

## Chapter 8.20

### NOISE

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#### **8.20.010** Definitions and standards.

All terminology used in this chapter and not defined in this section shall be in conformance with applicable American National Standards Institute publications, including but not limited to, S1.1-1960, R 1971, or those from its successor publications or bodies. For the purposes of this chapter, certain words and phrases used in this chapter are defined as follows:

"A-weighted sound pressure level" means the sound pressure level as measured with a sound level meter using the A-weighted network. The standard notation is "dB(A)" or "dBA."

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

"Continuous sound" means any sound that exists, essentially without interruption, for a period of ten (10) minutes or more.

"Cyclically varying noise" means any sound that varies in sound level such that the same level is obtained repetitively at reasonably uniform intervals of time.

"Decibel" means a logarithmic and dimensionless unit of measure often used in describing the amplitude of sound. Decibel is denoted as "dB."

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

"Dynamic braking device" (commonly referred to as Jacobs Brake) means a device used primarily on trucks for the conversion of the engine from an internal combustion engine to an air compressor for the purpose of braking without the use of wheel brakes.

"Emergency vehicle" means a motor vehicle used in response to any emergency or to protect persons or property from imminent exposure to danger.

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

"Impulsive noise" means a noise containing excursions usually less than one second, or sound pressure level using the fast meter characteristic.

"Motor vehicle" means any vehicle which is self-propelled by mechanical power, including but not limited to passenger cars, trucks, truck-trailers, semitrailers, campers, helicopters, motorcycles, minibikes, go-carts, snowmobiles and racing vehicles.

"Muffler" means an apparatus consisting of a series of chambers or baffle plates designed for the purpose of transmitting gases while reducing sound emanating from such apparatus.

"Noise" means any sound which is unwanted or which causes or tends to cause an adverse psychological or physiological effect on human beings.

"Noise disturbance" means any sound which annoys or disturbs reasonable persons with normal sensitivities, or which injures or endangers the comfort, repose, health, hearing, peace and safety of other persons.

"Percentile sound pressure level" means either of the following:

1. "Tenth percentile noise level" means the A-weighted sound pressure level that is exceeded ten percent of the time in any measurement period (such as the level that is exceeded for one minute in a ten (10) minute period) and is denoted "L10."

2. "Ninetieth percentile noise level" means 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 minutes in a ten (10) minute period) and is denoted "L90."

"Person" means any human being, firm, association, organization, partnership, business, trust, corporation, company, contractor, supplier, installer, user, owner or operator, including any municipal corporation or its officers or employees.

"Plainly audible noise" means any noise for which the information content of that noise is unambiguously transferred to the listener, such as but not limited to understanding of spoken speech, comprehension of whether a voice is raised or normal, or comprehension of musical rhythms.

"Property boundary" means any imaginary line exterior to any enclosed structure, at the ground surface, and its vertical extension, which separates the real property owned by one person from that owned by another person.

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

"Pure tone" means any sound that can be distinctly heard as a single pitch or a set of single pitches. For the purposes of measurement, a pure tone shall exist of the one-third octave band sound pressure level in the band when the tone exceeds the arithmetic average of the sound levels of the two contiguous one-third octave bands by five dB for frequencies of five hundred (500) Hz and above, by eight dB for frequencies between one hundred sixty (160) and four hundred (400) Hz, and by fifteen (15) dB for frequencies less than or equal to one hundred twenty-five (125) Hz.

"Repetitive impulsive noise" means any noise which is composed of impulsive noises that are repeated at sufficiently slow rates such that a sound level meter set at fast meter characteristic will show changes in sound pressure level greater than ten (10) dB(A).

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

"Sound level meter" means an instrument, including a microphone, amplifier, RMS detector and integrator, time averager, output meter and/or visual display and weighting networks, that is sensitive to pressure fluctuations. The instrument reads sound pressure level when properly calibrated and is of type 2 or better as specified in American National Standards Institute publication S1.4-1971 or its successor publication.

"Sound pressure" means the instantaneous difference between the actual pressure and the average or barometric pressure at a given point in space due to sound.

"Sound pressure level" means twenty (20) times the logarithm to the base ten of the ratio of the RMS sound pressure to the reference pressure, which shall be twenty (20) micropascals, denoted LP or SPL.

"Stationary noise source" means any device, fixed or movable, which is located or used on property other than a public right-of-way.

"Steady noise" means a sound pressure level which remains essentially constant during the period of observation, i.e., does not vary more than six dB(A) when measured with the slow meter characteristic of a sound level meter.

"Use district" means those districts established by the city zoning ordinance. (Ord. 391 § 1, 2002: prior code § 5.0601)

#### **8.20.020 Noises prohibited.**

A. General Prohibitions. In addition to the specific prohibitions outlined in subsection B of this section and Sections 8.20.030 and 8.20.090 of this chapter, it is unlawful for any person to make, continue, or cause to be made or continued any noise disturbance within the limits of the city.

B. Specific Prohibitions. The following acts are declared be in violation of this chapter.

1. Horns and Signaling Devices. Sounding of any horn or signaling device on any truck, automobile, motorcycle, emergency vehicle or other vehicle on any street or public place within the county or any city therein except as a danger warning signal or the sounding of any such signaling device for an unnecessary and unreasonable period of time.

2. Radios, Television Sets, Musical Instruments and Similar Devices.

a. Using, operating or permitting the use or operation of any radio receiving set, musical instrument, televisions, phonograph, drum or other machine or device for the production or reproduction of sound, except as provided for in subsection (B)(3) of this section, in such a manner as to violate Section 8.20.030 or cause a noise disturbance;

b. The operating of any such device between the hours of ten p.m. and seven a.m. the following day in such a manner as to be plainly audible at the property boundary of the source or plainly audible at fifty (50) feet from such device when operated within a vehicle parked on a public right-of-way or plainly audible at one hundred (100) feet from such device when operated within a moving vehicle.

3. Public Loudspeakers. Using or operating a loudspeaker or sound amplifying equipment in a fixed or movable position or mounted upon any sound 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 Section 8.20.030 or cause a noise disturbance unless a permit as provided by Section 8.20.060 is first obtained.

4. Hawkers and peddlers selling anything by outcry within any area of the city therein zoned primarily for residential uses in such a manner as to violate Section 8.20.030 or cause a noise disturbance. The provisions of this subsection shall not be construed to prohibit the selling by outcry of merchandise, food, and beverages at licensed sporting events, parades, fairs, circuses, and other similar licensed public entertainment events, or occasional sale of property by public auction.

5. Loading Operation. Loading, unloading, opening or otherwise handling boxes, crates, containers, garbage containers or other objects between the hours of ten p.m. and six a.m. the following day in such a manner as to violate Section 8.20.030 or cause a noise disturbance.

6. Construction Work. Operating, or causing to be used or operated, any equipment used in construction, repair, alteration or demolition work on buildings, structures, streets, alleys, or appurtenances thereto in:

a. Residential or commercial land use districts between the hours of ten p.m. and six a.m. the following day;

b. Any land use districts where such operation exceeds the sound level limits for an industrial land use as set forth in Section 8.20.030.

7. Domestic Power Equipment. Operating or permitting to be operated any power equipment rated five horsepower or less used for home or building repair or grounds maintenance, including, but not limited to a power saw, sander, lawn mower, or garden equipment, in residential or commercial zones:

a. Outdoors between the hours of ten p.m. and six a.m. the following day;

b. Any such power equipment which emits a sound pressure level in excess of seventy-four (74) dB(A) measured at a distance of fifty (50) feet (fifteen (15) meters).

8. Commercial Power Equipment. Operating or permitting to be operated any power equipment, except construction equipment used for construction activities, rated more than five horsepower, including but not limited to chainsaws, pavement breakers, log chippers, or powered hand tools in:

a. Residential or commercial land use districts between the hours of ten p.m. and six a.m. the following day;

b. Any land use district if such equipment emits a sound pressure level in excess of eighty-two (82) dB(A) measured at a distance of fifty (50) feet (fifteen (15) meters).

9. 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 a customer, maximum sound pressure levels of one hundred (100) dB(A) as read with the slow response on a sound level meter, unless a conspicuous and legible sign at least two hundred twenty-five (225) square inches in area is posted near each public entrance stating: "WARNING: SOUND LEVELS MAY CAUSE HEARING IMPAIRMENT." This subsection shall not be construed to allow the operation of any loudspeaker or other source of sound in such a manner as to violate Section 8.20.030 of this chapter.

10. Fireworks or Explosives. The use of explosives or fireworks, or the firing of guns or other explosive devices so as to be audible across a property boundary or on a public space or right-of-way, without first obtaining a permit as provided by Section 8.20.050 This subsection shall not be construed to permit conduct prohibited by other statutes, ordinances or regulations governing such activity.

11. Racing Events. Permitting any motor vehicle racing event at any place in such a manner as to violate Section 8.20.030 or cause a noise disturbance, without first obtaining a permit as provided by Section 8.20.050.

12. Powered Model Mechanical Devices. The flying of a 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, between the hours of ten p.m. and six a.m. the following day; or in such a manner as to violate Section 8.20.030 or cause a noise disturbance.

13. Dynamic Braking Devices. Operating any motor vehicle with a dynamic braking device engaged except for the aversion of imminent danger.

14. Defect in Vehicle. Operating or permitting to be operated or used any truck, automobile motorcycle, or other motor vehicle which, by virtue of disrepair or manner of operation, violates Section 8.20.030 or causes a noise disturbance.

15. Refuse Compacting Vehicles. The operating or causing or permitting to be operated or used any refuse compacting vehicle which creates a sound pressure level in excess of seventy-four (74) dB(A) at fifty (50) feet (fifteen (15) meters) from the vehicle.

16. Standing Motor Vehicle. The operating or causing or permitting to be operated any motor vehicle or any auxiliary equipment attached thereto in such a manner as to violate Section 8.20.030 or cause a noise disturbance for a consecutive period longer than fifteen (15) minutes during which such vehicle is stationary in a residential zone.

17. Quiet Zones. Creating noise in excess of the residential standards as defined in Section 8.20.030 within the vicinity of any school, hospital, institution of learning, court, or other designated area where exceptional quiet is necessary, while the school, hospital, institution, court or other area is in use, provided conspicuous signs are displayed in the streets indicating that the place is a quiet zone.

18. Bells and Alarms. Sounding, operating or permitting to sound or operate an electronically amplified signal from any bell, chime or clock, including but not limited to bells, chimes or clocks in schools, house of religious worship or governmental buildings, which fails to meet the standards set forth in Section 8.20.030.

19. Fixed Sirens, Whistles and Horns. The sounding or causing the sounding of any whistle, horn or siren as a signal for commencing or suspending work, or for any other purpose except as a sound signal of imminent danger, in such a manner as to violate Section 8.20.030 or cause a noise disturbance.

20. Recreational Vehicles and Snowmobiles. Operating a recreational vehicle or snowmobile in a manner that violates Section 8.20.030 or causes a noise disturbance. (Ord. 391 § 2, 2002: prior code § 5.0602)

#### **8.20.030 Use district noise levels.**

A. Maximum Permissible Sound Levels. It is unlawful for any person to operate or permit to be operated an stationary source of sound in such a manner as to create a ninetieth percentile sound pressure level (L90) of any measurement period (which shall not be less than ten (10) minutes unless otherwise provided in this chapter) which exceeds the limits set forth for the following receiving land use districts when measured at the boundary or at any point within the property affected by the noise:

Use District	11:00 p.m.-6:00 a.m. 6:00 a.m.-11:00 p.m.
Residential	50 dB(A) - 55 dB(A)
Commercial	55 dB(A) - 60 dB(A)
Industrial-agriculture	75 dB(A) - 80 dB(A)

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 boundaries between different land use categories.

B. Correction for Duration of Sound.

1. It shall be a violation of this chapter for any person to operate, or permit to be operated, any stationary source of sound within any land use district which creates a tenth percentile sound pressure level (L10) of fifteen (15) dB(A) greater than the levels set forth for the receiving land use districts in subsection A of this section for any measurement period. Such period shall not be less than ten (10) minutes.

2. Notwithstanding subsection (B)(1) of this section, it is unlawful for any person to operate or permit to be operated any stationary source of sound within any land use district which creates a tenth percentile sound pressure level (L10) greater than fifteen (15) dB(A) above the ambient sound pressure level (L90) of any measurement period. Such period shall not be less than ten (10) minutes.

C. Correction for Character of Sound.

1. For any stationary source of sound which emits a pure tone, cyclically varying sound or repetitive impulsive sound, the limits set forth in subsection A of this section shall be reduced by five dB(A).

2. Notwithstanding compliance with subsection (C)(1) of this section, it is unlawful for any person to operate or permit to be operated any stationary source of sound that emits a pure tone, cyclically varying or repetitive impulsive sound that creates a noise disturbance. (Ord. 391 § 3, 2002; prior code § 5.0603)

**8.20.040 Sound level measurement.**

The following uses and activities shall be exempt from noise level regulations:

- A. Noise of safety signals, warning devices and emergency pressure relief valves;
- B. Noise resulting from any authorized emergency vehicle when responding to an emergency call or acting in time of emergency;
- C. Noise resulting from emergency work;

D. Noise resulting from lawful fireworks and noisemakers used for celebration of an official holiday;

E. Any noise resulting from activities of temporary duration permitted by law for which a license or permit has been approved by the director of the health department in accordance with Section 8.20.050. (Ord. 391 § 4, 2002: prior code § 5.0604)

**8.20.050 Permit.**

A. Applications for a permit for relief from the noise restrictions in this chapter on the basis of undue hardship may be made to the health department. Any permit granted by the director of the health department or his or her authorized representative shall contain all conditions upon which the permit has been granted, including but not limited to the effective dates, any time of day, location, sound pressure level, or equipment limitation. The relief requested may be granted upon good and sufficient showing that:

1. Additional time is necessary for the applicant to alter or modify his or her activity or operation to comply with this chapter; or

2. The activity, operation, or noise source will be of temporary duration and cannot be done in a manner that would comply with this chapter; and

3. No reasonable alternative is available to the applicant.

B. The city may prescribe any reasonable conditions or requirements deemed necessary to minimize adverse effects upon a community or the surrounding neighborhood. (Ord. 391 § 5, 2002: prior code § 5.0605)

**8.20.060 Motor vehicle noise.**

A. No person shall drive or move or cause or knowingly permit to be driven or moved a motor vehicle or combination of vehicles at any time in such a manner as to exceed the following noise limits for the category of motor vehicle shown.

Noise shall be measured at a distance of at least twenty-five (25) feet (7.5 meters) from the near side of the nearest lane being monitored and at a height of at least four feet (1.2 meters) above the immediate surrounding surface.

**Sound Pressure Level dB(A)**

	Speed Limit less than or equal to 40 mph	Speed Limit over 40 mph
Motor vehicles with a manufacturers gross vehicle weight rating (GVWR) or gross combination weight rating (GCWR) of 10,000 pounds or more, or any combination of vehicles towed by such motor vehicle.	90	94
Any other motor vehicle or any combination of vehicles towed by any motor vehicle.	80	84

B. This section shall apply 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 this chapter relating to motor vehicle mufflers for noise control.

C. No person shall operate or cause to be operated any motor vehicle within the city unless the exhaust system of such vehicle is:

1. Free from defects that affect sound reduction;
2. Equipped with a muffler or other noise dissipative device; and
3. Not equipped with any cutout, bypass or similar device. (Ord. 391 § 6, 2002: prior code § 5.0606)

**8.20.070 Enforcement responsibility.**

The city planning department shall have primary, but not exclusive, enforcement responsibility for this chapter as it relates to stationary sources, and joint enforcement responsibility with appropriate law enforcement agencies as it relates to vehicular sources. (Ord. 391 § 7, 2002: prior code § 5.0607)

**8.20.080 Additional remedies.**

In addition to the imposition of other penalties, violations of Sections 8.20.020 through 8.20.060 of this chapter are deemed and declared to be a nuisance, and as such may be subject to summary abatement by means of a restraining order or injunction issued by a court of competent jurisdiction. (Ord. 391 § 8, 2002)