Chapter 36 - NOISE CONTROL^[1]

Footnotes:

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Cross reference—Barking dogs, § 8-46; health and sanitation, Ch. 24; nuisances generally, Ch. 37; mufflers and prevention of noise on motor vehicles, § 54-74; loud sirens, whistles, etc., prohibited on bicycles, § 54-579.

State Law reference— Noise abatement, C.R.S. 1973, 25-12-101 et seq.

Sec. 36-1. - Purpose.

This chapter is enacted to protect, preserve and promote the health, safety, welfare, peace and quiet for the citizens of the city through the reduction, control, and prevention of noise. This chapter establishes standards intended to eliminate and reduce unnecessary and excessive motor vehicle and community noises that are physically harmful and otherwise detrimental to individuals and the community in the enjoyment of life and property and to the conduct of business.

(Code 1950, § 717.1; Ord. No. 237-99, § 1, 3-29-99; Ord. No. 313-08, § 1, 6-16-08)

Sec. 36-2. - Definitions.

The following words and phrases, when used in this chapter, have the meanings respectively ascribed to them:

- (1) A-weighted sound pressure level means the sound pressure level as measured with a sound level meter using the A-weighting network. The standard notation is dB(A).
- (2) Background sound level means the A-weighted sound pressure level of all sound associated with a given environment, exceeded ninety (90) percent of the time (L90) measured and being a composite of sounds from many sources during the period of observation while the noise level from the noise source of interest is not present.
- (3) Commercial power equipment means any equipment or device rated at more than five (5) horsepower designed to be used or being used for building repairs, or property maintenance, excluding snow removal equipment.
- (4) *Commercial premises* means any land parcel with buildings where the use of less than fifty (50) percent of the gross floor area meets the definition of residential premises as contained in subsection (21).
- (5) *Construction equipment* means any device or mechanical apparatus operated by human, fuel, electric, or pneumatic power in the excavation, construction, repair, or demolition of any building, structure, land parcel, street, alley, waterway, or appurtenance thereto.
- (6) *Decibel* means a logarithmic unit of measure often used in measuring magnitudes of sound. The symbol is dB.
- (7) *Domestic power equipment* means any equipment or device rated at five (5) horsepower or less and used for building construction, remodeling and repairs or grounds maintenance, excluding snow removal equipment, operated by the owner and or occupant of the property.
- (8) Emergency vehicle means a motor vehicle that has audible warning devices such as whistles, sirens and bells when being lawfully used to respond to an emergency, or during a police activity or that is required by state or federal regulations (e.g., back-up alarms).
- (9) *Emergency work* is any activity made necessary to restore property to a safe condition following a public calamity, civil disturbance, natural disaster or other emergency; to protect persons or property from an imminent danger; or to secure medical care for any person. It includes work by private or public entities

- for providing or restoring immediately necessary service as well as all situations deemed necessary by the city.
- (10) *Emergency power generator* means any power generator providing emergency electrical power at any hospital, health clinic, nursing home or similar facility where the loss of electrical power poses a risk to the health, safety or welfare of any person, or at any premises where such equipment is required by the Denver Fire Department.
- (10.5) Festival, for this purpose of this chapter, means cultural, athletic, educational, charitable, or civic events (including those with entertainment) provided the event does not exceed four days, is not part of a series of two (2) or more separate events in the same vicinity, is open to the general public, a permit for street closure or occupancy is obtained, and a license is, or licenses are, obtained to serve food, beverage, or liquor.
- (11) *Gross floor area:* The sum of the horizontal floor areas of a building or unit of a building, including interior balconies and mezzanines, but excluding exterior balconies. All horizontal dimensions of all floors are to be measured by the exterior faces of walls of each such floor. The gross floor area computation shall exclude the following:
- a. Any floor area devoted to mechanical equipment serving the building;
- b. Any floor area used exclusively as parking space for motor vehicles; and
- c. Floor area serving as a pedestrian mall or public accessway to shops and stores.
- (12) *Industrial premises* means any premises where manufacturing, processing or fabrication of goods or products takes place regardless of whether located in a residential, commercial or industrial zoned area.
- (13) *Motor vehicle* means any vehicle that is self-propelled, used primarily for transporting persons or property upon public roadways and required to be licensed according to motor vehicle registration laws, including, without limitation, automobiles, trucks, and motorcycles. The term motor vehicle does not include: aircraft, watercraft, motorized bicycles as defined in subsection <u>54-1(37)</u> of this Code, motor vehicles operated on private property for recreational or amusement purposes, vehicles used exclusively on stationary rails, or specialized utility vehicles normally used only on private property in the daily course of business, such as forklifts and pallet movers.
- (14) *Muffler-approved type* means an apparatus consisting of a series of chambers, baffle plates, or other mechanical devices designed to receive and transmit exhaust gases that is in constant operation and properly maintained to prevent any excessive or unusual sound and that is not equipped with a cut-off, bypass, or similar device.
- (15) *Noise* means sound that is unwanted and that causes or tends to cause adverse psychological or physiological effects on human beings.
- (16) *Person* means any natural person, firm, association, organization, partnership, business, trust, corporation, company, contractor, supplier, installer, user or owner, and includes any municipal corporation, state or federal governmental agency, district, or any officer or employee thereof.
- (17) *Premises* means every parcel of land in the city or portion thereof, including all buildings, structures, land utilities (and all appurtenances thereto), yards, lots, courts, and inner yards.
- (18) *Property line* means that real or imaginary line and its vertical extension that separates real property owned or controlled by any person from contiguous real property owned or controlled by another person. The vertical and horizontal boundaries of a dwelling unit in a multi-dwelling-unit building, condominium, or townhouse complex shall not be considered property lines separating one (1) premises from another.
- (19) *Public premises* means all real property, including appurtenances thereon, owned or controlled by any governmental entity and includes, without limitation, rights-of-way, streets, highways, sidewalks, alleys, parks, and waterways.

- (20) Receptor premises means the premises (residential, commercial, industrial, or public) as listed in Table A receiving noise emitted from the source premises after crossing one (1) or more property lines.
- (21) Residential premises means all premises containing dwelling unit(s), primary schools, churches, nursing homes, and similar institutional facilities and includes any commercial premises where the use of more than fifty (50) percent of the gross floor area meets this definition of residential premises.
- (22) *Sound* means an oscillation in pressure, stress, particle displacement and particle velocity that induces auditory sensation.
- (23) Sound level meter means an apparatus or instrument that includes a microphone, amplifier, attenuator, output meter, and frequency weighting networks for the measurement of sound levels. The sound level meter must be of a design and have the characteristics of a Type 2 or better instrument as established by the American National Standards Institute, publication S1.4-1971 entitled Specification for Sound Level Meters.
- (24) Sound pressure level means twenty (20) times the logarithm to the base ten (10) of the ratio of the pressure of a sound to the reference pressure of twenty (20) micronewtons per square meter (20 \times 106 Newtons/meter²), and is expressed in decibels (dB).
- (25) Source premises means the premises (residential, commercial, industrial, or public) as listed in Table A that is emitting noise that is crossing one (1) or more property lines and impacting the receptor premises.
- (26) Snow removal equipment means any equipment used for removing snow from land or building surfaces including, without limitation, snow plows, blowers, sweepers, and shovels whether operated by mechanical, electrical, or manual means.
- (27) *Tree maintenance equipment* means any equipment used or designed to be used in trimming or removing trees only, including, without limitation, chainsaws, chippers and stump removers.
- (28) Vehicle auxiliary equipment means any manual, mechanical, and electrical device powered by the engine of the motor vehicle to which it is mounted, attached, or utilized from or by a separate engine or motor, that enables the motor vehicle or such devices to function, and includes, without limitation, trimmers, saws, blades, tools, refrigeration units, compressors, compactors, chippers, backhoes, drill rigs, grinders, power lifts, mixers, pumps, blowers, and power-take-offs.
- (29) *Waste stream activities* includes trash compaction, collection, recycling (such as sand and aggregate) street sweeping, street vacuums, and street blowers.
- (30) Weekday means the time beginning on Monday at 7:00 a.m. and ending on the following Friday at 9:00 p.m.
- (31) Weekend means the time beginning on Friday at 9:00 p.m. and ending on the following Monday at 7:00 a.m.

(Code 1950, § 717.2; Ord. No. 400-86, §§ 1—3, 6-30-86; Ord. No. 237-99, § 2, 3-29-99; Ord. No. 313-08, § 2, 6-16-08)

Cross reference— Definitions and rules of construction generally, § 1-2.

Sec. 36-3. - Sound pressure level measurement instrumentation.

- (a) Any sound pressure level that is measured must be taken with a sound level meter and at an A-weighting network.
- (b) If the noise from the source premises interferes with the measurement of the background sound level at the receptor premises, then measurements to determine the background sound level may be taken at another location in the vicinity or at another time or both; provided that the conditions at the alternative location or the alternative time or both are similar to the conditions at the receptor premises at the time of the noise measurement.

(Code 1950, § 717.3; Ord. No. 237-99, § 3, 3-29-99; Ord. No. 313-08, § 3, 6-16-08)

Sec. 36-4. - Inspections.

- (a) For the purpose of determining compliance with the provisions of this chapter, the manager of environmental health and the chief of police or their authorized representatives are hereby authorized to make inspections of all noise sources and to take measurements and tests whenever necessary to determine the quantity and character of noise. If any person refuses or restricts entry and free access to any part of a premises, or refuses inspection, testing or sound level measurement of any activity, device, facility, motor vehicle, or process where inspection is sought, the manager or the chief of police or their authorized representatives may seek from the county court a warrant for inspection requiring that such person permit entry and free access without interference, restriction or obstruction, at a reasonable time, for the purpose of inspecting, testing or measuring sound levels. The county court shall have power, jurisdiction and authority to enforce all orders issued under the provisions of this chapter.
- (b) It shall be unlawful for any person to refuse to allow or permit the manager of environmental health or the chief of police free access to any premises when they or their authorized representative is acting in compliance with a warrant for inspection and order issued by the county court.
- (c) It shall be unlawful for any person to violate the provisions of any warrant or court order requiring inspection, testing or measurement of sound levels and the possible sources thereof.
- (d) No person shall hinder, obstruct, delay, resist, prevent in any way, interfere, or attempt to interfere with any authorized person while in the performance of their duties under this chapter.

(Code 1950, § 717.4; Ord. No. 1110-96, § 1, 12-16-96; Ord. No. 313-08, § 4, 6-16-08)

Sec. 36-5. - Misrepresentation to avoid compliance.

It shall be unlawful for any person to misrepresent or give any false or inaccurate information or in any way attempt to deceive the manager of environmental health or the chief of police in order to avoid compliance with the provisions of this chapter.

(Code 1950, § 717.5-2; Ord. No. 1110-96, § 1, 12-16-96)

Sec. 36-6. - Restrictions and measurements of noise between source and receiving premises (Table A).

- (a) It shall be unlawful for any person to emit or cause to be emitted any noise that leaves the premises on which it originates, crosses a property line, and enters onto any other premises in excess of the sound pressure levels permitted during the time periods specified in Table A. It is further unlawful for any person to emit or cause to be emitted any noise within the public premises in excess of the limits established in Table A.
 - (1) The noise source shall be measured at any point along the property line of the receptor premises or within the property line of the receptor premises to determine compliance with this chapter.
 - (2) When it is determined that the background sound pressure level at the receptor premises equals or exceeds the maximum allowable sound pressure level specified in Table A, then the background sound pressure level is the standard that cannot be exceeded by the noise source.

Table A: Allowable Sound Pressure Levels (in dB(A)) with Time of Day Allowance

	Receptor Premises							
	Resid	Residential Comr		nercial	Industrial		Public	
Source Premises	7am— 10pm	10pm— 7am	7am— 10pm	10pm— 7am	7am— 10pm	10pm— 7am	7am— 10pm	10pm— 7am
Residential	<u>55</u>	<u>50</u>	65	60	80	75	75	70

Commer- cial	<u>55</u>	<u>50</u>	65	60	80	75	75	70
	[60]	[60]						
Industrial	<u>55</u>	<u>50</u>	65	60	80	75	75	70
	[65]	[65]						
Public	<u>55</u>	<u>50</u>	65	60	80	75	75	70
	[60]	[60]						

[60] The numbers in brackets are the allowable limits that comply with exemption 14.

- (b) Table A exemptions: The maximum permissible sound pressure levels as specified in subsection (a) and Table A shall not apply to sounds emitted from:
 - (1) Any bell or chime from any building clock, school or church, between 7:00 a.m. and 10:00 p.m., not including any amplified bell or chime sounds emitted from loudspeakers.
 - (2) Any siren, whistle or bell lawfully used by emergency vehicles or any other alarm systems used in case of fire, collision, civil defense, police activity or imminent danger.
 - (4) Any ground-based aircraft activity, including testing or engine run-up, provided, however, that emission of noise resulting from such activities in excess of a sound pressure level of sixty (60) dB(A) when measured upon an inhabited residential premises shall be deemed an unlawful nuisance.
 - (5) Any motor vehicles designed for and operated on public streets, alleys, highways or freeways that are regulated by Table B.
 - (6) Any tree maintenance, landscaping, or lawn care equipment operated upon a residential, commercial, industrial, or public premises between 7:00 a.m. and 9:00 p.m. This exemption does not apply if the equipment is not in good working order, not used for the manufacturer's intended purpose, or not operated in compliance with any required license.
 - (7) Any construction equipment or activities; delivery and delivery activities; and waste stream equipment and activities at times other than those prohibited as set forth in section 36-7(3) of this chapter.
 - (8) Any domestic power equipment operated by the owner and or occupant of the property upon any residential, commercial, industrial or public premises between 7:00 a.m. and 10:00 p.m. provided that such equipment does not exceed a sound pressure level of eighty (80) dB(A) when measured twenty-five (25) feet from the noise source or the complainant's property line, whichever is greater. This exemption does not apply if the equipment is not in good working order, not used for the manufacturer's intended purpose, or not operated in compliance with any required license.
 - (9) Any commercial power equipment operated upon any residential, commercial, industrial, or public premises between 7:00 a.m. and 9:00 p.m., provided, however, that such equipment does not exceed a sound pressure level of eighty-eight (88) dB(A) when measured twenty-five (25) feet from the noise source or the complainant's property line, whichever is greater. This exemption does not apply if the equipment is not in good working order, not used for the manufacturer's intended purpose, or not operated in compliance with any required license.

- (10) The musical instruments of any school marching band while performing at any sporting event or marching band competition, and the musical instruments of any school marching band practicing on school grounds between the hours of 7:00 a.m. and 9:00 p.m. that do not exceed sixty-five (65) dB(A) when measured at the property line of any residential receptor premises.
- (11) Snow removal equipment operated on any residential, commercial, or industrial premises, including adjoining sidewalks, between the hours of 5:00 a.m. and 11:00 p.m. during any snowfall or during a declared snow emergency under the Rules and Regulations of the Manager of the Department of Public Works regarding Snow and Ice Removal from Sidewalks; snow removal equipment operated during the time periods after the end of snowfall and after the end of a declared snow emergency as set forth in those rules; and snow removal equipment operated by or on behalf of the City.
- (12) Any emergency power generator providing emergency electrical power at any hospital, health clinic, nursing home or similar facilities where the loss of electrical power poses an immediate risk to the health, safety or welfare of any person, or at any premises where such equipment is required by the Denver Fire Department. Additionally, the sound pressure level emitted during the routine testing of emergency electrical power generators shall not exceed eighty-eight (88) dB(A) at a distance of twenty-five (25) feet or a receptor premises' property line, whichever is greater. Routine testing shall not exceed one (1) hour in any one-week period, or two (2) hours in any six-week period and shall be confined to the hours of 10:00 a.m. to 4:00 p.m. or as otherwise approved.
- (13) Any industrial, commercial, or public premises causing the standards of Table A to be exceeded at a residential receptor premises when the zoning of the residential receptor premises does not allow residential use (residential use is nonconforming), provided, however, that such sound pressure level may not exceed the standards afforded an industrial receptor premises.
- (14) Any industrial, commercial, or public premises causing the standards of Table A to be exceeded at a residential receptor premises when such industrial, commercial, or public premises and their emitted sound pressure levels were in existence prior to the existence of the residential receptor premises, provided, however, that the existing industrial premises does not exceed sixty-five (65) dB(A) and the commercial premises do not exceed sixty (60) dB(A) when measured at the residential receptor premises.
- (15) Any noise-causing activity or equipment in existence prior to April 2, 1999 that had previously been determined to be in violation of the sound pressure standards of Table A of <u>chapter 36</u> and was brought into and remains in compliance. A change in previously complained of business-licensed activity at a premises or a replacement of sound-emitting equipment cause the provisions of this chapter to apply.
- (16) Any emergency-related work and all associated equipment, training, and activities, such as emergency preparedness training, exercises, and drills.
- (17) Festivals and associated activities between the hours of 8:00 a.m. and 10 p.m., on the condition that production, reproduction, or amplification of sound may not exceed a sound pressure level of eighty (80) dB(A) when measured from the nearest residential receptor premises.

(Code 1950, § 717.6; Ord. No. 15-90, § 1, 1-8-90; Ord. No. 237-99, § 4, 3-29-99; Ord. No. 313-08, § 5, 6-16-08)

Sec. 36-7. - Prohibited noise activities.

The following activities are prohibited notwithstanding the sound pressure levels permitted pursuant to sections <u>36-6</u> and <u>36-8</u>:

(1) Vehicle horns. No person shall, at any time, sound any horn or other audible signal device of a motor vehicle unless it is necessary as a warning to prevent or avoid a traffic accident or reasonably inform or warn of a vehicle presence.

(2)

- *Alarms.* It is an unlawful nuisance for any alarm that is audible outside the premises or vehicle in which it is installed or that it is intended to protect and for which there is not a valid alarm user permit issued pursuant to section 42-106 of this Code, to be activated: a) for a period exceeding fifteen (15) minutes; or b) three or more times within a seven (7) day period when no emergency is found to exist by the city. Violation of (a) or (b) or both constitutes separate offenses.
- (3) *Delivery and delivery activities.* No person or persons shall make deliveries nor conduct delivery activities between the hours of 10:00 p.m. and 7:00 a.m. that exceeds the sound pressure limits of Table A. This prohibition excludes construction site deliveries, which are governed by subsection 36-7(5) of this chapter.
- (4) Waste stream equipment and activities. No person shall operate any waste stream equipment nor conduct any waste stream activities on any premises adjoining to or across the street or alley from a residential receptor premises between 10:00 p.m. and 7:00 a.m.
- (5) Construction equipment and activities.
 - a. No person shall operate, or cause to be operated, any construction equipment nor conduct any construction activities, including, without limitation, preparation activities, job site deliveries, and job site pick-ups, on weekdays between the hours of 9:00 p.m. and 7:00 a.m. in a manner that exceeds the sound pressure limits of Table A.
 - b. No person shall operate, or cause to be operated, any construction equipment nor conduct any construction activities, including, without limitation, preparation activity, job-site deliveries, and job-site pick-ups, on weekends between the hours of 5:00 p.m. and 8:00 a.m. in a manner that exceeds the sound pressure limits of Table A.
 - c. Construction equipment must be properly maintained, used for the manufacturer's intended purpose, and operated in compliance with any required license. The board of environmental health, in accordance with <u>chapter 24</u>, article I, may grant variances from the construction restrictions if it can be demonstrated that a construction project will interfere with traffic or jeopardize public safety if completed during daytime.

(Code 1950, § 717.7; Ord. No. 237-99, § 5, 3-29-99; Ord. No. 313-08, § 6, 6-16-08)

Sec. 36-8. - Motor vehicle noise.

(a) No person shall operate nor shall the owner permit the operation of any motor vehicle or combination of motor vehicles at any time or place when such operation exceeds the sound pressure levels for the corresponding category of motor vehicle as specified in Table B. Except as provided in this subsection (a), the standards in Table B apply to all noise emitted from motor vehicles including any and all equipment thereon, under any condition of acceleration, deceleration, idle, grade or load and regardless of whether in motion. In lieu of Table B, the provisions of section 36-6 Table A apply when a motor vehicle is parked and vehicle auxiliary equipment is in use.

TABLE B
Maximum Allowable Noise Sound Pressure Levels for Motor Vehicles

Type of Vehicle	Maximum Allowable Sound Pressure Level	Measurement Distance from Motor Vehicle
Motor vehicles weighing less than 10,000 pounds, manufacturers gross vehicle weight	82 dB(A)	25 feet

Motor vehicles weighing	90 dB(A)	50 feet
10,000 pounds or more,		
manufacturers gross vehicle		
weight		

- (b) It shall be unlawful for any person to operate, or for the owner of any motor vehicle to permit the operation of any motor vehicle or combination of motor vehicles at any time, that is not equipped with any exhaust muffler approved by this chapter.
- (c) It is unlawful for any person or for any owner to allow any person to modify, tamper with, alter, or change any motor vehicle in any manner that causes the sound emitted from the motor vehicle to exceed the corresponding sound pressure level in Table B.
- (d) No person shall, nor shall the owner allow any person to, operate a motorcycle manufactured after December 31, 1982 that is not equipped with an exhaust muffler bearing the Federal EPA required labeling applicable to the motorcycle's model year, as set out in Code of Federal Regulations <u>Title 40</u>, Volume 24, Part 205, Subpart D and Subpart E; or a muffler or muffler system in compliance with Table B.

(Code 1950, § 717.8; Ord. No. 237-99, § 6, 3-29-99; Ord. No. 249-07, § 1, 6-4-07)

Cross reference— Traffic regulation, Ch. 54.

State Law reference— Noise restrictions on the sale of new vehicles, C.R.S. 1973, 25-12-106.

Sec. 36-9. - City contracts to require chapter compliance.

Any written agreement, purchase order or contract whereby the city is committed to an expenditure of funds in return for work, labor, services, supplies, equipment, materials or any combination thereof, shall not be entered into unless such agreement, purchase order or instrument contains provisions that any equipment or activities which are subject to the provisions of this chapter will be operated, constructed, conducted or manufactured without violating the provisions of this chapter.

(Code 1950, § 717.9)

Cross reference— Contracts, purchases and conveyances generally, § 20-51 et seq.

Sec. 36-10. - Other applicable provisions.

- (a) Loud, persistent, noises or habitual dog barking, howling or yelping shall be controlled and enforced as provided in <u>Chapter 8</u>, Articles I and II, provided however that dog barking noise emitted from licensed commercial dog kennels shall also be subject to the provisions of <u>section 36-6</u>.
- (b) Loud or disturbing noise emitted by human voices shall be enforced pursuant to the provisions of <u>Chapter</u> 38, Article IV of this Code.
- (c) Off-road recreational vehicles operated on any public premises shall be enforced under chapters 39 and <u>54</u> of this Code.
- (d) Alarms for which a user permit has been issued pursuant to <u>section 42-106</u> shall be enforced under <u>Chapter</u> 42.

(Code 1950, § 717.10; Ord. No. 237-99, § 7, 3-29-99; Ord. No. 313-08, § 7, 6-16-08; Ord. No. 327-11, § 6, 6-20-11)