§ 165-52. Solar array system, large-scale and small-scale.

A. Authority.

This Solar array system, large-scale and small-scale is adopted pursuant to §261 through §263 of the Town Law and §20 of the Municipal Hame Rule Law of the State of New York, which authorizes the Town of Parma, hereinafter referred to as the "Town," to adopt zoning provisions that advance and protect the health, safety and welfare of the community, and, in accordance with the Town Law of New York State, "to make provision for, so far as conditions may permit, the accommodation of solar energy systems and equipment and access to sunlight necessary therefor."

B. Purpose.

(1) These regulations shall regulate the construction, maintenance and placement of solar array systems and any associated accessory uses and equipment.

(2) The purpose of this legislation is to protect the land and aquafer for future generations and balance the potential impact on neighbors when solar array systems may be installed near their property while preserving the rights of the property owners to install solar collection systems without excess regulation.

C. Applicability.

(1) The requirements of this section shall apply to all solar array systems installed or modified after the effective date of this chapter, excluding general maintenance and repair.

(2) All solar array systems shall be designed, erected and installed in accordance with all applicable codes, regulations and industry standards as referenced in the New York State Building Code, the National Electrical Code (NEC) and other local regulations in the Town's code.

D. SEQRA requirements.

(1) Under New York State's SEQRA regulations, actions are grouped as Type I, Type II or Unlisted Actions. Type II Actions are exempt from review and include actions such as construction, expansion or placement of minor accessory structures.

(2) The Town considers rooftop and building-integrated solar uses to be Type II Actions and therefore exempt from all SEQRA requirements, including the submission of an EAF environmental assessment form).

(3) Large-scale and small-scale solar array systems, as defined in 165-115 **Definitions**, that meet the thresholds contained in the SEQRA regulations, are considered more likely than others to have a significant adverse environmental impact. These uses shall be considered Type I Actions. *(Change the "80" acres in the definition to "8.0" as that is more than enough area for a 1 MW AC array.)*

(4) Any need for a complete environmental impact statement (EIS) shall be determined by the Town Board in accordance with the significance of the potential adverse environmental impact.

E. Setbacks, lot size, and lot coverage.

(1) The regulations in this sub-article shall apply to both large-scale and small-scale solar array systems.

(2) Large-scale solar array systems shall be considered principal uses (changed the beginning as small scale and installations on roof tops would not be considered principal use) and shall be permitted according to the regulations contained herein.

(3) Large-scale solar array systems SHALL ONLY be permitted in the LIGHT INDUSTRIAL (LI) and CORRIDOR MIXED-USE (C-MU) Districts. Small-scale solar array systems shall only be specially permitted in the Agricultural-Residential (AR) and Rural Residential (RR) Districts.

(4) Solar array systems shall comply with the height and setback requirements of the underlying zoning district together with the following area requirements, whichever is more restrictive:

(a) Large Scale solar array systems shall be set back a minimum of 300 ft. from the edge of any public right-of-way. Small Scale array systems must be located in the rear yard and have a minimum side and rear setback of 40 ft.

(b) Large Scale solar array systems shall be set back a minimum of 200 ft. from each property line bordering the property on which the use will be sited.

(c) Large Scale solar array systems shall be set back a minimum of 350 ft. from any residential land use on an adjacent property.

(d) Solar array systems shall be at least 50 ft. from any structure on the premises hosting the solar energy system, which may contain additional solar energy equipment.

(e) No part of the large-scale or small-scale solar array system shall exceed 35 ft. in height.

(5) Solar array systems shall be located on lots with a minimum lot size that is large enough to accommodate the proposed system. No solar array system will be permitted on multiple parcels. In this case, the system would only be permitted if the parcels were combined and retired by deed.

(6) The maximum lot coverage for any large-scale solar array system, inclusive of all solar energy systems, solar energy equipment, and relevant accessory uses shall be included in a property's total lot coverage and shall not exceed 50% of total lot coverage.

F. Fencing, glare, screening and landscaping.

(1) All mechanical equipment related to any solar array system shall be enclosed by fencing to prevent unauthorized access. Large-scale systems shall have warning signs with the owner's contact information which shall be placed on the entrance and perimeter of the fencing. All fencing shall be seven feet in height in accordance with National Electric Code.

(2) All solar panels to be included in a large-scale solar array, small-scale solar array, or roof-mounted solar systems shall have an anti-reflective coating.

(3) The removal of existing vegetation is limited to the extent necessary for the construction and maintenance of the solar array system. Removal of existing trees larger than six

inches in diameter should be minimized to the extent possible. No soil may be removed from the property on Large-scale solar array projects; soil must be stored on site for the decommissioning process.

(4) Applicants seeking to develop large-scale solar array systems shall develop, implement and maintain native vegetation to the extent practicable pursuant to a vegetation management plan by providing native perennial vegetation and foraging habitat beneficial to game birds, songbirds, and pollinators.

(5) Solar array systems shall be required to:

(a) Conduct a visual assessment of the visual impacts of the solar array system on public roadways and adjacent properties. At a minimum, a line-of-sight profile analysis shall be provided. Depending on the scope and potential significance of the visual impacts, additional impact analyses, including a digital viewshed report, shall be required to be submitted by the applicant.

(b) Submit a screening and landscaping plan to show adequate measures to screen through landscaping, grading or other means so that views of solar panels and solar energy equipment shall be minimized as reasonably practical from public roadways and adjacent properties to the extent feasible.

(c) The screening and landscaping plan shall specify the locations, elevations, height, plant species, and/or materials that will comprise the structures, landscaping, and/or grading used to screen and/or mitigate any adverse aesthetic effects of the system, following the applicable rules and standards established by the Town of Parma.

(d) Prior to construction, all large-scale solar array systems must place on file with the Town Board a letter of credit, in an amount estimated by the Town Engineer with the approval of the Town Attorney, to secure to the town the satisfactory construction and installation of the incomplete portion of the required improvements. All procedures and requirements for letters of credit shall be in accordance with the Town's requirements.

(e) Inspection of improvements. The town shall provide suitable inspectors to act as agents of the Planning Board for the purpose of assuring a satisfactory completion of improvements required by the Planning Board. The applicant shall pay the costs of such inspections, as determined by the Board, before beginning construction. The release of such funds shall not be authorized until the inspection costs are paid. If the Planning Board or its agents find, upon inspection, that any of the required improvements have not been constructed in accordance with approved construction detail sheets, the applicant and the bonding company will be severally and jointly liable for the costs of completing said improvements according to specifications.

G. Safety.

(1) All solar array systems shall be certified under the applicable electrical and/or building codes as required.

(2) Solar array systems shall be maintained in good working order and in accordance with

industry standards. Site access shall be maintained, including snow removal at a level acceptable to the Town's Fire Department.

(3) Where deemed necessary, the Zoning Board of Appeals may require the applicant to ensure emergency access to the facility area for local first responders by installing an emergency local box or similar device in a location subject to approval by the Town's Fire Department.

H. Battery storage.

(1) Applicability and governing standards.

(2) If battery energy storage systems (BESS) or solar storage batteries are included as part of a small-scale or large-scale solar array system, their location, placement, design, construction, operation, and maintenance shall comply with:

(a) This section;

(b) The New York State Uniform Fire Prevention and Building Code, including the Fire Code of New York State, Section 1207 (Electrical Energy Storage Systems), as amended;

(c) The National Electrical Code;

(d) NFPA 855 (Standard for the Installation of Stationary Energy Storage Systems), or successor standard; and

(e) All other applicable federal, state, and local laws and regulations.

(3) Preferred chemistry. Lithium-ion BESS associated with a solar array system shall use lithium iron phosphate (LFP / $LiFePO_4$) chemistry. The application shall identify the cell chemistry, manufacturer, model numbers, and applicable UL listings. Use of LFP does not exempt a project from fire-code, setback, access, emergency-planning, or containment requirements.

(4) Listing, testing, and review.

(a) All BESS shall be listed to UL 9540. Cells and modules shall be listed to UL 1642 and/or UL 1973, as applicable.

(b) Systems exceeding the energy-capacity thresholds in the Fire Code of New York State shall submit UL 9540A test reports at the required cell, module, unit, and/or installation levels.

(c) The Town may require independent peer review of technical documents, at applicant expense, for systems exceeding those thresholds, consistent with NYSERDA and Fire Code of New York State guidance.

(5) Environmental containment during fire or release events. All BESS associated with solar array systems shall incorporate approved environmental containment measures designed to prevent the release of contaminants, including firefighting-water runoff, electrolyte, thermal-runaway byproducts, or other hazardous materials, into soil, groundwater, surface water, or stormwater systems. At a minimum:

(a) Secondary containment, berms, dikes, lined swales, impermeable basins, or

equivalent systems sized to contain the volume of the largest credible spill plus firefighting-water runoff, calculated from the design fire flow and duration required by the Fire Code of New York State or as determined by the local fire official (typically including a 20-minute or greater design period where applicable).

(6) Emergency planning. A hazard mitigation analysis and emergency response plan, prepared in consultation with the local fire department, shall address chemistry-specific failure modes, environmental containment, off-gas and plume considerations where relevant, and first-responder procedures for contaminated runoff. The plan shall not assume that LFP is fire-exempt.

(7) Decommissioning and disposal. When storage batteries or BESS components are no longer in use, they shall be properly decommissioned and disposed of in accordance with New York State law and all other applicable federal, state, and local disposal laws and regulations. The decommissioning plan shall address residual contamination risks.

I. Decommissioning plan and financial surety.

(1) A system decommissioning plan shall be required as a result of any of the following conditions:

(a) The land lease, if any, ends, unless the project owner has acquired the land.

(b) The solar array system cannot produce more than 70% of its original output.

(c) The solar array system ceases to generate electricity on a continuous basis for 12 months.

(d) The solar array system is damaged and will not be repaired or replaced by the owner of the solar energy system.

(2) If any of the above conditions are met, and upon notification or instruction by the Town of Parma, the owner of the solar development in question shall implement the decommissioning plan. System decommissioning and removal, as well as all necessary site restoration or remediation activities shall be completed within 12 months.

(3) The owner of the solar array system, hereafter referred to as the facility, shall be responsible for the decommissioning plan and all related costs to decommissioning.

(4) The owner of the facility, as provided for in its lease with the landowner, and in accordance with the requirements of the Parma zoning law, SHALL restore the property to its condition as it existed before the facility was installed, within in one (1) year, pursuant to which shall include the following:

(a) Removal of all equipment, concrete, conduits, structures, fencing, structural supports and foundations to their full depth..

(b) Removal of any solid and hazardous waste caused by the facility in accordance with local, state and federal waste disposal regulations.

(c) Removal of all graveled areas and access roads unless the landowner requests in writing for it to remain.

(d) Removal of any SOCC or heavy metals present in concentrations higher than originally recorded at the site before the initial construction and present at

neighboring land at decommissioning.

(e) Decommissioning shall be deemed complete solely by the determination of the Town's Engineer.

(5) The cost of system decommissioning and removal, as well as all necessary site remediation and restoration activities shall be estimated on the date and time that development applications are filed.

(6) All components of a proposed solar energy system must be free of any synthetic organofluorine chemical compounds (SOCC). No SOCC may be added afterwards for any reason. All components must be certified as SOCC free by an independent third party. Site soil shall be tested in advance of any construction to determine current background levels of SOCC and EPA's Resource conservation and Recovery Act (RCRA) 8 metals. Testing to be conducted by a third party that is approved by the Town's Engineer.

(7) All large-scale solar array system landowner(s) and operator(s) of record during a solar energy system's operation SHALL BE RESPONSIBLE for:

a. All reclamation and decommissioning costs.

b. removal of all SOCC and heavy metals found at concentrations above preconstruction levels.

c. Establishing a reclamation and decommissioning fund which shall be held by the Town and funded by an annual fee assessed on the landowner(s) and solar operator(s) and be based on an operational solar energy system life span of 25 years.

d. Said reclamation and decommissioning fund SHALL:

i. start with 50% of the projected decommissioning cost upon startup, with the remainder accumulated on a yearly basis over the first 5 years of operation.

ii. the amount being held by the Town shall be evaluated and adjusted every 5 years and its amount set by the Town's Engineer after soil testing is performed, said cost of 5-year evaluation will be paid by the Owner.

iii. The use of a bond in lieu of the reclamation and decommissioning funds is prohibited.

(8) All large-scale solar array system landowner(s) and operator(s) of record during a solar energy system's operation SHALL:

a. Provide a maintenance fund to the Town equal to 10% of the original cost for landscaping and visual barrier installation and 5% of the cost of solar panel installation. The maintenance fund shall be held by the Town and paid out should any maintenance on the solar, landscaping or visual barriers need to be performed.

b. Perform any maintenance within 6 weeks of written notification by the Town, more time can be added for seasonal dependent work.

c. Replenished the maintenance fund annually and said maintenance fund will be increased by the rate established by the CPIAUCSL. Unused maintenance funds can be used for reclamation and decommissioning with any unused funds returned to the landowner(s) and operator(s) of record.

J. Agricultural resources.

(1) A small-scale solar array system may be installed on agricultural land if 100% of power generated is utilized for that farm's operations.

(2) To the maximum extent practicable, solar array systems located on MSG 1 to 4 shall be constructed, monitored in accordance with the NYS Department of Agriculture and Markets "Guidelines for Solar Energy Projects - Construction Mitigation for Agricultural Lands."

K. Definitions.

(1) For the purposes of this Article, the following words and phrases shall have the meanings set forth below. Words and terms not specifically defined in this Article shall have the meanings ascribed to them elsewhere in the Town Code, or, if not defined therein, shall be given their ordinary and commonly accepted meanings.

a. **Solar Array** means one or more interconnected rows or groups of solar photovoltaic panels mounted on a common support structure for the purpose of collecting solar energy and generating electricity.

b. **Solar Panel (Photovoltaic Module).** A manufactured device composed of photovoltaic cells that converts sunlight directly into electricity. One or more solar panels may be interconnected to form a solar array.

c. **Solar Array System** – the entire installation, including the solar arrays, mounting systems, inverters, wiring, transformers, access roads, fencing, and other associated equipment used to generate and deliver electricity.

d. **Synthetic Organofluorine Chemical Compounds (SOCC)** – compounds in which multiple fluorine atoms are attached to an alkyl (carbon chain) backbone, the most common being per- and polyfluoroalkyl substances (PFAS), perfluorooctanoic acid (PFOA), perfluorooctane sulfonate (PFOS) and all other similar hydrophobic chemical compounds commonly referred to as called forever chemicals.

INTRODUCTORY LOCAL LAW NO. 4-2026

A LOCAL LAW PROPOSING TO AMEND THE DEFINITION OF "LARGE-SCALE SOLAR ENERGY SYSTEM" AS SET OUT IN CHAPTER 165 ARTICLE X §165-115 – DEFINITIONS OF THE TOWN OF PARMA CODE

Said CHAPTER 165 Article X § 165-115 of the Town of Parma Code definition for a Solar Array System, Large-Scale shall read as follows:

SOLAR ARRAY SYSTEM, LARGE-SCALE

Any ground-mounted solar array system with a nameplate capacity between 25 KW AC and 1 MW AC, or with a total solar facility area of up to **8.0 (eight)** acres in size. Large-scale solar array systems generate no more than 110% of the electricity consumed on-site over a 12-month period.