

ARTICLE 4-1-C GENERAL DEVELOPMENT STANDARDS

Section 4-1-C-4 PERFORMANCE STANDARDS IN ALL DISTRICTS.

A. **Purpose:** The purpose of the performance standards procedures is to ensure that an objective, unbiased determination is made in those cases where there may be substantial doubt as to whether an individual structure or development complies with the performance standards of this Chapter and to formulate practical ways for the alleviation of such noncompliance.

B. **Proposed Development:** Any person proposing an industrial development or other development affected by these performance standards shall submit as a part of the final plan application such information as may be necessary to demonstrate that the proposed development will comply with the performance standards set forth in this Section.

C. **Existing Violations:** When the Planning Director or other City official, after due investigation, reasonably determines that an existing use violates 1 or more of the performance standards in this Section, the Planning Director or the Planning Director's designee shall begin the enforcement process set forth for this Chapter,* beginning with a notice of violation.

See Article L of this Chapter.

D. **Heat:** No heat from furnace processing equipment or other device shall be sensed at the lot line to the extent of raising the temperature of air or materials more than 5 degrees F.

E. **Noise:**

1. **Definitions:** The following words and phrases when used in this Section shall, for the purpose of this Section, have the meanings respectively ascribed to them in this Section unless otherwise defined in the text of the Section.

a. **Commercial Area** - property zoned NP-O, CP-O, CP-1, CP-2, CP-3, CO-4, HBD, or PUD (only if it contains commercial uses and no residential uses), or property operating under a special use permit for a commercial use.

b. **Complainant** - a property owner or tenant who files a complaint concerning an alleged noise disturbance.

c. **dB(A)** - a weighted sound level measured in decibels by a general purpose, properly calibrated, sound level meter complying with the provisions of the American National Standard Institute.

d. **Emergency Motor Vehicle** - a motor vehicle belonging to a fire department or certified private volunteer firefighter or firefighting association, partnership or corporation, an ambulance, or a motor vehicle belonging to a federal, state, county, or municipal governmental agency, provided such vehicle is being used as an emergency vehicle by one authorized to use such vehicle for that purpose.

e. **Industrial Area** - property zoned BP-1, BP-2, or PUD (only if it contains industrial uses and no commercial or residential uses), or property operating under a special use permit for an industrial use.

f. **Noise Disturbance** - includes both violations of performance standards established in Section 4-1-C-4-E-2 and violations of the prima facie noise standards established in Section 4-1-C-4-E-3.

g. **Plainly Audible** - capable of being heard. It is not necessary to distinguish words or

melodies. A plainly audible sound may consist of bass alone.

h. Property Owner - the named property owner as indicated by the records of the Register of Deeds or Appraiser's Office in Johnson County, Kansas.

i. Residential Area - property zoned RE, RP-E, R-1, RP-1, RP-2, RP-3, RP-4, RP-5, AG or PUD (only if it contains residential uses), or property upon which a legal non-conforming residential use is operating.

j. Sound Amplification or Producing Device or Similar Equipment - shall mean radio, radio receiving set, television, phonograph, stereo, tape player, cassette player, compact disc player, "boom box," loudspeaker, drum, jukebox, nickelodeon, musical instrument, sound amplifier or other device that produces, reproduces, or amplifies sound.

k. Tenant - any person who has an interest in real property either by oral or written lease or covenant.

2. Performance Standards. It shall be unlawful to make or cause to be made sound or noise in excess of the noise performance standards established in this Section. A sound registered on a decibel meter from any source not exempted or otherwise regulated by this Chapter and which, when measured anywhere off of the property of the sound source, is in excess of the dB(A) established for the time period and zones listed below:

Area	7:00 a.m. - 7:00 p.m.	7:00 p.m. - 7:00 a.m.
Residential	70 dB(A)	55 dB(A)
Commercial	65 dB(A)	60 dB(A)
Industrial	70 dB(A)	65 dB(A)

3. Prima Facie Violations. It shall be unlawful to conduct or allow to be conducted any of the following noise-producing activities so as to cause a sound plainly audible across any property boundary line in a residential area during specified times. The fact that the noise is plainly audible across a property boundary line constitutes prima facie evidence of a violation of this Section.

a. A sound resulting from the erecting, constructing, excavating, demolishing, altering, or repairing of any structure, or operating, or permitting the operation of any tools or equipment used in construction, drilling, or demolition work in such a manner as to cause a sound plainly audible across any property boundary line between the hours of 7:00 p.m. and 7:00 a.m. Between the hours of 7:00 a.m. and 7:00 p.m., sounds resulting from these activities shall not be subject to the time, area, and dB(A) limits set forth in Section 4-1-C-4-E-2.

b. The repairing, rebuilding, or modifying of any motor vehicle, motorcycle, or motorboat in such a manner as to cause a sound plainly audible across any property boundary line between the hours of 7:00 p.m. and 7:00 a.m. Between the hours of 7:00 a.m. and 7:00 p.m., sounds from these activities shall not be subject to the time, area, and dB(A) limits set forth in Section 4-1-C-4-E-2.

c. The operating or occupancy of a vehicle, which is moving or stationary, standing or parked, whether persons are seated in the vehicle or not, from which any sound amplification or producing device or similar equipment is creating a sound that is plainly audible at least fifty (50) feet from the source of the sound. Between the hours of 7:00 a.m. and 7:00 p.m., sounds from these activities shall not be subject to the time, area, and dB(A) limits set forth in Section 4-1-C-4-E-2.

d. The operation of any power tool, garden tool, lawnmower, snow blower or other similar equipment or device in residential areas in such a manner as to cause a sound plainly audible across any property boundary line between the hours of 7:00 p.m. and 7:00 a.m. Between the hours of 7:00 a.m. and 7:00 p.m., sounds resulting from these activities shall not be subject to the time, area, and dB(A) limits set forth in Section 4-1-C-4-E-2.

e. The operating, playing, permitting or causing to be operated or played any sound amplification or producing device or similar equipment in a manner as to cause a sound plainly audible across any property boundary line between the hours of 7:00 p.m. and 7:00 a.m. Between the hours of 7:00 a.m. and 7:00 p.m., sounds resulting from these activities shall not be subject to the area and dB(A) limits set forth in Section 4-1-C-4-E-2.

f. The creation of noise in connection with loading or unloading any vehicle, in the opening and destruction of bales, boxes, crates and containers, or in the handling, loading or unloading of trash, recyclable material, or solid waste in residential areas in such a manner as to cause a sound plainly audible across any property boundary line between the hours of 7:00 p.m. and 7:00 a.m. Between the hours of 7:00 a.m. and 7:00 p.m., sounds resulting from these activities shall not be subject to the time, area, and dB(A) limits set forth in Section 4-1-C-4-E-2.

g. The creation of noise or sound by any source, unless exempted under Section 4-1-C-4-E-7, that is offensive or distracting to any reasonable person of normal auditory sensitivity while attending any school, institution of learning, or church, while that institution is in use.

4. Minimum Evidentiary Requirements for Prima Facie Noise Violations. The demonstration of a prima facie noise violation under Section 4-1-C-4-E-3 shall be based on any combination of the following evidence:

a. Auditory confirmation by the Community Standards Officer of the noise at issue, or a similar noise from the same source, and a follow-up written report identifying the source, the property owner and/or tenant causing and/or allowing the noise, the type of noise, the distance at which the noise was plainly audible, and any other relevant information;

b. A written statement from the complainant (if involved) concerning the noise at issue;

c. An audio recording by the complainant (if involved) of the noise at issue, or

d. A video recording or photograph by the complainant (if involved) of the noise-producing source or action at issue.

5. Authority to Commence an Enforcement Action.

a. The Community Standards Officer has authority to commence an enforcement action for an alleged violation of Section 4-1-C-4-E-2 or 4-1-C-4-E-3 in a situation involving a sound plainly audible across any property boundary line other than that of the sound source.

b. A complainant has authority to commence an enforcement action for an alleged violation of Section 4-1-C-4-E-2 or 4-1-C-4-E-3 only in a situation involving a sound plainly audible across the complainant's property boundary line.

c. Enforcement actions shall be executed in accordance with the property use and maintenance code enforcement process set forth in Article 3-5-H.

6. Unlawful to Allow a Noise Disturbance; Responsibility for Abatement.

a. It is unlawful for any property owner or tenant, or other person with control, occupancy, or possession of residential property, to allow or permit a person or group of persons to create a noise disturbance as defined in Section 4-1-C-4-E-2 or 4-1-C-4-E-3 of this Section on said property.

b. The property owner, tenant, or other such person with control, occupancy, or possession of property, shall be responsible for abatement of noise disturbances occurring on that property and failure to do so shall be a violation of this Section.

7. Exemptions. The following shall not be considered to be noise disturbances for purposes of this Section:

a. Sound from law enforcement motor vehicles and other emergency motor vehicles, including, but not limited to, snow-clearing equipment.

b. Sound from vehicles or equipment belonging to the city, state, county, federal government, school or other governmental agencies, or utilities employed by a governmental agency engaged in preparing for or remedying a potentially hazardous situation in which immediate physical trauma or property damage is occurring or threatened.

c. Sound that a person is making or causing to be made when said person has received and

maintains a valid license or permit that specifically allows the sound from any department, board, or commission of the City authorized to issue a license or permit.

d. Sound from the operation of emergency generators used in emergency situations when electricity from the grid is unavailable.

F. **Vibration:**

1. **General Standards:** To limit adverse impacts on adjacent property, man-made earthborne vibrations shall not exceed the particle velocities so designated. A suitable instrument used for this measurement shall be a 3-component measuring system capable of simultaneous measurement of vibration in 3 mutually perpendicular directions. It shall indicate the maximum vibration, given as particle velocity. The maximum particle velocity shall be the vector sum of the 3 components recorded. Such particle velocity shall not exceed .10 inches per second at the lot line of the property on which the activity takes place nor shall it exceed .02 inches per second at the lot line of the nearest parcel of land zoned residential. These values may be multiplied by 2 for impact vibrations; e.g., discrete vibration pulsations not exceeding 1 second in duration and having a pause of at least 1 second between pulses. Vehicular traffic and nonblasting vibration resulting from temporary construction activity that occurs between 7:00 A.M. and 7:00 P.M. shall be exempt from these standards.

2. **Construction And Mineral Extraction Blasting Standards:** The general vibration standards do not take into account the special needs of businesses/contractors in the construction and/or mineral extraction industries. Special vibration standards for blasting helps ensure that these industries are able to operate in a manner which minimizes damage to nearby structures while limiting complaints received from persons on surrounding properties. The following standards attempt to address both the structural and psychological concerns of blasting vibrations.

Blasting Ground Vibration Standards*

Blast Type	Surrounding Parcels Within 500 Ft. of Blast	Maximum Allowable Peak Particle Velocity for Ground Vibration in Inches/Second	
		Frequencies - 4-30 Hz	Frequencies > 30 Hz
Intermittent Blasting: (i.e., temporary construction activities)	Developed parcels	0.75	1.0
	Vacant/agricultural parcels	see OSMRE blasting chart	see OSMRE blasting chart
Recurring Blasting: (i.e., mineral extraction purposes)	Developed parcels	0.50	0.50
	Vacant/agricultural parcels	see OSMRE blasting chart	see OSMRE blasting chart

NOTE: Particle velocity shall be recorded in 3 mutually perpendicular directions and shall be measured from the blast location to the property line of surrounding parcels within 500 feet of the blast. The maximum allowable peak particle velocity shall apply to each of the 3 measurements. Some of these standards are below guidelines established by the Federal Office of Surface Mining Reclamation and Enforcement (OSMRE) in their Blasting Level Chart, Figure 12, *Blasting Guidance Manual*, March 1987. The Blasting Level Chart determines the threshold vibration levels which may indicate potential for structural damage. The standards noted above attempt to take into account some of the negative psychological responses that can result from blasting adjacent to occupied structures, particularly for recurring blasting. However, it is understood that occasional, nonroutine blasting at higher levels may be needed for specific purposes. Therefore, the Fire Chief may modify these requirements to minimize complaints or to allow blasting at higher levels for specific purposes.

Airblast Vibration/Noise Standards*

Lower Frequency Limit of Measuring System, in HZ	Maximum Level in dB (+, -3dB)
2 Hz or lower - flat response	133 peak
6 Hz or lower - flat response	129 peak

NOTE: An airblast shall not exceed the maximum limits noted above measured at the property line of adjoining property containing any building. The Fire Chief may modify these standards for unique blasting needs or to prevent damage.

* "Blast Monitoring" (Applies to both tables): The blast contractor shall conduct periodic monitoring of blasts to ensure compliance with these vibrations/noise standards. The Fire Chief may require monitoring of shots that appear to deviate from established standards or that are located within 300 feet of an existing building. A seismographic record, including both particle velocity and vibration frequency levels shall be provided.

G. **Air Pollution:** The total emission rate of dust and particulate matter from all vents, stacks, chimneys, flues or other opening or any process, operation or activity except solid waste incinerators within the boundaries of any lot, shall not exceed the levels established by State rules and regulations governing air contamination and air pollution.

H. **Prima Facie Odor Violations:**

1. It shall constitute prima facie evidence of an odor violation if a chemical or substance is used, stored, or placed at a property and the odor emanating from the chemical or substance is offensive to and plainly detectable across the property boundary line by a reasonable person with ordinary olfactory sensitivity.

2. It shall constitute prima facie evidence of an odor violation if an odor is offensive to and plainly detectable across the property boundary line by a reasonable person with ordinary olfactory sensitivity, the odor persists for in excess of eight (8) consecutive hours, and the source of the odor is any of the following activities or conditions:

- a. Trash or garbage placed outside;
- b. Animal waste in yard, kennel, or stable; or
- c. Septic conditions resulting from standing water or liquid waste.

3. It shall constitute prima facie evidence of an odor violation if a process, activity or condition results in frequent, periodic releases of odor-producing substances that are offensive to and plainly detectable by a reasonable person with ordinary olfactory sensitivity. A frequent, periodic release involves at least four (4) separate releases in a twenty-four (24) hour period.

I. **Glare:** In all districts, an operation or activity producing glare shall be conducted so that direct or indirect light from the source shall not cause illumination in excess of 0.5 foot-candles when measured in a residential district.

1. Illumination levels shall be measured with a photoelectric photometer having a spectral response similar to that of the human eye, following the standard spectral luminous efficiency curve adopted by the International Commission on Illumination.

2. Uses subject to Category A, B and C performance standards shall not produce glare so as to cause illumination in residential districts in excess of 0.5 foot-candles. Flickering or intrinsically bright sources of illumination shall be prohibited except temporary (not to exceed 45 days) holiday lighting.

3. Uses subject to Category A, B and C performance standards shall limit the use of light sources and illuminated surfaces within 500 feet of, and visible in, a residential district to comply with the light intensities indicated below:

Table 4-1-C-4.2
Maximum Intensity of Light Sources

Source	Intensity Category A	Intensity Categories B & C
Bare incandescent bulbs	5 watts	40 watts
Illuminated buildings	15 foot-candles	30 foot-candles
Back lighted or luminous background signs	150 foot-lamberts	250 foot-lamberts
Outdoor illuminated signs	25 foot-candles	50 foot-candles
Any other unshielded sources	50 foot-candles per sq. cm.	50 foot-candles per sq. cm.

J. Sulfur Oxides:

1. Emission of oxides of sulfur (as sulfur dioxide) from combustion and other processes shall be limited in accordance with the requirement of each district. The oxides of sulfur may be computed from the sulfur analysis in the fuel or from known test data of sulfur oxides emission.

2. In residential districts, the maximum emission rate of oxides of sulfur from all stacks shall be 0.01 pounds per hour per 5 acres of lot area.

3. In commercial districts, the maximum emission rate of oxides of sulfur from all stacks shall be 0.02 pounds per hour per acre of lot area.

4. In industrial districts, the maximum emission rate of sulfur oxides from all stacks shall be 1 pound per hour per acre of lot area.

K. Smoke:

1. For the purpose of grading the density or equivalent opacity of smoke, the *Ringelmann Chart*, as published by the United States Bureau of Mines, shall be used.

2. In residential districts, the emission of smoke darker than Ringelmann No. 0 from any chimney, stack, vent, opening or combustion process is prohibited.

3. In commercial districts, the emission of smoke darker than Ringelmann No. 0 from any chimney, stack, vent, opening or combustion process is prohibited; however, smoke of a shade not to exceed Ringelmann No. 1 is permitted for up to 3 minutes total in any one 8 hour period.

4. In industrial districts, the emission of smoke darker than Ringelmann No. 1 from any chimney, stack, vent, opening or combustion process is prohibited; however, smoke of a shade not to exceed Ringelmann No. 3 is permitted for up to 3 minutes total in any one 8 hour period.

L. Toxic Matter:

1. The ambient air quality standards for the State shall be the guide to release of airborne toxic materials across lot lines. Where toxic materials are not listed in the ambient air quality standards of the State, the release of such materials shall be in accordance with the fractional quantities permitted below of those toxic materials currently listed in the *Threshold Limit Values* adopted by the American Conference of Governmental Industrial Hygienists. Unless otherwise stated, the measurement of toxic matter shall be at ground level or habitable elevation and shall be the average of any 24-hour sampling period.

2. In residential districts, no airborne toxic material shall be released.
3. In commercial districts, the release of airborne toxic matter shall not exceed $\frac{1}{30}$ of the threshold limit value across lot lines.
4. In industrial districts, the release of airborne toxic matter shall not exceed $\frac{1}{30}$ of the threshold limit value beyond the district boundary line. (Ord. 3911, 4-20-1995)

(Ord. 4473, Amended, 02/26/2002, Prior Text; Ord. 4472, Amended, 02/26/2002, Prior Text)