

**PROPOSED ORDINANCE 23-20
SPONSORED BY JUSTICE MAREE COATS**

**BE IT ENACTED BY THE QUORUM COURT OF FAULKNER COUNTY, ARKANSAS,
AN ORDINANCE TO BE ENTITLED:**

**AN EMERGENCY ORDINANCE ADOPTING CERTAIN RULES AND REGULATIONS
CONCERNING EXTERNAL NOISE ATTENUATION OF CRYPTOCURRENCY DATA
CENTERS AND TO PREVENT NOISE DISTURBANCE WITHIN FAULKNER
COUNTY’S UNINCORPORATED LIMITS; TO DECLARE AN EMERGENCY; AND
FOR OTHER PURPOSES**

WHEREAS, the equipment associated with the cooling systems and generators required to operate Cryptocurrency Data Centers generate broadband noise and low-frequency hums that result in noise disturbance. Noise disturbance is the cause of degradation and may produce negative impacts on public health, property and the environment; and

WHEREAS, noise attenuation should be an integral part of the design and construction of Cryptocurrency Data Centers in order to prevent noise pollution and noise disturbance; and

WHEREAS, the county finds that the public interest is served by the prevention of unreasonable noise emanating externally from the Cryptocurrency Data Centers and the provisions of this Ordinance are enacted for the purpose of preserving and protecting the public health, safety, welfare and property of the citizens of Faulkner County, Arkansas.

**THEREFORE, BE IT ORDAINED BY THE QUORUM COURT OF FAULKNER
COUNTY, ARKANSAS, AS FOLLOWS:**

ARTICLE 1. Purpose and Applicability

All Cryptocurrency Data Centers constructed within this jurisdiction shall be designed and built to incorporate noise attenuation measures in order to minimize the impact of noise disturbance on the residents of Faulkner County, Arkansas.

This ordinance shall only apply to noise disturbances originating within the unincorporated areas of Faulkner County, Arkansas.

ARTICLE 2: Definitions

For the purpose of this Ordinance, the following definitions shall apply unless the context clearly indicates or requires a different meaning:

1. *Ambient Noise*: The all-encompassing noise level associated with a given environment, being a composite of sounds from all sources, excusing the alleged offensive noise, at the locations and approximate time at which comparison with the alleged offensive noise is to be made.
2. *Cryptocurrency Data Center*: Leased or owned boundaries of floor space in which the primary purpose is to operate data processing equipment for cryptocurrency mining.
3. *Decibel (dB)*: A unit for measuring the volume of a sound, equal to twenty (20) times to the base 10 (10) of the ratio of the pressure of the sound measured to the referenced pressure, which is twenty (20) micropascals (twenty (20) micronewtons per square meter.)
4. *Mechanical Equipment*: The networked computer systems along with supporting equipment such as batteries, backup generators, and cooling systems housed on the Cryptocurrency Data Center's property.
5. *Noise Attenuation*: The reduction of noise levels through the use of sound-absorbing material, architectural design techniques, and/or any other suitable means.
6. *Noise Disturbance* is any sound which:
 - a. Endangers or injures the safety or health of humans or animals; or
 - b. Annoys or disturbs a reasonable person of normal sensitivities; or
 - c. Endangers or injures person or real property.
7. *Person*: An individual, association, partnership, or corporation, including any officer, employee, department, or agency.
8. *Property Line*: An imaginary line along the ground surface, and its vertical extension, which separates the real property owned by one person from that owned by another person, but not including intra-building real property divisions.
9. *Sound*: An oscillation in pressure, particle displacement, particle velocity or other physical parameter, in a medium with internal forces that causes compression and rarefaction of that medium. The description of sound may include any characteristic of such sound, including duration, intensity and frequency.
10. *Sound Level*: The weighted sound pressure level obtained by the use of a sound level meter and frequency weighting network, such as A, B, or C as specified in American National Standards Institute specifications for sound level meters (ANSI SI. 4-1971, or the latest approved revision thereof). If the frequency weighting employed is not indicated, the A-weighting shall apply.
11. *Sound Level Meter*: An instrument which includes a microphone, an amplifier, RMS detector, integrator or time averager, output meter, and weighting networks used to measure sound pressure levels.

ARTICLE 3: Noise Attenuation Requirements

Before a Cryptocurrency Data Center has commenced construction or operating within this jurisdiction, the property owner and operator proposing to build a Cryptocurrency Data Center shall comply with the following:

1. Notice Requirements

- a. The property owner and/or operator must notify all residents within a half-mile radius of the parcel, including any affiliated homeowners' association operating within the half-mile radius, that the property owner and operator intends to build and operate a Cryptocurrency Data Center on the property. The notice required in this section must be mailed to all postal addresses and homeowners' association addresses contained within a half-mile radius extending from the property line where the proposed Cryptocurrency Data Center will be built. Proof of notification shall be filed with the county clerk's office within 30 days of providing notice. The property owner and operator must notify the County Judge that the property owner and operator intends to build and operate a Cryptocurrency Data Center. The notification must include the location for the proposed Cryptocurrency Data Center.

2. Noise Study Requirements

- a. The property owner and/or operator of the lands upon which the Cryptocurrency Data Center is to be located shall conduct a sound study performed by a third-party acoustic engineer to document baseline sound levels in the area of the proposed Cryptocurrency Data Center, including noise levels measured at the property line in eight locations (north, south, east, west, northeast, northwest, southeast, southwest.) The report of the study must include sound mitigation recommendations based on the results of the sound study. The property owner must provide a copy of the report of the study to the county judge and file with the county clerk within 30 days of completion of the report.

3. Noise Attenuation Plan Requirements

- a. The property owner and/or operator must consult with a third- party architectural or design firm to develop a building plan that includes necessary noise attenuation measures in order to prevent the external sound level emanating from the Cryptocurrency Data Center from exceeding the sound level limitations below which will be considered a noise disturbance. The building plan is not required to adopt any or all of the noise attenuation recommendations so long as the plan includes noise attenuation measures that the architectural or design firm deems adequate to be in compliance with this Ordinance. Noise attenuation measures may include but not limited to:
 - i. Soundproofing walls, screens, panels, fences, or enclosures

- ii. Buffer yards
 - iii. Other noise attenuation measures recommended by the third-party acoustic engineer
- b. Mechanical equipment must be shown on any proposed plan and must be fully screened on all sides. Mechanical equipment not screened by a facade of the building must be screened by a visually solid fence, screen wall or panel, or parapet wall and constructed with a design, materials, details, and treatment compatible with those used on the nearest facade of the building.
- c. The property owner and/or operator must provide a copy of the building plan to the county judge and file with the county clerk within 30 days of completion of the plan prior to construction.
- d. Any additions, changes, or expansions of the Cryptocurrency Data Center must comply with the noise attenuation requirements of this Ordinance and must be designed and submitted to the county judge and file with the county clerk within 30 days of completion of the report.

4. *Post Completion Noise Study Requirements*

- a. Upon the Cryptocurrency Data Center's completion, the Cryptocurrency Data Center operator must conduct a post-construction noise study performed by a third-party acoustic engineer to document noise levels emanating from the Cryptocurrency Data Center when mechanical equipment is running at full capacity, including all HVAC units and generators necessary for peak operation. Noise levels are to be measured at the property line in the original eight locations used during the baseline study. The Cryptocurrency Data Center operator must provide a copy of the report to the county judge and file with the county clerk within 30 days of completion of the study.
- b. The Cryptocurrency Data Center shall not begin operations until the completion of the post-construction noise study and submission to the county judge and county clerk as required above. In order for the Cryptocurrency Data Center to be in compliance, the noise study results must show that its operation is in compliance with this Ordinance. If the results show that the Cryptocurrency Data Center is not in compliance with this Ordinance, the Cryptocurrency Data Center shall not commence operation until the required noise attenuation measures and noise limitations are met.
- c. Furthermore, the Cryptocurrency Data Center operator must conduct annual noise studies under the baseline and post-construction studies specifications in accordance with subsections (a) and (b) above. The Cryptocurrency Data Center operator must provide the results to the county judge and file with the county clerk within 30 days after the anniversary date of the first sound study report.

ARTICLE 4: Procedure for Measurement

All tests shall be conducted according to the following procedures:

1. *Complaint Driven:* When the measurement is the result of a complaint, measurements will be taken at the property line of the receiving property.
2. *Normal Monitoring:* When the measurement procedure is in the normal course of monitoring sound, the measurements will be taken at the real property line of the source of the sound.
3. *Calibration:* The sound level meter must be calibrated at least every two years.
4. *Meter Placement:* The sound level meter must be placed a minimum of four feet above the ground or from any reflective surface. The microphone must be pointed at the sound source.
5. *Measurements:* Measurements must include “high”, “average”, and “low” readings. If the sound level meter does not provide these multiple readings, a minimum of three separate measurements must be taken at a single location at varying time intervals. The average sound level reading shall be used to determine whether there has been a violation of this Ordinance.
6. *Monitoring Report:* The report for each measurement session must include:
 - a. The day, date and time of the measurements,
 - b. Date and time of recent calibration of the sound meter,
 - c. Temperature,
 - d. Identification of the monitoring equipment,
 - e. Location, land use, and description of the source,
 - f. Location and land use of the listener, and
 - g. Sound level measurements.
7. *Extraneous Sounds:* If there are extraneous sound sources that are unrelated to the measurements and increase the monitored sound level, the measurement shall be postponed until these noises subside.

ARTICLE 5: Noise Limitations

It shall be unlawful for any Cryptocurrency Data Center to make, or continue to cause or permit to be made or continued, noise levels constituting a noise disturbance. For the purposes of this section, the external noise level emanating from Cryptocurrency Data Centers shall be deemed disturbing to a person, reasonably calculated to disturb the peace and unreasonably offensive and injurious to the public, or their property, if the sound level is:

1. 60 dBa or higher during the hours of 8 A.M. to 10 P.M. or 55 dBa or higher during the hours of 10 P.M. to 8 A.M. measured at the property line of the receiving property.

2. The standard which may be considered in determining whether a violation of this Ordinance exists includes, but is not limited to the following:
 - a. The level or volume of the noise;
 - b. The time of day or night the noise occurs;
 - c. The duration of the noise;
 - d. Whether the noise is recurrent, intermittent or constant; and
 - e. Whether proper and reasonable noise attenuation methods were followed and maintained

ARTICLE 6: Violations

1. Any or all of the following persons may be held responsible for noise violations:
 - a. The person operating the equipment or creating the noise;
 - b. The person who employs the person operating the equipment or creating the noise at the time of the violation;
 - c. The person who owns or rents the property where the violation occurs.
2. The following acts, and the causing thereof, are declared to be in violation of this Ordinance:
 - a. The sound level emanating from the Cryptocurrency Data Center exceeds 60 dBa or higher during the hours of 8 A.M. to 10 P.M. or 55 dBa or higher during the hours of 10 P.M. to 8 A.M. measured at the property line of the receiving property.
 - b. The noise attenuation measures provided in the design plan to the county judge are not incorporated in the construction of the Cryptocurrency Data Center.
 - c. Any of the required sound study results are not filed with the county judge and the county clerk within 30 days of completion of the report.
 - d. The building plan is not filed with the county judge and the county clerk within 30 days of completion of the plan prior to construction.
 - e. Failure to act in accordance with any other provision of this Ordinance.
3. All Cryptocurrency Data Centers shall be in compliance with the requirements of this Ordinance before commencing operation; failure to do so will be deemed in violation of this Ordinance and result in an injunction and/or a stay in commencing operation.

ARTICLE 7: Penalties

- (1) Any person(s), firm, corporation, partnership, association, owner, occupant, agent or anyone having ownership in the subject property or supervision or control over the Cryptocurrency Data Center that violates or fails to comply with any provision of this Ordinance, shall be guilty of a misdemeanor.

- (2) Upon conviction of such violation, any offending party shall be punished by fine of up to \$1,000 for any one specified offense or violation. Each day of a continuing violation constitutes a separate violation. Furthermore, if the prohibited act continues after the conviction of a violation, a court may issue a fine in an amount up to \$500 for each day that the unlawful conduct continues. Additionally, the County may petition for an injunction in a court of proper jurisdiction to abate the nuisance.
- (3) The county or any citizen shall be entitled to pursue all legal and equitable remedies available under the law in order to abate the nuisance and compel compliance with this Ordinance, including injunctive relief and any civil damages the court deems appropriate.
- (4) Until the Cryptocurrency Data Center is in compliance with this Ordinance and required noise attenuation measures are implemented and noise limitations met, the Cryptocurrency Data Center shall cease operations.

ARTICLE 8: Severability

If any provision of this Ordinance is found to be invalid by the decision of any court of competent jurisdiction, such invalidity shall not affect the remaining sections, phrases, and provisions of this Ordinance which shall remain valid and enforceable.

ARTICLE 9: Emergency Clause

The Quorum Court finds that the immediate implementation of this ordinance is necessary for the preservation of the public’s peace, health, safety, welfare, and property, an emergency is hereby declared to exist and that this Ordinance is to be in effect immediately after its adoption.

PASSED AND APPROVED this _____ day of _____, 2023.

APPROVED: _____
COUNTY JUDGE

ATTEST: _____
COUNTY CLERK