CAERNARVON TOWNSHIP

Berks County, Pennsylvania

ORDINANCE NO. 322

AN ORDINANCE OF THE TOWNSHIP OF CAERNARVON, BERKS COUNTY, PENNSYLVANIA, TO AMEND THE ZONING ORDINANCE OF CAERNARVON TOWNSHIP, AS AMENDED, TO ALLOW REGIONAL ANAEROBIC DIGESTERS AS A PERMITTED CONDITIONAL USE IN THE EFFECTIVE AGRICULTURAL PRESERVATION DISTRICT PURSUANT TO SPECIFIED STANDARDS.

IT IS HEREBY ORDAINED AND ENACTED by the Board of Supervisors of Caernarvon Township, Berks County, Pennsylvania, as follows:

<u>SECTION 1.</u> The Caernarvon Township Zoning Ordinance, Section 300, Definitions, is hereby amended by adding the following new definitions for "Anaerobic Digester," "Anaerobic Digestion," "Biogas" and "Regional Anaerobic Digester."

ANAEROBIC DIGESTER. A facility, the main purpose of which is to use anaerobic digestion processes to manage and convert livestock and poultry manure that may be mixed with other organic materials brought into a facility from off-site (such as food waste) in order to create biogas, which is captured and either used on site to produce electricity, heat, and water or is conveyed via pipeline for use off-site. Types of anaerobic digesters include covered anaerobic lagoons, plug flow, and/or complete mix (or continually stirred tank reactor), along with other appurtenant sites, structures and buildings, food de-packaging facilities, electrical infrastructure, transmission lines and other appurtenant structures and facilities.

<u>ANAEROBIC DIGESTION</u>. The process in which microorganisms, in the absence of oxygen, convert the energy stored in volatile acids in livestock and poultry manure or other organic materials into biogas.

<u>BIOGAS</u>. A fuel consisting of methane, carbon dioxide, and small amounts of water and other compounds produced as part of anaerobic digestion processes.

<u>REGIONAL ANAEROBIC DIGESTER</u>. An anaerobic digester that accepts and utilizes livestock and poultry manure as well as organic materials generated off-site and delivered to the Anaerobic Digester. Regional anaerobic digesters may include "co-digestion" in which the livestock and poultry manure is mixed with other organic materials as part of creating biogas.

<u>SECTION 2</u>. The Caernarvon Township Zoning Ordinance, Article V, District Regulations, is hereby amended by adding Section 543.A. to the Effective Agricultural, Preservation District as follows:

Section 543.A. <u>Uses Permitted by Conditional Use</u>

The following, as a principal use, their accessory uses and no other, are permitted in the Effective Agricultural Preservation District when conditional use is granted by the Board of Supervisors subject to and in accordance with Article VII, Section 705 of this Ordinance.

1. Regional Anaerobic Digester, subject to Section 653 of this Ordinance.

<u>SECTION 3.</u> The Caernarvon Township Zoning Ordinance, Article VI, General Regulations, is hereby amended to create the following section.

653. Regional Anaerobic Digesters

- 1. Within the Effective Agricultural Preservation District, Regional Anaerobic Digesters shall be permitted by conditional use as an accessory use to a use permitted in Section 542 or Section 543. It is the intent of this provision to allow Regional Anaerobic Digesters in order to support and benefit farms within Caernarvon Township.
 - a. The minimum lot area shall be 40 acres.
 - b. A traffic impact study shall be prepared pursuant to the requirements and standards of Section 516 "Traffic Impact Studies" of the Caernarvon Township Subdivision and Land Development Ordinance.
 - c. The applicant shall submit a transportation study, detailing the effect of the regional anaerobic digester system on local roadways, including effect of vehicle weight, congestion, and noise.
 - d. The applicant shall provide sufficiently long stacking lanes into the facility, so that vehicles waiting to be loaded/unloaded will not backup onto public streets.
 - e. The applicant shall provide a detailed description of the proposed use in each of the following descriptions:
 - (1) The nature of on-site activities and operations, the types of materials stored and used, the frequency and duration period of storage of materials and the methods for use and disposal of materials. In addition, the applicant shall furnish evidence that the use, handling, and disposal of material will be accomplished in a manner that complies with state and federal regulations.
 - (2) The general scale of operation in terms of its market area, specific space and area requirements for each activity, the total number of employees of each shift, and an overall needed site size.
 - (3) How the anaerobic digester will support the farm on which it resides. This may include the management of manure, production of renewable biogas,

utilization of digestate and other organic materials used on the farm and the generation of a supplemental income stream to offset the high operational costs of farming and the fluctuations of farm commodity prices

- f. Design, installation and maintenance.
 - (1) The applicant shall address and document performance standards for siting to minimize impacts on neighboring properties which shall include considerations of topography, odor, prevailing wind patterns, proximity to nonagricultural properties, operational noise, and specific hours of operation. The Applicant is encouraged to design and construct digesters and associated buildings that blend into the agricultural character of the EAP district and the surrounding topography. The application shall include architectural renderings of the façade of all proposed improvements associated with the regional anaerobic digester and a street view profile. The façade and street view renderings shall demonstrate the proposed improvements and site layout will be designed in a manner consistent with the adjacent community and neighborhood and with those purposes that the Effective Agricultural Preservation District are intended to protect and promote in Section 541.
 - (2) Regional anaerobic digester systems shall be designed and constructed in compliance with the guidelines outlined in the publication Manure Management for Environmental Protection, Bureau of Water Quality Management Publication, and any revisions, supplements and successors thereto, of DEP.
 - (3) Regional anaerobic digesters shall be designed and constructed in compliance with applicable local, state, and federal codes and regulations. Evidence of all federal and state regulatory agencies' approvals shall be a condition of any approval.
 - (4) A certified professional, qualified to do such, shall furnish and explain all details of construction, operation, maintenance and necessary controls related to the anaerobic digester system.
 - (5) The applicant shall either provide a letter from the Conservation District stating that the applicant's regional anaerobic digester system design has been review and approved by the Conservation District and that all regulations and requirements of the state manure management program have been satisfied, or submit a letter from the Conservation District stating that it will not review the plan or that no review is required under applicable ordinances, or submit evidence that such a letter has been requested and the Conservation District has failed to respond.
 - (6) The applicant shall submit an operation and maintenance plan to demonstrate that the anaerobic digester and specifically any membrane system will prevent fugitive emissions and will be maintained in such a

manner as to prevent biogas leaks and resultant fugitive emissions and malodor odors.

- (7) The applicant shall submit an odor mitigation plan to demonstrate odor control measures and odor control devices to be implemented to control odors and mitigate impact on adjacent property owners.
- (8) Applicant shall submit renderings of how the digester and associated buildings will be designed and constructed so as to be generally consistent with the aesthetics of other agricultural buildings and surrounding farm operations.

g. Setback requirements.

- (1) Except as otherwise provided for under the provisions of the Pennsylvania Nutrient Management and Odor Management Act, no new underground storage, inground storage, trench silo, lagoon, earthen bank, or aboveground storage facility used for storing manure or organic slurry related to the regional anaerobic digester system shall be located within 200 feet from any property line unless the owner of an adjoining property waives this restriction in writing to the Township. Existing farm lagoons that are located within 200 feet of a property line may be utilized as part of an anaerobic digester operation.
- (2) No building, accessory outbuilding or equipment related to the anaerobic digester shall be constructed closer to fifty feet (50') from a property line, or closer than 300 feet from an occupied dwelling, whichever is greater, unless the owner of the dwelling waives this restriction in writing to the Township.
- (3) New driveways, parking lots and stormwater facilities required for the anaerobic digester shall be a minimum of twenty (20) feet from any property line. An applicant may use existing driveways and parking areas for an anaerobic digester located closer than twenty feet from the property line if approved by the Board of Supervisors during the conditional use proceedings.
- h. Height requirements. A maximum building height of thirty-five (35) feet shall apply to all buildings related to the regional anaerobic digester facility except that an anaerobic digester tank that is designed to inflate and deflate in capturing the biogas shall not exceed forty-five (45) feet in height when fully inflated. The maximum height for any flares related to the anaerobic digester facility shall be forty-five (45) feet. The maximum height for a flare may be increased by the Board of Supervisors if required by a state agency as part of issuing a permit for the anaerobic digester.
- i. Parking requirements. The applicant shall provide one parking space for each employee working at the anaerobic digester facility on the largest shift.

- j. Maximum Additional Impervious Surface. The total new impervious surface added to a property in order to operate an anaerobic digester shall be limited to no more than twenty (20) percent of the gross lot area.
- k. Storage. All food and food waste received as part of the anaerobic digester shall be stored indoors. No outdoor storage of food or food waste is permitted.
- 1. Trash. All garbage, trash and rubbish shall be stored indoors or in enclosed, screened areas not visible to the public or accessible to animals or rodents.
- m. Use and Transmission of Biogas. Any biogas generated from the digester must be used on the property or transported off the property via pipeline, subject to the provision of Section 653.1.m. The biogas generated from the digester shall not be liquified or compressed for purposes of transporting it off of the property using trucks.
- n. Transporting biogas using a pipeline. Biogas may only be transported off of a property using a pipeline if the right-of-way required for transporting the biogas to an existing pipeline is obtained through negotiations with affected property owners and not obtained through condemnation proceedings. Allowing for transporting biogas from the digester through a pipeline is hereby declared to be a purely private benefit for the Applicant under this zoning ordinance that is allowed only if the required right-of-way is not obtained through condemnation proceedings. Applicant shall establish that all pipeline right-of-way required for transporting biogas from the digester to an established pipeline have been voluntarily acquired through negotiations with any affected third parties. Otherwise, biogas from the digester may not be transported via pipeline from the property.

As part of the conditional use application, Applicant shall provide a document acceptable to the Township Solicitor that any zoning approval shall automatically become null and void if any right-of-way required for transporting the biogas to an existing pipeline is acquired through condemnation proceedings. Such document shall be recorded against the Property as a condition of any approval and must be recorded prior to the issuance of any zoning and building permits for a digester seeking to transport biogas off of a property.

- o. Use of livestock and / or poultry manure. The Anaerobic Digester must be designed so that a minimum of ten (10) percent of the materials inputted into the digester is manure from animals housed on the property on which the digester resides or from animals housed on an adjoining property.
- p. Agricultural Use and Subdivision Requirements. An anerobic digester shall be considered an agricultural use if all of the requirements of this Section 653 are met and shall not be considered a second principal use for purposes of Section 604. The applicant shall not be allowed to subdivide the area used for an

- anerobic digester from the remaining property but may enter into a lease agreement between the property owner and an operator of an anaerobic digester facility, which lease shall not constitute a subdivision for zoning and land development purposes.
- q. There shall be no onsite commercial or retail sales of product or byproduct generated by the Regional Anaerobic Digester unless expressly permitted by the Board of Supervisors as part of the conditional use proceedings.
- Decommissioning. The applicant shall submit a decommissioning plan for the Anaerobic Digester and related facilities pursuant to the requirements of Pennsylvania's Solid Waste Management Act ("Act") when the digester becomes functionally obsolete or is no longer in use. All tanks or other structures that contained waste or have been contaminated with waste shall be cleaned and the waste shall be processed and disposed of in accordance with the Act. Additionally, buildings, tanks, supporting structures and other physical components may be refurbished for continued use, reclaimed, or adapted for other farm use, or dismantled and recycled or disposed. The regional anaerobic digester owner shall notify the Township immediately upon cessation or abandonment of the operation and shall be responsible for the removal of the manure and organic food waste from the Anaerobic Digester facility within six weeks from the date operations cease. The digester shall be removed and all associated buildings or facilities shall be removed or repurposed as set forth in the decommissioning plan within twelve (12) months from cessation or abandonment of the operation. At the time of issuance of the permit for the construction of the regional anaerobic digester facility, the owner shall provide to the Pennsylvania Department of Environmental Protection ("DEP") financial security in an amount required by DEP to decommission the facility. If no financial security is required by DEP, the owner shall be required to provide financial security in a form and amount acceptable to the Township to secure the performance of the decommissioning of the regional anaerobic digester as set forth in the decommissioning plan. The amount of the financial security shall be renegotiated every five years for the life of the operations.
- s. The Board of Supervisors may permit the modification of the design standards contained within this Section 653 in order to encourage the use of efficient and innovative design or to address specific site conditions; no modification of design shall apply to any other section of the Zoning Ordinance and/or the SLDO outside of that contained within this Section 653. An applicant desiring to obtain such approval shall, when making application for approval for a digester, also make application for any requested modifications so that the Board of Supervisors shall consider any modification requests simultaneously with the request for the digester.

<u>SECTION 4.</u> Severability. The provisions of this Ordinance are severable and if any section, sentence, clause, or provision hereof shall be held illegal, invalid, or unconstitutional by any court of competent jurisdiction, such decision of the court shall not affect or impair the remaining sections, sentences, clauses, or provisions of this Ordinance. It is hereby declared to be the intent of the Board

of Supervisors of Caernarvon Township that this Ordinance would have been adopted if such illegal, invalid or unconstitutional section, sentence, clause or provision had not been included herein.

<u>SECTION 5.</u> This Ordinance shall take effect and be in force five (5) days after its enactment by the Board of Supervisors of Caernarvon Township as provided by law.

DULY ORDAINED AND ENACTED this \(\subseteq \frac{1}{2} \) day of \(\subseteq \frac{1}{2} \) day of \(\subseteq \frac{1}{2} \) the Board of Supervisors of Caernarvon Township, Berks County, Pennsylvania, in lawful session duly assembled.

CAERNARVON TOWNSHIP BOARD OF SUPERVISORS:

Attest:

Township Secretary

BY:

Sandra Styer, Chair

Paul Whiteman, Jr., Vice Chair

Keith Fritz, Supervisor

Jack Hess, Supervisor

Paul Whiteman, Sr., Supervisor