

MODEL ORDINANCE: DATA CENTERS

(MUNICIPALITY)
(XX) COUNTY, PENNSYLVANIA
ORDINANCE NO. _____

AN ORDINANCE OF THE (GOVERNING BODY) OF (MUNICIPALITY), PENNSYLVANIA, TO AMEND THE (MUNICIPALITY) CODE OF ORDINANCES TO DEFINE AND ADD SPECIFIC REQUIREMENTS FOR DATA CENTERS AND DATA CENTER ACCESSORY USES.

WHEREAS, the protection of public health, safety, and welfare is the paramount concern of the
(Municipality Name);

WHEREAS, it is the municipality’s policy that development within the jurisdiction be consistent with existing community characteristics, including environmental, infrastructural, and residential considerations;

WHEREAS, data centers are a rapidly expanding use that is not regulated at the state level in Pennsylvania and may exert significant impacts related to energy demand, water consumption, noise, vibration, and environmental quality;

WHEREAS, prudent local regulation of data centers through conditional use in designated industrial zones is necessary to ensure any such development is compatible with the surrounding community and infrastructure;

NOW, THEREFORE, the (Municipality Name) enacts the following regulations.

ARTICLE I – GENERAL PROVISIONS

Section 1.1. Title

This ordinance may be cited as the “Data Center Land Use Ordinance of (Municipality Name).”

Section 1.2. Purpose

It is hereby declared to be the purpose of this article to designate data centers as a conditional use exclusively in industrial zoning districts of (Municipality Name). Although data centers are not currently regulated at the state level, the municipality maintains its zoning and land use authority under the Pennsylvania Municipalities Planning Code (Title 53), and exercises that authority to protect the health, safety, and welfare of the community; to ensure development is consistent with current community characteristics; and to manage environmental, infrastructural, and land-use impacts associated with data center operations.

Section 1.3. Applicability

This ordinance applies to all proposed development of data centers in (Municipality Name).

ARTICLE II – DEFINITIONS

Section XXX of the (MUNICIPALITY) Code of Ordinances, entitled Definitions, is amended to add the following definitions:

- **DATA CENTER** — A facility primarily used for housing computer systems and associated components, including servers, data storage and processing systems, and auxiliary infrastructure such as cooling systems, power generators, electrical substations, and network hardware.
- **DATA CENTER ACCESSORY USE:** Ancillary uses or structures secondary and incidental to a Data Center use, including but not limited to: administrative, logistical, fiber optic, storage, and security buildings or structures; electrical substations; utility lines; domestic and non-contact cooling water and wastewater treatment facilities; water holding facilities; pump stations; water towers; environmental controls (air conditioning or cooling towers, fire suppression, and related equipment); security features, provided such data center accessory uses/structures are located on the same tract or assemblage of adjacent parcels developed as a unified development with a Data Center.
- **AMBIENT NOISE LEVEL** — The all-encompassing noise level associated with a given environment, being a composite of sounds from all sources at the location constituting the normal or existing level of environmental noise at a given location without extreme atmospheric conditions, such as wind greater than three meters per second or precipitation, and then adjusting the noise level to eliminate any noise associated with then existing development of facilities.

A. The noise level shall be established based on a test performed during a continuous seventy-two-hour time span which shall include at least one twenty-four-hour reading during either a Saturday or Sunday. The testing shall be done by a qualified noise control engineer or other qualified person approved by the Township and shall be in accordance with specifications ANSI S12.18-1994 Method II and ANSI S1.4-1971. The Township reserves the right to hire a third-party consultant to witness testing and review the results. The third-party costs will be deducted from the facility operator's escrow deposit. The sound level meters used shall meet the American Standard Institute's standard for a Type I sound level meter.

- **DECIBEL (DB)** - A unit for measuring the intensity of a sound/noise; equal to 10 times the logarithm to the base 10 of the ratio of the measured sound pressure, squared to a reference pressure of 20 micropascals.
- **SETBACK** — The required minimum horizontal distance between any principal or accessory structure and a residential zoning district boundary or protected residential property.

ARTICLE III – USE AND ZONING

Section 3.1. Zoning District

A. Data centers are allowed only by conditional use in the (XX) Industrial Zoning district within (Municipality Name).

B. Applicants bear the burden of proof to demonstrate that all development and operational aspects of the proposed data center will not adversely affect the health, safety, welfare, or character of surrounding areas.

C. Conditional use approval shall be valid for 1 year from the approval date. Extensions, not to exceed an additional 1 year, may be granted upon written request and a finding of continued compliance with current laws and regulations. If construction for the applied for use has not commenced within 1 year, the conditional use approval shall expire.

Section 3.2. Zoning Compliance

A. All aspects of the proposed data center and accessory structures including, but not limited to, design, development, and placement, shall comply with the (Municipality) Code of Ordinances, Chapters (XX) as well as all supplemental and general regulations for the (XX) Industrial Zoning District

B. Right of Entry: The Zoning Officer/Code Enforcement Officer or duly authorized Municipal Official may enter the premises or structure during normal business hours to verify or enforce provisions of this article and the conditional use approval. If premises or structure is unmanned, or, if there is reasonable cause to believe a condition exists on the premise which violates the ordinance constituting an unsafe condition, access shall be granted within 24 hours of notification to the operator/applicant.

ARTICLE IV – CONDITIONAL USE REQUIREMENTS

Section 4.1. Setbacks

A. All buildings, cooling systems, accessory facilities, and associated accessory structures must be located a minimum of 2,500 feet from any residential zoning district boundary

B. All buildings, cooling systems, accessory facilities, and associated accessory structures must be located a minimum of 1,500 feet of a boundary of an Agricultural, Rural, Conservation or Commercial District.

C. All buildings, cooling systems, accessory facilities, and associated accessory structures must be located a minimum of 1,000 feet of any stream, wetland, or floodplain as delineated on official Township maps.

D. No structure, accessory equipment, or appurtenance shall occupy any required setback area.

Section 4.2. Noise and Vibration

A. The applicant must submit a professional pre-construction study establishing baseline ambient noise and vibration levels, as well as predicted operational impacts.

B. Noise from operations, including cooling units and backup generators, shall not exceed 45 dBA or 60 dBC at the property line adjoining any residential zone between 10:00 p.m. and 7:00 a.m., and shall not exceed 40 dBA at other times. These thresholds are consistent with health-based guidelines established by the American National Standards Institute (ANSI), the World Health Organization (WHO), and the U.S. Environmental Protection Agency (EPA), and are intended to protect against both high-frequency and low-frequency tonal noise.

C. Following commencement of operations, an as-built noise and vibration study must be performed within six months to confirm compliance; any exceedance requires immediate mitigation.

D. The applicant shall provide a vibration study prepared by a qualified professional that demonstrates that no vibration from the Data Center, Data Center Accessory Uses, or associated equipment and structures will be perceptible to the human sense of feeling beyond the property line.

E. Third-party reviews may be required at the applicant's cost.

Section 4.3. Utilities and Infrastructure

A. Applicant shall submit at the time of application documentation of utility interconnection agreements verifying adequate grid capacity.

B. Applicant shall provide at the time of application an analysis of potential ratepayer impacts, including projected effects on public electric rates or service reliability.

C. Applicant shall provide at the time of application detailed estimates of daily and annual water use.

D. If connected to public water supplies, applicant shall include the time of application substantiating documentation of available capacity; for private sources, include a water feasibility study.

Section 4.4. Environmental Impact Assessment

A. Applicant shall submit at the time of application a comprehensive assessment covering:

1. Effects on ecosystems, stormwater, and water resources
2. Air quality and emissions
3. Energy consumption and greenhouse gas impacts
4. Infrastructure implications, including waste, heat and traffic

Section 4.5. Screening, Buffers, and Access

- A. Applicant shall provide a landscaped or forested buffer adjacent to residential areas.
- B. Applicant shall enclose or screen mechanical equipment, including generators.
- C. Applicant shall design safe ingress/egress with emergency vehicle access.

Section 4.6. Emergency Management

The applicant shall submit an Emergency Response Plan (ERP) prepared by a qualified professional.

A. The ERP shall:

1. Be reviewed and accepted by the local fire department and emergency management services as part of the conditional use process
2. Include detailed procedures for fire suppression, containment, ventilation, and evacuation
3. Include an evaluation of the access roads and hydrant locations within the site to ensure suitable access for emergency equipment within the site
4. Ensure that all first responders receive adequate training specific to the installed system
5. Include provisions for annual fire safety inspections demonstrating compliance with fire safety standards to be performed by a qualified professional on behalf of the Data Center

B. Any Data Center use proposing battery storage or any other device or group of devices capable of storing energy in order to supply electrical energy at a later time, whether the energy is stored for use on-site or off-site, shall demonstrate compliance with National Fire Protection Association (NFPA) Standard 855, Installation of Stationary Energy Storage Systems, or similar standards and must include fire suppression systems designed specifically for battery storage

C. No Data Center shall be approved unless the applicant demonstrates that procedures for fire suppression, containment, ventilation, and evacuation are sufficiently protective of public health, safety and welfare

Section 4.7. Decommissioning and Closure

A. **Decommissioning Plan Required** - At the time of application, the operator shall submit a Decommissioning Plan prepared by a qualified professional. The plan shall outline the procedures for safe shutdown, removal of equipment, disposal or recycling of materials, and site restoration.

B. **Financial Assurance** - As part of the Decommissioning Plan, applicants must post a bond, escrow, letter of credit, or other financial security acceptable to the municipality to cover the full cost of decommissioning and site restoration. The financial assurance shall be reviewed and adjusted bi-annually to reflect inflation and updated cost estimates.

C. Timeframe for Decommissioning - Decommissioning must begin within 1 year of cessation of data center operations, or upon notice of abandonment by the operator, whichever occurs first. Decommissioning shall be completed within 18 months thereafter unless extended by the municipality for good cause.

D. Standards for Decommissioning

1. All above-ground structures, equipment, and accessory facilities shall be removed
2. Hazardous materials, including batteries, fuel, or refrigerants, shall be disposed of in compliance with state and federal law.
3. Disturbed soils shall be stabilized and re-vegetated
4. Any utility connections shall be safely disconnected and capped
5. The site shall be restored to a condition compatible with surrounding land uses or consistent with the most restrictive adjacent zoning district

Section 4.8. Conditional Use Review

A. An application fee of \$___ shall accompany each conditional use submission.

B. The application must include:

1. Full and complete Conditional Use application
2. Documentation of required studies (noise, water, environmental, ratepayer etc)
3. Plans for electricity and water infrastructure
4. Mitigation or contingency strategies
5. Emergency Management Plan
6. Decommissioning Plan

C. Reviewing authorities (e.g., Planning Commission, Board of Commissioners/Supervisors) may impose additional conditions, request supplemental studies, in addition to the required public hearings.

ARTICLE V – VIOLATIONS AND ENFORCEMENT

Section 5.1. Compliance and Enforcement

A. Should monitoring indicate operation in violation of approved terms (e.g., noise or environmental thresholds), the facility must promptly implement remediation measures. Failure to comply shall result in permit revocation or operational suspension.

B. Any person found in violation of this article may be cited in a civil enforcement proceeding and fined up to \$1,000 per day per violation. Each day a violation persists constitutes a separate offense. The municipality may also seek injunction or other equitable relief.

ARTICLE VI – SEVERABILITY

If any provision is held invalid by a court, such invalidity will not affect other provisions of this ordinance.