# **18.30.190** Performance Standards

In some districts, performance standards capable of quantitative measurement are established. Except to the extent modified in the specific zoning district regulations, the following general provisions apply to measure compliance with those performance standards.

## A. Noise

See Noise Control Ordinance (Chapter <u>6.18</u> of the Municipal Code).

## **B. Smoke and Particulate Matter**

**1.** The Ringlemann Chart, as adopted and published by the United States Department of Interior, Bureau of Mines, shall be used to determine the density of equivalent opacity of smoke. The Ringlemann number indicated as the performance standard in certain zoning districts refers to the number of the area of the Ringlemann Chart that coincides most nearly with the visual density of equivalent opacity of the emission of smoke observed.

**2.** Within the M-1, M-2 and M-3 zoning districts, no use shall be permitted or operated so that smoke darker than Ringlemann No. 1 is produced from any vent, stack or chimney. However, emission of smoke darker than Ringlemann No. 2 is allowed for a duration of up to four (4) minutes during any eight (8) hour period if the emission is located no closer than two hundred fifty (250) feet from property zoned AG, any residential zoning district, N, or the residential areas of planned developments.

**3.** Particulate matter emissions, in excess of the threshold limit values caused by the wind from open storage areas, yards, roads, etc., within lot lines shall be kept to a minimum by appropriate landscaping, paving, oiling, wetting and other means, or shall be eliminated.

## C. Vibration

**1**. Vibration standards for any use, other than quarries and mines, are found within this section. For minimum standards for guarry and mine operations, see section 18.50.160 of this UDO.

1. <u>No use within a quarry or use within properties zoned M-1, M-2 and M-3, Within the M-1, M-2 and M-3 zoning districts, no use</u> may generate any ground-transmitted vibration in for three <u>consecutive minutes or more in duration in any one hour in excess</u> of one tenth (.10) inch per second measured at the property line, or in excess of two-one hundredths (.02) inch per second measured at any residential property line. These values may be multiplied by two (2) for impact vibrations, i.e., discrete vibration pulsations not exceeding one (1) second in duration and having

a pause of at least one (1) second between pulses. Vibrations are measured in particle velocity and are to be measured at the property line or other designated location.

2. A three-component measuring system capable of simultaneous measurement of vibration in three mutually perpendicular directions shall be used to measure vibrations. Upon request of the City, the owner or operator of a use subject to this section will install said measuring system at the property line of the use or on the residential property of a complainant with the property owner's consent.

**3.** The vibration maximums indicated as the performance standard in certain zoning districts may-must be measured directly with suitable instrumentation in accordance with the International Society of Explosive Engineers (ISEE) Field Practice Guidelines For Blasting Seismographs or other applicable guidelines for this type of measurement. or computed on the basis of displacement and frequency. When computed, the following formula shall be used:

₽V	-	<del>6.28 F x D</del>
Where:		
₽V	-	particle velocity, inches-per second
F	=	vibration frequency, cycles per second
Ð	-	single amplitude displacement of the vibration,
		inches

**4.** The maximum particle velocity shall be in the maximum vector sum of three mutuallyperpendicular components recorded simultaneously.

**5.** Unless specifically indicated to the contrary in the zoning district regulations, vibration resulting from temporary construction activity that occurs between 7:00 AM and 7:00 PM is exempt from the indicated performance standard.

**4.** The provisions of this subsection shall not apply to vibration from:

a. the operation of motor vehicles, trains, and aircraft; or

b. temporary construction activity that occurs between 7:00 AM and 7:00 PM; or

c. blasting at a quarry or mine regulated under Section 18.50.160.

## D. Glare

See Lighting (Section 18.30.135).

**1.** Within the M-1, M-2 and M-3 districts, direct or sky-reflected glare, from floodlights or from high temperature processes such as combustion or welding, shall not be directed into any adjoining property.

## E. Heat

Within the M-1, M-2 and M-3 districts, heat from furnaces, processing equipment, or other devices shall be contained so that the temperature of air or materials is raised no more than five (5) degrees Fahrenheit as measured at all property lines.

## F. Emissions

Within the M-1, M-2 and M-3 districts, the maximum rate of emission of dust and other particulate matter from all sources within the boundaries of any lot or tract shall not exceed one (1) pound per hour per acre of lot area.

## G. Air Contaminants (such as Odors and Fumes)

Within the M-1, M-2 and M-3 districts, the emission of air contaminants created by industrial processes shall comply with the Kansas Air Quality Act, K.S.A. § <u>65-3002</u> and any adopted state regulations. All air contaminants shall be contained so that no odors or fumes may be sensed at the property line of any residential zoning district.

#### H. Electrical Issues

Within the M-1, M-2 and M-3 districts, activity which creates any off-site electrical disturbance, or contributes to interference with electronic signals (including television and radio broadcasting transmissions) shall be prohibited.

## I. Toxic or Flammable Liquids

Storage of toxic or flammable liquids such as gasoline, oil or grease, where not stored underground, shall occur in such a manner that a secondary storage system is provided with capacity as specified by the Fire Code.

## 18.50.160 Quarries and Mines

Purpose. This section regulates the externalities of quarries.

## A. Applicability

This section applies to mines or quarries.

## B. Generally

All <u>M</u>mines and quarries shall follow all Federal, State, and <u>local</u> Olathe Municipal Code guidelines and requirements, including those <u>found in Title 16 of the Olathe Municipal Code as well as</u> requirements found in any special use permit governing a specific site. <del>for blasting and vibration.</del> <u>In</u> the event that multiple requirements exist, including those for blasting and vibration, the stricter standard shall be controlling over the land use activity on the site.

## C. Roads

- **1.** Proposed quarry operations shall provide or have direct access to a public road.
- **2.** Public and private roads shall be hard-surfaced and built to carry the heavy loads that are generated from quarry operations.

#### D. Setbacks for Above-Ground Operations

- **1.** All above-ground operations shall be located at least:
  - **a.** One hundred (100) feet from any property line except as provided below.

**b.** One thousand (1,000) feet from an existing residence or <u>the nearest property line of</u> a residentially zoned property, <u>whichever achieves the greatest overall setback</u>.

**2.** The Planning Commission or Governing Body may reduce the property line setback where it abuts a highway or railroad right-of-way by up to fifty (50) percent.

**3.** The Planning Commission or Governing Body may reduce the residential setback by up to ninety (90) percent if the applicant shows that compliance with the City ordinances related to noise, dust, visibility and operations will adequately protect the residents from the above-ground operations, or upon approval of the residence owner.

**4.** The above setbacks may be increased upon the City's determination that wider setbacks are warranted in order to mitigate adverse impacts. All above-ground operations located next to existing mine or guarry operations require no setback, and may be immediately adjacent.

**5.** A setback for above-ground operation is not required when the operation is located contiguous to another existing mine or quarry operation.

## E. Setbacks for Below-Ground Operations

All below-ground operations shall be located at least two hundred (200) feet from the nearest property line, measured laterally.

## F. Vibration

**1.** Ground-transmitted vibration shall not exceed two-tenths (0.20) inches per second at the property line or two-hundredths (0.02) inches per second measured at any residential property line.

**2.** These values may be multiplied by two (2) for impact vibrations; i.e., discrete vibration pulsations not exceeding one (1) second in duration and having a pause of at least one (1) second between pulses. (Ord. 16-51 § 3, 2016)