App. No. 088-2022-TA

Zoning Text Amendments

Guilford Township

Meeting:	September 7, 2022
Applicant:	Guilford Township Zoning Commission
Hearing:	TBD
Amendments:	Add Section 4.27 Wind Energy Conversion Systems Add Section 4.28 Outdoor Wood-Fired Hydronic Heaters Delete Sections 6.6, 7.C.4, 8.I.4 Wind Energy Conversion Systems Delete Sections 6.7, 7.C.5, 8.I.5 Outdoor Wood-Fired Hydronic Heaters
Reviewer:	Rob Henwood
Recommendation:	**APPROVE**

Proposal: Shannon Colonna, Zoning Secretary, requested a review of proposed text amendments listed above. The Zoning Resolution includes the Wind Energy and Wood-Fired Hydronic Heaters text sections in the Residential, Commercial, and Industrial Districts repeating the same text. The Township is proposing to delete all the repeated sections and add them to the General Regulations section.

Proposed additions are shown in red and underlined and deletions are ~~red and strikeout~~. Department of Planning Services (DPS) staff comments are black and ***bold and italics***.

Section 4: General Regulations

Regulations in this section apply to properties in all zoning districts except as noted.

4.27 Wind Energy Conversion Systems (WECS)

A. Single mono-pole wind turbines, (WECS), are permitted uses in all zoning districts as an accessory use on a parcel with a minimum of ten (10) acres.
   1. These rules and regulations apply only to those WECS that operate at an aggregate capacity of less than five (5) megawatts.
   2. Roof mounted wind turbines will also be permitted.

B. The electricity **shall** be generated for the on-site consumption of the owner of the lot upon which the turbine is constructed. Excess electric energy may be sold back to the property owner's electric provider

C. Wind turbines, (WECS), supported by guy wires are not permitted.

D. No wind turbines **shall** be located in the front yards in any district.

E. All wind turbines **shall** be UL listed and comply with the owner's electric provider requirements.

F. Freestanding wind turbines **shall** not be installed or erected on a mound or base for the intention of making the system higher than the natural grade and **shall** not exceed 160 feet from the natural grade to the tip of the blade at its highest vertical position.

G. The minimum fall zone for freestanding wind turbines **shall** be equal to the height of the turbine at the tip of the blade at the highest vertical position plus ten (10) feet, measurement **shall** be from the base of the tower and **shall** be free from all overhead transmission lines, public or private streets, above ground structures, property lines, and buildings meant for human occupancy.

H. Emergency contact information **shall** be posted on the structure, listing the manufacturer, owner, voltage, and any emergency contact personnel and 24-hour emergency phone numbers, so that emergency personnel can locate the responsible parties. At the time of issuance of a zoning permit, an identifying number **shall** be issued to the structure and provided to the Fire department and EMS.

I. The sound pressure level produced by the wind turbine **shall** not exceed ten (10) decibels above the ambient decibel level, measured at any property line abutting a contiguous property not owned by the system owner. The sound pressure level **shall** be measured by successively measuring the sound with the turbine turned on and measured again with the turbine turned off. This level may be exceeded during short-term events, such as times of excessive wind speeds or during power outages. We **shall** utilize neighboring townships personnel and equipment to check this.

J. During the location design phase, the owner **shall** consider possible shadow flicker on neighboring properties and conduct studies to identify and remove the impact to human occupied structures.

K. Safety Standards include the following:

1. Each turbine system **shall** be equipped with both manual and automatic controls to limit the rotational speed to correspond with the design limits of the rotor.
2. To control wind tower access, tower climbing apparatus for freestanding wind turbines **shall** be located no closer than fifteen (15) feet from the ground or have a locked anti-climbing device installed on the tower.
3. Wind turbines **shall** not be artificially lighted, except to the extent that may be required by the Federal Aviation Administration or other applicable authority that regulates air safety.
4. If a wind turbine is within 3 miles of an airport, application must be made to the FAA, for evaluation. This may be done online at: **www.oceaaa.faa.gov**. (Obstruction Evaluation Airport Airspace Analysis). There is no charge for this service. Any WECS must conform to any FAA regulations and all applicable permits must be submitted to the Township prior to the Township issuing a permit.
5. Transmission and power lines **shall** be placed underground and wiring from the turbine to ground level **shall** be within the monopole.

L. Wind turbines and components **shall** be painted or finished with a non-reflective unobtrusive color.

M. Freestanding Wind Turbine Maintenance and Removal:

1. The property owner is responsible for ensuring that the wind turbine operates as designed and in compliance with the guidelines of the Guilford Township Zoning Resolution. If a wind turbine system ceases to perform as originally intended for more than twelve (12) consecutive months, i.e., zero electricity generation, the property owner is responsible for repair or totally removing all parts of the system, no later than ninety (90) days after the end of the twelve (12) month period.
2. Upon failure to remove an inoperable wind turbine within the required timeframe, the Guilford Township Zoning Inspector **shall** issue a Notice of Violation, directing the removal of the wind turbine and all components within ninety (90) days. Upon confirming continuing noncompliance, the Guilford Township Trustees may contract with a contractor to remove all wind turbine components as established in the required entry agreement provided by the property owner at the time of permit application.

3. The property owner is responsible for all costs and expenses incurred in connection with securing, removing, and disposing of the system. Upon failure to pay invoices for all such costs and expenses within thirty (30) days of invoicing by the Guilford Township Fiscal Officer or designee, any unpaid costs will be placed as a lien to be collected as part of the real estate taxes.

N. Application Requirements Reviewed and Approved by the Zoning Inspector **shall** include the following:

1. A Zoning Certificate **shall** be required for wind energy conversion systems in residential, industrial, and commercial districts.
2. Submittals **shall** include the following:
   a) A development plan,
   b) A line drawing identifying the electrical components of the system,
   c) Detailed specifications for the wind turbine to be installed,
   d) A property entry agreement providing Guilford Township access to the site in the event that decommissioning is required,
   e) Evidence that the applicant has communicated with the public utility company regarding interconnection to the utility grid.
3. Development Plan requirements **shall** be drawn to scale and clearly detail the following:
   a) Information about the proposed site, including all parcel property lines, dimensions of the site, acreage, parcel numbers, current zoning district and use.
   b) Location and dimensions of existing structures on the site, noting which are human-occupied structures and structures on adjoining properties not owned by the applicant within 100 feet of the property lines in all directions.
   c) Indicate the exact location and height of the proposed free-standing wind turbine, setbacks to all property lines on the site and to all human-occupied structures.
   d) Location of all above-ground utility lines, free-standing antennas, public and private streets, gas and oil storage facilities within the setback radius.
   e) Indicate the property owner, mailing address, and physical address of the project.
   f) Include the make, model, picture/diagram of the wind turbine showing the following:
      i) Height to the hub and to the top of the blades when extended to highest point,
      ii) A cutaway view, illustrating the foundation,
      iii) Manufacturer's specifications,
      iv) Decibel level of the unit.
   g) Photographs of the turbine location, taken from the property lines and the setback locations.
   h) An aerial or satellite photograph with the exact location of the wind turbine indicated.

4.28 Outdoor Wood-Fired Hydronic Heaters (OWFHH)

Preamble

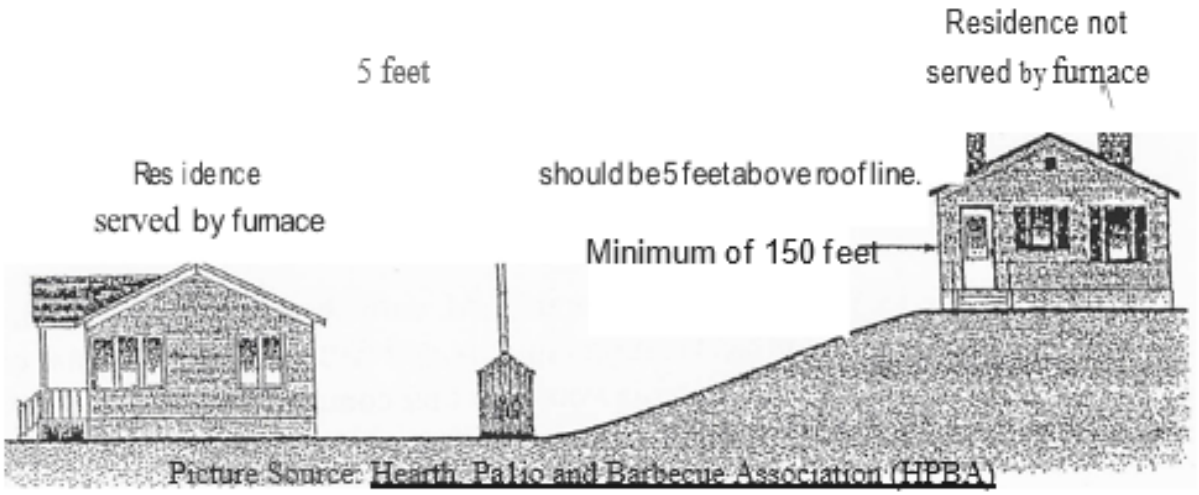
Uncontrolled wood-burning devices, including Outdoor Wood-Fired Hydronic heaters, emit particulate matter, carbon monoxide and other pollutants known to be detrimental to the health of

the public. Exposure to these pollutants can cause adverse short-term effects such as eye, nose, throat, and lung irritation, coughing, as well as shortness of breath. Long term exposure to these pollutants can cause asthma, heart, and lung disease as well as cancer. The Guilford Township Trustees will subject Outdoor Wood-Fired Hydronic Heaters to reasonable conditions that will protect the health, safety and general welfare of the residents and not deprive neighboring residents of the reasonable enjoyment of their property or premises.

A. Outdoor Wood-Fired Hydronic Heaters (OWHH) are considered an accessory use in all Zoning Districts and require a zoning certificate. An OWHH **shall** not be counted as an accessory building in any districts.
B. The OWHHs **shall** only service the principal buildings and/or accessory buildings upon the lot the unit is located.
C. OWHHs **shall** be installed in the rear yard only.
D. No person **shall** from the effective date of this Section, construct, establish or install a new Outdoor Wood-Fired Hydronic Heater that is not an EPA program qualified model, (or as may be amended by the EPA).
E. No person **shall** from the effective date of this Section, operate or maintain an OWHH unless such operation conforms with the manufacturer's instructions regarding such installation, operation/maintenance, and the requirements of this Section.
F. The use of any OWHH existing prior to the effective date of these regulations may be continued.
G. All materials used as fuel in any OWHH **shall** be in conformance with the manufacturer's instructions or the requirements of this Section. In the event of a conflict, the requirements of this Section **shall** apply unless the manufacturer's instructions are stricter, in which case the manufacturer's instructions **shall** apply.
H. The chimney height of a new or existing OWHH **shall** conform to the manufacturer's instructions or the requirements of this Section. In the event of a conflict, the requirements of this Section **shall** apply unless the manufacturer's recommendations are stricter, in which case the manufacturer's instructions **shall** apply.
I. All new OWHHs **shall** meet safety standards including UL, CAN/CSA, ANSI, or other applicable safety standards.
J. OWHHs must comply with Medina County Building Department regulations, i.e., building, electrical and heating, and Ohio EPA Air Pollution Control Division regulations, as well as any applicable State and Federal regulations.
K. Outdoor Wood-Fired Hydronic Heaters **shall** be constructed, established, installed, operated, and maintained pursuant to the following conditions:
    1. Fuel burned in any OWHH **shall** be only natural untreated wood, wood pellets, corn products, biomass pellets or other listed fuels specifically permitted by the manufacturer.
    2. The following fuels are specifically prohibited in any OWHH:
        a) Wood that has been painted, varnished, or coated with similar material and/or has been pressure treated with preservatives and contains resins or glues as in plywood or other composite wood products.
        b) Rubbish or garbage including, but not limited to food wastes, food packaging or food wraps.
        c) Any plastic materials including, but not limited to nylons, PVC, ABS, polystyrene or urethane foam, synthetic fabrics, plastic films, and plastic containers.

d) Rubber, including tires or other synthetic rubber-like products.
e) Newspaper, (other than a small amount to start an initial fire in the burn chamber), cardboard, or any paper with ink or dye products.
f) Any other items not specifically allowed by the manufacturer or this Section.

3. Setbacks for any new Outdoor Wood-Fired Hydronic Heater must meet the following requirements:
   a) The OWHH must comply with accessory building setback and height requirements in the District it is proposed to be erected and **shall** be located a minimum of twenty (20) feet from any other structure per **Section 4.17-5.**
   b) The OWHH **shall** be located on the property in compliance with the manufacturer's recommendations and/or testing and listing requirements for clearance to combustible materials.
   c) The Outdoor Wood-Fired Hydronic Heater **shall** be located a minimum of 150 feet from any residence, including an attached garage that is not served by the **OWHH.**



4. Chimney heights for any OWHH **shall** be as follows:
   a) The chimney of any Outdoor Wood-Fired Hydronic Heater **shall** extend at least five (5) feet above the peak of any residence not served by the OWHH located within 150 feet of such Outdoor Wood-Fired Hydronic Heater.
5. Outdoor Furnaces that use corn, wood pellets or other palletized biomass **shall** meet the same setback and chimney height requirements as EPA Program qualified models or **shall** meet the setback and chimney height requirements of this Section, whichever is more restrictive.

Section 6: Residential:
Regulations in this section apply to properties in the Residential district. All regulations in Section 4: General Regulation also apply unless noted.

~~**6.6 WIND ENERGY CONVERSION SYSTEMS (WECS)**~~

~~A. Single mono-pole wind turbines, (WECS), are permitted uses in all zoning districts as an accessory use on a parcel with a minimum of ten (10) acres. permitted.~~ ***The township proposes to delete the entire section.***

~~**6.7 OUTDOOR WOOD-FIRED HYDRONIC HEATERS**~~

~~**Preamble**~~

~~Uncontrolled wood-burning devices, including Outdoor Wood-Fired Hydronic Heaters, emit particulate matter, carbon monoxide and other pollutants known to be detrimental to the health of the public.~~ … ***The township proposes to delete the entire section.***

Section 7: Business and Commercial: which shall be designated as: "C" districts. Regulations in this section apply to properties in the Commercial district. All regulations in Section 4: General Regulation also apply unless noted.

~~**C.4 WIND ENERGY CONVERSION SYSTEMS (WECS)**~~

~~A. Single mono-pole wind turbines, (WECS), are permitted uses in all zoning districts as an accessory use on a parcel with a minimum of ten (10) acres.~~ ***The township proposes to delete the entire section.***

~~**C.5 OUTDOOR WOOD-FIRED HYDRONIC HEATERS (OWFHH)**~~

~~**Preamble**~~

~~Uncontrolled wood-burning devices, including Outdoor Wood-Fired Hydronic heaters, emit particulate matter, carbon monoxide and other pollutants known to be detrimental to the health of the public. Exposure to these pollutants can cause adverse short-term effects such as eye, nose, throat, and lung irritation, coughing, as well as shortness of breath.~~ … ***The township proposes to delete the entire section.***

Section 8: Industrial and Manufacturing:

Regulations in this section apply to properties in the Industrial district. All regulations in Section 4: General Regulation also apply unless noted.

~~**I.4 WIND ENERGY CONVERSION SYSTEMS - WECS**~~

~~A. Single mono-pole wind turbines, (WECS), are permitted uses in all zoning districts as an accessory use on a parcel with a minimum of ten (10) acres.~~ … ***The township proposes to delete the entire section.***

~~**I.5 OUTDOOR WOOD-FIRED HYDRONIC HEATERS (OWFHH)**~~

~~**Preamble**~~

~~Uncontrolled wood-burning devices, including Outdoor Wood-Fired Hydronic heaters, emit particulate matter, carbon monoxide and other pollutants known to be detrimental to the health of the public. Exposure to these pollutants can cause adverse short-term effects such as eye, nose, throat, and lung irritation, coughing, as well as shortness of breath.~~ … ***The township proposes to delete the entire section.***

Recommendation: Planning Services staff recommends the Planning Commission **APPROVE** the proposed text amendments to the Guilford Township Zoning Resolution.