

Noise Control Bylaw

Article 34 – ATM 5/17/2021

1. Authority

This Bylaw is issued by the Town of Somerset pursuant to its authority under M.G.L. Chapter 40, Section 21 as reasonable and necessary for the protection of the health and welfare of the citizens of the Town of Somerset.

2. Purpose

The Town of Somerset hereby finds that excessive or unwarranted noise is a nuisance and a potential health hazard. Recognizing that people have a right to—and should be ensured—an environment free from excessive and unwarranted noise, the Town of Somerset establishes this Bylaw to protect, preserve, and promote the health, safety, welfare, and quality of life for its citizens.

The intention is not to restrict people's enjoyment of their home, property, or business but to ensure that the Town and its citizens are protected from intrusion of excessive noise generation by:

- i. Providing a mechanism for control, prevention and mitigation of noise through the establishment of maximum noise levels for lawful uses and activities,
- ii. Providing a venue for adjudication, arbitration, and if necessary, the imposition of penalties to preserve the character of our town.

Noise is hereby declared a nuisance if it:

- i. is excessive, unnecessary, prolonged, unusually loud, or unnatural in its time, place, and use, and constitutes an annoyance to a person of ordinary sensibility to sound; materially and substantially interferes with the ordinary comfort of life, and the reasonable use and enjoyment of property; or
- ii. fails to meet the standards or limitations set forth in this Bylaw.

Therefore, without limiting the generality of the foregoing

- i. No person owning, leasing, or controlling a source of sound shall willingly, negligently, or through failure to provide necessary equipment, service, or maintenance and/or failure to take necessary precautions, cause, allow, or permit excessive or unwarranted noise as described in this Bylaw.
- ii. This Bylaw shall apply to all sound originating within the limits of the Town of Somerset and is intended to be consistent in scope and application with relevant state and federal statutes and Town Bylaws.
- iii. All Town of Somerset departments and agencies shall, to the fullest extent consistent with federal and state laws and Town Bylaws, carry out their programs in such a manner as to comply with this Bylaw.
- iv. Provisions in this Bylaw shall not apply to any activity to the extent that the Bylaw has been preempted by state or federal law.

3. Prohibitions on Excessive or Unwarranted Noise

The activities set forth below are deemed to be sources of excessive or unwarranted noise, when not performed in accordance with the following standards:

- A. Construction/maintenance power equipment. Devices and equipment engaged in home construction (including site preparation and restoration), roof installation, building restoration, and- activities and/or demolition shall be permitted for use only between the hours of 7:00 a.m. and 10:00 p.m., on weekdays and the hours of 8:00 am and 10:00 pm on weekends or legal holidays, or as otherwise allowed by a permit issued by the Somerset Board of Health for such activity.

EXCEPTIONS:

- i. Construction-related activity as specified in Section 3A, on days for which "Danger" or "Extreme Danger" heat conditions are forecast by the National Weather Service, may begin before 7:00 a.m., but not before 5:30 a.m.
- B. Residential trash collection: Vehicles permitted by the Somerset Board of Health, used for the collection of trash, rubbish, refuse, or debris are permitted to operate on any point of public or common right-of-way for vehicular traffic between the hours of 7:00 a.m. and 8:00 p.m.

EXCEPTIONS:

- i. Commercial trash collection may take place at any time within any area of the Town of Somerset's Industrial Zones or Commercial Zones under the Zoning Bylaw.
- C. Residential deliveries or pickups: Deliveries or pickups for residential purposes are permitted, unless the noise level of such deliveries or pickup exceeds the standards and limitations set forth in Section 5 of this bylaw.

EXCEPTIONS:

- i. Commercial deliveries or pickups may take place at any time within any area of the Town of Somerset's Industrial Zones or Commercial Zones under the Zoning Bylaw.
- D. Domestic mechanical equipment. The outdoor use of domestic mechanical equipment such as, but not limited to, lawn mowers, leaf blowers, and power saws is permitted between the hours of 7:00 a.m. and 10:00 pm Monday through Saturday and on Sundays and legal holidays between 8:00 am and 10:00 pm.
- E. Fixed plant equipment fixed such as but not limited to air conditioners, pumps, fans, furnaces, compressors, engines, ventilation equipment, fuel/pipeline vents or blowdowns, and similar equipment is prohibited. As used herein, fixed shall mean any equipment mounted, secured, or fastened to the ground or to any building or structure, as well as any equipment that requires the assistance of motorized equipment to move or transport, shall comply with the standards and limitations set forth in Section 5 of this Bylaw.
- F. Radio, phonograph, musical instruments and television. The playing of radio, phonograph, television set, amplified or musical instruments, loudspeakers, tape recorder or other electronic sound producing devices, in such a manner or with volume at any time or place so as to annoy or disturb the reasonable quiet, comfort or repose of persons in any dwelling or other type of residence, or in any office or of any persons in the vicinity.
- G. Noises on public streets (other than from the normal operation of motor vehicles). The making of any loud noises on any public streets, between the hours of 10:00 pm and 7:00 am, or the making of any such noise at any time of place so as to annoy or disturb the reasonable quiet, comfort or repose of persons in any dwelling, or other type of residence, or in any office or of any persons in the vicinity.
- H. Noises on public streets (from the normal operation of motor vehicles). Noise from motor vehicles operating on public streets within the Town of Somerset shall conform to the standards set forth in the United States Environmental Protection Agency Regulations, 40 C.F.R. 202.20, Interstate Motor Carrier Operations Standards, as may be amended or superseded from time-to-time, and which currently reads as follows:

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

at 50 feet from the centerline of lane travel on highways with speed limits of more than 35 mph.

- (b) No motor carrier subject to these regulations shall operate any motor vehicle of a type to which this regulation is applicable which at any time or under any condition of highway grade, load, acceleration or deceleration generates a sound level in excess of 83 dB(A) measured on an open site with fast meter response at 50 feet from the centerline of lane of travel on highways with speed limits of 35 MPH or less; 87 dB(A) measured on an open site with fast meter response at fifty feet from the centerline of lane of travel on highways with speed limit of more than 35 mph.

4. Exemptions

The provisions of this Bylaw shall not apply to sounds emitted during or associated with any of the following:

- A. Police, fire, and civil and national defense activities, or training exercises by public safety personnel related to emergency activities
- B. Any bell or chime from any school, church, or government building
- C. Any events that are permitted by the Town, such as parades, public gatherings, or sporting events for which permits have been issued
- D. Noncommercial public speaking and public assembly activities, as guaranteed by state and federal constitutions
- E. Operation of any activity that is an ordinary or ancillary aspect of farming.
- F. Emergency work including but not limited to the operation of any mechanical device, apparatus, vehicle, or equipment used in connection with that emergency, but only to the extent necessary to respond to the emergency.
- G. Snow removal.
- H. Any activity to the extent that this Bylaw has been preempted by state or federal laws.

5. Measurement of Excessive or Unwarranted Noise

It shall be unlawful for any person to make or produce excessive or unwarranted noise. A determination that excessive or unwarranted noise is caused by a given noise source will be made in accordance with the following standards using the "Definitions" set forth in the Appendix to the Bylaw.

- A. Excessive or unwarranted noise, as used in this Bylaw, shall mean any of the following:

It shall be unlawful for any person or persons to create, assist in creating, continue or allow to continue, any excessive, unnecessary, or unusually loud noise which either annoys, disturbs, injures, or endangers the reasonable quiet, comfort, repose or the health or safety of others within the Town of Somerset. The Board of Health, the Police Department or any other town enforcement agency, shall utilize a certified sound measuring device to investigate noise complaints. Such sound measuring devices shall be maintained, calibrated and periodically certified per manufacturer recommendations. The following tables shall serve as a guide to enforcement officials for investigating complaints:

	Location Where Noise is Measured	Time Period	Maximum allowable Decibel Level
Residential	Property line	7:00 am to 10:00 pm	65 decibels
Residential	Property line	10:00 pm to 7:00 am	55 decibels
Commercial	Property line	7:00 am to 10:00 pm	70 decibels

Type of Premises	Location Where Noise is Measured	Time Period	Maximum allowable Decibel Level
Commercial	Property line	10:00 pm to 7:00 am	60 decibels
Industrial	Property line	7:00 am to 10:00 pm	80 decibels
Industrial	Property line	10:00 pm to 7:00 am	70 decibels
Public premises	Property line or anywhere on public premises	8:00 am to 10:00 pm	75 decibels
Public premises	Property line or anywhere on public premises	10:00 pm to 8:00 am	60 decibels

- B. Determination of excessive or unwarranted noise originating from public property owned by the Town of Somerset or the Commonwealth of Massachusetts, shall be made at any location a passerby might lawfully occupy.
- C. Measurement of the noise source level shall be made over a time interval approximately equal to, but not to exceed, the duration of the noise source or noise event in question. For example, in the case of a continuous persistent stimulus, such as an air conditioning unit or machinery noise, an appropriate measurement duration should be at least 5 minutes. In the case of a transient, impulsive stimulus, such as a gas or steam blow-off or pile driver, the measurement interval needs to be shorter, matched to the duration of the noise stimulus.
- D. Noise level measurements made for the purpose of establishing compliance, or lack thereof, with this Bylaw may be submitted by a resident or business owner to any enforcing person, as specified in Section 6, which may be accepted or rejected and/or given weight as the enforcement officer deems appropriate. The Town of Somerset Board of Health may, at its discretion, consult qualified experts for the purpose of validating a complaint.
- E. Ambient baseline noise levels in the Town of Somerset may be measured by a qualified expert appointed by the Board of Health. If no such ambient baseline noise levels exist at the time a complaint is brought, or a site review is conducted, any person seeking relief under this Bylaw may submit ambient baseline measurements made in compliance with the conditions set forth in this section. The Town of Somerset Board of Health may, at its discretion, consult qualified experts for the purpose of validating a complaint.
- F. In no instance should any part of this Bylaw be interpreted so as to abrogate the power of the Board of Health pursuant to M.G.L. Chapter 111, Sections 31 and 122-125A, 310 CMR 7.00, and any other applicable law.

6. Enforcement and Penalties

The principal enforcement agencies for this Bylaw is the Town of Somerset Board of Health, Somerset Police Department or its designated agent. Any complaints or infractions should be reported to the Somerset Board of Health accordingly.

A. Any person who has witnessed a violation of this Bylaw may make a complaint to one of the enforcement officers designated above.

B. Upon receipt of a complaint brought under the terms and conditions of this Bylaw, the Board of Health or its designated agent may at its discretion, investigate the complaint, which may include convening a meeting with interested parties to attempt to resolve the matter. If the meeting does not result in resolution, either through inability to reach agreement or failure to participate by the party/parties involved, the Board of Health may take any and all actions as appropriate to enforce this Bylaw.

C. Any person who violates any provision of this Bylaw shall be subject to a fine of \$300 per violation at the discretion of the responding agency. The imposition of a penalty for any violation shall not excuse the violation or permit it to continue. Each day or portion thereof shall constitute a separate offense. If more than one, each condition violated shall constitute a separate offense.

D. Whoever violates any provision of this regulation may be penalized by a non-criminal disposition process as provided in MGL, chap. 40, s21D and the Town's non-criminal disposition by-law. If non-criminal disposition is elected, then the non-criminal fine for each such violation, if not otherwise specified shall be: \$300.00.

E. the Board of Health may enforce this by-law or enjoin violations thereof through any lawful process, which may include, but not limited to the issuance of cease and desist orders and/or orders to correct, and the election of one remedy by the Board of Health shall not preclude enforcement through any other lawful means.

7. Permitting of New Uses and Structures in Commercial and Industrial Zoning Districts

- A. No resident, property owner, or business owner or operator of any land or use in a Town of Somerset Commercial or Industrial Zoning District shall commence or cause to be commenced the construction of any structure or introduction of any land use unless it is first determined by the Board of Health the proposed use will not result in a source of excessive or unwarranted noise to be in conformance with the terms and conditions established under this Bylaw.
- B. Any application for a permit to the Town of Somerset for improvement to land in the Commercial or Industrial Zoning District, including but not limited to a building permit, occupancy permit, business permit, or special permit issued by Planning Board, Zoning Board of Appeals, or Board of Selectmen shall require a review by the Board of Health to determine compliance with this Bylaw.
 - i. This application must be made in writing, and shall include any and all information and data supporting the claim that the terms of this Bylaw will be met and maintained, as well as any other information which the Board of Health may reasonably require for this purpose.
- C. The Board of Health may conduct such inspections and measurements as are necessary to ensure the accuracy of any report submitted to ascertain compliance with this Bylaw. These may include on-site inspections by a noise or sound expert during specified periods of construction.
- D. The Board of Health may, at its discretion, impose any reasonable noise abatement or mitigation measures it believes to be necessary for the proposed building or use to meet with the terms and conditions of this Bylaw.
- E. No new or substantially modified structure as determined by the Building Inspector on land used or zoned as commercial or industrial shall be approved for construction unless the owner or developer of such land has demonstrated, in accordance with the terms and conditions delineated herein, that the completed structure and the activities associated with and on the same property as the structure, will comply with the provisions of this Bylaw when operation commences and will continue to comply.

8. Relationship to Other Laws

Nothing in this Bylaw shall be construed to restrict, amend, repeal, or otherwise limit the application or enforcement of existing federal, state, or Town of Somerset's laws.

9. Rules and Regulations

The Board of Health may promulgate, after public notice and hearing, rules and regulations to effectuate the purposes and intent of this Bylaw. However, failure by the Board of Health to promulgate such rules and regulations shall not act to suspend or invalidate the effect of this Bylaw.

10. Severability

If any section, paragraph or part of this Bylaw is for any reason declared invalid or unconstitutional by any court, every other section, paragraph, and part shall continue in full force.

APPENDIX

Definitions

A-weighted decibel (dBA)—refers to the nationally recognized standard for measured sound pressure level, normalized for the frequency-dependent relative loudness perceived by the human ear, and expressed in decibels relative to a reference pressure of 20 micropascals.

Absolute—a direct measurement in calibrated sound pressure level: Not comparative or relative in any way.

Ambient noise level (L_{eq})—the background noise level, or equivalent continuous noise level, measured in A-weighted decibels that is used as the reference level against which a new intrusive sound source may be compared. The Board of Health may, at its discretion, impose specific requirements as to the conditions under which the ambient noise level is to be established so as to insure its relevance and fairness to the quantification of the subject noise stimulus, including time duration and time of day.

Decibel (dB)—a logarithmic unit used in measuring the sound pressure level relative to a reference pressure of 20 micropascals.

Excessive—more than is necessary, normal, or desirable; immoderate

Noise—a sound.

Noise level—the property of broadband sound (that is, sound with multiple tones/frequencies, or a continuous band of frequencies) as measured in A-weighted decibels (dBA) with a sound level meter that meets or exceeds the requirement for a Type I or Type II sound-level meter as specified under American National Standards Institute (ANSI) Specification S1.4-1974 or its successor (ANSI, 1974/1983, S1.4), which is capable of making absolute measurements). For the purposes of characterizing the relative increase in sound pressure level caused by a noise under review, at its discretion the Board of Health may allow the presentation of measurements made by a more readily available instrument, such as a smartphone or tablet with a sound-pressure-meter application.

Octave band—a portion of the sound spectrum with the upper limit twice the frequency of the lower limit. Octave bands are named for their center frequency (geometric mean) of the band. Standard octave bands for sound level meters are defined by the American National Standards Institute (ANSI, 2009, S1.11).

Relative—a term used to describe any measurement of a noise stimulus made with respect to a contemporaneous measurement of the ambient noise level, as defined below. A relative measurement is understood to be self-normalizing in that it quantifies the intrusive nature of a noise source in terms of a known, ordinary acceptable noise background level. Further, a relative measurement inherently compensates for measurement error or bias associated with a particular measurement device by automatically cancelling any such errors as they are common to measurement of noise stimulus and background. As such, it is imperative that any relative measurement be performed using measurements of noise stimulus and background by the same exact device, made within a reasonable time interval.

Tonal—a sharply narrowband, continuous-wave (CW) signal or acoustic stimulus, like a long whistle or whirring sound. Due to its very concentrated nature in frequency, a tonal acoustic disturbance tends to possess a much greater annoyance factor, or even cause physical discomfort, at much lower relative sound pressure levels than a broadband noise source.

REFERENCES

American National Standards Institute (ANSI). (1974/1983). American National Standard Specification for Sound Level Meters: ANSI S1.4A-1985 Amendment to ANSI S1.4-1983. Melville, NY: Acoustical Society of America.

American National Standards Institute (ANSI). (2009). *Specification for octave-band and fractional-octaveband analog and digital filters*. Melville, NH: Secretariat, Acoustical Society of America.

Berglund, B., Lindvall, T., & Schewela, D. (2000). *Guidelines for community noise*. Geneva, Switzerland: World Health Organization (WHO).

Massachusetts Department of Environmental Protection Noise Pollution Policy Interpretation (2017). See the related law, regulations, and policy: M.G.L. Chapter 111, Sections 142A-142M, and 310 CMR 7.00: Air Pollution Control.

<https://www.mass.gov/files/documents/2018/01/31/noise-interpretation.pdf>

World Health Organization (WHO) Guidelines for Community Noise (1999).

<https://www.who.int/docstore/peh/noise/guidelines2.1ilml>

World Health Organization Guidelines for Community Noise (1999), Chapter: Adverse Health Effects of Noise.

<https://www.who.int/docstore/peh/noise/Comnoise-3.pdf>

World Health Organization Training Package for the Health Sector: Children and Noise, Children's Health and the Environment

<https://www.who.int/kebc/capacity/noise.pdf>

A true copy attest;

Dolores Bence, Town Clerk