

First Reading: September 13, 2010

Second Reading: October 12, 2010

Third Reading: November 8, 2010

PASSED: November 8, 2010

BY: Chaiken

ORDINANCE NO. 2010-20

ORDINANCE ENACTING REGULATIONS FOR  
ALTERNATIVE ENERGY SYSTEMS

**WHEREAS**, the Village Council has determined that:

1. Alternative energy systems such as solar, wind, and geothermal are gradually gaining broader acceptance by the public who desire to generate clean, renewable and, in some cases, cheaper energy;
2. Solar, wind, and geothermal energy are abundant, renewable, and nonpolluting energy resources;
3. Use of such alternative energy systems will help to reduce residents' dependence on nonrenewable energy resources and decrease air and water pollution resulting from conventional energy sources;
4. Alternative energy systems can help to reduce peak power demands from the electric power supply grid, help diversify the community's energy supply portfolio, and conserve natural resources;
5. Alternative energy systems promote competition in the electricity supply market by promoting consumer choice and provide a hedge against increases in the price of conventional fuels uses for electricity generation;

**WHEREAS**, the Council finds that it is appropriate to standardize the requirements for alternative energy systems so that these resources can be utilized in a cost-effective and appropriate manner while complying with the letter and intent of the Village Zoning Code and other regulations in order to minimize any adverse impact on neighboring properties;

**NOW, THEREFORE, BE IT ORDAINED BY THE** Council of Amberley Village, State of Ohio, seven (7) members elected thereto concurring:

**SECTION 1:** That Chapter 158 of the Village Code of Ordinances, which is to be added to and amends the Village Code of Ordinances, reads as follows:

Chapter 158: Alternative Energy Systems

***General Provisions***

**§ 158.01 PURPOSE.**

It is the purpose of this chapter, known as “Alternative Energy Systems,” to accommodate the need for alternative energy systems in the Village for the generation of power through renewable resources such as solar, geothermal, and wind, while regulating their location and number and otherwise minimizing their adverse impacts on neighboring properties.

## **§158.02 DEFINITIONS.**

The definitions set forth in Section 154.02 are applicable to this chapter and are incorporated herein. The following definitions shall also apply to this chapter. Where there is a conflicting provision, the definitions set forth in this chapter shall control.

**ALTERNATIVE ENERGY SYSTEM.** Any energy system using renewable, non-fossil fuels to generate power, including but not limited to solar, geothermal, and wind.

**GEOTHERMAL ENERGY SYSTEMS (GES).** A system that extracts heat from the earth by an open or closed system. An open system typically utilizes a well that is drilled to extract ambient tepid water, whereby the system extracts the heat and returns the water to the earth through the well. A closed system is normally a network of pipe or tubing that circulates water to transfer the heat from the earth to the liquid within the closed loop, whereby the system extracts the heat and recycles the liquid to repeat the cycle.

**GENERATION OF POWER FOR COMMERCIAL PURPOSES.** The generation of more than twice as much energy as used annually by the subject property upon which an alternative energy system is installed.

**NON-RESIDENTIAL ALTERNATIVE ENERGY SYSTEM.** An alternative energy system which is an accessory use to a lawful non-residential use in any zoning district.

**OWNER.** The record owner of the real property upon which an alternative energy system is installed or maintained.

**RESIDENTIAL ALTERNATIVE ENERGY SYSTEM.** An alternative energy system which is an accessory use to a lawful residential use in any zoning district.

**SOLAR ENERGY SYSTEM (SES).** An energy system and all associated equipment which converts solar energy to usable thermal, mechanical, chemical, or electrical energy to meet all or part of a structure’s energy requirements, including but not limited to the use of solar panels to heat water or air, or otherwise generate electric power.

**SOLAR PANEL.** A single photovoltaic panel or a group of photovoltaic panels containing one or more receptive cells, the purpose of which is to convert solar energy into usable thermal, mechanical, chemical, or electrical energy.

**WIND ENERGY CONVERSION SYSTEMS (WECS).** Any device, such as a wind charger, windmill, or wind turbine, and associated facilities including the support

structure of the system such as a tower, that converts wind energy into mechanical or electrical energy.

#### **§158.03        ACCESSORY STRUCTURES.**

Unless otherwise indicated in this chapter, alternative energy systems, including but not necessarily limited to GES, SES, and WECS, are permitted in all zoning districts as accessory structures pursuant to the Zoning Code, including but not limited to Sections 154.12 and 154.25.

#### **§158.04        COMMERCIAL GENERATION PROHIBITED.**

The installation or maintenance of an alternative energy system shall be to provide power for the principal use of the property upon which the system is located and shall not be for the generation of power for commercial purposes. This provision shall not prohibit the sale of excess power generated from time to time from an alternative energy system.

#### **§158.05        MAINTENANCE.**

All alternative energy systems shall be maintained by the owner of the property upon which the system is installed. This chapter shall be enforced consistent with the Property Maintenance Code as it applies to accessory structures, including but not limited to Section 150.79.7. This provision shall not be construed to abolish or impair additional remedies of the Village or its officers or agents relating to the health, safety, and welfare of the public and Village residents.

#### **§158.06        PERMIT REQUIRED.**

The installation of any alternative energy system, or the replacement or alteration of more than 50 percent of an existing alternative energy system, shall require a permit from the Village to be considered and administered by the Board of Zoning Appeals.

#### **§158.07        COMPLIANCE.**

The owner of the property upon which an alternative energy system is installed shall ensure that the design, installation, and maintenance of such systems comply with all applicable regulations of the Hamilton County Building Department, state, and federal regulations, as well as obtain all required permits and approvals from the Village. The installation or substantial improvement or change to an alternative energy system

### ***SOLAR ENERGY SYSTEMS***

#### **§158.10    LOCATION.**

(A)    *Roof Mounted Systems.* Roof mounted solar energy systems shall not extend beyond the existing roof (width and height) of the structure to which they are attached. Roof mounted systems shall not exceed the height of the roof line on a pitched

roof; SES may project vertically up to five (5) feet above a flat roof line. Roof mounted systems are not permitted in a front yard or on the front roof plane of a structure.

(B) *Ground Mounted Systems.*

(1) Ground mounted SES shall be located in a side or rear yard only. Solar energy systems will not be permitted in front yards and shall not extend beyond the front of the building.

(2) Ground mounted SES shall maintain the setbacks required for accessory structures from property lines, and shall not be located in a platted easement. The side yard setback shall apply to all ground mounted SES whether measuring from a side or rear lot line.

(3) Ground mounted solar panels shall not exceed eight (8) feet in height.

(4) Ground mounted solar panels shall be fully screened from adjacent properties by fencing or structures (detached garages, other permitted accessory structures, etc.) or landscaping.

(C) Solar panels shall be installed and arranged so as to avoid unreasonable glare projected onto neighboring properties.

**§158.15 SIGNAGE.**

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 a property line.

**§158.20 DESIGN.**

To the extent a solar energy system cannot be screened, the design of solar energy systems shall, to the extent reasonably possible, use materials, colors, and textures that will blend the systems into the natural setting and existing environment.

**§158.25 EXEMPTIONS.**

Solar panels less than two (2) square feet in area and those installed within the right of way by a utility company or the Village, and approved by the Village, are not subject to the regulations set forth above. For panels less than two (2) square feet in area, all panels on the same lot shall be combined and treated as if they formed a single panel for purposes of determining their size and whether they fall under this exemption.

***GEOHERMAL ENERGY SYSTEMS***

**§158.40 LOCATION.**

Geothermal energy systems shall not be located within 10 feet of any property line, utility lines, or right of way. Geothermal energy systems located underground may be permitted in the front yard.

**§158.45        NUISANCE.**

Geothermal energy systems shall not cause a nuisance to any neighboring property, including but not limited to any unreasonable noise, heat, vibration, or other such adverse effects.

**§158.50        EXCAVATION NOTICE.**

It shall be the responsibility of the owner of the property upon which any part of a GES is installed underground to identify the presence and location of GES facilities and equipment to any contractor, utility, or other person when appropriate, including but not limited to any time when the owner has reasonable notice that any excavation will occur within 10 feet of any part of the GES.

***WIND ENERGY SYSTEMS***

**§158.70        RESIDENTIAL USE.**

A wind energy conversion system (WECS) is not permitted in a residential area. A WECS for commercial properties is only permitted as a conditional use to be reviewed by the Board of Zoning Appeals.

**§158.75        LOCATION.**

(A) A WECS shall be placed away from any property line or above ground utility line at least as far as the total length of the tower height plus the blade length plus 10 feet. For example, for a tower 20 feet tall and a blade length of eight feet, the WECS must be located at least 38 feet from any property line.

(B) The height of any WECS shall be limited to 60 feet. Taller structures constitute a conditional use and are to be reviewed by the Board of Zoning Appeals.

(C) WECS shall be located only in the rear or side yards of the property and shall not extend beyond the front of the primary structure.

(D) WECS may only be mounted on the ground. WECS may not be mounted on the roof of any structure without a conditional use permit from the Board of Zoning Appeals.

**§158.80        DESIGN.**

(A) Towers shall be monopole towers. Other types of towers, such as lattice towers and guyed towers, may be acceptable as a conditional use to be reviewed by the Board of Zoning Appeals.

(B) All towers shall be hot-dipped galvanized, chemically cleaned, and painted with two coats of rust-inhibitive enamel.

(C) All advertising and identification of any kind on the WECS is prohibited except for applicable warning and equipment information signage required by the manufacturer or by federal, state or local regulations.

(D) Lighting shall be limited only to that required by the Federal Aviation Administration.

(E) The tower must not encourage climbing. There shall be no rungs or ladders at the bottom 10 feet of the tower.

#### **§158.85 MAINTENANCE.**

(A) All WECS shall be kept in good repair and free from rust, damaged supports, framework or other components.

(B) All abandoned or unused WECS shall be removed within six (6) months of the cessation of operations unless an extension is granted by the Board of Zoning Appeals. After the WECS is removed, the owner or operator shall restore the site to its original, or to an improved, condition.

(C) The Village is not responsible for the abandonment of a WECS. The owner of the property upon which a WECS is installed is responsible for removal or repair of the WECS.

#### **§158.90 NUISANCE.**

(A) WECS shall not cause a nuisance to any neighboring property, including but not limited to any unreasonable noise, heat, vibration, glare, or other such adverse effects.

(B) The noise level generated by a WECS shall not exceed 50 decibels measured at a distance from the base of the unit equivalent to the height of the unit. The height of the unit is calculated by adding the height of the tower plus the length of the blade.

#### **§158.95 INSURANCE/LIABILITY.**

The owner of the real property where a WECS is installed must maintain liability insurance. Proof of liability insurance is a condition of approval by the Board of Zoning Appeals. The owner shall provide the Village with a copy of a current general liability insurance certificate on a continued, up to date basis, indicating policy limits of at least \$500,000/\$1,000,000 (per occurrence/aggregate limit), and listing the Village as an additional insured. As a condition of approval, the owner shall indemnify and defend the Village and hold the Village harmless for any claim or action pertaining to the WECS on the owner's property.

**SECTION 2:** If any section, paragraph, subsection, clause or provision of this ordinance shall be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of this ordinance as a whole, or any other part hereof.

**SECTION 3:** That this Ordinance shall take effect and be in force at the earliest date allowed by law.

Passed this 8<sup>th</sup> day of November, 2010.

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Mayor Merrie Stillpass

Attest:

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Nicole Browder, Clerk of Council

Ordinance Vote:

Moved: Chaiken Second: Hattenbach

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|------------|------------|
| Stillpass  | <u>Aye</u> |
| Chaiken    | <u>Aye</u> |
| Cohen      | <u>Aye</u> |
| Conway     | <u>Aye</u> |
| Hattenbach | <u>Aye</u> |
| Katz       | <u>Aye</u> |
| McIntosh   | <u>Aye</u> |

I, Clerk of Council of Amberley Village, Ohio, certify that on the \_\_\_\_ day of \_\_\_\_\_, 2010, the forgoing Ordinance was published pursuant to Article IX of the Home Rule Charter by posting true copies of said Ordinance at all of the places of public notice as designed by Sec. 31.40(B), Code of Ordinances.

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Nicole Browder, Clerk of Council