

CITY OF BOSTON

AIR POLLUTION CONTROL COMMISSION

BOSTON CITY HALL

BOSTON, MASSACHUSETTS 02201

REGULATIONS FOR THE CONTROL OF NOISE
IN THE CITY OF BOSTON

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The Air Pollution Control Commission of the City of Boston, acting under the authority granted in Chapter 40, Section 21 of the General Laws of the Commonwealth of Massachusetts, and by the City of Boston Code, Ordinances, Title 7, Section 50, hereby adopts the following Regulations for the Control of Noise in the City of Boston.

DEFINITIONS

1. COMMISSION means the Air Pollution Control Commission of the City of Boston, or its successor as may hereinafter be designated.
2. 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.
3. NOISE POLLUTION means the presence of that amount of acoustic energy for that amount of time necessary to:
 - a) cause temporary or permanent hearing loss in persons exposed;
 - b) otherwise be injurious, or tend to be, on the basis of current information, injurious, to the public health or welfare;
 - c) cause a nuisance;
 - d) interfere with the comfortable enjoyment of life and property or the conduct of business; or
 - e) exceed standards or restrictions established herein or pursuant to the granting of any permit by the Commission.
4. 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.
5. dB is the abbreviation for decibel.
6. Hz is the abbreviation for Hertz, and is equivalent to cycles per second.
7. SOUND PRESSURE LEVEL (SPL) shall be numerically equal to 20 times the logarithm (to the base 10) of the ratio of the sound pressure to the reference sound pressure (the reference sound pressure shall be equal to 20 micropascals.) Unless otherwise stated, the level is understood to be that of a root-mean-square pressure.
8. dBA shall mean the A-weighted sound level in decibels, as measured by a general-purpose sound level meter complying with the provisions of the American National Standards Institute, "Specifications for Sound Level Meters (ANSI S1.4 1983)", properly calibrated, and operated on the "A" weighting network.

9. L₁₀ LEVEL shall mean the A-weighted sound level exceeded ten per cent of the time.
10. DAYTIME shall mean the period between the hours of seven *ante meridian* (7:00 AM) and six *post meridian* (6:00 PM) daily except Sunday according to the time system locally in effect.
11. ZONING DISTRICTS shall mean the zoning districts and land uses therein as established by the Zoning Code of the City of Boston.
12. RESIDENTIAL USE shall include Use Items Numbers 1 through 15 inclusive and Number 53 of Section 8-7 of the Boston Zoning Code.
13. INSTITUTIONAL USE shall include Use Items Numbers 16, 17, 18, 20, 21, 22, 23, 24, 25, 29, and 33 of Section 8-7 of the Boston Zoning Code. It shall also include courthouses.
14. BUSINESS USE shall include Use Items Numbers 19, 26, 32, 34 through 52 inclusive, and 61 of Section 8-7 of the Boston Zoning Code.
15. RECREATIONAL USE shall include Use Items Numbers 27 and 28 of Section 8-7 of the Boston Zoning Code.
16. INDUSTRIAL USE shall include Use Items Numbers 68, 69, and 70 of Section 8-7 of the Boston Zoning Code.
17. MOTOR VEHICLE shall be defined as in the General Laws of the Commonwealth, Chapter 90, Section 1, titled Definitions.
18. LIGHT MOTOR VEHICLE shall be defined as all motor vehicles having a gross vehicle weight of 10,000 pounds or less.
19. HEAVY MOTOR VEHICLE shall be defined as all motor vehicles having a gross vehicle weight in excess of 10,000 pounds.
20. MOTORCYCLE shall be defined as in the General Laws of the Commonwealth, Chapter 90, Section 1, titled Definitions.
21. 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.
22. 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 used expressly for the construction.

23. 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, and cranes.
24. 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 in a paving breaker or the drill steel of a jackhammer, or it may be a mass to which the impact device is temporarily connected as in the case of a pile and a pile driver. Examples of “impact devices” are: Pile drivers, paving breakers and power impact hammers, impact wrenches, riveters and stud drivers.
- a) PAVING BREAKER shall mean any hydraulically or pneumatically powered impact device intended to cut or trench pavement, sub-base macadam, gravel, concrete or hard ground.
- b) 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.
25. HOMEOWNER’S LIGHT RESIDENTIAL OUTDOOR EQUIPMENT means all engine- or motor-powered garden or maintenance tools intended for repetitive use in residential areas, typically capable of being used by a homeowner. Examples of Homeowner’s Light Residential Outdoor Equipment are: Lawn mowers, garden tools, riding tractors, snow blowers, snow plows, etc.
26. COMMERCIAL SERVICE EQUIPMENT means all engine- or motor-powered equipment intended for infrequent service work in inhabited areas, typically requiring commercial or skilled operators. Examples of Commercial Service Equipment are: Chain saws, log chippers, paving rollers, etc.

REGULATIONS FOR THE CONTROL OF NOISE

IN THE CITY OF BOSTON

REGULATION 1: General Prohibition of Noise Emissions

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 of a condition of noise pollution.

REGULATION 2: Noise Restrictions According to Zoning Districts

2.1 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:

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

2.2 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 2, 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 compliance with the Boston Zoning Code, in excess of any level of the "Residential District Noise Standard", Regulation 2.5; provided that if said lot is located in any Industrial Zoning District, the maximum noise level, measured at the lot line, shall not exceed any level of the "Residential-Industrial Noise Standard", Regulation 2.5.

2.3 Noise in Business Zoning Districts

No person shall create or cause to be emitted from any source subject to Regulation 2, 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 Boston Zoning Code, in excess of any level of the "Business District Noise Standard", Regulation 2.5.

2.4 Noise in Industrial Zoning Districts

No person shall create or cause to be emitted from or by any source subject to Regulation 2, 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 Boston Zoning Code, in excess of any level of the “Industrial District Noise Standard”, Regulation 2.5.

2.5 Zoning District Noise Standards

Noise standards referred to in these Regulations for the several zoning districts of the City of Boston, as defined in and established pursuant to the Boston Zoning Code, 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 / Industrial		Business	Industrial
	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 dBA	50 dBA	65 dBA	55 dBA	65 dBA	70 dBA

REGULATION 3: Restrictions on Noise Emitted from Construction Sites

3.1 Except as provided for in Regulation 3.3 and 3.4, 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	L ₁₀ level	Maximum Noise Level
Residential or Institutional	75 dBA	86 dBA
Business or Recreational	80 dBA	--
Industrial	85 dBA	--

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

3.2 The L₁₀ level shall be determined in the following manner:

- a) Every ten seconds, on the mark, the A-weighted noise level on the sound level meter on “slow” response is recorded until one hundred (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 an 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 L₁₀ level will be that level that is equal to the tenth highest level recorded.

- b) 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 L₁₀ level. The L₁₀ level during construction must exceed the background L₁₀ level by five (5) dBA to be considered a violation of Regulation 3.1.

3.3 Except as provided for in Regulation 3.4, 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 dBA at a distance of fifteen meters (50 feet) from the device.

The provisions of Regulation 3.1 shall not apply to any construction site covered by Regulation 3.3. The provisions of Regulation 3.3 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 3.3, or is not reused within the City until it does comply.

3.4 The provisions of Regulations 3.1 and 3.3 shall not be applicable to impact devices.

REGULATION 4: Restrictions on Noise Emitted by New Motor Vehicles

No person shall sell or lease a new motor vehicle that produces a maximum noise level, in dBA, exceeding the following limits (measured at a distance of fifteen (15) meters (50 feet) from the center-line of travel, in accordance with procedures established by the Commission), provided that at such time as the United States Environmental Protection Agency (USEPA) shall promulgate noise emission regulations or standards covering any class of motor vehicles, this regulation shall automatically be amended to prescribe noise emission limits identical to those of the USEPA for the class or classes of vehicles involved, without, however, in any way affecting the limits for vehicles for which the USEPA has not established regulations or standards. The preceding proviso is intended to satisfy the requirements of Section 6 (e) (1) (A) of the Noise Control Act of 1972.

Date of Manufacture of Vehicle	Light Motor Vehicle	Heavy Motor Vehicle	Motorcycle
After January 1, 1970	--	88	88
Before January 1, 1973	86	--	--
After January 1, 1973	84	86	86
After January 1, 1975	80	84	84
After January 1, 1978	--	83	--
After January 1, 1982	--	80	75

REGULATION 5: Restriction on Noise Emitted from New Outdoor Powered Equipment for Sale or Lease – Other than Pile Drivers

No person shall sell or lease any new outdoor powered equipment that produces a maximum noise level, in dBA, exceeding the following limits (measured at a distance of fifteen (15) meters (50 feet), under test procedures established by the Commission); provided that at such time as the United States Environmental Protection Agency (USEPA) shall promulgate noise emission regulations or standards covering any product covered by this Regulation, this Regulation shall automatically be amended to prescribe noise emission limits identical to those of the USEPA for the product or products involved, without, however, in any way affecting the limits for other products for which the USEPA has not established regulations or standards. The preceding proviso is intended to satisfy the requirements of Section 6 (e) (1) (A) of the Noise Control Act of 1972.

Date of Manufacture of Equipment	Homeowner's Light Residential Outdoor Equipment	Commercial Service Equipment and Construction Devices (other than Pile Drivers)
After January 1, 1973	74	88
After January 1, 1975	70	85
After January 1, 1978	65	--
After January 1, 1980	--	80

REGULATION 6: Permits - General

- 6.1 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 Boston.
- 6.2 All applications for permits shall be made to the Air Pollution Control Commission in such form as it shall prescribe. Such application shall not relieve any person from otherwise complying with the provisions of these Regulations or any other law or ordinance.
- 6.3 Such permit shall include such provisions and conditions as the Commission may deem necessary to protect the public health, welfare and comfort.
- 6.4 Any permit required by these Regulations shall be displayed to any police officer or employee of the Air Pollution Control Commission upon request.
- 6.5 Any permit issued by the Air Pollution Control Commission under the provisions of these Regulations may be revoked for violation of any of the terms and conditions of such permit.

REGULATION X: Conflict with other Regulations

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

REGULATION Y: Variances

The Commission 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.

REGULATION Z: Severability

Each of these Regulations shall be construed 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.