

1. SHORT TITLE

This By-Law may be cited as the "Outdoor Illumination and Light Pollution By-Law."

2. PURPOSE

Argyle Council seeks to enact a By-Law respecting the regulation of outdoor illumination to address the following potential nuisances:

- Reduce light pollution, light trespass, skyglow and glare to protect the nighttime environment.
- Preserve the Municipality's Dark Sky Certification and Starlight Designation Area.
- Minimize nuisances to people and harmful effects on wildlife caused by excessive or poorly designed outdoor lighting.
- Promote the use of energy-efficient lighting that is shielded, directing light downward that supports safety and visibility while also protecting the night sky.

3. MUNICIPAL GOVERNMENT ACT ENABLING LEGISLATION

Section 172 of the *Municipal Government Act* provides municipalities with the authority to make By-Laws for municipal purposes respecting 172(1)(d) – "nuisances, activities and things that, in the opinion of the Council, may be or may cause nuisances, including noise, weeds, burning, odours, fumes and vibrations…"

4. **DEFINITIONS**

For the purposes of this By-Law, terms used shall be defined as follows:

Argyle -The Municipality of the District of Argyle

Building Accent Lighting – Lighting used to decorate or highlight buildings, landscapes, or structures, not related to safety or essential functions.

Dimmed – Reduced in brightness, typically to 50% of less of full output.

Direct Light – Light emitted directly from a lamp or fixture.

Floodlight - Any light fixture or lamp that incorporates a reflector or a refractor to produce a broad beam of light that illuminates a large area. Symmetric floodlights often pollute the night sky, whereas asymmetrical floodlights are adjustable and increase lighting levels while minimizing night sky pollution.

Fully shielded fixture - An outdoor light fixture designed to direct all light only downward, projecting light below the horizontal plane. A fully shielded fixture is also referred to as a a full cut-off (FCO) light.

Footcandle – A measure of illuminance equal to one lumen per square foot.

Glare - Harsh, uncomfortable brightness that impairs vision.



Lamp - The component of a luminaire that directly produces the light.

Legacy Luminaires – Existing non-compliant fixtures installed before this By-Law.

Light Fixture - Part of a luminaire that holds the lamp.

Light Meter – A calibrated device for measuring illuminance in footcandles or lux

Light Pollution – Excessive or misdirected artificial light that brightens the night sky, disrupts ecosystems, or causes nuisances. Light that shines where it is not needed or wanted.

Light Trespass - Light that spills beyond the property where it is installed onto neighboring properties or public spaces.

Low Wattage Lights - Lights consuming 3 to 15 watts of power, excluding laser lights.

Lumen – A unit for measuring the amount of light something produces. Not to be confused with a watt, which is the standard measure of electrical power.

Luminaire - A complete lighting unit, including the lamp and fixture.

Lux – A unit of illuminance equal to one lumen per square meter.

Luminous Advertising Sign - An illuminated sign, or neon sign often lit with vibrant colors or captivating graphics to attract attention to it.

Motion Sensor – A device that activates lighting only when motion is detected. The lighting is deactivated after a period. (i.e. minutes of inactivity).

Outdoor Light Fixtures – Any artificial light source installed or used outdoors.

Searchlight - A powerful outdoor electric light with a concentrated beam that can be turned in the required direction.

Spotlight - Any light fixture or lamp that incorporates a reflector or a refractor with a concentrated beam.

Starlight Designation Area (SDA) – The UNESCO backed Starlight Tourist Destination and Reserve Certified area within and near Argyle, known as the Acadian skies and Mi'kmaq lands.

Up light – Light emitted above the horizontal plane, contributing to light pollution.

Warm Toned Light – Amber- or yellow-colored bulbs (under 2,700 Kelvin)

5. REGULATIONS FOR ALL OUTDOOR LIGHTING

- 5.1. All external luminaires, whether for safety or for business accent lighting, shall be fully shielded fixtures to minimize up light, glare and light trespass, examples of compliant fixtures are provided in Appendix A.
- 5.2. No outdoor recreational facility, whether public or private, shall be illuminated after sundown except when the facility is in use.
- 5.3. All external luminaries shall be warm toned. Proper luminaries include Amber LED, LED with warm-toned bulbs less than 2,700 Kelvin or high-pressure sodium luminaries. Blue LED luminaries are prohibited. For further guidance please see Appendix B.
- 5.4. Where floodlights are necessary for proper lighting, the person shall use asymmetrical floodlights to reduce night sky pollution.



- 5.5. The light level from any luminaire shall not exceed 5 Lux (.5 footcandles) when measured at the property boundary. This measurement shall be taken at least one hour after sunset or one hour before sunrise, using a calibrated light meter.
- 5.6. A single luminaire emitting more than 1,500 lumens must be fully shielded and shall comply with the boundary limit as specified in 5.5.
- 5.7. All commercial or institutional outdoor lighting not required for safety or security shall be extinguished or reduced to 50% output no later than 11 pm or one hour after business is closed, whichever is latest.
- 5.8. All outdoor luminaries are encouraged to be controlled by motion sensors, timers or other means to prevent unnecessary continuous lighting.

6. PROHIBITIONS

- 6.1. The use of laser source light, searchlights, spotlights or any similar high intensity light for outdoor advertising or entertainment purposes. The use of these luminaries is only permitted when used in emergencies by emergency service providers.
- 6.2. Electrical illumination of outdoor advertising off-site signs along roadways after business hours. Illumination shall be turned off one hour before sunset and permitted one hour before sunrise.
- 6.3. Outdoor illuminated signs of any sort within a National Wildlife Area, Provincial Wilderness Area, Provincial Nature Reserve, Provincial Game Sanctuary, land owned by the Nova Scotia Nature Trust, the Nature Conservancy of Canada or other conservation-related organization or within the Starlight Designation Area are prohibited.

7. EXEMPTIONS

- 7.1. In all cases of exemptions, organizations shall be encouraged to modify their lighting practices to reduce light pollution in the interest of meeting the requirements of this By-law.
- 7.2. Any related provincially or federally controlled buildings, structures, or waterways, including but not limited to, Harbour authorities, Canadian Coast Guard, Transport Canada and Innovation.
- 7.3. Navigation and general life safety lighting systems required at towers, airports, or other transportation installations.
- 7.4. The use of low wattage lights for temporary decoration purposes such as Christmas lighting and temporary property ornamentation.
- 7.5. Temporary lighting for theatrical, emergency purposes or construction sites.
- 7.6. In addition to other exemptions listed in this section, an outdoor luminaire not meeting these provisions shall still be allowed if the fixture is extinguished by an automatic shutoff device between sundown and sunrise.

8. NON-CONFORMING LEGACY LUMINAIRES

8.1. All luminaires and luminous advertising signs in place prior to the date of the passing of this By-Law shall be temporarily allowed. Any luminaire that replaces, modifies or moves a legacy luminaire shall be required to meet the provisions of this By-Law.



BY-LAW NUMBER 43 OUTDOOR ILLUMINATION AND LIGHT POLLUTION

- 8.2. Existing luminaires which are determined by the By-Law Enforcement Officer to direct light toward streets or parking lots and cause glare to motorists or cyclists are deemed to be a public safety concern. Legacy provisions shall not apply to those luminaries and must therefore comply with this By-law.
- 8.3. If proposed or existing lighting serves a security purpose, alternative security methods, such as infrared devices, are encouraged.
- 8.4. All non-conforming legacy luminaires shall be made compliant to the regulations of this By-Law by January 1, 2027.

9. INSPECTIONS OF PREMISES

- 9.1. The By-Law Enforcement Officer may enter on land at any reasonable time for the purpose of carrying out an inspection to determine whether the provisions of this By-Law are in compliance and to enforce and carry out the provisions of this By-Law or any direction or order issued pursuant to the *Municipal Government Act*, Section 172(1)(d), Section 266, Section 267 or this By-Law.
- 9.2. For the purposes of an inspection under 9.1:
 - a. The Officer shall request the production of information or supporting documents for inspection, to determine By-Law compliance.
 - b. Make examinations or take tests, samples, or photographs necessary for the purposes of the inspection.
 - c. Limit inspections to exterior luminaries.
 - d. Make available copies of any inspection to the person at their request, redacted for privacy protection where necessary.
- 9.3. No person shall hinder or obstruct, or attempt to hinder or obstruct, the By-Law Enforcement Officer who are exercising a power or performing a duty under this By-Law. Refusal, or obstruction of an inspection shall result in a \$500 penalty under this bylaw.

10. VIOLATIONS AND PENALTIES

- 10.1. The initial purpose of the By-Law is educational, not punitive. There are, however, certain practices that will promote compliance with lighting regulations. Education shall play a key role in promoting compliance.
- 10.2. Proactive enforcement procedures will include providing a copy of this By-Law and other educational tools to every applicant at the time they seek to obtain a development permit.
- 10.3. The following penalties shall apply to all non-compliant landowners:
 - a. A written warning outlining the non-compliant illuminated sign or luminaire(s) as well as methods to bring the luminaire(s) into compliance. The warning shall be deemed served by sending the order in registered or first-class mail, by posting the warning on the property, or by personal service. This warning shall provide 30 days to the person to provide a plan of action or rectify the matter.



BY-LAW NUMBER 43 OUTDOOR ILLUMINATION AND LIGHT POLLUTION

- b. If the landowner has not provided a plan of action nor commenced to bring the offending luminaire(s) into compliance with this By-Law within 30 days of the written warning, the person is considered in first offense of this By-Law, and shall result in a fine of no less than three hundred dollars (\$300) and no more than five hundred dollars (\$500) per offense. The fine shall be applied individually to each non-compliant property. The amount of the fine shall be influenced by the severity of the offense, at the sole judgement of the By-Law Enforcement Officer.
- c. After an additional 45 days, if the offending luminaire(s) are still non-compliant, the Bylaw Enforcement Officer shall fine for a second offence of no less than one thousand dollars (\$1,000) and not more than two thousand dollars (\$2,000). Ther person shall then be mandated to comply to this By-Law at an expense incurred by the owner of the property.
- d. The decision of the By-Law Enforcement Officer may be appealed directly to Council within 30 days of a decision made by the Officer. The appeal shall be made in writing and address the specific issue(s) that the person requires reconsideration.

11. SEVERABILITY

11.1. Should any part, section, subsection, or portion of this By-Law be repealed or declared by a Court of competent jurisdiction to be illegal, the same shall not affect the validity of the By-Law as a Whole or in part thereof, except for that which was declared to be invalid.

12. PROVINCIAL AND FEDERAL REGULATIONS

12.1. The provisions and regulations of this By-Law shall not supersede Provincial or Federal regulations. In case of conflict the Federal and Provincial regulations shall apply in that order.



Chief Administrative Officer's Annotation for Official By-Law Book	
Date of First Reading	
Date of Advertisement of Notice of Intent to Consider	
Date of Second Reading	
Date of Advertisement of Passage of By-Law	
Date of Mailing to Minister a Certified Copy of By-Law	
Effective Date of By-Law	
I certify that this <i>Outdoor Illumination and Light Pollution By-Law #43</i> was ac published as indicated above.	dopted by Council and
Warden	
Chief Administrative Officer Date	



APPENDIX A NON-POLLUTING LUMINAIRES





APPENDIX A CONT... (PAGE 2)

POLLUTING LUMINAIRES





APPENDIX B

Most lamps on the market today can be categorized into three groups:

- 1. LED
- 2. High intensity discharge (HID)
- 3. Fluorescent and incandescent.

All luminaries, regardless of quality, shall be fully shielded (FCO). The following sources of illumination have been rated by preferential order for outdoor use:

1 – Amber or warm-toned LED less than 2,700 Kelvin Recommended

2 - High Pressure Sodium (HPS) Acceptable

Florescent and incandescent are not recommended lighting options in this By-law and are for very low illumination only.