## **ORDINANCE NUMBER 78**

### MUDDY CREEK TOWNSHIP, BUTLER COUNTY, PENNSYLVANIA

AN ORDINANCE ESTABLISHING REASONABLE STANDARDS FOR THE DESIGN, CONSTRUCTION, OPERATION AND DECOMMISSIONING OF COMMERCIAL ALTERNATIVE ENERGY FACILITIES, REQUIRING EMERGENCY RESPONSE AND DECOMMISSIONING PLANS, EXEMPTING INDIVIDUAL RESIDENTIAL AND FARM USES, AND PROVIDING ENFORCEMENT PROCEDURES AND PENALTIES FOR VIOLATIONS.

NOW, THEREFORE, be it ORDAINED and ENACTED by the Board of Supervisors as follows:

## **SECTION 1. PURPOSE.**

(A) The purpose of this Ordinance is to set forth reasonable policy, procedures and regulations governing the design, construction, operation and decommissioning of commercial Alternative Energy Facilities, including, but not limited to, Solar Energy Facilities and Wind Energy Facilities within Muddy Creek Township (Township).

(B) These regulations are intended to protect the welfare, safety, character and integrity of the agricultural, residential, rural, environmental, natural and historic resources in the Township while providing for the appropriate location and development of Alternative Energy Facilities within the Township; to minimize adverse visual impacts of the facilities through careful siting and landscape screening; to avoid potential harmful impacts on adjacent properties from operations at the facilities; and to provide for safe and proper decommissioning and removal of all such facilities that are either abandoned or fail to meet the requirements set forth in these regulations.

## **SECTION 2. APPLICABILITY.**

(A) This Ordinance applies to all commercial Alternative Energy Facilities to be constructed, altered or modified after the effective date of this Ordinance.

(B) These regulations are not intended to apply to alternative energy systems installed primarily for individual residential or farm use.

**SECTION 3. DEFINITIONS.** As used in this Ordinance, the following terms shall have the meanings indicated:

ALTERNATIVE ENERGY FACILITY (AEF) - Includes, but is not limited to, commercial Solar Energy Facilities and Wind Energy Facilities.

DEVELOPER – Individual or entity proposing the design and construction of an Alternative Energy Facility.

FACILITY OWNER - The entity or entities having an equity interest in a commercial Solar or Wind Energy Facility, including their respective successors and assigns.

HEIGHT - The distance measured from the surface of the foundation to the highest point of the tallest structure or piece of equipment.

OCCUPIED BUILDING - A residence, school, hospital, church, public library, business or other building used for public gathering that is occupied or in use when the AEF land development application is submitted to the Township.

OPERATOR - The entity or entities responsible for the day-to-day operation and maintenance of a commercial Alternative Energy Facility.

SOLAR ENERGY FACILITY (SEF) - A commercial facility, consisting of one or more Solar Collectors or panels and other accessory buildings, structures and equipment, designed to capture solar energy, convert it to electrical energy or thermal power, and supply the electrical or thermal power primarily for off-site use.

SOLAR COLLECTOR - A solar energy system that converts solar energy into electricity through the use of panels.

TOWNSHIP - Muddy Creek Township, Butler County, Pennsylvania.

WIND ENERGY FACILITY (WEF) - A commercial facility, consisting of one or more Wind Turbines and other accessory buildings, structures and equipment, designed to capture wind energy, convert it to electrical energy and supply the electrical power primarily for off-site use.

WIND TURBINE - A wind energy system that converts wind energy into electricity using a wind turbine generator, which may be of horizontal or vertical shaft design.

## SECTION 4. ADDITIONAL REQUIREMENTS FOR AEF LAND DEVELOPMENT PLANS.

(A) All Alternative Energy Facility (AEF) land development plans shall conform to all the requirements set forth in the Township's Subdivision and Land Development Ordinance. In addition, the plans shall contain:

- (1) A project narrative describing the proposed AEF, including an overview of the project; the project location; the approximate generating capacity of the facility; the approximate number, representative types and height of facilities to be constructed, including their generating capacity, dimensions and respective manufacturers; and a description of any ancillary facilities, structures and equipment.
- (2) A copy of the Site Emergency Response Plan and Decommissioning Plan and an estimate of the costs of decommissioning.
- (3) An affidavit or similar evidence of agreement between the property owner and the Facility Owner or Operator demonstrating that the Facility Owner or Operator has the permission of the property owner to apply for necessary permits for the design, construction and operation of the facility.

- (4) A copy of the PA DEP, PUC, US EPA and United States Department of Energy licenses and permits applicable to the facility.
- (5) A site plan identifying, at a minimum, ownership, tax identification numbers, street addresses and ground water well locations for the proposed site and all abutting properties.
- (6) A site plan showing the planned location of each Solar Collector, panel or Wind Turbine, property lines, setback lines, access roads and turnout locations, substation(s), electrical cabling from the facility to the substation(s), ancillary equipment, buildings and structures, including, associated transmission lines, and layout of all structures within the geographical boundaries of the facility.
- (7) The plan for delivering energy to a public electric utility company "grid" must be explained in detail and shown with one or more drawings submitted as part of the land development plan.
- (8) Proof that the Developer and Operator have a current general liability policy covering bodily injury and property damage with limits of at least \$5 Million per occurrence and \$10 Million in the aggregate. Annual recertifications shall be made available to the Township upon request.
- (9) Identify all state and local public roads to be used to transport equipment and parts for construction, operation or maintenance of the facility. The Developer may be required to bond state and/or local public roads prior to the start of construction and the Operator may be required to bond the roads during facility operations.
- (10) Other relevant studies, reports, certifications and approvals, reasonably requested by the Township, ensuring compliance with this and all other Federal, State, County and Township statutes, regulations, directives and ordinances.

(B) Prior to the approval of the land development plan, the Board of Supervisors shall hold public hearings to afford the residents of the Township an opportunity to comment on the proposed facility and give the Developer an opportunity to present its plans and answer the Township's and residents' questions and address any concerns.

## SECTION 5. AEF DESIGN, INSTALLATION AND MAINTENANCE REQUIREMENTS.

(A) The AEF layout, design and installation shall comply with applicable industry standards, including those of the American National Standards Institute (ANSI) or other similar certifying organizations, and shall comply with the Pennsylvania Construction Code, as well as with all other applicable fire and life safety requirements. Such documentation shall be provided to the Township upon request.

(B) All installed equipment and electrical components shall comply with applicable industry standards, including those of the Underwriters Laboratories (UL) or other similar certifying organizations. Such documentation shall be provided to the Township upon request.

(C) On-site transmission and power lines shall, to the maximum extent practicable, be placed underground.

(D) No portion of the AEF site shall contain or be used to display advertising.

(E) The AEF shall not be artificially illuminated except to the extent required for safety, security or by applicable Federal, State or local authorities. Site lighting shall be directed downward and shielded to avoid glare on public roads and adjacent properties. All outdoor lighting shall be aimed, located, designed, fitted and maintained so as not to create glare, light pollution or light trespass. Cutoff shields of less than 60° shall be utilized as appropriate.

(F) Security fencing will be provided around the perimeter of the AEF at a height that makes it non-climbable with additional deterrents attached to the top. Additional vegetative cover may be required at the discretion of the Township.

(G) All gated access points to the AEF shall be locked at all times when not in use to prevent entry by non-authorized persons.

(H) Screening shall be provided at the perimeter of the AEF property in the form of privacy fencing or native evergreen plant species or some combination thereof.

(I) Appropriate safety/warning signage concerning live voltage shall be placed on or within three(3) feet of any ground-mounted electrical devices, equipment and structures.

(J) Visible, reflective, colored objects, such as flags, reflectors or tape, shall be placed on the anchor points of guy wires and along the guy wires up to a height of ten (10) feet from the ground.

(K) The Operator shall take all reasonable measures to avoid any disruption or loss of radio, telephone, television, cable, internet or similar signals on adjacent properties and shall immediately mitigate any such harm caused by the facility.

(L) No portion of the AEF site may be used as a supply yard for the outside storage of equipment, spare parts or supplies, etcetera. All on-site storage of equipment/materials must be kept within a building or enclosed structure.

(M) The entire AEF site must be properly and timely maintained, to include but is not limited to mowing, trimming and removal of damaged or diseased vegetation, routine inspection and maintenance of fencing, screening, buildings and structures, and maintaining access roads to ensure access by service and emergency vehicles.

# SECTION 6. AEF EMERGENCY RESPONSE PLAN AND EMERGENCY SERVICES ON-SITE TRAINING.

(A) The Developer shall procure a valid physical address for the site from the Township prior to submission of the land development plan. The address shall be posted clearly at the entrance to the facility at all times.

(B) The Developer shall, at all times, keep the Township and local fire department informed of the Developer's emergency point-of-contact during construction. Such notice shall include names, titles, addresses, phone numbers and email addresses for the point-of-contact.

(C) The Operator shall, at all times, keep the Township and local fire department informed of the Operators' emergency point-of-contact during facility operations. Such notice shall include names, titles, addresses, phone numbers and email addresses for the point-of-contact.

(D) The Developer and Operator shall, at all times, post signs with the current emergency contact name and phone number and site name at each gate entry point to the facility during installation and operations.

(E) The Operator shall provide a copy of the project summary and Site Emergency Response Plan to the local emergency service providers, including fire companies, emergency medical service providers, Butler County Emergency Management Agency and 911 Communications, for the facility no later than thirty (30) days prior to the start of operations.

(F) The Operator shall provide initial on-site emergency response training for the local fire company and EMS providers within thirty (30) days of the start of operations.

(G) The Operator shall provide refresher on-site emergency response training at least once every eighteen (18) months, at the request of the local fire company, after completion of the initial training.

**SECTION 7. AEF DECOMMISSIONING REQUIREMENTS**. All AEF land development plans shall contain a Decommissioning Plan meeting the following minimum requirements:

(A) The Facility Owner or Operator shall, at its expense, complete decommissioning of the facility within 12 months after the end of the useful life of the facility. The facility will be presumed to be at the end of its useful life if no electricity is generated for a continuous period of 12 months.

(B) Decommissioning shall include removal of Solar Collectors, panels, Wind Turbines, buildings, cabling, electrical components, roads, foundations to a depth of 36 inches and any other associated facilities. Disturbed earth shall be graded and reseeded. Soil samples shall be collected and analyzed. Ground water samples shall be collected and analyzed at the site and on all adjacent properties within 1,000 feet of the site boundaries. Results of the ground and water sample tests shall be submitted to the Township. Results of the water sample test shall also be provided to the adjacent property owners.

(C) The Facility Owner or Operator shall retain an independent and licensed professional engineer to calculate the estimated cost of the complete decommissioning of the facility without regard to salvage value of the equipment. This value shall be known as "the decommissioning cost." This cost shall also consider any soil or ground water remediation necessary or anticipated. The estimates shall be submitted to the Township prior to the start of construction and updated every fifth (5) year on the anniversary of the facility's startup date.

(D) The Facility Owner or Operator shall post and maintain with the Township decommissioning funds in an amount equal to the value of 100% of the decommissioning cost, as determined by the Township engineer, before construction begins on the facility. The decommissioning cost escrow shall be provided by a bonding company or financial institution, authorized to conduct such business within the Commonwealth and approved by the Township, and held by the Township in escrow. Decommissioning funds may be in the form of a performance bond, surety bond, letter of credit, corporate guarantee or other form of financial guarantee as may be acceptable to the Township.

(E) If neither the Facility Owner nor Operator complete decommissioning within the prescribed period, then the Township may take such measures as necessary to complete decommissioning at the cost of the Facility Owner, Operator or property owner.

(F) The Facility Owner or Operator shall maintain and update the surety bond/financial guarantee until such time as the bond/guarantee is released by the Board of Supervisors.

(G) The Decommissioning Plan shall identify all state and local public roads to be used to transport equipment and parts during decommissioning activity. The Facility Owner or Operator may be required to bond state and/or local public roads prior to the start of decommissioning activity.

**SECTION 8. ADDITIONAL REQUIREMENTS FOR SOLAR ENERGY FACILITIES (SEF).** All SEF land development plans shall comply with all applicable sections of the Township's Subdivision and Land Development Ordinance. In addition, the plan shall meet the following requirements:

(A) Prior to construction, the Developer shall collect and analyze background soil samples in the area where the facilities are to be installed for pH, oil, grease, lead, benzene, toluene, ethylbenzene (BTEX), cadmium, chromium and zinc. The Operator shall repeat the process of collecting and analyzing soil samples every five (5) years on the anniversary of the facility's startup date. All results shall be submitted to the Township.

(B) Prior to construction, the Developer shall collect and analyze ground water samples at the site and on all adjacent properties within 1,000 feet of the site boundaries. The Operator shall repeat the process of collecting and analyzing water samples at the site and adjacent properties every five (5) years on the anniversary of the facility's startup date. All results shall be submitted to the Township and adjacent property owners.

(C) The minimum lot size for the installation of a SEF shall be 15 acres.

(D) All SEF buildings and equipment shall be setback from the side yard property lines a minimum of 75 feet, the rear yard property line 100 feet, the front yard edge of road right-of-way 250 feet and shall be setback from all perennial streams, runs and/or creeks and all Occupied Buildings on adjacent lots a minimum of 300 feet.

(E) Ground-mounted SEFs shall not exceed 20 feet in Height.

(F) All on-site transmission, power and plumbing lines between Solar Collectors and panels shall, to the maximum extent feasible, be placed underground so as not to be visible on the ground surface.

(G) No portion of an SEF shall contain or be used to display advertising.

(H) Solar Collectors and panels shall be a non-obtrusive color such as white, off-white or gray.

(I) The SEF shall be located such that concentrated solar radiation or glare does not project onto nearby Occupied Buildings, structures or roadways. The Developer and Operator have the burden of proving, either through demonstration or mitigation, that any glare produced does not have a significant adverse impact or cause safety concerns for neighboring owners, neighboring property

uses or vehicular traffic. Of particular concern for the Township is lessening the facility's impacts on surrounding owners, properties and roadways.

(J) Noise from a SEF shall not exceed 55 dBA at the nearest property line measured at a height of six (6) feet and also fifteen (15) feet above the ground surface. The Developer and Operator shall provide technical documentation acceptable to the Township, indicating the noise standards are being achieved. This documentation shall be in the form of a sound study completed by a certified sound engineer.

(K) The SEF shall be screened from any adjacent residential or agricultural property. The screen shall consist of plants, evergreens, arborvitae, trees or similar plants and shrubs which provide an effective visual screen.

(L) The SEF shall be completely enclosed by a minimum eight-foot-high security fence with additional deterrents attached to the top. Additional vegetative cover may be required at the discretion of the Township.

(M) A minimum twenty-five-feet-wide access road shall be provided from a state or municipal road into the site, and a minimum twenty-feet-wide accessway shall be provided between the solar arrays to allow access for maintenance vehicles, emergency management vehicles and fire apparatus.

**SECTION 9. ADDITIONAL REQUIREMENTS FOR WIND ENERGY FACILITIES (WEF).** All WEF land development plans shall comply with all applicable sections of the Township's Subdivision and Land Development Ordinance. In addition, the plan shall meet the following requirements:

(A) Prior to the construction, the Developer shall collect and analyze background soil samples in the area where the facilities are to be installed for pH, oil, grease lead, benzene, toluene, ethylbenzene (BTEX), cadmium, chromium, and zinc. The Operator shall repeat the process of collecting and analyzing soil samples every five (5) years on the anniversary of the facility's startup date. All results shall be submitted to the Township.

(B) Prior to the construction, the Developer shall collect and analyze ground water samples at the site and on all adjacent properties within 1,000 feet of the site boundaries. The Operator shall repeat the process of collecting and analyzing water samples on the site and adjacent properties every five (5) years on the anniversary of the facility's startup date. All results shall be submitted to the Township and the adjacent property owners.

(C) The minimum lot size for the installation of a WEF shall be 25 acres.

(D) Wind Turbines shall be setback from side yard and rear yard property lines, as well as edge of the road right-of-way of any adjacent state or municipal road a distance not less than 1.5 times the turbine height. Setbacks shall be measured from the center of the Wind Turbine base. Under no circumstances shall a Wind Turbine be located closer than 300 feet from an Occupied Building on an adjacent lot and 300 feet from all streets, perennial streams, runs, and/or creeks.

(E) Under no circumstances shall any blade or vane of a Wind Turbine protrude over the property line of the property upon which the turbine is located.

(F) All WEF shall be equipped with a redundant braking system. This includes both aerodynamic over-speed controls (including variable pitch, tip and other similar systems) and mechanical brakes. Mechanical brakes shall be operated in a fail-safe mode. Stall regulation shall not be considered a sufficient braking system for overspeed protection.

(G) No portion of a WEF shall contain or be used to display advertising.

(H) All Wind Turbines shall be a nonobtrusive color such as white, off-white or gray.

(I) All on-site transmission, power and plumbing lines between turbines shall, to the maximum extent practicable, be placed underground so as not to be visible on the ground surface.

(J) Noise from a WEF shall not exceed 55 dBA at the nearest property line measured at a height of six (6) feet and twenty-five (25) feet above the ground surface. The Developer and Operator shall provide technical documentation acceptable to the Township, indicating the noise standards are being achieved. This documentation shall be in the form of a sound study completed by a certified sound engineer.

(K) All Wind Turbines shall be completely enclosed by a minimum eight-feet-high security fence, with additional deterrents attached to the top. Additional vegetative cover may be required at the discretion of the Township.

(L) The Developer and Operator shall take all reasonable measures to minimize WEF shadow flicker on nearby roads, Occupied Buildings and structures on adjacent properties.

(M) The Developer and Operator shall take all reasonable measures to avoid disruption or loss of radio, telephone, television, cable, internet or similar signals on adjacent properties, and shall mitigate any such harm caused by the facility.

(N) The WEF land development application shall discuss and address the protection of avian wildlife in and around the proposed installation.

(O) A minimum twenty-five-feet-wide driveway shall be provided from a state or municipal road into the site, and a minimum twenty-five-feet-wide accessway shall be provided between the turbines to allow access for maintenance vehicles, emergency management vehicles and fire apparatus.

#### SECTION 10. NOTICE OF VIOLATION AND DUTY TO REMEDY.

(A) Noncompliance with any provision of this Ordinance constitutes a violation. The Township or its designated Enforcement Officer shall issue a written notice of violation to be served by personal service or by registered or certified mail upon the Facility Owner, property owner, lessee, contractor or Operator and by posting the notice conspicuously upon the facility.

(B) The violation notice shall specify the nature of the violation and require the Facility Owner, property owner, lessee, contractor or Operator to commence necessary remedial actions within 24 hours of mailing, posting or delivery of the notice and to fully comply with the requirements of the notice within thirty (30) calendar days.

**SECTION 11. VIOLATIONS AND PENALTIES.** Any person, owner, firm, company, corporation, operator, or lessee violating any of the provisions of this Ordinance shall, upon being found liable therefor in a civil enforcement proceeding before a magisterial district judge, pay a judgement of not more than \$600 per violation. Each day a violation is committed or is permitted to continue shall constitute a separate offense and shall be subject to the penalty set forth herein.

**SECTION 12. CONFLICTING REGULATIONS.** Where a conflict exists between any of the regulations or limitations prescribed in this Ordinance and any other regulation applicable to the same area, the more stringent limitation, or requirement shall govern and prevail.

**SECTION 13. REPEALER.** All ordinances, or parts of ordinances, which are inconsistent with this Ordinance are repealed to the extent necessary to give effect to the provisions of this Ordinance.

**SECTION 14. SEVERABILITY**. If any sentence, clause, part or section of this Ordinance is found to be unconstitutional, illegal, invalid or contrary to any provisions of Federal or State law, that sentence, clause, part or section shall not affect the validity of the remaining provisions of this Ordinance. It is hereby declared the intent of the Board of Supervisors to have enacted this Ordinance as if such unconstitutional, illegal or invalid sentence, clause, part or section had not been included therein.

**SECTION 15: EFFECTIVE DATE.** This Ordinance shall become effective five (5) days after enactment and shall remain in force until amended, revised or rescinded by the Board of Supervisors.

**ORDAINED AND ENACTED** this 21<sup>st</sup> day of August 2024, by the Board of Supervisors of Muddy Creek Township in lawful session duly assembled.

ATTEST:

## MUDDY CREEK TOWNSHIP BOARD OF SUPERVISORS

Abbie M. Flinner Secretary By: \_\_\_\_

Dale R. Kerr, Chairperson

(SEAL)

By: \_

Eric Saunders, Vice Chairperson

By: \_\_\_

Dale Hall, Supervisor