

ORDINANCE TO CONTROL NOISE AND VIBRATIONS WITHIN
THE CITY LIMITS OF URBANA, ILLINOIS

BE IT ORDAINED BY THE CITY COUNCIL OF URBANA, ILLINOIS,

that:

Section 1. Definitions. For the purpose of this Ordinance, whenever any of the following words, terms or acronyms are used herein, they shall have the meaning ascribed to them as follows:

All acoustical terminology shall be that contained in ANSI S1.1

"Acoustical Terminology":

ANSI: American National Standards Institute or its successor bodies;

ARI: Air-Conditioning and Refrigeration Institute or its successor bodies;

ASHRAE: American Society of Heating, Refrigerating and Air-Conditioning Engineers or its successor bodies;

ASTM: American Society for Testing Materials or its successor bodies;

COMMISSIONER: The Commissioner of Public Works of the City of Urbana, Illinois;

DECIBEL: A unit for measuring the volume of a sound, equal to the logarithm of the ratio of the intensity of the sound to the intensity of an arbitrarily chosen standard sound; abbreviated "dB".

DISCRETE TONE: A discrete tone is a sound wave whose instantaneous sound pressure varies essentially as a simple sinusoidal function of the time.

FLUCTUATING NOISE: A fluctuating noise is a noise whose sound pressure level varies significantly but does not equal the ambient environmental level more than once during the period of observation.

IMPULSIVE NOISE: Impulsive noise is characterized by brief excursions of sound pressure (acoustic impulses) which significantly exceed the ambient environmental sound pressure. The duration of a single impulse is usually less than one second.

INTERMITTENT NOISE: An intermittent noise is a noise whose sound pressure level equals the ambient environmental level two or more times during the period of observation. The period of time during which the level of the noise remains at an essentially constant value different from that of the ambient is on the order of one second or more.

IEC: International Electrotechnical Commission or its successor bodies;

ISO: International Organization for Standardization or its successor bodies;

MOTOR VEHICLE: A motor vehicle is any passenger vehicle, truck, truck-trailer, trailer or semi-trailer propelled or drawn by mechanical power;

NON-STEADY NOISE: A non-steady noise is a noise whose level shifts significantly during the period of observation.

PERIOD OF OBSERVATION: The period of observation is the time interval during which acoustical data are obtained. The period of observation is determined by the characteristics of the noise being measured and should also be at least 10 times as long as the response time of the instrumentation. The greater the variance in indicated sound level, the longer must be the observation time for a given expected accuracy of the measurement.

SAE: Society of Automotive Engineers or its successor bodies;

SOUND LEVEL: (Noise Level): For air-borne sound, sound level (noise level) is a weighted sound pressure level, obtained by the use of metering characteristics and the A-weighting as specified in the referenced standards (Section 1.3). When the A-weighting is employed, it must be indicated.

SOUND PRESSURE LEVEL: The sound pressure level, in decibels, of a sound is 20 times the logarithm to the base 10 of the ratio of the pressure of the sound to the reference sound pressure. Unless otherwise specified, the effective (rms) pressure is to be understood. The reference sound pressure is $20 \mu\text{N/m}^2$.

STEADY NOISE: A noise whose level remains essentially constant (i.e., fluctuations are negligibly small) during the period of observation is a steady noise.

ZONING DISTRICT: Those districts established by the Zoning Ordinance of the City of Urbana, Illinois, (Chapter 34).

Section 2. No person shall unreasonably make, or cause to be made, upon a public way, or in such close proximity to a public way as to be distinctly and loudly audible upon such public way, and a threat to the public safety (or health) or a direct encroachment on the peace of the neighboring environment, any noise of any kind by crying, calling or shouting, or by means of any whistle, rattle, bell, gong, clapper, hammer, drum, horn, hand organ, mechanically operated piano, other musical instrument, wind instrument, mechanical device, radio, phonograph, sound amplifying or other similar electronic device; provided that the said restrictions shall not apply to any licensed peddler crying or calling for the purpose of advertising goods, wares or merchandise when lawfully using any public way in the City except by lawfully-issued permit.

Section 3. No person owning, or in possession or control of any building or premises, shall use the same, permit the use of the same, or rent the same to be used for any business or employment or residential use, or for any purpose of pleasure or recreation, if such use shall, by its boisterous nature, disturb or destroy the peace of the neighborhood in which such building or premise is situated, or be dangerous or detrimental to health.

Section 4. It shall be unlawful for any person to use any pile driver, shovel, hammer derrick, hoist tractor, roller or other mechanical apparatus operated by fuel or electric power in building or construction operations between the hours of 8:00 p.m. and 8:00 A.M. Monday through Saturday, and 8:00 p.m. and 12:00 Noon Sunday, except for emergency work, within 600 feet of any building used for residential or hospital purposes.

Section 5. A. It shall be unlawful for any person to operate any motor of a motor vehicle of a weight in excess of four tons (8,000 lbs.) for a consecutive period longer than two minutes while such vehicle is standing on private property and located within 150 feet of property zoned and used for residential purposes except where such vehicle is standing within a completely enclosed structure, and except when traffic conditions or weather conditions necessitate such.

This Section shall not apply to buses operated for the transportation of passengers while standing in established bus turnarounds, bus terminals, bus parking lots and bus-storage yards.

B. No person shall sell, or offer for sale, a new motor vehicle that produces a maximum noise exceeding the following noise limit at a distance of 50 feet from the center line of travel under test procedures established by Section 16 of this Ordinance.

Type of Vehicle	Date of Manufacture	Noise Limit
(1) Motorcycle	before 1 January 1970	91 dB (A)
Same	after 1 January 1970	87 dB (A)
Same	after 1 January 1973	85 dB (A)
Same	after 1 January 1975	83 dB (A)
Same	after 1 January 1980	74 dB (A)
(2) Any motor vehicle with a gross vehicle weight of 8,000 pounds or more	after 1 January 1968	88 dB (A)
Same	after 1 January 1973	85 dB (A)
Same	after 1 January 1975	83 dB (A)
Same	after 1 January 1980	74 dB (A)

Type of Vehicle	Date of Manufacture	Noise Limit
(3) Passenger cars, motor-driven cycle and any other motor vehicle	before 1 January 1973	86 dB (A)
Same	after 1 January 1973	84 dB (A)
Same	after 1 January 1975	80 dB (A)
Same	after 1 January 1980	75 dB (A)

C. No person shall operate within the speed limits specified in this Section either a motor vehicle or combination of vehicles of a type subject to registration at any time or under any condition of grade, load, acceleration or deceleration in such manner as to exceed the following noise limit for the category of motor vehicle, based on a distance of not less than 50 feet from the center line of travel under test procedures established by Section 17 of this Ordinance:

Type of Vehicle	Noise Limit in Relation To Posted Speed Limit	
	35 MPH or Less	Over 35 MPH
(1) Any motor vehicle with a manufacturer's GVW rating of 8,000 lbs. or more, and any combination of vehicles towed by such motor vehicle		
before 1 January 1973	88 dB (A)	90 dB (A)
after 1 January 1973	86 dB (A)	90 dB (A)
(2) Any motorcycle other than a motor-driven cycle		
before 1 January 1978	82 dB (A)	86 dB (A)
after 1 January 1978	78 dB (A)	82 dB (A)
(3) Any other motor vehicle and any combination of motor vehicles towed by such motor vehicle		
after 1 January 1970	76 dB (A)	82 dB (A)
after 1 January 1978	70 dB (A)	79 dB (A)

This Section applies to the total noise from a vehicle or combination of vehicles and shall not be construed as limiting or precluding the enforcement of any other provisions of the Statutes or Ordinances relating to motor vehicle mufflers for noise control.

D. No person shall modify or change the exhaust muffler, intake muffler or any other noise abatement device of a motor vehicle in a manner such that the noise emitted by the motor vehicle is increased above that emitted by the vehicle as originally manufactured. Procedures used to establish compliance with this paragraph shall be those used to establish compliance of a new motor vehicle with the requirements of this article.

Section 6. No person shall sell or lease, or offer for sale or lease, any powered equipment or powered hand tool that produces a maximum noise level exceeding the following noise limits at a distance of 50 feet, under test procedures established by Section 18 of this Ordinance:

Type of Equipment	Noise Limit
(1) Construction and industrial machinery, such as crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors, and pneumatic powered equipment, etc., but not including pile drivers.	
Manufactured after 1 January 1972	94 dB (A)
Manufactured after 1 January 1973	88 dB (A)
Manufactured after 1 January 1975	86 dB (A)
Manufactured after 1 January 1980	80 dB (A)
(2) Agricultural tractors and equipment	
Manufactured after 1 January 1972	88 dB (A)
Manufactured after 1 January 1975	86 dB (A)
Manufactured after 1 January 1980	80 dB (A)
(3) Powered commercial equipment of 20 HP or less intended for infrequent use in a residential area, such as chain saws, pavement breakers, log chippers, powered hand tools, etc.	
Manufactured after 1 January 1972	88 dB (A)
Manufactured after 1 January 1973	84 dB (A)
Manufactured after 1 January 1980	80 dB (A)
(4) Powered equipment intended for repetitive use in residential areas. Such equipment includes lawn mowers, small lawn and garden tools, riding tractors, snow removal equipment.	
Manufactured after 1 January 1972	74 dB (A)
Manufactured after 1 January 1975	70 dB (A)
Manufactured after 1 January 1978	65 dB (A)

Section 7. Any property use established in a Zoning District as defined and designated under the provisions of the Zoning Ordinance of the City of Urbana shall be so operated as to comply with the performance standards governing noise set forth hereinafter for the district in which such use shall be located.

Section 8. Noise levels shall be measured in terms of the sound pressure level in octave-frequency bands using equipment which meets the requirements established by this Ordinance. Impulsive type noises shall be subject to the performance standards hereinafter prescribed, provided that equipment suitable for such noise measurement, as defined by this Ordinance, is used. Noises such as those of an irregular and intermittent nature shall be restricted as provided for hereinafter.

Section 9. In I-1 Zoning Districts, at no point on the boundary of a Residence, Business or Commercial Zoning District shall the sound pressure level of any individual operation or plant, or the combined operations of any person, firm or corporation, exceed the decibel levels in the designated octave bands shown below for the Zoning District indicated as measured under the test procedures established by Section 19 of this Ordinance.

Octave Band Center Frequency (Hz)	Maximum Sound Pressure Levels (dB) Along District Boundaries	
	Residence	Business-Commercial
31.5	72	79
63	71	78
125	65	72
250	57	64
500	51	58
1000	45	52
2000	39	46
4000	34	41
8000	32	39
A-scale levels (for monitoring purposes)	55 dB (A)	62 dB (A)

In Business and Commercial Zoning Districts, all activities involving the production, processing, cleaning, servicing, testing, repair of materials, goods or products, or any property use including, but not limited to, air conditioning and sound amplification equipment, shall conform with the performance standards stated above, provided that performance standards shall in every case be applied at the boundaries of the lot on which any such activities take place.

In Residential Zoning Districts, any property use shall conform with the performance standards above for Residence District Boundaries, provided that performance standards shall in every case be applied at the boundaries of the lot on which such use is established.

The maximum sound pressure levels established in this Section to be applied to the boundaries of a lot shall not apply to construction sites. Construction site noise levels shall be regulated by Section 6 of this Ordinance.

Section 10. In I-2 Districts at no point either on the boundary of a Residence, Business or Commercial District, or at 125 feet from the nearest property line of a plant or operation, whichever distance is greater, shall the sound pressure level of any individual operation or plant, or the combined operations of any person, firm or corporation, exceed the decibel levels in the designated octave bands shown below for the Zoning Districts included as measured under test provisions established by Section 19 of this Ordinance:

Octave Band Center Frequency (Hz)	Maximum Sound Pressure Levels (dB) Among District Boundaries	
	Residence	Business-Commercial
31.5	72	79
63	71	78
125	66	73
250	60	67
500	54	61
1000	49	55
2000	44	50
4000	40	46
8000	37	43
A-scale levels (for monitoring purposes)	58 dB (A)	64 dB (A)

Section 11. Any property use established in an Industrial, Commercial, or Business Zoning District shall be so operated as to comply with the performance standards governing vibration set forth herein for the Zoning District in which such use shall be located.

Section 12. A. In I-1 Zoning Districts any use or portion thereof, creating earth-shaking vibrations such as are created by drop forges or hydraulic surges, shall be controlled in such manner as to prevent transmission beyond the lot lines of earth-shaking vibrations perceptible without the aid of instruments, and in no case shall any such vibration be allowed to create a nuisance or hazard beyond the lot lines.

B. In I-2 Zoning Districts any use or portion thereof creating intense earth-shaking vibrations such as are created by drop forges, or heavy hydraulic surges, shall be set back at least 300 feet from the boundary of a Residence, Business, or Commercial Zoning District and at least 150 feet from the boundary of an I-1 Zoning District, unless such operation is controlled in such a manner as to prevent transmission beyond the lot lines of earth-shaking vibrations perceptible without the aid of instruments.

Section 13. In B-1 and B-2 Zoning Districts the performance standards governing vibrations in the I-1 Zoning Districts shall apply.

Section 14. No person shall sound any horn or audible signal device of any motor vehicle of any kind while the vehicle is not in motion, nor shall such horn or signal device be sounded under any circumstances except as required by law, and except as reasonably required for other emergency circumstances, nor shall it be sounded for any unnecessary period of time.

Section 15. A. No person shall sell, or offer for sale, a new motor-driven recreational or off-highway vehicle, including dunebuggies, snowmobiles, all-terrain vehicles, go-carts, and mini-bikes, that produces a maximum noise exceeding the following noise limit at a distance of 50 feet from the center line of travel under test procedures established by Section 20 of this Ordinance.

Type of Vehicle	Date of Manufacture	Noise Limit
Snowmobile	after 1 January 1971	86 dB (A)
Same	after 1 June 1972	82 dB (A)
Same	after 1 June 1974	73 dB (A)
Any other vehicle including Dune buggy, all-terrain vehicle, go-cart, mini-bike	after 1 January 1971	86 dB (A)
	after 1 January 1973	80 dB (A)
	after 1 January 1975	70 dB (A)

B. It shall be unlawful for any person to operate a motor-driven vehicle of a type not subject to registration for road use, at any time or under any condition of load, acceleration, or deceleration, in such a manner as to exceed the following noise/limit at any point on property zoned for business or residential use at a distance of not less than 50 feet from the path of travel:

	Noise Limit
before 1 January 1973	86 dB (A)
after 1 January 1973	82 dB (A)

Section 16. Test procedures to determine whether maximum noise emitted by new motor vehicles sold or offered for sale meet the noise limits stated in Section 5B of this Ordinance shall be in substantial conformity with Standards and Recommended Practice established by the Society of Automotive Engineers, Inc., including SAE Standard J331; SAE Recommended Practice J184; SAE Recommended Practice J366; SAE Standard J986 and such other and further standards as may be propounded in the Code of Recommended Practices of the Department of Public Works or other department as designated by the Mayor.

Section 17. Test procedures to determine whether maximum noise emitted by motor vehicles in use meet the noise limits stated in Section 5C of this Ordinance shall be in substantial conformity with Standards and Recommended Practice established by the Society of Automotive Engineers, Inc., including SAE Standard J986; SAE Standard J331; Recommended Practice J366; Recommended Practice J184; and such other and further standards as may be propounded in the Code of Recommended Practices of the Department of Public Works or other department as designated by the Mayor.

Section 18. Test procedures to determine whether maximum noise emitted by engine-powered equipment or powered hand tools, sold or leased, or offered for sale or lease, meet the noise limits stated in Section 6 of this Ordinance shall be in substantial conformity with Standards and Recommended Practice established by the Society of Automotive Engineers, Inc., including SAE Standard J952; SAE Recommended Practice J184; and such other and further standards as may be propounded in the Code of Recommended Practices of the Department of Public Works or other department as designated by the Mayor.

Section 19. Test procedures to determine whether maximum noise levels emitted by property uses along property lines and zoning district boundaries meet the noise limits stated in Sections 9 and 10 of this Ordinance shall be in substantial conformity with ANSI Standard S1.4-1961 or IEC Standard 123-1961; ANSI Standard S1-12-1967; ANSI Standard S1.11-1966; IEC Standard 179-1965; IEC Standard 225-1966; SAE Recommended Practice J184; and such other and further standards as may be propounded in the Code of Recommended Practices of the Department of Public Works or other department as designated by the Mayor.

Section 20. Test procedures to determine whether maximum noise emitted by new motor-driven recreational or off-highway vehicles including dune buggies, snowmobiles, all-terrain vehicles, go-carts, and mini bikes meet the noise limits stated in Section 15 of this chapter shall be in substantial conformity with Standards and Recommended Practice established by the Society of Automotive Engineers, Inc., including SAE Standard J331; SAE Standard J986; SAE Recommended Practice J184; and such other and further standards as may be propounded in the Code of Recommended Practices of the Department of Public Works or other department as designated by the Mayor.

Section 21. Any emission of noise or earth-shaking vibration from any source in excess of the limitations established in or pursuant to this article shall be deemed, and is hereby declared, to be a public nuisance, and may be subject to summary abatement procedures. Such abatement may be in addition to the administrative proceedings, fines and penalties herein provided. The Commissioner is empowered to secure the institution of legal proceedings through the City Attorney for the abatement or prosecution of emissions of noise and earth-shaking vibration which cause injury, detriment, nuisance or annoyance to the public or endanger the health, comfort, safety or welfare of the public, or cause or have a natural tendency to cause injury or damage to public or property. Such legal proceedings may be in addition to the administrative proceedings, fines and penalties herein provided.

Section 22. Nothing in this article shall be construed to impair any cause of action, or legal remedy therefor, of any person or the public for injury or damage arising from the emission or release into the atmosphere or ground from any source whatever of noise or earth-shaking vibration in such place or manner, or at such levels, so as to constitute a common-law nuisance.

Section 23. The Corporate Authorities shall appoint the enforcement officer.

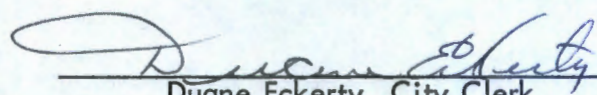
Section 24. Any person found guilty of violating, disobeying, omitting, neglecting, or refusing to comply with the provisions of this ordinance shall, upon conviction thereof, be punished by a fine ~~of~~ not more than Two Hundred Dollars (\$200.00).

Section 25. This Ordinance shall be in full force and effect from after its passage and recording as provided by law.

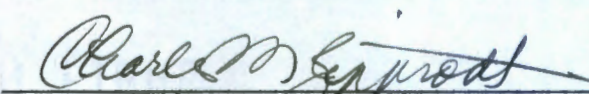
Section 26. If any provision of this Ordinance, or the application of such provision to any person or circumstances, shall be held invalid, the remainder of this Ordinance, and the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

This Ordinance is hereby passed by the affirmative vote, the "ayes" and "nays" being called, of a majority of the members of the Council of the City of Urbana, Illinois, at a regular meeting of said Council on the 15TH day of November, A.D. 1971.

PASSED by the City Council this 15TH day of November, 1971.


Duane Eckerty, City Clerk

APPROVED by the Mayor this 16TH day of November, 1971.


Charles M. Zipprott, Mayor



STATE OF ILLINOIS }
COUNTY OF CHAMPAIGN } SS.

I, DUANE ECKERTY, City Clerk of the City of Urbana, Illinois, and keeper of the records, files and seal of said City, do hereby certify that the foregoing is a true and exact copy of an ordinance entitled, "An Ordinance Amending An Ordinance To Control Noise and Vibrations Within The City Limits Of Urbana, Illinois", adopted by the City Council of the City of Urbana, Illinois, on the 6th day of December, A.D. 1971, as appears in the records and files in my office remaining.

Given under my hand and seal of said City of Urbana, Illinois, this 7th day of December, A.D. 1972.

(SEAL)

DUANE ECKERTY
City Clerk