

UPPER DUBLIN TOWNSHIP
MONTGOMERY COUNTY, PA
STAND-ALONE LIGHTING ORDINANCE

§ 158-14. Outdoor lighting. [Added 10-8-2002 by Ord. No. 1093]

A. Purpose. To require and set minimum standards for outdoor lighting to:

- (1) Provide appropriate lighting in outdoor public places to protect public health, safety and welfare.
- (2) Protect drivers and pedestrians from the glare of non-vehicular light sources that impairs vision and safety.
- (3) Protect the public and the environment from nuisance glare and intrusive, stray and/or excessive light emitted from poorly or improperly shielded, designed, aimed, placed, applied or maintained light sources.

B. Applicability.

- (1) The provisions of this section shall be applicable to all multifamily residential, commercial, industrial and institutional uses, and to residential uses in combination with any of such uses or as specifically set forth herein.
- (2) Appropriate outdoor lighting with adequate nuisance glare-control shall be required for safety and personal security during hours of darkness where there is public assembly and traverse, including but not limited to the following uses: multifamily residential, commercial, industrial and institutional.
- (3) The glare-control requirements herein contained apply to lighting in all above-mentioned uses as well as, but not limited to, sign, architectural, landscape and streetscape lighting applications.
- (4) Appropriate officers or agents of the Township may require lighting be incorporated and/or controlled for nuisance glare in residential uses or locations as necessary. Otherwise the provisions of this section shall not be applicable to residential uses.
- (5) The provisions of this section shall not be applicable to public rights-of-way or to properties owned by Upper Dublin Township or the Upper Dublin School District or to properties used by them for public purposes.

C. Definitions. The following words and phrases, when used in this section, shall have the meanings indicated:

FOOTCANDLE — A common unit of light intensity used in the United States and stated in lumens per square foot. It is measurable with a light meter. (Note: LUX is the metric equivalent. There are approximately 10.7 lux per footcandle.)

FULL CUTOFF LUMINAIRE — A lighting unit in its mounted form that allows no direct light or reflected source image from the lighting unit above a ninety-degree plane, and no more than 10% of rated lamp output on an eighty-degree plane, at any lateral angle around the fixture.

FULLY SHIELDED — Providing internal and/or external shields and louvers to prevent brightness from lamps, reflectors and lenses from causing glare at normal viewing angles.

GLARE — The sensation produced by direct lighting that causes an annoyance, discomfort or loss in visual performance and visibility to the eye.

ILLUMINANCE — The intensity of incident light at a point, measured in footcandles or lux.

LIGHT TRESPASS — Light emitted by a lighting installation which shines beyond the boundaries of the property on which the installation is sited.

LUMEN — A unit of measurement of light. One lumen is equal to one footcandle falling onto one square foot of area.

LUMINAIRE — A complete luminaire, including a lamp or lamps, together with the parts designed to distribute the light, to position and protect the lamps and to connect the lamps to the power supply.

RESIDENTIAL — Single-family or two-family residential.

D. Criteria.

(1) Illumination levels.

- (a) Lighting, where required or permitted by this section, shall have intensities and uniformity ratios, which shall not exceed the current recommended practices of the Illuminating Engineering Society of North America (IESNA) as contained in the IESNA Lighting Handbook or separately in IESNA Recommended Practices.
- (b) Future amendments to such recommended practices shall become a part of this section without further action of the Township.

(2) Outdoor luminaire design.

- (a) luminaires shall be of a type and design appropriate to the lighting application and shall conform to the requirements set forth in this Code.
- (b) For lighting horizontal tasks such as private roadways, sidewalks, entrances and parking areas, full cutoff luminaires shall be used.
- (c) The use of floodlighting, spotlighting, wall-mounted fixtures, internally illuminated decorative globes and spheres and other fixtures not meeting "full cutoff" criteria shall be permitted only with the approval of the Township, based upon acceptable justification and achievement of adequate glare control.
- (d) Luminaires shall be equipped with light directing and/or shielding devices such as shields, visors, skirts or hoods to redirect offending light distribution and/or to reduce direct or reflected glare.
- (e) A NEMA-head fixture, a.k.a. "barn light" or "dusk-to-dawn light," shall not be permitted where it is visible from a neighboring use or property unless fitted with a reflector to render it full cutoff. In no case shall the intensity of illumination cast by a source or sources regulated by this section onto an adjacent residential property exceed 0.1 vertical footcandle measured line-of-sight from anywhere on the adjacent residential property.

(3) Control of nuisance and disabling glare.

- (a) All outdoor lighting shall be aimed, located, designed, fitted and maintained so as not to present a hazard to drivers or pedestrians by impairing their ability to safely traverse and so as not to create a nuisance by projecting or reflecting light onto a neighboring use or property which interferes with such use or with the enjoyment of such property.
- (b) Only full cutoff luminaires may be used under outdoor canopies. They shall be shielded in such a manner that the edge of the fixture shield shall be level with or below the light source envelope and reflector. Outdoor canopies include, but are not limited to, the following applications:
 - [1] Fuel island canopies associated with service stations and convenience stores.
 - [2] Exterior canopies above storefronts in shopping centers and malls.
 - [3] Exterior canopies above driveways and building entrances.
 - [4] Pavilions and gazebos.
 - [5] Parking garages with interior lighting visible from the exterior.

- (c) Floodlights and spotlights. The use of searchlights or laser source lights for advertising or entertainment purposes is prohibited.
- (d) Outdoor lighting shall be controlled by automatic switching devices such as time clocks or combination motion detectors and photocells that will extinguish such lighting between 11:00 p.m. and dawn to reduce energy waste and mitigate nuisance glare and sky-lighting consequences, except as specifically otherwise permitted herein.
- (e) Lighting proposed for use after 11:00 p.m. or after normal hours of operation, whichever is earlier, for commercial, industrial or institutional safety applications shall be reduced by 75% from the permitted illumination levels set forth above from then until dawn.
- (f) All illumination for advertising signs, buildings and/or surrounding landscapes for decorative, advertising or esthetic purposes is prohibited between 11:00 p.m. and sunrise, except that such lighting situated on the premises of a commercial establishment may remain illuminated while the establishment is actually open for business and until one hour after closing.
- (g) Flagpole lighting sources shall not exceed 10,000 lumens per pole.
- (h) Vegetation screens shall not be employed to serve as the primary means for controlling glare. Rather, glare control shall be achieved primarily through the use of such means as cutoff fixtures, shields and baffles and appropriate application of fixture mounting height, wattage, aiming angle and fixture placement.
- (i) Except as set forth by § 255-155, externally illuminated signs shall be lighted by fixtures mounted at the top of the sign and aimed downward. Such lighting shall be automatically extinguished between the hours of 11:00 p.m. and dawn. All such fixtures shall be so designed or fitted to concentrate the light output onto and not beyond the sign.
- (j) Full cutoff luminaires shall not be mounted in excess of 20 feet above finished grade unless under a canopy. All other luminaires shall not be mounted in excess of 16 feet above grade.
- (k) Directional fixtures for such applications as facade, fountain, feature, recreational and landscape illumination shall be aimed so as not to project their output beyond the objects intended to be illuminated and shall be extinguished between the hours of 11:00 p.m. and dawn.
- (l) The use of white strobe lighting for tall structures such as smokestacks, chimneys and radio/communications/television towers is prohibited during hours of darkness except as required by the Federal Aviation Administration or other regulatory agency.

(4) Installation.

- (a) For new installations, electrical feeds for fixtures mounted on poles shall be run underground.
- (b) Poles supporting lighting fixtures for the illumination of parking areas shall be placed a minimum of five feet outside the paved area, or on concrete pedestals at least 30 inches high above the pavement, or otherwise suitably protected from damage by vehicles as approved by the Board of Commissioners.

(5) Maintenance. Lighting fixtures and ancillary equipment shall be maintained so as always to meet the requirements of this section.

E. Plan submission.

- (1) For subdivision and land development applications and nonresidential construction, where site lighting is employed in four or more locations, whether proposed or existing, lighting plans shall be submitted to the Township for review and approval with any preliminary subdivision/land development plan submission and with any nonresidential application for conditional use, special exception, variance or building permit and shall include:
 - (a) A site plan, complete with all structures, parking spaces, building entrances, traffic areas (both vehicular and pedestrian), vegetation that might interfere with lighting and adjacent use that

might be adversely impacted by the lighting, containing a layout of all proposed fixtures by location, mounting height and type.

(b) Isofootcandle plots for individual fixture installations, or ten-foot-by-ten-foot illuminance-grid plots for multifixture installations, which demonstrate compliance with the intensity and uniformity requirements as set forth in this section. Building and property outlines shall be clearly identified on the layout plots.

(c) Description of the proposed equipment, including fixture catalog cuts, photometrics, glare reduction devices, lamps, on/off control devices, mounting heights, pole foundation details and mounting methods.

(2) In all instances where plan submission is required, the Board of Commissioners may require that appropriate steps be taken to mitigate on-site and off-site glare and light intrusion.

(3) Post-approval alterations to lighting plans or intended substitutions for approved lighting equipment shall be submitted to the Township for review and approval. A note to that effect shall be placed on the lighting plan. Property owners shall maintain the approved lighting plan and may not alter it without the approval of the Township.

F. Post-installation inspection. The Township reserves the right to conduct a post-installation nighttime inspection to verify compliance with the requirements of this section and, if appropriate, to require remedial action at no expense to the Township. A note to that effect shall be placed on the lighting plan.

G. Compliance monitoring.

(1) Safety hazards.

(a) If the Building Officer judges a lighting installation creates a safety or personal security hazard, the person(s) responsible for the lighting shall be notified in writing and required to take remedial action.

(b) If appropriate corrective action has not been effected within 30 days of written notification, the Township may commence legal action as provided in Subsections J and K below.

(2) Nuisance glare and inadequate illumination levels.

(a) When the Building Officer judges an installation produces unacceptable levels of nuisance glare, direct skyward light, excessive or insufficient illumination levels or otherwise varies from this section, the Township may cause written notification of the person(s) responsible for the lighting and require appropriate remedial action.

(b) If appropriate corrective action has not been effected within 30 days of notification, the Township may commence legal action as provided in Subsections J and K below.

H. Noncompliant lighting. Any lighting fixture or lighting installation existing on the effective date of this section that does not conform with the requirements of this section shall be considered as a lawful nonconformance. Unless minor corrective action is deemed by the Township to be an acceptable alternative, a noncompliant lighting fixture or lighting installation shall be made to conform with the applicable requirements of this section in any of the following instances:

(1) When it is deemed by the Township to create a safety hazard or a nuisance.

(2) When it is replaced, abandoned or relocated.

(3) When there is a change in use of the property on which the area being illuminated is located.

(4) Within two years after the effective date of this section.

I. The Board of Commissioners, upon written application accompanied by a fee of \$100, may grant waivers from the requirements of this section to meet public safety or security concerns, to meet the needs of all-night operations on a property or where the strict application of the requirements of this section in a commercial, industrial or institutional application would impose an unreasonable financial

hardship or would deprive the applicant the reasonable use of the property. Before acting on the application for a waiver, the Board may require that the applicant submit a lighting plan meeting the criteria set forth in § 158-14D above.

J. All appeals from notifications authorized by this section shall be taken to the Board of Commissioners within 30 days of the date of such notification.

K. Violations and penalties. Violations of this section shall be enforced in accordance with the provisions of § 158-9 of this chapter. The penalties during any one-year period for the first offense shall be \$50, for the second offense \$200, and for the third offense and all other offenses, no less than \$350.