



## Text File

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**Bill No:** 2021-1733, **Version:** 1

**Committee:** Committee on Public Works

**Status:** Passed Finally

Ordinance amending and supplementing the Pittsburgh Code of Ordinances, Title Four: Public Places and Properties, Articles I: Public Right-of-Way, XI: Parks and Playground and XIV: Public Buildings by adding language to require that new streetlights and lighting in newly constructed and renovated City-owned facilities and parks comply with Dark Sky Lighting principles.

WHEREAS, as part of the Climate Action Plan 3.0, the City of Pittsburgh has committed to increase energy efficiency and improving building operations; and,

WHEREAS, Dark Sky Lighting Principles decrease energy usage, reduce light pollution and glare that can be distracting and unsightly, assist in protecting wildlife habitats, improve public health outcomes, and eliminate waste; and,

WHEREAS, rather than installing less lighting, Dark Sky Lighting Principles utilize technology, lower color temperature, and shielding to reduce wasteful light pollution and dangerous glare; and,

WHEREAS, current technology enables normal lighting functions for safety and comfort while still maintaining compliance with Dark Sky Lighting Principles; and,

WHEREAS, communities of color experience over-lighting and light pollution, which can negatively impact residents' mental and physical health, at a disproportionate rate; and,

WHEREAS, government buildings and park spaces should serve as a model for other structures; and,

WHEREAS, the City is currently in the process of retrofitting existing high-pressure sodium streetlights to LED with Dark Sky compliant fixtures and is committing to improving energy efficiency in lighting, eliminating light pollution, reducing glare and light pollution, and advancing equity through this process; and,

WHEREAS, as part of the introduction of this legislation, the Pittsburgh Zoo and PPG Aquarium, the National Aviary, and Phipps Conservatory and Botanical Gardens have committed, wherever possible, to install Dark Sky compliant lighting in all future capital projects within their own facilities; and,

WHEREAS, the City encourages residents, business owners, and others to join City government in transitioning to Dark Skies Lighting, and the City's Sustainability and Resilience Division will be making available a resource guide for residents and others who wish to add Dark Sky compliant lighting to their homes and businesses.

**The Council of the City of Pittsburgh hereby enacts as follows:**

**Section 1.** The Pittsburgh City Code is hereby amended and supplemented at Title Four: Public Places and Properties, Article I: Public Right-of-Way by adding a new Chapter 424: Dark Sky Lighting Principles in Streetlights as follows:

**Chapter 424: Dark Sky Lighting Principles in Streetlights**

**§424.01- Purpose**

The City of Pittsburgh is committed to increasing energy efficiency in City facilities, eliminating waste, improving habitats for plants and animals, and reducing glare and light pollution that can distract motorists, pedestrians, and cyclists. As such, the City is committed to adhering to Dark Sky Lighting Principles for its own newly installed or retrofitted streetlights

**§424.02- Definitions**

(a) *Dark Sky Lighting Principles* shall mean the use of advanced lighting technologies, including, but not limited to LEDs, shielding, and a limit on color temperature in an effort to reduce light pollution and glare and eliminate waste. All applicable lighting shall utilize LED and/or other approved advanced lighting technologies, including on-off and dimming controls, where possible, shall follow the current lighting and luminaire recommendations of the International Dark-Sky Association, and shall use best available technologies.

**§424.03- Dark Sky Lighting Principles**

- (a) For all projects involving the replacement or installation of more than 10 streetlight fixtures, such lights shall adhere to Dark Sky Lighting Principles as defined in §424.02a herein.
- (b) The lighting shall achieve the reduction requirements listed in the International Dark Sky Association Model Lighting Ordinance and/or use best available technologies and practices to comply with Dark Sky Lighting Principles.
- (c) All lighting shall utilize appropriate color temperature not to exceed 3000 Kelvins with a preference for 2700 Kelvins where possible, and include full cutoff shielding such that no light is emitted above a horizontal plane through the fixture.
- (d) The Department of City Planning, Division of Sustainability and Resilience shall provide technical guidance and assistance with compliance to this Section.

**§424.04- Exemptions**

The City shall comply with Section §424.04 fully unless one or more of the following exemptions applies to the project and the reasons for the exemption are clearly documented in the plan as submitted to the Chief Operating Officer or their designee:

- (a) Where replacement occurs in response to an urgent life-safety matter that requires initiating immediate action as determined by the Director of the Department of Mobility and Infrastructure
- (b) In a life-safety, emergency situation, such as a natural disaster, where the Director of the Department of Mobility and Infrastructure or their designee determines that compliance with this Section would impact the City's ability to respond to the emergency in a timely and safe manner.

**Section 2.** The Pittsburgh City Code is hereby amended and supplemented at Title Four: Public Places and Properties, Article XI: Parks and Playgrounds by adding a new Chapter 472: Dark Sky Lighting Principles in Parks and Playgrounds as follows:

**Chapter 472: Dark Sky Lighting Principles in Parks and Playgrounds**

**§472.01- Purpose**

The City of Pittsburgh is committed to increasing energy efficiency in City facilities, eliminating waste, improving habitats for plants and animals, and reducing glare and light pollution that can distract motorists, pedestrians, and cyclists. As such, the City is committed to adhering to Dark Sky Lighting Principles for its own newly constructed and renovated park spaces and playgrounds.

**§472.02- Definitions**

(a) *Dark Sky Lighting Principles* shall mean the use of advanced lighting technologies, including, but not limited to LEDs, shielding, and a limit on color temperature in an effort to reduce light pollution and glare and eliminate waste. All applicable lighting shall utilize LED and/or other approved advanced lighting technologies, including on-off and dimming controls, where possible, shall follow the current lighting and luminaire recommendations of the International Dark-Sky Association, and shall use best available technologies.

(b) *Major Renovations* of park spaces shall mean any instance in which all of the lighting fixtures in a park space are replaced.

(c) *Non-Habitable Structures* shall mean picnic pavilions, park shelters, dugouts, small utility structures, and other similar facilities

**§472.03- Dark Sky Lighting Principles**

(a) For projects involving the construction of a new park or playground or the Major Renovation of an existing park or playground, the Director of the Department of Public Works or their designee shall submit to the Chief Operating Officer or their designee a plan that describes in detail how the project complies with Dark Sky Lighting Principles as defined in §472.02a herein.

(b) The plan must ensure that the lighting will achieve the reduction requirements listed in the International Dark Sky Association Model Lighting Ordinance and/or use best available technologies and practices to comply with Dark Sky Lighting Principles.

(c) All lighting shall utilize appropriate color temperature not to exceed 3000 Kelvins with a preference for 2700 Kelvins where possible.

(d) Non-Habitable Structures renovated or constructed as part of an applicable project shall comply with Dark Sky Lighting Principles as determined by the Director of the Department of Public Works or their designee.

(e) The Department of City Planning, Division of Sustainability and Resilience shall provide technical guidance and assistance with compliance to this Section.

**§472.04- Exemptions**

The City shall comply with Section §472.03 fully unless one or more of the following exemptions applies to the project and the reasons for the exemption are clearly documented in the plan as submitted to the Chief Operating Officer or their designee:

(a) Where a renovation occurs in response to an urgent life-safety matter that requires initiating immediate action within three (3) months or less with a goal of returning the park space to its normal operating state.

(b) In a life-safety, emergency situation, such as a natural disaster, where the Director of the Department of Public Works or their designee determines that compliance with this Section would impact the City's ability to respond to the emergency in a timely and safe manner.

(c) Where a Major Renovation is determined by the Director of the Department of Public Works to be consistent with the purpose of this Chapter, but where full compliance would not be possible or significantly feasible.

**Section 3.** The Pittsburgh City Code is hereby amended and supplemented at Title Four: Public Places and Properties, Article XIV: Public Buildings by adding a new Chapter 489: Dark Sky Lighting Principles in City-Owned Buildings as follows:

## Chapter 489: Dark Sky Lighting Principles in City-Owned Buildings

### §489.01- Purpose

The City of Pittsburgh is committed to increasing energy efficiency in City facilities, eliminating waste, improving habitats for plants and animals, and reducing glare and light pollution that can distract motorists, pedestrians, and cyclists. As such, the City is committed to adhering to Dark Sky Lighting Principles for its own newly constructed and renovated City-owned buildings.

### §489.02- Definitions

(a) *Dark Sky Lighting Principles* shall mean the use of advanced lighting technologies, including, but not limited to LEDs, shielding, and a limit on color temperature in an effort to reduce light pollution and glare and eliminate waste. All applicable lighting shall utilize LED and/or other approved advanced lighting technologies, including on-off and dimming controls, where possible, shall follow the current lighting and luminaire recommendations of the International Dark-Sky Association, and shall use best available technologies.

(b) *Major Renovations* shall mean any facility project intended to physically modify an existing building in a substantial way, including, but not limited to life safety upgrades, aesthetic upgrades, asbestos abatement, structural upgrades, major equipment replacement, or interior layout changes. In cases where a determination is needed regarding whether a facility project is a Major Renovation, the Zoning Administrator, the Director of City Planning, and the Director of the Department of Permits, Licenses, and Inspections together shall make a determination regarding whether a renovation project is a substantial improvement, taking into account a written recommendation from the Director of the Department of Public Works, whether the construction cost is fifty percent or more of the replacement value of the structure, and any other factors deemed relevant to the determination.

### §489.03- Dark Sky Lighting Principles

(a) For projects involving the construction of a new City-owned building or the Major Renovation of an existing City-owned building, the Director of the Department of Public Works or their designee shall submit to the Chief Operating Officer or their designee a plan that describes in detail how the project complies with Dark Sky Lighting Principles as defined in §489.02a herein.

(b) The plan must consider the ability of building users to:

(1) Minimize the use of outdoor lighting for the building and site to only that needed for comfort and safety as determined by the Director of the Department of Public Works or their designee. For buildings, only light at entrances and exits. Low-intensity façade lighting is permitted so long as no lighting spills beyond the façade being lit.

(2) Turn off all site lighting between 12:00 midnight and 6:00 a.m., except when determined by the Director of the Department of Public Works and/or the Director of the Department of Public Safety.

(3) Minimize light trespass from the interior of the building or structure by lowering window shades after sunset and/or turning off lighting when not in use.

(c) All lighting shall utilize appropriate color temperature not to exceed 3000 Kelvins with a preference for 2700 Kelvins where possible.

(d) Non-Habitable Structures renovated or constructed as part of an applicable project shall comply with Dark Sky Lighting Principles as determined by the Director of the Department of Public Works or their designee.

(e) The Department of City Planning, Division of Sustainability and Resilience shall provide technical guidance and assistance with compliance to this Section.

### §489.04- Exemptions

The City shall comply with Section §489.04 fully unless one or more of the following exemptions applies to the

project and the reasons for the exemption are clearly documented in the plan as submitted to the Chief Operating Officer or their designee:

- (a) Where a renovation occurs in response to an urgent life-safety matter that requires initiating immediate action within three (3) months or less with a goal of returning the park space to its normal operating state.
- (b) In a life-safety, emergency situation, such as a natural disaster, where the Director of the Department of Public Works or their designee determines that compliance with this Section would impact the City's ability to respond to the emergency in a timely and safe manner.
- (c) Where a Major Renovation is determined by the Director of the Department of Public Works to be consistent with the purpose of this Chapter, but where full compliance would not be possible or significantly feasible.