

ORDINANCE #14-2016

**AN ORDINANCE AMENDING CHAPTER 196 NUISANCES CREATING
ARTICLE 3, OUTDOOR LIGHTING
CODE OF THE CITY OF MARGATE CITY, COUNTY OF ATLANTIC
AND STATE OF NEW JERSEY**

NOW THEREFORE BE IT ORDAINED by the Commissioners of the City of Margate, County of Atlantic and State of New Jersey as follows:

SECTION 1: Margate City Code Chapter 196, Nuisances shall be amended to add the following:

SECTION 2: TITLE

An Ordinance establishing regulations, specifications and restrictions for the use and/or installation of outdoor lighting in the Municipality.

SECTION 3: SHORT TITLE

This Ordinance shall be known as and may be cited as the “Outdoor Lighting Ordinance”.

SECTION 4: PURPOSE

To require and set minimum standards for outdoor lighting to:

- A. Provide for and control lighting in outdoor public places where public health, safety and welfare are potential concerns.
- B. Protect drivers and pedestrians from the disabling glare of non-vehicular light sources.
- C. Protect neighbors and the night sky from nuisance glare and light trespass from improperly selected or poorly aimed, placed, applied, maintained or shielded light sources.
- D. Promote energy efficient lighting design and operation.
- E. Protect and retain the intended character of the various portions of the Municipality.

SECTION 5: APPLICABILITY

- A. All uses within the Municipality where there is interior or exterior lighting that creates a nuisance or hazard as viewed from outside, or exterior lighting that creates a nuisance when viewed from inside, including but not limited to, residential, commercial, industrial, public and private recreational/sports and institutional uses, and sign, billboard, architectural and landscape lighting.
- B. The Municipality may, in its sole discretion, require the illumination of residential subdivisions in accordance with Section 6.G below.

- C. The Municipality may, in its sole discretion, require lighting to be incorporated for other uses or locations or may restrict lighting in any of the above uses, as deemed necessary.
- D. The glare-control requirements herein contained apply to lighting in all uses, applications and locations.
- E. Temporary seasonal decorative lighting (defined as two months annually commencing November 15th through January 15th) is exempt from all but the glare-control requirements of this Ordinance.
- F. Emergency lighting, as may be required by any public agency while engaged in the performance of their duties, or for illumination of the path of egress during an emergency, are exempt from the requirements of this Ordinance.
- G. Baseball/recreational field is exempt from this Ordinance.

SECTION 6: DEFINITIONS

- A. **BUG** – A rating of the amount of Backlight, Uplight and Glare of a luminaire.
- B. **Correlated Color Temperature (CCT)** – the temperature of a source of blackbody radiation whose spectrum best approximates the spectrum of a particular light source, expressed in units of Kelvins (K). CCT information is provided by lighting manufacturers on the product packaging of all new lighting.
- C. **Cutoff** – A lighting fixture from which no more than 2.5% of its lamp’s intensity is emitted at or above a horizontal plane drawn through the lowest light-emitting/reflective part of the fixture and no more than 10% of its lamp’s intensity is emitted between 80° and that horizontal plane.
- D. **Footcandle (fc)** – A unit of illuminance or illumination, equivalent to the illumination produced by a source of one candle at a distance of one foot and equal to one lumen incident per square foot.
- E. **Full Cutoff** – A lighting fixture from which none of its lamp’s intensity is emitted at or above a horizontal plane drawn through the lowest light-emitting/reflective part of the fixture and no more than 10% of the lamp’s intensity is emitted between 80° and that horizontal plane.
- F. **Fully Shielded** – A lighting fixture, from which, in the installed position, none of its light output, either directly from the lamp or a diffusing element, or indirectly by reflecting or refraction from any part of the fixture (excepting only incidental reflections from supporting brackets or arms), is projected above a horizontal plane through the fixture’s lowest light-emitting/reflective part, as determined by photometric test or certified by the manufacturer. Any structural part of the fixture providing this shielding shall be permanently affixed.
- G. **Glare** – The sensation produced by lighting that causes an annoyance, discomfort or loss in visual performance and visibility to the eye.

- H. Holiday Lighting – Decorative lighting permitted under this Ordinance commencing November 15th through January 15th (two months) which lighting is exempt from all but the glare control provisions of this Ordinance and said lighting shall be extinguished between the hours of 11:00 p.m. to 7:00 a.m. of the following day during the two-month seasonal exemption.
- I. IESNA - Illuminating Engineering Society of North America, an internationally-recognized organization that establishes best practices and published guidance for outdoor lighting.
- J. Initial Lumens – the lumens rating of a lamp at the time of manufacture, not accounting for losses due to normal lamp aging. Initial lumens are measured by manufacturers and provided along with product packaging information.
- K. Illuminance – The intensity or degree to which something is illuminated and is not the amount of light produced by the light source. This is measured in footcandles or lux.
- L. Light Trespass – Light emitted from fixtures designed or installed in a manner that unreasonably causes light to fall on a property other than the one where the light is installed, in a motor vehicle drivers’ eyes, or upwards toward the sky.
- M. Lumen (lm) – A metric unit of measurement of light. A light source of one lumen yields an illuminance of one foot-candle on one square foot of area.
- N. Luminaire – A complete lighting unit, including lamp, housing and optics.
- O. Lux (lx) – A metric unit of illuminance or illumination. One lux equals one lumen of light incident on one square meter of illuminated surface area.
- P. Shielded – The description of a luminaire from which no direct glare is visible at normal viewing angles by virtue of its being properly aimed, oriented, and located and properly fitted with such devices as shields, barn doors, baffles, louvers, skirts or visors.

SECTION 7: LIGHTING CRITERIA

A. IES Recommended Lighting Levels.

1. Lighting where required by this Ordinance or otherwise required by the Municipality, shall have illuminances and uniformity ratios in accordance with the current recommended practices of the IESNA as contained in the IEG Lighting Handbook and relevant Recommended Practices (RPs) as otherwise specified herein.
2. Future amendments to said Lighting Handbook and Recommended Practices shall become a part of this Ordinance without further action by the Municipality.

B. Lighting Fixture Design.

1. Luminaries shall be of a type and design appropriate to the lighting application and aesthetically acceptable to the Municipality.

2. 500-lm Shielding Limit and BUG Rating Requirement: For the lighting of predominantly horizontal surfaces such as, but not limited to parking areas, roadways, vehicular and pedestrian passage areas, merchandising and storage areas, automotive-fuel dispensing facilities, automotive sales areas, loading docks, cul-de-sacs, active and passive recreational areas, building entrances, sidewalks, bicycle and pedestrian paths, and site entrances, all luminaires shall be aimed straight down, redundant to BUG rating. Luminaires exceeding 500 initial lumens shall meet IESNA fully shielded criteria.
3. BUG Rating Requirement: Except as may be specified elsewhere in this Ordinance, luminaires shall have a BUG rating of B1-UO-G1. Luminaires not exceeding 500 initial lumens, e.g., the rated output of a standard non-directional 33-Watt incandescent or 8-Watt compact fluorescent lamp, are exempt from the requirements of this paragraph. In the case of decorative street lighting luminaires, the Municipality may approve the use of luminaires with an uplight component not exceeding 1%.
4. For the lighting of predominantly non-horizontal tasks or surfaces such as, but not limited to, facades, landscaping, signs, billboards, fountains, displays and statuary, when their use is specifically permitted by the Municipality, luminaires shall be fully shielded and shall be installed and aimed so as to not project their output into the windows of neighboring residences, adjacent uses, past the object being illuminated, skyward, or onto a public roadway. Luminaires with an aggregate rated lamp output not exceeding 500 initial lumens, e.g., the rated output of a standard non-directional 33-Watt incandescent or 8-Watt compact fluorescent lamp, are exempt from the requirements of this paragraph.
5. CCT Restriction – All light sources shall have a CCT that does not exceed 3000K.

C. Lighting Control.

Light Trespass Prohibited:

1. All 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 shall not create light trespass onto a neighboring use or property.
2. Directional luminaires such as floodlights and spotlights, when their use is specifically approved by the Municipality, shall be so shielded, installed and aimed that they do not create light trespass of neighboring past the object being illuminated, skyward or onto a public roadway or pedestrian way. Floodlights installed above grade on residential properties, except when motion-sensor

activated, shall not be aimed above 45° from the horizontal.

Sign/Advertising Lighting Curfew:

3. Illumination for signs, billboards, building facades and/or surrounding landscapes for decorative, advertising or aesthetic purposes is prohibited between 11:00 p.m. and dawn, except that such lighting situated on the premises of a commercial establishment may remain illuminated while the establishment is open for business, and until no more than one-half hour after closing. Such lighting shall be automatically extinguished using a programmable controller.

Area/Parking Lighting Curfew:

4. Lighting for parking areas and vehicular and pedestrian traffic ways for commercial, industrial and institutional uses shall be automatically extinguished nightly within one half hour of the close of the facility. On/off control shall be by astronomic programmable controller with battery or capacitor power-outage reset. When after-hours site safety lighting is proposed, such lighting shall not exceed twenty-five (25%) percent of the number of fixtures required or permitted for illumination during regular business hours. The use of greater than 25% of the normal lighting for all-night safety lighting shall require Municipality approval, based on the unique nature of the use. Alternatively, where there is reduced but continued onsite activity throughout the night that requires exterior illumination, the use of dimming circuitry to lower illumination levels by at least 50% after 11:00 p.m. or after normal business hours, or the use of motion-sensor control, shall be required.
5. 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.
6. The vertical illuminance at the property line, measured in any azimuthal direction, shall not exceed 0.05 fc (0.5 lx).

Landscape/Architecture Lighting Restrictions:

7. Directional fixtures for such applications as façade, fountain, feature and landscape illumination shall be aimed so as not to project their output beyond the objects intended to be illuminated, shall be extinguished between the hours

of 11 p.m. and dawn and shall not be in conflict with the Municipality's aim to maintain its intended character.

8. Only the United States and the State flag shall be permitted to be illuminated from dusk till dawn and each flag shall be illuminated by a source or sources with a beam spread no greater than necessary to illuminate the flag. Flag lighting sources shall be fully shielded, mounted such that flags are illuminated from the top down, and not exceed 2,000 initial lumens per flagpole.
9. 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 specifically required by the Federal Aviation Administration.
10. Under-canopy lighting for such applications as gas/service stations, hotel/theater marquees, fast-food/bank/drugstore drive-ups, shall be accomplished using flat-lens full-cutoff luminaires aimed straight down and shielded in such a manner that the lowest opaque edge of the luminaire shall be below the light source and its light-directing surfaces, at all lateral angles around the luminaire. The average maintained illumination in the area directly below the canopy shall not exceed 20 fc (215 lx), with no value exceeding 30 fc (323 lx).

D. Agricultural Use Criteria

1. For agricultural uses, the following criteria shall apply:
 - a. No lighting shall be permitted that creates light trespass on any adjacent residential use.
 - b. No lighting shall be permitted that creates a public safety hazard by shining onto a public right-of-way.
 - c. Floodlights and other directional luminaires whose lamp and/or reflective surfaces are visible from an adjacent residential use shall be extinguished by no later than 11 p.m. or controlled by a motion sensor.

E. Recreational Uses

1. When facilities for such outdoor recreational activities as baseball, tennis, football, miniature golf or any other recreational use permitted under the Municipality's Municipality Zoning Ordinance, are specifically permitted by the Municipality for operation during hours of darkness, the following requirements shall apply:

Conformity with IES Shielding Regulations

- a. Lighting shall be accomplished only through the use of luminaires conforming to IESNA full-cutoff criteria, or as otherwise approved by the Municipality based on suitable control of glare and light trespass. The IESNA standards for sports lighting (RP-6) shall be utilized.

Curfew

- b. For new recreational facilities and for recreational facilities wishing to change their hours of operation during hours of darkness, sporting events shall be timed so that all lighting in the sports facility, other than lighting for safe exit of patrons, shall be extinguished by 11:00 p.m., or the conclusion of regular play, irrespective of extra innings or overtimes.

F. Residential Uses. Light trespass, as defined herein, is prohibited as same constitutes a nuisance to surrounding neighborhood properties and occupants.

SECTION 8: COMPLIANCE MONITORING

A. Safety Hazards

- 1. If appropriate officers or agents of the Municipality judge a lighting installation, including lighting poles, creates a public safety hazard, the person(s) responsible for the lighting shall be notified in writing and required to take remedial actions.
- 2. If appropriate corrective action has not been effected within twenty-four hours, same shall be deemed a violation of this ordinance.

B. Nuisance Glare and Inadequate Illumination Levels

- 1. Prohibited Light Trespass. When appropriate officers or agents of the Municipality judge an installation produces unacceptable levels of light trespass or otherwise varies from the provisions of this Ordinance, Municipality may cause written notification to the person(s) responsible for the lighting and require appropriate remedial action.
- 2. If appropriate corrective action has not been affected within twenty-four hours of written notification, the Municipality may commence legal action as summons for municipal court for ordinance violations or commencement of proceedings in Superior Court.
- 3. Fines. Each day the violation continues, the fine shall be no less than \$100 but no more than \$1,000.00 per day.

SECTION 9: VIOLATIONS AND PENALTIES

Any person violating the terms of this chapter, whether as principal, agent or employee of another, shall, upon conviction in the Municipal Court, be subjected to a fine not exceeding \$1,000.00 or to imprisonment in the county jail not exceeding 90 days, or to both, in the discretion of the Judge.

SECTION 10: All ordinances or parts of ordinances inconsistent with any terms of this ordinance are hereby repealed to the extent of such inconsistency only.

SECTION 11: This ordinance shall take effect upon its final passage and publication as required by law.

Michael Becker, Mayor

John Amodeo, Commissioner

Maury Blumberg, Commissioner

Board of Commissioners of the City of
Margate City, New Jersey

Introduction:

Enactment: