

CHAPTER 22 HEALTH

ARTICLE V. NOISE CONTROL^{*}

ARTICLE V. NOISE CONTROL [*]

Sec. 22.65 Declaration of policy

It is hereby declared to be the policy of the City to minimize the exposure to citizens to the physiological and psychological harm of excessive noise and to protect, promote, and preserve the public health, comfort, convenience, safety, and welfare. It is the express intent of the City Council to control the level of noise in a manner which promotes commerce; protects the sleep and repose of citizens; promotes the use, value, and enjoyment of property; and preserves the quality of the environment. (Ordinance 5544, sec. 1, adopted 3/20/01)

ARTICLE V. NOISE CONTROL [*]

Sec. 22.66 Definitions and standards

(A) All technical terminology used in this article, but not defined in this article, shall be interpreted in conformance with applicable American National Standards Institute noise specifications, including, but not limited to, ANSI S 1.1-1960 and ANSI S 1.4-1971 or those from its successor publications or bodies.

(B) The following definitions shall apply in the interpretation and enforcement of this article:

A-weighted sound pressure level. The sound pressure level in decibels as measured on a sound level meter using the A-weighting network. The level so read shall be designated db(A) or dbA.

Ambient sound level. The sound level of the all-encompassing sound associated with a given environment, being usually a composite of sounds from many sources. It is also the A-weighted sound level exceeded ninety (90) percent of the time (L90) based on a measurement period which shall not be less than ten (10) minutes or more than thirty (30) minutes.

Authorized emergency vehicle. Vehicles of the Fire Department (fire patrol), police vehicles, public and private ambulances for which permits have been issued by the state board of health, emergency vehicles of municipal departments or public service corporations as are designated or authorized by the governing body of an incorporated City, private vehicles operated by volunteer firemen or certified emergency medical services employees or volunteers while answering a fire alarm or responding to a medical emergency, and vehicles operated by blood banks or tissue banks, accredited or approved under the laws of this state or the United States, while making emergency deliveries of blood, drugs or medicines, or organs.

Decibel. Logarithmic unit of measure used in describing the amplitude of sound, denoted as db.

Device. Any mechanism which is intended to produce, or which actually produces, noise when operated or handled.

Director. The Director of the City Health Department or his duly appointed representative.

Emergency work. Work made necessary to restore property to a safe condition following a public calamity, work to restore public utilities, or work required to protect persons or property from an imminent danger.

Gross combination weight rating (GCWR). The value specified by the manufacturer as the recommended maximum loaded weight of a combination vehicle in a case where trailer and tractor are separable.

Gross vehicle weight rating (GVWR). The value specified by the manufacturer as the recommended maximum loaded weight of a single motor vehicle.

Motor vehicle. Any vehicle propelled by mechanical power, such as, but not limited to, any passenger car, truck, truck-trailer, semitrailer, camper, motorcycle, minibike, go-cart, dune buggy, or racing vehicle.

Muffler. Any apparatus consisting of baffles, chambers, or acoustical absorbing material whose primary purpose is to transmit liquids or gases while causing a significant reduction in sound emission.

Noise. Any sound which is unwanted or which causes, or tends to cause, an adverse psychological or physiological effect on human beings.

Percentile sound pressure level.

- (1) Unit percentile level. The A-weighted sound pressure level that is exceeded one (1) percent of the time in a measurement period; it is denoted L1.
- (2) Tenth percentile level. The A-weighted sound pressure level that is exceeded ten (10) percent of the time in any measurement period (such as the level that is exceeded for one (1) minute in a ten-minute period); it is denoted L10.
- (3) Ninetieth percentile level. The A-weighted sound pressure level that is exceeded ninety (90) percent of the time in any measurement period (such as the level that is exceeded for nine (9) minutes in a ten-minute period); it is denoted L90.

Person. Any individual, firm, association, partnership, corporation or any other entity, public or private.

Property boundary. An imaginary line at the ground surface and its vertical extension which separates the real property owned or occupied by one person from that owned or occupied by another person. In a multifamily dwelling or other multitenant structure, the property boundary shall be the wall between a noise source and a neighboring tenant.

Public and private projects. Any activity other than the construction or alteration of a single-family dwelling that requires a building permit from the Building Inspection Department.

Public right-of-way. Any street, avenue, boulevard, highway, alley, or similar place, which is owned or controlled by a public governmental entity.

Public service work. Work conducted by a governmental entity in the interest of the community.

Sound. A temporal or spatial oscillation in pressure, or other physical quantity, in a medium with internal forces that causes compression and rarefaction of that medium, and which propagates at finite speed to distant points.

Sound level. The weighted sound pressure level measured by the use of a metering characteristic and weighted as specified in American National Standards Institute specifications ANSI S1.4- 1971. The sound pressure level of a sound expressed in decibels is twenty (20) times the logarithm to the base ten (10) of the ratio of the pressure of the sound to the reference sound pressure of twenty (20) micropascals. If the frequency weighting employed is not indicated, the A-weighting shall apply.

Sound level meter. An instrument, which includes a microphone, amplifier, RMS detector and integrator, time averager, output meter and weighting networks, that is sensitive to pressure fluctuations. The instrument reads sound pressure level when properly calibrated with an acoustical calibrator accurate to +1db and is of type I or type II as specified in ANSI S1.4-1971 or the latest approved revision thereof.

Stationary sound source. Any device or motor vehicle, fixed or movable, which is located or used on property other than a public right-of-way.

Use district. Those zoning districts established by the City zoning ordinance.

Vibration. A temporal and spatial oscillation of displacement, velocity or acceleration in a solid material.

Vibration perception threshold. The minimum ground or structure-borne vibrational motion necessary to cause a person to be aware of the vibration by such direct means as, but not limited to, sensation by touch or visual observation of moving objects.

(Ordinance 5544, sec. 1, adopted 3/20/01)

ARTICLE V. NOISE CONTROL*

Sec. 22.67 Administration of program

The noise control program required by this article shall be administered by the Director of the City Health Department. (Ordinance 5544, sec. 1, adopted 3/20/01)

ARTICLE V. NOISE CONTROL*

Sec. 22.68 Noise measurement generally

Sound level measurements shall be made with a sound level meter, type II or better, using the A-weighting network in accordance and conforming with the noise measurement standards promulgated by the American National Standards Institute and testing procedures adopted by the City Health Department. (Ordinance 5544, sec. 1, adopted 3/20/01)

ARTICLE V. NOISE CONTROL*

Sec. 22.69 Limitations on environmental sound levels

It shall be a violation of this article for any person to operate or permit to be operated any stationary source or sources of sound which create or creates a unit percentile sound level (L1) greater than fifteen

(15) dbA above the ambient sound pressure level (L90) as set forth in the table below in any residential use zone, or creates a tenth percentile sound level (L10) or a ninetieth percentile sound level (L90) which exceeds the limits set forth in the table below for the receiving land use districts when measured at the property boundary. For the purpose of enforcing these provisions, a measurement period shall not be less than ten (10) minutes or more than thirty (30) minutes.

Limiting Sound Levels (in dbA)

Land Use District	Tenth Percentile (L10)	Ambient, or Ninetieth Percentile (L90)
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Residential:

7:00 a.m.–10:00 p.m.	65	55
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10:00 p.m.–7:00 a.m.	60	50
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Commercial/Agricultural:

7:00 a.m.–10:00 p.m.	72	62
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10:00 p.m.–7:00 a.m.	67	57
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Industrial:

7:00 a.m.–10:00 p.m.	85	75
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10:00 p.m.–7:00 a.m.	85	75
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When a noise source can be identified and its noise measured in more than one land use category, the limits of the most restrictive use shall apply at the boundary and within the most restrictive land use category.

(Ordinance 5544, sec. 1, adopted 3/20/01)

ARTICLE V. NOISE CONTROL*

Sec. 22.70 Specific noises prohibited

(A) The following sounds are hereby determined to be specific noises, which can constitute a noise disturbance, and violations of this article are hereby defined:

(1) Animals. Owning, keeping, possessing, or harboring any animal or animals which, by frequent or habitual noisemaking, violate the sound levels as listed in [section 22.69](#), or which unreasonably disturb or interfere with the peace, comfort, and repose of a neighboring person of ordinary sensibilities. The provisions of this subsection shall apply to all public and private facilities, including any animal shelter or commercial kennel, which holds or treats animals.

(2) Radios, television sets, musical instruments and similar devices. Operating or permitting to be operated any radio receiving set, musical instrument, television, phonograph, drum or other machine or device for the production or reproduction of sound in such a manner as to violate the sound levels as listed in [section 22.69](#), or which unreasonably disturbs or interferes with the peace, comfort, and repose of neighboring persons of ordinary sensibilities.

(3) Exterior loudspeakers. Operating or permitting to be operated any loudspeaker or sound-amplifying equipment in a fixed or movable position mounted upon any vehicle in or upon any street, alley, sidewalk, park, place, or public property for the purpose of commercial advertising, giving instructions, directions, talks, addresses, lectures, or transmitting music to any persons or assemblages of persons in such a manner as to violate the sound levels as listed in [section 22.69](#), or **which unreasonably disturbs or interferes with peace**, comfort, and repose of neighboring persons of ordinary sensibilities—**unless a permit of variance as outlined in [section 22.76](#) is first obtained.**

(4) Construction work. Operating or permitting to be operated any equipment used in commercial construction, repair, alteration or demolition work on buildings, structures, streets, alleys or appurtenances thereto which exceed the sound level limits for an industrial land use as set forth in [section 22.69](#), measured on the property boundary of the receiving land use, or which unreasonably disturbs **or interferes with the peace**, comfort, and repose of neighboring persons of ordinary sensibilities—**unless a permit of variance as outlined in [section 22.76](#) is first obtained.**

(5) Power equipment. **Operating or permitting to be operated any power equipment in residential zones outdoors between the hours of 10:00 p.m. and 7:00 a.m. the following day. Power equipment rated five (5) horsepower or less shall not exceed a sound level of seventy-four (74) dbA at a distance of fifty (50) feet; power equipment rated more than five (5) horsepower shall not exceed a sound level of eighty-two (82) dbA at a distance of fifty (50) feet. Operating or permitting to be operated, any power equipment in residential zones outdoors which unreasonably disturbs or interferes with the peace, comfort, and repose of neighboring persons of ordinary sensibilities.**

(6) Enclosed places of public entertainment. Operating or permitting to be operated in any place of public entertainment any loudspeaker or other source of sound which produces, at a point that is normally occupied by the customer, maximum sound pressure levels of one hundred (100) dbA as read with the slow response on a sound level meter, unless a conspicuous and legible sign is posted near each public entrance stating: “WARNING: SOUND LEVELS WITHIN MAY CAUSE PERMANENT HEARING IMPAIRMENT.” This provision shall not be construed to allow the operation of any loudspeaker or other source of sound in such a manner as to violate the sound levels as listed in [section 22.69](#).

(7) Powered model mechanical devices. **The flying of model aircraft powered by internal**

combustion engines, whether tethered or not, or the firing or operating of model rocket vehicles or other similar noise-producing devices, in a residential area between the hours of 10:00 p.m. and 7:00 a.m. the following day or in such a manner as to violate the sound levels as listed in [section 22.69](#).

(8) Refuse collection. The collection of garbage, waste or refuse between the hours of 10:00 p.m. and 6:00 a.m. the following day in any area zoned residential, or within three hundred (300) feet of an area zoned residential unless a permit of variance as outlined in [section 22.76](#) is first obtained.

(9) Vibration. Using or causing the use of any device that creates vibration which is above the perception threshold of any individual at or beyond the property boundary of the source, if on private property, or at fifty (50) feet from the source, if on a public space or public right-of-way.

(10) Emergency signaling devices. The intentional sounding or permitting the sounding outdoors of any fire, burglar, or civil defense alarm, siren, whistle or similar stationary emergency signaling device for more than five (5) minutes during any consecutive 60-minute period or so as to violate the sound levels as listed in [section 22.69](#), except for those exemptions outlined in [section 22.74](#).

(11) Watercraft. Operating or permitting to be operated any motorboat in any lake, river or stream in such a manner as to violate the sound levels as listed in [section 22.69](#) at the property boundary on the receiving land.

(12) Mechanical sweeping and cleaning. The sweeping, blowing or vacuuming of nonresidential property using mechanical devices between the hours of 11:00 p.m. and 6:00 a.m. the following day within 500 feet of an area zoned residential, unless a permit of variance as provided in [section 22.76](#) is first obtained.

(13) Commercial or industrial noise. Operating or permitting to be operated any mechanical operations at a commercial business or industry which exceeds the sound levels as listed in [section 22.69](#), or which unreasonably disturbs or interferes with the peace, comfort and repose of neighboring persons of ordinary sensibilities.

(B) If any sound listed in subsections (A)(1), (A)(2), or (A)(3) above can be heard in a residential area at a distance of 50 feet or more from the closest property line of the property where the sound originates, there shall be a presumption that the sound unreasonably disturbs or interferes with the peace, comfort and repose of neighboring persons of ordinary sensibilities.

(Ordinance 5544, sec. 1, adopted 3/20/01; Ordinance 5733, sec. 1, adopted 5/20/03; Ordinance 6330, sec. 15, adopted 7/21/09)

ARTICLE V. NOISE CONTROL*

Sec. 22.71 Motor vehicles, motorcycles

(A) Limitation of sound levels. No person shall drive or move or permit to be driven or moved a motor vehicle or combination of motor vehicles at any time on a public right-of-way under any conditions of grade, load, acceleration or deceleration in such a manner as to exceed the sound limits set forth in the table below for the appropriate category of motor vehicle. Measurements shall be made at a distance of twenty-five (25) feet (seven and five-tenths (7.5) meters) for class 1 and class 2 vehicles, measured from the near side of the nearest lane being monitored at a height of at least four (4) feet above the immediate surface.

Motor Vehicle and Motorcycle Sound Limits

Vehicle Class	Posted Speed Limit 40 mph or Less
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Class 1. Any motor vehicle, motorcycle, or 80 dbA combination of vehicles towed by any motor vehicle with a GVWR or GCWR less than 10,000 pounds

Class 2. Any motor carrier vehicle with a 96 dbA GVWR or GCWR of 10,000 pounds or more

(B) Exhaust system modifications. No person shall operate or cause to be operated any motor vehicle unless the vehicle is equipped with an exhaust system which includes a tail pipe or resonator where the original vehicle design included a tail pipe and resonator. Such exhaust system shall be:

- (1) Equipped with a muffler which is in good working order (free of damage to the baffles contained in the muffler) and is in constant operation; and
- (2) Not equipped with any cutout, bypass or similar device.

(C) Tires. It is unlawful for any person to operate a motor vehicle in such manner as to cause or allow to be emitted squealing, screeching or other such sound from the tires in contact with the ground because of rapid acceleration or excessive speed around corners or other such reason, provided that sound resulting from emergency braking to avoid imminent danger shall be exempt from this section.

(D) Off-highway motor vehicles. No person shall operate or permit to be operated any motorized vehicle off a public right-of-way in such a manner as to exceed the sound levels as listed in [section 22.69](#) at the receiving property boundary.

(Ordinance 5544, sec. 1, adopted 3/20/01)

ARTICLE V. NOISE CONTROL*

Sec. 22.72 Airport and aircraft operations

All airport, airpark, and/or aircraft operations within the City must be conducted in all respects in accordance with or pursuant to applicable laws and regulations of the U.S. Environmental Protection Agency and the U.S. Department of Transportation Federal Aviation Administration. (Ordinance 5544, sec. 1, adopted 3/20/01)

ARTICLE V. NOISE CONTROL*

Sec. 22.73 Residential air-conditioning, ventilation, and heating devices

Sound caused by the operation of properly maintained residential-type air-conditioning, ventilating, or heating devices (if within sound levels specified by the manufacturer or similar to sound levels produced by equivalent, adjacent devices) may be allowed to exceed sound levels as listed in [section 22.69](#) if approved by the Director of Health. (Ordinance 5544, sec. 1, adopted 3/20/01)

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Sec. 22.74 Emergency or public service work, public utility operations

Sound caused in the performance of emergency or public service work, including public utility operations, acting to protect the health, safety, or welfare of the community shall not be subject to the provisions of this article. Nothing in this section, however, shall be construed to permit law enforcement, ambulance, fire or other public service personnel to make excessive noise in the performance of their duties when such sound is clearly unnecessary. The C. E. Newman Plant will be specifically exempt from the provisions of this article. (Ordinance 5544, sec. 1, adopted 3/20/01)

ARTICLE V. NOISE CONTROL*

Sec. 22.75 Public and private project review

All public and private projects shall be subject to a review process by the director in order to determine if such projects are likely to cause noise or vibration in violation of this article. The director shall be authorized to make or require any investigations or studies, which in his opinion are necessary to determine if compliance with this article can be achieved. The director shall also have the authority to require noise attenuation measures in accordance with the findings of said investigations or studies for the purpose of determining compliance with this article. (Ordinance 5544, sec. 1, adopted 3/20/01)

ARTICLE V. NOISE CONTROL*

Sec. 22.76 Variance permits

The director shall evaluate all applications for permits of variance from the requirements of this article and may grant said variances with respect to time for compliance, subject to such terms, conditions, and requirements as the director may deem reasonable to achieve compliance with the provisions of this article. Each such variance shall set forth in detail the approved method of achieving compliance and a time schedule for its accomplishment. In determining the reasonableness of the terms of a proposed permit or variance, the director shall consider the magnitude of nuisance caused by the offensive noise, the uses of property within the area of impingement by the noise, the time factors related to study, design, financing and construction of remedial work, the economic factors related to age and useful life of the equipment, and the general public interest and welfare. (Ordinance 5544, sec. 1, adopted 3/20/01)

ARTICLE V. NOISE CONTROL*

Sec. 22.77 Enforcement responsibility

The City Health Department shall have primary enforcement responsibility for the provisions of this article. (Ordinance 5544, sec. 1, adopted 3/20/01)

ARTICLE V. NOISE CONTROL*

Sec. 22.78 Inspection authority

In order to implement and enforce this article, and for the general purpose of noise and vibration abatement and control, the duly appointed and authorized representative of the Health Department, under the direct supervision of the director, shall have the power to make necessary inspections and tests with proper authorization or permission from the owner on any private or public property or place and/or stop any motor vehicle or motorcycle operated on a public right-of-way or public space reasonably suspected of violating any provisions of this article and issue a notice of violation, and/or abatement order, or class c misdemeanor citation. (Ordinance 5544, sec. 1, adopted 3/20/01)

ARTICLE V. NOISE CONTROL*

Sec. 22.79 Article violations; penalty

Any person who violates any provision of this article shall be punished, upon conviction, in accordance with [section 10.05](#) of this Code. (Ordinance 5544, sec. 1, adopted 3/20/01)

ARTICLE V. NOISE CONTROL*

Secs. 22.80–22.84 Reserved