

## CHAPTER 8.32. - NOISE CONTROL

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## 8.32.010 - Title for citation.

The ordinance codified in this chapter shall be known and cited as the "noise control ordinance." (Ord. 1921 § 1 (part), 1987: prior code § 3-110)

## 8.32.020 - Purpose.

This chapter is designed to provide comprehensive regulations to control noise levels so as to preserve, protect, and promote the public health, safety and welfare, and the peace, comfort, and quiet of the inhabitants of the city, prevent injury to humans, animals, and property, and foster the comfort of its inhabitants and reasonable enjoyment of property. It is the intent of the council that this chapter be liberally construed to effect its general purpose. (Ord. 1921 § 1 (part), 1987: prior code § 3-111)

## 8.32.030 - Definitions.

- A. "ANSI" means the American National Standard Institute.
- B. "A-weighted sound level" means the sound pressure level in decibels as measured on a sound level meter using the A-weighting network as specified by the ANSI. The level so read is designated dB(A) or dBA.
- C. "Board of appeals" means the Livonia zoning board of appeals.
- D. "Commercial area" means an area which is designated as P-S, P.O., P, P.L., C-1, C-2, C-3, C-4, and R-E in the Livonia zoning ordinance.
- E.

- "Construction" means any site preparation, assembly, erection, substantial repair, alteration, or similar action, but excluding demolition, for or of public or private rights-of-way, structures, utilities or similar property.
- F. "Continuous noise" means any noise whose level varies less than three (3) dBA during the course of a period of at least five (5) minutes.
- G. "Decibel" means a unit for measuring the sound pressure level, equal to twenty (20) times the logarithm to the base ten (10) of the ratio of the pressure of the sound measured to the reference pressure, which is twenty (20) micropascals (twenty (20) micronewtons per square meter).
- H. "Demolition" means any dismantling, intentional destruction or removal of structures, utilities, public or private right-of-way surfaces, or similar property.
- I. "Emergency work" means work made necessary to restore property to a safe condition following a public calamity or act of God, or work required to protect the health and safety of persons or property.
- J. "Impulsive noise" means sound of short duration, usually less than one (1) second, with an abrupt onset and rapid decay. Examples of sources of impulsive noise include explosions, drop-forge impacts, and the discharge of firearms.
- K. "Industrial area" means an area which is designated as ML, M-1, or M-2 in the Livonia zoning ordinance.
- L. "Intermittent noise" means any noise which goes on and off during a course of measurement of at least five (5) minutes, but which exceeds ten (10) seconds in duration each time it is on.
- M. "Livonia zoning ordinance" means Ordinance No. 543 of the city of Livonia, as amended.
- N. "Noise" means any sound which annoys or disturbs humans or which causes or tends to cause an adverse psychological or physiological effect on humans.
- O. "Noise disturbance" means any sound which:
1. Endangers or injures the safety or health of humans or animals; or
  2. Annoys or disturbs a reasonable person of normal sensitivities; or
  3. Endangers or injures personal or real property; or
  4. Violates the factors set forth in Sections 8.32.070 and 8.32.080 of the ordinance codified in this chapter.
- P. "Noise sensitive zone" means any area recommended in Section 8.32.040(B)(9) of the ordinance codified in this chapter and so designated by the council for the purpose of ensuring exceptional quiet, and all existing quiet zones until otherwise designated by council, including, but not limited to, any street, sidewalk, public space, or grounds adjacent to any school, institution of learning, church, public library or court while such buildings are being used, or any hospital or nursing home.
- Q. "Perpetual noise" means any noise whose level varies less than three (3) dBA during a period of at least thirty (30) minutes.
- R. "Preexisting source" means any noise source established and in operation or under construction prior to the effective date of the ordinance codified in this chapter.
- S. "Public right-of-way" means the entire easement width of any street, avenue, boulevard, highway, sidewalk or alley or similar place which is owned or controlled by a governmental entity.
- T. "Real property boundary" means an imaginary line along the ground surface, and its vertical extension, which separates the real property owned by one (1) person from that owned by another person but not including intrabuilding real property divisions.
- U. "Residential area" means an area which is designated as R-1, R-2, R-3, R-4, R-5, R-6, R-7, R-8, R-9, RUF and AG in the Livonia zoning ordinance.
- V. "Sound" means an oscillation in pressure, particle displacement, particle velocity or other physical parameter, in a medium with internal forces that causes compression and rarefaction of that medium. The description of sound may include any characteristics of such sound, including duration, intensity and frequency.

- W. "Sound level" means the quantity of sound measured in dB(A) on a sound level meter.
- X. "Sound level meter" means an instrument meeting at least type 2 requirements of the ANSI S1.4-1971 or the latest approved version thereof, composed of a microphone, amplifier, and output meter, that is used for the measurement of sound levels and which is capable of measuring A-weighted sound levels.
- Y. "Vibration" means an oscillatory motion of solid bodies of deterministic or random nature described by displacement, velocity, or acceleration with respect to a given reference point. (Ord. 1921 § 1 (part), 1987: prior code § 3-112)

#### 8.32.050 - Enforcement.

- A. If the director has reason to believe a noise from any source is in noncompliance with Sections 8.32.070 or 8.32.080, a violation notice may be issued to the owner or operator of the source in question. The director may grant up to ninety (90) days for compliance with this chapter.

For further variance, the procedure set forth in Section 8.32.060 must be used. Provided, further, that upon observing any noise disturbance in noncompliance with Section 8.32.070 or 8.32.080, officers empowered to enforce this chapter may file a criminal complaint in a court of competent jurisdiction for violation of such section. If the alleged violation is of a continuing nature, as determined by the director, the charged party may seek administrative relief from such complaint pursuant to Section 8.32.050(B) through (D) and Section 8.32.060 and such criminal action may be accordingly continued or dismissed.

- B. Any person who is issued a violation notice from the director in accordance with this section may, within fifteen (15) days from the date of receipt of said notice, submit data to the director indicating reasons why there is no violation of Section 8.32.070 or 8.32.080. The director shall review the data submitted and within fifteen (15) days affirm or withdraw the violation notice by informing, in writing, the person receiving said notice of the decision to affirm or withdraw. If the director does not withdraw the violation notice, the person cited, within ten (10) days of receipt of the director's decision to affirm the violation notice (or within ten (10) days of a decision of the board of appeals should appeal be taken from the director's decision to affirm the violation notice), may ask that tests be performed to determine the noise levels from the operation which is the subject of a particular violation notice. If the tests indicate that the noise level exceeds the maximum allowable, the violation notice shall be considered substantiated. If the tests indicate that the noise level is equal to or less than the standard applicable to the operation of this chapter then the violation notice shall be considered void. If a violation notice has been substantiated, remains not acted upon by the person receiving the violation notice within the times prescribed, has not been nullified by the issuance of a variance, or if the conditions causing the violation have not been rectified or eliminated, the director may institute the necessary legal proceedings in a court of competent jurisdiction to assess penalties and/or obtain an injunction to secure compliance with the provisions of this chapter.
- C. If the noise tests conducted pursuant to Section 8.32.050(B) substantiate the violation notice issued, the person or persons liable for the violation shall be responsible for paying all attendant costs for conducting said tests. If said tests do not substantiate the violation notice issued, then the city shall be responsible for paying all attendant costs for conducting said tests. However, if the person liable elects to conduct his own tests, the person so electing shall pay for these tests irrespective of their outcome.
- D. Where a preexisting source does not meet the requirements noted in Section 8.32.070 or 8.32.080 then a program to meet the noise limitations stipulated shall be developed and offered to the director by the owner of the equipment or premises causing the noise. This program shall be submitted upon the request of and within such time as shall be fixed by the director, and after said program has been approved by the director, the owner of the equipment or premises causing the noise shall not be in violation of this chapter so long as said program is observed. In evaluating such a program of improvement, the director shall take into consideration the following factors:
  - 1. The time of day when the noise will occur;
  - 2. The duration of the noise;

3. Its magnitude relative to the required levels of this chapter;
  4. The technical feasibility of bringing the noise into conformity with this chapter, including the economic factors related to age and useful life of the facility or equipment in question;
  5. The number of people affected by such noise;
  6. Action taken to control noise disturbances prior to the effective date of this chapter;
  7. The temporary interim control measures intended to minimize existing noise levels;
  8. The degree of hardship involved if the relief is not granted;
  9. Such other matters as can be reasonably related to the impact of noise on the health, safety, welfare, peace and quiet of the community.
- E. Reports consisting of information required by the director indicating the progress of these programs shall be submitted annually to the director by the owner of the equipment or premises causing the noise in question. If progress of the program is deemed by the director to be unsatisfactory, the director may suspend the program and issue a violation notice.
- F. In the event the person responsible for a noise source causing a noise disturbance and the director cannot evolve a mutually acceptable program of improvement, the person responsible for the noise source may appeal to the board of appeals for resolution and determination of an acceptable program, which shall be binding upon both the applicant and the director.
- G. Notwithstanding the provisions of this chapter or any other provision of law, if the director finds that any owner is causing or contributing to a noise disturbance and that such causing or contributing to a noise disturbance creates an emergency which requires immediate action to protect the public health or safety, the director shall order such owner to reduce or discontinue immediately the causing or contributing to the noise disturbance and such order shall be complied with immediately. Such order shall be deemed properly served if a copy thereof is delivered personally, or if the owner involved cannot be found, by mailing a copy thereof by certified mail to the owner involved at the premises involved or his business or residence address, if known, and by posting a copy thereof in a conspicuous place in or about the premises affected.
- H. Any person violating any provision of this chapter or failing, neglecting or refusing to comply with an order of the director issued pursuant to Section 8.32.050 shall be guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not more than five hundred dollars (\$500.00). Each act of violation and every day upon which such violation shall occur shall constitute a separate offense. (Ord. 1921 § 1 (part), 1987: prior code § 3-113(a))

#### 8.32.060 - Variances.

- A. A person responsible for a noise source may apply to the board of appeals for a variance from this chapter when it is determined that compliance with said provisions would impose an arbitrary, unreasonable, or undue hardship or inconvenience, or when the social value clearly outweighs the need for the limitations contained herein.
- B. In making their determination, the board of appeals shall take into consideration the factors noted in (D)(1) through (4) and shall grant such variance only to the extent necessary to ameliorate such arbitrary, unreasonable, or undue hardship or inconvenience, and with due regard for the adequate protection of the public health, safety, and welfare, and the intent and purpose of this chapter.
- C. The board of appeals may condition such variance and the terms thereof on such factors as they deem appropriate, including a schedule of compliance specifying a definite time period within which full compliance with this chapter and the rules and regulations adopted hereunder shall be achieved.
- D. Any person taking exception to any decision, ruling, regulation or order of the director or seeking a variance from this chapter may appeal to the board of appeals. Such appeal shall be taken within ten (10) days after the decision, ruling, regulation or order complained of, by filing with the director a notice of appeal directed to the board of appeals, specifying the grounds thereof and the relief sought. A filing fee in accordance with Ordinance 543, Section 21.09, shall be paid by the appellant at the time of filing of the appeal to cover the

cost of the hearing. The director shall forthwith furnish to the board of appeals all papers relating to the decision, ruling, regulation or order which is appealed. The boards of appeals shall set a date for the hearing, and shall give notice thereof by mail to all interested parties. Such an appeal shall act as a stay of the decision, ruling, regulation or order in question until the decision of the board of appeals is rendered, unless the director certifies to the board of appeals, after the notice of appeal shall have been filed with the director, that by reason of facts stated in the certificate, a stay would in the director's opinion cause imminent peril to life or property, in which case proceedings shall not be stayed except by a restraining order which may be granted by the board or by circuit court on application, on notice to such officer, and on due cause shown. The decision of the appeals board shall be binding on the director and the appellant unless reversed by a court of competent jurisdiction. The appellant may appear at the hearing in person and may be represented by an agent or an attorney. (Ord. 1921 § 1 (part), 1987: prior code § 3-113(b))

#### 8.32.070 - Prohibited acts.

- A. No person shall make, cause, continue, or permit to be made or continued any unreasonably loud, raucous, jarring, or disturbing noise which causes or threatens to cause a noise disturbance. Noise disturbances are hereby declared to be public nuisances.
- B. For purposes of this section, loud, raucous, jarring, or disturbing noises include, but are not limited to, the following acts:
  1. Horns, Signaling Devices, Etc. The sounding of any horn or sound signaling device, including any horn, whistle or other device operated on engine exhaust, on any automobile, motorcycle, street car, or other vehicle on any street or public place of the city, except as a danger warning or except as provided in Sections 10.66.020 and 10.66.330 and as provided in the Michigan Motor Vehicle Code, so as to create a noise disturbance; and the sounding of any such device for any unnecessary and unreasonable period of time or when traffic is for any reason held up;
  2. Radios, Televisions, Phonographs, Musical Instruments. The playing of, operating, or permitting to be played, used, or operated, any radio, television, musical instrument, phonograph or other machine or device for the producing or reproducing of sound, in such a manner as to cause a noise disturbance. This provision shall not be applicable to those activities such as street dances, concerts and outdoor athletic functions, where a special permit for the same has been approved by the council;
  3. Loud Speakers and Amplifiers on Public Space or for Commercial or Business Advertising Purposes.
    - a. Stationary Location. The using, playing, operating, or permitting to be used, played, or operated, any drum or other musical device or instrument, loud speaker, or sound amplifier or other similar machine or device for the production or reproduction of sound on public space, or for commercial or business advertising purposes, or for the purpose of attracting attention to any performance, show, sale, or display of merchandise in front of or outside of any building, place, vehicle, or premises, or in or through any aperture of such building, place, vehicle or premises, abutting on or adjacent to a public street, park, or place, where the sound therefrom:
      - i. Is plainly audible upon any public street, park or place on Sunday or before seven a.m. or after eleven p.m. on any other day,
      - ii. Creates a noise disturbance across a residential real property boundary or within a noise sensitive zone,
      - iii. Provided, however, that these provisions shall not be applicable to those activities, such as block parties, street dances, election rallies, festivals, parades and public gatherings, where a permit for the same has been approved by the council,
    - b. Mobile Unit or Sound Truck. Use or operation of any radio receiving set, television set, musical instrument, phonograph, loudspeaker, or sound amplifier, audible one (1) meter from any motor vehicle, excepting in vehicles and by devices officially used by governmental units in the function of such units. Provided, however, that upon receiving a written application, the council shall grant permission to use amplifying devices in, on, or from vehicles where such application complies with the following standards and conditions:

- i. That the sound therefrom shall not exceed seventy-eight (78) dBA at distance of not less than one (1) meter from the source,
  - ii. That the only sounds will be that of music or human speech,
  - iii. That the hours of operation are minimal and do not unreasonably affect the peace and tranquility of residential and commercial areas, however, in no event, shall the operation exceed four (4) hours on any day, except on Sundays and legal holidays when no such operations shall be authorized whatsoever. The permitted four (4) hours shall be between the hours of eleven thirty a.m. and one thirty p.m. and between the hours of four thirty p.m. and six thirty p.m.,
  - iv. That the applicant shall submit a map evidencing the route such sound vehicle shall be operated and that such operation will not be within ninety-one (91) meters (one hundred (100) yards) of any hospital, school, church or courthouse,
  - v. That the applicant shall submit a script or list of musical selections that will be employed in the use of such equipment and that the content of the script or musical selections are not profane, lewd, indecent and slanderous and shall be of some social redeeming value,
  - vi. That the council may, in consideration for the granting of such permission, set such reasonable conditions as are in the best interests of the general public of the city and insure the public's rights of peace, tranquility and privacy;
4. Yelling, Shouting, Etc. Yelling, shouting, hooting, whistling or singing on the public streets or places or on private property, particularly between the hours of eleven p.m. and seven a.m. or at any time or place so as to cause a noise disturbance;
  5. Animals and Birds. Owning, possessing or harboring any animal or bird which frequently or for continued duration, howls, barks, meows, squawks, or makes other sounds which create a noise disturbance across a residential real property boundary or within a noise sensitive zone;
  6. Nonemergency Signal Devices. Sounding or permitting the sounding of any signal from any stationary bell, chime, siren, whistle, or similar device, intended primarily for nonemergency purposes, from any place, for more than one (1) minute in any hourly period;
  7. Emergency Signaling Devices.
    - a. The intentional sounding or permitting the sounding outdoors of any fire, burglar, or civil defense alarm, siren, whistle or similar stationary emergency signaling device, except for emergency purposes or for testing, as provided in subsection B7b of this section,
    - b. Testing of a stationary emergency signaling device shall occur at the same time of day each time such a test is performed, but not before seven a.m. or after nine p.m.,
    - c. Sounding or permitting the sounding of any exterior burglar or fire alarm or any motor vehicle burglar alarm unless such alarm is automatically terminated within sixty (60) minutes of activation;
  8. Exhausts.
    - a. The discharge into open air of the exhaust from any steam or internal-combustion engine, or motor vehicle except through a muffler or other device which will effectively prevent loud or explosive noises therefrom,
    - b. Operation of any motor vehicle that fails to comply with Sections 10.69.010 through 10.69.110;
  9. Standing Motor Vehicles.
    - a. The permitting of the motor in motor vehicles to idle in the "warming up" process or the unnecessary racing of motors, particularly in the idling or racing of truck motors, whether diesel or gasoline powered, either on the public streets, public ways or public places or on private property in a manner which creates a noise disturbance,
    - b. The operation or permitting the operation of any motor vehicle with a registered weight in excess of ten thousand (10,000) pounds, or any auxiliary equipment attached to such a vehicle, for a period longer than five (5) minutes in any hour while the vehicle is stationary, for reason other than traffic congestion, on public

- ways or public places or on private property within forty-six (46) meters (one hundred fifty (150) feet) of a residential area or a noise sensitive zone, between the hours of eleven p.m. and seven a.m. the following day;
10. Vehicle or Motorboat Repairs and Testing. Repairing, rebuilding, modifying, or testing any motor vehicle, motorcycle, recreational vehicle, or motorboat in such a manner as to cause a noise disturbance across a residential real property boundary or within a noise sensitive zone;
  11. Defect in Vehicle Load. The use of any mechanical device, motor vehicle, or motorboat so out of repair or operated in such a manner as to create a loud, grating, grinding, rattling or other noise which causes a noise disturbance;
  12. Transportation of Metal Rails, Pillars, and Columns. The transportation of rails, pillars, or columns of iron, steel, or other material over and along the streets and other public places upon carts, trays, cars, trucks, or in any manner so loaded as to cause any unreasonably loud, raucous, jarring, or disturbing noise which causes a noise disturbance;
  13. Loading or Unloading. The loading and unloading of any motor vehicle, including vehicles involved in solid waste disposal, or the opening, closing, or destruction of bales, boxes, crates, and containers, between the hours of eleven p.m. and seven a.m. the following day in such a manner as to cause a noise disturbance across a residential real property boundary or within a noise sensitive zone;
  14. Construction.
    - a. Any noise connected with or which is the product of erection (including excavation), demolition, alteration or repair of any structure between the hours of eleven p.m. and seven a.m., except for emergency work of public service utility or by permit issued pursuant to subsection B14b of this section.
    - b. If the director should determine that the public health, safety, quiet, repose, welfare or convenience of the residents of the city will not be impaired by the erection, demolition, alteration or repair of any buildings or the excavation of streets, highways or public places between the hours of eleven p.m. and seven a.m. of any day, and if it is further determined that loss would otherwise result to any party in interest, permission may be granted for emergency work to be done between the hours of eleven p.m. and seven a.m. of the following morning upon application being made at the time the permit for the work is awarded or during the progress of the work. Such permits may be renewed for periods of three (3) days or less while the emergency continues;
  15. Noise Sensitive Zones.
    - a. Creating or causing the creation of any sound within any noise sensitive zone so as to disrupt the activities normally conducted within the zone; provided, that conspicuous signs are displayed indicating the presence of the zone, or
    - b. Creating or causing the creation of any sound within any noise sensitive zone containing as hospital, nursing home, or similar activity, so as to interfere with the functions of such activity, or disturb or annoy the patients in the activity; provided, that conspicuous signs are displayed indicating the presence of the zone;
  16. Hawkers, Peddlers. The shouting and crying of peddlers, hawkers and vendors which create a noise disturbance across a residential property boundary, or within a noise sensitive zone;
  17. Domestic Power Tools. Operating or permitting the operation of any mechanically powered saw, drill, sander, grinder, lawn or garden tool, snowblower, or similar device used outdoors in residential areas between the hours of eleven p.m. and seven a.m. the following day so as to cause a noise disturbance across a residential real property boundary;
  18. Blowers, Power Fans. The operation of any noise-creating blower or power fan unless the noise from such blower or fan is muffled sufficiently to deaden such noise and not cause a noise disturbance across a real property boundary or within a noise sensitive zone;
  19. Mechanical Equipment. The use or operation of any air-conditioning, refrigerator, heat pump, fan, swimming pool equipment, or other mechanical equipment existing or hereafter installed, regardless of location, in such a manner as to disturb the peace, quiet, and comfort of adjacent property owners or occupants. Any

noise from such source exceeding sixty (60) dB(A) when measured at any point at or beyond the real property boundary shall be deemed to be prima facie evidence of a violation of this provision;

20. Model Aircraft. The using, running, operating or flying or the permitting to be used, run, operated or flown of any model aircraft or similar contrivance now known or hereinafter invented, used or designed for flight in the air, in such a manner that there is produced loud, harsh, intense or continuous noise which disturbs the peace, quiet, comfort or repose of any person except in areas and at times designated by the superintendent of parks and recreation who is hereby authorized to designate areas and times where and when such model aircraft may be run or flown without annoyance to the persons in the vicinity;
21. Vibration. Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of an individual at or beyond the real property boundary of the source if on private property. For the purposes of this section, "vibration perception threshold" means the minimum ground or structure-borne vibrational motion necessary to cause a normal 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. (Ord. 1921 § 1 (part), 1987: prior code § 3-113(c))

8.32.080 - Maximum permissible sound levels by receiving land use.

- A. Except as otherwise provided by this chapter, on or after June 1, 1988, no person shall operate or cause to be operated on private property any source of sound in such a manner as to create a sound level which exceeds the limits set forth for the receiving land use category in Table I when measured at or within the property boundary of the receiving land use.

**Table 1. Sound Levels by Receiving Land Use**

Receiving Land Use Category	Time	Sound Level Limit dB(A)
Residential area	7:00 a.m.—11:00 p.m.	55
	11:00 p.m.—7:00 a.m.	48
Commercial area	At all times	65
Industrial area	At all times	75

- B. Correction for Character of Sound. Should the noise be of a type or character listed in Table II, one (1) or more of the following corrections as appropriate may be added to or subtracted from the maximum sound levels established in Table I of subsection A of this section, and violations of said adjusted limit shall be a violation of this section:

**Table II. Corrections for Character of Sound**

Duration or Character of Noise	Correction in dB(A)
1. Continuous noise	0
2. Noise duration of less than 10 minutes	+ 5*
3. Noise duration of less than 5 minutes	+ 10*

4. Noise duration of less than 1 minute	+ <u>15</u> *
5. Noise of impulsive character	-5
6. Noise of intermittent character	-5

\* Apply only one (1) of these corrective factors.

(Ord. 1921 § 1 (part), 1987: prior code § 3-113(d))

8.32.090 - Exemptions. The provisions of Section 8.32.080(A) and Section 8.32.080(B) shall not apply to:

A. Activities covered by the following sections:

1. Section 8.32.070(B)(6) (Nonemergency Signaling Devices),
2. Section 8.32.070(B)(7) (Emergency Signaling Devices),
3. Section 8.32.070(B)(17) (Domestic Power Tools), and
4. Section 8.32.070(B)(19) (Mechanical Equipment);

B. The unamplified human voice;

C. Interstate railway locomotives and cars;

D. Devices used in conjunction with places of religious worship. (Ord. 1921 § 1 (part), 1987: prior code § 3-113(e))

8.32.100 - Conflicting provisions setting maximum sound levels.

The maximum sound limits established in Section 8.32.080, unless otherwise excepted, are in addition to any other limitations provided in this chapter. (Ord. 1921 § 1 (part), 1987: prior code § 3-113(f))