

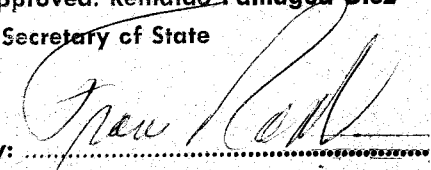
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REGULATION FOR THE
PREVENTION AND CONTROL
OF NOISE POLLUTION

COMMONWEALTH OF PUERTO RICO
OFFICE OF THE GOVERNOR
ENVIRONMENTAL QUALITY BOARD
SAN JUAN, PUERTO RICO

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Approved: Reinaldo Paniagua-Diez
Secretary of State

By: 
Acting Secretary of State

REGULATION OF THE ENVIRONMENTAL QUALITY BOARD
FOR THE PREVENTION AND CONTROL OF
NOISE POLLUTION

AS PROMULGATED BY THE ENVIRONMENTAL QUALITY BOARD

To Establish Standards and Requirements for the Control,
Reduction or Elimination of Noises Hazardous
To Public Health and Public Welfare, Pursuant
To Law No. 9, of June 18, 1978
As Amended, the Puerto Rico Environmental Public
Policy Act

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ARTICLE I - DEFINITIONS

Air Horn

A device which is used to produce a noise signal by means of compressed air.

Board

The Environmental Quality Board of the Commonwealth of Puerto Rico.

Construction

Any activity which is necessary or incidental for earth moving, erection, assembly, remodeling, and installation of equipment in buildings or structures, or any similar activity on premises, right of ways, public or private structures, or similar property.

Daytime

Period between 7:01 A.M. and 9:00 P.M.

dB (A) (Decibel of A - weighted Sound Level)

The unit measure of sound level, measured with the A - frequency - weighting.

Decibel, dB

The unit measure of sound level and other kinds of levels.

Demolitions

Any dismantling, removal or intentional destruction of structures, such as, but not limited to: public or private buildings, right-of-way surfaces, or similar property.

Emergency

Any occurrence or set of circumstances which cause immediate or imminent danger to a person or to property, and which requires immediate attention.

Emission

Emanation or discharge of noise to the atmosphere from any sound source.

Emission Source

Any object, device, or sound wave originating thing, such as of a stationary type, mobile, or portable.

Existing Sound Source Site

Any existing sound source site at the effective date of this regulation.

Impulsive Sound

Sound of short duration, usually of less than one second and of high intensity, with an abrupt onset and rapid decay, such as, but not limited to: explosions, drop forge impacts and the discharge of fire arms.

L 10

The sound level, in decibels, which is exceeded 10% of the time during a stated time period.

Leq (Equivalent Sound Level)

The level, in decibels, of the meansquare A-weighted sound pressure during a stated time period, with reference to the square of the standard reference pressure of 20 micro-pascals.

Motor Boat

Any vessel which is propelled by a motor, including, but not limited to; boats, ships, barges, amphibious vehicles, tugboats.

Motorcycles

As defined in the Motor Vehicle Law, Law No. 141 of 20 July, 1960, as amended, (an unenclosed motor vehicle having a saddle for the use of the operator, and two or three wheels, such as, but not limited to, motor scooters and minibikes).

Motor Vehicle

Any motor vehicle, as defined in Law No. 141 of 20 July 1960, as amended. (Any vehicle which is propelled or drawn on land by motor, such as, but not limited to: passenger cars, trucks, truck trailers, campers, go-carts, and racing vehicles).

Muffler

A device for abating the sound of escaping gases of an internal combustion engine.

New or Modified Sound Source Site

Any sound source site that is not in existence at the effective date of this regulation.

Nighttime

Period between 9:01 P.M. and 7:00 A.M.

Noise

Any sound which annoys or disturbs humans psychologically and/or physiologically, and that exceeds the limitations established in this regulation.

Noise Pollution

Any emission of sound that endangers, or injures the safety or health of humans, affects real property or its lawful use and enjoyment of property, according to the standards set forth in this Regulation.

Person

Any natural or juridical person, or group of persons, private or public, including agencies, governmental instrumentalities, municipalities, and quasipublic corporations.

Public Right-of-Ways

Any street, avenue, boulevard, highway, sidewalk, or alley or similar space dedicated for public use.

Sound

An oscillatory phenomena in which the matter is set to vibrate in such a manner that its density is affected. The changes in the density of the matter (and for the same reason the pressure it exerts) will be rhythmical or periodic. The description of this will include all the sound characteristics such as the duration, wave amplitude, frequency, intensity and velocity.

Sound Level (Noise level)

The level, in decibels, measured by an instrument satisfying the requirements of the American National Standards Specifications for Sound Level Meters, S1.4-1971, Type 2. For the purpose of this Regulation, the sound level shall be measured using the A-frequency weighting and the Slow Dynamic Averaging Characteristics.

Sound Level Meter

Any instrument used to measure sound pressure levels.

Sound Pressure Level

20 times the logarithm to the base 10 (20 Log 10) of the ratio of the RMS Sound Pressure to the reference pressure of 20 micropascals ($20 \times 10^{-6} \text{ N/m}^2$). The sound pressure level is denoted L_p and is expressed in decibels.

Sound Source Site

Place, site or premise of origin of sound wave, or any geographical area including all the land and nearby water bodies. The sound source site comprises all the individual sound sources located within the limits of such property, such as stationary type, mobile or portable.

Sound Waves

The periodic undulatory variations in the density and pressure of the medium.

Weekday

Any day, Monday through Friday, which is not a Legal Holiday.

Vibration

Any oscillatory motion of solid bodies, of a random nature, characterized by displacement, velocity, and/or acceleration with respect to a given reference point.

Zone I

Area in which human beings live, and/or sleep, in which noise levels shall not interfere with rest or sleep: including all residential houses, lands, and structures where rest is accomplished; this zone shall include also any place within the limits of the property, or that place which is three feet distant from the principal surface of residences or structures, as it be applicable. This definition includes, but is not limited to, areas such as the following:

A. Residences

1. Permanent Homes.
2. Rural or country homes.
3. Summer homes.

B. Commercial Dwellings

1. Hotels and Motels
2. Apartments
3. House trailer parks
4. Campsites
- 5.. Cabins
6. Guest Houses
7. Student Dormitories

C. Community Services

1. Orphanages
2. Elderly asylums
3. Hospitals
4. Mental Health Hospitals
5. Correctional Institutions
6. Charity Institutions

Zone II

Area in which interpersonal communication is achieved by speech, where noise levels shall not interfere with such communication; said zone shall include any place within the property limits or that site or area which is at a distance of three feet from the surface of any structure, as it is applicable. This category includes, but is not limited to, the following:

A. Commercial Food Establishments

1. Restaurants
2. Luncheon Shops
3. Cafeterias
4. Ice-cream parlors
5. Night Clubs
6. Open-Air Cafeterias

B. Vehicle Service Stations

1. Gas stations
2. Auto sales, and rental business
3. Parking lots
4. Car washes
5. Auto repair services (Tin shops, Painting, Mechanical Repair)

C. Property not Live in by Humans, Miscellaneous Commercial Services.

1. Funeral parlor
2. Dog pounds, Kennels and Veterinary Clinics

D. Recreation and Entertainment (Property not lived in by humans)

1. Theaters
2. Stadiums
3. Race Tracks
4. Golf Courses
5. Amusement and recreation parks
6. Beaches
7. Public Squares

E. Community Services not Inhabited by Persons

1. Schools
2. Churches
3. Cultural Centers
4. Hunting and Fishing Tracts
5. Forests

Zone III

Area in which people stay for long periods of time engaged in economic activities of such nature that higher noise levels are anticipated than in the other zones. This definition includes, but is not limited to, areas such as the followings:

A. Loading and Unloading Establishments

1. Hardware Stores
2. Warehouses, Lumberyards, Wholesale Shops
3. Truck Terminals
4. Docks

B. Industrial Areas (Properties used in the production or manufacture of consumer goods)

1. Mining (Tentative)
2. Light and Heavy Industry
3. Petrochemical plants
4. Refineries
5. Quarries
6. Foundries
7. Excavations
8. Thermoelectric Generating Plants

C. Agriculture - Area used to produce or to cultivate crops, or:

1. Poultry Farms
2. Dairy Farms
3. Greenhouses
4. Barns

Quiet Zone (Noise Sensitive Zones)

A previously designated area where a need may exist for exceptional quietness, where the equivalent sound level shall not exceed 45 dB (A).

ARTICLE II - GENERAL PROVISIONS

2.1 Generic Prohibitions

2.1.1 No person shall cause or permit noise pollution as defined in Article I.

2.1.2 No person shall cause or permit the production or emission of any noise in violation of applicable laws and regulations.

A. Such rules and regulations include:

1. All the requirements established by this Regulation or by other laws and regulations of the Commonwealth of Puerto Rico.

2. All provisions established through standards promulgated by the Board.

2.1.3 No person shall cause or permit from any "sound source site" the emission of a sound level which exceeds the limits established in Section IV for a period greater than ten percent (10%) of the time (L 10), or of an equivalent sound level (Leq) which exceeds the limits established in Section IV, during any measurement period, which shall not be shorter than ten minutes.

2.1.4 Tampering

No person shall cause or permit:

A. The tampering or destruction of any noise control equipment except for the purpose of repair or replacement of said equipment.

B. Intentional tampering with, or alteration of any instrument or device used to measure sound placed by and/or for the Board, provided that said instrument or device or the area in which it is located are properly marked or labeled.

C. The use of any product from which has been removed or rendered inoperative, its noise control system, any other such design element, or its sound level label, has been removed.

2.2 Inspections

A. The representatives of the Board, after properly identifying themselves, shall be able to enter and investigate any local, equipment, facilities, premises or property of any person

subject to its jurisdiction, with the purpose of investigating and verifying compliance with the provisions of this Regulation, of taking any sound level measurements the Board deems necessary, or having access to books or documents related to any matter under investigation.

- B. If the owners, holders, their representatives or officials in charge, refuse the entry and/or examination, the Board or its representatives may use all the legal remedies available to gain access to the premises, equipment or said property.

2.3 Records

The Board may require the owner or caretaker of any commercial or industrial sound source site or sound emission source to establish and maintain whatever records, and prepare whatever reports, which seem reasonable in the judgement of the Board.

2.4 Measurements

All the measurements and data analyses will be made in accordance with the methods and guidelines adopted by the Board.

2.5 Equipment

All equipment for noise pollution control shall fulfill the requirements established by the Board. The equipment must be installed, maintained and operated in a satisfactory and reasonable manner, in accordance with the manufacturers specifications and the requirements established by the Board.

ARTICLE III - PROHIBITED NOISES

3.1 Specific Prohibitions

The following actions among other, are declared by this Regulation to be polluting, excessive, annoying and strident noises.

3.1.1 Horns, sirens

No person shall cause or permit the sounding of horns and sirens of any motor vehicle on any public right-of-way or sound source site unnecessarily, except as a warning of danger, or in case of emergency, as set forth in Section 6.4.

3.1.2 Air Horns

No person shall cause or permit the use, sale or installation of any air horn, as defined in Article I, after 60 days have elapsed from the effectiveness of this Regulation; and/or of any type of horn which is not the type normally installed on motor vehicles and motorcycles.

3.1.3 Radio, musical instruments, juke boxes, amplifiers and similar devices.

No person shall cause or permit the use or operation of any radio, musical instrument, juke box, sound amplifier or any similar device for the production or reproduction of sound in such a manner that it may cause noise pollution across a property boundary, or within quiet zones, in violation of the noise level limits set forth in Section 4.1.

3.1.4 Exterior loudspeakers, public address systems, and similar devices

A. For noncommercial purposes

No person shall cause or permit the use or operation of any exterior loudspeaker, public address system, or similar device, wherever it may be located, between the nighttime period, in such a manner that the sound therefrom creates noise pollution across residential zones or within quiet zones.

B. For commercial purposes

No person shall operate or permit the operation for commercial purposes of any loudspeaker, public address system, or similar

device, in a fixed or movable position, on the outside of any building, or motor vehicle, in such a manner that the noise emission exceeds the maximum permissible noise level limits set forth in Section 4.1; it is hereby prohibited the use or operation of such devices, for commercial purposes during the nighttime period.

3.1.5 Street Sales (Venta por pregoneo)

No person shall cause or permit the sale of any product by shouting or "outcry" by means of the use of amplifier systems within any residential or commercial area of the city or municipality, in such a manner that the noise emission exceeds the maximum permissible noise level limits set forth in Section 4.1; street sales by shouting or "outcry" are hereby prohibited during the nighttime period.

3.1.6 Construction

- A. No person shall cause or permit the use or operation of any equipment for construction, repair and/or demolition work, in such a manner as to produce noise pollution, as defined in Section I of this Regulation; the use or operation of such equipment is hereby prohibited during the weekdays nighttime period, except for emergency work, as provided in sections 4.4 A (1), and 6.4 of this Regulation.
- B. This section shall not apply to the use of domestic power tools subject to Section 3.1.13 of this Regulation.

3.1.7 Motor Vehicle Racing Events

No person shall cause or permit the operation of any motor vehicle racing event in any place, in violation of the standards set forth in Section 4.1 of this Regulation, except in a duly authorized racetrack, and in the manner prescribed by the Board.

3.1.8 Refuse Collection Vehicles

- A. No person shall cause or permit the operation of the refuse compacting mechanism of any motor vehicle after the 1st of January 1979, in such a manner that during the compaction cycle, the sound level pressure of 65 dBA is exceeded, when measured at a distance of 50 feet, and/or its equivalent, from any point on the vehicle.
- B. No person shall cause or permit the collection of refuse between the hours of 10:00 P.M. to 6:00 A.M. of the following day, in residential zones and/or quiet zones.

3.1.9 Alarms

No person shall cause or permit the sounding of any exterior alarm on any building or motor vehicle unless such alarm ceases its operation within five (5) minutes of activation.

3.1.10 Quiet Zone (Noise Sensitive Zone)

No person shall cause or permit the emission of any unnecessary, unexpected or unusual noise in violation of this Regulation, close to a school, or any other educational institution, hospital, nursing home, court of justice, or designated area where exceptional quiet is necessary while such institution is in use; provided that conspicuous signs and posters are displayed on adjacent or contiguous streets indicating the presence of the quiet zone.

3.1.11 Machinery, Equipment, Fans, Air Conditioners

No person shall cause or permit the operation of machinery, equipment, fans and air conditioners in such a manner that they exceed the maximum sound pressure levels set forth in Section 4.1 of this Regulation. The operation of any machinery, equipment, pump, air conditioner, or similar device shall be subject to the maximum permissible noise levels in the zone in which the source is located.

3.1.12 Repairs and Testing of Motor Vehicles, Motorcycles

The repair, remodeling, rebuilding, or manufacturing of any motor vehicle, or motorcycle shall be subject to the maximum permissible noise levels of the zone in which the source is located.

3.1.13 Domestic Power Tools

No person shall cause or permit the operation of domestic power tools such as powered saws, sanders, drills, lawnmowers, or garden equipment, or tools of any kind used primarily for domestic purposes outdoor in residential zones between the hours of the nighttime period; or cause or permit the operation of such domestic power tools in such manner as to violate the provisions of this Regulation.

3.1.14 Vibration

No person shall cause or permit the operation of any device which generates vibrations which can be felt without instruments, or which are above the vibration perception threshold of an individual, at or beyond the boundary of any adjacent property from the source.

3.1.15 Animals

Maintaining and possessing any animal which frequently or continuously howls, barks, meows, squawks, whistles, or caws, or makes other sounds which produce noise pollution across the property lines, or within quiet zones, will be considered a violation of this Regulation (except for public and private zoological parks).

ARTICLE IV - NOISE EMISSION LEVELS AMONG ZONES
(Sound Levels in Receiving Land)

4.1 Sound Level Limits

No person shall permit or cause the emission of any sound, which upon crossing the property boundaries of the sound source site, exceeds the limits set forth in the following table, as measured at or within the proper receiving zone, as these zones are defined in Article I:

TABLE I

NOISE LEVEL LIMITS

dB(A)

(Equivalent Sound Level (Leq) and/or
Level Exceeded During 10% of the
Measurement Period (L10)

Receiving Zones	Day time period 7:01 a.m. to 9:00 p.m.	Nighttime period 9:01 p.m. to 7:00 a.m.
Zone I - (Residential)	65	45
Zone II - (Commercial)	70	60
Zone III - (Industrial)	75	75
Zone IV - (Quiet Zone)	45	45

4.1.1 Sounds among zones

When the sound source site or noise emission source can be identified and the measured noise affects more than one zone, the sound level of the most restricted zone will be applied.

4.1.2 The maximum permissible limit of sound pressure of the commercial zone shall also apply to land zoned for agriculture.

4.2 Correction for Character of Sound

The limits set forth in Section 4.1 shall be reduced by 5 dB(A) for any stationary source of sound which emits a pure tone, noise in fluctuating cycles or repetitions of impulsive noise.

4.3 Monitoring

The Board may require from any sound source site or noise emission source to install, operate and maintain monitoring equipment and the preparation and radication of reports on the same.

4.4 Exemptions, others

The following actions shall be exempted from the requirements set forth in Section 4.1.

A. Daytime Period (7:01 a.m. to 9:00 p.m.)

1. Sounds produced by temporary projects for the repair and maintenance of homes and their subdivisions.
2. Sounds produced by the firing of small fire arms in authorized firing ranges.
3. Sounds produced during the installation and repair of essential public service utilities.
4. Electric Generating Plants for emergency work in hospitals and/or emergency wards.

B. Nighttime Period (9:01 p.m. to 7:00 a.m.)

Noise emitted by electric power generating substations and by equipment used for water transportation, in cases of emergency.

C. Other Exemptions

1. Sounds produced by accident prevention devices.
2. Sounds produced by assemblies, public acts and non-routine parades duly authorized.
3. Sounds produced by the firing of small fire arms during the hunting season, in areas duly designated and for such hunting purposes.
4. Sounds emitted by the boilers of oil refineries and/or electric generating plants provided that the firing-up of such boilers, be accomplished during the daytime period.

6. Sounds caused by alarms which operate for no more than 5 minutes, and/or bells, chimes, or carrillons.
 7. Sound caused by the un-amplified human voice.
- 4.5 Nothing contained in this Section shall be construed as to impede the Board from requiring the installation of the best available noise control technology in the market to the activities declared exempted from the dispositions of this Regulation.
- 4.6 Without violating their constitutional right to free worship, religious institutions shall discipline themselves by establishing noise control measures in churches, which shall be submitted by an AD HOC Advisory Council in a reasonable term of time for the evaluation and approval of the Environmental Quality Board, provided that when a controversy arises in which noise complaints are involved against religious institutions, the same shall be submitted to the consideration of a special investigating panel, selected by the AD HOC Advisory Council and approved by the Board. Such special investigating panel shall submit its recommendations to the Environmental Quality Board for the final resolution of the case.
- The AD HOC Advisory Council shall be appointed by the Environmental Quality Board and the same will be composed of representatives from religious interest groups duly established in Puerto Rico.
- 4.7 This Regulation shall not apply to civilian aircraft to the extent such aircraft flight is controlled under Federal Law by the Federal Aviation Administration.

ARTICLE V - MOTOR VEHICLES, MOTORCYCLES ON PUBLIC RIGHTS-OF-WAY
(Motor Vehicles Sound Emission Levels)

5.1 General Prohibitions

5.1.1 No person shall operate or permit the operation of a motor vehicle, motorcycle or any other on a public right-of way at any time, in such a manner that the sound pressure levels emitted by the motor vehicle or motorcycle exceed the maximum permissible levels set forth in the following table, measured at a distance of 50 feet from the center of the public right-of-way and at the specified speed limits.

TABLE II

MAXIMUM PERMISSIBLE SOUND LEVELS FOR MOTOR VEHICLES ON PUBLIC RIGHT-OF-WAYS, MEASURED AT A DISTANCE OF 50 FEET

Vehicle Class	Speed Limit 35 MPH or less	Speed Limit Over 35 MPH	Stationary Run-up
Motor vehicle of 10,000 lbs or more (gross weight)	86 dBA	90 dBA	88 dBA
Any motorcycle	80 dBA	84 dBA	-----
Any other vehicle or any combination of vehicles	76 dBA	80 dBA	-----

5.1.2 No person shall operate or permit the operation of a motor vehicle or motorcycle in a public right-of-way, at any time, which is not equipped with a system device or sound muffler in good working order.

5.1.3 No person shall leave operating or permit the operation of any motor vehicle or any auxiliary towing equipment parked on a public right-of-way or public or private parking lot at a distance of less than 150 feet from the zone designated as residential zone or quiet zone during the nighttime period. This prohibition applies to additional equipment such as, but not limited to refrigeration equipment, electric portable generators, and/or similar equipment.

5.2 Maximum permissible levels for new motor vehicles and new motorcycles

No person shall sell or permit the selling of new motor vehicles (or new motorcycles), in such a manner that such motor vehicle or motorcycle exceed the maximum permissible levels measured at a distance of 50 feet from the vehicle or motorcycle, during an acceleration test as specified in Table III.

TABLE III

MAXIMUM PERMISSIBLE LEVELS FOR
NEW VEHICLES AND MOTORCYCLES

<u>Type of vehicle</u>	<u>Maximum permissible Level (dBA)</u>
Motor vehicle of gross weight of 10,000 lbs. or more manufactured between 1975-1977	86 dBA
Motor vehicle with a gross weight less than 10,000 lbs. manufactured after 1975	80 dBA
Motorcycles (any) made after 1975	83 dBA

5.3 Distance For Noise Measurement

For the purposes of Section 5.1 the Noise Level Measurements shall be made at a height of 1.2 meters (4 feet) over ground level and at a horizontal distance of 15 meters (50 feet) and/or its equivalent from the center of the line of traffic.

ARTICLE VI - ADMINISTRATION

6.1 Permits

- A. No person shall establish, possess, operate and/or cause the establishment of a sound source site or emission source without previously obtaining a permit from the Board.
- B. The Board may award such permits as may be required in accordance with the provisions established by any section of this Regulation.

6.1.1 Applications

Each application for a permit shall include those plans, specifications and any other detailed information about the noise levels emitted, and the noise control measures to be established from the sound source site or emission source.

6.1.2 Conditions on Permit

The Board may impose any reasonable condition upon a permit necessary for the operation of the sound source site or emission source within the limits set forth by this Regulation.

6.1.3 Lapse of Permit

The Board shall determine the term of duration for each permit in accordance with pertinent administrative rules and regulations which are in effect, but in no case a permit will be awarded for a period over five years.

6.2 Compliance Plans

- A. Any owner or responsible person of an existing sound source site or emission source on the effective date of this Regulation which does not comply with its provisions shall be in compliance within the next 180 days after its effective date or in such shorter time as may be set by the Board. A compliance plan may be accepted by the Board if it is presented in accordance with the provisions set forth in this Regulation. Nothing contained herein should be construed to prevent the Board from requiring immediate compliance with this Regulation.
- B. At the discretion of the Board sufficient time shall be conceded for the installation of the necessary controls, and/or for the construction, and/or modification of the facilities in order to be in compliance with the provisions set forth in this Regulation

6.2.1 Application

- A. Each application for approval of a compliance plan shall be signed by the owner or responsible person for the source or sound source site, and shall be submitted within a 180 days of the effective date of this Regulation.
- B. Each proposed compliance plan shall indicate a compliance date, on, or before which, compliance shall be attained.