

# **ORDINANCE REGULATING THE OPERATION AND MAINTENANCE OF SOLAR ENERGY FACILITIES IN DELAWARE TOWNSHIP**

WHEREAS, this Board desires to enact the following ordinance regulating the operation or maintenance of Solar Energy Facilities in Delaware Township.

THE TOWNSHIP OF DELAWARE ORDAINS,

## **Section 15.18.00. TITLE**

This ordinance may be known and may be cited as “Ordinance Regulating the Operation and Maintenance of Solar Energy Facilities in Delaware Township.”

## **Section 15.18.01. PURPOSES AND OBJECTIVES**

The purpose and objectives for which this ordinance is passed are as follows:

- A. To preserve the dignity and aesthetic quality of the environment in Delaware Township.
- B. To preserve the physical integrity of land in close proximity to residential areas.
- C. To protect and enhance the economic viability and interests of the citizens and residents of Delaware Township who have made substantial financial investments in homes, businesses, and industry in Delaware Township.
- D. To facilitate the construction, installation and operation of Solar Energy Facilities (SEFs) in the Township of Delaware in a manner that minimizes the adverse impacts to residential, forestry, agricultural, commercial, and wildlife interests.

## **Section 15.18.02. CONFLICTING REGULATIONS**

Whenever any provision of this Ordinance impose more stringent requirements, regulations, restrictions or limitations than are imposed or required by the provisions of any other law or ordinance, the provisions of this Ordinance shall govern.

## **Section 15.18.03. DEFINITIONS**

For the purpose of this ordinance, certain terms and words are hereby defined; words used in the present tense shall include the future; words used in the singular number shall include the plural number; and the plural the singular; and the word “shall” is mandatory and not discretionary.

**A) Abandonment:** to give up, discontinue, withdraw from. Any Solar Energy Facility that ceases to produce energy for 12 continuous months will be considered abandoned.

**B) Building:** Any structure having a roof supported by columns or walls, and designated or intended for the shelter, support, enclosure or protection of persons, animals or chattels.

**C) Decommissioning plan:** A document that details the planned shut down or removal of a solar energy facility from operation or usage.

**D) Fence:** A continuance barrier extending from the surface of the ground to a uniform height of not less than four (4) feet from the ground at any given point, constructed of dirt, wood, stone, steel, or other metal, or any substance of a similar nature and strength.

**E) Gate:** A door or other device attached to a fence which, when opened, provides a means of ingress and egress of persons and things for which it was intended, and which, when closed, forms and continuous barrier as a part of the fence to which it is attached.

**F) Glare:** The effect produced by light with an intensity sufficient to cause annoyance, discomfort, or loss in visual performance and visibility.

**G) Improved Area:** Area containing solar panels, electrical inverters, storage buildings and access roads.

**H) Opaque Fence:** A continuous opaque, unperforated barrier extending from the surface of the ground to a uniform height of not less than four (4) feet from the ground at any given point, constructed of dirt, wood, stone, steel, or other metal, or any substance of a similar nature and strength which will hide the Solar Energy Facility.

**I) Public Road:** Any road or highway located within the Township of Delaware which is now or hereafter designated and maintained by the Township of Delaware, County of Sanilac or the Michigan Department of Transportation as part of the State Highway System, Whether primary or secondary, hard surfaced or other dependable roads which provide access to residential areas. Setbacks for improved areas shall be measured from the road right away.

**J) Residence:** A building used as a dwelling for one or more families or persons.

**K) Solar Energy Facility:** An energy facility, an area of land, or a structural rooftop principally used to convert solar energy to electricity, which includes, but is not limited to, the use of one or more solar energy systems. This definition shall only include those facilities that sell electricity to be used off site and shall not include "Small Scale Solar Energy Systems" as governed by Section 15.17.03.

**L) Solar Energy Overlay Zoning District:** Districts created by the Delaware Township Board, upon receiving a recommendation of the Planning Commission, by identifying specific areas that are appropriate for development of Solar Energy Facilities and that have specific regulations for unique uses, structures, or conditions.

**M) Township:** Township shall mean the Township of Delaware, Sanilac County, Michigan.

#### **Section 15.18.04. DEVELOPMENT USES, REQUIREMENTS AND RESTRICTIONS**

All listed principal permitted uses in the underlying zoning district of this overlay zone are permitted. All listed discretionary conditional, special approval or special land uses in the underlying zoning district of the overlay zone are subject to conditional use or special land use permit process and review. Solar powered electricity generating sources and solar farms are special approval uses in a solar energy facility overlay zoning district

#### **Section 15.18.05. PERMITTED ZONES**

In any Solar Energy overlay zoning district, the Planning Commission shall review all the Solar Energy Facility land use applications, subject to the restrictions contained in this Ordinance.

#### **Section 15.18.06. PROHIBITIONS**

It shall be unlawful after the effective date of this Ordinance for any person, firm, or corporation, or other legal entity to operate, maintain or establish in any area of Delaware Township a Solar Energy Facility which the site plan has not been approved by the Delaware Township Planning Commission. Modifications or upgrades to an existing Solar Energy Facility that increases the area by more than 20% of the original footprint or changes the solar panel type shall be subject to this ordinance.

#### **Section 15.18.07. LOCATION**

- A. All Solar Energy Facilities must comply with the requirement established in the Delaware Township Zoning Ordinance.
- B. All Solar Energy Facilities shall be considered any special use in a Solar Energy Overlay Zoning District, subject to the restrictions contained in the Ordinance.
- C. All improved areas, including disposal areas, shall be at least 100 ft. from a public road and 25 Ft from a fence line.
- D. All improved areas shall maintain a 25 ft. set back from residential areas and adjacent properties.
- E. All improved areas located in a residential area shall have a minimum landscape buffer within 25 ft. The buffer shall contain evergreen trees or bushes planted no more than 8 ft. apart and at least 4 ft. tall at the time of planting. The buffer shall obtain a height of 10 ft.

#### **Section 15.18.08. SECURITY & SAFETY**

- A. Solar Energy Facilities shall be completely fenced. No fence shall be less than four feet in height. The perimeter fence shall be signed to restrict unauthorized access. If a wire fence is used, vegetation must be planted along the residential sides.

- B. Each owner, operator or maintainer of a Solar Energy Facility to which this Ordinance applies, and who chooses to use vegetation as defined in Section 15.18.08 above with wire fence, shall utilize good husbandry techniques with respect to said vegetation, including but not limited to proper pruning, proper fertilize, and proper mulching, so that the vegetation will reach maturity as soon as practical and will have maximum density in foliage. Dead or diseased vegetation shall be removed and must be replanted at the next appropriate planting time. Plants or grasses not part of landscaping shall be maintained by the facility operator not to exceed twelve inches in height.
- C. All collection system wiring shall comply with all applicable safety and stray voltage standards.
- D. All access doors to solar buildings and electrical equipment shall be locked at all times when unattended.
- E. Solar Energy Facilities shall be designed and operated in compliance with all applicable provisions of local, state and federal laws and regulations.
- F. The applicant shall be responsible for maintenance of the access roads. At the landowner's discretion, the entrance of each access road from public right of way shall be gated, with wings as appropriate, to discourage trespassers.

**Section 15.18.09. GLARE AND SOLAR RADIATION**

- A. All Solar Energy Facilities shall be placed such that concentrated solar radiation or glare does not project onto nearby structures, properties, or roadways.
- B. Must have glare reduction-anti reflective coating according to F.A.A.
- C. The applicant has the burden of proving that any glare produced does not have significant adverse impact on neighboring or adjacent properties.

**Section 15.18.10 SUPPLEMENTAL REGULATIONS**

- A. The manufacturer's or installer's identification and appropriate warning sign shall be posted on or near the panels in a clearly visible manner.
- B. On site power lines between solar panels and inverters shall be placed underground.
- C. The design of Solar Energy Facilities buffers shall use materials, colors, textures, screening and landscaping, that will blend the facility into the natural setting and existing environment.

- D. If the Solar Energy Facility consists of batteries or storage of batteries, adequate design must be provided to ensure all the local, state and federal requirements regulating outdoor battery storage have been met.
- E. The applicant must obtain from Sanilac County a driveway permit.
- F. The design and construction of Solar Energy Facilities shall not produce light emissions, either direct or indirect (reflective), that would interfere with pilot vision and / or traffic control operations. The applicant shall use measures to reduce the visual impact of solar panels to the extent possible.
- G. The design and construction of Solar Energy Facilities shall not produce electrical emissions that would interfere with aircraft communications systems or navigations equipment.
- H. A copy of the application to the utility company that will be purchasing electricity from the proposed site shall be provided to the Township.
- I. An affidavit or evidence of an agreement between the lot owner and the facility's owner or operator confirming the owner or operator has permission for construction and operation of the Solar Energy Facility.
- J. Any other relevant studies, reports, certificates and approval as may be reasonably required by the State of Michigan, County of Sanilac or Delaware Township.
- K. A description of the proposed technology to include type of solar panel and system, fixed mounted verses solar tracking, number of panels, and angles of orientation.
- L. An information sign shall be posted and maintained at the entrance(s) which lists the name and phone number of the owner and/or operator and identify a person responsible for the public to contact with inquiries and complaints throughout the life of the project and provide this number and name to Delaware Township. The Solar Energy Facility owner and / or operator shall make reasonable efforts to respond to the public's inquiries and complaints.
- M. Any erosion or flooding of property resulting from the construction of alternative energy structures or access roads, whether in the Overlay Zone or not, is the responsibility of the developer/ owner of the structures.
- N. Existing structures and landscaping on adjacent properties shall not be removed, altered, or affected by Solar Energy Systems.

### **Section 15.18.11. SITE PLAN REQUIRED /REVIEW**

Solar Energy Facilities shall not be located, constructed, erected, altered, or used without first obtaining a Solar Energy Facilities special land use approval permit issued by the Planning Commission pursuant to this Ordinance. An applicant proposing a Solar Energy Facility must submit the following site plan materials:

- 1) A detailed site plan of the property showing existing features such as contours, buildings, roads, overhead public utility lines, zoning district, and ownership of property, and vehicular access:
  - 2) Plan(s) showing the location of proposed Solar Energy Facilities ( with possible deviation ), underground and overhead wiring ( including the minimum depth of underground wiring), new drainage facilities ( if any) , access roads, (including minimum width), substations and accessory structures;
  - 3) A description of the routes to be used and of any road improvements that will be necessary in the Township to accommodate construction vehicles, equipment or other deliveries, and an agreement or bond which guarantees the repair of damage to public roads and other areas caused by construction of the Solar Energy Facility;
  - 4) Engineering data concerning construction of Solar Energy Facilities and its base or foundation, which must be engineered and constructed in such a manner that upon removal of said solar farm, the soil will be restored to its original condition to depth of three (3) feet;
  - 5) Anticipated construction schedule;
  - 6) Description of operations, including anticipated regular unscheduled maintenance.
  - 7) Complaint resolution policy and procedures manual.
  - 8) MISS DIG Systems, Inc. of Michigan membership;
  - 9) Proof of liability insurance prior to the start of construction for all contractors and subcontractors that are to be part of the project.
- A) Construction Bond.  
Applicant shall file a construction performance bond or other acceptable agreement, in an amount determined by the Township, to ensure that, in the event that the project is not completed, the project site and other affected private or governmental properties (eg,

roads, ditches, bridges, etc.) will be restored to pre-construction condition. The bond shall be terminated upon timely completion of construction and activation of the facility.

B) Decommissioning Plan and Bond.

Applicant shall file a decommissioning plan and an agreement that, upon activation of the facility, a decommissioning bond or equivalent financial instrument shall be posted. (See “Decommissioning”)

C) The applicant must also obtain a building permit from the Sanilac County Department of Construction and Land Use and a permit from the Sanilac County Road Commission and / or Michigan Department of Transportation (MDOT) for driveways to connect access roads to existing County roads and from the Sanilac County Drain Commission for any culverts or other drainage facilities.

**Section 15.18.12. APPLICATION FEE**

An applicant for a Solar Energy Facility special approval permit shall remit an application fee and a fee per megawatt of nameplate capacity to the Township included with all applications in the amount specified in the fee schedule. This fee (which may be adjusted from time to time) is based on the Township review costs, and shall include, but not be limited to, such cost as meeting expenses, publication and notification expenses, related attorney fees, and other costs as may be incurred by the Township during the application and review process.

**Section 15.18.13. APPLICATION PROCEDURES**

A developer/operator of any Solar Energy Facilities within the overlay zone shall comply with the following procedures for application for land use permit:

- A) Make application for a special approval land use permit for Solar Energy Facility to the Planning Commission as generally required by the zoning ordinance and as specifically required by this Article. The application for special approval land use permit for Solar Energy Facilities will be accompanied by the required fees and information as required in this Article.
- B) The Planning Commission will review the application in a public meeting which shall be noticed pursuant to the special approval provisions of this zoning Ordinance and the Michigan Zoning Enabling Act (Act 110 of 2006; MCL 125.3101 et seq.)

**Section 15.18.14. ABANDONMENT AND DECOMMISSIONING**

- A) At time of application for special land use permit, the applicant shall submit a plan describing the intended disposition of the alternative energy project at the end of its useful life and shall describe any agreement with the landowner regarding equipment removal upon termination of the lease.

- B) Any Solar Energy Facilities left unused or inoperable for more than 12 months would be deemed abandoned, to be disposed of by the applicant pursuant to the ordinance.
- C) The land must be returned to its original state within six months of the determination of abandonment.
- D) Any Concrete bases must be removed three (3) feet below ground level with appropriate drainage and filled with like soil that was removed.
- E) The application shall post a performance bond or equivalent financial instrument for decommissioning. The bond shall be in favor of Delaware Township and shall be determined by the Delaware Township Board and shall contain a replenishment obligation. Evidence of decommissioning bond may be in form of escrow account, surety performance bond, letter of credit or similar financial commitment to guaranty decommissioning of an abandoned site.
- F) Within six months prior to the effective date of the performance bond or equivalent financial instrument the developer/ applicant shall provide a report as to the estimated cost of decommissioning the project as of that date. The Township shall review the results and other such information as the Township may gather and shall adjust the initial amount of the bond or equivalent financial instrument accordingly. Such adjustments shall be at the sole discretion of the Township.
- G) Every two (2) years after the Effective date of the bond or equivalent financial instrument the developer/ applicant shall provide a report as to the estimated cost of decommissioning the project as of that date. The Township shall review the results and other such information as the Township may gather and shall adjust the amount of the bond or equivalent financial instrument accordingly. Such adjustments shall be at the sole discretion of the Township.
- H) Should the developer/ applicant fail to decommission the project following abandonment the township shall have the authority to decommission the project, to sell the scrap, and to use the salvage value to defray the costs of decommissioning the project.

#### **Section 15.18.15. INSPECTIONS**

The Township will conduct annual inspections of any and all Solar Energy Facilities. The cost of the annual Township inspection will be reimbursed to the Township by the Solar Energy Company's owner/ operator through an escrow fund established pursuant to a schedule of " Fees and Permits" as adjusted from time-to-time by the Township Board. The inspections will consist of but not be limited to evaluating compliance with the original contract terms; compliance with improvements and updates and evaluating compliance with the special land use permit.

**Section 15.18.16. PENALTY**

Violators of the provisions of this ordinance shall be subject to a civil infraction penalty for each and every day of non-compliance.

**Section 15.18.17. COMPLIANCE**

All structures shall comply with the area, setback and height requirements, unless different requirements are specified as a condition for a use permitted after special approval.

**Section 15.18.18. NOISE**

- A) A noise study will be performed and included in the application. The noise study will be performed by an independent noise study expert and paid for by the applicant. Audible noise or the sound pressure level from the operation of the Solar Energy Facility shall not exceed forty-five (45) dBA, or the ambient sound pressure level plus five (5) dBA, whichever is greater, for more than ten percent (10%) of any sixty minutes interval, measured at any property line existing on the date of approval of any Solar Energy Facility special approval permit. The applicant shall be able to provide sound pressure level measurements from a reasonable number of sampled locations at the perimeter and the interior for the Solar Energy Facility to demonstrate compliance with this standard.
  
- B) In the event audible noise from the operation of the Solar Energy Facility contains a steady pure tone, the standards for audible noise set forth in subparagraph a) of this subsection shall be reduced by five (5) dBA. A pure tone is defined to exist if the one-third (1/3 ) octave band sound pressure level in the band, including the tone, exceeds the arithmetic average of the sound pressure levels of the two (2) contiguous one-third (1/3) octave bands by five (5) dBA for center frequency of five hundred (500) Hz and above, by eight (8) dBA for center frequencies between one hundred and sixty (160) Hz and four hundred ninety-nine (499) Hz, or by fifteen (15) dBA for center frequencies less than or equal to one hundred and twenty –five (125) Hz.

**Section 15.18.19. COMPLAINT RESOLUTION**

- A) The Solar Energy Facility owner and /or Operator shall submit a detailed, written complaint resolution process developed by the applicant to resolve complaints from the Delaware Township board or the Delaware Township property owner or residents concerning the construction or operation of the Facility. The complaint resolution process must be approved by the Township board as a condition of approval of the special land use permit application.
  
- B) The Township Board shall appoint a three-member Complaint Resolution Committee to oversee and participate in all complaint resolution discussions or meetings between the Township property owners or resident and the Solar Energy Facility Owners and / or Operator.

- C) The Complaint Resolution Committee Shall consist of one (1) member of the Township Board, one (1) member of the Township Planning Commission, and one (1) qualified elector chosen from the community.
- D) The Solar Energy Owner and / or Operator shall provide not less than forty eight (48) hour notice to the Complaint Resolution Committee and shall provide the opportunity for the Committee to attend any and all complaint resolution discussions and meetings.
- E) The Township shall be kept apprised of all complaints and shall receive a report as outlining the issue, the progress, and the resolution. Such report shall be presented monthly by the Complaint Resolution Committee.

**Section 15.18.20. SOLAR ENERGY OVERLAY ZONING DISTRICT**

- A) The Solar Energy Overlay Zoning District shall consist of the Parcels identified in the Solar Overlay District map in the Delaware Township Zoning Book.
- B) Purpose, Adoption of Districts. The purpose of the Solar Energy Overlay Zoning District is to regulate the placement and operation of the Solar energy generation equipment in the district, and to provide a procedure by which Solar Energy projects may be addressed by the Planning Commission.

**Section 15.18.21. SIGNAL INTERFERENCE**

- A) No Solar Energy Facility shall be installed in any location where its proximity to existing fixed broadcast, retransmission, or reception antennas for radio, television, or wireless phone or other personal communication system would produce consistent and noticeable electromagnetic interference with signal transmission or reception.
- B) No Solar Energy Facility shall be installed in any location along the major axis of an existing microwave communications link that is filed in the records of the Federal Communication Commission where its operation is likely to produce electromagnetic interference in the link's operation.
- C) Notwithstanding the foregoing, an approval may be issued under this Article if Applicant demonstrates an ability to remedy any interference described above with the use of signal repeaters or other proven mitigation measures.

**Section 15.18.22. GOVERNING LAW**

Any contract related to the development or operation of a Solar Energy Facility under this ordinance shall be governed by the laws of the County of Sanilac and the State of Michigan.