

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2011

H

1

HOUSE BILL 455

Short Title: Outdoor Light Fixtures Using State Funds. (Public)

Sponsors: Representatives Fisher, Harrison, and McGrady (Primary Sponsors).
For a complete list of Sponsors, see Bill Information on the NCGA Web Site.

Referred to: Environment, if favorable, Appropriations.

March 24, 2011

A BILL TO BE ENTITLED

AN ACT TO CONSERVE ENERGY AND REDUCE THE EXPENSES OF LIGHTING ASSOCIATED WITH THE USE OF OUTDOOR LIGHTING WHEN THE LIGHTING IS NOT NEEDED TO PROVIDE SAFETY, UTILITY, OR SECURITY BY REQUIRING OUTDOOR LIGHTING FIXTURES THAT ARE INSTALLED, REPLACED, MAINTAINED, OR OPERATED USING STATE FUNDS TO MEET CERTAIN STANDARDS DESIGNED TO REDUCE UNNECESSARY ILLUMINATION AND REDUCE GLARE AND LIGHT POLLUTION.

The General Assembly of North Carolina enacts:

SECTION 1. Article 3B of Chapter 143 of the General Statutes is amended by adding a new Part to read:

"Part 3.

"Outdoor Lighting Fixtures Involving the Use of State Funds.

"§ 143-64.18 Purpose.

The purpose of this Part is to conserve energy and reduce the expenses of lighting associated with the use of outdoor lighting when the lighting is not needed to provide safety, utility, or security by requiring outdoor lighting fixtures that are installed, replaced, maintained, or operated using State funds to meet certain standards designed to reduce unnecessarily high illumination and reduce glare and light pollution. Additional benefits of this Part are to improve the travel conditions of persons and vehicles on public ways by reducing glare; to reduce light trespass; and to assist nighttime training exercises needed for certain groups such as the military, certain emergency responders, and astronomers and to preserve and enhance the State's dark sky for the enjoyment of the State's citizens and those who come to visit our State and experience its natural beauty.

"§ 143-64.18A. Definitions.

As used in this Part, the following definitions apply:

- (1) Energy conservation. – Reducing energy costs and resources used. Energy conservation includes using a light with lower wattage or a timer switch.
- (2) Full cutoff luminaire. – A luminaire that allows no direct light emissions above a horizontal plane through the luminaire's lowest light-emitting part.
- (3) Light pollution. – The night sky glow caused by the scattering of artificial light in the atmosphere.
- (4) Light trespass. – Light emitted by a luminaire that shines beyond the boundaries of the property on which the luminaire is located.



- 1 (5) Luminaire. – The complete lighting system, including the lamp and the
2 fixture.
- 3 (6) Outdoor lighting fixture. – Any type of fixed or movable lighting equipment
4 that is designed or used for illumination outdoors. Outdoor lighting fixture
5 includes area lighting and includes street lights, billboard lighting,
6 searchlights, and other lighting used for advertising purposes. Outdoor
7 lighting fixture does not include lighting equipment that is required by law to
8 be installed on motor vehicles or lighting required for the safe operation of
9 aircraft.
- 10 (7) State funds. – Funds appropriated by the General Assembly or bond
11 revenues of the State.

12 **"§ 143-64.18B. Standards for State-funded outdoor lighting fixtures.**

13 (a) Any outdoor lighting fixture installed, replaced, maintained, or operated using State
14 funds shall meet at least all of the following requirements:

- 15 (1) When the rated output of the outdoor lighting fixture is greater than 1,800
16 lumens, the new or replacement outdoor lighting fixture is a full cutoff
17 luminaire.
- 18 (2) The minimum illuminance adequate for the intended purpose is used with
19 consideration given to nationally recognized standards.
- 20 (3) For lighting of a designated highway of the State highway system, the
21 Department of Transportation determines that the purpose of the outdoor
22 lighting fixture cannot be achieved by the installation of reflective road
23 markers, lines, warning or information signs, or other effective passive
24 methods.
- 25 (4) Full consideration has been given to energy conservation, reducing glare and
26 light trespass, minimizing light pollution, and preserving the natural night
27 environment.

28 (b) The requirements of subsection (a) of this section do not apply under any one of the
29 following circumstances:

- 30 (1) The outdoor lighting fixture is used on a temporary basis when emergency
31 personnel require additional illumination for an emergency procedure.
- 32 (2) The outdoor lighting fixture is used on a temporary basis for nighttime work.
- 33 (3) The outdoor lighting fixture is used when special events or situations require
34 additional illumination.
- 35 (4) The outdoor lighting fixture is used solely to enhance the aesthetic beauty of
36 an object.
- 37 (5) The outdoor lighting fixture is used when a compelling safety interest exists
38 that cannot be addressed in another manner.

39 (c) When additional illumination is required for special events or situations under
40 subdivision (3) of subsection (b) of this section, the outdoor lighting fixture must be situated so
41 that the lighting fixture is shielded from direct view and upward lighting and light pollution is
42 minimized. Special events or situations under subdivision (3) of subsection (b) of this section
43 include sporting events and illumination of monuments, historic structures, or flags.

44 **"§ 143-64.18C. Penalty.**

45 Any person who is found by the Secretary of Administration to have violated the provisions
46 of this Part shall be liable for a civil penalty not to exceed one thousand dollars (\$1,000) for
47 each violation. The maximum civil penalty may not exceed fifty thousand dollars (\$50,000) for
48 any related series of violations occurring within one year after the date of the first violation. In
49 determining the amount of the penalty, the Secretary shall consider the amount of money that
50 inured to the benefit of the violator as a result of the violation, whether the violation was
51 willful, and the prior record of the violator in complying or failing to comply with this Part."

1 **SECTION 2.** This act becomes effective January 1, 2012, and applies to any
2 outdoor lighting fixtures that are installed, replaced, maintained, or operated on or after that
3 date.