

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

State of Arkansas
93rd General Assembly
Regular Session, 2021

As Engrossed: H3/9/21
A Bill

HOUSE BILL 1584

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

TO CREATE 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) Street lighting that is used excessively and inefficiently is not a cost-effective use of taxpayer money;

(2)(A) Light pollution generated by street lighting systems 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, while disability glare poses safety risks, especially for the elderly.

(B) The findings set out in 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 shielded lighting, and in 2016 the American Medical Association advocated avoiding outdoor lighting with high levels of blue light; and

(3) It is in the public interest to set standards for 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 the state's citizens and wildlife.

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

CHAPTER 14

~~SHIELDED OUTDOOR LIGHTING ACT~~ ARKANSAS NIGHTTIME ENVIRONMENT PROTECTION ACT

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~~ regulate lighting systems to promote safety, conserve energy, save tax dollars, and preserve the state's natural nighttime environment.

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) "Excessive cost" means:

(A) The cost to meet a requirement under this chapter is excessive when the present value of purchasing, installing, maintaining, and powering a lighting system over its anticipated life expectancy is at least one hundred ten percent (110%) more expensive than a nonconforming lighting system; or

(B) In the case of a tariff on a lighting system, the tariff for the lighting system for a conforming lighting system is greater

than the tariff for a nonconforming lighting system;

(2) "Governing body" means an agency director for a state level entity and the legislative body for a county or municipality;

(3) "Fixture" means a complete lighting unit, including without limitation a light source together with the parts designed to distribute the light, to position and protect the light source, and to connect the light source to the power supply;

(4) "Full cutoff" means a fixture does not allow more than two percent (2%) light emissions, either directly from a light source 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) "Illuminance" means the level of light measured on an intercepting surface;

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

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

(8) "Lighting system" means a group of adjoining lighting fixtures that are substantially identical and are:

(A) On the same street; or

(B) On the same property; and

(9) "Permanent outdoor fixture" means a fixture or system of fixtures that is outdoors and intended to be used or is used for ninety (90) days or longer.

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

~~(a)(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 does 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 Division of Environmental Quality shall promulgate rules 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 if:~~

~~(A) 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 United States Environmental Protection Agency Test Method 1311; and~~

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

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

~~(B) 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) A state agency, public corporation, county, municipality, or electric utility shall not install, or cause to be installed, a new or replacement lighting system unless the following conditions are met:

(1) The fixture is a full cutoff fixture when the initial rated lumens of the lighting fixture are greater than one thousand eight hundred lumens (1,800 lm);

(2) The illuminance of a surface does not exceed what is adequate for that purpose under guidelines recommended for that purpose by the Illuminating Engineering Society, as the guidelines existed on January 1, 2021, or the minimum illuminance recommendation for that purpose by the United States Department of Transportation, as the minimum illuminance recommendation existed on January 1, 2021;

(3) Consideration has been given to minimizing glare, light pollution, and light trespass and to reducing energy use; and

(4) The color temperature is four thousand kelvin (4,000 K) or less for major highways and thoroughfares and three thousand kelvin (3,000 K) or less for all other areas unless a recognized standard or practice requires otherwise.

(b)(1) An electric utility shall not install a permanent outdoor fixture for new or replacement residential security or area lighting when the initial lumen rating of the permanent outdoor fixture exceeds one thousand eight hundred lumens (1,800 lm) unless the permanent outdoor fixture is a full cutoff fixture and the color temperature is three thousand kelvin (3,000 K) or less for residential lighting.

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

(c) An entity that installs new or replacement lighting system on behalf of or that will become the responsibility of a state agency, public corporation, county, or municipality shall comply with subsection (a) of this section.

~~8-14-105. Penalties.~~

~~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.~~

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; and
- (2) A local code enforcement agency within the jurisdiction of the governing body of a political subdivision of the state.

~~8-14-107. Provisions supplemental.~~

~~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.~~

8-14-108. Exemptions.

Section 8-14-104 does not apply if:

- (1) A federal law, rule, or regulation preempts § 8-14-104;
- (2)(A) There are special lighting requirements, including

without limitation:

(i) At sports facilities that comport with recognized lighting practice for such sports facilities as established by the Illumination Engineering Society;

(ii) For historic decorative considerations;

(iii) At monuments; and

(iv) For decorative lighting on bridges over navigable waterways.

(B) However, lighting exempted under subdivision (2)(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;

(3) The lighting is for a public or private state correction facility, a detention facility, or a mental health facility;

(4) A single permanent outdoor street lighting fixture is part of a lighting system and bringing the single permanent outdoor street lighting fixture into compliance would:

(A) Create a substantive change to the appearance of the single permanent outdoor street lighting fixture compared to the other fixtures in the lighting system;

(B) Create a disruption in the illuminance levels of the lighting system; or

(C) Require cost-prohibitive reengineering of the lighting system; or

(5)(A) The governing body determines through an ordinance that a compliant lighting system could not achieve the lighting conditions needed to meet safety concerns without incurring excessive cost.

(B) The ordinance shall be in effect only for the current instance of the project and include:

(i) The specific lighting system and its location;

and

(ii) A cost or safety justification for the need.

/s/S. Meeks