

ment contribution to the rulemaking development process by interested parties. Interested persons may submit written data or views to the Office of Noise Abatement and Control, U.S. Environmental Protection Agency, Washington, D.C. 20460.

This regulation is promulgated under the authority of 42 U.S.C. 4917(a), 88 Stat. 1249.

Dated: October 21, 1974.

JOHN QUARLES,  
Acting Administrator.

Part 202 of title 40 shall read as follows:

**PART 202—MOTOR CARRIERS ENGAGED IN INTERSTATE COMMERCE**

<b>Subpart A—General Provisions</b>	
Sec. 202.10	Definitions.
202.11	Effective date.
202.12	Applicability.
<b>Subpart B—Interstate Motor Carrier Operations Standards</b>	
202.20	Standards for highway operations.
202.21	Standard for operation under stationary test.
202.22	Visual exhaust system inspection.
202.23	Visual tire inspection.

**AUTHORITY:** Section 18, 88 Stat. 1249, 42 U.S.C. 4917(a).

**Subpart A—General Provisions**

**§ 202.10 Definitions.**

As used in this part, all terms not defined herein shall have the meaning given them in the Act:

(a) "Act" means the Noise Control Act of 1972 (P.L. 92-574, 88 Stat. 1234).

(b) "Common carrier by motor vehicle" means any person who holds himself out to the general public to engage in the transportation by motor vehicle in interstate or foreign commerce of passengers or property or any class or classes thereof for compensation, whether over regular or irregular routes.

(c) "Contract carrier by motor vehicle" means any person who engages in transportation by motor vehicle of passengers or property in interstate or foreign commerce for compensation (other than transportation referred to in paragraph (b) of this section) under continuing contracts with one person or a limited number of persons either (1) for the furnishing of transportation services through the assignment of motor vehicles for a continuing period of time to the exclusive use of each person served or (2) for the furnishing of transportation services designed to meet the distinct need of each individual customer.

(d) "Cutout or by-pass or similar devices" means devices which vary the exhaust system gas flow so as to discharge the exhaust gas and acoustic energy to the atmosphere without passing through the entire length of the exhaust system, including all exhaust system sound attenuation components.

(e) "dB(A)" means the standard abbreviation for A-weighted sound level in decibels.

(f) "Exhaust system" means the system comprised of a combination of com-

ponents which provides for enclosed flow of exhaust gas from engine parts to the atmosphere.

(g) "Fast meter response" means that the fast dynamic response of the sound level meter shall be used. The fast dynamic response shall comply with the meter dynamic characteristics in paragraph 5.3 of the American National Standard Specification for Sound Level Meters, ANSI S1. 4-1971. This publication is available from the American National Standards Institute, Inc., 1420 Broadway, New York, New York 10018.

(h) "Gross Vehicle Weight Rating" (GVWR) means the value specified by the manufacturer as the loaded weight of a single vehicle.

(i) "Gross Combination Weight Rating" (GCWR) means the value specified by the manufacturer as the loaded weight of a combination vehicle.

(j) "Highway" means the streets, roads, and public ways in any State.

(k) "Interstate commerce" means the commerce between any place in a State and any place in another State or between places in the same State through another State, whether such commerce moves wholly by motor vehicle or partly by motor vehicle and partly by rail, express, water or air. This definition of "interstate commerce" for purposes of these regulations is the same as the definition of "interstate commerce" in section 203(a) of the Interstate Commerce Act [49 U.S.C. Section 303(a) 1].

(l) "Motor carrier" means a common carrier by motor vehicle, a contract carrier by motor vehicle, or a private carrier of property by motor vehicle as those terms are defined by paragraphs (14), (15), and (17) of section 203(a) of the Interstate Commerce Act [49 U.S.C. 303(a) 1].

(m) "Motor vehicle" means any vehicle, machine, tractor, trailer, or semi-trailer propelled or drawn by mechanical power and used upon the highways in the transportation of passengers or property, or any combination thereof, but does not include any vehicle, locomotive, or air operated exclusively on a rail or rails.

(n) "Muffler" means a device for abating the sound of escaping gases of an internal combustion engine.

(o) "Open site" means an area that is essentially free of large sound-reflecting objects, such as barriers, walls, board fences, signboards, parked vehicles, bridges, or buildings.

(p) "Private carrier of property by motor vehicle" means any person not included in terms "common carrier by motor vehicle" or "contract carrier by motor vehicle", who or which transports in interstate or foreign commerce by motor vehicle property of which such person is the owner, lessee, or bailee, when such transportation is for sale, lease, rent or bailment, or in furtherance of any commercial enterprise.

(q) "Sound level" means the quantity in decibels measured by a sound level meter satisfying the requirements of American National Standards Specification for Sound Level Meters S1.4-1971.

This publication is available from the American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018. Sound level is the frequency-weighted sound pressure level obtained with the standardized dynamic characteristic "fast" or "slow" and weighting A, B, or C; unless indicated otherwise, the A-weighting is understood.

**§ 202.11 Effective date.**

The provisions of Subpart B shall become effective October 15, 1975.

**§ 202.12 Applicability.**

(a) The provisions of Subpart B apply to all motor carriers engaged in interstate commerce.

(b) The provisions of Subpart B apply only to those motor vehicles of such motor carriers which have a gross vehicle weight rating or gross combination weight rating in excess of 10,000 pounds, and only when such motor vehicles are operating under the conditions specified in Subpart B.

(c) Except as provided in Subsections (d) and (e) of this section, the provisions of Subpart B apply to the total sound produced by such motor vehicles when operating under such conditions, including the sound produced by auxiliary equipment mounted on such motor vehicles.

(d) The provisions of Subpart B do not apply to auxiliary equipment which is normally operated only when the transporting vehicle is stationary or is moving at a speed of 5 miles per hour or less. Examples of such equipment include, but are not limited to, cranes, asphalt spreaders, ditch diggers, liquid or slurry pumps, air compressors, welders, and trash compactors.

(e) The provisions of Subpart B do not apply to warning devices, such as horns and sirens; or to emergency equipment and vehicles such as fire engines, ambulances, police vans, and rescue vans, when responding to emergency calls; or to snow plows when in operation.

**Subpart B—Interstate Motor Carrier Operations Standards**

**§ 202.20 Standards for highway operations.**

No motor carrier subject to these regulations shall operate any motor vehicle of a type to which this regulation is applicable which at any time or under any condition of highway grade, load, acceleration or deceleration generates a sound level in excess of 88dB(A) measured on an open site with fast meter response at 50 feet from the centerline of lane of travel on highways with speed limits of 35 MPH or less; or 90 dB(A) measured on an open site with fast meter response at 50 feet from the centerline of lane of travel on highways with speed limits of more than 35 MPH.

**§ 202.21 Standard for operation under stationary test.**

No motor carrier subject to these regulations shall operate any motor vehicle of a type to which this regulation is applicable which generates a sound level in

ment contribution to the rulemaking development process by interested parties. Interested persons may submit written data or views to the Office of Noise Abatement and Control, U.S. Environmental Protection Agency, Washington, D.C. 20460.

This regulation is promulgated under the authority of 42 U.S.C. 4917(a), 83 Stat. 1249.

Dated: October 21, 1974.

JOHN QUARLES,  
Acting Administrator.

Part 202 of title 40 shall read as follows:

**PART 202—MOTOR CARRIERS ENGAGED IN INTERSTATE COMMERCE**

**Subpart A—General Provisions**

Sec.

- 202.10 Definitions.
- 202.11 Effective date.
- 202.12 Applicability.

**Subpart B—Interstate Motor Carrier Operations Standards**

- 202.20 Standards for highway operations.
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**AUTHORITY:** Section 18, 83 Stat. 1249, 42 U.S.C. 4917(a).

**Subpart A—General Provisions**

**§ 202.10 Definitions.**

As used in this part, all terms not defined herein shall have the meaning given them in the Act:

(a) "Act" means the Noise Control Act of 1972 (P.L. 92-574, 83 Stat. 1234)

(b) "Common carrier by motor vehicle" means any person who holds himself out to the general public to engage in the transportation by motor vehicle in interstate or foreign commerce of passengers or property or any class or class thereof for compensation, whether regular or irregular routes.

(c) "Contract carrier by motor vehicle" means any person who engages in transportation by motor vehicle of passengers or property in interstate or foreign commerce for compensation (other than transportation referred to in paragraph (b) of this section) under continuing contracts with one person or a limited number of persons either (1) for the furnishing of transportation services through the assignment of motor vehicles for a continuing period of time to the exclusive use of each person served or (2) for the furnishing of transportation services designed to meet the distinct need of each individual customer.

(d) "Cutout or by-pass or similar devices" means devices which vary the exhaust system gas flow so as to discharge the exhaust gas and acoustic energy to the atmosphere without passing through the entire length of the exhaust system, including all exhaust system sound attenuation components.

(e) "dB(A) means the standard abbreviation for A-weighted sound level in decibels.

(f) "Exhaust system" means the system comprised of a combination of com-

ponents which provides for enclosed flow of exhaust gas from engine parts to the atmosphere.

(g) "Fast meter response" means that the fast dynamic response of the sound level meter shall be used. The fast dynamic response shall comply with the meter dynamic characteristics in paragraph 5.3 of the American National Standard Specification for Sound Level Meters, ANSI S1.4-1971. This publication is available from the American National Standards Institute, Inc., 1420 Broadway, New York, New York 10018.

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(j) "Highway" means the streets, roads, and public ways in any State.

(k) "Interstate commerce" means the commerce between any place in a State and any place in another State or between places in the same State through another State, whether such commerce moves wholly by motor vehicle or partly by motor vehicle and partly by rail, express, water or air. This definition of "interstate commerce" for purposes of these regulations is the same as the definition of "interstate commerce" in section 203(a) of the Interstate Commerce Act [49 U.S.C. Section 203(a)].

(l) "Motor carrier" means a common carrier by motor vehicle, a contract carrier by motor vehicle, or a private carrier of property by motor vehicle as those terms are defined by paragraphs (14), (15), and (17) of section 203(a) of the Interstate Commerce Act [49 U.S.C. 303 (a)].

(m) "Motor vehicle" means any vehicle, machine, tractor, trailer, or semi-trailer propelled or drawn by mechanical power and used upon the highways in the transportation of passengers or property, or any combination thereof, but does not include any vehicle, locomotive, or car operated exclusively on a rail or rails.

(n) "Muffler" means a device for abating the sound of escaping gases of an internal combustion engine.

(o) "Open site" means an area that is essentially free of large sound-reflecting objects, such as barriers, walls, board fences, signboards, parked vehicles, bridges, or buildings.

(p) "Private carrier of property by motor vehicle" means any person not included in terms "common carrier by motor vehicle" or "contract carrier by motor vehicle", who or which transports in interstate or foreign commerce by motor vehicle property of which such person is the owner, lessee, or bailee, when such transportation is for sale, lease, rent or bailment, or in furtherance of any commercial enterprise.

(q) "Sound level" means the quantity in decibels measured by a sound level meter satisfying the requirements of American National Standards Specification for Sound Level Meters S1.4-1971.

This publication is available from the American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018. Sound level is the frequency-weighted sound pressure level obtained with the standardized dynamic characteristic "fast" or "slow" and weighting A, B, or C; unless indicated otherwise, the A-weighting is understood.

**§ 202.11 Effective date.**

The provisions of Subpart B shall become effective October 15, 1975.

**§ 202.12 Applicability.**

(a) The provisions of Subpart B apply to all motor carriers engaged in interstate commerce.

(b) The provisions of Subpart B apply only to those motor vehicles of such motor carriers which have a gross vehicle weight rating or gross combination weight rating in excess of 10,000 pounds, and only when such motor vehicles are operating under the conditions specified in Subpart B.

(c) Except as provided in Subsections (d) and (e) of this section, the provisions of Subpart B apply to the total sound produced by such motor vehicles when operating under such conditions, including the sound produced by auxiliary equipment mounted on such motor vehicles.

(d) The provisions of Subpart B do not apply to auxiliary equipment which is normally operated only when the transporting vehicle is stationary or is moving at a speed of 5 miles per hour or less. Examples of such equipment include, but are not limited to, cranes, asphalt spreaders, ditch diggers, liquid or slurry pumps, air compressors, welders, and trash compactors.

(e) The provisions of Subpart B do not apply to warning devices, such as horns and sirens; or to emergency equipment and vehicles such as fire engines, ambulances, police vans and rescue vans, when responding to emergency calls; or to snow plows when in operation.

**Subpart B—Interstate Motor Carrier Operations Standards**

**§ 202.20 Standards for highway operations.**

No motor carrier subject to these regulations shall operate any motor vehicle of a type to which this regulation is applicable which at any time or under any condition of highway grade, load, acceleration or deceleration generates a sound level in excess of 86dB(A) measured on an open site with fast meter response at 50 feet from the centerline of lane of travel on highways with speed limits of 35 MPH or less; or 90 dB(A) measured on an open site with fast meter response at 50 feet from the centerline of lane of travel on highways with speed limits of more than 35 MPH.

**§ 202.21 Standard for operation under stationary test.**

No motor carrier subject to these regulations shall operate any motor vehicle of a type to which this regulation is applicable which generates a sound level in

*4/11/76 Adopted as Amended*

*- Work Sheet -*

*New Amended Ordinance to Be*

NOISE CONTROL REGULATION - CITY OF CAMBRIDGE

*Prepared.*  
*WITH FOUR AMENDMENTS OFFERED AND*  
*ADOPTED ON APRIL 11, 1972*

- I. PURPOSE
- II. DEFINITIONS
- III. GENERAL PROHIBITION OF NOISE EMISSIONS
- IV. PROHIBITION OF NOISE EMISSIONS IN DWELLING UNITS
- V. PROHIBITION OF NON-MEASURED NOISE POLLUTING ACTS
- VI. RESTRICTIONS - ZONING DISTRICTS
- VII. RESTRICTIONS - CONSTRUCTION SITES
- VIII. RESTRICTIONS - NOISE EMITTED FROM NEW MOTOR VEHICLES
- ~~IX~~ *IX = Interstate Motor Carrier Operator Standard*
- ~~IX~~. PERMITS
- X. EXEMPTIONS
- XI. PENALTIES
- XII. ENFORCEMENT
- ~~XIII~~ *XIV*
- ~~XIII~~. CONFLICT
- XIV. VARIANCES
- XV. SEVERABILITY

March 11, 1977

## I. PURPOSE

This ordinance provides standards for the control of noise pollution and prohibits those acts which most frequently create noise pollution. The general objectives of these standards are to secure the public health, comfort, convenience, and safety of, and to promote the welfare, prosperity, peace, and quiet of, the citizens of the City of Cambridge.

Be it ordained by the City Council of the City of Cambridge as follows:

## II. DEFINITIONS

Terms used in this ordinance shall be defined as follows:

**ACOUSTICAL TERMINOLOGY** Acoustical Terminology used throughout these Regulations is that most recently approved as American Standard Acoustical Terminology by the American National Standards Institute (ANSI); except as may be specified otherwise herein.

**BUSINESS USE** shall be as set forth in the Zoning Ordinance of the City of Cambridge Article IV, Section 2.

**CONSTRUCTION** shall mean any and all physical activity necessary or incidental to the erection, placement, demolition, assembling, altering, cleaning, repairing, installing, or equipping of buildings and other structures, public or private highways, roads, premises, parks, utility lines, or other property, and shall include land clearing, grading, excavating, filling and paving.

**COMMERCIAL SERVICE EQUIPMENT** shall mean all engine-or motor-powered equipment intended for infrequent service work in inhabited areas, typically requiring commercial or skilled operators (such as chain saws, log chippers, paving rollers, etc.).

**CONSTRUCTION DEVICE** shall mean any powered device or equipment, designed and intended for use in construction. Examples of "construction devices" are air compressors, bulldozers, back-hoes, trucks, shovels, derricks, or cranes.

**CONSTRUCTION SITE** shall mean that area within which a contractor confines a construction operation. This includes defined boundary lines of the project itself plus any contractor staging area outside those defined boundary lines and used expressly for the construction.

DAYTIME shall mean the period between the hours of seven ante meridian (7:00 a.m.) and six post meridian (6:00 p.m.) daily except Sunday according to the time system locally in effect.

dB is the abbreviation for decibel.

dB(A) shall mean the A-weighted sound level in decibels, as measured by a general purpose sound level meter complying with the provisions of Specifications for Sound Level Meters (Sl. 4 1971), American National Standards Institute (ANSI), properly calibrated, and operated on the "A" weighting network.

EMERGENCY WORK Work necessary to restore public or private property to a safe condition following a public calamity or work required to protect persons or property from an imminent exposure to danger. The necessity of such work shall be determined by the Building Superintendent or his deputy or by other authorized emergency or public utility personnel after consultation with the Superintendent of Buildings.

HOMEOWNER'S LIGHT RESIDENTIAL OUTDOOR EQUIPMENT shall mean all engine-or motor-powered garden or maintenance tools intended for repetitive use in residential areas, typically capable of being used by a homeowner (such as lawn mowers, garden tools, riding tractors, snow blowers, snow plows, etc.).

Hz is the abbreviation for Hertz, which means cycles per second.

IMPACT DEVICE shall mean a construction device in which or by which a hammer, meaning a moving mass of hard solid material, is mechanically by means of a working fluid or compressed air caused to repetitively impact upon and transmit kinetic energy to a tool. The tool may be included as part of the device, as in the case of a moil on a paving breaker or the drill steel or a jackhammer, or it may be a mass to which the impact device is temporarily connected as in the case of a pile and pile driver. Examples of impact devices are pile drivers, paving breakers and power impact hammers, impact wrenches, riveters and stud drivers.

INDUSTRIAL USE shall be as set forth in the Zoning Ordinance of the City of Cambridge, Article IV, Section 2.

$L_{10}$  LEVEL shall mean the A-weighted sound level exceeded 10% of the time.

NOISE POLLUTION means the presence of that amount of acoustic energy for that period of time necessary:

- a) to cause temporary or permanent hearing loss in persons exposed;
- b) to otherwise be injurious, or tend to be, on the basis of current information, injurious, to the public health or welfare;
- c) to cause a nuisance:
- d) to interfere with the comfortable enjoyment of life and property or the conduct of business; or
- e) to exceed standards or restrictions established herein or pursuant to the granting of any permit by the Superintendent of Buildings.

NON-MEASURED NOISE POLLUTING ACTS - Uses and activities that create or cause to be created loud and unnecessary noises which, by virtue of the nature, duration or time of occurrence, are not readily subject to measurement by official testing devices.

PAVING BREAKER shall mean any hydraulically or pneumatically-powered impact device intended to cut or trench pavement, subbase macadam, gravel, concrete or hard ground.

PERSON means an individual, partnership, association, firm, syndicate, company, trust, corporation, department, bureau or agency, or any other entity recognized by law as the subject of rights and duties.

PILE DRIVER shall mean an impact device designed or used for the driving of piles, columns and other supports into soil or other material by means of impact, vibrations, pressure or other means.

RESIDENTIAL USE shall be as set forth in the Zoning Ordinance of the City of Cambridge, Article IV, Section 2.

SOUND PRESSURE LEVEL (SPL) shall be numerically equal to 20 times the logarithm (to the base 10) of the sound pressure to the reference sound pressure (the reference sound pressure shall equal 20 micropascals.) Unless otherwise stated, the level is understood to be that of a root mean-square pressure.

ZONING DISTRICTS shall mean the zoning districts and land uses therein as established by the Zoning Ordinance of the City of Cambridge.

### III. GENERAL PROHIBITIONS OF NOISE EMISSIONS

- A. No person or persons owning, leasing, or controlling the operation of any source or sources of noise shall willfully, negligently, or through failure to provide necessary equipment or facilities or to take necessary precautions, permit the establishment or continuation of a condition of noise pollution.

### IV. PROHIBITION OF NOISE EMISSIONS WITHIN DWELLING UNITS

- A. It shall be unlawful for any person or persons owning, leasing, or controlling the operation of any source or sources of noise to make continue or cause to be made or continued any loud, unnecessary or unusual noise within a dwelling unit which either annoys, disturbs, injures or endangers the comfort, repose, health, peace or safety of others living in adjacent dwelling units or otherwise living in close proximity to the source of noise.

### V. PROHIBITION OF NON-MEASURED NOISE POLLUTING ACTS

- A. The following acts, among others, are declared to be loud, disturbing and unnecessary noises in violation of this ordinance, but said enumeration shall not be deemed to be exclusive, namely:

- 1) Horns, Signaling Devices, etc. The sounding of any horn or signalling device on any automobile, motorcycle, street car or other vehicle on any street or public place of the city, except as a danger warning; the creation by means of any such signaling device of any unreasonably loud or harsh sound; and the sounding of any such device for an unnecessary and unreasonable period of time. The use of any signalling device except one operated by hand or electricity; the use of any horn, whistle or other device operated by engine exhaust; and the use of any such signaling device when traffic is for any reason held up.

*Q. Elliott  
Amendment  
Add loudspeaker  
in public places  
Sydney, Waukegan  
Waukegan, Ill  
City of  
Lawrence*

- 2) Radios, Phonographs, etc. The using, operating, or permitting to be played, used or operated any radio receiving set, musical instrument, ~~phonograph~~ or other machine or device for the producing or reproducing of sound in such manner as to disturb the peace, quiet and comfort of the neighboring inhabitants or at any time with louder volume than is necessary for convenient hearing for the person or persons who are in the room, vehicle or chamber in which such machine or device is operated and who are voluntary listeners thereto. The operation of any such set, instrument, phonograph, machine or device between the hours of eleven o'clock p.m. and seven o'clock a.m. on weeknights and twelve o'clock p.m. and seven o'clock a.m. on weekend nights in such a manner as to be plainly audible at a distance of fifty (50) feet approximately fifteen (15) meters from the building, structure, vehicle, or dwelling unit in which it is located shall be prima facie evidence of a violation of this section.
- 3) Yelling, Shouting, etc. Yelling, shouting, hooting, whistling, or singing on the public streets, particularly between the hours of 11 p.m. and 7 a.m. or at any time or place so as to annoy or disturb the quiet, comfort, or repose of persons in any office, or in any dwelling, hotel or other type of residence, or of any persons in the vicinity.
- 4) Animals, Birds, etc. The keeping of any animal or bird which by causing frequent or long continued noise shall disturb the comfort or repose of any persons in the vicinity.
- 5) Steam Whistles. The blowing of any locomotive steam whistle or steam whistle attached to any stationary boiler except to give notice of the time to begin or stop work or as a warning of fire or danger, or upon request of proper city authorities.
- 6) Exhausts. The discharge into the open air of the exhaust of any steam engine, stationary internal combustion engine, motor boat, or motor vehicle except through a muffler or other device which will effectively prevent loud or explosive noises therefrom.
- 7) Defect in Vehicle or Load. The use of any automobile, motorcycle, or vehicle so out of repair, so loaded or in such manner as to create loud and unnecessary grating, grinding, rattling or other noise.
- 8) Loading, Unloading, Opening Boxes. The creation of a loud and excessive noise in connection with loading or unloading any vehicle or the opening and destruction of bales, crates, and containers.

- 9) Drums. The use of any drum or other instrument or device for the purpose of attracting attention by creation of noise to any performance, show, sale, or exhibition.
- 10) Hawkers, Peddlers. The shouting and crying of peddlers, hawkers and vendors which disturbs the peace and quiet of the neighborhood.

VI NOISE RESTRICTIONS ACCORDING TO ZONING DISTRICTS

A. This Regulation shall apply to the use or occupancy of any lot or structure thereon and to the noise produced thereby, but shall not apply to the following:

- 1) To the intermittent or occasional use, during the daytime, of light homeowner's residential outdoor equipment or commercial service equipment provided said equipment and its use complies with other provisions of these Regulations;
- 2) To construction activities and the associated use of construction devices nor to the noise produced thereby, provided such activities, and such equipment and its use, comply with other provisions of these Regulations;
- 3) To the operation of any motor vehicle on any public way, nor to the noise produced thereby.

B. Noise in Residential Zoning Districts or Affecting Residential Property.

No person shall create or cause to be emitted from or by any source subject to Regulation VI any noise which causes or results in a [maximum] noise level, measured at any lot line of any lot located in any Residential Zoning District or in residential use elsewhere in conformance with the Cambridge Zoning Ordinance, in excess of any level of the "Residential District Noise Standard", Regulation VI. E., provided that if said lot is located in any Industrial District, the [maximum] noise level measured at the lot line shall not exceed any level of the "Residential-Industrial Noise Standard", Regulation VI. E. Noise emitted from construction sites shall be excepted from this regulation.

*Word MAXIMUM STRUCK out where it APPEARS in B-L-D-*

C. Noise in Business, Office Zoning Districts

No person shall create or cause to be emitted from or by any source subject to Regulation V any noise which causes or results in a [maximum] noise level, measured at any lot line of any lot in any Business Zoning District other than a lot in residential use in conformance with the

*Approved by 2 - failed  
By E. Ackerman*

Cambridge Zoning Ordinance, in excess of any level of the "Business District Noise Standard", Regulation VI. E. Noise emitted from construction sites shall be excepted from this regulation.

D. Noise in Industrial Zoning Districts

No person shall create or cause to be emitted from or by any source subject to Regulation VI, any noise which causes or results in a [maximum] noise level, measured at any lot line of any lot in recreational or business use in any Industrial Zoning District in conformance with the Cambridge Zoning Ordinance, in excess of any level of "Industrial District Noise Standard", Regulation VI. E. Noise emitted from construction sites shall be excepted from this regulation.

E. Zoning District Noise Standards

Noise standards referred to in these Regulations for the several zoning districts of the City of Cambridge, as defined in and established pursuant to the Cambridge Zoning Ordinance are as established by the following Table.

TABLE OF ZONING DISTRICT NOISE STANDARDS

Octave Band Center Frequency of Measurement (Hz)	Maximum Allowable Octave Band Sound Pressure Levels					
	Residential		Residential in Industrial		Office Business	Industry
	Daytime	All Other Times	Daytime	All Other Times	Anytime	Anytime
31.5	76	68	79	72	79	83
63	75	67	78	71	78	82
125	69	61	73	65	73	77
250	62	52	68	57	68	73
500	56	46	62	51	62	67
1000	50	40	56	45	56	61
2000	45	33	51	39	51	57
4000	40	28	47	34	47	53
8000	38	26	44	32	44	50
Single- Number-Equivalent (dB(A))	60	50	65	55	65	70

VII RESTRICTIONS ON NOISE EMITTED FROM CONSTRUCTION SITES

A. Except as provided for in Regulation VII C. and VII D., it shall be unlawful for any person to operate any construction device or devices on any construction site if the operation of such device or devices emits noise, measured at the lot line of the affected property, in excess of the values shown below:

<u>Lot Use of Affected Property</u>	<u>L<sub>10</sub> Level</u>	<u>Max. Noise Level</u>
Residential	75 dB(A)	86 dB(A)
Business or Office	80 dB(A)	----
Industrial	85 dB(A)	----

The same level shall apply to a public way as applies to an industrial use. Measurements should not be taken closer than 50 feet or approximately fifteen (15) meters from the nearest active construction device on the construction site. The maximum noise level shall be measured on the sound level meter at slow response.

B. The L<sub>10</sub> level shall be determined in the following manner:

- 1) Every ten seconds, on the mark, the A-weighted noise level on the sound level meter with slow response is recorded until 100 observations have been made. If, during any of these observations, a measurement is substantially affected by any source outside the construction site (such as aircraft overflight), measurements made during these periods will not be considered. However the observation period shall be extended until 100 valid measurements are obtained. The L<sub>10</sub> level will be that level that is equal to the tenth highest level recorded.
- 2) If in the estimation of the person taking the measurements, outside noise sources contribute significantly to the noise level, the above procedure shall be repeated (with the same outside noise source contributions) when construction is inactive, in order to determine the existing background L<sub>10</sub> level. The L<sub>10</sub> level during construction must exceed the background L<sub>10</sub> level by 5 dB(A) to be considered a violation of Regulation VII A.

- C. Except as provided for in Regulation VIID, it shall be unlawful to operate a construction device at any street excavation, grading or repair, utility street work installation or repair, which produces a noise level exceeding 86 dB(A) at a distance of 50 feet or approximately fifteen (15) meters from the device.

The provisions of Regulation VIIA, shall not apply to any construction site covered by Regulation VII C. The provisions of Regulation VII C. will not be applicable to any construction device used in emergency service work that is necessary to return utility service to an area provided that within 24 hours such device is brought into compliance with Regulation VII C. or is not reused within the City until it does comply.

- D. The provisions of Regulation VIIA. and VII C. shall not be applicable to impact devices.

VIII. RESTRICTIONS ON NOISE EMITTED FROM NEW MOTOR VEHICLES

No person shall sell or lease a new motor vehicle that produces a maximum noise level, in dB(A), exceeding the following limits (measured at a distance of fifty (50) feet approximately fifteen (15) meters from the center line of travel.)

Date of Manufacture of Vehicle	Light Motor Vehicle	Heavy Motor Vehicle	Motorcycle
After date or ordination	80	84	84
After January 1, 1980	75	75	75

*Recommendation by [Signature]*

*Insert New IX section here. Insert Integrate from License Operation Standard P#20120*

IX. PERMITS - GENERAL

- A. A permit shall constitute permission to use or to allow the use of a device or to engage in an activity to which reference has been made in these Regulations or in the Ordinances of the City of Cambridge.
- B. All applications for permits shall be made to the Superintendent of Buildings in such form and detail as he shall prescribe. Such application shall not relieve any person from otherwise complying with the provisions of these Regulations or any other law or ordinance.
- C. Such permit shall include such provisions and conditions as the Commissioner may deem necessary to protect the public health, welfare and comfort.

- D. Any permit required by these Regulations shall be displayed to any police officer or employee of the Building Department upon request.
- E. Any permit issued by the Superintendent of Buildings under the provisions of these Regulations may be revoked for violation of any of the terms and conditions of such permit.

XI EXEMPTIONS

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

- 1) Noises of safety signals, warning devices, and emergency pressure relief valves.
- 2) Noises resulting from any authorized emergency vehicle, when responding to an emergency call or acting in time of emergency.
- 3) Any other noise resulting from activities of a temporary duration permitted by law and for which a license or permit therefore has been granted by the City in accordance with Section ~~IX~~ of this Ordinance
- 4) 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 regulations of this ordinance. 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 this ordinance.
- 5) Noises resulting from emergency work as defined in DEFINITIONS SECTION.

XII PENALTIES

A. Any person who violates any provision of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined an amount not exceeding \$100, or by imprisonment for not more than 5 days, or by both said fine and said imprisonment.

*B. Every day that the offense continues shall be considered a separate violation*

*Amendment #1  
By C. DeCarmon*

~~XII~~ ENFORCEMENT

- A. The Chief of Police of the City of Cambridge shall be the officer charged with the enforcement of this ordinance. He shall, at any time necessary, call on the Superintendent of Buildings or his deputy to provide personnel to perform such tests as the Chief of Police deems necessary to determine violations of this ordinance.

~~XIII~~ CONFLICT WITH OTHER REGULATIONS

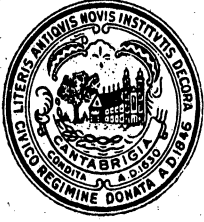
- A. The noise regulations shall not relieve any person from complying with other laws, statutes, codes, regulations, or ordinances of the Commonwealth or of the City of Cambridge.

~~XIV~~ VARIANCES

- A. The Superintendent of Buildings may grant variances after public hearing or may reject applications on review without a hearing. Variances thus granted may be effective for no longer than one year.

~~XV~~ SEVERABILITY

- A. Each of these Regulations shall be constructed as separate to the end that if any Regulation or section, sentence, clause or phrase thereof shall be held invalid for any reason, the remainder of these Regulations shall continue in full force.



# City of Cambridge

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In the Year One Thousand, Nine Hundred Seventy-Seven

## AN ORDINANCE

In amendment to an ordinance formerly entitled: "The General Ordinances of the City of Cambridge" as revised in 1972 and now designated as "The Code of the City of Cambridge".

*Be it ordained by the City Council of the City of Cambridge as follows:*

Chapter Thirteen entitled: "Offenses" Article IV entitled: "Offenses Against Public Peace" is hereby amended by striking out the present sections 13-10 and 13-11 and substituting in place thereof a new section 13-10 entitled: "Regulations for the Control of Noise".

# City of Cambridge

## NOISE CONTROL REGULATION - CITY OF CAMBRIDGE

- I. Purpose
- II. Definitions
- III. General Prohibition of Noise Emissions
- IV. Prohibition of Noise Emissions in Dwelling Units
- V. Prohibition of Non-Measured Noise Polluting Acts
- VI. Restrictions - Zoning Districts
- VII. Restrictions - Construction Sites
- VIII. Restrictions - Noise Emitted from New Motor Vehicles
- IX. Interstate Motor Carrier Operation Standard
- X. Permits
- XI. Exemptions
- XII. Penalties
- XIII. Enforcement
- XIV. Conflict
- XV. Variances
- XVI. Severability

# City of Cambridge

## 13-10. Regulations for the Control of Noise.

### I. PURPOSE.

This ordinance provides standards for the control of noise pollution and prohibits those acts which most frequently create noise pollution. The general objectives of these standards are to secure the public health, comfort, convenience, and safety of, and to promote the welfare, prosperity, peace and quiet of, the citizens of the City of Cambridge.

Be it ordained by the City Council of the City of Cambridge as follows:-

### II. DEFINITIONS.

Terms used in this ordinance shall be defined as follows:-

- ACOUSTICAL TERMINOLOGY - Acoustical Terminology used throughout these regulations is that most recently approved as American Standard Acoustical Terminology by the American National Standards Institute (ANSI); except as may be specified otherwise herein.
- BUSINESS USE - shall be as set forth in the Zoning Ordinance of the City of Cambridge Article IV, Section 2.
- CONSTRUCTION - shall mean any and all physical activity necessary or incidental to the erection, placement, demolition, assembling, altering, cleaning, repairing, installing, or equipping of buildings and other structures, public or private highways, roads, premises, parks, utility lines, or other property, and shall include land clearing, grading, excavating, filling and paving.
- COMMERCIAL SERVICE EQUIPMENT - shall mean all engine-or motor-powered equipment intended for infrequent service work in inhabited areas, typically requiring commercial or skilled operators (such as chain saws, log chippers, paving rollers, etc.).
- CONSTRUCTIVE DEVICE - shall mean any powered device or equipment, designed and intended for use in construction. Examples of "construction devices" are air compressors, bulldozers, backhoes, trucks, shovels, derricks, or cranes.
- CONSTRUCTION SITE - shall mean that area within which a contractor confines a construction operation. This includes defined boundary lines of the project itself plus any contractor staging area outside those defined boundary lines and used expressly for the construction.
- DAYTIME - shall mean the period between the hours of seven ante meridian (7:00 A. M. ) and six post meridian (6:00 P. M.) daily except Sunday according to the time system locally in effect.

# City of Cambridge

- dB is the abbreviation for decibel.
- dB(A) shall mean the A-weighted sound level in decibels, as measured by a general purpose sound level meter complying with the provisions of Specifications for Sound Level Meters (Sl. 4 1971), American National Standards Institute (ANSI), properly calibrated, and operated on the "A" weighting network.
- EMERGENCY WORK - work necessary to restore public or private property to a safe condition following a public calamity or work required to protect persons or property from an imminent exposure to danger. The necessity of such work shall be determined by the Building Superintendent or his deputy or by other authorized emergency or public utility personnel after consultation with the Superintendent of Buildings.
- HOMEOWNER'S LIGHT RESIDENTIAL OUTDOOR EQUIPMENT - shall mean all engine- or motor-powered garden or maintenance tools intended for repetitive use in residential areas, typically capable of being used by a homeowner (such as lawn mowers, garden tools, riding tractors, snow blowers, snow plows, etc.).
- Hz is the abbreviation for Hertz, which means cycles per second.
- IMPACT DEVICE - shall mean a construction device in which or by which a hammer, meaning a moving mass of hard solid material, is mechanically by means of a working fluid or compressed air caused to repetitively impact upon and transmit kinetic energy to a tool. The tool may be included as part of the device, as in the case of a moil on a paving breaker or the drill steel or a jackhammer, or it may be a mass to which the impact device is temporarily connected as in the case of a pile and pile driver. Examples of impact devices are pile drivers, paving breakers and power impact hammers, impact wrenches, riverters and stud drivers.
- INDUSTRIAL USE - shall be as set forth in the Zoning Ordinance of the City of Cambridge, Article IV, Section 2.

# City of Cambridge

$L_{10}$  LEVEL

shall mean the A-weighted sound level exceeded 10% of the time.

NOISE POLLUTION -

means the presence of that amount of acoustic energy for that period of time necessary:-

- a) to cause temporary or permanent hearing loss in persons exposed;
- b) to otherwise be injurious, or tend to be, on the basis of current information, injurious, to the public health or welfare;
- c) to cause a nuisance;
- d) to interfere with the comfortable enjoyment of life and property or the conduct of business; or
- e) to exceed standards or restrictions established herein or pursuant to the granting of any permit by the Superintendent of Buildings.

NON-MEASURED NOISE POLLUTION ACTS -

Uses and activities that create or cause to be created loud and unnecessary noises which, by virtue of the nature, duration or time of occurrence, are not readily subject to measurement by official testing devices.

PAVING BREAKER -

shall mean any hydraulically or pneumatically powered impact device intended to cut or trench pavement, subbase macadam, gravel, concrete or hard ground.

PERSON -

means an individual, partnership, association, firm, syndicate, company, trust, corporation, department, bureau or agency, or any other entity recognized by law as the subject of rights and duties.

PILE DRIVER -

shall mean an impact device designed or used for the driving of piles, columns and other supports into soil or other material by means of impact, vibrations, pressure or other means.

# City of Cambridge

RESIDENTIAL USE -

shall be as set forth in the Zoning Ordinance of the City of Cambridge, Article IV, Section 2.

SOUND PRESSURE LEVEL (SPL) -

shall be numerically equal to twenty times the logarithm (to the base ten) of the sound pressure to the reference sound pressure (the reference sound pressure shall equal twenty micropascals.) Unless otherwise stated, the level is understood to be that of a root mean-square pressure.

ZONING DISTRICTS -

shall mean the zoning districts and land uses therein as established by the Zoning Ordinance of the City of Cambridge.

### III. GENERAL PROHIBITIONS OF NOISE EMISSIONS.

- A. No person or persons owning, leasing, or controlling the operation of any source or sources of noise shall willfully, negligently, or through failure to provide necessary equipment or facilities or to take necessary precautions, permit the establishment or continuation of a condition of noise pollution.

### IV. PROHIBITION OF NOISE EMISSIONS WITHIN DWELLING UNITS.

- A. It shall be unlawful for any person or persons owning, leasing, or controlling the operation of any source or sources of noise to make continue or cause to be made or continued any loud, unnecessary or unusual noise within a dwelling unit which either annoys, disturbs, injures or endangers the comfort, repose, health, peace or safety of other living in adjacent dwelling units or otherwise living in close proximity to the source of noise.

### V. PROHIBITION OF NON-MEASURED NOISE POLLUTING ACTS.

- A. The following acts, among others, are declared to be loud, disturbing and unnecessary noises in violation of this ordinance, but said enumeration shall not be deemed to be exclusive namely:

- 1) Horns, Signaling Devices, etc. The sounding of any horn or signalling device on any automobile, motorcycle, street car or other vehicle on any street or public place of the city, except as a danger warning; the creation by means of any such signalling device of any unreasonably loud or harsh sound; and the sounding of any such device for an unnecessary and unreasonable period of time. The use of any signalling device except one operated by hand or electricity; the use of any horn, whistle or other device operated by engine exhaust; and the use of any such signalling device when traffic is for any reason held up.

## City of Cambridge

- 2) Radios, Phonographs, etc. The using, operating, or permitting to be played, used or operated any radio receiving set, musical instrument, phonograph, loudspeaker or public address systems, unless used by the City of Cambridge or other machine or device for the producing or reproducing of sound in such manner as to disturb the peace, quiet and comfort of the neighboring inhabitants or at any time with louder volume than is necessary for convenient hearing for the person or persons who are in the room, vehicle or chamber in which such machine or device is operated and who are voluntary listeners thereto. The operation of any such set, instrument, phonograph, machine or device between the hours of eleven o'clock P. M. and seven o'clock A. M. on weeknights and twelve o'clock P. M. and seven o'clock A. M. on weekend nights in such a manner as to be plainly audible at a distance of fifty (50) feet approximately fifteen (15) meters from the building, structure, vehicle, or dwelling unit in which it is located shall be prima facie evidence of a violation of this section.
- 3) Yelling, Shouting, etc. Yelling, shouting, hooting, whistling, or singing on the public streets, particularly between the hours of 11:00 P. M. and 7:00 A. M. or at any time or place so as to annoy or disturb the quiet, comfort, or repose of persons in any office, or in any dwelling, hotel or other type of residence, or of any persons in the vicinity.
- 4) Animals, Birds, etc. The keeping of any animal or bird which by causing frequent or long continued noise shall disturb the comfort or repose of any persons in the vicinity.
- 5) Steam Whistles. The blowing of any locomotive steam whistle of steam whistle attached to any stationary boiler except to give notice of the time to begin or stop work or as a warning of fire or danger, or upon request of proper city authorities.
- 6) Exhausts. The discharge into the open air of the exhaust of any steam engine, stationary internal combustion engine, motor boat, or motor vehicle except through a muffler or other device which will effectively prevent loud or explosive noises therefrom.

# City of Cambridge

- 7) Defect in Vehicle or Load. The use of any automobile, motorcycle, or vehicle so out of repair, so loaded or in such manner as to create loud and unnecessary grating, grinding, rattling or other noise.
- 8) Loading, Unloading, Opening Boxes. The creation of a loud and excessive noise in connection with loading or unloading any vehicle or the opening and destruction of bales, crates, and containers.
- 9) Drums. The use of any drum or other instrument or device for the purpose of attracting attention by creation of noise to any performance, show, sale, or exhibition.
- 10) Hawkers, Peddlers. The shouting and crying of peddlers, hawkers and vendors which disturbs the peace and quiet of the neighborhood.

## VI. NOISE RESTRICTIONS ACCORDING TO ZONING DISTRICTS.

A. This regulation shall apply to the use or occupancy of any lot or structure thereon and to the noise produced thereby, but shall not apply to the following:-

- 1) To the intermittent or occasional use, during the daytime, of light homeowner's residential outdoor equipment or commercial service equipment provided said equipment and its use complies with other provisions of these regulations;
- 2) To construction activities and the associated use of construction devices nor to the noise produced thereby, provided such activities, and such equipment and its use, comply with other provisions of these regulations;
- 3) To the operation of any motor vehicle on any public way, nor to the noise produced thereby.

## B. NOISE IN RESIDENTIAL ZONING DISTRICTS OR AFFECTING RESIDENTIAL PROPERTY.

No person shall create or cause to be emitted from or by any source subject to regulation VI any noise which causes or results in a noise level, measured at any lot line of any lot located in any Residential Zoning District or in residential use elsewhere in conformance with the Cambridge Zoning Ordinance, in excess of any level of the "Residential District Noise Standard", Regulation VI. E., provided that if said lot is located in any Industrial District, the noise level measured at the lot line shall not exceed any level of the "Residential-Industrial Noise Standard", Regulation VI. E. Noise emitted from construction sites shall be excepted from this regulation.

# City of Cambridge

**C. NOISE IN BUSINESS, OFFICE ZONING DISTRICTS.**

No person shall create or cause to be emitted from or by any source subject to Regulation V any noise which causes or results in a noise level, measured at any lot line of any lot in any Business Zoning District other than a lot in residential use in conformance with the Cambridge Zoning Ordinance, in excess of any level of the "Business District Noise Standard", Regulation VI. E. Noise emitted from construction sites shall be excepted from this regulation.

**D. NOISE IN INDUSTRIAL ZONING DISTRICTS.**

No person shall create or cause to be emitted from or by any source subject to Regulation VI, any noise which causes or results in a noise level, measured at any lot line of any lot in recreational or business use in any Industrial Zoning District in conformance with the Cambridge Zoning Ordinance, in excess of any level of "Industrial District Noise Standard", Regulation VI. E. Noise emitted from construction sites shall be excepted from this regulation.

**E. ZONING DISTRICT NOISE STANDARDS.**

Noise standards referred to in these Regulations for the several zoning districts of the City of Cambridge, as defined in and established pursuant to the Cambridge Zoning Ordinance are as established by the following Table.

TABLE OF ZONING DISTRICT NOISE STANDARDS

Maximum Allowable Octave Band Sound Pressure Levels

Octave Band Center Frequency of Measurement (Hz)	Residential		Residential in Industrial		Office Business	Industry
	Daytime	All other times	Daytime	All other times	Anytime	Anytime
31.5	76	68	79	72	79	83
63	75	67	78	71	78	82
125	69	61	73	65	73	77
250	62	52	68	57	68	73
500	56	46	62	51	62	67
1000	50	40	56	45	56	61
2000	45	33	51	39	51	57
4000	40	28	47	34	47	53
8000	38	26	44	32	44	50
Single Number- Equivalent (dB(A))	60	50	65	55	65	70

# City of Cambridge

## VII. RESTRICTIONS ON NOISE EMITTED FROM CONSTRUCTION SITES.

- A. Except as provided for in Regulation VII. C. and VII. D., it shall be unlawful for any person to operate any construction device or devices on any construction site if the operation of such device or devices emits noise, measured at the lot line of the affected property, in excess of the values shown below:-

<u>LOT USE OF AFFECTED PROPERTY</u>	<u>L<sub>10</sub> LEVEL</u>	<u>MAX. NOISE LEVEL</u>
Residential	75 dB(A)	86 dB(A)
Business or Office	80 dB(A)	_____
Industrial	85 dB(A)	_____

The same level shall apply to a public way as applies to an industrial use. Measurements should not be taken closer than fifty feet or approximately fifteen (15) meters from the nearest active construction device on the construction site. The maximum noise level shall be measured on the sound level meter at slow response.

- B. THE L<sub>10</sub> LEVEL SHALL BE DETERMINED IN THE FOLLOWING MANNER:-

- 1) Every ten seconds, on the mark, the A-weighted noise level on the sound level meter with slow response is recorded until 100 observations have been made. If, during any of these observations, a measurement is substantially affected by any source outside the construction site (such as aircraft overflight), measurements made during these periods will not be considered. However the observation period shall be extended until 100 valid measurements are obtained. The L<sub>10</sub> level will be that level that is equal to the tenth highest level recorded.
- 2) If in the estimation of the person taking the measurements, outside noise sources contribute significantly to the noise level, the above procedure shall be repeated (with the same outside noise source contributions) when construction is inactive, in order to determine the existing background L<sub>10</sub> level. The L<sub>10</sub> level during construction must exceed the background L<sub>10</sub> level by 5 dB(A) to be considered a violation of Regulation VII. A.

# City of Cambridge

C. Except as provided for in Regulation VII. D., it shall be unlawful to operate a construction device at any street excavation, grading or repair, utility street work installation or repair, which produces a noise level exceeding 86 dB(A) at a distance of fifty (50) feet or approximately fifteen (15) meters from the device.

The provisions of Regulation VII. A., shall not apply to any construction site covered by Regulation VII. C. The provisions of Regulation VII. C. will not be applicable to any construction device used in emergency service work that is necessary to return utility service to an area provided that within twenty-four (24) hours such device is brought into compliance with Regulation VII. C. or is not reused within the City until it does comply.

D. The provisions of Regulation VII. A. and VII. C. shall not be applicable to impact devices.

## VIII. RESTRICTIONS ON NOISE EMITTED FROM NEW MOTOR VEHICLES.

No person shall sell or lease a new motor vehicle that produces a maximum noise level, in dB(A), exceeding the following limits (measured at a distance of fifty (50) feet approximately fifteen (15) meters from the center line of travel.)

Date of Manufacture of vehicle	Light Motor vehicle	Heavy Motor vehicle	Motorcycle
after date or ordina- tion	80	84	84
after January 1, 1980	75	75	75

## IX. INTERSTATE MOTOR CARRIER OPERATION STANDARDS.

No motor carrier subject to these regulations shall operate any motor vehicle of a type to which this regulation is applicable which at any time or under any condition of highway grade, load, acceleration or deceleration generates a sound level in excess of 88dB(A) measured on an open site with fast meter response at fifty (50) feet from the centerline of lane of travel on highways with speed limits of thirty-three (33) MPH or less; or ninety (90) dB(A) measured on an open site with fast meter response at fifty (50) feet from the centerline of lane of travel on highways with speed limits of more than thirty-five (35) MPH.

# City of Cambridge

## X. PERMITS - GENERAL.

- A. A permit shall constitute permission to use or to allow the use of a device or to engage in an activity to which reference has been made in these Regulations or in the Ordinances of the City of Cambridge.
- B. All applications for permits shall be made to the Superintendent of Buildings in such form and detail as he shall prescribe. Such application shall not relieve any person from otherwise complying with the provisions of these Regulations or any other law or ordinance.
- C. Such permit shall include such provisions and conditions as the Commissioner may deem necessary to protect the public health, welfare and comfort.
- D. Any permit required by these Regulations shall be displayed to any police officer or employee of the Building Department upon request.
- E. Any permit issued by the Superintendent of Buildings under the provisions of these Regulations may be revoked for violation of any of the terms and conditions of such permit.

## XI. EXEMPTIONS.

- A. The following uses and activities shall be exempt from noise level regulations:-
  - 1) Noises of safety signals, warning devices, and emergency pressure relief valves.
  - 2) Noises resulting from any authorized emergency vehicle, when responding to an emergency call or acting in time of emergency.
  - 3) Any other noise resulting from activities of a temporary duration permitted by law and for which a license or permit therefore has been granted by the City in accordance with Section X of this Ordinance.
  - 4) 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 regulations of this ordinance. 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 this ordinance.

# City of Cambridge

- 5) Noises resulting from emergency work as defined in DEFINITIONS SECTION.

## XII. PENALTIES.

- A. Any person who violates any provision of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined an amount not exceeding \$100.00, or by imprisonment for not more than five (5) days, or by both said fine and said imprisonment.
- B. Every day that the offense continues shall be considered a separate violation.

## XIII. ENFORCEMENT.

- A. The Chief of Police of the City of Cambridge shall be the officer charged with the enforcement of this ordinance. He shall, at any time necessary, call on the Superintendent of Buildings or his deputy to provide personnel to perform such tests as the Chief of Police deems necessary to determine violations of this ordinance.

## XIV. CONFLICT WITH OTHER REGULATIONS.

- A. The noise regulations shall not relieve any person from complying with other laws, statutes, codes, regulations, or ordinances of the Commonwealth or of the City of Cambridge.

## XV. VARIANCES.

- A. The Superintendent of Buildings may grant variances after public hearing or may reject applications on review without a hearing. Variances thus granted may be effective for no longer than one year.

## XVI. SEVERABILITY.

- A. Each of these Regulations shall be constructed as separate to the end that if any Regulation or section, sentence, clause or phrase thereof shall be held invalid for any reason, the remainder of these Regulations shall continue in full force.

In City Council April 11, 1977.

Passed to be ordained as amended by a yea and nay vote:- Yeas 7; Nays 0; Absent 2.

James L. Sullivan, City Manager.

ATTEST:- Paul E. Healy, City Clerk.



# City of Cambridge

In the Year One Thousand, Nine Hundred Seventy-Seven

## AN ORDINANCE

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ATTEST:- Paul E. Healy, City Clerk.

NOTE:- Pursuant to the provisions of General Laws, Chapter 43, Section 23, Tercentenary Edition, being a part of the City Charter, the ordinance as aforesaid, which exceeds in length eight octavo pages of ordinary book print may be examined at the Office of the City Clerk in the form of a printed pamphlet during office hours on or after March 14, 1977.

By order of the City Council,

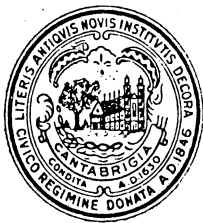
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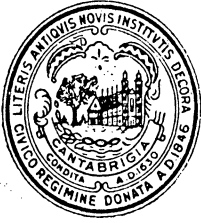
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ATTEST:- Paul E. Healy, City Clerk.

# Noise Control Ordinance City of Cambridge

MASSACHUSETTS

In City Council April 1978

*Passing To Be Ordained as amended -*

	YEA	NAY	ABSENT	PRESENT
Mrs. Ackermann	✓			
Mr. Clem	✓			
Mr. Clinton	✓			
Mr. Danehy			✓	
Mr. Duehay	✓			
Mrs. Graham	✓			
Mr. Russell	✓			
Mr. Sullivan	✓			
Mayor Vellucci			✓	

7 0 2

# City of Cambridge

MASSACHUSETTS

In City Council April 11 1979

*4*  
*E. Clinton Page 5 #2 Amendment Carried*

	YEA	NAY	ABSENT	PRESENT
Mrs. Ackermann	✓			
Mr. Clem	✓			
Mr. Clinton	✓			
Mr. Danehy			✓	
Mr. Duehay	✓			
Mrs. Graham	✓			
Mr. Russell	✓			
Mr. Sullivan	✓			
Mayor Vellucci			✓	

*"Unless used by City or Council"*

# City of Cambridge

3

MASSACHUSETTS

In City Council April 11 1977

3 Duehay  
re Feeblem  
paragaph  
addition

New section IX on page 9

	YEA	NAY	ABSENT	PRESENT
Mrs. Ackermann	✓			
Mr. Clem	✓			
Mr. Clinton	✓			
Mr. Danehy			✓	
Mr. Duehay	✓			
Mrs. Graham	✓			
Mr. Russell				✓
Mr. Sullivan		✓		
Mayor Vellucci			✓	

Amendment  
Consent

5  
1                      2                      1

Noise Ordinance Amendment by P. Ackermann

City of Cambridge

MASSACHUSETTS

In City Council April 14 1978

*2/*  
- Motion Failed - word "maximum" } Article II  
see 5B-6-4-

	YEA	NAY	ABSENT	PRESENT
Mrs. Ackermann	✓			
Mr. Clem		✓		
Mr. Clinton		✓		
Mr. Danehy			✓	
Mr. Duehay		✓		
Mrs. Graham				✓
Mr. Russell		✓		
Mr. Sullivan		✓		
Mayor Vellucci			✓	

1 5 2 1

# Noise Ordinance Amendment By E. Ackermann

## City of Cambridge

MASSACHUSETTS

11)

Every day a separate OFFENSE -

In City Council

April 11

1979

- Amendment Enacted -

OFFENSE - Every day - separate noise

	YEA	NAY	ABSENT	PRESENT
Mrs. Ackermann	✓			
Mr. Clem	✓			
Mr. Clinton	✓			
Mr. Danehy			✓	
Mr. Duehay	✓			
Mrs. Graham	✓			
Mr. Russell	✓			
Mr. Sullivan	✓			
Mayor Vellucci			✓	

7

0

2

## NOISE ORDINANCE SYNOPSIS

The Noise Ordinance has three basic provisions for the control of noise pollution. First are the prohibitions of excessive noise emissions from within dwelling units and excessive noise emissions in general. These consist of two paragraphs which forbid the creation of "loud, unnecessary or unusual noise" without specific reference to source.

Second is the prohibition of non-measured noise polluting acts, which by their nature or duration cannot readily be measured by testing devices. This section forbids the creation of excessive noise by the following acts: The sounding of any horn or signaling device except as a danger warning, the playing of radios, phonographs, musical instruments etc. so as to disturb neighbors; yelling, shouting etc. in the public streets; the keeping of a noisy animal or bird; the exhaust of any engine without an effective muffler; the use of any vehicle so out of repair or so loaded so as to create excessive noise; the loading or unloading of any vehicle which creates excessive noise; the use of a drum or other device for attracting attention; and the shouting of hawkers or peddlers. Judgement of a violation would be at the discretion of the enforcing agent.

The third provision establishes a maximum noise level in decibels for each type of zoning district in the City. Zoning districts are categorized as residential, office/business, or industrial. A category, residential uses in industrial zones, has been added.

In addition to these three basic provisions, there are two sections which regulate noise created by two specific uses. First is the section which restricts noise emitted from construction sites. It establishes maximum decibel levels for properties affected by adjacent construction, based on type of zoning district in which the affected property lies. Second is the restriction on noise emitted from new motor vehicles. This section imposes maximum decibel levels for new light and heavy motor vehicles and motorcycles with a provision for a further reduction in the allowed level of noise emitted from new motor vehicles after January 1, 1980.

There are both Permit and Variance procedures incorporated into the ordinance with the Superintendent of Buildings as the granting authority.

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There are both Permit and Variance procedures incorporated into the ordinance with the Superintendent of Buildings as the granting authority.

ment contribution to the rulemaking development process by interested parties. Interested persons may submit written data or views to the Office of Noise Abatement and Control, U.S. Environmental Protection Agency, Washington, D.C. 20460.

This regulation is promulgated under the authority of 42 U.S.C. 4917(a), 83 Stat. 1249.

Dated: October 21, 1974.

JOHN QUARLES,  
Acting Administrator.

Part 202 of title 49 shall read as follows:

**PART 202—MOTOR CARRIERS ENGAGED IN INTERSTATE COMMERCE**

Subpart A—General Provisions	
Sec.	
202.10	Definitions.
202.11	Effective date.
202.12	Applicability.
Subpart B—Interstate Motor Carrier Operations Standards	
202.20	Standards for highway operations.
202.21	Standard for operation under stationary test.
202.22	Visual exhaust system inspection.
202.23	Visual tire inspection.

AUTHORITY: Section 18, 83 Stat. 1249, 42 U.S.C. 4917(a).

**Subpart A—General Provisions**

**§ 202.10 Definitions.**

As used in this part, all terms not defined herein shall have the meaning given them in the Act:

(a) "Act" means the Noise Control Act of 1972 (P.L. 92-574, 83 Stat. 1234).

(b) "Common carrier by motor vehicle" means any person who holds himself out to the general public to engage in the transportation by motor vehicle in interstate or foreign commerce of passengers or property or any class or classes thereof for compensation, whether over regular or irregular routes.

(c) "Contract carrier by motor vehicle" means any person who engages in transportation by motor vehicle of passengers or property in interstate or foreign commerce for compensation (other than transportation referred to in paragraph (b) of this section) under continuing contracts with one person or a limited number of persons either (1) for the furnishing of transportation services through the assignment of motor vehicles for a continuing period of time to the exclusive use of each person served or (2) for the furnishing of transportation services designed to meet the distinct need of each individual customer.

(d) "Cutout or by-pass or similar devices" means devices which vary the exhaust system gas flow so as to discharge the exhaust gas and acoustic energy to the atmosphere without passing through the entire length of the exhaust system, including all exhaust system sound attenuation components.

(e) "dB(A)" means the standard abbreviation for A-weighted sound level in decibels.

(f) "Exhaust system" means the system comprised of a combination of com-

ponents which provides for enclosed flow of exhaust gas from engine parts to the atmosphere.

(g) "Fast meter response" means that the fast dynamic response of the sound level meter shall be used. The fast dynamic response shall comply with the meter dynamic characteristics in paragraph 5.3 of the American National Standard Specification for Sound Level Meters, ANSI S1.4-1971. This publication is available from the American National Standards Institute, Inc., 1420 Broadway, New York, New York 10018.

(h) "Gross Vehicle Weight Rating" (GVWR) means the value specified by the manufacturer as the loaded weight of a single vehicle.

(i) "Gross Combination Weight Rating" (GCWR) means the value specified by the manufacturer as the loaded weight of a combination vehicle.

(j) "Highway" means the streets, roads, and public ways in any State.

(k) "Interstate commerce" means the commerce between any place in a State and any place in another State or between places in the same State through another State, whether such commerce moves wholly by motor vehicle or partly by motor vehicle and partly by rail, express, water or air. This definition of "interstate commerce" for purposes of these regulations is the same as the definition of "interstate commerce" in section 203(a) of the Interstate Commerce Act [49 U.S.C. Section 303(a) 1].

(l) "Motor carrier" means a common carrier by motor vehicle, a contract carrier by motor vehicle, or a private carrier of property by motor vehicle as those terms are defined by paragraphs (14), (15), and (17) of section 203(a) of the Interstate Commerce Act [49 U.S.C. 303(a) 1].

(m) "Motor vehicle" means any vehicle, machine, tractor, trailer, or semi-trailer propelled or drawn by mechanical power and used upon the highways in the transportation of passengers or property, or any combination thereof, but does not include any vehicle, locomotive, or car operated exclusively on a rail or rails.

(n) "Muffler" means a device for abating the sound of escaping gases of an internal combustion engine.

(o) "Open site" means an area that is essentially free of large sound-reflecting objects, such as barriers, walls, board fences, signboards, parked vehicles, bridges, or buildings.

(p) "Private carrier of property by motor vehicle" means any person not included in terms "common carrier by motor vehicle" or "contract carrier by motor vehicle", who or which transports in interstate or foreign commerce by motor vehicle property of which such person is the owner, lessee, or bailee, when such transportation is for sale, lease, rent or bailment, or in furtherance of any commercial enterprise.

(q) "Sound level" means the quantity in decibels measured by a sound level meter satisfying the requirements of American National Standards Specification for Sound Level Meters S1.4-1971.

This publication is available from the American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018. Sound level is the frequency-weighted sound pressure level obtained with the standardized dynamic characteristic "fast" or "slow" and weighting A, B, or C; unless indicated otherwise, the A-weighting is understood.

**§ 202.11 Effective date.**

The provisions of Subpart B shall become effective October 15, 1975.

**§ 202.12 Applicability.**

(a) The provisions of Subpart B apply to all motor carriers engaged in interstate commerce.

(b) The provisions of Subpart B apply only to those motor vehicles of such motor carriers which have a gross vehicle weight rating or gross combination weight rating in excess of 10,000 pounds, and only when such motor vehicles are operating under the conditions specified in Subpart B.

(c) Except as provided in Subsections (d) and (e) of this section, the provisions of Subpart B apply to the total sound produced by such motor vehicles when operating under such conditions, including the sound produced by auxiliary equipment mounted on such motor vehicles.

(d) The provisions of Subpart B do not apply to auxiliary equipment which is normally operated only when the transporting vehicle is stationary or is moving at a speed of 5 miles per hour or less. Examples of such equipment include, but are not limited to, cranes, asphalt spreaders, ditch diggers, liquid or slurry pumps, air compressors, welders, and trash compactors.

(e) The provisions of Subpart B do not apply to warning devices, such as horns and sirens; or to emergency equipment and vehicles such as fire engines, ambulances, police vans, and rescue vans, when responding to emergency calls; or to snow plows when in operation.

**Subpart B—Interstate Motor Carrier Operations Standards**

**§ 202.20 Standards for highway operations.**

No motor carrier subject to these regulations shall operate any motor vehicle of a type to which this regulation is applicable which at any time or under any condition of highway grade, load, acceleration or deceleration generates a sound level in excess of 83dB(A) measured on an open site with fast meter response at 50 feet from the centerline of lane of travel on highways with speed limits of 35 MPH or less; or 90 dB(A) measured on an open site with fast meter response at 50 feet from the centerline of lane of travel on highways with speed limits of more than 35 MPH.

**§ 202.21 Standard for operation under stationary test.**

No motor carrier subject to these regulations shall operate any motor vehicle of a type to which this regulation is applicable which generates a sound level in

9-A "are Street,  
Cambridge Mass. 02138

April 3, 1977

Frank Duehay  
City Councillor  
CAMbridge,

Dear Mr. Duehay,

This letter is to urge you to pass an effective noise ordinance. The law should be one that can and will be enforced and one that will be effective. It should be one that will make Cambridge a quieter place to live and work. The noise level around here and the Square has gone up enormously these last few years. Much of the noise is caused by the garbage trucks that operate on Prescott Street 5 days a week and by delivery trucks very early in the morning. There has been a great increase in noise over these operations these last years.

Unfortunatly the meeting was postponed and I have a previous speaking engagement on April 11 and can not attend the meeting.

Thank you very much,

Sincerely yours

*Marion Walter*  
MARION Walter

*Introduced by F. Duehay 4/11/77*

*Received at 853/24 Apr 11/1977 by Lily Chen*

WE STRONGLY URGE THE CITY TO PASS THE PROPOSED ANTI\_NOISE  
ORDINANCE AS SOON AS POSSIBLE

Bella Huntington

49 Norwolk St.  
Cambridge 02139

Maurice St. Montette

115 Holden Green  
Cambridge, 02138 661-1989

Eugene Radwin

1 Langdon St  
Cambridge 02138 354-5488

Anne Cotton

2 Forest Street  
Cambridge 02140

Maury Goodwood

57 1/2 TREMONT STREET  
CAMBRIDGE, MASS 02139.

Tony Urbani

Eliot House B-43  
Harvard Univ  
Cambridge, Mass 02138  
3 Concord Ave (Apt 43)  
Cambridge, MA 02138

Margaret E. Boorman

9 Curtis Street, apt 3L  
Cambridge, MA 02140

Jennifer M. Shroy

Barbara Ruckman

8 Forest St.  
Cambridge Mass.

Aparna Sastry

83 Beath Street  
Cambridge Mass 02138

Joan Couzanelle

395 Broadway, R3F  
Cambridge, Mass. 02139

M. Andrea Stoff (Plant trees to  
absorb sound)

55 Magazine St. #56  
Cambridge, MA 02139

CONT next  
page

WE STRONGLY URGE THE CITY COUNCIL TO PASS THE PROPOSED  
ANTI\_ NOISE ORDINANCE AS SOON AS POSSIBLE

John Bowen  
Joan Margolis

Cambridge, MA  
E-53, Sloan, MIT

Arnold Ziffle  
~~Carol O'Neil~~

111 Holden Street, Camb  
22 Hellewood Street, Cambridge

Joseph Blatt  
Kathleen Dale

14 Quincey Ave, Cambridge

Sara Greenwood

14 Forest St.

Mary Ann Rowell

44 Brattle St [work]

Maria Casace

44 Brattle St [work]

Thuyhachyn

26 Garden Court

Suzanne Kravitz

17 Pleasant Place, Cambridge

Reynold D. Phyl

107 King St Cambridge

Adrienne Pejar

1137 Mass Ave

Mary Madden

218 Chestnut St Camb.

Heather Tab

80 Folger St. Camb.

Saretta Winneq

205 Mount Auburn St. Camb.

Sarah Fitzgerald

20 Bryant St Camb.

Barbara F. Waller

Row 3-208, M.I.T [work]

Marion Walter

97 Ware St Cambridge

Jon Whitman

9A WARE ST, CAMBRIDGE

E STRONGLY URGE THE CITY TO PASS THE  
ORDINANCE  
PROPOSED ANTI NOISE, AS SOON AS POSSIBLE

Marian R. M.  
MARY F. BOTWELL  
Joan C. Llewellyn  
Courtney B. Taylor  
Louis J. Bahannan  
Liam J. Stewart

41 Bowdoin St., Cambridge  
2192 MASS AVE CAMBRIDGE  
5A Seaver St Cambridge 02134  
984 Memorial Dr. Camb.  
1030 Mass Ave Camb. Work  
171 NEWBURY ST CAMBRIDGE

6

WE STRONGLY URGE THE CITY COUNCIL TO PASS THE PROPOSED NOISE  
ORDINANCE AS SOON AS POSSIBLE

Sharon Cronan / 63 Dana St. 02138

P. Rowley / 1737 Camb St. "

A. Margeson / 9-A Ware St. "

8

# City of Cambridge

## HEARING NOTICE

The Cambridge City Council will conduct a public hearing on Monday, April 11, 1977 at 8:00 P. M. in the Council Chambers relative to proposed amendment to the General Ordinances regarding the "Regulation of Noise" within the City of Cambridge.

All interested individuals are requested to attend and be heard at this time.

By order of the City Council

Paul E. Healy  
City Clerk

NOISE CONTROL REGULATION - CITY OF CAMBRIDGE

- I. PURPOSE
- II. DEFINITIONS
- III. GENERAL PROHIBITION OF NOISE EMISSIONS
- IV. PROHIBITION OF NON-MEASURED NOISE POLLUTING ACTS
- V. RESTRICTIONS - ZONING DISTRICTS
- VI. RESTRICTIONS - CONSTRUCTION SITES
- VII. PERMITS
- VIII. EXEMPTIONS
- IX. PENALTIES
- X. ENFORCEMENT
- XI. CONFLICT
- XII. VARIANCES
- XIII. SEVERABILITY

January 25, 1977

*Amended March 11, 1977*

## I. PURPOSE

This ordinance provides standards for the control of noise pollution and prohibits those acts which most frequently create noise pollution. The general objectives of these standards are to secure the public health, comfort, convenience, and safety of, and to promote the welfare, prosperity, peace, and quiet of, the citizens of the City of Cambridge.

Be it ordained by the City Council of the City of Cambridge as follows:

## II. DEFINITIONS

Terms used in this ordinance shall be defined as follows:

**ACOUSTICAL TERMINOLOGY** Acoustical Terminology used throughout these Regulations is that most recently approved as American Standard Acoustical Terminology by the American National Standards Institute (ANSI); except as may be specified otherwise herein.

**BUSINESS USE** shall be as set forth in the Zoning Ordinance of the City of Cambridge Article IV, Section 2.

**CONSTRUCTION** shall mean any and all physical activity necessary or incidental to the erection, placement, demolition, assembling, altering, cleaning, repairing, installing, or equipping of buildings and other structures, public or private highways, roads, premises, parks, utility lines, or other property, and shall include land clearing, grading, excavating, filling and paving.

**COMMERCIAL SERVICE EQUIPMENT** shall mean all engine- or motor-powered equipment intended for infrequent service work in inhabited areas, typically requiring commercial or skilled operators (such as chain saws, log chippers, paving rollers, etc.).

**CONSTRUCTION DEVICE** shall mean any powered device or equipment, designed and intended for use in construction. Examples of "construction devices" are air compressors, bulldozers, back-hoes, trucks, shovels, derricks, or cranes.

**CONSTRUCTION SITE** shall mean that area within which a contractor confines a construction operation. This includes defined boundary lines of the project itself plus any contractor staging area outside those defined boundary lines and used expressly for the construction.

DAYTIME shall mean the period between the hours of seven ante meridian (7:00 a.m.) and six post meridian (6:00 p.m.) daily except Sunday according to the time system locally in effect.

dB is the abbreviation for decibel.

dB(A) shall mean the A-weighted sound level in decibels, as measured by a general purpose sound level meter complying with the provisions of Specifications for Sound Level Meters (Sl. 4 1971), American National Standards Institute (ANSI), properly calibrated, and operated on the "A" weighting network.

EMERGENCY WORK Work necessary to restore public or private property to a safe condition following a public calamity or work required to protect persons or property from an imminent exposure to danger. The necessity of such work shall be determined by the Building Superintendent or his deputy or by other authorized emergency or public utility personnel after consultation with the Superintendent of Buildings.

HOMEOWNER'S LIGHT RESIDENTIAL OUTDOOR EQUIPMENT shall mean all engine-or motor-powered garden or maintenance tools intended for repetitive use in residential areas, typically capable of being used by a homeowner (such as lawn mowers, garden tools, riding tractors, snow blowers, snow plows, etc.).

Hz is the abbreviation for Hertz, which means cycles per second.

IMPACT DEVICE shall mean a construction device in which or by which a hammer, meaning a moving mass of hard solid material, is mechanically by means of a working fluid caused to repetitively impact upon and transmit kinetic energy to a tool. The tool may be included as part of the device, as in the case of amoil on a paving breaker or the drill steel or a jackhammer, or it may be a mass to which the impact device is temporarily connected as in the case of a pile and pile driver. Examples of impact devices are pile drivers, paving breakers and power impact hammers, impact wrenches, riveters and stud drivers.

INDUSTRIAL USE shall be as set forth in the Zoning Ordinance of the City of Cambridge, Article IV, Section 2.

INSTITUTIONAL, TRANSPORTATION AND UTILITY USES shall be as set forth in the Zoning Ordinance of the City of Cambridge, Article IV, Section 2.

$L_{10}$  LEVEL shall mean the A-weighted sound level exceeded 10% of the time.

NOISE POLLUTION means the presence of that amount of acoustic energy for that period of time necessary:

- a) to cause temporary or permanent hearing loss in persons exposed;
- b) to otherwise be injurious, or tend to be, on the basis of current information, injurious, to the public health or welfare;
- c) to cause a nuisance:
- d) to interfere with the comfortable enjoyment of life and property or the conduct of business; or
- e) to exceed standards or restrictions established herein or pursuant to the granting of any permit by the Commission.

NON-MEASURED NOISE POLLUTING ACTS - Uses and activities that create or cause to be created loud and unnecessary noises which, by virtue of the nature, duration or time of occurrence, are not readily subject to measurement by official testing devices.

PAVING BREAKER shall mean any hydraulically or pneumatically-powered impact device intended to cut or trench pavement, subbase macadam, gravel, concrete or hard ground.

PERSON means an individual, partnership, association, firm, syndicate, company, trust, corporation, department, bureau or agency, or any other entity recognized by law as the subject of rights and duties.

PILE DRIVER shall mean an impact device designed or used for the driving of piles, columns and other supports into soil or other material by means of impact, vibrations, pressure or other means.

RESIDENTIAL USE shall be as set forth in the Zoning Ordinance of the City of Cambridge, Article IV, Section 2.

SOUND PRESSURE LEVEL (SPL) shall be numerically equal to 20 times the logarithm (to the base 10) of the sound pressure to the reference sound pressure (the reference sound pressure shall equal 20 micropascals.) Unless otherwise stated, the level is understood to be that of a root mean-square pressure.

ZONING DISTRICTS shall mean the zoning districts and land uses therein as established by the Zoning Ordinance of the City of Cambridge.

### III. GENERAL PROHIBITIONS OF NOISE EMISSIONS

- A. No person or persons owning, leasing, or controlling the operation of any source or sources of noise shall willfully, negligently, or through failure to provide necessary equipment or facilities or to take necessary precautions, permit the establishment or continuation of a condition of noise pollution.

( OR )

- B. It shall be unlawful for any person to make, continue, or cause to be made or continued any loud, unnecessary or unusual noise or any noise which either annoys, disturbs, injures or endangers the comfort, repose, health, peace or safety of others, within the limits of the city.

( OR BOTH )

### IV. PROHIBITION OF NON-MEASURED NOISE POLLUTING ACTS

- A. The following acts, among others, are declared to be loud, disturbing and unnecessary noises in violation of this ordinance, but said enumeration shall not be deemed to be exclusive, namely:

- 1) Horns, Signaling Devices, etc. The sounding of any horn or signalling device on any automobile, motorcycle, street car or other vehicle on any street or public place of the city, except as a danger warning; the creation by means of any such signaling device of any unreasonably loud or harsh sound; and the sounding of any such device for an unnecessary and unreasonable period of time. The use of any signalling device except one operated by hand or electricity; the use of any horn, whistle or other device operated by engine exhaust; and the use of any such signaling device when traffic is for any reason held up.

- 2) Radios, Phonographs, etc. The using, operating, or permitting to be played, used or operated any radio receiving set, musical instrument, phonograph, or other machine or device for the producing or reproducing of sound in such manner as to disturb the peace, quiet and comfort of the neighboring inhabitants or at any time with louder volume than is necessary for convenient hearing for the person or persons who are in the room, vehicle or chamber in which such machine or device is operated and who are voluntary listeners thereto. The operation of any such set, instrument, phonograph, machine or device between the hours of twelve o'clock p.m. and seven o'clock a.m. in such a manner as to be plainly audible at a distance of fifty (50) feet from the building, structure, vehicle, or dwelling unit in which it is located shall be prima facie evidence of a violation of this section.
- 3) Yelling, Shouting, etc. Yelling, shouting, hooting, whistling, or singing on the public streets, particularly between the hours of 12 p.m. and 7 a.m. or at any time or place so as to annoy or disturb the quiet, comfort, or repose of persons in any office, or in any dwelling, hotel or other type of residence, or of any persons in the vicinity.
- 4) Animals, Birds, etc. The keeping of any animal or bird which by causing frequent or long continued noise shall disturb the comfort or repose of any persons in the vicinity.
- 5) Steam Whistles. The blowing of any locomotive steam whistle or steam whistle attached to any stationary boiler except to give notice of the time to begin or stop work or as a warning of fire or danger, or upon request of proper city authorities.
- 6) Exhausts. The discharge into the open air of the exhaust of any steam engine, stationary internal combustion engine, motor boat, or motor vehicle except through a muffler or other device which will effectively prevent loud or explosive noises therefrom.
- 7) Defect in Vehicle or Load. The use of any automobile, motorcycle, or vehicle so out of repair, so loaded or in such manner as to create loud and unnecessary grating, grinding, rattling or other noise.
- 8) Loading, Unloading, Opening Boxes. The creation of a loud and excessive noise in connection with loading or unloading any vehicle or the opening and destruction of bales, crates, and containers.

- 9) Drums. The use of any drum or other instrument or device for the purpose of attracting attention by creation of noise to any performance, show or sale.
- 10) Hawkers, Peddlers. The shouting and crying of peddlers, hawkers and vendors which disturbs the peace and quiet of the neighborhood.

## V. NOISE RESTRICTIONS ACCORDING TO ZONING DISTRICTS

A. This Regulation shall apply to the use or occupancy of any lot or structure thereon and to the noise produced thereby, but shall not apply to the following:

- 1) To the intermittent or occasional use, during the daytime, of light homeowner's residential outdoor equipment or commercial service equipment provided said equipment and its use complies with other provisions of these Regulations;
- 2) To construction activities and the associated use of construction devices nor to the noise produced thereby, provided such activities, and such equipment and its use, comply with other provisions of these Regulations;
- 3) To the operation of any motor vehicle on any public way, nor to the noise produced thereby.

### B. Noise in Residential Zoning Districts or Affecting Residential or Institutional Property

No person shall create or cause to be emitted from or by any source subject to Regulation V any noise which causes or results in a maximum noise level, measured at any lot line of any lot located in any Residential Zoning District or in residential or institutional use elsewhere in conformance with the Cambridge Zoning Ordinance, in excess of any level of the "Residential District Noise Standard", Regulation V. E, provided that if said lot is located in any Industrial District, the maximum noise level measured at the lot line shall not exceed any level of the "Residential-Industrial Noise Standard", Regulation V. E.

### C. Noise in Business, Office Zoning Districts

No person shall create or cause to be emitted from or by any source subject to Regulation V any noise which causes or results in a maximum noise level, measured at any lot line of any lot in any Business Zoning District other than a lot in residential or institutional use in conformance with the

Cambridge Zoning Ordinance, in excess of any level of the "Business District Noise Standard", Regulation V.E.

D. Noise in Industrial Zoning Districts

No person shall create or cause to be emitted from or by any source subject to Regulation V any noise which causes or results in a maximum noise level, measured at any lot line of any lot in recreational or business use in any Industrial Zoning District in conformance with the Cambridge Zoning Ordinance, in excess of any level of "Industrial District Noise Standard", Regulation V.E.

E. Zoning District Noise Standards

Noise standards referred to in these Regulations for the several zoning districts of the City of Cambridge, as defined in and established pursuant to the Cambridge Zoning Ordinance are as established by the following Table.

TABLE OF ZONING DISTRICT NOISE STANDARDS

Octave Band Center Frequency of Measurement (Hz)	Maximum Allowable Octave Band Sound Pressure Levels					
	Residential		Residential		Office	
	Institutional		Industrial		Business	Industry
	Daytime	All Other Times	Daytime	All Other Times	Anytime	Anytime
31.5	76	68	79	72	79	83
63	75	67	78	71	78	82
125	69	61	73	65	73	77
250	62	52	68	57	68	73
500	56	46	62	51	62	67
1000	50	40	56	45	56	61
2000	45	33	51	39	51	57
4000	40	28	47	34	47	53
8000	38	26	44	32	44	50
Single- Number - Equivalent (dB(A))	60	50	65	55	65	70

VI. RESTRICTIONS ON NOISE EMITTED FROM CONSTRUCTION SITES

A. Except as provided for in Regulation VI. C. and VI. D., it shall be unlawful for any person to operate any construction device or devices on any construction site if the operation of such device or devices emits noise, measured at the lot line of the affected property, in excess of the values shown below:

Lot Use of Affected Property	Effective June 1, 1975		Effective Jan. 1, 1976	
	L <sub>10</sub> Level	Max. Noise Level	L <sub>10</sub> Level	Max. Noise Level
Residential or Institutional	80 dB(A)	86 dB(A)	75 dB(A)	86 dB(A)
Business or Office	85 dB(A)	-	80 dB(A)	-
Industrial	90 dB(A)	-	85 dB(A)	-

The same level shall apply to a public way as applies to an industrial use. Measurements should not be taken closer than 50 feet from the nearest active construction device on the construction site. The maximum noise level shall be measured on the sound level meter at slow response.

B. The L<sub>10</sub> level shall be determined in the following manner:

- 1) Every ten seconds, on the mark, the A-weighted noise level on the sound level meter with slow response is recorded until 100 observations have been made. If, during any of these observations, a measurement is substantially affected by any source outside the construction site (such as aircraft overflight), measurements made during these periods will not be considered. However the observation period shall be extended until 100 valid measurements are obtained. The L<sub>10</sub> level will be that level that is equal to the tenth highest level recorded.
- 2) If in the estimation of the person taking the measurements, outside noise sources contribute significantly to the noise level, the above procedure shall be repeated (with the same outside noise source contributions) when construction is inactive, in order to determine the existing background L<sub>10</sub> level. The L<sub>10</sub> level during construction must exceed the background L<sub>10</sub> level by 5 dB(A) to be considered a violation of Regulation VI. A.

- C. Except as provided for in Regulation VI. D, it shall be unlawful to operate a construction device at any street excavation, grading or repair, utility street work installation or repair, which produces a noise level exceeding 86 dB(A) at a distance of 50 feet from the device after June 1, 1975.

The provisions of Regulation VI. A, shall not apply to any construction site covered by Regulation VI. C. The provisions of Regulation VI. C. will not be applicable to any construction device used in emergency service work that is necessary to return utility service to an area provided that within 24 hours such device is brought into compliance with Regulation VI. C. or is not reused within the City until it does comply.

- D. The provisions of Regulation VI. A. and VI. C. shall not be applicable to impact devices.

## VII. PERMITS - GENERAL

- A. A permit shall constitute permission to use or to allow the use of a device or to engage in an activity to which reference has been made in these Regulations or in the Ordinances of the City of Cambridge.
- B. All applications for permits shall be made to the Superintendent of Buildings in such form and detail as he shall prescribe. Such application shall not relieve any person from otherwise complying with the provisions of these Regulations or any other law or ordinance.
- C. Such permit shall include such provisions and conditions as the Commissioner may deem necessary to protect the public health, welfare and comfort.
- D. Any permit required by these Regulations shall be displayed to any police officer or employee of the Building Department upon request.
- E. Any permit issued by the Superintendent of Buildings under the provisions of these Regulations may be revoked for violation of any of the terms and conditions of such permit.

## VIII. EXEMPTIONS

- A. The following uses and activities shall be exempt from noise level regulations:
- 1) Noises of safety signals, warning devices, and emergency pressure relief valves.
  - 2) Noises resulting from any authorized emergency vehicle, when responding to an emergency call or acting in time of emergency.
  - 3) Any other noise resulting from activities of a temporary duration permitted by law and for which a license or permit therefore has been granted by the city in accordance with Alternate Section.
  - 4) 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 regulations of this ordinance. 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 this ordinance.
  - 5) Noises resulting from emergency work as defined in DEFINITIONS SECTION.

## IX. PENALTIES

- A. Any person who violates any provision of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined not exceeding \$ \_\_\_\_\_, or by imprisonment for not more than \_\_\_\_\_ days, or by both said fine and said imprisonment.

## X. ENFORCEMENT

- A. The Chief of Police of the City of Cambridge shall be the officer charged with the enforcement of this ordinance. He shall, at any time necessary, call on the Superintendent of Buildings or his deputy to provide personnel to perform such tests as the Chief of Police deems necessary to determine violations of this ordinance.

XI. CONFLICT WITH OTHER REGULATIONS

- A. The noise regulations shall not relieve any person from complying with other laws, statutes, codes, regulations, or ordinances of the Commonwealth or of the City of Cambridge.

XII. VARIANCES

- A. The Superintendent of Buildings may grant variances after public hearing or may reject applications on review without a hearing. Variances thus granted may be effective for no longer than one year.

XIII. SEVERABILITY

- A. Each of these Regulations shall be constructed as separate to the end that if any Regulation or section, sentence, clause or phrase thereof shall be held invalid for any reason, the remainder of these Regulations shall continue in full force.

NOISE CONTROL REGULATION - CITY OF CAMBRIDGE

- I. PURPOSE
- II. DEFINITIONS
- III. GENERAL PROHIBITION OF NOISE EMISSIONS
- IV. PROHIBITION OF NON-MEASURED NOISE POLLUTING ACTS
- V. RESTRICTIONS - ZONING DISTRICTS
- VI. RESTRICTIONS - CONSTRUCTION SITES
- VII. PERMITS
- VIII. EXEMPTIONS
- IX. PENALTIES
- X. ENFORCEMENT
- XI. CONFLICT
- XII. VARIANCES
- XIII. SEVERABILITY

January 25, 1977

*Amended April 11, 1977*

## I. PURPOSE

This ordinance provides standards for the control of noise pollution and prohibits those acts which most frequently create noise pollution. The general objectives of these standards are to secure the public health, comfort, convenience, and safety of, and to promote the welfare, prosperity, peace, and quiet of, the citizens of the City of Cambridge.

Be it ordained by the City Council of the City of Cambridge as follows:

## II. DEFINITIONS

Terms used in this ordinance shall be defined as follows:

**ACOUSTICAL TERMINOLOGY** Acoustical Terminology used throughout these Regulations is that most recently approved as American Standard Acoustical Terminology by the American National Standards Institute (ANSI); except as may be specified otherwise herein.

**BUSINESS USE** shall be as set forth in the Zoning Ordinance of the City of Cambridge Article IV, Section 2.

**CONSTRUCTION** shall mean any and all physical activity necessary or incidental to the erection, placement, demolition, assembling, altering, cleaning, repairing, installing, or equipping of buildings and other structures, public or private highways, roads, premises, parks, utility lines, or other property, and shall include land clearing, grading, excavating, filling and paving.

**COMMERCIAL SERVICE EQUIPMENT** shall mean all engine-or motor-powered equipment intended for infrequent service work in inhabited areas, typically requiring commercial or skilled operators (such as chain saws, log chippers, paving rollers, etc.).

**CONSTRUCTION DEVICE** shall mean any powered device or equipment, designed and intended for use in construction. Examples of "construction devices" are air compressors, bulldozers, back-hoes, trucks, shovels, derricks, or cranes.

**CONSTRUCTION SITE** shall mean that area within which a contractor confines a construction operation. This includes defined boundary lines of the project itself plus any contractor staging area outside those defined boundary lines and used expressly for the construction.

DAYTIME shall mean the period between the hours of seven ante meridian (7:00 a.m.) and six post meridian (6:00 p.m.) daily except Sunday according to the time system locally in effect.

dB is the abbreviation for decibel.

dB(A) shall mean the A-weighted sound level in decibels, as measured by a general purpose sound level meter complying with the provisions of Specifications for Sound Level Meters (Sl. 4 1971), American National Standards Institute (ANSI), properly calibrated, and operated on the "A" weighting network.

EMERGENCY WORK Work necessary to restore public or private property to a safe condition following a public calamity or work required to protect persons or property from an imminent exposure to danger. The necessity of such work shall be determined by the Building Superintendent or his deputy or by other authorized emergency or public utility personnel after consultation with the Superintendent of Buildings.

HOMEOWNER'S LIGHT RESIDENTIAL OUTDOOR EQUIPMENT shall mean all engine-or motor-powered garden or maintenance tools intended for repetitive use in residential areas, typically capable of being used by a homeowner (such as lawn mowers, garden tools, riding tractors, snow blowers, snow plows, etc.).

Hz is the abbreviation for Hertz, which means cycles per second.

IMPACT DEVICE shall mean a construction device in which or by which a hammer, meaning a moving mass of hard solid material, is mechanically by means of a working fluid caused to repetitively impact upon and transmit kinetic energy to a tool. The tool may be included as part of the device, as in the case of a moil on a paving breaker or the drill steel or a jackhammer, or it may be a mass to which the impact device is temporarily connected as in the case of a pile and pile driver. Examples of impact devices are pile drivers, paving breakers and power impact hammers, impact wrenches, riveters and stud drivers.

INDUSTRIAL USE shall be as set forth in the Zoning Ordinance of the City of Cambridge, Article IV, Section 2.

INSTITUTIONAL, TRANSPORTATION AND UTILITY USES shall be as set forth in the Zoning Ordinance of the City of Cambridge, Article IV, Section 2.

$L_{10}$  LEVEL shall mean the A-weighted sound level exceeded 10% of the time.

NOISE POLLUTION means the presence of that amount of acoustic energy for that period of time necessary:

- a) to cause temporary or permanent hearing loss in persons exposed;
- b) to otherwise be injurious, or tend to be, on the basis of current information, injurious, to the public health or welfare;
- c) to cause a nuisance;
- d) to interfere with the comfortable enjoyment of life and property or the conduct of business; or
- e) to exceed standards or restrictions established herein or pursuant to the granting of any permit by the Commission.

NON-MEASURED NOISE POLLUTING ACTS - Uses and activities that create or cause to be created loud and unnecessary noises which, by virtue of the nature, duration or time of occurrence, are not readily subject to measurement by official testing devices.

PAVING BREAKER shall mean any hydraulically or pneumatically-powered impact device intended to cut or trench pavement, subbase macadam, gravel, concrete or hard ground.

PERSON means an individual, partnership, association, firm, syndicate, company, trust, corporation, department, bureau or agency, or any other entity recognized by law as the subject of rights and duties.

PILE DRIVER shall mean an impact device designed or used for the driving of piles, columns and other supports into soil or other material by means of impact, vibrations, pressure or other means.

RESIDENTIAL USE shall be as set forth in the Zoning Ordinance of the City of Cambridge, Article IV, Section 2.

SOUND PRESSURE LEVEL (SPL) shall be numerically equal to 20 times the logarithm (to the base 10) of the sound pressure to the reference sound pressure (the reference sound pressure shall equal 20 micropascals.) Unless otherwise stated, the level is understood to be that of a root mean-square pressure.

ZONING DISTRICTS shall mean the zoning districts and land uses therein as established by the Zoning Ordinance of the City of Cambridge.

### III. GENERAL PROHIBITIONS OF NOISE EMISSIONS

- A. No person or persons owning, leasing, or controlling the operation of any source or sources of noise shall willfully, negligently, or through failure to provide necessary equipment or facilities or to take necessary precautions, permit the establishment or continuation of a condition of noise pollution.

( OR )

- B. It shall be unlawful for any person to make, continue, or cause to be made or continued any loud, unnecessary or unusual noise or any noise which either annoys, disturbs, injures or endangers the comfort, repose, health, peace or safety of others, within the limits of the city.

( OR BOTH )

### IV. PROHIBITION OF NON-MEASURED NOISE POLLUTING ACTS

- A. The following acts, among others, are declared to be loud, disturbing and unnecessary noises in violation of this ordinance, but said enumeration shall not be deemed to be exclusive, namely:

- 1) Horns, Signaling Devices, etc. The sounding of any horn or signalling device on any automobile, motorcycle, street car or other vehicle on any street or public place of the city, except as a danger warning; the creation by means of any such signaling device of any unreasonably loud or harsh sound; and the sounding of any such device for an unnecessary and unreasonable period of time. The use of any signalling device except one operated by hand or electricity; the use of any horn, whistle or other device operated by engine exhaust; and the use of any such signaling device when traffic is for any reason held up.

- 2) Radios, Phonographs, etc. The using, operating, or permitting to be played, used or operated any radio receiving set, musical instrument, phonograph, or other machine or device for the producing or reproducing of sound in such manner as to disturb the peace, quiet and comfort of the neighboring inhabitants or at any time with louder volume than is necessary for convenient hearing for the person or persons who are in the room, vehicle or chamber in which such machine or device is operated and who are voluntary listeners thereto. The operation of any such set, instrument, phonograph, machine or device between the hours of twelve o'clock p.m. and seven o'clock a.m. in such a manner as to be plainly audible at a distance of fifty (50) feet from the building, structure, vehicle, or dwelling unit in which it is located shall be prima facie evidence of a violation of this section.
- 3) Yelling, Shouting, etc. Yelling, shouting, hooting, whistling, or singing on the public streets, particularly between the hours of 12 p.m. and 7 a.m. or at any time or place so as to annoy or disturb the quiet, comfort, or repose of persons in any office, or in any dwelling, hotel or other type of residence, or of any persons in the vicinity.
- 4) Animals, Birds, etc. The keeping of any animal or bird which by causing frequent or long continued noise shall disturb the comfort or repose of any persons in the vicinity.
- 5) Steam Whistles. The blowing of any locomotive steam whistle or steam whistle attached to any stationary boiler except to give notice of the time to begin or stop work or as a warning of fire or danger, or upon request of proper city authorities.
- 6) Exhausts. The discharge into the open air of the exhaust of any steam engine, stationary internal combustion engine, motor boat, or motor vehicle except through a muffler or other device which will effectively prevent loud or explosive noises therefrom.
- 7) Defect in Vehicle or Load. The use of any automobile, motorcycle, or vehicle so out of repair, so loaded or in such manner as to create loud and unnecessary grating, grinding, rattling or other noise.
- 8) Loading, Unloading, Opening Boxes. The creation of a loud and excessive noise in connection with loading or unloading any vehicle or the opening and destruction of bales, crates, and containers.

- 9) Drums. The use of any drum or other instrument or device for the purpose of attracting attention by creation of noise to any performance, show or sale.
- 10) Hawkers, Peddlers. The shouting and crying of peddlers, hawkers and vendors which disturbs the peace and quiet of the neighborhood.

V. NOISE RESTRICTIONS ACCORDING TO ZONING DISTRICTS

A. This Regulation shall apply to the use or occupancy of any lot or structure thereon and to the noise produced thereby, but shall not apply to the following:

- 1) To the intermittent or occasional use, during the daytime, of light homeowner's residential outdoor equipment or commercial service equipment provided said equipment and its use complies with other provisions of these Regulations;
- 2) To construction activities and the associated use of construction devices nor to the noise produced thereby, provided such activities, and such equipment and its use, comply with other provisions of these Regulations;
- 3) To the operation of any motor vehicle on any public way, nor to the noise produced thereby.

B. Noise in Residential Zoning Districts or Affecting Residential or Institutional Property

No person shall create or cause to be emitted from or by any source subject to Regulation V any noise which causes or results in a maximum noise level, measured at any lot line of any lot located in any Residential Zoning District or in residential or institutional use elsewhere in conformance with the Cambridge Zoning Ordinance, in excess of any level of the "Residential District Noise Standard", Regulation V. E., provided that if said lot is located in any Industrial District, the maximum noise level measured at the lot line shall not exceed any level of the "Residential-Industrial Noise Standard", Regulation V. E.

C. Noise in Business, Office Zoning Districts

No person shall create or cause to be emitted from or by any source subject to Regulation V any noise which causes or results in a maximum noise level, measured at any lot line of any lot in any Business Zoning District other than a lot in residential or institutional use in conformance with the

Cambridge Zoning Ordinance, in excess of any level of the "Business District Noise Standard", Regulation V.E.

D. Noise in Industrial Zoning Districts

No person shall create or cause to be emitted from or by any source subject to Regulation V any noise which causes or results in a maximum noise level, measured at any lot line of any lot in recreational or business use in any Industrial Zoning District in conformance with the Cambridge Zoning Ordinance, in excess of any level of "Industrial District Noise Standard", Regulation V.E.

E. Zoning District Noise Standards

Noise standards referred to in these Regulations for the several zoning districts of the City of Cambridge, as defined in and established pursuant to the Cambridge Zoning Ordinance are as established by the following Table.

TABLE OF ZONING DISTRICT NOISE STANDARDS

Octave Band Center Frequency of Measurement (Hz)	Maximum Allowable Octave Band Sound Pressure Levels					
	Residential		Residential		Office	
	Institutional		Industrial		Business	Industry
	Daytime	All Other Times	Daytime	All Other Times	Anytime	Anytime
31.5	76	68	79	72	79	83
63	75	67	78	71	78	82
125	69	61	73	65	73	77
250	62	52	68	57	68	73
500	56	46	62	51	62	67
1000	50	40	56	45	56	61
2000	45	33	51	39	51	57
4000	40	28	47	34	47	53
8000	38	26	44	32	44	50
Single- Number - Equivalent (dB(A))	60	50	65	55	65	70

VI. RESTRICTIONS ON NOISE EMITTED FROM CONSTRUCTION SITES

A. Except as provided for in Regulation VI. C. and VI. D., it shall be unlawful for any person to operate any construction device or devices on any construction site if the operation of such device or devices emits noise, measured at the lot line of the affected property, in excess of the values shown below:

Lot Use of Affected Property	Effective June 1, 1975		Effective Jan. 1, 1976	
	L <sub>10</sub> Level	Max. Noise Level	L <sub>10</sub> Level	Max. Noise Level
Residential or Institutional	80 dB(A)	86 dB(A)	75 dB(A)	86 dB(A)
Business or Office	85 dB(A)	-	80 dB(A)	-
Industrial	90 dB(A)	-	85 dB(A)	-

The same level shall apply to a public way as applies to an industrial use. Measurements should not be taken closer than 50 feet from the nearest active construction device on the construction site. The maximum noise level shall be measured on the sound level meter at slow response.

B. The L<sub>10</sub> level shall be determined in the following manner:

- 1) Every ten seconds, on the mark, the A-weighted noise level on the sound level meter with slow response is recorded until 100 observations have been made. If, during any of these observations, a measurement is substantially affected by any source outside the construction site (such as aircraft overflight), measurements made during these periods will not be considered. However the observation period shall be extended until 100 valid measurements are obtained. The L<sub>10</sub> level will be that level that is equal to the tenth highest level recorded.
- 2) If in the estimation of the person taking the measurements, outside noise sources contribute significantly to the noise level, the above procedure shall be repeated (with the same outside noise source contributions) when construction is inactive, in order to determine the existing background L<sub>10</sub> level. The L<sub>10</sub> level during construction must exceed the background L<sub>10</sub> level by 5 dB(A) to be considered a violation of Regulation VI.A.

- C. Except as provided for in Regulation VI. D, it shall be unlawful to operate a construction device at any street excavation, grading or repair, utility street work installation or repair, which produces a noise level exceeding 86 dB(A) at a distance of 50 feet from the device after June 1, 1975.

The provisions of Regulation VI. A, shall not apply to any construction site covered by Regulation VI. C. The provisions of Regulation VI. C. will not be applicable to any construction device used in emergency service work that is necessary to return utility service to an area provided that within 24 hours such device is brought into compliance with Regulation VI. C. or is not reused within the City until it does comply.

- D. The provisions of Regulation VI. A. and VI. C. shall not be applicable to impact devices.

## VII. PERMITS - GENERAL

- A. A permit shall constitute permission to use or to allow the use of a device or to engage in an activity to which reference has been made in these Regulations or in the Ordinances of the City of Cambridge.
- B. All applications for permits shall be made to the Superintendent of Buildings in such form and detail as he shall prescribe. Such application shall not relieve any person from otherwise complying with the provisions of these Regulations or any other law or ordinance.
- C. Such permit shall include such provisions and conditions as the Commissioner may deem necessary to protect the public health, welfare and comfort.
- D. Any permit required by these Regulations shall be displayed to any police officer or employee of the Building Department upon request.
- E. Any permit issued by the Superintendent of Buildings under the provisions of these Regulations may be revoked for violation of any of the terms and conditions of such permit.

## VIII. EXEMPTIONS

- A. The following uses and activities shall be exempt from noise level regulations:
- 1) Noises of safety signals, warning devices, and emergency pressure relief valves.
  - 2) Noises resulting from any authorized emergency vehicle, when responding to an emergency call or acting in time of emergency.
  - 3) Any other noise resulting from activities of a temporary duration permitted by law and for which a license or permit therefore has been granted by the city in accordance with Alternate Section.
  - 4) 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 regulations of this ordinance. 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 this ordinance.
  - 5) Noises resulting from emergency work as defined in DEFINITIONS SECTION.

## IX. PENALTIES

- A. Any person who violates any provision of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined not exceeding \$ , or by imprisonment for not more than days, or by both said fine and said imprisonment.

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- A. The Chief of Police of the City of Cambridge shall be the officer charged with the enforcement of this ordinance. He shall, at any time necessary, call on the Superintendent of Buildings or his deputy to provide personnel to perform such tests as the Chief of Police deems necessary to determine violations of this ordinance.

XI. CONFLICT WITH OTHER REGULATIONS

- A. The noise regulations shall not relieve any person from complying with other laws, statutes, codes, regulations, or ordinances of the Commonwealth or of the City of Cambridge.

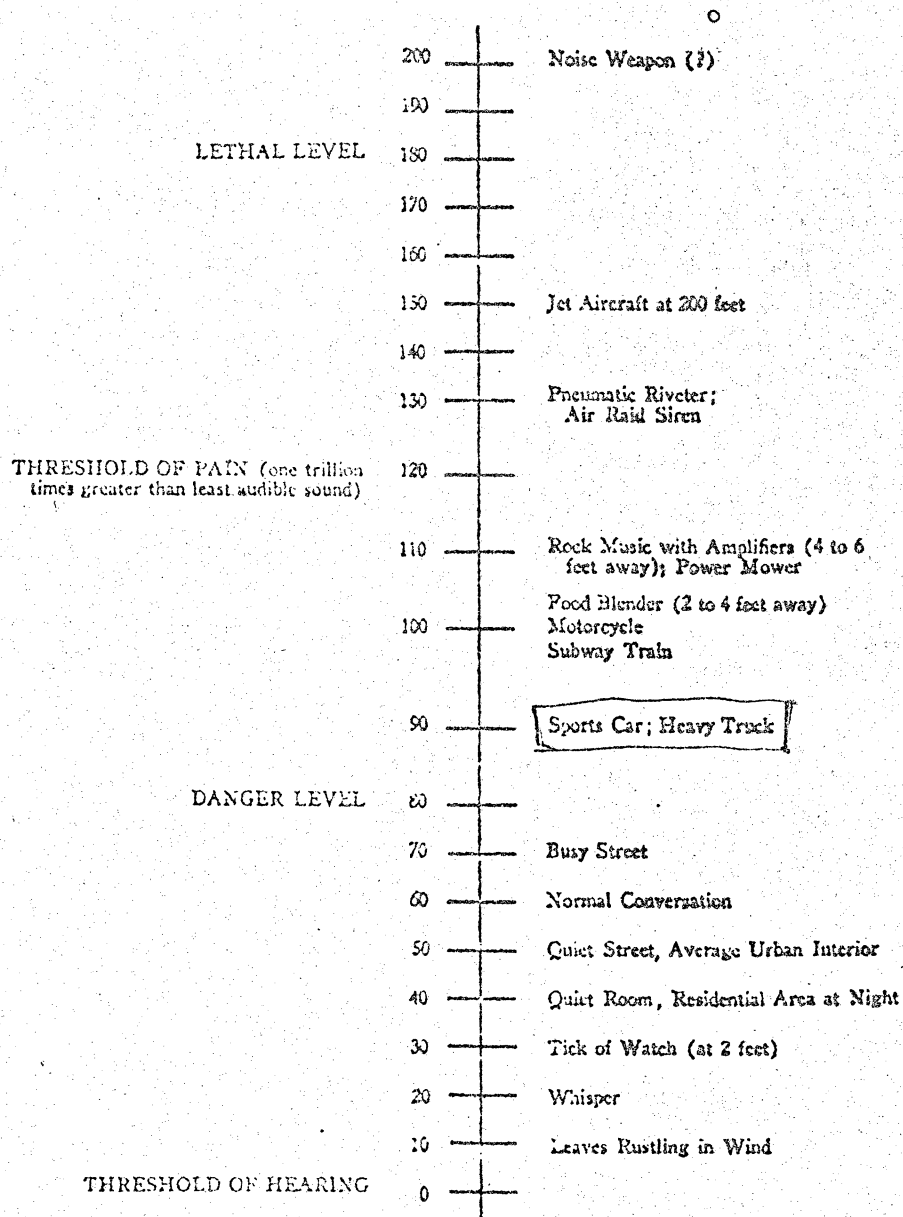
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XIII. SEVERABILITY

- A. Each of these Regulations shall be constructed as separate to the end that if any Regulation or section, sentence, clause or phrase thereof shall be held invalid for any reason, the remainder of these Regulations shall continue in full force.

87. RELATIVE NOISE LEVELS IN DECIBELS:



Compiled from the following sources: Schenker-Sprüngli, *supra* note 74, at 6; Dreher, *supra* note 13, at 24; *Medicine: Going Deaf from Rock'n Roll*, TIME, Aug. 9, 1968, at 47; Brower, *supra* note 17, at 17-18.

88. U.S. AIR FORCE REGULATION 160-3:5, *Hazardous Noise Exposure* (1956).

*- Original Proposal -*

NOISE CONTROL REGULATION - CITY OF CAMBRIDGE

- I. PURPOSE
- II. DEFINITIONS
- III. GENERAL PROHIBITION OF NOISE EMISSIONS
- IV. PROHIBITION OF NON-MEASURED NOISE POLLUTING ACTS
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January 25, 1977

*Amended Apr 11, 1977*

## I. PURPOSE

This ordinance provides standards for the control of noise pollution and prohibits those acts which most frequently create noise pollution. The general objectives of these standards are to secure the public health, comfort, convenience, and safety of, and to promote the welfare, prosperity, peace, and quiet of, the citizens of the City of Cambridge.

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**BUSINESS USE** shall be as set forth in the Zoning Ordinance of the City of Cambridge Article IV, Section 2.

**CONSTRUCTION** shall mean any and all physical activity necessary or incidental to the erection, placement, demolition, assembling, altering, cleaning, repairing, installing, or equipping of buildings and other structures, public or private highways, roads, premises, parks, utility lines, or other property, and shall include land clearing, grading, excavating, filling and paving.

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( OR )

- B. It shall be unlawful for any person to make, continue, or cause to be made or continued any loud, unnecessary or unusual noise or any noise which either annoys, disturbs, injures or endangers the comfort, repose, health, peace or safety of others, within the limits of the city.

( OR BOTH )

### IV. PROHIBITION OF NON-MEASURED NOISE POLLUTING ACTS

- A. The following acts, among others, are declared to be loud, disturbing and unnecessary noises in violation of this ordinance, but said enumeration shall not be deemed to be exclusive, namely:

- 1) Horns, Signaling Devices, etc. The sounding of any horn or signalling device on any automobile, motorcycle, street car or other vehicle on any street or public place of the city, except as a danger warning; the creation by means of any such signaling device of any unreasonably loud or harsh sound; and the sounding of any such device for an unnecessary and unreasonable period of time. The use of any signalling device except one operated by hand or electricity; the use of any horn, whistle or other device operated by engine exhaust; and the use of any such signaling device when traffic is for any reason held up.

- 2) Radios, Phonographs, etc. The using, operating, or permitting to be played, used or operated any radio receiving set, musical instrument, phonograph, or other machine or device for the producing or reproducing of sound in such manner as to disturb the peace, quiet and comfort of the neighboring inhabitants or at any time with louder volume than is necessary for convenient hearing for the person or persons who are in the room, vehicle or chamber in which such machine or device is operated and who are voluntary listeners thereto. The operation of any such set, instrument, phonograph, machine or device between the hours of twelve o'clock p.m. and seven o'clock a.m. in such a manner as to be plainly audible at a distance of fifty (50) feet from the building, structure, vehicle, or dwelling unit in which it is located shall be prima facie evidence of a violation of this section.
- 3) Yelling, Shouting, etc. Yelling, shouting, hooting, whistling, or singing on the public streets, particularly between the hours of 12 p.m. and 7 a.m. or at any time or place so as to annoy or disturb the quiet, comfort, or repose of persons in any office, or in any dwelling, hotel or other type of residence, or of any persons in the vicinity.
- 4) Animals, Birds, etc. The keeping of any animal or bird which by causing frequent or long continued noise shall disturb the comfort or repose of any persons in the vicinity.
- 5) Steam Whistles. The blowing of any locomotive steam whistle or steam whistle attached to any stationary boiler except to give notice of the time to begin or stop work or as a warning of fire or danger, or upon request of proper city authorities.
- 6) Exhausts. The discharge into the open air of the exhaust of any steam engine, stationary internal combustion engine, motor boat, or motor vehicle except through a muffler or other device which will effectively prevent loud or explosive noises therefrom.
- 7) Defect in Vehicle or Load. The use of any automobile, motorcycle, or vehicle so out of repair, so loaded or in such manner as to create loud and unnecessary grating, grinding, rattling or other noise.
- 8) Loading, Unloading, Opening Boxes. The creation of a loud and excessive noise in connection with loading or unloading any vehicle or the opening and destruction of bales, crates, and containers.

- 9) Drums. The use of any drum or other instrument or device for the purpose of attracting attention by creation of noise to any performance, show or sale.
- 10) Hawkers, Peddlers. The shouting and crying of peddlers, hawkers and vendors which disturbs the peace and quiet of the neighborhood.

V. NOISE RESTRICTIONS ACCORDING TO ZONING DISTRICTS

A. This Regulation shall apply to the use or occupancy of any lot or structure thereon and to the noise produced thereby, but shall not apply to the following:

- 1) To the intermittent or occasional use, during the daytime, of light homeowner's residential outdoor equipment or commercial service equipment provided said equipment and its use complies with other provisions of these Regulations;
- 2) To construction activities and the associated use of construction devices nor to the noise produced thereby, provided such activities, and such equipment and its use, comply with other provisions of these Regulations;
- 3) To the operation of any motor vehicle on any public way, nor to the noise produced thereby.

B. Noise in Residential Zoning Districts or Affecting Residential or Institutional Property

No person shall create or cause to be emitted from or by any source subject to Regulation V any noise which causes or results in a maximum noise level, measured at any lot line of any lot located in any Residential Zoning District or in residential or institutional use elsewhere in conformance with the Cambridge Zoning Ordinance, in excess of any level of the "Residential District Noise Standard", Regulation V. E., provided that if said lot is located in any Industrial District, the maximum noise level measured at the lot line shall not exceed any level of the "Residential-Industrial Noise Standard", Regulation V. E.

C. Noise in Business, Office Zoning Districts

No person shall create or cause to be emitted from or by any source subject to Regulation V any noise which causes or results in a maximum noise level, measured at any lot line of any lot in any Business Zoning District other than a lot in residential or institutional use in conformance with the

Cambridge Zoning Ordinance, in excess of any level of the "Business District Noise Standard", Regulation V.E.

D. Noise in Industrial Zoning Districts

No person shall create or cause to be emitted from or by any source subject to Regulation V any noise which causes or results in a maximum noise level, measured at any lot line of any lot in recreational or business use in any Industrial Zoning District in conformance with the Cambridge Zoning Ordinance, in excess of any level of "Industrial District Noise Standard", Regulation V.E.

E. Zoning District Noise Standards

Noise standards referred to in these Regulations for the several zoning districts of the City of Cambridge, as defined in and established pursuant to the Cambridge Zoning Ordinance are as established by the following Table.

TABLE OF ZONING DISTRICT NOISE STANDARDS

Octave Band Center Frequency of Measurement (Hz)	Maximum Allowable Octave Band Sound Pressure Levels					
	Residential		Residential		Office	
	Institutional		Industrial		Business	
	Daytime	All Other Times	Daytime	All Other Times	Anytime	Anytime
31.5	76	68	79	72	79	83
63	75	67	78	71	78	82
125	69	61	73	65	73	77
250	62	52	68	57	68	73
500	56	46	62	51	62	67
1000	50	40	56	45	56	61
2000	45	33	51	39	51	57
4000	40	28	47	34	47	53
8000	38	26	44	32	44	50
Single- Number - Equivalent (dB(A))	60	50	65	55	65	70

VI. RESTRICTIONS ON NOISE EMITTED FROM CONSTRUCTION SITES

A. Except as provided for in Regulation VI. C. and VI. D., it shall be unlawful for any person to operate any construction device or devices on any construction site if the operation of such device or devices emits noise, measured at the lot line of the affected property, in excess of the values shown below:

Lot Use of Affected Property	Effective June 1, 1975		Effective Jan. 1, 1976	
	L <sub>10</sub> Level	Max. Noise Level	L <sub>10</sub> Level	Max. Noise Level
Residential or Institutional	80 dB(A)	86 dB(A)	75 dB(A)	86 dB(A)
Business or Office	85 dB(A)	-	80 dB(A)	-
Industrial	90 dB(A)	-	85 dB(A)	-

The same level shall apply to a public way as applies to an industrial use. Measurements should not be taken closer than 50 feet from the nearest active construction device on the construction site. The maximum noise level shall be measured on the sound level meter at slow response.

B. The L<sub>10</sub> level shall be determined in the following manner:

- 1) Every ten seconds, on the mark, the A-weighted noise level on the sound level meter with slow response is recorded until 100 observations have been made. If, during any of these observations, a measurement is substantially affected by any source outside the construction site (such as aircraft overflight), measurements made during these periods will not be considered. However the observation period shall be extended until 100 valid measurements are obtained. The L<sub>10</sub> level will be that level that is equal to the tenth highest level recorded.
- 2) If in the estimation of the person taking the measurements, outside noise sources contribute significantly to the noise level, the above procedure shall be repeated (with the same outside noise source contributions) when construction is inactive, in order to determine the existing background L<sub>10</sub> level. The L<sub>10</sub> level during construction must exceed the background L<sub>10</sub> level by 5 dB(A) to be considered a violation of Regulation VI. A.

- C. Except as provided for in Regulation VI. D, it shall be unlawful to operate a construction device at any street excavation, grading or repair, utility street work installation or repair, which produces a noise level exceeding 86 dB(A) at a distance of 50 feet from the device after June 1, 1975.

The provisions of Regulation VI. A, shall not apply to any construction site covered by Regulation VI. C. The provisions of Regulation VI. C. will not be applicable to any construction device used in emergency service work that is necessary to return utility service to an area provided that within 24 hours such device is brought into compliance with Regulation VI. C. or is not reused within the City until it does comply.

- D. The provisions of Regulation VI. A. and VI. C. shall not be applicable to impact devices.

## VII. PERMITS - GENERAL

- A. A permit shall constitute permission to use or to allow the use of a device or to engage in an activity to which reference has been made in these Regulations or in the Ordinances of the City of Cambridge.
- B. All applications for permits shall be made to the Superintendent of Buildings in such form and detail as he shall prescribe. Such application shall not relieve any person from otherwise complying with the provisions of these Regulations or any other law or ordinance.
- C. Such permit shall include such provisions and conditions as the Commissioner may deem necessary to protect the public health, welfare and comfort.
- D. Any permit required by these Regulations shall be displayed to any police officer or employee of the Building Department upon request.
- E. Any permit issued by the Superintendent of Buildings under the provisions of these Regulations may be revoked for violation of any of the terms and conditions of such permit.

### VIII. EXEMPTIONS

- A. The following uses and activities shall be exempt from noise level regulations:
- 1) Noises of safety signals, warning devices, and emergency pressure relief valves.
  - 2) Noises resulting from any authorized emergency vehicle, when responding to an emergency call or acting in time of emergency.
  - 3) Any other noise resulting from activities of a temporary duration permitted by law and for which a license or permit therefore has been granted by the city in accordance with Alternate Section.
  - 4) 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 regulations of this ordinance. 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 this ordinance.
  - 5) Noises resulting from emergency work as defined in DEFINITIONS SECTION.

### IX. PENALTIES

- A. Any person who violates any provision of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined not exceeding \$ \_\_\_\_\_, or by imprisonment for not more than \_\_\_\_\_ days, or by both said fine and said imprisonment.

### X. ENFORCEMENT

- A. The Chief of Police of the City of Cambridge shall be the officer charged with the enforcement of this ordinance. He shall, at any time necessary, call on the Superintendent of Buildings or his deputy to provide personnel to perform such tests as the Chief of Police deems necessary to determine violations of this ordinance.

XI. CONFLICT WITH OTHER REGULATIONS

- A. The noise regulations shall not relieve any person from complying with other laws, statutes, codes, regulations, or ordinances of the Commonwealth or of the City of Cambridge.

XII. VARIANCES

- A. The Superintendent of Buildings may grant variances after public hearing or may reject applications on review without a hearing. Variances thus granted may be effective for no longer than one year.

XIII. SEVERABILITY

- A. Each of these Regulations shall be constructed as separate to the end that if any Regulation or section, sentence, clause or phrase thereof shall be held invalid for any reason, the remainder of these Regulations shall continue in full force.

NOISE CONTROL REGULATION - CITY OF CAMBRIDGE

- I. PURPOSE
- II. DEFINITIONS
- III. GENERAL PROHIBITION OF NOISE EMISSIONS
- IV. PROHIBITION OF NOISE EMISSIONS IN DWELLING UNITS
- V. PROHIBITION OF NON-MEASURED NOISE POLLUTING ACTS
- VI. RESTRICTIONS - ZONING DISTRICTS
- VII. RESTRICTIONS - CONSTRUCTION SITES
- VIII. RESTRICTIONS - NOISE EMITTED FROM NEW MOTOR VEHICLES
- IX. PERMITS
- X. EXEMPTIONS
- XI. PENALTIES
- XII. ENFORCEMENT
- XIII. CONFLICT
- XIV. VARIANCES
- XV. SEVERABILITY

March 11, 1977.

## I. PURPOSE

This ordinance provides standards for the control of noise pollution and prohibits those acts which most frequently create noise pollution. The general objectives of these standards are to secure the public health, comfort, convenience, and safety of, and to promote the welfare, prosperity, peace, and quiet of, the citizens of the City of Cambridge.

Be it ordained by the City Council of the City of Cambridge as follows:

## II. DEFINITIONS

Terms used in this ordinance shall be defined as follows:

**ACOUSTICAL TERMINOLOGY** Acoustical Terminology used throughout these Regulations is that most recently approved as American Standard Acoustical Terminology by the American National Standards Institute (ANSI); except as may be specified otherwise herein.

**BUSINESS USE** shall be as set forth in the Zoning Ordinance of the City of Cambridge Article IV, Section 2.

**CONSTRUCTION** shall mean any and all physical activity necessary or incidental to the erection, placement, demolition, assembling, altering, cleaning, repairing, installing, or equipping of buildings and other structures, public or private highways, roads, premises, parks, utility lines, or other property, and shall include land clearing, grading, excavating, filling and paving.

**COMMERCIAL SERVICE EQUIPMENT** shall mean all engine- or motor-powered equipment intended for infrequent service work in inhabited areas, typically requiring commercial or skilled operators (such as chain saws, log chippers, paving rollers, etc.).

**CONSTRUCTION DEVICE** shall mean any powered device or equipment, designed and intended for use in construction. Examples of "construction devices" are air compressors, bulldozers, backhoes, trucks, shovels, derricks, or cranes.

**CONSTRUCTION SITE** shall mean that area within which a contractor confines a construction operation. This includes defined boundary lines of the project itself plus any contractor staging area outside those defined boundary lines and used expressly for the construction.

DAYTIME shall mean the period between the hours of seven ante meridian (7:00 a.m.) and six post meridian (6:00 p.m.) daily except Sunday according to the time system locally in effect.

dB is the abbreviation for decibel.

dB(A) shall mean the A-weighted sound level in decibels, as measured by a general purpose sound level meter complying with the provisions of Specifications for Sound Level Meters (Sl. 4 1971), American National Standards Institute (ANSI), properly calibrated, and operated on the "A" weighting network.

EMERGENCY WORK Work necessary to restore public or private property to a safe condition following a public calamity or work required to protect persons or property from an imminent exposure to danger. The necessity of such work shall be determined by the Building Superintendent or his deputy or by other authorized emergency or public utility personnel after consultation with the Superintendent of Buildings.

HOMEOWNER'S LIGHT RESIDENTIAL OUTDOOR EQUIPMENT shall mean all engine-or motor-powered garden or maintenance tools intended for repetitive use in residential areas, typically capable of being used by a homeowner (such as lawn mowers, garden tools, riding tractors, snow blowers, snow plows, etc.).

Hz is the abbreviation for Hertz, which means cycles per second.

IMPACT DEVICE shall mean a construction device in which or by which a hammer, meaning a moving mass of hard solid material, is mechanically by means of a working fluid or compressed air caused to repetitively impact upon and transmit kinetic energy to a tool. The tool may be included as part of the device, as in the case of a moil on a paving breaker or the drill steel or a jackhammer, or it may be a mass to which the impact device is temporarily connected as in the case of a pile and pile driver. Examples of impact devices are pile drivers, paving breakers and power impact hammers, impact wrenches, riveters and stud drivers.

INDUSTRIAL USE shall be as set forth in the Zoning Ordinance of the City of Cambridge, Article IV, Section 2.

L<sub>10</sub> LEVEL shall mean the A-weighted sound level exceeded 10% of the time.

NOISE POLLUTION means the presence of that amount of acoustic energy for that period of time necessary:

- a) to cause temporary or permanent hearing loss in persons exposed;
- b) to otherwise be injurious, or tend to be, on the basis of current information, injurious, to the public health or welfare;
- c) to cause a nuisance:
- d) to interfere with the comfortable enjoyment of life and property or the conduct of business; or
- e) to exceed standards or restrictions established herein or pursuant to the granting of any permit by the Superintendent of Buildings.

NON-MEASURED NOISE POLLUTING ACTS - Uses and activities that create or cause to be created loud and unnecessary noises which, by virtue of the nature, duration or time of occurrence, are not readily subject to measurement by official testing devices.

PAVING BREAKER shall mean any hydraulically or pneumatically-powered impact device intended to cut or trench pavement, subbase macadam, gravel, concrete or hard ground.

PERSON means an individual, partnership, association, firm, syndicate, company, trust, corporation, department, bureau or agency, or any other entity recognized by law as the subject of rights and duties.

PILE DRIVER shall mean an impact device designed or used for the driving of piles, columns and other supports into soil or other material by means of impact, vibrations, pressure or other means.

RESIDENTIAL USE shall be as set forth in the Zoning Ordinance of the City of Cambridge, Article IV, Section 2.

SOUND PRESSURE LEVEL (SPL) shall be numerically equal to 20 times the logarithm (to the base 10) of the sound pressure to the reference sound pressure (the reference sound pressure shall equal 20 micropascals.) Unless otherwise stated, the level is understood to be that of a root mean-square pressure.

ZONING DISTRICTS shall mean the zoning districts and land uses therein as established by the Zoning Ordinance of the City of Cambridge.

### III. GENERAL PROHIBITIONS OF NOISE EMISSIONS

- A. No person or persons owning, leasing, or controlling the operation of any source or sources of noise shall willfully, negligently, or through failure to provide necessary equipment or facilities or to take necessary precautions, permit the establishment or continuation of a condition of noise pollution.

### IV. PROHIBITION OF NOISE EMISSIONS WITHIN DWELLING UNITS

- A. It shall be unlawful for any person or persons owning, leasing, or controlling the operation of any source or sources of noise to make continue or cause to be made or continued any loud, unnecessary or unusual noise within a dwelling unit which either annoys, disturbs, injures or endangers the comfort, repose, health, peace or safety of others living in adjacent dwelling units or otherwise living in close proximity to the source of noise.

### V. PROHIBITION OF NON-MEASURED NOISE POLLUTING ACTS

- A. The following acts, among others, are declared to be loud, disturbing and unnecessary noises in violation of this ordinance, but said enumeration shall not be deemed to be exclusive, namely:

- 1) Horns, Signaling Devices, etc. The sounding of any horn or signalling device on any automobile, motorcycle, street car or other vehicle on any street or public place of the city, except as a danger warning; the creation by means of any such signaling device of any unreasonably loud or harsh sound; and the sounding of any such device for an unnecessary and unreasonable period of time. The use of any signalling device except one operated by hand or electricity; the use of any horn, whistle or other device operated by engine exhaust; and the use of any such signaling device and

- 2) Radios, Phonographs, etc. The using, operating, or permitting to be played, used or operated any radio receiving set, musical instrument, phonograph, or other machine or device for the producing or reproducing of sound in such manner as to disturb the peace, quiet and comfort of the neighboring inhabitants or at any time with louder volume than is necessary for convenient hearing for the person or persons who are in the room, vehicle or chamber in which such machine or device is operated and who are voluntary listeners thereto. The operation of any such set, instrument, phonograph, machine or device between the hours of eleven o'clock p.m. and seven o'clock a.m. on weeknights and twelve o'clock p.m. and seven o'clock a.m. on weekend nights in such a manner as to be plainly audible at a distance of fifty (50) feet approximately fifteen (15) meters from the building, structure, vehicle, or dwelling unit in which it is located shall be prima facie evidence of a violation of this section.
- 3) Yelling, Shouting, etc. Yelling, shouting, hooting, whistling, or singing on the public streets, particularly between the hours of 11 p.m. and 7 a.m. or at any time or place so as to annoy or disturb the quiet, comfort, or repose of persons in any office, or in any dwelling, hotel or other type of residence, or of any persons in the vicinity.
- 4) Animals, Birds, etc. The keeping of any animal or bird which by causing frequent or long continued noise shall disturb the comfort or repose of any persons in the vicinity.
- 5) Steam Whistles. The blowing of any locomotive steam whistle or steam whistle attached to any stationary boiler except to give notice of the time to begin or stop work or as a warning of fire or danger, or upon request of proper city authorities.
- 6) Exhausts. The discharge into the open air of the exhaust of any steam engine, stationary internal combustion engine, motor boat, or motor vehicle except through a muffler or other device which will effectively prevent loud or explosive noises therefrom.
- 7) Defect in Vehicle or Load. The use of any automobile, motorcycle, or vehicle so out of repair, so loaded or in such manner as to create loud and unnecessary grating, grinding, rattling or other noise.
- 8) Loading, Unloading, Opening Boxes. The creation of a loud and excessive noise in connection with loading or unloading any vehicle or the opening and destruction of boxes, crates and containers.

- 9) Drums. The use of any drum or other instrument or device for the purpose of attracting attention by creation of noise to any performance, show, sale, or exhibition.
- 10) Hawkers, Peddlers. The shouting and crying of peddlers, hawkers and vendors which disturbs the peace and quiet of the neighborhood.

## V. NOISE RESTRICTIONS ACCORDING TO ZONING DISTRICTS

A. This Regulation shall apply to the use or occupancy of any lot or structure thereon and to the noise produced thereby, but shall not apply to the following:

- 1) To the intermittent or occasional use, during the daytime, of light homeowner's residential outdoor equipment or commercial service equipment provided said equipment and its use complies with other provisions of these Regulations;
- 2) To construction activities and the associated use of construction devices nor to the noise produced thereby, provided such activities, and such equipment and its use, comply with other provisions of these Regulations;
- 3) To the operation of any motor vehicle on any public way, nor to the noise produced thereby.

### B. Noise in Residential Zoning Districts or Affecting Residential Property.

No person shall create or cause to be emitted from or by any source subject to Regulation VI any noise which causes or results in a maximum noise level, measured at any lot line of any lot located in any Residential Zoning District or in residential use elsewhere in conformance with the Cambridge Zoning Ordinance, in excess of any level of the "Residential District Noise Standard", Regulation VI. E., provided that if said lot is located in any Industrial District, the maximum noise level measured at the lot line shall not exceed any level of the "Residential-Industrial Noise Standard", Regulation VI. E. Noise emitted from construction sites shall be excepted from this regulation.

### C. Noise in Business, Office Zoning Districts

No person shall create or cause to be emitted from or by any source subject to Regulation V any noise which causes or results in a maximum noise level, measured at any lot line of any lot in any Business Zoning District, that exceeds the

Cambridge Zoning Ordinance, in excess of any level of the "Business District Noise Standard", Regulation VI. E. Noise emitted from construction sites shall be excepted from this regulation.

D. Noise in Industrial Zoning Districts

No person shall create or cause to be emitted from or by any source subject to Regulation VI, any noise which causes or results in a maximum noise level, measured at any lot line of any lot in recreational or business use in any Industrial Zoning District in conformance with the Cambridge Zoning Ordinance, in excess of any level of "Industrial District Noise Standard", Regulation VI. E. Noise emitted from construction sites shall be excepted from this regulation.

E. Zoning District Noise Standards

Noise standards referred to in these Regulations for the several zoning districts of the City of Cambridge, as defined in and established pursuant to the Cambridge Zoning Ordinance are as established by the following Table.

TABLE OF ZONING DISTRICT NOISE STANDARDS

Octave Band Center Frequency of Measurement (Hz)	Maximum Allowable Octave Band Sound Pressure Levels					
	Residential		Residential in Industrial		Office Business	Industry
	Daytime	All Other Times	Daytime	All Other Times	Anytime	Anytime
31.5	76	68	79	72	79	83
63	75	67	78	71	78	82
125	69	61	73	65	73	77
250	62	52	68	57	68	73
500	56	46	62	51	62	67
1000	50	40	56	45	56	61
2000	45	33	51	39	51	57
4000	40	28	47	34	47	53
8000	38	26	44	32	44	50
Single- Number - Equivalent	60	50	65	55	65	70

VII. RESTRICTIONS ON NOISE EMITTED FROM CONSTRUCTION SITES

A. Except as provided for in Regulation VII C. and VII D., it shall be unlawful for any person to operate any construction device or devices on any construction site if the operation of such device or devices emits noise, measured at the lot line of the affected property, in excess of the values shown below:

<u>Lot Use of Affected Property</u>	<u>L<sub>10</sub> Level</u>	<u>Max. Noise Level</u>
Residential	75 dB(A)	86 dB(A)
Business or Office	80 dB(A)	-----
Industrial	85 dB(A)	-----

The same level shall apply to a public way as applies to an industrial use. Measurements should not be taken closer than 50 feet or approximately fifteen (15) meters from the nearest active construction device on the construction site. The maximum noise level shall be measured on the sound level meter at slow response.

B. The L<sub>10</sub> level shall be determined in the following manner:

- 1) Every ten seconds, on the mark, the A-weighted noise level on the sound level meter with slow response is recorded until 100 observations have been made. If, during any of these observations, a measurement is substantially affected by any source outside the construction site (such as aircraft overflight), measurements made during these periods will not be considered. However the observation period shall be extended until 100 valid measurements are obtained. The L<sub>10</sub> level will be that level that is equal to the tenth highest level recorded.
- 2) If in the estimation of the person taking the measurements, outside noise sources contribute significantly to the noise level, the above procedure shall be repeated (with the same outside noise source contributions) when construction is inactive, in order to determine the existing background L<sub>10</sub> level. The L<sub>10</sub> level during construction must exceed the background L<sub>10</sub> level by 5 dB(A) to be considered a violation of Regulation VII A.

- C. Except as provided for in Regulation VIID, it shall be unlawful to operate a construction device at any street excavation, grading or repair, utility street work installation or repair, which produces a noise level exceeding 86 dB(A) at a distance of 50 feet or approximately fifteen (15) meters from the device.

The provisions of Regulation VIIA, shall not apply to any construction site covered by Regulation VII C. The provisions of Regulation VII C. will not be applicable to any construction device used in emergency service work that is necessary to return utility service to an area provided that within 24 hours such device is brought into compliance with Regulation VII C. or is not reused within the City until it does comply.

- D. The provisions of Regulation VIIA. and VII C. shall not be applicable to impact devices.

VIII. RESTRICTIONS ON NOISE EMITTED FROM NEW MOTOR VEHICLES

No person shall sell or lease a new motor vehicle that produces a maximum noise level, in dB(A), exceeding the following limits (measured at a distance of fifty (50) feet approximately fifteen (15) meters from the center line of travel.)

Date of Manufacture of Vehicle	Light Motor Vehicle	Heavy Motor Vehicle	Motorcycle
After date or ordination	80	84	84
After January 1, 1980	75	75	75

IX. PERMITS - GENERAL

- A. A permit shall constitute permission to use or to allow the use of a device or to engage in an activity to which reference has been made in these Regulations or in the Ordinances of the City of Cambridge.
- B. All applications for permits shall be made to the Superintendent of Buildings in such form and detail as he shall prescribe. Such application shall not relieve any person from otherwise complying with the provisions of these Regulations or any other law or ordinance.
- C. Such permit shall include such provisions and conditions as the Commissioner may deem necessary to protect the public health, welfare and comfort.

- D. Any permit required by these Regulations shall be displayed to any police officer or employee of the Building Department upon request.
- E. Any permit issued by the Superintendent of Buildings under the provisions of these Regulations may be revoked for violation of any of the terms and conditions of such permit.

#### X. EXEMPTIONS

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

- 1) Noises of safety signals, warning devices, and emergency pressure relief valves.
- 2) Noises resulting from any authorized emergency vehicle, when responding to an emergency call or acting in time of emergency.
- 3) Any other noise resulting from activities of a temporary duration permitted by law and for which a license or permit therefore has been granted by the City in accordance with Section IX of this Ordinance
- 4) 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 regulations of this ordinance. 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 this ordinance.
- 5) Noises resulting from emergency work as defined in DEFINITIONS SECTION.

#### XI. PENALTIES

- A. Any person who violates any provision of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined an amount not exceeding \$100, or by imprisonment for not more than 5 days, or by both said fine and said imprisonment.

XII. ENFORCEMENT

- A. The Chief of Police of the City of Cambridge shall be the officer charged with the enforcement of this ordinance. He shall, at any time necessary, call on the Superintendent of Buildings or his deputy to provide personnel to perform such tests as the Chief of Police deems necessary to determine violations of this ordinance.

XIII. CONFLICT WITH OTHER REGULATIONS

- A. The noise regulations shall not relieve any person from complying with other laws, statutes, codes, regulations, or ordinances of the Commonwealth or of the City of Cambridge.

XIV. VARIANCES

- A. The Superintendent of Buildings may grant variances after public hearing or may reject applications on review without a hearing. Variances thus granted may be effective for no longer than one year.

XV. SEVERABILITY

- A. Each of these Regulations shall be constructed as separate to the end that if any Regulation or section, sentence, clause or phrase thereof shall be held invalid for any reason, the remainder of these Regulations shall continue in full force.



# City of Cambridge

In the Year One Thousand, Nine Hundred Seventy-Seven

## AN ORDINANCE

In amendment to an ordinance formerly entitled: "The General Ordinances of the City of Cambridge" as revised in 1972 and now designated as "The Code of the City of Cambridge".

*Be it ordained by the City Council of the City of Cambridge as follows:*

Chapter Thirteen entitled: "Offenses" Article IV entitled: "Offenses Against Public Peace" is hereby amended by striking out the present sections 13-10 and 13-11 and substituting in place thereof a new section 13-10 entitled: "Regulations for the Control of Noise".

ATTEST:- Paul E. Healy, City Clerk.

NOTE: Pursuant to the provisions of General Laws, Chapter 43, Section 23, Tercentenary Edition, being a part of the City Charter, the ordinance as aforesaid, which exceeds in length eight octavo pages of ordinary book print may be examined at the Office of the City Clerk in the form of a printed pamphlet during office hours on or after March 14, 1977.

By order of the City Council,

Paul E. Healy, City Clerk.

In City Council March 14, 1977.

Passed to a second reading at the City Council meeting of March 14, 1977 and on or after April 4, 1977 the question may be on passing to be ordained.

0-18

ORDINANCE REGULATING THE CONTROL OF  
NOISE.

Passed to be ordained on  
April 11, 1977

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