ORDINANCE NO. 4760-20

AN ORDINANCE TO REVISE, UPDATE, AND ADD NEW SECTIONS TO THE CODE OF THE CITY OF JOHNSON CITY REGARDING NOISE BY AMENDING TITLE 11, CHAPTER 5 OF THE CODE OF THE CITY OF JOHNSON CITY, TENNESSEE, AND REPEALING ALL ORDINANCES AND PARTS OF ORDINANCES IN CONFLICT HEREWITH.

BE IT ORDAINED BY THE CITY OF JOHNSON CITY as follows:

SECTION I. That Title 11, Chapter 5, of the City of Johnson City Code is hereby amended to read as follows:

The original Section 11-501 reads as follows:

- 11-501. <u>Definitions</u>. All terminology used in this chapter, not defined below shall be in conformance with applicable publications of the American National Standards Institute (ANSI) or its successor body. The following words and phrases shall have the meanings respectively ascribed to them by this section:
- (1) "A-weighted sound level (dBA)." The sound pressure level in decibels as measured on a sound level meter using the A-weighting network. The unit of measurement is dB(A).
- (2) "C-weighted sound level (dBC)." The sound pressure level in decibels as measured on the sound level meter using the C-weighted network, which is more sensitive to low-frequency content of a complex sound environment. The unit of measurement is designated dBC.
- (3) "Decibel (dB)." Logarithmic unit of measure used in describing the relative level of sound. The unit of measurement is dBC.
- (4) "Low frequency ambient." The lowest sound level repeating itself during a ten (10) minute measurement period utilizing the dBC slow response weighting. "Low-frequency ambient" is ascertained with the sound turned off at the source of a complaint. Measurement shall be made at the same complaint location for a comparison of the ambient sound level and the sound emanating from the source of a complaint. The ambient sound level shall not be less than 45 dBC for interior residential noise as measured five feet (5') above the floor in the center of a room or 55 dBC for all exterior locations measured at a height of five feet (5') above the ground at any point along or within the property lines as set forth in § 11-503.
- (5) "Motor vehicle." Any two (2) or more wheeled vehicle or machine, propelled or drawn by mechanical power and used in the transportation of passengers or property. This shall not include vehicles, locomotives or cars operated exclusively on rail or rails.
- (6) "Noise." Any sound which exceeds the maximum permissible sound levels by land use categories as specified in this code and which annoys or disturbs humans and causes or tends to cause an adverse psychological or physiological effect on humans.
- (7) "Residential zone." Any location where residential uses are permitted in the Zoning Code of the City of Johnson City, Tennessee.
 - (8) "Sound level." In decibels, the A-weighted or C-weighted sound pressure level

obtained by the use of a calibrated Type 1 or Type 2 sound level meter as specified by the American National Standards Institute [ANSI S1.4- 1983 (R2006)/ANSI S1.4a-1985 (R2006)]).

(9) "Sound level meter." An instrument for measuring sound, including a microphone, amplifier, output meter and weighting network which is sensitive to pressure fluctuations and shall be at least Type II per ANSI S1.4-1983 specifications. (Ord. #3251, Oct. 1994, as amended by Ord. #4508-13, Oct. 2013)

The new Section 11-501, as amended, is substituted as follows:

- 11-501. <u>Definitions</u>. All terminology used in this chapter, not defined below shall be in conformance with applicable publications of the American National Standards Institute (ANSI) or its successor body. The following words and phrases shall have the meanings respectively ascribed to them by this section:
- (1) "A-weighted sound level (dBA)." The sound level in decibels measured on a sound level meter using the A-weighting network.
- (2) "Acoustic calibrator." An instrument providing reference noise source used to calibrate and check the performance of sound levels meter.
- (3) "Ambient sound level." The all-encompassing sound level, including the noise source of interest, associated with a given environment, being usually a composite of sounds from any sources, near and far.
- (4) "Audible annunciator." A sound-producing device, such as a bell, siren, whistle, or buzzer, incorporated as part of an emergency signaling device, including, but not limited to, a fire, burglar, tornado, or civil defense alarm system.
- (5) "Background sound level." The sound level in a given environment excluding the noise source of interest.
- (6) "City." The City of Johnson City, Tennessee, or the area within the territorial City limits of the City of Johnson City, Tennessee, and such territory outside of the City over which the City has jurisdiction or control by virtue of ownership.
- (7) "Commercial area." Any area of the City not located within an Industrial or Residential area, as such areas are defined in this section.
- (8) "Construction." Any and all activity necessary or incidental to the erection, demolition, assembling, altering, installing, repair, or equipping of public or private buildings, roadways, or utilities, including land clearing, grading, excavating, drilling, and filling.
- (9) "Continuous sound." Any non-impulsive, non-intermittent sound, including steady, quasi-steady, and fluctuating sounds that exists, essentially without interruption, for a period of five minutes or more.
- (10) "C-weighted sound level (dBC)." The sound level in decibels as measured on the sound level meter using the C-weighted network.
- (11) "Decibel (dB)." Logarithmic unit of measure used in describing a sound's volume or amplitude, equal to 20 times the logarithm to the base ratio of the pressure produced by a sound wave to a reference pressure, which is 20 micropascals (20 micronewtons per square meter).
- (12) "Dynamic braking device." A device used primarily on trucks and buses to convert the motor from an internal combustion engine or an air compressor for the purpose of vehicle braking without the use of a wheel brake.
- (13) "Emergency." Any occurrence or set of circumstances involving actual or imminent physical trauma to a person or persons or damage to property that demands immediate action.

- (14) "Emergency work." Work made necessary to restore property to a safe condition following a disaster or other public calamity, work to restore public utilities, or any other work required to protect persons or property from imminent exposure to danger.
- (15) "Equivalent A-Weighted or C-weighted Sound Level (LeqA or LeqC)." The constant or "average" sound level over a specified measurement period conveys the same sound energy as the actual time-varying A- or C-weighted sound levels over the same period. LeqA or LeqC describe a receiver's cumulative sound exposure from all sources over the specified measurement.
- (16) "Fluctuating or time-varying sound." A non-steady, non-impulsive sound whose sound pressure level varies significantly but does not equal the ambient level more than once during the period of observation. For purposes of this Chapter, a sound is slowly fluctuating sound if its a-weighted sound level measured using the "slow" response on a sound level meter fluctuates more than ± 3 dBA; a sound is a rapidly fluctuating sound if it's a-weighted sound level measured using the "fast" response on a sound level meter fluctuates more than ± 3 dBA.
- (17) "Frequency." The number of occurrences of a repeating event per unit of time, measured in hertz (Hz), i.e., the number of cycles per second.
- (18) "Gross vehicle weight rating (GVWR)." The value specified by the manufacturer as the recommended maximum loaded weight of a single motor vehicle. For purposes of this Chapter, in cases where trailers and tractors are separable, the gross combination weight rating (GCWR), which is the value specified by the manufacturer as the recommended maximum loaded of the combination vehicle shall be used.
- (19) "Home improvement service." The repair, replacement, remodeling, alteration, conversion, modernization, improvement, or addition to any residential property, including, but not limited to, the repair, replacement, remodeling, alteration, conversion, modernization, improvement, or addition to driveways, swimming pools, porches, garages, landscaping, fences, and roofing.
- (20) "Impulsive sound." A sound of short duration usually lasting for less than one second, consisting of a single pressure peak or a single burst (multiple pressure peaks), and characterized by an abrupt onset and rapid decay. Impulsive sounds are generally associated with sources such as explosions, the discharge of firearms, impacts, and certain industrial processes.
- (21) "Industrial area." Any area of the City located within any Industrial District or Planned Industrial District, as permitted in the Zoning Code of the City of Johnson City.
- (22) "Intermittent sound." A sound where the sound level meter indicates a sound pressure level equal to the ambient level two or more times during the measurement period; intermittent sounds may be either steady or fluctuating.
- (23) "Low frequency ambient." The lowest sound level repeating itself during a ten (10) minute measurement period utilizing the dBC slow response weighting. "Low-frequency ambient" is ascertained with the sound turned off at the source of a complaint. Measurement shall be made at the same complaint location for a comparison of the ambient sound level and the sound emanating from the source of a complaint. The ambient sound level shall not be less than 45 dBC for interior residential noise as measured five feet (5') above the floor in the center of a room or 55 dBC for all exterior locations measured at a height of five feet (5') above the ground at any point along or within the property lines as set forth in § 11-503.
- (24) "Maximum sound level (Lmax)." The maximum sound level during a measurement period as determined by using a sound level meter set to the "fast" response

setting. For purposes of this Chapter, Lmax may be measured as either an A-weighted or C-weighted sound level.

- (25) "Measurement period." The time interval during which acoustical data are obtained. For purposes of this Chapter, the measurement period is determined by the characteristics of the noise being measured and must be at least ten times as long as the response time of the instrumentation. The greater the variation in indicated sound level, the longer the observation time must be for a given expected precision of measurement.
- (26) "Motor vehicle." Any two (2) or more wheeled vehicle or machine, propelled or drawn by mechanical power and used in the transportation of passengers or property. This shall not include vehicles, locomotives or cars operated exclusively on rail or rails.
- (27) "Motorcycle." Any motor vehicle that has a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground, including a vehicle that is fully enclosed, has three wheels in contact with the ground, weighs less than 1,500 lbs., and has the capacity to maintain posted highway speed limits, excluding a tractor or motorized bicycle, as defined in T.C.A. § 55-8-101.
- (28) "Muffler". Any device for abating sound of escaping gases of an internal combustion engine.
- (29) "Noise." Any sound which exceeds the maximum permissible sound levels by land use categories as specified in this code and which annoys or disturbs humans and causes or tends to cause an adverse psychological or physiological effect on humans.
- (30) "Noise Officer." Any City of Johnson City Police Office, Building Inspector, or Codes Enforcement Officer.
- (31) "Non-steady sound." A sound whose sound pressure level fluctuates by more than 3 dB from its mean during the measurement period, as measured using the "slow" response of the sound level meter.
- (32) "Peak sound level (Lpk)." The maximum sound level as measured using the C-weighting scale and peak/impulse settings on the sound level meter.
- (33) "Public entertainment venue." Any location, exterior or interior to a building, including but not limited to a theatre, bar, cafe, restaurant, dance club, or concert venue, that regularly permits public entrance for entertainment purposes.
- (34) "Plainly audible sound." Any sound for which the information content of that sound is unambiguously communicated to the listener, such as, but not limited to, understandable spoken speech, comprehension of whether a voice is raised or normal, repetitive bass sounds, or comprehensible musical rhythms.
- (35) "Power tools and equipment." Any device mechanically powered by electricity, gasoline, diesel fuel, or any other fuel that is intended to be used or is actually used for the performance of cutting, nailing, stapling, sawing, vacuuming, blowing, drilling, sanding, grinding, and similar functions.
- (36) "Pure tone." Any sound that can be heard as single pitch (i.e., frequency) or combination of pitches.
- (37) "Quasi-steady sound." A rapid series of impulsive sounds that has the same effect on a sound level meter as a steady sound.
- (38) "Refuse compacting or collection vehicle." Any vehicle which is designated to be used or is actually used to compact, collect, and/or transfer refuse, garbage, recyclables, or trash.

- (39) "Residential zone." Any location where residential uses are permitted in the Zoning Code of the City of Johnson City, Tennessee.
- (40) "RMS sound pressure (Prms) (effective sound pressure)." The value obtained when squaring multiple instantaneous sound pressure level measurements at a given point, averaging these over the time of a complete cycle, and taking the square root of this average, expressed in pascals.
- (41) "Soft test point." Any test site having the ground surface covered with grass, other ground cover, or similar absorptive material for ½ or more of the distance between the microphone target point and the microphone location point.
- (42) "Sound." An oscillation in pressure, particle displacement, particle velocity or other physical parameter, in a medium with internal forces that causes compression and rarefaction of that may include any characteristic of such sound, including duration, intensity, and frequency.
- (43) "Sound amplification device." Any device whose primary function is the amplification of sound, live or recorded, including, but not limited to, any musical instrument, loudspeaker, radio, television, digital or analog music player, public address system, or other device or equipment used for the reproduction or amplification of the human voice or other sound.
- (44) "Sound level." In decibels, the A-weighted or C-weighted sound pressure level obtained by the use of a calibrated Type 1 or Type 2 sound level meter as specified by the ANSI S1.4-2014.
- (45) "Sound level meter." A sound level measuring device, either Type I or Type II, as defined in the latest version of ANSI S1.4-2014 "Sound Level Meters." For purposes of this Chapter, a sound level meter must contain at least an A-scale, both fast and slow meter response, and be capable of calculating equivalent A-weighted sound levels. (Ord. #3251, Oct. 1994, as amended by Ord. #4508-13, Oct. 2013)

The original section 11-502 reads as follows:

11-502. **Standards**.

- (1) Sound level measurements shall be made with a properly calibrated sound level meter which meets or exceeds the requirements of this chapter and is operated by persons trained in sound level measurement and the operation of sound level measurement equipment.
- (2) Sound level measurement shall be made with a sound level meter using the A-weighting scale set on "slow" response for all measurements except that when measuring motor vehicle sounds, "fast" response shall be used.
- (3) For low frequency sound including but not limited to music produced by amplification or for any live entertainment (whether amplified or not) or any combination of the same, sound level measurements shall be made using the C-weighting scale set on "slow" response for all measurements. (Ord. #3251, Oct. 1994, as replaced by Ord. #4508-13, Oct. 2013).

The new Section 11-502, as amended, is substituted as follows:

11-502. Administration and enforcement.

(1) The City's Chief of Police and the Chief Building Official, or their designees, shall be responsible for administering and enforcing the provisions of this Chapter. The City Manager may authorize other City departments to assist the Chief of Police and Chief Building Codes Official in enforcing this Chapter.

- (2) Any City of Johnson City Police Officer shall have the authority to investigate suspected violations of this Chapter and to pursue enforcement activities in accordance with Code § 11-512, provided, however, that only those officers qualified as a Noise Officer shall have the authority to enforce sections of this Chapter requiring the use of a sound level meter.
- (3) Any City Building Inspector or Code Enforcement Officer shall have the authority to investigate suspected violations of Code §§ 11-505 and 11-506 and to pursue enforcement activities in accordance with Code § 11-512, provided, however, that only those inspectors qualified as a Noise Officer shall have the authority to enforce sections of this Chapter requiring the use of a sound level meter.
- (4) The Chief Building Official or designee shall be responsible for administering all other aspects of the noise control program established by this Chapter and shall have the power to:
 - (a) Review public and private projects, subject to mandatory review and approval by other City departments, boards, and/or commissions, for compliance with this Chapter.
 - (b) Require the owner or operator of any commercial or industrial activity to establish reports and maintain records and make such reports as the Building Codes Division may reasonably prescribe; and
 - (c) Require the owner or operator of any commercial or industrial activity to measure, with or without the presence of Building Codes Division officials, the sound level of or the vibration from any source in accordance with applicable ANSI methods and procedures and at such locations and times as the Building Codes Division may reasonably prescribe and to furnish reports of the results of such measurements.

The original Section 11-503 reads as follows:

11-503. Maximum permitted sound levels in residential zones.

- (1) Except as exempted in § 11-506 below, no person, regardless of location, shall operate or cause to be operated any source of sound in such a manner as to create a sound level which, at its maximum, exceeds the limits set forth in this section (noise) when measured at a height of five feet (5') above the ground at any point on the property lines of a complaining residence or within the property lines of a complaining residence. Physical features which are commonly associated with property lines such as back of curb, telephone and street light poles, edge of driveway or parking lot, hedges, perimeter landscape strips, buffers, and fences are presumed to be at a point which is at or within the property lines.
- (2) Sound which originates from a dwelling unit in a duplex or other multi-family housing unit or from a source outside the interior walls of a dwelling unit in a duplex or other multi-family housing unit shall be measured within the complaining dwelling unit at a point at five feet (5') above the floor at the center of any room.
- (3) The following standards shall govern the allowable sound levels in any residential zoning district. Unless exempted per § 11-506, no noise shall exceed the limits specified below:
 - (a) Nighttime -- 55 dBA between 11:00 P.M. and 7:00 A.M.
 - (b) Daytime -- 75 dBA between 7:00 A.M. and 11:00 P.M.
 - (c) Any time -- 8 dBC above the low frequency ambient noise level as defined in § 11-501. (Ord. #3251, Oct. 1994, as amended by Ord. #3600, July 1998, and replaced by Ord. #4508-13, Oct. 2013)

The new Section 11-503, as amended, is substituted as follows:

11-503. Sound measurement procedures.

- (1) Sound Measurement Equipment.
- (a) All sound level measurements made by the Noise Officer pursuant to this Chapter shall be made using a sound level meter in good operating condition and that meets the requirements of a Type 1 or Type 2 instrument, as described in ANSI S1.4 2014 "Sound Level Meters" as it exists as of the effective date of this Chapter or as such requirements are hereafter amended.
- (b) Acoustic calibrators used to calibrate a sound level meter should be those recommended by the manufacturer of the sound level meter.
- (c) Each sound level meter used in connection with the enforcement and administration of this Chapter must be recalibrated and the acoustic calibrator must be recalibrated at least once per year by the manufacturer or by a laboratory accredited for such calibrations by either the American Association for Laboratory Accreditation or the National Institute of Standards and Technology. A copy of written documentation of such recalibration shall be kept with the equipment to which it refers.
- (2) Insofar as practicable, sound will be measured while the source under investigation is operating at normal, routine conditions and, as necessary, at other conditions including, but not limited to, design, maximum and fluctuating rates.
 - (3) All tests shall be conducted in accordance with the following procedures;
 - (a) The Noise Officer shall, to the extent practicable, identify and document all sources contributing sound to the point of measurement. Prior to taking any noise measurements, the Noise Officer shall explore, as is reasonable under the circumstances, the vicinity of the source in question to identify any other sound sources that could affect measurements, to establish the approximate location and character of the principal sound source, and to select suitable locations from which to measure the sound from the source in question.
 - (b) Except as otherwise provided in this Chapter, measurements shall be taken at or near the nearest real property boundary of the property receiving the alleged offending sound.
 - (c) The Noise Officer shall conduct an external calibration of the sound level meter using an acoustic calibrator immediately before and after a series of measurements at each test site.
- (4) When using a sound level meter to enforce the provisions of Title 11 of the Johnson City Code, the Noise Officer shall utilize the settings specified below for the specific type of sound being evaluated.
 - (a) <u>Non-impulsive sounds</u>. Except as set forth otherwise in this Chapter, the sound level of a sound that is sustained for more than one second at a time and shall be measured using the A-weighting scale and the fast response settings on the sound level meter, unless otherwise specified in the most recent version of ANSI S1.4-2014.
 - (b) <u>Measurement of impulsive sounds</u>. The sound level of an impulsive sound shall be measured using the C-weighting scale and peak/impulse settings on the sound level meter, unless otherwise specified in the most recent version of ANSI S1.4-2014.

(c) <u>Measurement of sounds with significant low-frequency components</u>. The sound level of a sound with significant low-frequency components, e.g., certain sound amplification devices and heavy equipment or machinery, in addition to being measured in accordance with subsection (a), may also be measured using the C-weighting scale and the fast response setting on the sound level meter for purposes of establishing compliance with the applicable sound level limits.

(5) Adjustment for background interference.

- (a) Wherever possible, the background sound level should be measured at the same location on the receiving property used to measure the alleged offending noise source. Background sound levels shall be taken using the same weighting scale as being evaluated and the fast response setting on the sound level meter.
- (b) If the source of interest can be turned off, the Noise Officer shall subtracted the background sound level from the measured sound levels of the source(s) of interest (i.e., ambient sound level) by using Table 1 to determine the sound levels from the source(s) of interest alone.

Table 1		
Difference between ambient and background levels	Correction factor to be subtracted from ambient level to determine source level	
3	3	
4-5	2	
6-9	1	
10 or more	0	

- (c) If the intruding noise source cannot reasonably be discontinued or stopped for a period of time sufficient to allow the measurement of the background sound level, the background sound level may be determined by the decibel reading traveling away from the noise source to a point where a steady-state decibel reading is achieved.
- (6) Reporting requirements
- (a) The Noise Officer shall complete a report for each measurement session on forms approved by the Chief of Police and Chief Building Codes Official.
- (b) Information required to support the issuance of a citation shall be considered sufficient if the data captured by the sound level meter provides such information, and/or such information can be provided by the citation and/or the testimony of the Noise Officer taking such readings, and/or such other reports generated by the Noise Officer.

The original Section 11-504 reads as follows:

11-504. Maximum permitted sound levels for motor vehicles.

(1) It shall be unlawful for any person to operate or cause to be operated a public or private motor vehicle, motorcycle or combination of vehicles at any time in such a manner that the sound level of the vehicle exceeds the levels set forth in Table 1 below:

Table 1			
Vehicle class	Speed Limit 35 mph or less	Speed limit Over 35 mph	
Any motor vehicle with a gross vehicle weight rating (GVWR) of less than 10,000 pounds	81	85	
Any motor vehicle with a GVWR of more than 10,000 pounds	89	94	
Motorcycles	81	85	
Any other motor vehicle or any combination of vehicles towed by any motor vehicle	76	80	

(2) Sound levels are to be measured at a distance of at least fifty (50) feet from the noise source and at a height of at least four (4) feet above the surrounding surface. (Ord. #3251, Oct. 1994)

The new Section 11-504, as amended, is substituted as follows:

11-504. Maximum permitted sound levels.

(1) Except as exempted in § 11-510, no person, regardless of location, shall operate or cause to be operated any source of sound in such a manner as to create a sound level which, at its maximum, exceeds the limits set forth in Table 2.

Table 2			
Receiving Land Use	Time	Sound Level Limit (dBA)	
Category		Pure Tones, Cyclically	All Other
		Varying Sounds, and Quasi-	Sounds
		Steady Sounds	
Residential or Noise-	7:00 a.m. to 11:00 p.m.	50	55
Sensitive Zone	11:00 p.m. to 7:00 a.m.	43	48
Commercial Zone	7:00 a.m. to 11:00 p.m.	60	65
	11:00 p.m. to 7:00 a.m.	53	58
Industrial Zone	7:00 a.m. to 11:00 p.m.	65	70
	11:00 p.m. to 7:00 a.m.	65	70

(2) Sound which originates from a dwelling unit in a duplex or other multi-family housing unit or from a source outside the interior walls of a dwelling unit in a duplex or other multi-family housing unit shall be measured within the complaining dwelling unit at a point at five feet (5') above the floor at the center of any room. No noise shall exceed the limits set forth in Table 3.

7	Γable 3
Time	Sound Level Limit (dBA)
8:00 a.m. to 8:00 p.m.	45
8:00 p.m. to 8:00 a.m.	40

The original Section 11-505 reads as follows:

- 11-505. <u>Nuisance noises expressly prohibited</u>. To the extent that they exceed the sound levels set forth in §§ 11-503 or 11-504, the following specific acts are declared to be in violation of this chapter:
- (1) <u>Animals</u>. The keeping of any animal, bird or fowl which makes frequent or long, continued noise;
- (2) <u>Noise sensitive zone</u>. The creation of any excessive noise heard within any school, public building, church or any hospital, or the grounds thereof, while in use, which interferes with the workings of such institution;
- (3) <u>Loudspeakers</u>, etc. The use of any loudspeaker, drum, or other device for the purpose of attracting attention to any performance or sale or display of merchandise.
- (4) Places of entertainment, etc. With respect to any place of entertainment or any place where amplified sound is produced, or at any place which is the source of a complaint of vibrations emanating from any location, in addition to the dBA criteria above, a secondary low frequency dBC criteria shall apply. No sound or music associated with a location that is the subject of a complaint shall exceed the low frequency ambient sound level as defined in § 11-501 by more than 8 dBC. (Ord. #3251, Oct. 1994, as replaced by Ord. #4508-13, Oct. 2013).

The new Section 11-505, as amended, is substituted as follows:

11-505. Maximum permitted sound levels for construction activities.

- (1) Except as exempted in § 11-510, it shall be unlawful for any person to engage in any construction work on private property such that the sound therefrom exceeds an equivalent A-weighted sound level (LeqA) of:
 - (a) 80 dBA, as measured at or within a residential real property boundary or within a noise-sensitive zone from 7:00 a.m. to 8:00 p.m. on Sunday through Saturday throughout the year;
 - (b) 85 dBA, as measured from the commercial or industrial real property boundary of another person or at a distance of 50 feet of the source, whichever is greater, between 7:00 a.m. and 10:00 p.m.; or
 - (c) The applicable maximum permissible sound levels established in § 11-504 at all other times.
- (2) Notwithstanding the limitation on construction activities specified in subsection (1), sounds created on private property by impact-type equipment, including but not limited to pavement breakers, pile drivers, jackhammers, sandblasting tools, or by other types of equipment

that create impulsive or impact sound or are used as impact equipment, as measured at the property line on which the construction activity is occurring or at a distance of 50 feet of the source, whichever is greater, may exceed the exterior sound level limits established in § 11-504 between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, and 8:00 a.m. and 6:00 p.m., on Saturday, Sunday, and legal holidays, but in no event may the equivalent C-weighted sound level (LeqC), measured over one minute, exceed 100 dB(C). Equivalent C-weighted sound levels in excess of 100 dBC are prohibited unless authorized by a temporary permit issued by the Chief Building Official. At all times other than the hours specified in this subsection, any sound generated by impact-type equipment shall comply with the sound level limits and time restrictions established in subsection (1).

- (3) In addition to the restrictions specified in subsections (1) and (2), no person shall operate or cause to be operated any equipment used for construction work that is not equipped with a sound reduction device at least as effective as that provided by or recommended by the equipment's manufacturer.
- (4) The restrictions specified in subsections (1) and (2), above, do not apply to: emergency work; power tools and equipment used in activities other than construction; and construction work performed pursuant to a temporary permit issued by the Chief Building Official, or that official's designee.

The original Section 11-506 reads as follows:

- 11-506. Exceptions. The following are exempt from the sound level limits specified in §§ 11-503 and 11-504 of this code:
 - (1) Any vehicle or employee of the city, while engaged upon public business;
- (2) Construction operations between the hours of 7:00 A.M. and 9:00
- P.M. for which building permits have been issued or construction operations for which no permit is required, provided that all construction equipment is operated according to manufacturer's specifications and mufflers are maintained in proper working order;
- (3) Excavations or repairs of bridges, streets, highways, sidewalks, utilities, or other public works by or on behalf of the city, county, state, or utility company, during the night, when the public welfare and convenience renders it impossible to perform such work during the day;
- (4) Domestic power tools, lawn mowers, and agricultural equipment, between the hours of 7:00 A.M. and 9:00 P.M. provided it is properly operated with all manufacturer's standard sound-reducing equipment in place and in proper operating condition;
 - (5) Safety signals and alarm devices and the authorized testing of such equipment;
 - (6) Sounds from nonamplified church bells and chimes;
- (7) Sounds resulting from a parade, scheduled outdoor athletic event, fireworks display, or any event which has been sanctioned by the city;
- (8) Sounds resulting from a street fair or block party between the hours of 7:00 A.M. and 11:00 P.M.;
- (9) Sounds from trains and other associated railroad rolling stock when operated in proper repair and manner;
- (10) Religious or political gatherings and other activities protected by the First Amendment to the United States Constitution. (Ord. #3251, Oct. 1994, as replaced by Ord. #4508-

The new Section 11-506, as amended, is substituted as follows:

11-506. Maximum permitted sound levels for power tools and equipment.

- (1) Except as exempted in § 11-510, it shall be unlawful for any person to:
- (a) Between 7:00 a.m. and 8:00 p.m., operate or cause the operation of any power tool or equipment having an engine rated at five HP or less where the an equivalent A-weighted sound level (LeqA) attributable to that device exceeds 75 dBA, as measured from the real property boundary of another person or at a distance of 50 feet of the source, whichever is greater.
- (b) Between 7:00 a.m. and 8:00 p.m., operate or cause the operation of any power tool or equipment having an engine rated at more than five HP where the an equivalent A-weighted sound level (LeqA) attributable to that device exceeds 80 dBA, as measured from the real property boundary of another person or at a distance of 50 feet of the source, whichever is greater.
- (c) Between 8:00 p.m. and 7:00 a.m., the use of any power tool or equipment shall be subject to the exterior sound level limits set forth in subsection (B), provided, however, no person engaged in any commercial tree maintenance, landscaping, lawn care, or home improvement service may utilize any power tool or equipment in a residential zone or noise-sensitive zone during such period.
- (d) In addition to the restrictions specified in subsections (1), (2) and (3), no person may operate any power tool or equipment without all manufactured-supplied emission control and sound reduction device in proper working order.
- (e) This section shall not apply to the use of power tools and equipment in support of construction activities or emergency work, or to the use of snow blowers and snow throwers when operated with a muffler for the purposes of snow removal.

The original Section 11-507 reads as follows:

11-507. Enforcement and penalties.

- (1) For purposes of this chapter, either the owner, occupant, or manager of the real property from which a noise violation originates shall be responsible for remedying the violation and liable for any costs or fines which result from the violation.
- (2) Any person or organization found to be in violation of §§ 11-503, 11-504, or 11-505 of this code shall receive a citation charging him (it) with a misdemeanor which may result in a fine of not more than fifty dollars (\$50.00) for each separate violation. Upon issuance of a notice of violation, the responsible party shall correct said violation immediately or be cited for an additional violation. (Ord. #3251, Oct. 1994, as replaced by Ord. #4508-13, Oct. 2013)

The new Section 11-507, as amended, is substituted as follows:

11-507. Maximum permitted sound levels for motor vehicles.

(1) Except as exempt in § 11-510, it shall be unlawful for any person to operate or cause to be operated a public or private motor vehicle, motorcycle or combination of vehicles at any time in such a manner that the sound level of the vehicle exceeds the levels set forth in Table 5 below.

- (2) Sound levels are to be measured at a distance of at least fifty (50) feet from the noise source and at a height of at least four (4) feet above the surrounding surface. (Ord. #3251, Oct. 1994).
- (3) Notwithstanding any other provisions of this section or provisions of this Chapter related to noise disturbances, no person may play, or operate or permit the playing, use, or operation of any sound amplification device located within a motor vehicle being operated or parked on public or private property within the City, including any public or private street or road, in such manner as to violate subsections (B) or (D) or otherwise create a noise disturbance. The operation of any such device in such a manner as to be audible to the human ear at a distance of 50 feet from the vehicle in which it is located shall be prima facie evidence of a violation of this section. If this section is determined to be in conflict with any other section of this Chapter, this section shall take precedence.
- (4) Notwithstanding any other provisions of this Chapter, no person may operate a motor vehicle, and no owner of any motor vehicle may permit to be operated upon any public road, street, or highway so as to cause any greater noise or sound than is reasonably necessary for the proper operation of such motor vehicle.
- (5) It shall be unlawful for any person to drive a motor vehicle on a public highway unless it is equipped with a muffler or other sound-dissipative device in good working order and in constant operation to prevent excessive or unusual noise.
- (6) It shall be unlawful for any person to operate a motor vehicle on a street or highway with an exhaust system utilizing a cutout, bypass or similar device.
- (7) It shall be unlawful for any person to operate a motor vehicle in such a manner as to cause or allow to be emitted squealing, screeching, or other such noise from the tires in contact with the ground because of rapid acceleration or excessive speed around corners or other such reason, except that noise resulting from emergency action to avoid imminent danger shall be exempt from this provision.
- (8) It shall be unlawful for any person to operate any motor vehicle in excess of 10,000 pounds GCWR, in any residential zone of the City or within 200 feet of any dwelling or noise-sensitive area, with a dynamic braking device engaged except to avoid imminent danger.
- (9) It shall be unlawful for any person to operate any motor vehicle in excess of 10,000 pounds GCWR, in any residential zone of the City or within 200 feet of any dwelling or noise-sensitive area for longer than ten minutes in any hour while the vehicle is stationary for reasons other than traffic between the hours of 10:00 p.m. and 7:00 a.m.
- (10) It shall be unlawful for any person to sound any horn or other auditory signaling device on or in any motor vehicle on any public right-of-way or public space, except as a warning of danger or as otherwise specifically required or permitted by federal or state law. No person shall sound any horn or auditory signaling device that produces a maximum sound level (Lmax) in excess of 90 dBA as measured at 100 feet from the vehicle.
- (11) It shall be unlawful for any person to operate or permit the operation of the refuse-compacting mechanism of any motor vehicle where the maximum sound level (Lmax) of the mechanism's compacting cycle exceeds 85 dBA as measured at 10 feet from the loudest part of the vehicle at any time. In addition, no person shall operate a refuse compacting, processing, or

collection vehicle for the purposes of compacting or collecting refuse or recycling in, or within 100 feet of, a residential area between the hours of 8:00 p.m. and 6:00 a.m.

(12) It shall be unlawful for any person to operate and no owner of property shall permit the operation of an off road recreational vehicle so as to exceed the noise emission standards set forth in Table 7. This section shall apply to all recreational motorized vehicles, whether or not duly licensed and registered, including, but not limited to, commercial or non-commercial racing vehicles, motorcycles, all-terrain vehicles, go-carts, snowmobiles, amphibious craft, campers, and dune buggies.

Table 5		
Vehicle Class	Maximum Sound Level Limit – Lmax(A) measured at 50 feet Speed Limit	
	35 mph or less	Over 35 mph
Any motor vehicle with a GVWAR or GCWR of 10,000 lbs.		
or more	89	94
Any motor vehicle with a GVWAR or GCWR of less than		
10,000 lbs.	81	85
Street motorcycle other than moped	81	85
Moped	70	70
Off-road motorcycle with engine displacements greater than		
170 cc	82	82
Off-road motorcycle with engine displacements Less than 170		
cc	80	80
Any other vehicle	76	80

The new Sections 11-508 through 11-513 have been added as follows:

- 11-508. <u>Nuisance noises expressly prohibited</u>. To the extent that they exceed the sound levels set forth in §§ 11-503 or 11-504, the following specific acts are declared to be in violation of this chapter:
- (1) <u>Animals</u>. The keeping of any animal, bird or fowl which makes frequent or long, continued noise;
- (2) <u>Noise sensitive zone</u>. The creation of any excessive noise heard within any school, public building, church or any hospital, or the grounds thereof, while in use, which interferes with the workings of such institution;
- (3) <u>Loudspeakers</u>, etc. The use of any loudspeaker, drum, or other device for the purpose of attracting attention to any performance or sale or display of merchandise.
- (4) <u>Places of entertainment, etc.</u> With respect to any place of entertainment or any place where amplified sound is produced, or at any place which is the source of a complaint of vibrations emanating from any location, in addition to the dBA criteria above, a secondary low frequency dBC criteria shall apply. No sound or music associated with a location that is the subject of a

complaint shall exceed the low frequency ambient sound level as defined in § 11-501 by more than 8 dBC. (Ord. #3251, Oct. 1994, as replaced by Ord. #4508-13, Oct. 2013).

- (5) <u>Explosives, firearms, and similar devices</u>. It shall be unlawful for any person to use or fire any explosive any explosive, firearm, or similar device that creates an impulsive sound so as to cause a noise disturbance across a real property boundary in a noise-sensitive zone, in a public space, or on a public right-of-way at any time without first obtaining authorization from the City Manager, or his/her designee.
- (6) This Chapter shall not apply to setting off fireworks otherwise permitted under any other provision of the City Code, game hunting on property where such activities are authorized by law, construction activities permitted under § 11-506, or shooting ranges.

11-509. Voice sound amplification.

- (1) Except as exempt in § 11-510, it shall be unlawful for any person to cause, suffer, allow or permit the operation of sound amplification device on public property.
- (2) It shall be unlawful for any person to cause, suffer, allow or permit the operation of sound amplification device in such a manner that the sound emanating therefrom intrudes upon the interior of a residence or dwelling unit and raises the background sound level by more than the permissible sound level limits set forth in Table 4.

Table 4		
Week Nights (8:00 p.m. – 8:00 a.m.)	Weekend Nights and Nights Preceding Legal Holiday (10:00 p.m. – 9:00 a.m.)	All other times
3 db(C)	3 dB(C)	6 dB(C)

11-510. Exceptions. The following are exempt from the sound level limits specified in §§ 11-504, 11-506, 11-507, 11-508 and 11-509 of this code.

- (1) Any emission of sound for the purpose of alerting persons to the existence of an emergency, danger, or attempted crime, including any such sound emitted from a stationary signaling device or any police vehicle, fire and rescue vehicle, or ambulances;
- (2) Any emission of sound caused by the performance of emergency work, or by the ordinary and accepted use of emergency apparatus and equipment;
 - (3) Sounds generated by emergency pressure relief valves;
 - (4) Any vehicle or employee of the City, while engaged upon public business;
- (5) Amplification during routine assemblies, special events, sporting events, or other activities approved by authorized representative of said location by designated person(s) located on the campuses of all public and private, primary and secondary schools, located within the corporate jurisdiction of the City of Johnson City; located on the campus of East Tennessee State University; located at any municipal park and facility; located at any municipal baseball stadium and athletic facility; located at any municipal civic center; and located at Pine Oaks Golf Course;
- (6) Amplification during any special event, such amplification being utilized by the event organizer and not an attendee, that has been approved by the City Commission and a proper Special Event Permit has been issued;
- (7) Construction operations between the hours of 7:00 A.M. and 10:00 P.M. for which building permits have been issued or construction operations for which no permit is required,

provided that all construction equipment is operated according to manufacturer's specifications and mufflers are maintained in proper working order;

- (8) Excavations or repairs of bridges, streets, highways, sidewalks, utilities, or other public works by or on behalf of the city, county, state, or utility company, during the night, when the public welfare and convenience renders it impossible to perform such work during the day; and
- (9) Sounds caused by sources regulated as to sound production by federal law, including, but not limited to, any aircraft operated in conformity with, or pursuant to federal law, Federal Aviation Administration regulations, and the instructions of an air traffic controller. Any aircraft operating under technical difficulties, in any kind of distress, under emergency order of air traffic control, or being operated pursuant to and subsequent to the declaration of an emergency under Federal Aviation Administration regulations shall also be exempt from the provisions of this Chapter.
- Inspector, or Code Enforcement Officer, in addition to any other authority vested in any such person, has the power, upon presentation of proper credentials, to enter and inspect any dwelling, multifamily dwelling, building, structure, or premises within the City as may be necessary to enforce the provisions of this Chapter. Permission to conduct any such inspection must be obtained in writing from the occupant or, in the case of unoccupied property, from the owner or the owner's agent. If such permission is refused or cannot otherwise be obtained before such entry or inspection is made, a search warrant must be obtained upon the showing of probable cause to believe that a violation of this Chapter may exist, unless the sound emanating from the location presents an immediate threat to health and safety.

11-512. Enforcement procedure; penalties and other remedies.

- (1) <u>Citation</u>. Violations of this Chapter may be prosecuted by citation in the same manner as other violations of the City Code.
- (2) <u>Continuing violations</u>. Each violation of this Chapter shall be considered a separate offense, and any violation continuing one-half hour or reoccurring within one-half hour shall be considered a separate offense for each half hour of violation.
- (3) Prima facie evidence. Any sound exceeding the applicable sound level limit specified in this Chapter shall be deemed to be prima facie evidence of a violation of this Chapter, as is use of any voice amplification device except as set forth in § 11-510.
 - (4) Affirmative defenses. It is a defense to an offense under this Chapter that:
 - (a) An order, if given, was promptly obeyed;
 - (b) The device creating the noise was operated within an enclosed motor vehicle and was not audible outside the vehicle in which it was operated;
 - (c) The device creating the noise is one required by any law, ordinance or regulation of the federal, state, or municipal government and was being operated in accordance with applicable law; or
- (5) <u>Penalty for violation</u>. Any person violating any provision of this Chapter shall be punished as provided in Johnson City Code § 1-104. In addition to any penalty imposed pursuant to § 1-104.
 - (6) Stop work order.
 - (a) In lieu of or in addition to issuing a citation as provided for in subsection (3), the Chief Building Official may issue a stop work order requiring the immediate halt

of any construction or repair or maintenance of real property and abatement of any source of sound alleged to violate this Chapter, where such violation threatens the health or safety of the public or materially impairs the City's ability to secure compliance with this Chapter.

- (b) The stop work order must specify the violation and may prohibit all or any work or other activity at the site that is a cause of the violation of this Chapter or the violation of permit or variance granted by codes enforcement.
- (c) The Chief Building Official may serve the stop work order by posting it in a conspicuous place at the site, if posting is physically possible. If posting is not physically possible, the stop work order shall be served on the owner(s) of the property and the person(s) performing the work on the property either by personal service or by first class mail to the person's last known address. Service is complete at the time of posting or of personal service, or if mailed, three days after the date of mailing. When the last day of the period so computed is a Saturday, Sunday, or Legal holiday, the period runs until 5:00 p.m. on the next business day.
- (d) A stop work order shall remain in effect until the violation ceases or until the Chief Building Official grants a temporary permit for the work or issues a written determination that the violation has been mitigated technically and economically feasible in accordance with subsection (5).
- (7) <u>Injunctive relief.</u> The City may institute a civil action seeking an injunction and order of abatement against any person creating or allowing the creation of any unlawful noise, including the owner or person otherwise having legal or actual control of the premises from which the unlawful noise emanates.

(8) Identification of violator.

- (a) At private residences. Any adult resident present at the time of the offense, and any adult guest or adult trespasser with the ability to control the level of noise at the time of the offense when no adult is present at the time of the offense.
- (b) At business locations. Any business owner, operator, manager, employee-in-charge and all persons in control or in possession instrument generating the noise disturbance or property at the time of the offense. In addition, any officer, agent, or other person acting for or employed by any corporation, or unincorporated association or organization shall be subject and liable to punishment as well as such corporation, or unincorporated association or organization for the violation of any section of this Chapter, where such violation was the result of the act, omission, or order of any such person.
- (c) At any location with an unattended noise disturbance producing machine, device, instrument, animal, or combination of the same. Any person who leaves unattended any machine, instrument, device, animal, or any combination of the same, that thereafter continues or commences to produce a noise disturbance.
- (d) If the person operating or controlling the source of a noise disturbance cannot be identified, any owner, tenant, resident, or manager physically present on or in the property where the violation is occurring is rebuttably presumed to be guilty of the violation.

11-513. No limitation of remedy.

- (1) No provision of this Chapter shall be construed to impair any common law or statutory cause of action, or legal remedy there from, of any person for injury or damage arising from any violation of this ordinance or from other law.
- (2) Nothing in this Chapter shall be construed to prevent or limit any person from seeking any remedy available in law or equity for activities that are or may be subject to regulation by this chapter, or from pursuing any such remedy simultaneously with proceedings under this chapter, nor shall any of the procedures specified herein be a condition precedent to the intuition of any legal action.

SECTION III. BE IT FURTHER ORDAINED that all ordinances and parts of ordinances in conflict herewith be and the same are hereby repealed.

SECTION IV. BE IT FURTHER ORDAINED that this ordinance shall take effect from and after its passage on third and final reading and publication as required by law, the public welfare requiring it.

PASSED IN OPEN, PUBLIC MEETING ON THE FIRST READING!

PASSED IN OPEN, PUBLIC MEETING ON THE SECOND READING OF TWO TO THE

PASSED IN OPEN, PUBLIC MEETING ON THE THIRD READING 15 July 2021

APPROVED AND SIGNED IN OPEN MEETING ON THE 15 DAY OF , 2021.

FOLLOWING PASSAGE ON THIRD READING.

MAYOR

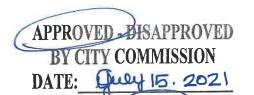
ATTEST:

APPROVED AS TO FORM:

CITY ATTORNEY

City Commission

AGENDA SUMMARY





SUBJECT:

Ordinance 4760-20: Third Reading & Public Hearing

An ordinance to amend Title 11, Chapter 5 of the Code of the City of Johnson City

MEETING:

City Commission - Jul 15 2021

DEPARTMENT:

Legal

STAFF CONTACT:

Sunny Sandos, City Attorney

SUMMARY:

Title 11, Chapter 5, of the Code of the City of Johnson City has been amended to identify maximum permitted sound levels in residential zones, update and improve sound measurement procedures, identify exceptions to sound level limits, and to prohibit nuisance noises and voice sound amplification.

STAFF RECOMMENDATION:

Staff has reviewed the Ordinance 4760-20 and recommend Commission approval.

SUPPORTING DOCUMENTS:

#4760-20 - Title 11, Chapter 5, Noise Revised.doc