# TABLE OF CONTENTS

# **Control of Noise**

Definitions	22a-69-1
General	22a-69-1.1
Acoustic terminology and definitions	22a-69-1.2
Coordination with other laws	22a-69-1.3
Incorporation by reference	22a-69-1.4
Compliance with regulations no defense to nuisance claim	22a-69-1.5
Severability	22a-69-1.6
Exclusions	22a-69-1.7
Exemptions	22a-69-1.8
Burden of persuasion regarding exclusions and exemptions	22a-69-1.9
Classification of land according to use	22a-69-2
Basis	22a-69-2.1
Multiple uses	22a-69-2.2
Class A noise zone	22a-69-2.3
Class B noise zone	22a-69-2.4
Class C noise zone	22a-69-2.5
Allowable noise levels	22a-69-3
General prohibition	22a-69-3.1
Impulse noise	22a-69-3.2
Prominent discrete tones	22a-69-3.3
Infrasonic and ultrasonic	22a-69-3.4
Noise zone standards	22a-69-3.5
High background noise areas	22a-69-3.6
Existing noise sources	22a-69-3.7
Adaptive reuse of existing buildings	22a-69-3.8
Measurement procedures	22a-69-4
Other provisions	22a-69-5
Intrusion alarms	22a-69-5.1
Airport facilities	22a-69-6
Extent of regulation	22a-69-6.1
Reserved	22a-69-6.2
Variances and enforcement procedures	22a-69-7
Variances	22a-69-7.1
Transference	22a-69-7.2
Responsibility to comply with applicable regulations	22a-69-7.3
Violations and enforcement	220 60 7 4

#### Control of Noise

#### Sec. 22a-69-1. Definitions

#### Sec. 22a-69-1.1. General

- (a) **adaptive reuse** means remodeling and conversion of an obsolete or unused building or other structure for alternate uses. For example, older industrial buildings, warehouses, offices, hotels, garages, etc., could be improved and converted for reuse in terms of industrial processes, commercial activities, educational purposes, residential use as apartments, or other purposes.
- (b) **aircraft** means any engine-powered device that is used or intended to be used for flight in the air and capable of carrying humans. Aircraft shall include civil, military, general aviation and VTOL/STOL aircraft.
- (i) aircraft, STOL means any aircraft designed for, and capable of, short takeoff and landing operations.
- (ii) **aircraft**, **VTOL** means any aircraft designed for, and capable of, vertical take-off and landing operations such as, but not limited to, helicopters.
- (c) **airport** means an area of land or water that is used, or intended to be used, for the landing and takeoff of aircraft and is licensed by the State of Connecticut Bureau of Aeronautics for such use. "Airport" shall include all buildings and facilities if any. "Airport" shall include any facility used, or intended for use, as a landing and take-off area for VTOL/STOL aircraft, including, but not limited to, heliports.
  - (d) **ANSI** means the American National Standards Institute or its successor body.
- (e) **best practical noise control measures** means noise control devices, technology and procedures which are determined by the Commissioner to be the best practical, taking into consideration the age of the equipment and facilities involved, the process employed, capital expenditures, maintenance cost, technical feasibility, and the engineering aspects of the applicable noise control techniques in relation to the control achieved and the non-noise control environmental impact.
- (f) **commissioner** means the Commissioner of the Department of Environmental Protection or his/her designated representative.
- (g) **construction** means any, and all, physical activity at a site necessary or incidental to the erection, placement, demolition, assembling, altering, blasting, cleaning, repairing, installing, or equipping of buildings or other structures, public or private highways, roads, premises, parks, utility lines, or other property, and shall include, but not be limited to, land clearing, grading, excavating, filling and paving.
  - (h) daytime means 7:00 a.m. to 10:00 p.m. local time.
- (i) **director** means the Director of the Office of Noise Control in the Department of Environmental Protection.
- (j) **emergency** means any occurrence involving actual or imminent danger to persons or damage to property which demands immediate action.
- (k) **intrusion alarm** means a device with an audible signal which, when activated, indicates intrusion by an unauthorized person. Such alarm may be attached to, or within, any building, structure, property or vehicle.
- (1) **ISO** means the International Organization for Standardization, or its successor body.
- (m) **lawn care and maintenance 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, and including, but not limited to, lawn mowers, riding tractors, snowblowers, and including equipment intended for infre-

quent service work in inhabited areas, typically requiring skilled operators, including, but not limited to, chain saws, log chippers or paving rollers.

- (n) **nighttime** means 10:00 p.m. to 7:00 a.m. local time.
- (o) **noise zone** means an individual unit of land or a group of contiguous parcels under the same ownership as indicated by public land records and, as relates to noise emitters, includes contiguous publicly dedicated street and highway rights-of-way, railroad rights-of-way and waters of the State.
- (p) **office of noise control** means the office within the Department of Environmental Protection designated by the Commissioner to develop, administer and enforce the provisions of Chapter 442 of the Connecticut General Statutes.
- (q) **OSHA** means the Occupational Safety and Health Act and any amendments thereto or successor regulations administered by the U.S. and Connecticut Departments of Labor or successor bodies.
- (r) **person** means any individual, firm, partnership, association, syndicate, company, trust, corporation, municipality, agency, or political or administrative subdivision of the State or other legal entity of any kind.
- (s) **public emergency sound signal** means an audible electronic or mechanical siren or signal device attached to an authorized emergency vehicle or within or attached to a building for the purpose of sounding an alarm relating to fire or civil preparedness. Such signal may also be attached to a pole or other structure.
  - (t) **SAE** means the Society of Automotive Engineers, Inc., or its successor body.
- (u) **safety and protective devices** means devices that are designed to be used, and are actually used, for the prevention of the exposure of any person or property to imminent danger, including, but not limited to, unregulated safety relief valves, circuit breakers, protective fuses, back-up alarms required by OSHA or other state or federal safety regulations, horns, whistles or other warning devices associated with pressure buildup.
- (v) **site** means the area bounded by the property line on or in which a source of noise exists.

(Effective June 15, 1978)

#### Sec. 22a-69-1.2. Acoustic terminology and definitions

- (a) All acoustical terminology used in these Regulations shall be in conformance with the American National Standards Institute (ANSI), "Acoustical Terminology," contained in publication S1.1 as now exists and as may be hereafter modified. The definitions below shall apply if the particular term is not defined in the aforesaid ANSI publication.
- (b) **audible range of frequency** means the frequency range 20 Hz to 20,000 Hz which is generally considered to be the normal range of human hearing.
- (c) **background noise** means noise which exists at a point as a result of the combination of many distant sources, individually indistinguishable. In statistical terms, it is the level which is exceeded 90% of the time ( $L_{90}$ ) in which the measurement is taken
- (d) **continuous noise** means ongoing noise, the intensity of which remains at a measurable level (which may vary) without interruption over an indefinite period or a specified period of time.
  - (e) **decibel** (dB) means a unit of measurement of the sound level.
- (f) **excessive noise** means emitter Noise Zone levels from stationary noise sources exceeding the Standards set forth in Section 3 of these Regulations beyond the boundary of adjacent Noise Zones.

- (g) **existing noise source** means any noise source(s) within a given Noise Zone, the construction of which commenced prior to the effective date of these Regulations.
- (h) **fluctuating noise** means a continuous noise whose level varies with time by more than 5 dB.
- (i) **frequency** means the number of vibrations or alterations of sound pressure per second and is expressed in Hertz.
- (j) **hertz** (**Hz**) means a unit of measurement of frequency formerly stated as, and numerically equal to, cycles per second.
- (k) **impulse noise** means noise of short duration (generally less than one second), especially of high intensity, abrupt onset and rapid decay, and often rapidly changing spectral composition.
- (*l*) **infrasonic sound** means sound pressure variations having frequencies below the audible range for humans, generally below 20 Hz; subaudible.
- (m)  $L_{10}$  means the A-weighted sound level exceeded 10% of the time period during which measurement was made.
- (n)  $\mathbf{L}_{50}$  means the A-weighted sound level exceeded 50% of the time period during which measurement was made.
- (o)  $\mathbf{L}_{90}$  means the A-weighted sound level exceeded 90% of the time period during which measurement was made.
- (p) **octave band sound pressure level** means the sound pressure level for the sound contained within the specified preferred octave band, stated in dB, as described in ANSI S1.6-1967: Preferred Frequencies and Band Numbers for Acoustical Measurements.
- (q) **peak sound pressure level** means the absolute maximum value of the instantaneous sound pressure level occurring in a specified period of time.
- (r) **prominent discrete tone** means the presence of acoustic energy concentrated in a narrow frequency range, including, but not limited to, an audible tone, which produces a one-third octave sound pressure level greater than that of either adjacent one-third octave and which exceeds the arithmetic average of the two adjacent one-third octave band levels by an amount greater than shown below opposite the center of frequency for the one-third octave band containing the concentration of acoustical energy.

<sup>1</sup> /3 Octave Band	dB
Center Frequency (Hz)	
100	16
125	14
160	12
200	11
250	9
315	8
400	7
500	6
630	6
800	5
1000	4
1250	4
1600	4
2000	3
2500	3

3150	3
4000	3
5000	4
6300	4
8000	5
10000	6

- (s) **reference pressure** is 0.00002 Newtons per square meter (N/M²), or 20 microPascals, for the purposes of these Regulations.
- (t) **sound** means a transmission of energy through solid, liquid, or gaseous media in the form of vibrations which constitute alterations in pressure or position of the particles in the medium and which, in air, evoke physiological sensations, including, but not limited to, an auditory response when impinging on the ear.
- (u) **sound analyzer** means a device, generally used in conjunction with a sound level meter, for measuring the sound pressure level of a noise as a function of frequency in octave bands, one-third octave bands or other standard ranges. The sound analyzer shall conform to Type E, Class II, as specified in ANSI S1.11-1971 or latest revision.
- (v) **sound level** means a frequency weighted sound pressure level, obtained by the use of metering characteristics and the weighting A, B, or C as specified in ANSI, "Specifications for Sound Level Meters," S1.4-1971 or latest revision. The unit of measurement is the decibel. The weighting employed must always be stated as dBA, dBB, or dBC.
- (w) **sound level meter** means an instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement of sound levels. The sound level meter shall conform to ANSI Specifications for Sound Level Meters \$1.4-1971.
- (x) **sound pressure level (SPL)** means twenty times the logarithm to the base ten of the ratio of the sound pressure in question to the standard reference pressure of  $0.00002\ N/M^2$ . It is expressed in decible units.
- (y) **ultrasonic sound** means sound pressure variations having frequencies above the audible sound spectrum for humans, generally higher than 20,000 Hz; superaudible.
- (z) **vibration** means an ascillatory motion of solid bodies of deterministic or random nature described by displacement, velocity, or acceleration with respect to a given reference point.

(Effective June 15, 1978)

#### Sec. 22a-69-1.3. Coordination with other laws

- (a) Nothing in these Regulations shall authorize the construction or operation of a stationary noise source in violation of the requirements of any other applicable State law or regulation.
- (b) Nothing in these Regulations shall authorize the sale, use or operation of a noise source in violation of the laws and regulations of the Connecticut Department of Motor Vehicles, the Federal Aviation Administration, the U.S. Environmental Protection Agency, or any amendments thereto.

(Effective June 15, 1978)

# Sec. 22a-69-1.4. Incorporation by reference

(a) The specifications, standards and codes of agencies of the U.S. Government and organizations which are not agencies of the U.S. Government, to the extent that

they are legally incorporated by reference in these Regulations, have the same force and effect as other standards in these Regulations.

- (b) These specifications, standards and codes may be examined at the Office of Noise Control, Department of Environmental Protection, State of Connecticut.
- (c) Any changes in the specifications, standards and codes incorporated in these Regulations are available at the Office listed in (b) above. All questions as to the applicability of such changes should also be referred to this Office.

(Effective June 15, 1978)

# Sec. 22a-69-1.5. Compliance with regulations no defense to nuisance claim

Nothing in any portion of these Regulations shall in any manner be construed as authorizing or legalizing the creation or maintenance of a nuisance, and compliance of a source with these Regulations is not a bar to a claim of nuisance by any person. A violation of any portion of these Regulations shall not be deemed to create a nuisance per se.

(Effective June 15, 1978)

## Sec. 22a-69-1.6. Severability

If any provision of these Regulations or the application thereof to any person or circumstances is held to be invalid, such invalidity shall not affect other provisions or applications of any other part of these Regulations which can be given effect without the invalid provisions or application; and to this end, the provisions of these Regulations and the various applications thereof are declared to be severable.

(Effective June 15, 1978)

#### Sec. 22a-69-1.7. Exclusions

These Regulations shall not apply to:

- (a) Sound generated by natural phenomena, including, but not limited to, wind, storms, insects, amphibious creatures, birds, and water flowing in its natural course.
  - (b) The unamplified sounding of the human voice.
  - (c) The unamplified sound made by any wild or domestic animal.
- (d) Sound created by bells, carillons, or chimes associated with specific religious observances.
- (e) Sound created by a public emergency sound signal attached to an authorized emergency vehicle in the immediate act of responding to an emergency, as authorized by subsection (d) of Section 14.80 and Section 14-la of Chapter 246 of the General Statutes and all amendments thereto, or located within or attached to a building, pole or other structure for the purpose of sounding an alarm relating to fire or civil preparedness.
  - (f) Sound created by safety and protective devices.
  - (g) Farming equipment or farming activity.
  - (h) Back-up alarms required by OSHA or other State or Federal safety regulations.
- (i) Sound created by any mobile source of noise. Mobile sources of noise shall include, but are not limited to, such sources as aircraft, automobiles, trucks, and boats. This exclusion shall cease to apply when a mobile source of noise has maneuvered into position at the loading dock, or similar facility, has turned off its engine and ancillary equipment, and has begun the physical process of removing the contents of the vehicle.

## Sec. 22a-69-1.8. Exemptions

Exempted from these Regulations are:

- (a) Conditions caused by natural phenomena, strike, riot, catastrophe, or other condition over which the apparent violator has no control.
- (b) Noise generated by engine-powered or motor-driven lawn care or maintenance equipment shall be exempted between the hours of 7:00 a.m. and 9:00 p.m. provided that noise discharged from exhausts is adequately muffled to prevent loud and/or explosive noises therefrom.
- (c) Noises created by snow removal equipment at any time shall be exempted provided that such equipment shall be maintained in good repair so as to minimize noise, and noise discharged from exhausts shall be adequately muffled to prevent loud and/or explosive noises therefrom.
- (d) Noise that originates at airports that is directly caused by aircraft flight operations specifically preempted by the Federal Aviation Administration.
- (e) Noise created by the use of property for purposes of conducting speed or endurance events involving motor vehicles shall be exempted but such exemption is effective only during the specific period(s) of time within which such use is authorized by the political subdivision or governmental entity having lawful jurisdiction to sanction such use.
  - (f) Noise created as a result of, or relating to, an emergency.
  - (g) Construction noise.
- (h) Noise created by blasting other than that conducted in connection with construction activities shall be exempted provided that the blasting is conducted between 8:00 a.m. and 5:00 p.m. local time at specified hours previously announced to the local public, or provided that a permit for such blasting has been obtained from local authorities.
- (i) Noise created by on-site recreational or sporting activity which is sanctioned by the state or local government provided that noise discharged from exhausts is adequately muffled to prevent loud and/or explosive noises therefrom.
  - (j) Patriotic or public celebrations not extending longer than one calendar day.
- (k) Noise created by aircraft, or aircraft propulsion components designed for or utilized in the development of aircraft, under test conditions.
- (1) Noise created by products undergoing test, where one of the primary purposes of the test is evaluation of product noise characteristics and where practical noise control measures have been taken.
- (m) Noise generated by transmission facilities, distribution facilities and substations of public utilities providing electrical powers, telephone, cable television or other similar services and located on property which is not owned by the public utility and which may or may not be within utility easements.

(Effective June 15, 1978)

# Sec. 22a-69-1.9. Burden of persuasion regarding exclusions and exemptions

In any proceeding pursuant to these Regulations, the burden of persuasion shall rest with the party attempting to enforce the Regulations. Notwithstanding the foregoing, if an exclusion or exemption stated in these Regulations would limit an obligation, limit a liability, or eliminate either an obligation or a liability, the person who would benefit from the application of the exclusion or exemption shall have the burden of persuasion that the exclusion or exemption applies and that the terms of the exclusion or exemption have been met. The Department shall cooperate with

and assist persons in determining the application of the provisions of these Regulations.

(Effective June 15, 1978)

# Sec. 22a-69-2. Classification of land according to use

#### Sec. 22a-69-2.1. Basis

Noisy Zone classifications shall be based on the actual use of any parcel or tract under single ownership as detailed by the Standard Land Use Classification Manual of Connecticut (SLUCONN).

(Effective June 15, 1978)

## Sec. 22a-69-2.2. Multiple uses

Where multiple uses exist within a given Noise Zone, the least restrictive land use category for the Emitter and Receptor shall apply regarding the noise standards specified in Section 3 of these Regulations.

(Effective June 15, 1978)

#### Sec. 22a-69-2.3. Class A noise zone

Lands designated Class A shall generally be residential areas where human beings sleep or areas where serenity and tranquility are essential to the intended use of the land.

Class A Land Use Category. The land uses in this category shall include, but not be limited to, single and multiple family homes, hotels, prisons, hospitals, religious facilities, cultural activities, forest preserves, and land intended for residential or special uses requiring such protection.

The specific SLUCONN categories in Class A shall include:

- 1. Residential
- 11 Household Units\*
- 12 Group Quarters
- 13 Mobile Home Parks and Courts
- 19 Other Residential
- 5. Trade
- 583 Residential Hotels
- 584 Hotels, Tourist Courts and Motels
- 585 Transient Lodgings
- 6. Services
- 651 Medical and Other Health Services; Hospitals
- 674 Correctional Institutions
- 691 Religious Activities
- 7. Cultural, Entertainment and Recreational
- 711 Cultural Activities
- 712 Nature Exhibitions
- 713 Historic and Monument Sites
- \*Mobile homes are included if on foundations
  - 9. Undeveloped, Unused and Reserved Lands and Water Areas
  - 92 Reserved Lands
  - 941 Vacant Floor Area—Residential

#### Sec. 22a-69-2.4. Class B noise zone

Lands designated Class B shall generally be commercial in nature, areas where human beings converse and such conversation is essential to the intended use of the land.

Class B Land Use Category. The land uses in this category shall include, but not be limited to, retail trade, personal, business and legal services, educational institutions, government services, amusements, agricultural activities, and lands intended for such commercial or institutional uses.

The specific SLUCONN categories in Class B shall include:

- 4. Transportation, Communication and Utilities
- 46 Automobile Parking
- 47 Communication
- 5. Trade
- 51 Wholesale Trade
- 52 Retail Trade Building Materials
- 53 Retail Trade General Merchandise
- 54 Retail Trade Food
- 55 Retail Trade Automotive Dealers and Gasoline Service Stations
- 56 Retail Trade Apparel and Accessories
- 57 Retail Trade Furniture, Home Furnishings and Equipment
- 58 Retail Trade Eating, Drinking and Lodging Except 583, 584, and 585
- 59 Retail Trade N.E.C.\*
- 6. Services
- 61 Finance, Insurance and Real Estate Services
- 62 Personal Services
- 63 Business Services—Except 637
- 64 Repair Services
- 65 Professional Services—Except 651
- 67 Government Services—Except 672, 674, and 675
- 68 Educational Services
- 69 Miscellaneous Services—Except 691
- 7. Cultural, Entertainment and Recreational
- 71 Cultural Activities and Nature Exhibitions—Except 711, 712, and 713
- 72 Public Assembly
- 73 Amusements
- 74 Recreational Activities
- 75 Resorts and Group Camps
- 76 Parks
- 79 Other, N.E.C.\*
- \*Not Elsewhere Classified
  - 8. Agriculture
  - 81 Agriculture
  - 82 Agricultural Related Activities
  - 9. Undeveloped, Unused, and Reserved Lands and Water Area
  - 91 Undeveloped and Unused Land Area
  - 93 Water Areas
  - 94 Vacant Floor Area—Except 941
  - 99 Other Undeveloped Land and Water Areas, N.E.C.\*
- \*Not Elsewhere Classified

#### Sec. 22a-69-2.5. Class C noise zone

Lands designated Class C shall generally be industrial where protection against damage to hearing is essential, and the necessity for conversation is limited.

Class C Land Use Category. The land uses in this category shall include, but not be limited to, manufacturing activities, transportation facilities, warehousing, military bases, mining, and other lands intended for such uses.

The specific SLUCONN categories in Class C shall include:

- 2. Manufacturing Secondary Raw Materials
- 3. Manufacturing Primary Raw Materials
- 4. Transportation, Communications and Utilities Except 46 and 47
- 6. Services
- 637 Warehousing and Storage Services
- 66 Contract Construction Services
- 672 Protective Functions and Related Activities
- 675 Military Bases and Reservations
- 8. Agriculture
- 83 Forestry Activities and Related Services
- 84 Commercial Fishing Activities and Related Services
- 85 Mining Activities and Related Services
- 89 Other Resource Production and Extraction, N.E.C.\*

\*Not Elsewhere Classified

(Effective June 15, 1978)

#### Sec. 22a-69-3. Allowable noise levels

# Sec. 22a-69-3.1. General prohibition

No person shall cause or allow the emission of excessive noise beyond the boundaries of his/her Noise Zone so as to violate any provisions of these Regulations. (Effective June 15, 1978)

## Sec. 22a-69-3.2. Impulse noise

- (a) No person shall cause or allow the emission of impulse noise in excess of 80 dB peak sound pressure level during the nighttime to any Class A Noise Zone.
- (b) No person shall cause or allow the emission of impulse noise in excess of 100 dB peak sound pressure at any time to any Noise Zone.

(Effective June 15, 1978)

### Sec. 22a-69-3.3. Prominent discrete tones

Continuous noise measured beyond the boundary of the Noise Zone of the noise emitter in any other Noise Zone which possesses one or more audible discrete tones shall be considered excessive noise when a level of 5 dBA below the levels specified in Section 3 of these Regulations is exceeded.

(Effective June 15, 1978)

#### Sec. 22a-69-3.4. Infrasonic and ultrasonic

No person shall emit beyond his/her property infrasonic or ultrasonic sound in excess of 100 dB at any time.

(Effective June 15, 1978)

#### Sec. 22a-69-3.5. Noise zone standards

(a) No person in a Class C Noise Zone shall emit noise exceeding the levels stated herein and applicable to adjacent Noise Zones:

		Receptor		
	C	B	A/Day	A/Night
Class C Emitter to	70 dBA	66 dBA	61 dBA	51 dBA

Levels emitted in excess of the values listed above shall be considered excessive noise.

(b) No person in a Class B Noise Zone shall emit noise exceeding the levels stated herein and applicable to adjacent Noise Zones:

Receptor

	Receptor			
	C	$\hat{B}$	A/Day	A/Night
Class B Emitter to	62 dBA	62 dBA	55 dBA	45 dBA

Levels emitted in excess of the values listed above shall be considered excessive noise.

(c) No person in a Class A Noise Zone shall emit noise exceeding the levels stated herein and applicable to adjacent Noise Zones:

		Receptor		
	C	$\bar{B}$	A/Day	A/Night
Class A Emitter to	62 dBA	55 dBA	55 dBA	45 dBA

Levels emitted in excess of the values listed above shall be considered excessive noise.

(Effective June 15, 1978)

# Sec. 22a-69-3.6. High background noise areas

In those individual cases where the background noise levels caused by sources not subject to these Regulations exceed the standards contained herein, a source shall be considered to cause excessive noise if the noise emitted by such source exceeds the background noise level by 5 dBA, provided that no source subject to the provisions of Section 3 shall emit noise in excess of 80 dBA at any time, and provided that this Section does not decrease the permissible levels of the other Sections of this Regulation.

(Effective June 15, 1978)

### Sec. 22a-69-3.7. Existing noise sources

Existing noise sources constructed between the effective date of these Regulations and January 1, 1960 shall be provided a permanent five (5) dBA maximum noise level allowance over levels otherwise herein required regardless of subsequent changes in ownership or facility utilization processes at the location of the existing noise source. Existing noise sources constructed prior to 1960 shall be provided a permanent ten (10) dBA maximum noise level allowance over levels otherwise herein required regardless of subsequent changes in ownership or facility utilization processes at the location of the existing noise source. Additionally, all existing noise sources shall be provided twenty-four (24) months in order to achieve compliance with these Regulations if a notice of violation has been, or may be, issued to the source. This time period begins with the effective date of these Regulations, not with the date of the notice of violation.

## Sec. 22a-69-3.8. Adaptive reuse of existing buildings

Buildings and other structures that exist as of the effective date of these Regulations which have been remodeled or converted for adaptive reuse or which may be remodeled or converted at a future date shall be provided a permanent five (5) dBA maximum noise level allowance above the Emitter Class of the new use of the building over levels otherwise herein required.

(Effective June 15, 1978)

## Sec. 22a-69-4. Measurement procedures

Acoustic measurements to ascertain compliance with these Regulations shall be in substantial conformity with standards and Recommended Practices established by professional organizations such as ANSI and SAE.

- (a) Personnel conducting sound measurements shall be trained and experienced in the current techniques and principles of sound measuring equipment and instrumentation. The Commissioner shall establish sufficiently detailed measurement procedure guidelines specifying, but not necessarily being limited to, the following: The appropriate utilization of fast or slow sound level meter dampening when making sound level measurements, the rise time specified in microseconds for measuring impulse noise, the need for a whole circuit in such measurements, and the proper weighting to be used in measuring impulse noise.
  - (b) Instruments shall conform to the following standards of their latest revisions:
  - (i) ANSI S1.4-1971, "Specifications for Sound Level Meters," Type 1 or 2.
- (ii) ANSI S1.11-1966, "Specifications for Octave, One-Half Octave and One-Third Octave Band Filter Sets," Type E, Class II.
- (iii) If a magnetic tape recorder or a graphic level recorder or other indicating device is used, the system shall meet the applicable requirements of SAE Recommended Practice J184, "Qualifying a Sound Data Acquisition System."
- (c) Instruments shall be set up to conform to ANSI S1.13-1971, "Methods for the Measurement of Sound Pressure Levels."
- (d) Instrument manufacturer's instructions for use of the instruments shall be followed, including acoustical calibration of equipment used.
- (e) The determination of  $L_{90}$  to ascertain background levels requires a statistical analysis. A graphic level recording and visual interpretation of the chart recording to determine the levels is an acceptable method. Instruments designed to determine the cumulative distribution of noise levels are also acceptable used either in the field or in the laboratory to analyze a tape recording. Dynamic visual estimations from a sound level meter are not an acceptable method for determining such levels. Sound level sampling techniques are acceptable and will often be the most practical to employ. Such a technique using Connecticut Noise Survey Data Form #101 with accompanying instructions is acceptable.
- (f) In measuring compliance with Noise Zone Standards, the following shortterm noise level excursions over the noise level standards established by these Regulations shall be allowed, and measurements within these ranges of established standards shall constitute compliance therewith:

Time period of
such levels
(minutes/hour)
15
$7\frac{1}{2}$
5

(g) Measurements taken to determine compliance with Section 3 shall be taken at about one foot beyond the boundary of the Emitter Noise Zone within the receptors's Noise Zone. The Emitter's Noise Zone includes his/her individual unit of land or group of contiguous parcels under the same ownership as indicated by public land records. The Emitter's Noise Zone also includes contiguous publicly dedicated street and highway rights-of-way, railroads rights-of-way and waters of the State.

(Effective June 15, 1978)

# Sec. 22a-69-5. Other provisions

### Sec. 22a-69-5.1. Intrusion alarms

No person shall cause, suffer, allow or permit the operation of any intrusion alarm which, from time of activation of audible signal, emits noise for a period of time exceeding ten minutes when attached to any vehicle or thirty minutes when attached to any building or structure.

The repetition of activation of the audible signal of an intrusion alarm due to malfunction, lack of proper maintenance, or lack of reasonable care shall be considered excessive noise.

(Effective June 15, 1978)

### Sec. 22a-69-6. Airport facilities

## Sec. 22a-69-6.1. Extent of regulation

Airport facilities are subject to Section 3 to the extent not preempted by state or federal law or regulation.

(Effective June 15, 1978)

#### Sec. 22a-69-6.2. Reserved

(This subsection is reserved for possible future regulations regarding the assessment of, and long-range plans for, the reduction of airport facility noise impacts to the extent not preempted by state or federal law or regulation.)

(Effective June 15, 1978)

#### Sec. 22a-69-7. Variances and enforcement procedures

#### Sec. 22a-69-7.1. Variances

- (a) Any person who owns or operates any stationary noise source may apply to the Commissioner for a variance or a partial variance from one or more of the provisions of these Regulations. Applications for a variance shall be submitted on forms furnished by the Commissioner and shall supply such information as he/she requires, including, but not limited to:
- (i) Information on the nature and location of the facility or process for which such application is made.
- (ii) The reason for which the variance is required, including the economic and technical justifications.
- (iii) The nature and intensity of noise that will occur during the period of the variance.
- (iv) A description of interim noise control measures to be taken by the applicant to minimize noise and the impacts occurring therefrom.
- (v) A specific schedule of the best practical noise control measures, if any, which might be taken to bring the source into compliance with those Regulations from

which a variance is sought, or a statement of the length of time during which it is estimated that it will be necessary for the variance to continue.

- (vi) Any other relevant information the Commissioner may require in order to make a determination regarding the application.
- (b) Failure to supply the information required by the form furnished by the Commissioner shall be cause for rejection of the application unless the applicant supplies the needed information within thirty (30) days of the written request by the Commissioner for such information.
- (c) No variance shall be approved unless the applicant presents adequate proof to the Commissioner's satisfaction that:
- (i) Noise levels occurring during the period of the variance will not constitute a danger to the public health; and
- (ii) Compliance with the Regulations would impose an arbitrary or unreasonable hardship upon the applicant without equal or greater benefits to the public.
- (d) In making a determination on granting a variance, the Commissioner shall consider:
- (i) The character and degree of injury to, or interference with, the health and welfare or the reasonable use of property which is caused or threatened to be caused.
  - (ii) The social and economic value of the activity for which the variance is sought.
- (iii) The ability of the applicant to apply best practical noise control measures, as defined in these Regulations.
- (e) Following receipt and review of an application for a variance, the Commissioner shall fix a date, time and location for a hearing on such application.
- (f) The Commissioner shall cause the applicant to publish at his/her own expense all notices of hearings and other notices required by law, including, but not limited to, notification of all abutters of record.
- (g) Within sixty (60) days of the receipt of the record of the hearings on a variance application, the Commissioner shall issue his/her determination regarding such application. All such decisions shall briefly set forth the reasons for the decision.
- (h) The Commissioner may, at his/her discretion, limit the duration of any variance granted under these Regulations. Any person holding a variance and needing an extension of time may apply for a new variance under the provisions of these Regulations. Any such application shall include a certification of compliance with any condition imposed under the previous variance.
- (i) The Commissioner may attach to any variance any reasonable conditions he/she deems necessary and desirable, including, but not limited to:
- (i) Requirements for the best practical noise control measures to be taken by the owner or operator of the source to minimize noise during the period of the variance.
- (ii) Requirements for periodic reports submitted by the applicant relating to noise, to compliance with any other conditions under which the variance was granted or to any other information the Commissioner deems necessary.
- (j) The filing of an application for a variance shall operate as a stay of prosecution, except that such stay may be terminated by the Commissioner upon application of any party if the Commissioner finds that protection of the public health so requires.
- (k) In any case where a person seeking a variance contends that compliance with any provision of these Regulations is not practical or possible because of the cost involved either in installing noise control equipment or changing or curtailing the operation in any manner, he/she shall make available to the Commissioner such financial records as the Commissioner may require.

(1) A variance may include a compliance schedule and requirements for periodic reporting of increments of achievement of compliance.

(Effective June 15, 1978)

#### Sec. 22a-69-7.2. Transference

No person who owns, operates or maintains a stationary noise source shall transfer a variance from one site to another site.

(Effective June 15, 1978)

## Sec. 22a-69-7.3. Responsibility to comply with applicable regulations

Approval of a variance shall not relieve any person of the responsibility to comply with any other applicable Regulations or other provisions of federal, state or local laws, ordinances or regulations.

(Effective June 15, 1978)

## Sec. 22a-69-7.4. Violations and enforcement

- (a) No person shall violate or cause the violation of any of these Regulations.
- (b) Each day on which a violation occurs or continues after the time for correction of the violation given in the order has elapsed or after thirty (30) days from the date of service of the order, whichever is later, shall be considered a separate violation of these Regulations.
- (c) Qualified personnel of the Office of Noise Control shall, with or without complaints, conduct investigations and ascertain whether these Regulations have been complied with. Whenever such personnel determines that any of these Regulations have been violated or there has been a failure to comply therewith, they shall make and serve upon the person(s) responsible for the violation a written order specifying the nature of the violation or failure and affording a reasonable time for its correction or remedy. Prior to the issuance of such order, such personnel shall make a reasonable effort in light of the circumstances to correct a violation or achieve compliance by means of conference, conciliation and persuasion as required by statute. Unless the person(s) against whom an order has been served files a written answer thereto with the Commissioner within thirty (30) days after the date of service of the order and requests a hearing thereon, such order shall become final and effective in accordance with the Connecticut Administrative Procedures Act and the rules, practices, and procedures of the Department of Environmental Protection.