

Stricken language would be deleted from and underlined language would be added to present law.

State of Arkansas
89th General Assembly
Regular Session, 2013

As Engrossed: H4/3/13
A Bill

HOUSE BILL 1568

By: Representative S. Meeks

For An Act To Be Entitled

AN ACT TO CREATE THE ARKANSAS NIGHTTIME ENVIRONMENT
PROTECTION ACT; AND FOR OTHER PURPOSES.

Subtitle

THE ARKANSAS NIGHTTIME ENVIRONMENT
PROTECTION ACT.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:

SECTION 1. DO NOT CODIFY. Findings.

The General Assembly finds that:

(1)(A) Energy is wasted when methods of illumination are used excessively and inefficiently.

(B) This wasteful use of energy is not a cost-effective use of taxpayer money and adds unnecessary pollutants to our environment from the energy generation;

(2)(A) In addition, light pollution has been implicated in disruption of the human and animal circadian rhythm and strongly suspected as an etiology of suppressed melatonin production, depressed immune systems, and increases in certain cancer rates.

(B) The findings under subdivision (2)(A) of this section prompted the American Medical Association in June 2009 to adopt a resolution advocating the reduction of light pollution and glare through the use of energy efficient and shielded lighting;

(3) In addition, light pollution disrupts nocturnal animal activity and results in diminished health and survival of various animal and plant populations;



(4) In addition, light pollution reduces the ability for Arkansans to enjoy recreational or educational astronomical observations of the starry night sky;

(5) In addition, light pollution reduces the ability for Arkansas scientist to conduct scientific research of the cosmos;

(6) In addition, inefficient luminaries may cast unwanted light outside the intended target area, creating light trespass; and

(7) Therefore, it is in the public interest to reduce light pollution to protect the nighttime environment and create awareness.

SECTION 2. Arkansas Code Title 8, Chapter 14, is amended to read as follows:

8-14-101. Title.

This chapter shall be known and may be cited as the ~~“Shielded Outdoor Lighting Act”~~ “Arkansas Nighttime Environment Protection Act”.

8-14-102. Purpose.

~~The purpose of this chapter is to conserve energy and preserve the environment through the regulation of outdoor lighting fixtures~~ The purpose of the Arkansas Nighttime Environment Protection Act is to regulate outdoor night lighting fixtures to promote safety, conserve energy, save tax dollars, and preserve the state’s natural nighttime environment for the health and welfare of our citizens, our wildlife, and astronomy.

8-14-103. Definitions.

As used in this chapter:

~~(1) “Outdoor lighting fixture” means an automatically controlled, outdoor artificial illuminating device, whether permanent or portable, used for illumination or advertisement, including searchlights, spotlights, and floodlights, whether for architectural lighting, parking lot lighting, landscape lighting, billboards, or street lighting; and~~

~~(2) “Shielded” means a fixture that is covered in a manner that light rays emitted by the fixture, either directly from the lamp or indirectly from the fixture, are projected below a horizontal plane running through the lowest point on the fixture where light is emitted.~~

(1) “Direct light” means light emitted directly from a lamp, off

a reflector, or through a refractor of a fixture;

(2) "Excessive cost" means the cost to replace and operate a conforming replacement fixture that is at least one and one-half (1 1/2) times more expensive than a nonconforming fixture;

(3) "Fixture" means a complete lighting unit, including without limitation 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;

(4) "Fully shielded" means a fixture that does not allow direct light emissions, either directly from the lamp or indirectly by reflection or refraction from any part of the lighting unit, above a horizontal plane running through the lowest point on the fixture where light is emitted;

(5) "Glare" means direct light emitting from a fixture that causes reduced vision or momentary blindness;

(6) "Illuminance" means the level of light measured on an intercepting surface;

(7) "Lamp" means the component of a fixture that produces light;

(8) "Light pollution" means general sky glow caused by the scattering of artificial light in the atmosphere;

(9) "Light trespass" means light emitted by a fixture that shines beyond the boundaries of the property on which the fixture is located;

(10) "Lumen" means a specific standard unit of measurement of luminous flux;

(11) "Partially shielded" means a fixture that is constructed so that the bottom edge of the shield is below the plane of the center line of the lamp, reducing light above the horizontal to less than twenty percent (20%) of the light emitted from any part of the lighting unit;

(12) "Permanent outdoor fixture" means a fixture or system of fixtures that is outdoors and intended to be used or is used for thirty (30) days or longer; and

(13) "Public funds" means any bond revenues or any money appropriated or allocated by the General Assembly or any money raised through taxes or fees and county and municipal funds.

8-14-104. ~~Shielding Prohibitions Exemptions~~ Regulations for outdoor illumination.

~~(a) After January 1, 2006:~~

~~(1)(A) No public funds shall be used to install an outdoor lighting fixture unless it is shielded.~~

~~(B) Subdivision (a)(1)(A) of this section shall not apply to any municipality or county if the governing body of the municipality or county determines by ordinance or to a municipally owned utility if the municipal employee responsible for procurement determines that the cost of acquiring a shielded outdoor lighting fixture will be prohibitive after comparing:~~

~~(i) The cost of the fixtures; and~~

~~(ii) The projected energy cost of the operation of the fixtures;~~

~~(2) The Arkansas Department of Environmental Quality shall promulgate regulations prohibiting any person or entity from knowingly placing or disposing of the bulb or tube portion of an electric lighting device containing hazardous levels of mercury in a landfill after January 1, 2008, if:~~

~~(A) The device contains more than two-tenths milligram per liter (0.2 mg/l) of leachable mercury as measured by the Toxicity Characteristic Leaching Procedure as set out in EPA test Method 1311; and~~

~~(B) Adequate facilities exist for the public to properly dispose of the device described in subdivision (a)(2)(A) of this section; and~~

~~(3)(A) Each electric public utility shall offer a shielded lighting service option.~~

~~(B) Not later than January 1, 2006, each electric public utility shall file an application with the Arkansas Public Service Commission to establish a schedule of rates and charges for the provision of a shielded lighting service option to the utility's customers.~~

~~(C) The commission shall require each electric public utility to inform its customers of the availability of the shielded lighting service.~~

~~(b) This chapter does not apply to acquisitions of:~~

~~(1) Incandescent outdoor lighting fixtures of one hundred fifty watts (150W) or less or other light sources of seventy watts (70W) or less;~~

~~(2) Outdoor lighting fixtures on advertisement signs on interstate or federal primary highways;~~

~~(3)(A) Outdoor lighting fixtures existing and legally installed before August 12, 2005.~~

~~(B) However, if an existing outdoor lighting fixture exempted from this chapter under subdivision (b)(3)(A) of this section needs to be replaced, the acquisition of the replacement outdoor lighting fixture shall be subject to the provisions of this chapter;~~

~~(4) Navigational lighting systems at airports or other lighting necessary for aircraft safety; and~~

~~(5) Outdoor lighting fixtures that are necessary for worker safety at farms, ranches, dairies, or feedlots or industrial, mining, or oil and gas facilities.~~

~~(c) This chapter does not apply to outdoor lighting fixtures maintained or installed by:~~

~~(1) A public school district;~~

~~(2) A correctional facility;~~

~~(3) A juvenile detention facility;~~

~~(4) An adult detention facility;~~

~~(5) A mental health facility; or~~

~~(6) A state-supported institution of higher education.~~

(a) An agency, public corporation, county, or municipal subdivision of this state shall not use public funds to operate, maintain, install, or cause to be installed any new or replacement permanent outdoor fixture unless the following conditions are met:

(1) The permanent outdoor fixture is a fully shielded fixture when the rated output of the permanent outdoor fixture is greater than one thousand eight hundred lumens (1,800 lm);

(2) The permanent outdoor fixture is designed to maximize energy conservation and to minimize light pollution, glare, and light trespass;

(3) The permanent outdoor fixture's maximum illuminance does not exceed what is adequate for that purpose under guidelines recommended for that purpose by the Illuminating Engineering Society of North America, as the guidelines existed on January 1, 2013, or the minimum illuminance recommendation for that purpose by the United States Department of Transportation, as the recommendation existed on January 1, 2013;

(4) For roadway lighting unassociated with intersections of two (2) or more streets or highways, a determination is made by the Director of

the Arkansas State Highway and Transportation Department or his or her designee or body of jurisdiction or a designee the purpose of the lighting installation or replacement cannot be achieved by reduction of the speed limit, installation of reflectorized roadway markers, lines, warnings, or informational signs, or other passive means; and

(5) Full consideration has been given to the use of public funds for the goals of eliminating glare, light pollution, and light trespass, reducing energy use, and preserving the natural night environment.

(b) Roadway signage, installed or replaced after the effective date of this chapter that is illuminated shall be illuminated from within the sign or from above the sign with fully shielded fixtures that minimize glare, except:

(1) When illumination of the roadway sign from within or above is not possible;

(2) That commercial and advertising roadway signage, including billboards, installed or replaced after the effective date of this act shall be illuminated from within the sign or if the signage is illuminated with external fixtures, then:

(A) Light from the fixture must be directed so a majority of the light falls upon the advertisement surface;

(B) The lamp is not visible from the roadway; and

(C) The fixture does not create glare, light trespass, or excessive amounts of light pollution.

(c)(1) An electric utility shall not operate, maintain, install, or cause to be installed a fixture for new or replacement residential or commercial security lighting unless the following conditions are met:

(A) The fixture is a fully shielded or partially shielded fixture when the rated output of the fixture is greater than one thousand eight hundred lumens (1,800 lm); and

(B) The fixture is designed to maximize energy conservation and to minimize light pollution, glare, and light trespass.

(2) If a property owner purchases a fixture that does not conform to the requirements of subdivision (d)(1) of this section from a third party, the electric utility, at the electric utility's discretion, may install, operate, and service the fixture.

(d)(1) The Arkansas Public Service Commission shall, after taking into account all costs, including long term costs, associated with the operation

and maintenance of a given fixture, ensure that the rate schedule for public, residential, and commercial security and street lighting published by an electric utility for fixtures that are better shielded, use lower wattage, and require less maintenance, are properly reflective of the long-term cost savings of using the fixtures.

(2) Each electric utility shall submit a review of its outdoor lighting fee schedule to the Arkansas Public Service Commission at least one (1) time every three (3) years during the first ten-year period after the effective date of this act.

(e) It is unlawful for any person or entity to commit excessive or unreasonable light trespass unless permission is granted by the property owner upon whom the light trespass is occurring.

(f) A new mercury vapor shall not be installed in the state by a government agency, public entity, or utility.

(g) An outdoor recreational facility shall not be illuminated after 11:00 p.m. if it is not in use, except for necessary security and safety lighting.

(h) The Arkansas Department of Environmental Quality shall promulgate regulations prohibiting any person or entity from knowingly placing or disposing of the bulb or tube portion of an electric lighting device containing hazardous levels of mercury in a landfill after January 1, 2008, if:

(1) The electric lighting device contains more than two-tenths milligram per liter (0.2 mg/l) of leachable mercury as measured by the Toxicity Characteristic Leaching Procedure as set out in EPA test Method 1311; and

(2) Adequate facilities exist for the public to properly dispose of the electric lighting device described in subdivision (i)(1) of this section.

(i) Any entity that installs new or replacement street or outdoor lighting on behalf of an agency, public corporation, county, or municipal subdivision of this state or that will become the responsibility of an agency, public corporation, county, or municipal subdivision of this state shall comply with subsection (a) of this section.

(j) Unless preempted by federal law or a waiver is granted by the Arkansas Aviation and Aerospace Commission to address safety concerns, only

red lights shall be used during the nighttime hours on elevated objects for aircraft avoidance lights on structures built after the effective date of this act.

8-14-105. Penalties Exemptions.

~~Violations of this chapter are punishable by:~~

~~(1) A warning for a first offense; and~~

~~(2) A fine of twenty five dollars (\$25.00) minus the replacement cost for each offending outdoor lighting fixture for a second or subsequent offense or for an offense that continues for thirty (30) calendar days from the date of the warning.~~

(a) Section 8-14-104 does not apply if:

(1) A federal law, rule, or regulation preempts § 8-14-104;

(2) Fire, police, rescue, correctional, or medical personnel need outdoor lighting for temporary emergencies not to exceed thirty (30) days in duration unless a waiver is granted by the Director of the Arkansas State Highway and Transportation Department;

(3) The outdoor lighting fixture is necessary for worker safety and is used on a temporary basis for nighttime work, including without limitation work performed on:

(A) Projects or improvements relating to the construction, reconstruction, improvement, or maintenance of a street, highway, building, structure, or facility; and

(B) Farms, ranches, dairies, and feedlots, and in industrial, drilling, mining, or oil and gas facilities;

(4) The lighting is part of a navigational lighting system for an airport or on a navigable waterway or provides other lighting necessary for aircraft or watercraft safety;

(5)(A) In a situation in which there are special lighting requirements, such as sports facilities, or historic decorative considerations, monuments, or the lighting of the United States flag under the Federal Flag Code, 4 U.S.C. §§ 4-10.

(B) However, lighting exempted under subdivision (5)(A) of this section shall be selected and installed to shield the lamp or lamps from direct view to the greatest extent possible and to minimize upward lighting and light trespass;

(6)(A) The lighting is for a municipality, a public or private state correction, detention, mental health facility, kindergarten through grade twelve (K-12) school, college, or university.

(B) For lighting exempted under subdivision (6)(A) of this section, § 8-14-104 shall serve only as a guideline and shall not be binding;

(7)(A) If it has been determined that a reasonable safety, security or excessive cost, or structural modification interest exists regarding becoming compliant with this chapter, the agency director, an elected official, or a body responsible for the fixture may waive the provisions of subdivision (5) of this section if, after a request for a waiver has been made and reviewed, the agency director or an elected official with jurisdiction or his or her designee determines that a waiver is necessary for the lighting application.

(B) The ruling may be appealed by a citizen of the state to the agency director, an elected official, or a body responsible for the fixture; and

(8)(A) The outdoor lighting fixture existed and was legally installed before the effective date of this act.

(B) However, when existing lighting fixtures become unrepairable, a replacement is subject to § 8-14-104.

(b) Upon petition to the Arkansas Pollution Control and Ecology Commission, in the manner and method established by the commission, the commission may waive any provision of this chapter on a case by case basis provided consideration has been given to reduce light pollution, save taxpayer dollars, and to protect the nighttime environment.

8-14-106. Enforcement.

~~This chapter may be enforced by a town, city, or county of this state by seeking injunctive relief in a court of competent jurisdiction.~~

This chapter shall be enforced by:

(1) The governing body of a political subdivision of the state within its jurisdiction;

(2) Any local or state code enforcement agency within the governing body's jurisdiction;

(3) The Arkansas State Highway and Transportation Department over highways, streets, and right-of-way lighting and all signage for and

along streets and highways; and

(4)(A) The Arkansas Department of Environmental Quality within its jurisdiction.

(B) If appropriate, the Arkansas Department of Environmental Quality may refer any cases to a local or state code enforcement agency or to a local governing body.

8-14-107. Provisions supplemental Violations.

~~The provisions of this chapter are cumulative and supplemental and shall not apply within a town, city, or county of this state that by ordinance has adopted provisions restricting light pollution that are equal to or more stringent than the provisions of this chapter.~~

(a) A person or entity that violates this chapter is subject to:

(1) For a first offense, a warning;

(2) For a second offense or an offense that continues for thirty (30) days after the date of the warning, a fine of twenty-five dollars (\$25.00) minus the replacement cost for each offending fixture assessed; and

(3) For an offense continuing for more than sixty (60) days after the date of the warning, a fine of twenty-five dollars (\$25.00) for each offending fixture for each calendar month the violation continues.

(b) Money raised by fines assessed under subsection (a) of this section shall be deposited into the general fund of the agency assessing the fine to offset the cost of enforcement.

8-14-108. Chapter cumulative and supplemental.

This chapter is cumulative and supplemental and shall not apply within a county or municipality that, by ordinance or resolution, has adopted provisions restricting light pollution that are equal to or more stringent than the provisions of this chapter.

SECTION 3. DO NOT CODIFY. EFFECTIVE DATE. This act becomes effective on October 1, 2013.

/s/S. Meeks