

ARTICLE III. - NOISE^[3]

Footnotes:

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Editor's note— Ord. No. 87-2-9/O-1, § 1, enacted Feb. 9, 1987, amended Art. III to read as herein set out in §§ 11-37—11-42. Formerly, Art. III, §§ 11-37—11-42, was derived from Ord. No. O-81-33, § 1, adopted May 11, 1981; Ord. No. O-81-61, § 1, adopted Sept. 14, 1981 and Ord. No. O-82-19, § 1, adopted March 8, 1982. Subsequently, Ord. No. 2001-09-24/O-8, § 1, amended Art. III, in its entirety, to read as herein set out. Prior to inclusion of said ordinance, Art. III pertained to similar subject matter. See the Code Comparative Table for a detailed analysis of inclusion.

State Law reference— City may regulate noise, G.S. § 160A-184.

Sec. 11-37. - Article designated noise control code.

This article shall be known as the "Noise Control Code for the Town of Chapel Hill."

(Ord. No. 2001-09-24/O-8, § 1)

Sec. 11-38. - Terminology and standards.

- (a) *Terminology.* Major terminology used in this article is defined below. Terms not defined herein shall be in conformance with applicable publications of the American National Standards Institute (ANSI) or its successor body.
- (1) *A-weighted sound level:* The sound pressure level in decibels as measured on a sound level meter using the A-frequency-weighted network and slow meter response setting. The level so read is designated dB(A).
 - (2) *Decibel (dB):* Unit of level when the base of the logarithm is the tenth root of ten (10) and the quantities concerned are proportional to power. Unit symbol, dB.
 - (3) *Sound pressure level:* Ten (10) times the logarithm to the base ten (10) of the ratio of the time-mean-square pressure of a sound, in a stated frequency band, to the square of the reference sound pressure in gases of twenty (20) micro Pa. Unit decibel (dB); abbreviation, SPL; symbol, Lp.
 - (4) *Sound level meter:* Device used to measure sound pressure levels with a standardized frequency weighting and indicated exponential time weighting for measurements of sound level, or without time weighting for measurement of time-average sound pressure level or sound exposure level.
 - (5) *Sound level weighted sound pressure level:* Ten (10) times the logarithm to the base ten (10) of the ratio of the squared A-frequency-weighted sound pressure to the squared reference sound pressure of twenty (20) micro Pa, the squared sound pressure being obtained with slow (S) (1,000 ms) exponentially weighted time-averaging selected. Unit decibel (dB). [However, herein the unit for A-frequency weighted measurements will be referred to simply as dB(A).]
 - (6) *Time-interval equivalent continuous A-frequency-weighted sound pressure level:* Ten (10) times the logarithm to the base ten (10) of the ratio of the time-mean-square instantaneous A-frequency-weighted sound pressure during a stated time interval T, to the square of the standard reference sound pressure. Unit, decibel (dB); abbreviated as $L_{Aeq,T}$

- (7) *Time-interval equivalent continuous band sound pressure level*: Sound pressure level for sound contained within a restricted frequency band during a stated time interval T. Unit, decibel (dB); abbreviated as $L_{b,eq,T}$.
 - (8) *Filters*: Herein refers to either an octave-band or one-third (1/3) octave-band frequency filter as defined in ANSI S1.1-1994. Measurements with the A-frequency weighting filter provide a single overall sound level for a noise source after the contribution of the low frequencies has been significantly reduced. Octave-band and one-third (1/3) octave-band filter measurements provide more accurate information about the frequency pitch characteristics of the noise source.
 - (9) *Emergency work*: Any work performed for the purposes of maintaining public safety, preventing or alleviating physical trauma or property damage threatened or caused by an existing or imminent peril.
 - (10) *Steady-state sound*: A steady-state sound is one that exists twenty-five (25) percent of any one (1) measurement interval. A measurement interval is a continuous period of fifteen (15) seconds. Examples would include music sources, PA sounds, exhaust fan noise, heating and air-conditioner noise, etc.
 - (11) *Adjoining property*: Property which shares a contiguous boundary with another.
- (b) *Instrumentation, requirements and measurement procedures*: The instrumentation requirements, personnel training or qualifications and reporting procedures to be used in the measurement of sound as provided for in this section shall be those as specified herein:
- (1) Sound level measurements shall be obtained following the general guidelines outlined in the references listed below and as specified in documents formulated by the city pertaining to the enforcement of this code.
 - (2) Sound level meters shall be of a least Type Two as defined in ANSI S1. 4-1997 for integrating-averaging sound level meters. The sound measurement system shall be serviced and calibrated and operated as recommended by the manufacturer or as outlined in the general order defined in (4) below.
 - (3) Persons using the sound measuring equipment and related instrumentation shall be trained in its proper operation, use, and care.
 - (4) The town manager or ~~manager's~~ designee shall issue a general order adopting standards and procedures for sound level measurements and enforcement consistent with this article.
- (c) *References*:
- (1) *ANSI S1.43-1997*. American National Standard Specifications for Integrating-Averaging Sound Level Meters. Standards Secretariat, Acoustical Society of America, New York, NY.
 - (2) *ANSI S1.4-1983 (R 1997)*. American National Standard Specification for Sound Level Meters. Standards Secretariat, Acoustical Society of America, New York, NY.
 - (3) *ANSI S2.11-1966 (R 1993)*. American National Standard Specifications for octave, half-octave, and third-octave band filter sets. Standards Secretariat, Acoustical Society of America, New York, NY.
 - (4) *ANSI S1.1-1994*. American National Standard Acoustical Terminology. Standards Secretariat, Acoustical Society of America, New York, NY.
 - (5) *ANSI S3.20-1995*. American National Standard Bioacoustical Terminology. Standards Secretariat, Acoustical Society of America, New York, NY.
 - (6) *ANSI S1.40-1984(R 1997)*. American National Standard Specification for Acoustical Calibrators. Standards Secretariat, Acoustical Society of America, New York, NY.

(Ord. No. 2001-09-24/O-8, § 1)

Sec. 11-39. - Maximum permitted steady-state sound levels and sound pressure levels.

(a) No person or group of persons shall operate, ~~or~~ cause to be operated, or allow to be operated any source of sound in such a manner as to create a root mean square (rms) steady-state sound level that exceeds the limits set forth either in Table 1 or in Table 2 when measured at any point on the boundary planes of the property line from which the sound originates, or beyond.

(1) *A-frequency-weighted sound pressure levels:*

Table 1. Maximum Sound Level Limitations at the Property Boundary—Plane by Primary Use Category, dBA

Primary Use Category	Daytime*	Nighttime*
Residential	50	45
Business, Office, Commercial, and Institutional	65	55
Shopping Center, Thoroughfare, and Industrial	70	65

* Daytime and nighttime are defined in section 11-39(d).

(2) *One-third octave-band sound pressure levels:*

Table 2. Maximum One-Third Octave-Band Sound Pressure Level Limitations At The Property Boundary—Plane by Primary Use Category, dB

One-Third Octave-Band Center Frequency, Hertz	One-Third Octave-Band SPL, dB			
	Daytime	Nighttime	Daytime	Nighttime
	Residential		Business, Office, Commercial, Institutional	
16	83	78	98	88
20	75	70	90	80

25	67	62	82	72
31.5	60	55	75	65
40	57	52	72	62
50	56	51	71	61
63	55	50	70	60
80	54	49	69	59
100	53	48	68	58
125	52	47	67	57
160	51	46	66	56
200	50	45	65	55
250	49	44	64	54
315	47	42	62	52
400	45	40	60	50
500	43	38	58	48
630	41	36	56	46

- (b) In Table 2, the allowed one-third (1/3) octave-band sound pressure levels for the nighttime and daytime for the shopping center, thoroughfare and industrial boundaries are +5 and +10 dB higher than is defined for the daytime business, office and commercial, and institutional boundary planes.
- (c) When the primary use of the property where the noise is produced differs from the primary use of the adjoining sound-receiving property, then the maximum permitted sound levels or sound pressure levels which will apply are the lower of the levels shown in Tables 1 and 2 for the two (2) primary use categories involved.
- (d) For purposes of this article daytime is defined as 7:00 a.m. until 11:00 p.m. and nighttime is defined from 11:01 p.m. until 6:59 a.m. from Sunday through Thursday. For the days of Friday and Saturday daytime is defined as 7:00 a.m. until 12:00 a.m. and nighttime is defined as 12:01 a.m. until 6:59 a.m.

(Ord. No. 2001-09-24/O-8, § 1)

Sec. 11-39.1. - Nuisance noises.

- (a) It shall be unlawful to create, cause, or allow the continuance of any unreasonably loud noise, particularly during nighttime, which interferes seriously with neighboring residents' reasonable use of their properties. Steady state noises that do not exceed the allowable sound levels as defined in section 11-39(a)(1) and (2) are not nuisance noises. Nuisance noises may include, but are not limited to, the following:
- (1) Yelling, shouting, whistling or singing.
 - (2) Noisy parties.
 - (3) Loading operations. Loading, unloading, opening or otherwise handling boxes, crates, containers, garbage cans, or other similar objects.
 - (4) Repair of motor vehicles. The repair, rebuilding or testing of any motor vehicle.
 - (5) Sound amplification equipment, television, or musical instrument.
 - (6) Horns and signaling devices (except as a warning of a safety hazard, danger or emergency).
 - (7) Vehicles not operating with original manufacturer-provided muffler, or equivalent, in good working order.
 - (8) Exterior and mobile loud speakers.
 - (9) Power equipment including but not limited to power tools, generators, and garden equipment.
 - (10) Explosives. The use or firing of explosives, firearms, fireworks or similar devices which create impulsive sound.
 - (11) Security alarms. The sounding of a security alarm, for more than twenty (20) minutes after the owner or responsible party has been notified by law enforcement personnel.
- (b) It shall be unlawful to operate a vehicle sound system on public or private property, or a boom box on public property, in such a manner that the sound emanating from such equipment is detectable at a distance of thirty (30) feet from the source.

(Ord. No. 2001-09-24/O-8, § 1; Ord. No. 2004-10-27/O-3, § 1; Ord. No. 2009-06-22/O-10, § 2)

Sec. 11-40. - Exceptions.

The following are exempt from the provisions of this article:

- (a) Sound emanating from regularly scheduled outdoor athletic events on the campus of the University of North Carolina, or on the grounds of local schools, or parks.
- (b) Construction operations from 7:00 a.m. to 9:00 p.m. on weekdays and 8:00 a.m. to 9:00 p.m. on weekends for which building permits have been issued, or construction operations not requiring permits due to ownership of the project by an agency of government; providing all equipment is operated in accord with the manufacturer's specifications, and with all standard equipment, and with manufacturer's mufflers and noise-reducing equipment in use, and in proper operating condition.
- (c) Noises of safety signals, warning devices, emergency pressure relief valves, all church bells and the bells of the Bell Tower and the bell on South Building on the University of North Carolina campus.
- (d) Noises resulting from any authorized emergency vehicle when responding to any emergency call or acting in time of emergency.

- (e) Sound at street fairs conducted by or for the Town of Chapel Hill.
- (f) An official all-campus University of North Carolina event, held on the University Campus, no more than one (1) weekend in duration, occurring no more often than twice per year.
- (g) All noises coming from the normal operations of properly equipped aircraft (not including scale model aircraft).
- (h) All noises coming from normal operation of motor vehicles properly equipped with the manufacturer's standard mufflers and noise-reducing equipment.
- (i) Noise from lawful fireworks and noisemakers on holidays and at religious ceremonies.
- (j) Reserved.
- (k) Musical accompaniment or firearm discharge related to military ceremonies.
- (l) Emergency work necessary to maintain public safety, or to restore property to a safe condition following an accident or natural disaster, or to restore public utilities and infrastructure following an accident or natural disaster, or to protect persons or property from an imminent danger.
- (m) Noises resulting from the provision of government services necessary to maintain the public infrastructure.
- (n) Noises resulting from work performed by non-government agencies, provided that such work is necessary to maintain the public infrastructure, and that a permit for the work has been issued by the town.
- (o) Noises resulting from the provision of sanitation and recycling services between the hours of 5:30 a.m. and 11:00 p.m. in accordance with a permit issued by the manager.
- (p) Any other noise resulting from activities for which a permit allowing exemption from this article has been granted by the town. Regulation of noises emanating from operations under such permit shall be according to the conditions and limits stated on the permit.

(Ord. No. 2001-09-24/O-8, § 1; Ord. No. 2004-10-27/O-3, § 2; Ord. No. 2005-06-15/O-4, § 1; Ord. No. 2009-06-22/O-10, § 2)

Sec. 11-40.1. - Regulations applicable to leaf blowers and other motorized agricultural and landscape maintenance equipment.

Leaf blowers, lawn mowers and other motorized agricultural and landscape maintenance equipment shall be subject to the following regulations:

- (1) Leaf blowers, lawn mowers and other motorized agricultural and landscape maintenance machinery shall be operated only with all manufacturer-supplied emission control devices and noise muffling equipment in proper working order.
- (2) Leaf blowers, lawn mowers and other motorized agricultural and landscape maintenance machinery may be used during the following time periods based on the zoning designation of the property and contiguous property:
 - a. On property zoned one of the residential zoning classifications under the town's Land Use Management Ordinance (R-6, R-5, R-4, R-3, R-2, R-2A, R-1, R-1A, R-LD-1, and R-LD-5), and on parts of any property not so zoned but contiguous to property carrying such designation, within one hundred (100) feet of the residentially zoned property, such equipment may only be operated between the hours of 8:00 a.m. and 7:00 p.m. Monday through Friday and between the hours of 9:00 a.m. and 5:00 p.m. Saturday and Sunday. However, commercial golf courses shall operate such equipment only between the hours of 6:30 a.m. and 5:00 p.m. Monday through Friday and between the hours of 6:30 a.m. and 5:00 p.m. Saturday and Sunday.

- b. On property zoned for any other purpose not meeting the contiguity standard in subsection (1), said equipment may only be operated between the hours of 4:00 a.m. and 9:00 p.m. Monday through Friday and between the hours of 8:00 a.m. and 5:00 p.m. on Saturday and Sunday.
- (3) Notwithstanding the provisions of subsection (2), the town manager is authorized to direct the use by town staff and town agents of such motorized machinery at other hours when such use is necessary to clean or restore public properties following scheduled or unscheduled special events.
- (4) Leaf blowers, lawn mowers and any other motorized agricultural and landscape maintenance machinery shall be operated and controlled by the handler so that the decibel level generated by said equipment does not exceed sixty-five (65) dBA when measured, off of the premises where the equipment is used, at a distance of fifty (50) feet from the location of use. Equipment that would otherwise exceed this standard shall be operated at a reduced intensity in order to meet this standard when the operator is made aware of persons present within the nearby vicinity. This subsection shall not apply to commercial golf courses.
- (5) These specific regulations shall not mean that the use of such equipment is not further subject to the nuisance provisions contained in section 11-39.1 of this chapter.
- (6) The town manager is authorized to issue permits to exempt property owners from the time periods set out in this section on a case by case basis where a property owner applies for a permit to conduct maintenance activity on his/her own property and presents documentation from a physician that due to a medical condition the individual should not be engaging in the landscape maintenance activity during the time periods where such activity is otherwise permitted due to the individual's sensitivity to heat or other conditions existing during such time periods.

(Ord. No. 2005-06-15/O-4, § 2; [Ord. No. 2014-11-24/O-1, § 1](#))

Sec. 11-41. - Permit to exceed noise limits.

- (a) A person or group of persons may apply for a permit specific to the time and place of a planned activity in order to produce or cause to be produced sound no more than ten (10) dB in excess of the sound limits specified in section 11-39 only during the daytime hours on Friday and Saturday.
- (b) Any person or group of persons desiring a permit shall apply as provided herein, and shall provide all information required.
- (c) Any person desiring a permit to exceed the sound level limits as specified herein and for the allowed times must apply seven (7) days prior to the activity for which the permit is requested.
- (d) In considering and acting on all requests or permits pursuant to this article, the town manager shall consider, but shall not be limited to the following, in issuing or denying such permit: The timeliness of the application; the nature of the requested activity or event; the time of the event; the duration of the event; other activities in the vicinity of the location proposed; the frequency of the application; the effect of the activity on the residential areas of the town; previous experience with the applicant; and previous violations, if any, of the applicant.
- (e) In addition, in order to issue a permit, the manager must determine that granting such a permit would have minimum or no impact on the surrounding area, or that the event is of a community-wide nature.
- (f) A permit granted under this section will require the payment of a fifty dollar (\$50.00) administrative fee.
- (g) Permit holders agree to contact at least one (1) adult at every residential address within two hundred fifty (250) feet of the property boundary of the site for which the permit has been issued. Such notification must be made in writing using the notification form provided by the police department, and be done at least seventy-two (72) hours prior to the starting time of the permit.

- (h) Permit holders agree to cooperate with town officials in enforcing this noise ordinance by having the signer(s) of the permit available at the site of the event during the entire time for which a permit has been issued and capable of assisting town officials in enforcing the noise ordinance

(Ord. No. 2001-09-24/O-8, § 1)

Sec. 11-42. - Violations.

- (a) ~~When it is reasonable and practical to do so, a~~ person believed to be violating any portion of this article may be given an oral order to cease or abate the noise immediately, or as soon as is reasonable or practical. ~~-, If the person does not comply with the order to cease or abate the noise, the person or persons responsible for the noise or for allowing the continuation of the noise may be cited for a violation. prior to being charged with a violation. An order to cease or abate is not a prerequisite to issuance of a citation.~~
- ~~(b) If the order to cease or abate the noise is not complied with, the person or persons responsible for the violation may be charged with a violation of this article.~~
- ~~(be)~~ A person or group of persons will not be deemed to have violated section 11-39.1(a) of this article unless the noise being created, caused, or allowed to continue by said person(s) is reported on at least two (2) occasions, at least twenty (20) minutes apart, by different complainants at two (2) different locations, or unless the noise is of such a nature that a reasonable person should have known that the noise was a nuisance as defined in section 11-39.1(a).
- ~~(ce)~~ Steady-state sounds, created by existing sources and/or equipment in place and operational prior to the effective date of this article, and maintained in good working order, are not violations of this article if the sound levels created do not exceed the limits allowed by ordinance prior to the effective date of this article.

(Ord. No. 2001-09-24/O-8, § 1)

Sec. 11-43. - Penalties and enforcement.

- ~~(a) Any violation of this article within a twelve-month period subjects the offender to a civil citation and the following civil penalties:
 - ~~(1) First violation: Written warning and/or twenty-five dollars (\$25.00).~~
 - ~~(2) Second violation: Seventy-five dollars (\$75.00).~~
 - ~~(3) Third violation: One hundred and fifty dollars (\$150.00).~~
 - ~~(4) Fourth and subsequent violations: Two-hundred and fifty dollars (\$250.00) up to maximum of five hundred dollars (\$500.00).~~~~
- ~~(b) A violation that continues after the Town notifies the offender of the violation or issues a citation for the violation constitutes an additional violation subject to further civil penalty.~~
- ~~(c) Appeal. A person assessed a civil penalty under this section may appeal to the manager or manager's designee by filing an appeal within fifteen (15) days of receipt of the citation. The manager or designee shall conduct an administrative hearing during which the appealing party may present any material information in support of the appeal. The manager or designee shall render a decision within fifteen (15) days of the hearing.~~
- ~~(d) The Town may collect unpaid penalties through a civil action in the nature of a debt. A penalty is deemed unpaid if not paid within 30 days after receipt of the citation or conclusion of appeals. The manager is authorized to reach equitable settlement of unpaid penalties.~~

(e) The Town may also enforce this article by seeking an equitable remedy, including but not limited to injunctive relief or order of abatement.

(f) Violation of section 11-41 of this article is cause for immediate revocation of a permit to exceed normal sound limits.

(g) The manager or the manager's designee may deny a request to receive a permit to exceed the normal sound limits to any person or group of persons who have, within the previous six (6) months, violated any provision of this article.

~~(a) Any violation of this article is a misdemeanor and is punishable by a fine not to exceed one hundred fifty dollars (\$150.00), imprisonment for not more than ten (10) days, or both.~~

~~(b) Violation of section 11-41 of this article is cause for immediate revocation of a permit to exceed normal sound limits.~~

~~(c) The town manager or the town manager's designee may deny a request to receive a permit to exceed the normal sound limits to any person or group of persons who have, within the previous six (6) months, violated any condition of this article.~~

~~(d) Violations of this article may also be enforced by assessment of a civil penalty of up to five hundred dollars (\$500.00) per day as provided by law. Each day that a violation continues shall constitute a separate offense. The manager shall determine the amount of the civil penalty to be assessed under this section, shall make written demand for payment upon the person responsible for the violation, and shall set forth in detail the violation for which the penalty has been invoked. If payment is not received or equitable settlement reached within sixty (60) days after demand for payment is made, a civil action may be initiated to collect said penalty. In determining the amount of the penalty the manager shall consider the extent of the inconvenience or harm inflicted by the violation, whether the violation was committed willfully, and the prior record of the violator in complying or failing to comply with the ordinance.~~

~~(e) In addition to the civil and criminal penalties, the town may institute legal procedures for injunctive relief for any violation of the article.~~

(Ord. No. 2001-09-24/O-8, § 1)

Secs. 11-44—11-52. - Reserved.