arises between the manufacturer's instructions and regulations, and the regulations contained in this Ordinance, the stricter instructions and/or regulations shall apply.

12. All ashes or waste may be disbursed on the property where the appliance is located unless otherwise prohibited by law. Any large accumulation of ashes or waste must be disposed of in a manner approved by the Township of East Rockhill and the Pennsylvania Department of Environmental Protection.
13. All appliances shall be used for the sole purpose of furnishing heat and/or hot water to a dwelling or other structure, including residential swimming pools, located on the property wherein the appliance is located.
14. Outdoor solid fuel burning appliances shall be operated only between September 1st and May 1st each year, unless otherwise approved by the Township.
15. Spark arrestors. All outdoor solid fuel burning appliances shall be equipped with properly functioning spark arrestors.
16. Catalytic converter. All outdoor solid fuel burning appliances installed within East Rockhill Township must be equipped with a properly functioning catalytic converter, unless otherwise approved by the Township.
17. Installation of any electrical or plumbing apparatus or device used in connection with the operation of an appliance shall be in conformity with all applicable electrical and plumbing codes and, in the absence of such code, in conformity with the manufacturer's installation specifications.
18. Standards for installation of an appliance shall also require the outdoor solid fuel burning appliance to be installed upon a nominal six-inch thick permanent, reinforced cement pad in such dimension so as to allow a minimum of six inches of exposed surface area along the perimeter of the pad.
19. All stacks or chimneys must be constructed to withstand high winds or other related elements, as deemed necessary by the Township.
20. The use of lighter fluids, gasoline or chemicals to start the appliance is prohibited.
21. The appliance shall be located on a property with due consideration to prevailing wind conditions.
22. Any outdoor solid fuel burning appliance in existence on the effective date of this Ordinance shall be permitted to remain, provided that the owner complies with the regulations provided for in this Ordinance under Sections 13-407.3., 13-407.4., 13-407.9., 13-407.10., 13-407.12., 13-407.13., 13-407.14., 13-407.15., 13-407.16., 13-407.17 and 13-407.20.

23. Any resident who has secured a permit to install an outdoor solid fuel burning appliance in so doing will also be agreeing to allow the Township Code Enforcement Officer or any other person designated by the Township to inspect the appliance if a written complaint is filed relative to a violation of this Ordinance.
24. The Township reserves the right to suspend the use of all outdoor solid fuel burning appliances if weather conditions warrant, based upon air quality warnings which may be issued by monitoring agencies.
25. A permit issued pursuant to this Ordinance and the use of the outdoor solid fuel burning appliance may be suspended if any of the following conditions occur and/or as the Code Enforcement Officer or other person appointed by the Board of Supervisors to administer and enforce this Ordinance deem necessary to protect the public health, safety and welfare of the residents of East Rockhill Township:
 - A. Malodorous air contaminants from the appliance are detectable outside the property of the person on whose land the appliance is located.
 - B. The emissions from the appliance interferes with the reasonable enjoyment of life on neighboring property.
 - C. The emissions from the appliance caused damage to vegetation on neighboring property.
 - D. The emissions from the appliance are harmful to human or animal health.
 - E. The burning of any material prohibited within this Ordinance.
 - F. Any other violation of this Ordinance.
26. A suspended permit may be reinstated once the condition which resulted in suspension is remedied and reasonable assurances are given that such condition will not recur. Recurrence of a condition which has previously resulted in suspension of a permit shall be considered a violation of this Ordinance and subject the property owner to the penalties provided within the Ordinance.
27. If an outdoor solid fuel burning appliance is replaced or upgraded, a permit shall be required pursuant to this Ordinance.
28. Outdoor solid fuel burning appliances shall be screened with plantings acceptable to the Township and/or Township Engineer and such plantings shall be arranged in an informal manner.

§13-408. Abandonment and/or Decommissioning of Alternative Energy System.

1. If an alternative energy system remains nonfunctional or inoperative for a continuous period of six months, the system shall be deemed to be abandoned and constitute a public nuisance and shall thereafter be removed by the property owner.
2. The alternative energy system owner, at his/her sole expense, shall complete decommissioning of the system within six months after the end of the useful life of the system, or within six months of damage which prevents the system from operating in a safe manner at full capacity or according to industry standards.
3. The owner shall remove the abandoned and/or decommissioned system after a demolition or other requisite permit has been obtained from the Township. Removal includes the entire structure including foundations to below natural grade, external mechanical equipment and transmission equipment.

§13-409. Administration.

1. Permits. The appropriate permit shall be secured prior to the erection, structural repair, alteration and/or relocation of any alternative energy system within the Township. For purposes of obtaining a permit, the applicant shall make application in writing to the Township and shall submit the following information and documents to the Township, together with the additional specific requirements of each alternative energy system as set forth in this Ordinance:
 - A. Name and address of the owner of the property wherein the alternative energy system is proposed and a detailed description of the type, make and model of the alternative energy system being proposed.
 - B. Name and address of the applicant.
 - C. A plot plan (1/8" per foot or greater) showing the location of the lot, building, and proposed alternative energy system in relation to each public right-of-way, building, property line, neighboring properties, and driveways. It shall also identify the lot area, location of existing natural and manmade features, ownership information for adjoining properties, setback measurements from property and street lines and any additional information deemed necessary by the Township.
 - D. Construction plans, including all pertinent engineering data to the Township.
2. Inspection. The Building Inspector and/or Code Enforcement Officer, or other designated Township representative, shall require the proper maintenance and use of all alternative energy systems and will inspect every alternative energy system for which a permit is required within ten days after work is completed on the alternative energy system.

3. Fees and Deposits. Permit fees and escrow deposit amounts, as required by the Township, shall be set by resolution of the Township Board of Supervisors. The applicant for an alternative energy system application requiring a review by the Township Engineer and/or other professional consultant of the Township shall be required to post an appropriate escrow deposit and enter into a Professional Services Agreement with the Township.

§13-410. Enforcement.

1. The Township Manager, or his/her designee, the Code Enforcement and/or Building Code Officer and/or local police department are authorized to enforce this Part.
2. If the Township Manager, or his/her designee, finds or learns that any provision of this Part has been violated, he/she shall provide notification in writing to the person responsible for the violation and the property owner, indicating the nature of the violation and ordering the action necessary to correct it.
3. If the violation is not corrected within the time specified in the written notification from the Township, the Township Manager, or his/her designee, may:
 - A. Order repairs or removal of any alternative energy system and its supporting structures deemed to be dangerous, in disrepair or in violation of this Part and/or order the violating individual(s) to cease all such alternative energy activities.
 - B. Revoke the applicable permits.
 - C. Seek penalties, fines and injunctive relief in accordance with the law.

§13-411. Penalties.

Any person that violates any provision of this Part or any lawful order relating to this Part by the Township Manager, or his/her designee, shall be subject to a fine of not less than One Hundred Dollars (\$100) nor more than Six Hundred Dollars (\$600.00) per violation. Each day that the violation continues is a separate violation. In the event that East Rockhill Township incurs any expense in the enforcement of this Ordinance, including but not limited to court costs and attorney's fees, the Township shall be entitled to collect such costs from the violator. Any penalties or costs assessed shall be payable to East Rockhill Township. In addition to fines, judgments and/or costs set forth above, the Township reserves the right to pursue all other available remedies at law or in equity under the laws of the Commonwealth of Pennsylvania. Any person who has violated or permitted a violation of this Ordinance shall be subject to having their permit suspended or revoked by the Township. Any person who has violated or permitted a violation of this Ordinance shall also immediately cease all alternative energy system activities within the Township until otherwise permitted by the Township.

§13-412. Appeals.

Any person aggrieved by a decision of the Township Manager, or his/her designee, under this Part may appeal the decision to the Township Board of Supervisors within 30 days of the date of the decision and/or order. The Township Board of Supervisors has the authority to interpret the provisions of this Ordinance and to waive the standards included in this Ordinance when a literal enforcement of the provisions of this Ordinance would result in the unreasonable prohibition of alternative energy resources. The Pennsylvania Local Agency Law, as amended, shall govern such appeals and proceedings.

ARTICLE II. Severability and Repealer.

1. The provisions of this Ordinance are severable and if any section, subsection, clause, sentence, or parts thereof shall be held or declared illegal, invalid, or unconstitutional by any court of competent jurisdiction, the decision shall not affect or impair any of the remaining sections, subsections, clauses, sentences, or parts thereof, of this ordinance, and it is hereby declared to be the intent of Township Board of Supervisors that this ordinance would have been adopted if such illegal, invalid, or unconstitutional section, subsection, clause, sentence or part thereof had not been included herein.
2. Any and all existing ordinances that are inconsistent with this Ordinance are hereby repealed to the extent that they are inconsistent with the terms of this amendment.

ARTICLE III. Enactment.

This Ordinance shall become effective five (5) days after enactment.

ENACTED AND ORDAINED by the Board of Supervisors this 18 day of January, 2011.

EAST ROCKHILL TOWNSHIP
BOARD OF SUPERVISORS

ATTEST:

Township Manager