Chapter 20

NOISE[1]

Sec. 20-1. Declaration of policy.

It is hereby declared to be the policy of the city to prohibit unnecessary, excessive and annoying noises from all sources subject to its police power. At certain levels noises are detrimental to the health and welfare of the citizenry and in the public interests shall be systematically proscribed.
(Code 1967, § 19A-l)

Sec. 20-2. Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

"A" band level means the total sound level of all noise as measured with a sound level meter using A-weighting network. The unit is the dB(A).

Ambient noise means the all-encompassing noise associated with a given environment, being usually a composite of sounds from many sources, near and far. For the purpose of this chapter, ambient noise level is the level obtained when the noise level is averaged over a period of fifteen (15) minutes without inclusion of noise from isolated identifiable sources, at the location and time of day near that at which a comparison is to be made. Averaging may be done by instrumental analysis in accordance with American National Standard S. 13-1971, or may be done manually as follows:

(1) Observe a sound level meter for five (5) seconds and record the best estimate of central tendency of the indicator needle, and the highest and lowest indications.

(2) Repeat the observations as many times as necessary to ensure that observations are made at the beginning and the end of the fifteen (15) minute averaging period and that there are at least as many additional observations as there are decibels between the highest high indication and the lowest low indication.

(3) Calculate the arithmetical average of the observed central tendency indications.

Decibel means a sound pressure that is twenty (20) times the logarithm to the base 10 of the ratio of the pressure of sound to the reference pressure, 2×10^{-5} Newton/meter^2.

Emergency work means work made necessary to restore property to a safe condition following a public calamity or work required to protect the health, safety or welfare of persons or property or work by private or public utilities when restoring utility service.

[1]**Cross reference—**Use of bell, etc., by mobile merchant, § 24-29.

Frequency. "Frequency" of a function periodic in time shall mean the reciprocal of the primitive period. The unit is the hertz and shall be specified.

Impulse noise means a noise of short duration, usually less than one second, with an abrupt onset and rapid decay.

Microbar means a unit of pressure commonly used in acoustics and is equal to one dyne per square centimeter.

Motor vehicles means any self-propelled vehicle operated within the city, including but not limited to licensed or unlicensed vehicles, automobiles, minibikes, go-carts and motorcycles.

Period. "Period" of a periodic quantity shall mean the smallest increment of time for which the function repeats itself.

Periodic quantity means oscillating quantity, the values of which recur for equal increments of time.

Pure tone noise means any noise which is distinctly audible as a single pitch (frequency) or set of pitches as determined by the enforcement officer.

Sound level. "Sound level" (noise level), in decibels (dB) is the sound measured with the A - weighting and slow response by a sound level meter.

Sound level meter means an instrument including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement of sound levels which satisfies the pertinent requirements in American Standard Specifications for Sound Level Meters S1.4-1971 or the most recent revision thereof.
(Code 1967, § 19A-2; Ord. No. 2000.01, 1-20-00)

Sec. 20-3. Violation established.

Any person violating any of the provisions of this chapter is in violation of the ordinances of the city and is subject to enforcement action pursuant to the provisions of this chapter
(Code 1967, § 19A-11; Ord. No. 2000.01, 1-20-00)

Sec. 20-4. Exemptions.

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

(1) Air-conditioning equipment when it is functioning in accord with manufacturer's specifications and is in proper operating condition provided that no unit may cause the noise level measured inside any sleeping or living room inside any dwelling unit to exceed forty-five (45) dB(A) between the hours of 10:00 p.m. and 7:00 a.m., nor fifty-five (55) dB(A) between the hours of 7:00 a.m. and 10:00 p.m.;

(2) Lawn maintenance equipment when it is functioning in accord with manufacturer's specifications and with all mufflers and noise-reducing equipment in use and in proper operating condition;

(3) Nonamplified noises resulting from the activities such as those planned by school, governmental or community groups;

(4) Noises of safety signals, warning devices and emergency pressure relief valves;

(5) Noises resulting from any authorized emergency vehicle when responding to an emergency call or acting in time of emergency;

(6) Noises resulting from emergency work as defined in § 20-2;

(7) All noises coming from the normal operations of railroad trains;

(8) Noises of church chimes; and

(9) Power plant equipment during normal operation provided that no plant equipment may cause the noise level measured inside any sleeping or living room inside any residential dwelling unit to exceed forty-five (45) dB(A) between the hours of 10:00 p.m. and 7:00 a.m., nor fifty-five (55) dB(A) between the hours of 7:00 a.m. and 10:00 p.m.

(Code 1967, § 19A-10; Ord. No. 2000.01, 01-20-00)

Sec. 20-5. Measurement criteria.

For the purpose of enforcement of the provisions of this chapter, noise level shall be measured on the A-weighted scale with a sound level meter satisfying at least the applicable requirement for Type 1 sound-level meters as defined in American National Standard S 1.4-1971 or the most recent revisions thereof. The meter shall be set for slow response speed, except that for impulse noises or rapidly varying sound levels, fast response speed may be used. Prior to measurement, the meter shall be verified, and adjusted to ± 0.3 decibel by means of an acoustical calibrator.

(Code 1967, § 19A-3)

Sec. 20-6. Allowable noise levels.

(a) It is unlawful for any person to create any noise which would cause the noise level measured at either the property line or the area of the property affected by the noise emission to exceed the following community noise standards:

Zone	*Time*	*Noise Standard dB(A)*
Residential	10:00 p.m. — 7:00 a.m.	45
	7:00 a.m. — 10:00 p.m.	55
Commercial	10:00 p.m. — 7:00 a.m.	55
	7:00 a.m. — 10:00 p.m.	65
Industrial	10:00 p.m. — 7:00 a.m.	60
	7:00 a.m. — 10:00 p.m.	70

(b) If the measurement location is on a boundary between two (2) zoning districts, the lower noise standard shall apply.

(c) If the ambient noise level in a residential zoned location is measured and found to be forty (40) dB(A) or less between the hours of 10:00 p.m. and 7:00 a.m., then the actual ambient noise level will be community noise standard.

(d) If the ambient noise level in any zoning district is measured and found at any time to be in excess of the community noise standards described in subsection (a) of this section, then the actual ambient noise level will be the community noise standard.

(e) A noise level which exceeds the community noise standard by five (5) dB(A) or more, when measured at the affected area, the nearest property line, or, in the case of multiple-family residential buildings, when measured anywhere in one dwelling unit with respect to a noise emanating from another dwelling unit or from common space in the same building, shall be deemed a prima facie violation of this chapter.
(Code 1967, § 19A-4, Ord. No. 2000.01, 1-20-00)

Sec. 20-7. Special noise sources.

(a) Residential zones.

(1) It shall be unlawful for any person, other than law enforcement personnel or government agencies acting within the scope of their employment, to install, use or operate within any residential zone of the city, a loudspeaker or sound-amplifying device or equipment in a fixed or movable position, on public property including any public right-of-way, without first obtaining a temporary permit from the special events task force.

(2) The special events task force shall consider applications for permits for the use of a loudspeaker or sound-amplifying device as follows:

a. Each applicant for a permit to use or operate a loudspeaker or sound-amplifying device or equipment shall submit a complete special events permit application to the city special events office at least ten (10) days prior to the date upon which such loudspeaker or sound-amplifying device or equipment is to be used or operated. Such application shall state the specific location, date and hours for the proposed use, and the volume of sound proposed to be used measured by decibels.

b. The issuance of a permit shall not be denied to any applicant who complies with the provisions of this section, except for the reasons specified in this article or for failure to remit payment of fees.

(3) The special events task force shall not issue a permit for a loudspeaker or sound-amplifying device or equipment as follows:

a. In any location within fifty (50) feet of a school, courthouse, place of worship, hospital or similar institution;

b. In any location where the special events task force determines that the conditions of vehicular, pedestrian travel or both, would constitute a threat to health, safety or welfare; or, would interfere with pedestrian or motor vehicle travel;

c. In any location in which overcrowding, street repair or other physical conditions exist that would deprive the public of safe, comfortable, convenient or peaceful enjoyment of any public property;

d. In any vehicle while in transit; or

e. Between the hours of 10:00 p.m. and 7:00 a.m.

(4) The following activities shall be exempted from the provisions of this section:

a. Warning devices for the protection of public safety, as used for that purpose;

b. Activities conducted on public or private school grounds;

c. Public health and safety activities conducted by public utilities, transportation, flood control, construction or maintenance operations that are serving the public interest, as otherwise authorized by the city;

d. Any mechanical device, apparatus or equipment used for or in relation to emergency machinery or vehicle work that is otherwise authorized by the city;

e. Testing of emergency signaling devices or systems, conducted during the hours of 8:00 a.m. and 8:00 p.m.;

f. Any activity to the extent that such activity is preempted and regulated by state or federal law; and,

g. Any outdoor public gathering or celebration involving the use of city owned properties that involve but are not limited to any of the following: entertainment; dancing; music; dramatic productions; athletic tournaments; amusements, festivals or carnivals; sale of merchandise, food or alcohol, including sidewalk sales; parades, walks, bicycle rides or runs; any temporary extension of premises of an existing use; or, any other activity requiring a special events permit as defined in § 5-2 of this code.

(b) Non-residential zones. It shall be unlawful for any person to create any noise on any street, sidewalk or public place adjacent to any school, institution of learning or church while the same is in use or adjacent to any hospital, which noise unreasonably interferes with the workings of such institution or which disturbs or unduly annoys patients in the hospital; provided that conspicuous signs are displayed in such streets, sidewalk or public place indicating the presence of a school, church or hospital; or that is detrimental to the health, safety and welfare of the public in a manner including but not limited to, a use or operation that diverts the attention of pedestrians or vehicle operators in public streets, parks and places.
(Code 1967, § 19A-5; Ord. No. 2000.01, 1-20-00; Ord. No. 2013.37, 7-30-13)

Sec. 20-8. Construction of buildings and projects.

(a) *General provisions*. It shall be unlawful for any person to operate equipment or perform any outside construction or repair work on buildings, structures or projects, or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist or any other construction-type device, except within the time periods specified herein, or if the noise level created thereby is in excess of the applicable community noise standard by five (5) dB(A) at either the nearest property line or the affected area of the property unless written authorization has been obtained before hand from the city manager or his duly authorized representative.

(b) *Start/Stop Times*:

(1) *Concrete*. From April 15 to October 15 inclusive, concrete may be poured, and concrete mixing trucks may be idled, each day between the hours of 5:00 a.m. and 7:00 p.m. or at such other times pursuant to written authorization. From October 16 to April 14 inclusive, concrete may be poured, and concrete mixing trucks may be idled, each day between the hours of 6:00 a.m. to 7:00 p.m. or at such times pursuant to written authorization.

(2) *All other construction/residential zones in or within five hundred (500) feet*. From April 15 to October 15 inclusive, all other construction or repair work shall not begin prior to 6:00 a.m. and must stop by 7:00 p.m. each day in or within five hundred (500) feet of a residential zone or at such other times pursuant to written authorization. From October 16 to April 14 inclusive, all other construction or repair work shall not begin prior to 7:00 a.m. and must stop by 7:00 p.m. each day in or within five hundred (500) feet of a residential zone or at such other times pursuant to written authorization.

(3) *Commercial and industrial zones*. Construction and repair work in commercial and industrial zones not within five hundred (500) feet of a residential zone shall not begin prior to 5:00 a.m. and must stop by 7:00 p.m. or it may be conducted at such other times pursuant to written authorization.

(c) *Weekends and holidays excluded*. Notwithstanding the foregoing, construction or repair work shall not begin prior to 7:00 a.m. and must stop by 7:00 p.m. and concrete pouring should not begin prior to 6:00 a.m. and must stop by 7:00 p.m. on any Saturday, Sunday or holiday, unless such other times are allowed by written authorization.

(d) *Written authorization*. Construction and repair work may be conducted at different times and at higher noise levels than otherwise permitted herein if written authorization is obtained before hand from the city manager or his authorized representative. In granting such authorization, the city manager or his authorized representative shall consider if construction noise in the vicinity of the proposed work site would be less objectionable at night than during the daytime because of different population levels or different neighboring activities; if obstruction and interference with traffic, particularly on streets of major importance, would be less objectionable at night than during the daytime; if the kind of work to be performed emits noises at such a low level as to not cause significant disturbance in the vicinity of the work site; if the neighborhood of the proposed work site is primarily residential in character wherein sleep could be disturbed; if great economic hardship would occur if the work was spread over a longer

time; if the work will abate or prevent hazard to life or property; if the proposed early morning or night work is in the general public interest, and he shall prescribe such conditions, working times, types of construction equipment to be used and permissible noise emissions as he deems to be required in the public interest. No written authorization shall be required to perform emergency work as defined in § 20-2.

(e) *Revocation of written authorization; appeal*. The city manager or his authorized representative may revoke any written authorization granted hereunder upon complaints based upon substantial evidence that the construction activity causes significant disturbance in the vicinity of the work site. Any person aggrieved by the granting of written authorization or the refusal to grant written authorization by the city manager or his authorized representative may appeal the decision to the city council who shall hear such appeal at the next regularly scheduled meeting of the city council.

(f) *Stop orders.* Whenever any work on a construction project is in violation of the provisions of this section, the community development director or his authorized representative, or, in the case of public works projects, the public works director or his authorized representative, may order the construction project stopped by notice in writing served on any persons responsible for the project, and any such persons shall forthwith stop work on the project until authorized by the community development director or the public works director to proceed with such work.
(Code 1967, § 19A-6; Ord. No. 696.3, 6-20-85; Ord. No. 86.46, § 1, 6-19-86; Ord. No. 2000.01, 1-20-00; Ord. No. 2001.17, 7-26-01; Ord. No. 2010.02, 2-4-10)

Sec. 20-9. Vehicles.

(a) It shall be unlawful for any person within any residential area of the city to repair, rebuild or test any motor vehicle (between the hours of 10:00 p.m. of one day and 7:00 a.m. of the next day) in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance.

(b) No person shall operate either a motor vehicle or combination of vehicles at any time or under any condition of grade, load, acceleration or deceleration in such a manner as to exceed the following noise limit of the category of motor vehicle based on a distance of fifty (50) feet from the center of the lane or travel within the speed limits specified in this section:

	Speed limit of 35 mph or less	*Speed limit of more than 35 mph*
(1) Any motor vehicle with a manufacturer's gross vehicle weight rating of 6,000 pounds or more, any combination of vehicles towed by such motor vehicle, and any motor-cycle other than a motor-driven cycle.	88 dB(A)	92-dB(A)

	Speed limit of 35 mph or less	*Speed limit of more than 35 mph*
(2) Any other motor vehicle and any combination of vehicles towed by such motor vehicles.	82 dB(A)	86 dB(A)

(Code 1967, § 19A-7)

Sec. 20-10. Aircraft.

(a) It will be unlawful for any person to operate or cause to be operated any type of aircraft which produces a noise level exceeding 86 dB(A) within the city.

(b) Any aircraft operated in conformity with, or pursuant to, federal law, federal air regulations and air traffic control instruction used pursuant to and within the duly adopted federal air regulations shall be exempt from the provisions of subsection (a) of this section as well as the other regulations of this chapter. Any aircraft operating under technical difficulties, in any kind of distress, under emergency orders of air traffic control or being operated pursuant to and subsequent to the declaration of an emergency under federal air regulations shall also be exempt from the provisions of subsection (a) of this section as well as the other regulations of this chapter.
(Code 1967, § 19A-8)

Sec. 20-11. Unnecessary noise.

(a) Notwithstanding any other provision of this chapter, and in addition thereto, it shall be unlawful for any person without justification to make or continue, or cause or permit to be made or continued, any unnecessary, excessive or offensive noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area.

(b) The factors which will be considered in determining whether a violation of the provisions of this section exists will include, but not be limited to, the following:

(1) The volume of noise;

(2) The intensity of the noise;

(3) Whether the nature of the noise is usual or unusual;

(4) Whether the origin of the noise is natural or unnatural;

(5) The volume and intensity of the background noise, if any;

(6) The proximity of the noise to residential sleeping facilities;

(7) The nature and zoning of the area within which the noise emanates;

(8) The density of the inhabitation of the area within which the noise emanates;

(9) The time of the day or night the noise occurs;

(10) The duration of the noise;

(11) Whether the noise is recurrent, intermittent or constant;

(12) Whether the noise is produced by a commercial or noncommercial activity;

(13) Whether it is a pure tone noise; or

(14) Whether it is an impulse noise.

(Code 1967, § 19A-9; Ord. No. 2000.01, 1-20-99)

Sec. 20-12. Commencement of action, citation, contents.

An action under this chapter shall be commenced by delivering a citation to the occupant of the property where the violation has occurred, the owner of record, or any person responsible for the violation.

(Ord. No. 2000.01, 1-20-00; Ord. No. 2000.13, 3-30-00; Ord. No. 2001.17, 7-26-01; Ord. No. 2002.35, 8-8-02)

Sec. 20-13. Repealed

(Ord. No. 2000.01, 1-20-00; Ord. No. 2000.13, 3-30-00; Ord. No. 2002.35, 8-8-02)

Sec. 20-14. Repealed.

(Ord. No. 2000.01, 1-20-00; Ord. No. 2000.13, 3-30-00; Ord. No. 2001.17, 7-26-01; Ord. No. 2002.35, 8-8-02)

Sec. 20-15. Civil fines and penalties imposed.

(a) The civil fine/penalty for violating any provision of this chapter shall be not less than one hundred dollars ($100) nor more than one thousand dollars ($1,000).

(b) In addition to the amount of the fine imposed under subsection (a) above, there is imposed a default penalty in the amount of fifty dollars ($50) should the defendant fail to appear and answer for a violation of this chapter within the time period stated on the citation or fails to appear at the time and place set by the court for a matter arising under this chapter.

(c) The court may enforce collection of delinquent fines, fees, reinspection fees, and penalties as may be provided by law. In addition, any judgment for a civil sanction imposed pursuant to this code shall constitute a lien against the real property of the owner of the property where the violation occurred. The lien may be perfected by recording a copy of the judgment under seal of the City of Tempe with the Maricopa County Recorder. Any judgment for civil sanction pursuant to this code may be collected as any other civil judgment.

(Ord. No. 2000.01, 1-20-00)

Sec. 20-16. Repealed.

(Ord. No. 2000.01, 1-20-00; Ord. No. 2000.13, 3-30-00; Ord. No. 2002.35, 8-8-02)

Sec. 20-17. Each day separate violations.

Each day that a violation of this chapter is permitted to continue or occur by the defendant shall constitute a separate offense subject to separate citation pursuant to the provisions of this chapter.
(Ord. No. 2000.01, 1-20-00)

Sec. 20-18. Habitual offender.

A person who commits a violation of this chapter after having previously been found responsible by the court on three (3) separate occasions for committing a civil violation of this chapter within a twenty-four (24) month period, whether by admission, by payment of the fine, by default, or by judgment after hearing, shall be charged with a criminal misdemeanor pursuant to the general penalties provision of § 1-7. The Tempe city prosecutor is authorized to file a criminal misdemeanor complaint in the Tempe Municipal Court against habitual offenders who violate this section. In applying the twenty-four (24) month provision, the dates of the commission of the offense shall be the determining factor, irrespective of the sequence in which the offenses were committed.
(Ord. No. 2000.01, 1-20-00)

Sec. 20-19. Nuisance abatement; additional remedy.

In addition to or in lieu of filing a civil citation or criminal complaint, the operation or maintenance of any device, instrument, vehicle or machinery in violation of any provision of this chapter, which operation or maintenance causes discomfort or annoyance to reasonable persons of normal sensitivity or which endangers the comfort, repose, health or peace of residents in the area, shall be deemed and is declared to be a nuisance and shall be subject to abatement as set forth in chapter 21 of this code.
(Ord. No. 2000.01, 1-20-00)