

TOWNSHIP OF ELDRED
MONROE COUNTY, PENNSYLVANIA

ORDINANCE NO. 2021-01

**AN ORDINANCE AMENDING THE ELDRED TOWNSHIP ZONING ORDINANCE,
TOWNSHIP ORDINANCE #2014-01, AS AMENDED; AMENDING THE
REGULATIONS PERTAINING TO GROUND SOURCE HEAT PUMPS; AND
PROVIDING FOR OTHER MISCELLANEOUS MATTERS.**

WHEREAS, Eldred Township, Monroe County, Pennsylvania, (the "Township") is a Pennsylvania second class township, organized and operating under the Pennsylvania Second Class Township Code ("Township Code"), 53 P.S. Sec. 65101, et seq.;

WHEREAS, pursuant to Sec. 1505 of the Township Code, 53 P.S. Sec. 66505, the corporate powers of the Township shall be exercised by the Township Board of Supervisors (the "Board");

WHEREAS, Section 1506 of the Township Code, 53 P.S. Section 66506, authorizes the Board of Supervisors to make and adopt any ordinances, by-laws, rules and regulations not inconsistent with or restrained by the Constitution and the laws of this Commonwealth necessary for the proper management, care and control of the Township, and its finances and maintenance of peace, good government, health, and welfare of the Township and its citizens, trade, commerce and manufactures;

WHEREAS, Section 1516 of the Township Code, 53 P.S. 66516, entitled "Land Use Regulations," authorizes the Board of Supervisors to plan for the development of the Township through zoning, subdivision and land development regulations under the Act of July 31, 1968 (P.L. 805, No. 247), known as the "Pennsylvania Municipalities Planning Code";

WHEREAS, pursuant to such authority, the Township enacted on May 1, 2014, Township Ordinance #2014-01, commonly known as the Eldred Township Zoning Ordinance, (the "Zoning Ordinance");

WHEREAS, Section 609 of the Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247, as amended and re-enacted by the Act of December 21, 1988, P.L. 1329, No. 170, found at 53 P.S. 10609, entitled "Enactment of Zoning Ordinance Amendments," sets forth provisions for the

enactment of amendments to zoning ordinances pursuant to certain procedural formalities;

WHEREAS, the Board of Supervisors from time to time has reviewed the Zoning Ordinance, and amended the Zoning Ordinance, as the Board finds in the best of interests of the health, safety and welfare of Township residents;

WHEREAS, the Zoning Ordinance currently only allows the use of ground source heat pumps by special exception as set forth in Section 707.7;

WHEREAS, the Board finds that advances in technology enable ground source heat pumps to function without the use of liquid chemicals that could be harmful to the aquifer if they leached from the pump system; and

WHEREAS, the Board finds that, subject to certain requirements as contained herein, ground source heat pumps can be permitted by right under the Zoning Ordinance.

NOW, THEREFORE, BE IT ORDAINED AND ENACTED by the Board of Supervisors of Eldred Township, Monroe County, Pennsylvania, and it is hereby ordained and enacted by the authority of the same, to wit:

Section 1. Section 707.7 Regulated Uses of the Zoning Ordinance is amended so as to provide that Ground Source Heat Pumps in Wellhead Protection Zones 2 and 3 shall be governed by the underlying zoning district (zon dist), instead of being permitted only by special exception (spec excep). The Schedule of Regulated Land Uses within Section 707.7 is amended accordingly.

Section 2. Section 707.8 I. Ground Source Heat Pumps of the Zoning Ordinance is amended and restated, in its entirety, as follows: "See Section 503.18 for specific requirements."

Section 3. The Zoning Ordinance is amended by adding a new Section 503.18 Ground Source Heat Pumps as stated in the attached Exhibit "A" hereto, which is incorporated herein by reference.

Section 4. If any sentence, clause, section, or part of this Ordinance is for any reason found to be unconstitutional,

illegal or invalid, such unconstitutionality, illegality, or invalidity shall not affect or impair any remaining provisions, sentences, clauses, sections, or parts of this Ordinance. It is hereby declared as the intent of the Board of Supervisors that such remainder shall be and shall remain in full force and effect.

Section 5. All Ordinances or parts of Ordinances inconsistent with this Ordinance are hereby repealed insofar, but only insofar, as the same are inconsistent herewith. To the extent the provisions of this Zoning Ordinance Amendment are the same as any provisions of the Zoning Ordinance, as amended, in force immediately prior to adoption of this Ordinance, the provisions of this Ordinance are intended as a continuation of such prior provisions and not as new provisions. The provisions of this Ordinance shall not affect any act done or liability incurred, nor shall such provisions affect any suit or prosecution pending or to be initiated to enforce any right or penalty or to punish any offense under the authority of any ordinance in force prior to adoption of this Ordinance.

Section 6. This ordinance shall take effect five (5) days after the date of its enactment.

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EXHIBIT "A"

TO

ORDINANCE

§ 503.18 Ground Source Heat Pumps (GSHP)

- A. Applicability. No person shall install, construct, modify, drill, or excavate to facilitate the construction/installation and modification of a GSHP without first obtaining from the Township a zoning permit.

A permit under the provision of this chapter shall be required prior to any person:

- (a) Constructing or modifying a GSHP.
- (b) Drilling or redrilling any vertical GSHP.
- (c) Decommissioning or abandoning an existing GSHP.

- B. Closed-loop systems. All ground source heat pump systems shall be closed-loop systems. Open-loop GSHP systems shall not be permitted.

GSHP systems shall be designed and constructed in accordance with the International Ground Source Heat Pump Association (hereafter IGSHA) Installation Standards.

- C. Minimum isolation requirements. The perimeter of the GSHP subsurface loops, vertical or horizontal, shall meet the following minimum isolation requirements.

- (1) 100 feet from any existing or proposed drinking water wells;
- (2) 25 feet from any existing or proposed individual or community on-lot sewage disposal system including any primary or alternate drainfield sites;
- (3) 25 feet from property lines, rights-of-way; and
- (4) 25 feet from existing or proposed structures

- D. Subsurface loops. With respect to the subsurface loop of the GSHP systems:

- (1) The subsurface loop piping for same must be made of polyethylene or a substitute similar material approved for use by the IGSHPA. 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; and
- (5) For closed-loop GSHP systems, only water or mixture of water and food-grade propylene glycol may be used as the circulating fluid unless a similarly inert fluid is approved for use by the IGSHPA.

E. Plan requirement. A written plan shall provide for the operation and periodic inspections of the GSHP system proposed by the system designer and approved by the property owner which, among, other matters, provides that:

- (1) Any GSHP system leaks or releases will be reported by the owner to the Township within 2 hours of the discovery of same, and the owner shall covenant and agree to take all necessary appropriate action to minimize any fluid release to the ground and to promptly repair any system leaks; and
- (2) A system closure plan for use in the event of the discontinuance of the use of the GSHP system.

F. Standards for vertical closed-loop GSHP systems.

- (1) Vertical closed-loop GSHP systems.
 - (a) GSHP well drilling shall only be undertaken by a Pennsylvania licensed well driller.
 - (b) Well shall be grouted to protect against degradation or contamination of the groundwater or intermingling of separate aquifers.
 - (c) Grouting shall be mixed, pumped and placed in accordance with the procedures recommended by the International Ground Source Heat Pump Association. Acceptable grout materials are as follows:

- (i) High solids bentonite grout with a minimum of 30% solids (not bentonite gel).
 - (ii) A material approved for use by the IGSHPA.
 - (d) Grouting shall be placed in the borehole from the bottom to the top. Grouting shall be pumped into place via a tremie pipe.
- (2) Prior to activation of the system with respect to each vertical GSHP well installation, the Pennsylvania licensed well driller and/or system installer shall provide to the Township Zoning Officer:
- (a) An accurate written drilling record and a written geologic log; and
 - (b) An accurate record of the grouting used for each such well; and
 - (c) As-built plans and related documentation for each such system and well location; and
 - (d) Written documentation of the GSHP system testing and certification.

G. Standards for horizontal closed-loop systems.

- (1) Care shall be taken that no rocks are in contact with piping. In rocky soils, pipe shall be placed in a bed of sand or limestone screenings at the bottom of the trenches.
- (2) Flowable backfill consisting of water, sand and cement may be used to surround the pipe in the trench.
- (3) Metallic pipe location tape shall be placed 12 inches below the ground surface to alert future owners and excavators to the presence and location of the system.
- (4) The depth of the tubing or heat transfer element must be at least 30 inches below the surface of the ground.

H. Inspections.

- (1) A permit fee in the amount of \$500 shall be posted with the Township to cover the cost of plan review and inspection costs. This fee amount may be amended by resolution of the Board of Supervisors.
- (2) Piping shall be flow and pressure tested before vertical borings are sealed or before horizontal trenches are backfilled. The Township Zoning Officer or his or her designee shall observe pressure testing.


- (3) The Township Zoning Officer, or his or her designee, shall observe grouting of the vertical boreholes of the GSHP wells.
- (4) GSHP system installer shall contact the Township Zoning Officer, or his or her designee, a minimum of 24 hours in advance to inspect grouting pond piping and to verify pressure testing.

ORDAINED AND ENACTED into an Ordinance at a regular meeting of the Board of Supervisors of Eldred Township, Monroe County, Pennsylvania this 15 day of December, 2021.

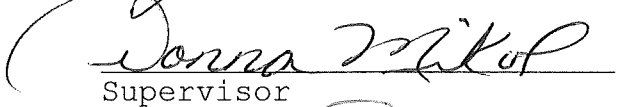
TOWNSHIP OF ELDRED
BOARD OF SUPERVISORS




Chairperson



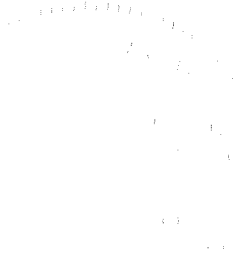
Vice Chairperson



Supervisor



Township Secretary



(TOWNSHIP SEAL)