CLERK'S CORRECTION

MOTION: **BODDYE** **October 28, 2025**
Regular Meeting
SECOND: **BAILEY** **Ord. No. 25-62**

RE: **AMEND COUNTY CODE SECTION 14-1 – SECTION 14-8, OF CHAPTER 14, NOISE - COUNTYWIDE**

ACTION: **APPROVED**

WHEREAS, under County Code Section 14-1 the purpose of the Noise Ordinance is "to protect citizens against excessive noise which is detrimental to life, health and enjoyment of property"; and

WHEREAS, on July 12, 2022, the Prince William Board of County Supervisors (Board) issued Directive (DIR) 22-28 directing County staff to comprehensively review the noise ordinance and propose appropriate amendments, if any for the Board to consider; and

WHEREAS, the County Executive established the Data Center Ordinance Advisory Group to assist County staff with making recommended changes to the Noise Ordinance; and

WHEREAS, County staff hired three (3) acoustics experts to assist with revising the Noise Ordinance and addressing the enforcement aspects of the County Code. The consultant team included:

1. JMT,
2. The Noise Consultancy LLC,
3. Nelson Acoustics; and

WHEREAS, the County consultants researched noise ordinances across the nation and Europe to assess how others were addressing low frequency steady tonal noise; and

WHEREAS, County staff conducted noise testing in conjunction with the consultant team at over 50 field locations, which included schools, hospitals, data centers, parks, residential communities, and restaurants. The test results helped inform the consultant team's work on the draft noise scale; and

WHEREAS, on October 14, 2025, by adoption of Resolution Number (Res. No.) 25-533, the Board authorized a public hearing on the attached amendments to County Code Section 14-1 – Section 14-8, Chapter 14, Noise; and

WHEREAS, County staff recommends that the Board approve the attached amendments to County Code Section 14-1 – Section 14-8 of Chapter 14, Noise; and

CLERK'S CORRECTION

WHEREAS, the Board finds that adopting the attached amendments to County Code Section 14-8 – Section 14-8 of Chapter 14, Noise, secures and promotes the health, safety, and general welfare of the County and its inhabitants;

NOW, THEREFORE, BE IT ORDAINED that the Prince William Board of County Supervisors hereby amends County Code Chapter 14, Noise, by adopting the attached amendments to County Code Section 14-1 – Section 14-8;

BE IT FURTHER ORDAINED that the attached amendments to Section 14-1 – Section 14-8 of Chapter 14, Noise, of the County Code shall become effective at 12:01 A.M. on May 1, 2026.

ATTACHMENT: Amendments to County Code Chapter 14, "Noise"

Votes:
Ayes: Angry, Bailey, Boddye, Franklin, Gordy
Nays: Jefferson, Vega
Absent from Vote: None
Absent from Meeting: None

For Information:
Deputy County Executive – Wade Hugh

ATTEST: Andrea P. Madden
Clerk to the Board

Chapter 14 -NOISE

Sec. 14-1. Declaration of policy.

It is hereby declared to be the public policy of Prince William County to protect its citizens against excessive noise which is detrimental to life, health and enjoyment of property. In order to promote the public health, safety, welfare and the peace and quiet of the inhabitants of the county, the following measurements and standards relating to noise are hereby adopted.

Sec. 14-2. Violations of chapter.

a. Any person ~~violating~~ who is found to have violated any provision of this chapter shall be guilty of a Class ~~2~~ 4 misdemeanor for the first offense. Any person who is found to have violated any provision of this chapter within 365 days of the date of a previous conviction for a violation of this chapter shall be guilty of a Class 3 misdemeanor.

b. In lieu of the criminal penalties set forth in section 14-2(a), a violation of any provision of this chapter may be punishable by a civil penalty of not more than $250 for the first offense and $500 for the second offense. Any third or subsequent offense shall be subject to the penalties in 14-2(a) above. This civil penalty provision shall not apply to noise generated in connection with the business being performed on industrial property or railroads.

Sec. 14-3. Definitions.

For the purposes of this chapter, the following words and phrases shall have the meanings respectively ascribed to them by this section:

A-weighted decibel means the sound level, in decibels, measured with a sound level meter using the A-weighting network or scale as specified in the ANSI S1.4 ~~1983 (specification for sound level meters)~~ .The level so read shall be post scripted dB(A) or dBA.

Ambient sound level means the measured value that represents the sound from all sound sources, exclusive of extraneous sound and the sound from the source property under investigation when observed from the location at which the compliance measurements were conducted (i.e., property line of source or at or within property line of receptor). Ambient sounds are differentiated from extraneous sounds by the fact that ambient sounds are being emitted the majority of the time, although they may not be continuous. Examples of ambient sounds include, but not limited to, consistent, but not necessarily continuous, steady off-site traffic of properly muffled vehicles, mechanical equipment not located on the property under investigation, seasonal insects, and a flock of non-transient birds. Ambient sound is included in all measurements.

ANSI means the American National Standards Institute, Inc. ~~, New York, New York.~~ ANSI standards referenced in this chapter are available at ANSI.org, and are incorporated herein by reference, as supplemented or amended.

Beat means an interference pattern between two sounds of slightly different frequencies, perceived as a periodic variation in volume.

Chief means the chief of police of Prince William County or his authorized agents.

Corrected source sound level means the sound level of the source under investigation, calculated by subtracting the measured ambient sound level from the measured total sound level.

Daytime means the local time of day between the hours of 7:00 a.m. and 10:00 p.m. weekdays and from 9:00 a.m. to 10:00 p.m. on Saturdays, Sundays and legal holidays observed by the county government unless otherwise specified.

dBA means the sound level as measured using the "A" weighting network with a sound level meter. The unit of reporting is dB(A). The "A" weighting filters de-emphasizes against the lower frequencies according to a relationship approximating the auditory sensitivity of the human ear.

dBC means the sound level as measured using the "C" frequency-weighting network of a sound level meter. The level so read is reported in decibels and designated dB(C) or dBC. The C-weighting network provides a relatively flat response across the mid-frequency range with much less de-emphasis of low frequencies than A-weighting, and is intended to represent human hearing at higher overall sound levels. It is commonly used where low-frequency content or peak/impulsive noise is of concern and is defined in international sound-level-meter standards.

dBZ means the sound pressure level as measured with the Z-weighting network of a sound level meter. The level so read is reported in decibels and designated dB or dBZ. Z-weighting (or zero weighting) is a flat (unweighted) response between 10 Hz to 20kHz. The Z-scale is used when measuring octave band sound pressure levels.

Decibel means a unit that describes the sound pressure level or intensity of sound. The sound pressure level in decibels is 20 times the logarithm to the base ten of the ratio of the pressure of the sound in microbars to a reference pressure of 0.0002 microbar; abbreviated dB.

Director means the director of the department of public works or his authorized agent.

Extraneous sound means an intermittent sound that is neither ambient sound nor sound from the source under investigation. Examples of extraneous sound include, but are not limited to, the following intermittent sounds: car horns, passing sirens, aircraft, and transient birds. Extraneous sounds are excluded from all measurements either manually or by data processing.

IEC means the International Electrotechnical Commission. IEC standards referenced in this chapter are available at IEC.ch, and are incorporated herein by reference, as supplemented or amended.

Impulsive sound means either a single pressure peak or a single burst (multiple pressure peaks) having a duration of less than two seconds. Examples include sounds emitted from impacts (one item striking another, e.g., using a mallet to aid in the unloading of a powder from a tanker truck) and items being dropped (e.g., kegs mishandled at a loading dock).

Investigator means a County employee authorized to enforce the provisions of this chapter.

Lmax means the maximum sound level reported by a sound level meter and either observed and recorded manually or electronically logged with the fast time constant.

Motor vehicle means every vehicle that is self-propelled or designed for self-propulsion and is used for transportation on public highways.

Nighttime means those times excluded from the definition of daytime.

Noise means ~~any steady-state or impulsive sound occurring on either a continuous or intermittent basis~~. any sound not in conformance with any provision herein

Noise disturbance means any sound which:

(1) Endangers or injures the safety or health of humans; or

(2) Endangers or injures personal or real property; or

(3) Exceeds the applicable maximum permissible sound levels as they appear in the table in section 14-4.

Octave band means a range of sound frequencies between band edge frequencies an octave apart. Octave band center frequencies are as specified in ANSI S1.11.

Receptor means the property at which sound is received from the source under investigation for potential violation of this chapter, or the location on that property at which it is received.

Sound means a series of vibrations within a medium, including air that may be perceived by the human sense of hearing.

Sound level means the sound pressure level measured in decibels with a sound level meter set for A - weighting, expressed in dBA.

Sound level meter means an instrument used to measure ~~s~~sound levels or sound pressure levels that meets or exceeds performance standards for a Type 1 or Type 2 meter as specified by ~~the~~ either ANSI S 1.14 or IEC 61672

Sound level meter calibrator means an instrument used to conduct field calibration checks of a sound level meter, and which conforms to either ANSI S1.40 or IEC 60942.

Sound pressure level means ~~the intensity in decibels (dB) of a sound.~~the ratio of a measured pressure in air to a reference pressure as measured with a sound level meter, reported in units of dB or dBZ. It is an unweighted measurement.

Sound production device means any device whose primary function is the production of sound, including, but not limited to, any musical instrument, loudspeaker, radio, television, digital or analog music player, public address system, or sound-amplifying equipment

Steady tonal sound means a sound characterized by a droning nature and which may be referred to as a whine, hum, rumble, or buzz, which may either be broadband or include a single frequency or a narrow cluster of frequencies. Such sound sources include, but are not limited to, heating, ventilating or air-conditioning units, refrigeration units, transformers, and backup generators. The steady tonal sound level in any single C-weighted measurement found to exceed the limits of County Code section 14-4(b) may not exceed plus or minus 3 dB, unless multiple sources on a site under investigation are perceptibly beating at which time the levels may not exceed plus or minus 5 dB. For enforcement, assessed using C-weighted (dB(C)), slow response, measured at or within the receiving property line of the complainant.

Total sound level means the measured level that represents the summation of the sounds from the source under investigation and the ambient sound level, excluding any extraneous sound, when measured at the location of compliance measurements.

Zoning district classification is the scheme of land use classification contained in the Prince William County Zoning Ordinance.

Sec. 14-4. Maximum permissible sound levels

(a) Generally.

(1) Except as otherwise provided, any sound~~noise~~ which emanates from any operation, activity or source and which exceeds the maximum permissible sound levels established in this section below is hereby prohibited. Such levels shall be measured at the property boundary of the sound source or at any point within any other property affected by the sound~~noise~~. When the sound from a source ~~a noise source~~ can be ~~identified and its noise~~ measured in more than one zoning district classification, the limits of the most restrictive classification shall apply.

TABLE 1- MAXIMUM PERMISSIBLE SOUND ~~PRESSURE~~ LEVELS (Leq)

Zoning District Classification	Maximum dBA Daytime	Maximum dBA Nighttime
Residential	60	55
Mixed Use District	60	55
Commercial	65	60
Office	65	60
Industrial	79	72

The limits in Table 1 may not be exceeded during any three or more sampling intervals, the duration of which shall be no less than 30 seconds, within any one-hour period. If the duration of the sound is less than 90 seconds, the requirement for three measurements is waived. Measurements of impulsive sound or in response to nuisance complaints may be instantaneous readings (observed and manually recorded maxima or logged Lmax).

~~(b~~2) Heating and cooling systems, including but not limited to air conditioners and heat pumps, and Radon systems serving a residential dwelling(s) shall not be subject to the nighttime levels enumerated ~~above~~ in Table 1 or in subsection(b) below ~~This provision shall expire on February 18, 2026, at 11:59 p.m.~~

(b) Additional limits in residential zoning districts.

No source of steady tonal sound may exceed the limits outlined below when measured at any location at or within a residential property boundary in a residential zoning district.

Maximum permissible C-weighted sound level at the receiving property:

Daytime 73 dB(C); Nighttime 68 dB(C).

The limits above may not be exceeded over a five-minute interval.

Octave-Band tables are advisory only (see Appendix A) and may be measured by the County for diagnosis and mitigation planning.

(c) Construction.

~~(c)~~(1)Any person, with lawfully obtained permits, who between the hours of 7:00 a.m. and 9:00 p.m. weekdays and between the hours of 9:00 a.m. and 9:00 p.m. on Saturdays, Sundays and legal holidays observed by county government operates or causes to be operated any equipment used in construction, repair, alteration, or demolition work on buildings, structures, alleys or appurtenances thereto in the outdoors in any residential zoning district within 100 yards of a lawfully occupied dwelling shall not be subject to the levels enumerated ~~above~~ in Tables 1 and or subsection (b). Any construction, repair, alteration,or demolition work on buildings, structures, alleys, or appurtenances thereto in the outdoors in any residential zoning district within 100 yards of a lawfully occupied dwelling at all other hours shall be subject to the levels enumerated in Tables 1 and subsection(b)

(d) (2) Persons performing construction of public projects, repair or maintenance work for such projects or persons performing work for private or public utilities for the repair of facilities or restoration of services shall not be subject to the levels enumerated above in tables 1 and subsection (b)

(3) Unless County Code section 14-4(c)(2) applies, it is prohibited to operate or cause to be operated at nighttime any equipment used in construction, repair, alteration, or demolition work on buildings, structures, alleys, or appurtenances thereto in the outdoors in any residential zoning district within 100 yards of a lawfully occupied dwelling. This subsection shall not apply to construction of public projects, the repair or maintenance work performed on such projects ,or work performed by private or public utility companies for the repair or restoration of service.

(d) Emergency Generators.

(1) Emergency generators are exempt from the limits under Table 1 and subsection (b) when running during electrical grid outages, equipment failures, or at the request of a utility.

(2) Exercising of emergency generators shall only be conducted during the daytime, during which time the limits in Table 1 apply. The limits in subsection (b) do not apply to such exercising. The exercising of such generators shall be limited to the minimal acceptable duration time specified by the manufacturer.

Sec. 14-5. Prohibitions generally.

The following acts are violations of this chapter:

(1) Sounding a horn or other signaling device on any motor vehicle except as an emergency or danger warning signal.

a. Operating or causing to be operated a public or private motor vehicle or motorcycle on a public right-of-way at any time in such a manner that the sound level emitted by the motor vehicle or motorcycle, when measured at a distance of 50 feet or more, exceeds the level set forth in the following table:

TABLE 2 – VEHICULAR MAXIMUM PERMISSIBLE SOUND LEVELS (Instantaneous maximum, Lmax, single sample)

	Maximum Sound level in dBA	
Vehicle Class	Speed limit 35 MPH or less	Speed limit over 35 MPH
All motor vehicles of GVWR or GCWR of 6,000 lbs. or more	86	90
Any motorcycle	82	86
Any other motor vehicle or any combination of vehicles towed by any motor vehicle	76	82

b. This section shall not apply to any motor carrier vehicle engaged in interstate commerce.

(2) Any noise from the spinning of tires, racing of engines, or the absence of a muffler and/or exhaust system conforming to the provisions of Virginia Code §§ 46.2-1047 and 46.2-1049 on a motor vehicle or motorcycle.

~~[~~(~~2~~3)] Operating, loading or unloading any vehicle, including but not limited to trucks, or the opening and destruction of bales, boxes, crates and containers in the outdoors in zones other than industrial within 100 yards of a lawfully occupied dwelling between the hours of 10:00 p.m. and 6:00 a.m.

~~[(3)] Operating or causing to be operated between the hours of 10:00 p.m. and 6:00 a.m. on weekdays and between the hours of 10:00 p.m. and 9:00 a.m. on Saturdays, Sundays and legal holidays observed by county government any equipment used in construction, repair, alteration or demolition work on buildings, structures, alleys or appurtenances thereto in the outdoors in any residential district within 100 yards of a lawfully occupied dwelling. This section shall not apply to construction of public projects, the repair or maintenance work performed on such projects or work performed by private or public utility companies for the repair of facilities or restoration of services.~~

~~[~~(4)~~]~~ Using, operating or causing to be operated any sound production device ~~mechanical loud speakers or other sound amplification devices~~ on trucks or other moving vehicles or in commercial establishments for the purpose of commercial advertising or attracting the attention of the public during the nighttime. The use of such at all other times shall be subject to the following conditions:

a. The only sounds permitted are music or human speech.

b. Sound shall not be issued or devices shall not be used within 100 yards of hospitals, schools, churches or courthouses.

c. The human speech and music amplified shall not be obscene.

~~[~~(5)~~]~~ Operating or permitting to be operated any powered model aircraft in the outdoors during the nighttime. Any person desiring to use county parks or facilities to operate such aircraft at any time must first obtain permission from the ~~park authority~~ County Department of Parks and Recreation .

~~[~~(6)~~]~~ The playing of any sound production device ~~radio, phonographs, television, tape or disc players, musical instruments or drums, sound amplifiers or similar devices~~ which produces, reproduces or amplify~~y~~ies sound in such a manner as to emit sound audible at a distance of 50 feet or more from the boundary of the property from which it is being emitted~~outside of a building~~ or audible through partitions common to two or more residences within a building.

~~[~~(7)~~]~~ Talking, yelling, shouting, screaming, singing, or any other form of human sounds produced by any person or group of people between the hours of 10:00 p.m. and 6:00 a.m. in such a manner as to be audible across property boundaries or audible through partitions common to two or more residences within a building.

~~[~~(8)~~]~~ Playing, operating or permitting to be operated, any sound device~~radio, tape player, compact disc player, loud speaker or other electronic device used for the amplification of sound,~~ mounted on or in any motor vehicle ~~which emits sound within a~~ while the motor vehicle ~~being~~ is operated or parked on a public street alley, parking lot open to the public, or public park, and which emits sound audible from outside the motor vehicle at a distance of 50 feet or more. The provisions of this subsection shall not apply to sound emissions from motor vehicles alarms or other security devices, the emission of sound for purposes of alerting persons to the existence of an emergency, or the emission of sound in performance of emergency work.

Sec. 14-5.1. Noise from animals.

~~(a)~~ It shall be unlawful for any person to allow any animal or bird except farm animals in agricultural districts to create sound~~noise~~ such that it is audible at least once a minute for ten consecutive minutes (i) inside the confines of the dwelling unit, house or apartment of another; or (ii) at 50 or more feet from the animal or bird.

Sec. 14-6. Trash or refuse.

Sound~~Noise~~ relating to the collection of trash or refuse is regulated under section 22-42 of this Code.

Sec. 14-7. Measurement procedures.

The measurement of sound or noise pursuant to this section shall be as follows:

(1) The measurement of sound or noise shall be made with a Type 1 integrating sound level meter capable of C-weighted (and A-weighted) measurements which meet the standards prescribed by the ANSI; octave-band capability is recommended for advisory analyses. The instruments shall be maintained in calibration and good working order. A calibration shall be made of the system at the time of any noise measurement. Measurements recorded shall be taken so as to provide a proper representation of the noise source. The microphone during measurement shall be positioned so as not to create any unnatural enhancement or diminution of the measured noise.

~~A windscreen for the microphone shall be used when required. A minimum of three sound level readings will be taken. The geometric mean of these readings will be used as the average sound level. If the background noise is equal to the levels set forth in section 14-4 above, three dB shall be subtracted out of the average sound level.(2)~~

~~(2) The slow meter response of the sound level meter shall be used to determine that the average amplitude has not exceeded the dBA readings or the limiting noise spectra set forth in section 14-4 above.(3)~~

~~(3) Unless otherwise specified, the measurement shall be made at the property boundary on which such noise is generated, or at any point within the receiving property affected by the noise.~~

Measurements shall be conducted at the location specified by the provision being applied. At that location, measurements may be conducted at any elevation (e.g., 2nd floor bedroom window, 3rd floor balcony).

Compliance determinations with Tables 1, 2, or 14-4(b) shall be based upon the source sound level.

Sec. 14-7.1. Sport shooting ranges.

(a) The provisions of this chapter shall not subject a sport shooting range to noise control standards more stringent than those in effect at the time the construction or operation of the range initially was approved, or at the time any application was submitted for the construction or operation of the range. The operation or use of a sport shooting range shall not be enjoined on the basis of noise, nor shall any person be subject to action for nuisance or criminal prosecution in any manner relating to noise resulting from the operation of the range, if the range is in compliance with all ordinances relating to noise in effect at the time construction or operation of the range was approved, or at the time any application was submitted for the construction or operation of the range.

(b) For purposes of this section, "sport shooting range" means an area or structure designed for the use of rifles, shotguns, pistols, silhouettes, skeet, trap, black powder, or any other similar sport shooting.

Sec. 14-8 VariancesExemptions.

(1) Exemptions Variances from the provisions of this chapter may be granted in accordance with the requirements below:

(1a) Any person responsible for any soundnoise from the operating of any equipment used in construction, repair, alteration or demolition work on building structures, alleys or appurtenances thereto shall apply to the director for an exemption variance or partial exemption variance from the provisions of this chapter. All other requests for variances exemptions shall be directed to the chief. The director or the chief may grant such varianceexemption or partial varianceexemption if he finds that:

a. The soundnoise does not endanger the public health, safety or welfare; or

b. Compliance with the provisions of this chapter from which an exemption variance is sought would cause a serious hardship without producing equal or greater benefit to the public.

(2b) In determining whether to grant such varianceexemption the director or chief shall consider the following:

a. The time of day the soundnoise will occur;

b. The duration of the soundnoise;

c. The loudness of the sound noise in relation to the maximum permissible sound levels set forth in section 14-4 of this chapter;

d. Whether the sound noise is intermittent or continuous; and

e. Such other matters as are reasonably related to the impact of the sound noise on the health, safety and welfare of the community and the degree of hardship which may result from the enforcement of the provisions of this chapter.

(3c) VariancesExemptions or partial variance exemptions issued pursuant to this section shall be granted for such period as the director or chief deems reasonable. Any such varianceexemption shall be reviewed if complaints are received by the director or chief and may be revoked if, when the foregoing standards are applied, circumstances no longer justify the variance or partial variance.

(4e) Any person aggrieved by a decision of the director or the chief made pursuant to this section may obtain review of such decision by the county executive or his authorized agent by delivering a written statement of appeal to the office of the county executive within ten days of the date of the decision. The county executive shall review all statements of grievances and shall, within ten days after receipt of such written statement of grievance, either affirm or set such decision aside, and make any such further determination as may be necessary to effectuate the provisions of this section. The decision of the county executive shall be final and binding.

(f) The director or chief may revoke the variance if the applicant violates the terms of the variance or if there was a misrepresentation in the variance application.

Appendix A (Advisory) - Octave-Band Guidance

This appendix provides recommended octave-band design targets and diagnostic methods to identify and mitigate tonal/low-frequency noise. These values are advisory and do not constitute the legal compliance test. Facilities may use this guidance in Noise Mitigation Plans submitted during entitlement or permitting.

TABLE 1- RECOMMENDED OCTAVE BAND SOUND PRESSURE LEVELS FOR RESIDENTIAL ZONING DISTRICTS (dBZ, L50, 30 seconds)

Octave Band (Hz)	Daytime Maximum dBZ	Nighttime Maximum dBZ
31.5	71	66
63	66	61
125	61	56
250	56	51
500	51	46
1000	47	42
2000	44	39
4000	42	37
8000	41	36