
Sec. 23-5.5.3. Noise.

(a) *Definitions:*

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

Background noise means noise from all sources other than that under specific consideration including traffic operating on public thoroughfare, and is established by measuring the noise level over an eight minute period of time.

Bounding lot line means the far side of any street, alley, stream, or other permanently dedicated open space from the stationary source when such open space exists between the lot line of the stationary source and adjacent property. When no such open space exists, the common line between two pieces of property shall be interpreted as the bounding lot line.

Daytime means the hours between 7:00 a.m. and 8:00 p.m. on any given day.

Decibel (dB) means a unit for measuring the volume of a 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).

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

Sound means the weighted sound pressure level obtained by the use of a sound level meter and frequency weighing 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 thereto). 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 meter and weighting networks used to measure sound pressure levels.

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 (SPL) means 20 times the logarithm to the base 10 of the ratio of the RMS sound pressure to the reference pressure of 20 Micropascals ($20 \times 10^{-6} \text{ N/m}^2$). The sound pressure level is denoted LP or SPL and is expressed in decibel.

Time weighted means an established period of time during which the sound pressure levels are averaged.

(b) *General provisions.* A person shall not conduct a use that creates a noise level that exceeds the standards established in this section.

A sound level meter that meets the standards of the American Standards Association must be used to determine whether a noise level violates a noise standard in this section. The instrument must be maintained in a good working condition. A calibration check should be made prior to and following any noise investigation.

Traffic, aircraft, and other background noises are not considered in measuring noise levels except when such noises are being generated on and as a result of the uses of a property being investigated for a potential noise violation.

For purposes of this section, identifiable portions of a planned development district (PD) used for residential uses shall be treated as a residential zoning district. Identifiable portions of a planned development district (PD) used for nonresidential uses permitted in all nonresidential districts except commercial (C), industrial park (IP) and

industrial (I) shall be treated as a nonresidential district. Identifiable portions of a planned development district (PD) used for uses allowed only in commercial (C), industrial park (IP) and industrial (I) shall be treated like an industrial/commercial district.

The requirements of this section do not apply to:

- (a) Noises coming from daytime construction and maintenance activities performed on structures housing legal uses.
 - (b) Noises from safety signals, warning devices or other sound generating equipment used to warn the public of an emergency or for public safety.
 - (c) Lawn maintenance, repair of personal vehicles, and home repair of places of residences as long as these activities are conducted in the daytime hours as a normal function of a permitted use and the equipment is maintained in proper working order.
- (c) *Maximum permissible sound pressure levels.* At no point at the bounding property line of any use shall the sound pressure level of any operation or activity exceed the standards specified in the following table.

Zoning district	Maximum permissible daytime decibel limit at bounding property line	Maximum permissible daytime decibel limit at nearest specified zoning district line
Uses located in residential districts (RR, SF-E, SF-22, SF-10, SF-8.5, SF-7, TH and MF)	56 dBA	56 dBA
Uses located in nonresidential districts (OT, NS, LR, CC), excluding industrial/commercial districts (C, IP, I)	63 dBA	56 dBA at residential zoning district boundaries, 63 dBA at nonresidential districts excluding industrial districts.
Uses located in industrial or heavy commercial districts (C, IP and I)	70 dBA	56 dBA at residential zoning district boundaries, 63 dBA at nonresidential districts excluding industrial districts.
Planned development districts or portions thereof used for residential uses	56 dBA	56 dBA
Planned development districts or portions thereof used for nonresidential uses	63 dBA	56 dBA at residential zoning district boundaries, 63 dBA at nonresidential districts excluding industrial districts.
Planned development districts or portions thereof used for industrial/heavy commercial uses	70 dBA	56 dBA at residential zoning district boundaries, 63 dBA at nonresidential Districts excluding Industrial Districts.

- (d) *Noise level adjustments.* The maximum noise levels permitted in subsection (c) shall be adjusted by subtracting seven (7) dBA for noise present at night time.

The maximum noise levels permitted in subsection (c) shall be adjusted by subtracting seven (7) dBA for noise that is impulsive (meter reading changes at a rate greater than ten (10) decibels per second).

The maximum noise levels permitted in subsection (c) shall be adjusted by adding 10dBA when:

Noise has an "on time" of no more than:	and an "off time" between successive "on times" of at least	Decibels added to permitted noise level

0.5 minutes	one half hour	10
5.0 minutes	one hour	10
10.0 minutes	two hours	10
20.0 minutes	four hours	10

"Off time" is when the level of the primary noise being measured does not exceed that of the background noise by more than five (5) dBA.