

Philadelphia Department Of Public Health Board Of Health

NOISE AND EXCESSIVE VIBRATION REGULATIONS

Approved By:

BOARD OF HEALTH..... July 6, 1982

DEPARTMENT OF LAW..... August 2, 1982

DEPARTMENT OF RECORDS..... September 8, 1982

PREFACE

These Noise and Excessive Vibration Regulations are promulgated pursuant to the Philadelphia Code, Chapter 10-400 Noise & Excessive Vibration, Section 10-406, Powers and Duties of the Board of Health

These Regulations are divided into three categories, General Provisions, Specific Source Limitations and Motor Vehicles.

The General Provisions are intended to minimize noise and vibration emissions by prohibiting the emanation of sounds or vibrations from any activity or source which exceed the maximum permissible levels established hereafter.

Sound levels of the source shall be measured at the point of complaint origination. Such complaint origination shall be a residential or commercial establishment external to the property in which the source is found and vibration levels shall be measured according to accepted test procedures selected by the Department available to the public.

NOISE AND EXCESSIVE VIBRATION REGULATIONS

SECTION 1. DEFINITIONS

A. The following definitions are in the Noise Ordinance and apply to these Regulations:

- ~~(1) **Board** means the Board of Health.~~
- ~~(2) **Department** The Department of Public Health, Health Commissioner or any
—authorized representative thereof.~~
- ~~(3) **Facility** The area, buildings and equipment used by any person at a single
location in
—the conduct of business.~~
- ~~(4) **Noise** - The presence of a sound or sounds of such intensity, duration, frequency,
or
character which annoy, disturb, or cause or tend to cause adverse psychological
and
physiological effects on persons;~~
- ~~(5) **Person** Any individual, natural person, syndicate, association, partnership, firm,
—corporation, institution, agency, authority, department, bureau or instrumentality
of
—federal, state or local government or other entity recognized by law as subject of
rights
—and duties.~~
- ~~(6) **Sound** An oscillation in pressure, particle displacement, particle velocity or
other
—physical parameter in a medium with internal forces that causes compression and
—rarefaction of that medium.~~
- ~~(7) **Vibration** An oscillatory motion of solid bodies of deterministic or random
nature
—described by displacement, velocity or acceleration with respect to a given
reference
—point.~~
- ~~(8) **Excessive Vibration** The presence of a vibration or vibrations:

(a) of such intensity, duration, frequency or character which annoy,
disturb,
—or cause or tend to cause adverse psychological or physiological
effects
—on persons, or damage or tend to damage personal or real property;

(b) in excess of standards promulgated by the Board of Health.~~

~~**B.** In addition to definitions provided in the Noise Ordinance, the following definitions apply to
these
—Regulations:~~

- ~~(1) **Background Sound Level** —the measured sound level in the area without the
sound
—contribution of the specific source in question.~~

~~(2) **Commercial Establishment** – A place where commodities are exchanged, bought or
— sold.~~

~~(3) **Construction** – Any site preparation, assembly, erection, repair, alteration, or
similar
— action or the excavation, filling, grading and regulation of lots in connection
therewith
— for or of public or private rights of way, structures, utilities or similar property;
— including demolition.~~

~~(4) **Decibel (dB)** – A unit for measuring the volume of sound equal to 20 times the
— logarithm to the base 10 of the ratio of the pressure of the sound measured to the
— reference pressure which is 20 micropascals (20 micronewtons per square
meter).~~

~~(5) **Industrial Establishment** – A place where any department or branch or art,
— occupation, or business is conducted as a means of livelihood or for profit;
especially,
— one which employs much labor and capital and is a distinct branch of trade.~~

~~(6) **Institutional** – Applies to an establishment or place, especially of a public
character
— affecting the community, where the operations of an association or society are
carried
— on.~~

~~(7) **Property** – All land whether improved or not improved, with or without
structures.~~

~~(8) **Property Boundary** – The surveyed line at ground surface which separates the
facility
— owned, rented or leased by one or more persons from any other such facilities.~~

~~(9) **Residential Site** – An occupied home or apartment.~~

~~(10) **Siren** – A device manually or electronically operated for producing a
penetrating
— warning sound.~~

~~(11) **Sound Level** – The weighted sound pressure level obtained by the use of a
sound
— level meter and frequency weighting network such as A, B, or C as specified in
— American National Standards Institute specifications (ANSI S1, 4-1971, or the
latest
— revision thereof.) If the frequency weighting employed is not indicated, the
— A Weighting shall apply.~~

~~(12) **Sound Level Meter** – An instrument which includes a microphone, amplifier,
RMS~~

~~— detector, integrator or time averager, output meter and any applicable weighting
— network used to measure sound pressure levels.~~

~~(13) **Sound Pressure**— The instantaneous difference between the actual pressure and the~~

~~— average or barometric pressure at a given point in space, as produced by sound
— energy.~~

~~(14) **Source**— Any emitter of sound and/or vibration.~~

~~(15) **Speaker Device**— A device that converts the electrical output signal from an
— amplifier to a sound signal.~~

SECTION II. GENERAL PROVISIONS

A. SOUND LEVELS

~~— Sound levels from any commercial industrial and institutional source, excluding construction, shall not~~

~~— exceed the limits set forth in Table 1 at the point of complaint origination.~~

B. VIBRATION LEVELS

~~— Vibration levels shall not exceed 0.2 inches per second beyond any source property boundary or 30~~

~~— yards from any moving source.~~

C. DETERMINATION OF BACKGROUND SOUND LEVEL

~~— The Department shall request the operator to discontinue the suspected source of noise in order to~~

~~— measure the background sound level. In the event this is not feasible, a measurement location shall~~

~~— be selected in the immediate vicinity, at such a point to minimize the alleged noise source contribution~~

~~— to the total sound level.~~

D. TAMPERING

~~(1) No person shall operate any equipment unless all noise and/or vibration control
— devices installed thereon are in full operation.~~

~~(2) No person shall circumvent or remove any sound level monitoring instrument,
meter or~~

~~— device positioned by or for the Department.~~

~~(3) No person shall remove or deface a noise label on any product.~~

SECTION III. SPECIFIC SOURCE LIMITATIONS

~~A. ANIMALS~~

~~Noise (as defined by Section 10-402(4) of the Noise Ordinance and Section I(a) of these Regulations) by animals for a period or periods aggregating more than 15 minutes in any one hour where such animals are under a person's control is prohibited. This provision shall not apply to public zoos or nature centers.~~

B. ASH, TRASH, OR GARBAGE COLLECTION

Ash, trash, or garbage collection which creates noise in residential sites shall be prohibited between 9 P.M. and 7 A.M. without prior written permission of the Department. Such permission shall be considered where there is strong evidence that traffic or other problems of City-import require such action.

~~C. HOSPITALS, NURSING HOMES, HOUSES OF WORSHIP, COURTHOUSES, SCHOOLS AND LIBRARIES~~

~~(1) Sound levels from a specific external source, excluding construction, shall not exceed 2 dBA above background at the property boundary of any hospital or nursing home at any time.~~

~~(2) Sound levels from a specific external source, excluding construction, shall not exceed 2 dBA above background at the source of complaint origination where said source is within any house of worship, school, library or courthouse which is being used for its primary purpose if the effect of such action is to imminently disrupt the orderly course of worship, education, or administration of justice.~~

D. AMPLIFIED SOUNDS

~~(1) Amplified sounds from commercial, industrial and institutional establishments shall not exceed 3 dBA above background level beyond the property boundary.~~

~~(2) Playing of radios, phonographs or tape recorders on public transportation is prohibited.~~

~~E. SIRENS~~

~~(1) Sirens shall be operated only during emergency situations. Maximum permissible sound~~

~~—levels from sirens so operated is 128 dBA 10 feet from the source.~~

~~(2) Civil Defense and disaster warning sirens shall not exceed a signal source strength of~~

~~—128 dBA at 100 feet. These sirens will be used only as directed by appropriate City~~

~~—officials in emergency situations, for exercise purposes and to test operational—capability.~~

~~(3) It shall be prohibited for sirens associated with anti-theft or anti-intruder alarm systems~~

~~—to sound for more than fifteen (15) minutes at any single time. Therefore, every siren~~

~~—shall have a reset device which causes an automatic shutoff after the siren has sounded~~

~~—for 15 continuous minutes.~~

~~(4) Sirens shall be placed in such a manner as to cause the least possible noise effects on~~

~~—persons.~~

~~(5) At each siren location the name and telephone number of a 24-hour responsive party~~

~~—or a code number from which said name and telephone number may be electronically~~

~~—derived shall be clearly posted and visible to the public. A responsive party shall be a~~

~~—party who has the authority and ability to shut off the siren.~~

~~F. COMMERCIAL AIR CONDITIONING AND REFRIGERATION SYSTEMS~~

~~—Sound levels from commercial air conditioning and refrigeration systems shall not exceed 5 dBA~~

~~—above background at the point of complaint origination. Commercial air conditioning and~~

~~—refrigeration systems as used herein applies to those systems which provide air conditioning or~~

~~—refrigeration for more than two residential units as well as for those systems which are used in—commercial or industrial establishments.~~

~~G. PLACES OF ENTERTAINMENT~~

~~—All places of entertainment whose noise levels exceed the limits set forth in Table 1 shall keep doors~~

~~—and windows closed during hours of operation.~~

~~H. CONSTRUCTION~~

- ~~(1) No person shall perform any construction, in, on, over or under buildings, part of buildings, bridges, streets or pavements between the hours of 9 P.M. and 7 A.M. without the written approval of Air Management Services. On Sundays and the following holidays: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas, the aforesaid prohibition shall obtain between 9 P.M. and 8 A.M.~~
- ~~(2) Approval shall be considered where there is strong evidence that traffic patterns, safety or other problems of City import require such action.~~
- ~~(3) Subsections (1) and (2) above of this Section shall not apply to emergencies, public utility construction or with respect to construction of public works projects exclusively relating to streets, bridges and sidewalks.~~
- ~~(4) All equipment used in construction must comply with the noise standards of the Federal General Services Administration or other applicable State or Federal agencies.~~

SECTION IV. EXCEPTIONS

~~A. These regulations shall not apply to:~~

- ~~(1) The unamplified human voice.~~
- ~~(2) Aircraft and airport operations.~~
- ~~(3) Railway locomotives and cars.~~

SECTION V. MOTOR VEHICLES

~~A. All motor vehicles shall comply with the Regulations of the Pennsylvania Department of Transportation Title 67, Chapter 157, Established Sound Levels.~~

B. STREET VENDORS, SOUND TRUCKS AND STANDING COMMERCIAL VEHICLES

~~Noise from street vendors and sound trucks is prohibited between the hours of 9 P.M. and 7 A.M.~~

~~This provision may be waived by the Department in extraordinary circumstances. At other times~~

~~sound levels from street vendors, sound trucks and standing commercial vehicles shall not~~

~~exceed
the limits set forth in Table I.~~

~~C. HORN BLOWING~~

~~No person shall at any time sound the horn or other warning device of a vehicle except when
necessary to prevent accidents.~~

~~SECTION VI. SEVERABILITY~~

~~The provisions of these Regulations are severable and if any provisions, sentence, clause, section or
thereof
shall be held illegal, invalid, unconstitutional or inapplicable to any person or circumstances, such illegal
invalidity, unconstitutionality or inapplicability shall not affect or impair any of the remaining provi:
sentences,
clauses, sections or parts of the ordinance or their application to him or to other persons and circumstanc
is
hereby declared to be the legislative intent that these Regulations would have been adopted if such it
invalid or
unconstitutional provision, sentence, clause or part had not been included therein, and if the pers
circumstances
to which the ordinance or any part thereof is inapplicable had not specifically been exempted therefrom.~~