



Report to Council

Department: Office of the CAO

Division: Legal and Legislative Services

Date: March 3, 2025

Prepared by: Joe Malandruccolo, Director, Legal & Legislative Services

Report Number: Legal and Legislative Services-2025-01

Subject: Greenhouse Light Abatement By-Law (2025)

Number of Pages: 50 pages, including attachments

Recommendation(s)

That Legal & Legislative Services-2025-01 entitled Greenhouse Light Abatement By-Law (2025) prepared by Joe Malandruccolo, Director, Legal & Legislative Services dated March 3, 2025, be received, and

That By-Law No. 2211 being a by-law to require the abatement of interior greenhouse light emissions be read a first and second time and provisionally adopted on March 3, 2025.

Purpose

The purpose of this report is to recommend that By-Law No. 2211 regulating public nuisances related to interior greenhouse light emissions be read a first and second time and provisionally adopted.

Background and Discussion

On December 19, 2022, at its Regular Meeting, Council provisionally passed the proposed Greenhouse Light Abatement By-Law 2211 (see Administration Report dated December 19, 2022, and attached as Appendix A to this report). Following the provisional adoption of By-Law 2211, Council directed Administration to revise the By-Law incorporating comments from Council and residents. This report and the proposed amendments to By-Law 2211 consider a similar By-Law passed by the Municipality of Leamington (“**Leamington**”) in accordance with minutes of settlement (the “**Minutes of Settlement**”) arising from multiple challenges to such similar By-Law at the Normal Farm Practices Protection Board.

By-Law Amendments

A revised version of the By-Law is attached to this report. A tracked changes version of the By-Law, showing the suggested revisions to the original By-Law is attached to this Report as Appendix B. The rationale for the suggested revisions to By-Law 2211 follows:

1. Definitions

Revisions are suggested to the definitions of “Barrier”, “Greenhouse” and “Lights.

Barrier

As previously drafted, the definition of “Barrier” could be subject to interpretation. The amendment clarifies how much light must be blocked or prevented from escaping the interior of the greenhouse and considers that, following the Minutes of Settlement, Leamington amended their By-Law to specify that 99% of light is to be blocked, as manufacturer specifications cannot ensure that barriers will be 100% “blackout”. As such, the definition of “Barrier” is revised as follows:

“Barrier” means a barrier permanently installed and maintained so as to that based upon the manufacturer’s specifications prevents or blocks ninety-nine percent (99%) of direct light emitting from the interior of a Greenhouse from escaping to the exterior of the Greenhouse onto adjoining land(s) or into the night sky, which may be permanently affixed to a wall, ceiling, or permanently affixed to a system which permits the barrier to extend or retract by mechanical or manual means.

Greenhouse

As previously drafted, the definition of “greenhouse” might have allowed for greenhouse operators to avoid the By-Law requirements by constructing multiple small greenhouses on a single property. Adding *“group of structures on a property”* to the definition clarifies that one cannot erect a number of smaller greenhouses to exempt themselves from this By-Law. While the Town’s Zoning By-Law would likely also prohibit such actions, this amendment provides further clarity.

Lights

As previously drafted, the definition of “lights” could be subject to interpretation due to a specific reference to “photometric” light. Removing the wording “*that emits photometric light*” from the definition allows for this definition to capture future technological advancements by regulating all light used for inducing plant growth regardless of the type.

2. Light Abatement Requirements in By-Law

Section 4.1 of the provisionally adopted By-Law created exceptions to full coverage requirements that the Minutes of Settlement would suggest were overly restrictive because research indicates that when ceiling light abatement curtains are 100% closed, heat and humidity cannot escape the greenhouse, which negatively effects plant growth. Venting through the ceiling is a common means to manage heat and humidity levels but it does not have to take place throughout the entire night. As a result, Section 4.1 of the By-Law was amended as follows to provide for slightly less stringent requirements during specified hours, which the Minutes of Settlement suggests are acceptable for the growers and the Town:

4.1 An Owner of a Greenhouse that utilizes Lights shall ensure that Barriers are installed at or near the ceiling of the Greenhouse and at or near the sidewalls and endwalls of the Greenhouse, and maintained in good practice, so that the Barriers cover:

a) A minimum of ninety percent (90%) of the ceiling, sidewalls, and endwalls of the Greenhouse between the hours of 5:00 p.m. and 10:00 p.m. EST;

- b) The entirety of the ceiling, sidewalls, and endwalls of the Greenhouse between the hours of 10:00 p.m. and 2:00 a.m. EST; and*
- c) A minimum of ninety percent (90%) of the ceiling, sidewalls, and endwalls of the Greenhouse between the hours of 2:00 a.m. and 8:00 a.m. EST.*

3. Alternative Compliance

Section 6 of the revised By-Law 2211 proposes a section that introduces an Alternative Compliance Plan. Each proposed Alternative Compliance Plan would be reviewed and recommended for approval by the Town's By-Law Department, in consultation with the Town's Building and Planning Departments prior to being brought forward for Council's approval.

The introduction of an Alternative Compliance Plan is in line with the Minutes of Settlement and intended to reduce the restrictiveness of By-Law 2211.

4. Future Date of Compliance

Section 6 of the revised By-Law 2211 introduces a compliance date of June 1, 2025, by which each greenhouse owner shall either be in compliance or provide:

- a) evidence that the Owner shall be in a position to install and maintain Barriers to cover the ceiling, sidewalls, and endwalls of the Greenhouse on or before December 1, 2025; or
- b) a statutory declaration in writing that the Lights in the Greenhouse shall be completely shut off and remain off between the hours of 5:00 p.m. and 8:00 a.m.

EST until at least the date on which Barriers are installed to cover the ceiling, sidewalls, and endwalls of the Greenhouse.

This provides greenhouse owners with some time to be able to arrange for and install the measures required to become compliant with By-Law 2211.

Proposal of an Overall Outdoor Illumination Control By-Law

Since the provisional passing of By-Law 2211, a resident suggested that an overall Outdoor Illumination Control By-Law be implemented by the Town.

Section 5.5 of the Town's Property Standards By-Law 936 deals with light nuisance by stating: *"Lighting fixtures and their supports shall be installed and maintained in a safe and structurally sound condition, and in good working order and in good repair and designated and/or positioned so as to not project light onto abutting properties or otherwise cause a nuisance."* Such provision seems to address overall outdoor illumination control. If Council feels that such provision needs to be revisited, it is suggested that Council direct Administration to review the Town's Property Standards By-Law 936 with this intention.

Administration suggests that By-Law 2211 remain a very specific By-Law concerned only with light emissions from greenhouse operations.

Consultation with Stakeholders & Caldwell First Nation

A request for consultation was sent in October 2022 to Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), Ontario Greenhouse Vegetable Growers (OGVG), Caldwell First Nation, Essex Region Conservation Authority, Essex County Field Naturalists Club, Point Pelee National Park, Holiday Beach Migration Observatory, and Wildlife Preservation Canada.

The only response received was OMAFRA.

OGVG did not directly provide comments, however, there were ongoing discussions with the association since the beginning of the project. OGVG indicated support for Leamington's revised By-Law.

The consultation protocol (online portal) for Caldwell First Nation was followed however no response was received.

Proposed Consultation with the Royal Astronomical Society of Canada

In response to a request from a resident, this group was not consulted as this By-Law relates specifically to greenhouse operations and is not a general light nuisance by-law.

Comments on Greenhouse Light Abatement By-Law 2211

Since the provisional passing of By-Law 2211, concerns were raised regarding the definition of "barrier", size of the greenhouse, and the gapping of the ceiling barriers. These concerns were addressed in the suggested amendments to the By-Law, as indicated above.

Comparison to By-Laws of Other Jurisdictions

Compared to the Town of Kingsville's Light Nuisance By-Law, the By-Law proposed by Administration in this report provides for more clarity to assist with specific enforcement of greenhouse light restrictions. Kingsville's By-Law is very general, speaking only to "nuisance", but does not provide for the method of abatement of light and addresses issues meant to be covered by the Town's Property Standards By-Law 936.

With the recommended amendments contained herein, the Town's proposed Greenhouse Light Abatement By-Law 2211 aligns with Leamington's By-Law for the same purpose.

Financial Impact

The passing of the proposed by-law may have a significant impact upon the resources of the Building and By-Law Enforcement Division due to the limited number of opportunities for cost recovery through user fees. Any significant impact realized in the future would require a further review from a budgetary perspective.

At this time identifying the potential enforcement costs would be purely speculative as these costs depend on the nature of the enforcement activity necessary, whether the Town would retain external legal counsel, and the number of orders in which the Town would be required to act. At present, the impact on enforcement resources is expected to be minimal due to the nominal number of greenhouses currently operating in the Town of Essex.

The prosecution of Part III charges through the *Provincial Offences Act* that must be brought before a Justice of the Peace for resolution could also result in an increase on the resources of Legal and Legislative Services, as resulting fines are set and collected by the Province.

Consultations

Town of Essex Legal and Legislative Services

Town of Essex Planning Division

Town of Essex Building and By-Law Enforcement Division

Ontario Ministry of Agriculture, Food and Rural Affairs

Link to Strategic Priorities

- ☐ Embrace asset management best practices to build, maintain, and continuously improve our municipally owned infrastructure.
- ☐ Leverage our Town's competitive advantages to promote jobs and economic investment.
- ☒ Take care of our natural environment and strengthen the sense of belonging to everyone who makes Essex "home".
- ☐ Deliver friendly customer service in an efficient, effective, and transparent manner while providing an exceptional working environment for our employees.
- ☐ Build corporate-level and community-level climate resilience through community engagement and partnership and corporate objectives.

Report Approval Details

Document Title:	Greenhouse Light Abatement By-Law 2025 - Legal and Legislative Services-2025-01.docx
Attachments:	<ul style="list-style-type: none">- Appendix A - Greenhouse Light Abatement By-Law (2022) - Legal and Legislative Services.pdf- Appendix B - By-Law No. 2211 - Greenhouse Light Abatement (Redline).pdf- By-Law No. 2211 - Greenhouse Light Abatement.pdf- By-Law No. 2211 - Set Fine Schedule.pdf
Final Approval Date:	Feb 25, 2025

This report and all of its attachments were approved and signed as outlined below:

A handwritten signature in black ink, appearing to read 'Doug Sweet', with a stylized flourish extending from the end.

Doug Sweet, Chief Administrative Officer - Feb 25, 2025 - 8:28 AM