

**VILLAGE OF MARIEMONT, OHIO**

**ORDINANCE NO. O-24-XX**

**TO AMEND SECTION 151.087 PERMITTED  
OBSTRUCTIONS IN REQUIRED YARDS AND ADD  
NEW SECTION 151.087.1 .2 .3 .4 .5 .6 and .7**

**WHEREAS**, Rules and Law Committee and the Building Administrator have reviewed several sections of the Mariemont Code of Ordinances that regulate the use of property and the conservation of energy through access to, and use of, renewable energy resources; and

**WHEREAS**, the Village wishes to promote the general health, safety and welfare of the community by adopting and implementing this Ordinance providing for the proper installation, construction and operation of Geothermally fueled Systems; and

**WHEREAS**, the purpose of this Ordinance is to set requirements for Geothermal Systems; and as such, the committee has determined that Section 151.087 needs to be modified and Section 151.087.1 .2 .3 .4 .5 .6 and .7 added to include allowances for geothermal fueled systems; and

**WHEREAS**, Council believes it is in the best interest of the Village that Section 151.087 shall be amended and Section 151.087.1 .2 .3 .4 .5 .6 and .7 be added to reflect said changes.

**NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF  
THE VILLAGE OF MARIEMONT, STATE OF OHIO, A  
MAJORITY OF THE MEMBERS DULY ELECTED THERETO  
CONCURRING:**

**SECTION I.** That Section 151.087 of the Mariemont Code of Ordinances which currently reads as follows:

**§ 151.087 PERMITTED OBSTRUCTIONS IN REQUIRED YARDS.**

(E) Heating, ventilating, refrigerating, condensing, or back-up electrical generator equipment, or combinations thereof may be placed in a required rear yard; provided, that there be no more than two such (three if one is a back-up generator) obstructions and that no such obstruction shall extend more than four feet above the ground at the point of the obstruction and that such obstructions do not occupy more than 12 (16 if includes a back-up generator) square feet of the required rear yard, and further; provided, that such obstructions be placed as close to the residence for which the required rear yard is provided as is reasonably possible. Similar equipment may be permitted in any side yard but may not be placed closer to the side yard property line than the required side yard setback. No similar equipment is permitted in the front yard of any structure. Utility meters may not be installed on the wall of any structure facing a street. Utility meters may be placed above grade on the side or rear wall of any structure:

Is hereby amended to read as follows:

**§ 151.087 PERMITTED OBSTRUCTIONS IN REQUIRED YARDS**

(E) Heating, ventilating, refrigerating, condensing, or back-up electrical generator equipment, or combinations thereof may be placed in a required rear yard; provided, that there be no more than two such (three if one is a back-up generator) obstructions and that no such obstruction shall extend more than four feet above the ground at the point of the obstruction and that such obstructions do not occupy more than 12 (16 if includes a back-up generator) square feet of the required rear yard, and further; provided, that such obstructions be placed as close to the residence for which the required rear yard is provided as is reasonably possible. Similar equipment may be permitted in any side yard but may not be placed closer to the side yard property line than the required side yard setback for lots wider than 50ft or 3ft for lots 50ft or narrower. If there are obstacles blocking egress to the rear yard (i.e. fencing, large tree, other obstructions), the building department may deny the side yard location. No similar equipment is permitted in the front yard of any structure. Utility meters may not be installed on the wall of any structure facing a street. Utility meters may be placed above grade on the side or rear wall of any structure. Refer to Section 151.087 for Geothermal System requirements.

**151.087.1 – Purpose:**

The purpose of this Ordinance is to promote the use and construction of a Geothermal Heating or Cooling Systems within the Village while protecting the Village’s water resources. In furtherance of this overall purpose, this Ordinance addresses the following:

- A. Protect and preserve the water resources and water supply that serve all the Village’s residents;
- B. Conserve and beneficially manage Geothermal Resources and Thermal Groundwater in a comprehensive and coordinated manner so as to assure their continued availability and productivity;
- C. Continue to support and assist in the development of individual private Geothermal Resources and Thermal Groundwater uses, including residential, institutional, commercial and industrial activities;
- D. Maximize the public welfare and economic benefit to be derived from Geothermal Resources and Thermal Groundwater;
- E. Minimize the potential for damage or degradation to Geothermal Resources and Thermal Groundwater;
- F. Protect the surface and subsurface environment during development and utilization of Geothermal Resources and Thermal Groundwater; and
- G. Allow for the installation and maintenance of Geothermal Heating Systems that are safe, efficient, and utilize modern technology.

**151.087.2 – Definitions:**

**CLOSED LOOP SYSTEMS:** A geothermal heat pump system which relies on the contained circulation of geothermal fluids through an underground loop of pipes. The loops act as a subsurface heat exchanger, which transports the heat to or from the ground. The loop of pipe is installed either vertically in borings or horizontally in trenches.

**CLOSED LOOP, HORIZONTAL:** A Closed Loop System where the loops of the pipe are laid horizontally in the ground, in trenches.

**CLOSED LOOP, VERTICAL:** A Closed Loop System where the loops of the pipe are installed vertically into the ground, in well borings.

**GEOHERMAL FLUID:** Any fluid transporting or capable of transporting geothermal heat.

**OPEN LOOP SYSTEMS:** A geothermal heat pump system which relies on the circulation of groundwater from a supply well, spring or surface water. The source for heat, groundwater is moved from the ground to a heat pump. The water is then transferred to a discharge area, typically a surface water body, storm or sanitary sewer system, or recharge well.

**151.087.3 – Applicability:**

- (a) No person shall install a Geothermal System in any zoning district in the Village without compliance with the provisions of this chapter and applicable related requirements of the entire ordinances.
- (b) Geothermal installations constructed prior to the effective date of this Chapter shall not be required to meet the requirements of this chapter
- (c) Geothermal installations are not allowed in any front yard.
- (e) Geothermal installations are allowed in a side or rear yard with the following provisions:
  - 1) Well locations must be setback 3ft from all side or rear property lines
  - 2) A minimum of 10ft from any public utilities (electrical, gas, water, sewer)
  - 3) Not in a designated floodplain

**151.087.4 - Contents of application.**

- (a) An application for Geothermal Heating & Cooling Systems to be approved in compliance with the standards and criteria of this Chapter and shall include:
  - 1) Locations and depths of all well drillings referenced from established property lines and surface elevation. If there is doubt to the compliance of well locations, a survey may be required.
  - 2) Complete specifications of all equipment and materials to be used for the geothermal system.
  - 3) Manual-J loss/gain calculation and geothermal design report specific to the manufacturer of the geothermal equipment
  - 4) Qualifications or certifications of the HVAC contractor and well digger.

**151.087.5 - Design and performance standards.**

- (a) Open Loop Systems shall be prohibited;
- (b) Only Vertical Closed Loop Systems shall be permitted;
- (c) Only nontoxic, biodegradable circulating fluids are permitted;

- (d) The design and installation of geothermal systems and related boreholes for geothermal heat pump systems shall conform to applicable industry standards, including those of the American National Standards Institute (ANSI), the International Ground Source Heat Pump Association (IGSHPA), the American Society for Testing and Materials (ASTM), the Air-Conditioning and Refrigeration Institute (ARI), or other similar certifying organizations, and shall comply with the Residential Code of Ohio Building Code and all other applicable Village zoning requirements.

#### **151.087.6 - Fees**

All applications for a Geothermal Heating System permit shall be accompanied by an application fee, which shall be non-refundable, and such fee will be according to a fee schedule established by Village resolution. Engineering and other professional fees incurred in the review of the permit application shall be paid by the Applicant.

#### **151.087.7 Maintenance and Abandonment:**

- A. Any leakage of the geothermal fluid requires the system to be shut down immediately until successful repairs are completed and inspected. The owner of the system is responsible for all costs related to repair and clean-up of the leakage. A Geothermal Heating System continuing defective operation shall be prosecuted as a violation of this ordinance.
- B. Access and Notification: In connection with the principal functions and activities of the Village's resource management responsibilities, officials may, upon notice to the Applicant, enter upon any property within the Village for purposes of inspecting Geothermal Systems or monitoring the operational characteristics of such facilities. When such inspection or monitoring is necessary to the assessment of other indices related to geothermal or groundwater reservoir management, or protection of the public safety and welfare, the Village shall provide affected occupants with prior notice, describing the nature, purpose, and duration of the necessary inspection or monitoring. Such inspections or monitoring shall be conducted in accordance with applicable Village and State procedures for inspections; and
- C. No Geothermal Heating System constructed or altered after the effective date of this ordinance shall be operated or altered in such a manner as to cause Geothermal Fluids or Thermal Groundwater to be discharged onto the surface of the ground or into any public drainage facility; and
- D. The Applicant shall notify the Municipality within 30 days of the abandonment of any Geothermal Heating System.
- E. If the geothermal system remains nonfunctional or inoperative for a continuous period of one year, the system shall be deemed to be abandoned and shall constitute a public nuisance. The owner shall remove the abandoned system at their expense after a demolition permit has been obtained in accordance with the following: the heat pump and any external mechanical equipment shall be

removed. The heat transfer fluid shall be captured and disposed of in accordance with applicable regulations. The top of the pipe/coil shall be properly capped.

**SECTION II.** In all other respects, Section 151.087 of the Mariemont Code of Ordinances shall remain in full force and effect.

**SECTION III.** That this Ordinance shall take effect at the earliest date allowed by law.

Passed: April 8, 2024

---

William A. Brown, Mayor

ATTEST:

---

Kelly I. Rankin, Fiscal Officer

I, Kelly I. Rankin, Fiscal Officer of the Village of Mariemont, Ohio, do hereby certify that there is no newspaper printed in said municipality and that publication of the foregoing Ordinance was duly made by posting true copies thereof at five of the most public places in said corporation as determined by the Council, as follows: the Concourse, Miami Bluff and Flintpoint Way; the Tennis Court property, on the east side of Plainville Road between Maple and Chestnut Streets; the site of the Municipal Building. Wooster Pike and Crystal Springs Road; the northeast corner of the intersection of Rembold and Miami Road inside the enclosure; the northwest corner of the Old Town Center, intersection of Chestnut and Oak Streets; each for a period of fifteen days commencing on the 9th day of April 2024.

---

Kelly I. Rankin, Fiscal Officer