

ARTICLE 15

PERFORMANCE STANDARDS

Section 1501. PURPOSE

It is the purpose of this Article to provide appropriate standards relating to the operation of commercial, industrial and residential uses throughout Lykens Township. Such operations and uses may create such excessive air pollution, electromagnetic interference, fire and explosive hazards, glare, heat, light, noise, odor, and vibration which may be harmful to the public's health, comfort, convenience, safety and welfare. This Article is intended to (1) provide standards for factual and objective measurement of nuisances; (2) ensure that all uses will provide methods to protect the community from hazards and nuisances which can be prevented by process of control and elimination; and, (3) protect viable and productive uses and activities from arbitrary exclusion or persecution based solely on nuisance production.

Section 1502. AIR POLLUTION AND ODOR

To protect and enhance the air quality in Lykens Township, all sources of air pollution shall comply with any and all regulations set forth by the Federal Environmental Protection Agency and the Pennsylvania Department of Environmental Protection. In addition, the following shall apply:

A. Smoke

Grading the density or equivalent opacity of smoke shall be measured using the Ringlemann scale. Smoke from any chimney, stack, vent, opening, or combustion process at a density or equivalent opacity at the Ringlemann No. 1 level is prohibited. Smoke of a shade not to exceed Ringlemann No. 3 is permitted for up to three minutes in any one eight-hour period.

B. Particulate Matter

The rate of particulate matter emission from all sources within the boundaries of any lot shall not exceed a net figure of one pound per acre of lot area during any one hour period, after deducting the correction factors from the gross hourly emission per acre as indicated in the following Table 15-1.

TABLE 15-1 ALLOWANCE FOR HEIGHT OF PARTICULATE EMISSIONS*

Height of Emission Above Grade (Feet)	Correction (Pounds per Hour, Per Acre)
50	0.01
100	0.06
150	0.10
200	0.16
300	0.30
400	0.50

* - Interpolation for intermediate values not shown on Table.

Determination of the total net rate of emission of particulate matter within the boundaries of any lot shall be made as follows:

1. Determine the maximum emission in pounds per hour from each source of emission and divide this figure by the number of acres of lot area, thereby obtaining the gross hourly rate of emission in pounds per acre.
2. From the gross hourly rate of emission figure determined above in Section 1502.B.1 above, deduct the correction factor (interpolate if required) for the height of emission set forth in Table 15-1, thereby obtaining the net rate of emission in pounds per acre per hour for each source of emission.
3. Add the individual net rates of emission derived in Section 1502.B.2 above to obtain the total net rate of emission from all sources of emission within the boundaries of the lot. The total shall not exceed one pound per acre of lot area during any one-hour period.

C. Odor

In any zoning district, no odor shall be permitted at any lot line which exceeds the lowest amount set forth in Table III, "Odor Thresholds," of Chapter 5, "Physiological Effects," of the Air Pollution Abatement Manual of the Manufacturing Chemists Association, according to the latest edition of such table for the chemical compounds therein described. For compounds not

described in Table III, odor thresholds may be established by methods indicated in Chapter 5 of the manual, an no odor shall be permitted at any lot line exceeding the amount determined by the application of such methods.

Section 1503. NOISE

In all zoning districts, the sound pressure level for all uses and activities shall not exceed the decibels limits in the octave bands designated in the following Table 15-2 and comply with the following standards:

A. Noise Measurement

Sound levels shall be measured with a sound level meter and associated octave band filter manufactured in accordance with the American National Standards Institute (ANSI). Noises capable of being measured shall be those noises which cause rapid fluctuations of the sound level meter with a variation of no more than plus or minus two decibels. Noises incapable of being measured, such as those of irregular and/or intermittent nature shall be controlled so as not to become a nuisance to adjacent uses.

B. Permitted Decibel Levels

At no point at or beyond the property line shall the measured sound level exceed the maximum permitted sound levels designated in Table 15-2 below:

TABLE 15-2 MAXIMUM PERMITTED SOUND LEVEL IN DECIBELS ALONG THE PROPERTY LINE

Octave Band Cycles per Second	Residential Zoning Districts (Decibels)	Non-Residential Zoning Districts (Decibels)
0 to 75	67	73
75 to 159	62	68
150 to 300	58	64
300 to 600	54	60
600 to 1200	49	55
1200 to 2400	45	51
2400 to 4800	41	47
over 4800	37	43

C. Exemptions from Noise Regulations

The following activities or sources of noise are exempt from the noise standards of this Section:

1. Activities involving the following: stationary signaling devices; domestic power tools; air conditioning and air handling equipment for residential purposes; operating motor vehicles; and refuse collection vehicles;
2. The unamplified human voice;
3. The lowing of cattle, the clucking of fowl, the neighing of horses, or other normal sounds of reasonably cared for farm animals;
4. Sounds from standard commercial farm equipment necessary for a bona fide agricultural operation;
5. Aircraft operations;
6. Construction or routine maintenance of public service utilities;
7. Temporary activities relating to the construction and maintenance of buildings and facilities (including site preparation) between 6 am. and 9 pm.;
8. Church bells or chimes;
9. The emission of sound for the purpose of alerting persons of an emergency, or the emission of sounds in the performance of emergency work; and
10. Occasionally used safety signals, warning devices and emergency pressure-relief valves.

Section 1504. LIGHT

The following standards are intended to eliminate the negative effects of excessive and intrusive light from residential and non-residential uses onto neighboring residential properties, public streets and other walkways.

A. Measurement

Lighting levels shall be measured in footcandles. Measurement shall be taken with a direct reading portable light meter or light reading equipment recommended by the Township Engineer.

B. Measurement Method

Light readings shall be taken by qualified personnel so that the light reading meter has been exposed long enough to provide a constant reading. Measurements shall be made after dark. A reading will be conducted with the light source in question followed by a second light meter reading with the same sources turned off. The difference between the two readings shall be compared to the maximum permitted illumination at the property line at ground level. All light meter readings shall be conducted in this manner to ensure consistency and to eliminate the effects of moonlight or other ambient light.

C. Standards

1. Exterior lighting, except for overhead public street lights, warning lights, emergency lights or traffic signals, shall be installed in accordance with Article 14, Section 1404 in such a manner to sufficiently obscure and prevent glare from extending onto public streets, walkways and neighboring residential areas.
2. The installation of any lighting which may be confused with warning signals, emergency signals, or traffic signals shall not be permitted.
3. Any lighting that produces glare shall not cause illumination in excess of five tenths (0.5) footcandles measured at the property line.

Section 1505. GLARE AND HEAT

In all zoning districts, any operation producing intense glare or heat shall be conducted within an enclosed building or with other effective screening in such a manner as to make such glare or heat completely imperceptible from any point along the property line. No heat from any source shall be sensed at any property line to the extent of raising the ambient temperature of air or materials more than 5 degrees Fahrenheit. Any operation or activity that produces glare shall be conducted so that direct or indirect light from the source shall not cause illumination in excess of five-tenths (0.5) footcandles measured at the property line.

Section 1506. VIBRATION

Every use shall be so operated that the ground vibration inherently and recurrently generated is not perceptible, without instruments, at any point of any boundary line of the lot on which the

use is located. Vibrations from temporary construction and vehicles which leave the lot (such as trucks, trains, airplanes and helicopters) are excluded.

Section 1507. ELECTROMAGNETIC INTERFERENCE

In all districts, no use activity, or process shall be conducted which produces electric and/or magnetic fields which adversely affect public health, safety, and welfare, including but not limited to interference with normal radio, telephone, or television reception from off the premises where the activity is conducted.

Section 1508. OUTDOOR STORAGE AND REFUSE DISPOSAL

In all districts, any use or activity requiring outdoor storage and refuse disposal shall meet the following requirements:

A. Material Transfer

No materials or wastes shall be deposited upon a lot in such a form or manner that they may be transferred off the lot by natural causes or forces.

B. Containers

All materials or wastes which might cause fumes or dust or which constitute a fire hazard or which may be edible by or otherwise be attractive to rodents or insects shall be stored outdoors only in closed containers.

C. Groundwater Protection

In no case shall outdoor storage or waste disposal cause contamination to wells, groundwater, watercourses or any other body of water.