

ORDINANCE #24-03

REPEALING AND RECREATING CHAPTER 146  
NOISE ORDINANCE OF THE DE PERE MUNICIPAL CODE

THE COMMON COUNCIL OF THE CITY OF DE PERE, WISCONSIN, DOES HEREBY ORDAIN AS  
FOLLOWS:

Section 1. Chapter 146 – NOISE ORDINANCE shall be repealed in its entirety and recreated  
as follows:

Chapter 146 – NOISE ORDINANCE

**Sec. 146-1. Declaration of findings and policy.**

- (a) Excessive sound is a serious hazard to the public health and welfare, safety and the quality of life. A substantial body of science and technology exists by which excessive sound may be substantially abated, and the people have a right to and should be ensured an environment free from excessive sound that may jeopardize their health or welfare or safety or degrade the quality of life.
- (b) It is declared to be the policy of the city to prevent excessive sound which may jeopardize the health and welfare or safety of its citizens or degrade the quality of life.

**Sec. 146-2. Scope of article.**

This article shall apply to the control of all noise within the city.

**Sec. 146-3. Definitions and terminology.**

- (a) *Terminology.* All terminology used in this article, not defined in subsection (b) of this section, shall be in conformance with the most current, applicable publications of the American National Standards Institute (ANSI) or its successor body. Also refer to ANSI Standard S1.1 for additional mathematical and acoustical terminology definitions.
- (b) *Definitions.* The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this subsection, except where the context clearly indicates a different meaning:

*ANSI* means American National Standards Institute or its successor bodies.

*A-Weighted Sound Level* means the total sound level in decibels as measured with a sound level meter using "A" frequency weighting as defined by ANSI/ASA S1.4 standard. Abbreviated as "dB(A)".

*Ambient Sound* or *Background Noise* means the all-encompassing sounds or noises associated with a given environment, being usually a composite of sounds from many sources, near and far.

*Construction* means any safe preparation, assembly, erection, substantial repair, alteration or similar action, but excluding demolition, for or of public or private rights-of-way, structures, utilities or similar property.

*Day or daytime* means the hours between 7:00 a.m. and 10:00 p.m.

*Decibel* means a standard unit for measuring sound pressure levels that is equal to one-tenth of a bel and is a unit of level when the base of the logarithm is the tenth root of ten, and the quantities concerned are proportional to power; abbreviated "dB."

*Demolition* means any dismantling, intentional destruction or removal of structures, utilities, public or private right-of-way surfaces or similar property.

*Emergency* means any occurrence or set of circumstances involving actual or imminent physical trauma or property damage which demands immediate action.

*Emergency work* means any work performed for the purpose of preventing or alleviating the physical trauma or property damage threatened or caused by an emergency.

*Equivalent continuous level* is a method of reporting the average sound pressure level over a measurement's period of time; abbreviated as "Leq" or "LAeq" when the value has A-frequency weighting.

*Fast response* is a setting for sound level meters that indicates a 0.125-second response time.

*Frequency* means the reciprocal of the primitive period of a function periodic in time. The unit is the cycle per unit time and must be specified; typically, this unit will be Hertz (Hz) i.e. cycles per second.

*Frequency spectrum* means the continuous range of sound frequencies that the typical human ear can interpret, generally considered 20-20,000 Hz.

*Impulsive sound* means a sound is characterized by a rapid rise in time in the initial pressure wave of less than a few milliseconds, and by a decay time of less than a few seconds.

*Intermittent sound* means a sound that varies in level and duration and may repeat at regular intervals.

*Lot-line* means 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.

*Micropascal* means a unit of pressure commonly used in acoustics that is equal to one newton per square meter x 10<sup>-6</sup>.

*Period* means the smallest increment of time for which a function repeats itself in a periodic quantity.

*Period of observation* means the time interval during which acoustical data are obtained and may vary based on the type of measurement being performed.

*Person* means any person, person's firm, association, co-partnership, joint venture, corporation, or any entity public or private in nature.

*Public right-of-way* means any street, avenue, boulevard, highway, sidewalk or alley or similar place which is owned or controlled by a governmental entity.

*Pure tone* means a sound having a single frequency.

*Slow response* is a setting for sound level meters that indicates a 1-second response time.

*Sound* or *Noise* means 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.

*Real time sound analyzer* means a sound level meter that can measure and display the frequency spectrum of a sound.

*Sound level meter* means an instrument conforming to the ANSI/ASA S1.4 standard used for the measurement of sound pressure levels using various methods such as time-weighting, exponential time-weighting, frequency weighting, and integration. Device shall include a microphone, preamplifier, and processing/reporting unit.

*Sound pressure level* means a measure of the relative sound pressure relative to the reference sound pressure of 20 micropascals. Abbreviated as "L", reported in decibels (dB).

*Spectrum* is a function of time and is a description of its resolution into components, each of different frequency and usually of different amplitude and phase and is also used to signify a continuous range of components each of different frequency and usually of different amplitude and phase. A spectrum is used to signify a continuous range of components usually wide in extent within which waves have some specified characteristics such as audio-frequency spectrum and is also applied to functions of variables other than time.

*Steady sound* means a sound whose sound pressure varies less than +/- 1.5 dB during the period of observation.

Tonal sound means any sound which can be distinctly heard as a single pitch or a set of single pitches. For purposes of this ordinance, a sound shall be considered tonal if the one-third octave band sound pressure in the band with the tone exceeds the arithmetic average of the sound pressure levels of the two adjacent one-third octave bands by 5 dB for center frequencies of 500 Hz and above and by 8 dB for center frequencies between 160 and 400 Hz and by 15 dB for center frequencies less than or equal to 125 Hz.

*Vibration meter* means an instrument conforming to ANSI S1.4, S2.1, S2.2 and 2.71 used for measuring physical vibrations as a function of acceleration and/or velocity and frequency. Device shall include a vibration pickup device, preamplifier, and processing/reporting unit.

#### **Sec. 146-4. Enforcement of article provisions.**

It shall be the duty of the health department, inspection department and the police department to enforce the provisions of this article.

#### **Sec. 146-5. Excessive noise declared a nuisance.**

Excessive noise as prohibited in this article is hereby declared to be a public nuisance and may be subject to summary abatement procedures as described in section 78-3 of this Code. Such abatement may be in addition to administrative proceedings, fines and penalties as provided in this article. It shall be the duty of the health department, inspection department or the police department, upon complaint of a nuisance, to determine if excessive noise exists as defined in this section and to take the appropriate action as specified therein. Conditions of excessive noise which are specifically exempted or for which a variance permit has been issued in conformity with the provisions of this section, shall be exempt from the application of the provisions of this section.

#### **Sec. 146-6 Reserved.**

#### **Sec. 146-7. Exemptions.**

The following activities are exempted from regulation under section 146-9.

- (1) *Construction sites; public utility projects; public works.*

- a. *Construction sites; public utility projects.* The criteria, as set forth in section 146-9, shall not apply to construction sites and public utilities projects during the daytime hours from Monday through Saturday, inclusive; provided, however, that noise production shall be minimized through proper equipment operation, maintenance or modifications thereto. Stationary equipment on construction projects lasting more than ten days within residential districts shall be shielded or located so as not to cause excessive noise.
  - b. *Variance for certain construction sites and utility projects.* A construction site or utility project may seek a variance exempting such site/project from the noise limitations set forth in section 146-9 if public convenience so requires or if the site/project operations by its nature, extends beyond the time and day limitations of subsection 146-9., according to the following process:
    1. Written application shall be made to the director of public works, or designee, at least ten calendar days prior to site/project start; and
    2. The director of public works shall, in consultation with the health officer/director, review the site/project location and the probable noise impact on residential areas; and
    3. Applicant shall ensure noise production is minimized through proper equipment operation, maintenance or modifications thereto as required by the director of public works or health officer/director; and
    4. The director of public works and/or health officer/director shall place such terms and conditions upon any variance approval as will protect the health and welfare of the public. Failure to abide by such terms and conditions shall result in revocation of the variance; [and]
    5. Approval and denial of any application shall be in writing; and
    6. If the variance is granted, applicant shall notify all property owners as identified by the health officer/director prior to commencement of the site/project; and
    7. Application denials may be appealed to the board of public works within ten days of the date of denial.
  - c. *Public works operation.* City public works maintenance and operations projects shall be exempt from the criteria set forth in section 146-9; provided, however, that noise production shall be minimized through proper equipment operation and maintenance.
  - d. *Brown County US 41 Project.* The criteria set forth in section 146-9 shall not apply to construction activities that are a part of the State of Wisconsin Department of Transportation Brown County US 41 project. This exemption shall terminate upon the final completion of said project.
- (2) *Emergency operations.* Emergency short term operations which are necessary to protect the health and welfare of the citizens, such as emergency utility and street repair, fallen tree removal, snow removal or emergency fuel oil delivery, shall be exempt from the criteria as set forth in section 146-9, provided that reasonable steps shall be taken by those in charge of such operations to minimize noise emanating from such operations.
  - (3) *Noises required by law.* The provisions of section 146-9 shall not apply to any noise required specifically by law for the protection, health, welfare or safety of people or property.
  - (4) *Lawn mowers; garden tools; powered equipment.* Powered equipment such as lawn mowers, small lawn and garden tools, riding tractors and snow removal equipment which is necessary for the maintenance of property, is kept in good repair and maintenance, and which equipment, when new, would not comply with the standards set forth in this article, shall be exempted from the provisions of section 146-9. No

person shall operate such equipment, with the exception of snow removal equipment, during the hours of 10:00 p.m. through 7:00 a.m. inclusive.

- (5) *Outdoor religious, educational, or recreational activities.* Reasonable activities conducted on public or private grounds, which are conducted in accordance with the manner in which such spaces are generally used, including but not limited to, religious, educational or recreational activities or events.
- (6) *Other outdoor events.* Outdoor gatherings, public dances, shows and sporting events, and other similar outdoor events, provided that a permit has been obtained from the appropriate permitting authority.
- (7) *Airplanes.* Aircraft operations which are controlled specifically by federal law and enforcement shall be exempted from the provisions of this article.
- (8) *Bells and chimes.* Bells, chimes and similar devices which signal the time of day and operate during the daytime hours for a duration of no longer than 15 minutes in any given one-hour period shall be exempt from the noise limitations.

#### **Sec. 146-8. Variances for time to comply.**

##### *Time to comply.*

- (1) It is recognized that it may not be technically or economically feasible for certain commercial or industrial sources of sound to be modified in such a manner as to comply in a timely manner with the standards set forth in this article. Therefore, the board of health may issue a variance permit on existing or potential commercial or industrial sources of sound which produce excessive noise.
- (2) At least 60 days prior to commencement of sound producing operations, or upon a complaint which cannot be resolved to the satisfaction of health officer, the owner, or authorized agent of any commercial or industrial source or potential source of sound may apply to the board of health for a variance in time to comply with the noise level requirements of this article. The board of health shall have the authority, consistent with this section, to grant a variance, not to exceed 18 months from the effective date of such variance permit.
- (3) Any person seeking a variance as allowed herein shall file an application with the health officer. The application shall contain information which demonstrates that bringing the source of sound or activity for which the variance is sought into compliance with this article would constitute an unreasonable hardship on the applicant, on the community, or on other persons. A public hearing shall be held, preceded by a Class 1 notice of such hearing. Notice of the public hearing on the variance request shall be given to all property owners within a 300-foot radius, or a radius distance that is inclusive of all properties in which the noise level exceeds the lot-line regulation, whichever is greater.
- (4) In determining whether to grant or deny the application, the board of health shall balance the hardship to the applicant, the community, and other persons of not granting the variance against the adverse impact on health, safety and welfare of persons affected, the adverse impact on property affected, and any other adverse impacts of granting the variance. Applicants for variances and persons contesting the variances may be required to submit any information the board of health may reasonably require. In granting or denying an application, the board of health shall place on public file a copy of the decision and the reasons for denying or granting the variance in time to comply.
- (5) Variances shall be granted to the applicant containing all necessary conditions, including a schedule for achieving compliance. The variance shall not become effective until all conditions are agreed to by the applicant. Noncompliance with any condition of the variance shall terminate the variance and subject the person holding it to those provisions of this article for which the variance was granted.

- (6) Application for extension of the variance or for modification of other substantial conditions shall be treated like applications for initial variances under this subsection, except that the board of health must find that the need for the extension or modification clearly outweighs any adverse impacts of granting the extension or modification.

#### **Sec. 146-9. Lot line noise regulation.**

- (a) The following noise limitations are established for any premises, measured at the lot line:
- (1) *Maximum levels within zones.* No person shall operate or cause to be operated on private or public property any source of sound in such a manner as to create a sound pressure level which exceeds the limits set for the zone categories in Table 1-1.

TABLE 1-1 -- MAXIMUM PERMISSIBLE SOUND PRESSURE		
Zone Category	Time of Day	
	7:00 AM – 10:00 PM	10:00 PM – 7:00 AM
MAXIMUM dB(A) LEVEL WITHIN A PROPERTY/ZONE		
Residential	57	52
Mixed-Use	63	58
Commercial and Employment	72	67

- (2) *Maximum levels between zones.* No person shall operate or cause to be operated on private or public property any source of sound from a mixed-use zone into a residential zone or commercial and employment zone, or from a commercial and employment zone into a residential zone or mixed-use zone which exceeds the limits set for the zone categories in Table 1-2.

TABLE 1-2 -- MAXIMUM PERMISSIBLE SOUND PRESSURE		
Zone Category	Time of Day	
	7:00 AM – 10:00 PM	10:00 PM – 7:00 AM
MAXIMUM dB(A) LEVEL BETWEEN PROPERTIES/ZONES		
<b>Residential</b>		
Residential into Residential	57	52
Residential into Mixed-Use	57	52
Residential into Commercial and Employment	57	52
<b>Mixed-Use</b>		
Mixed-Use into Residential	61	55
Mixed-Use into Mixed-Use	63	58
Mixed-Use into Commercial and Employment	63	58
<b>Commercial and Employment</b>		
Commercial and Employment into Residential	64	60
Commercial and Employment into Mixed-Use	66	61
Commercial and Employment into Commercial and Employment	72	67

(b) *Definitions of zone categories.* The following zones are included in the zone categories:

- (1) *Residential* R1-80, R1-60, R1-45, R2-60, R2-45, RM-1, RM-2 zoning districts;
- (2) *Mixed-Use:* MX1, MX2, MX3, GX1, GX2 zoning districts;
- (3) *Commercial and Employment:* O, C, BP-1, BP-2, I zoning districts;
- (4) *Special:* AG, CON, PI-1, PI-2, PUD zoning districts.

Regulation will be according to the underlying zones or zoning district. Special zones that are not publicly owned shall be regulated according to the adjacent zone. If the neighboring zones are different, they shall be extended to the center of the conservancy for the purposes of this article.

(c) *Tonal Sounds.* Sounds that are categorized as tonal are subject to a 5 dB reduction to the regulation limits set forth in the tables above.

(d) *Measurements.* The measurement shall be made at or beyond the property line of the property on which such noise is generated or at or within the property line of the property on which such noise is perceived, as appropriate. Measurement shall be done at a minimum distance of 1 meter from any reflecting surface (including the ground). The measurement of sound shall be made with a sound level meter or real-time analyzer that meets or exceeds the ANSI S1.4 requirements for a Type 1 sound level meter or any subsequent nationally adopted standards superseding the above standards. The instrument should be maintained in calibration and good working order. All outdoor measurements shall be taken using a 3-inch diameter windscreen and with wind speeds at 11 miles per hour or less.

Measurements for steady state sounds shall be taken for a period of 5-minutes using the A-weighted, equivalent continuous method (LAeq). Measurements for impulsive or intermittent sounds shall be taken over a period of time such as to capture the sound in question using the maximum fast-response sound pressure level (LAFmax).

(e) *Residential air conditioners.* Noise emitted by residential air conditioners shall be judged by the criteria set forth above.

(f) *Ambient noise.* If the ambient noise due to environmental factors exceeds the noise regulations listed on the table above, then the noise measurements shall include frequency analysis using 1/3 octave bands. If the measurements including the subject noise exceed the ambient noise by 5 dB or more, or 2 dB or more if the noise is considered to be tonal, in any 1/3 octave band, then it is to be considered excessive.

(g) *Exemptions.* The provisions of this section shall not apply to:

- (1) Activities covered by the variance and exemption sections of this article;
- (2) The activities expressly covered under other provisions of this chapter;
- (3) Nonstationary farming equipment.

## **Sec. 146-10. Vibrations.**

(a) The use of any property or portion of such property which causes earth-shaking vibrations such as are created by uses including, but not limited to, drop forges and hydraulic surges, shall be controlled in such a manner as to prevent transmission beyond the lot line of vibration limits as indicated on Tables II and III.

Table

II

Maximum Permissible Vibration Baseline Curve

	1/3 Octave Band Center Frequency (Hz)																			
	1	1.25	1.6	2	2.5	3.15	4	5	6.3	8	10	12.5	16	20	25	31.5	40	50	63	80
Velocity (mm/s)	0.57	0.46	0.36	0.29	0.24	0.21	0.17	0.14	0.12	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Table

III

Maximum Permissible Vibration Multiplication Factors

	Residential Zones 7:00AM-10:00PM	Residential Zones 10:00PM-7:00AM	Mixed-Use; Commercial and Employment Zones
Continuous, Intermittent, or Impulsive (>3/day) Vibrations	4	1.4	4
Impulsive Vibrations (<3/day)	90	1.4	128

- (b) Measurements shall be taken on a building structure or foundation surface near occupiable space on the receiving property. Measurement shall be made using a vibration meter in accordance with ANSI S1.4 and S2.71, or any subsequent nationally adopted standards superseding the above standards. The instrument should be maintained in calibration and good working order. The pickup device shall be properly connected to the building structure or foundation surface using a magnetic mount, petro wax, or tapped threaded stud.

Measurements shall include the Root-Mean-Square (RMS) velocity in 1/3 octave bands from 1 – 80 Hz. Measurements for steady state vibrations shall be taken for a period of 2-minutes using the equivalent continuous velocity method (Veq). Measurements for impulsive or intermittent sounds shall be taken over a period of time such as to capture the vibration or impact in question using the maximum slow-response velocity level (Vsmx). Table II indicates the baseline velocity values, which are to be multiplied by the applicable factor as listed in Table III based on the time of day, receiving zone, and type of vibration.

**Sec. 146-11. Reserved.**

**Sec. 146-12. Reserved.**

**Sec. 146-13. Penalty for violation of article.**

Anyone violating any of the provisions of this Article, unless otherwise provided, shall, upon conviction, forfeit such amount as determined by the Common Council by Resolution. Each violation and each day a violation continues or occurs shall constitute a separate offense. This section shall not preclude the City from maintaining any appropriate action to prevent or to remove a violation of any of such sections.



Section 2. That all other ordinances in conflict herewith are hereby repealed.

Section 3. That this ordinance shall take effect upon passage and publication.

Adopted by the Common Council of the City of De Pere, Wisconsin, this 16th day of January,  
2024.

APPROVED:

\_\_\_\_\_  
James G. Boyd, Mayor

ATTEST:

\_\_\_\_\_  
Carey E. Danen, City Clerk

Ayes: 8

Nays: 0

Board/Committee/Commission Approval: 01/9/2024

Publication Date: 01/19/2024