

ORDINANCE NO. 14,009

AN ORDINANCE to amend the Municipal Code of the City of Des Moines, Iowa, 2000, adopted by Ordinance No. 13,827, passed June 5, 2000, by repealing Sections 42-246, 42-252 and 42-253 thereof and enacting new Sections 42-246, 42-252 and 42-253, relating to noise pollution.

Be It Ordained by the City Council of the City of Des Moines, Iowa:

Section 1. That the Municipal Code of the City of Des Moines, Iowa, 2000, adopted by Ordinance No. 13,827, passed June 5, 2000, is hereby amended by repealing Sections 42-246, 42-252 and 42-253 thereof and enacting new Sections 42-246, 42-252 and 42-253, relating to noise pollution, as follows:

Sec. 42-246. Definitions.

Definitions of technical terms used in this article which are not defined in this section shall be obtained from publications of acoustical terminology issued by the American National Standards Institute (ANSI) or its successor body. The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Ambient sound level means the noise associated with a given environment, exclusive of a particular noise being tested, being usually a composite of sounds from many sources near and far, exclusive of intruding noises from isolated identifiable sources.

A-weighted sound level means the sound pressure level in decibels as measured on a sound level meter using the A-weighting network. The level is designated dB(a) or dBA.

Construction means any site preparation, assembly, erection, substantial repair,

alteration, or similar action for or of public or private rights-of-way, structures, utilities or similar property.

Decibel (dB) means a logarithmic and dimensionless unit of measure often used in describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

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 or psychological trauma or property damage which demands immediate action.

Emergency work means any work performed for the purpose of alleviating or resolving an emergency.

Equivalent A-weighted sound level (Leq) means the constant sound level that, in a given situation and time period, conveys the same sound energy as the actual time-varying A-weighted sound. For the purpose of this article, a time period of one hour shall be used, unless the likely duration or intensity of the sound being measured makes a shorter time period reasonable.

Impulsive sound means sound of short duration, usually less than one second, with an abrupt onset and rapid decay. Examples of sources of impulsive sound include explosions, drop forge impacts, and the discharge of firearms.

Motorboat means any vessel which operates on water and which is propelled by a motor, including but not limited to boats, barges,

amphibious craft, water ski towing devices and hovercraft.

Motorcycle means any motor vehicle having a saddle or seat for the use of the rider and designed to travel on not more than three wheels in contact with the ground. The term includes motorized bicycles and motor scooters.

Motor vehicle means any motor-operated vehicle licensed for use on the public highways, but not including a motorcycle.

Noise means any sound which disturbs humans or which causes or tends to cause an adverse psychological or physiological effect on humans.

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Noise sensitive activities means activities which should be conducted under conditions

of exceptional quiet, including but not limited to operation of schools, libraries open to the public, churches, hospitals, and nursing homes.

Noise sensitive area means any area designated pursuant to section 42-263 of this article for the purpose of ensuring exceptional quiet and clearly posted with noise sensitive area signs, because of the noise sensitive activities conducted therein.

Person shall have the meaning prescribed by section 1-2 of this Code and, in addition, means and includes any officer, employee, department, agency or instrumentality of the state or any political subdivision of the state.

Powered model vehicle means any self-propelled airborne, waterborne, or landborne model plane, vessel, or vehicle, which is not designed to carry persons, including but not limited to any model airplane, boat, car or rocket.

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.

Public space means any real property, including any structure thereon, which is owned or controlled by a governmental entity.

Pure tone means any sound which can be distinctly heard as a single pitch or a set of single pitches.

Real property boundary 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 intrabuilding real property divisions.

Receiving land use means the use or occupancy of the property which receives the transmission of sound as defined in this section.

Recreational vehicle means any race car, motorcycle, snowmobile, or any other motorized vehicle equipped for use in racing or other recreational events or uses off of public rights-of-way on public or private property. For purposes of this article, a motor vehicle or motorized vehicle which is taking part in an organized racing, endurance, or other coordinated sporting event shall be deemed a recreational vehicle and shall be governed by the terms of subsection 42-258(e) of this article.

Residential means any property on which is located a building or structure used wholly or partially for living or sleeping purposes. This definition shall not include park custodial residences or school or college dormitories.

RMS sound pressure means the square root of the time averaged square of the sound pressure, denoted P_{rms} .

Sound means an oscillation in pressure, particle displacement, particle velocity or other physical parameter, in a medium with internal forces that cause compression and rarefaction of that medium. The description of sound may include any characteristic of such sound, including duration, intensity and frequency.

Sound equipment means any radio, record player, stereo, television, tape deck or player, loudspeaker, amplifier, sound truck or other device for producing, reproducing, or amplifying sounds.

Sound level means 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 S1.4-1971 or the latest approved revision thereof). If the frequency weighting employed is not indicated, the A-weighting shall apply.

Sound level meter means an instrument which includes a microphone, amplifier, RMS detector, integrator or time averager, output or display meter, and weighting networks used to measure sound pressure levels, which complies with American National Standards Institute standard 1.4-1971.

Sound pressure means the instantaneous difference between the actual pressure and the average or barometric pressure at a given point in space, as produced by sound energy.

Sound pressure level means 20 times the logarithm to the base 10 of the ratio of the RMS sound pressure to the reference pressure of 20 micronewtons per square meter (20×10^{-6} N/m²). The sound pressure level is denoted L_p or SPL and is expressed in decibels.

Used or occupied includes the words "intended, designed, or arranged to be used or occupied."

Sec. 42-252. Noise disturbance prohibited.

1) No person shall make or continue or cause to be made or continued any noise disturbance as defined in this article.

2) This section, 42-252, prohibiting noise disturbances shall be separate from and in

addition to any other section of this article, and enforcement actions may be brought pursuant to the prohibition of noise disturbances, or to the prohibition of specific noises at or above certain decibel levels, or to both, except that no noise shall be deemed a noise disturbance where the decibel level of such noise is within the limits prescribed by another applicable section of this article and where there is compliance with all other requirements of law with respect to such noise.

Sec. 42-253. Maximum permissible sound levels by receiving land use; immediate threat.

(a) *Maximum permissible sound levels.* With the exception of sound levels elsewhere specifically authorized or allowed in this article, no person shall make, continue, or cause to be made or continued, any sound which exceeds the following sound level limits at or within the real property boundary of a receiving land use:

TABLE 1. SOUND LEVELS BY RECEIVING LAND USE

Zoning Category of Receiving Land Use	Time	Sound Level Limit, dBA
R-1 to R-6 residential	7:00 a.m. to 10:00 p.m. 10:00 p.m. to 7:00 a.m.	60 50
C-0, C-1 to C-4, U-1 commercial	At all times	65
M-1 to M-3 industrial	At all times	75
Noise sensitive area	At all times	55
U-1 floodplain or FW floodway	At all times	Use specific limit from above in view of character of land use

(1) For the purposes of this article, sound levels in excess of the dBA listed in table 1 shall be deemed a violation.

(2) Correction for character of sound. For any source of sound which emits a pure tone, the maximum sound level limits set forth in table 1 shall be reduced by five dBA.

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TABLE 2. CONTINUOUS SOUND LEVELS WHICH POSE
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IMMEDIATE THREAT TO HEALTH AND WELFARE

(Measured at 50 Feet)

Sound Level Limit (dBA)	Duration
90	24 hours
93	12 hours
96	6 hours
99	3 hours
102	1.5 hours
105	45 minutes
108	22 minutes

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TABLE 3. IMPULSIVE SOUND LEVELS WHICH POSE
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IMMEDIATE THREAT TO HEALTH AND WELFARE

(Measured at 50 Feet)

Sound Level Limit (dB)	Number of Repetitions Per 24-Hour Period
140	1
130	10

120	100
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Sec. 2. This ordinance shall be in full force and effect from and after its passage and publication as provided by law.

FORM APPROVED:

Mark Godwin, Deputy City Attorney

Preston Daniels, Mayor

Attest:

I, Donna Boetel-Baker, City Clerk of the City of Des Moines, Iowa, hereby certify that the above and foregoing is a true copy of an ordinance (Roll Call No. 01- 3336), passed by the City Council of said City at a meeting held November 5, 2001, signed by the Mayor on November 5, 2001, and published as provided by law in the Business Record on November 19, 2001. Authorized by Publication Order No. 3002.

Donna Boetel-Baker, MMC City Clerk