



**CITY OF KINGSTON**  
**REPORT TO COUNCIL**

**Report No.: 03-120**

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**TO:** Bert Meunier, Chief Administrative Officer

**FROM:** Cynthia Beach, P.Eng. – Commissioner of Planning & Development Services

**PREPARED BY:** Paul MacLatchy, P.Eng. – Manager, Environment Division

**DATE OF MEETING:** 2003-05-06

**SUBJECT:** Potential Municipal Strategies for Reducing Cosmetic Pesticide Use

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**RECOMMENDATIONS TO COUNCIL:**

**WHEREAS** the protection of human health and the environment in our community is a priority;

**AND WHEREAS** there is a lack of conclusive evidence demonstrating that pesticide use does not create a potential for unwanted long-term health effects and environmental impacts;

**AND WHEREAS** the use of pesticides for cosmetic purposes is non-essential - protecting neither human or animal health nor property;

**AND WHEREAS** the House of Commons Standing Committee on Environment and Sustainable Development conducted an extensive review of the issue of cosmetic pesticide use and recommended that municipalities adopt a precautionary approach and seek to minimize or eliminate the cosmetic use of pesticides;

**AND WHEREAS** the Supreme Court of Canada has upheld a Quebec municipality's right to enact control over pesticide application on public and private properties and it is generally accepted that a similar right exists for Ontario municipalities;

**THEREFORE BE IT RESOLVED THAT** The City of Kingston shall revise, develop and implement policies and/or by-laws that will serve to minimize or eliminate the cosmetic use of chemical pesticides on public and private properties;

**AND THAT** City Council authorizes the creation of an ad-hoc Pesticides Reduction Task Force composed of interested members of Council to undertake public consultation and evaluate, develop and recommend to Committee of the Whole such policies, by-laws and strategies as appropriate to achieve the goal of cosmetic pesticide reduction on public and private lands;

**AND THAT** the project form be completed for the Pesticides By-law and an assessment of resources be provided to Council before the Task Force is formed.

**ORIGIN/PURPOSE:**

This report has been prepared by the Department of Planning and Development Services – Environment Division for the purpose of providing information and recommendations to City Council with respect to *the potential for the City of Kingston to invoke restrictive controls over the application of chemical pesticides onto public and private property for cosmetic purposes.*

This report does not address other aspects of pesticide use such as by the agricultural or forestry industries. The recommendations of this report are meant to apply to cosmetic pesticide use only and not to any agricultural or other use.

Frequently asked questions about pesticide use is provided (with thanks to the City of Ottawa and Town of Perth) in a question and answer format within Appendix A of this report.

Acknowledgement is provided to other municipalities and organizations such as The Cities of Ottawa, Toronto and Halifax, and the Town of Perth, Pesticides Reduction Kingston and the Ontario Landscape Association who have compiled information on the topic of cosmetic pesticide use and municipal issues. Much of the information provided within this report was gathered from their diligent work.

Project Priority: The Pesticides By-law has been approved by Council as a low priority on the “Go Slow” list of projects. A project form has not been approved by Senior Managers for this project. However, prior to establishing the Task Force, a project form will be completed with resources identified.

**OPTIONS/DISCUSSION:**

A significant number of reputable organizations as well as other Canadian municipalities have taken the position that the cosmetic use of chemical pesticides is non-essential and may pose an unacceptable health risk and therefore should be restricted. Kingston City Council is now considering whether this municipality should follow the lead of the town of Hudson, who in 1991, passed their landmark by-law banning cosmetic pesticide use on private and public properties.

When considering the issue of restricting the use of chemical pesticides for cosmetic purposes it is useful to structure the debate and decision-making process by asking and answering the following critical questions:

- Q1: How are pesticides currently used and regulated in the City of Kingston.*
- Q2: Are pesticides used on public lands?*
- Q3: Is a restriction of chemical pesticide use warranted from a public health or environmental protection perspective?*
- Q4: Are all pesticides potentially harmful?*
- Q5: Is a municipal restriction of pesticide use legal?*
- Q6: Would a restriction on pesticide use pose an insurmountable barrier to those intent on pursuing green lawns and vibrant gardens?*

*Q7: What are the potential options for a municipal restriction of chemical pesticide use?*

*Q8: What are the potential implications of each option?*

*Q9: What have other jurisdictions done; and what have their outcomes been?*

**Q1: How are pesticides currently used and regulated in the City of Kingston?**

*What is Used?*

Chemical pesticides are used in a great variety of products for numerous purposes. Statistics published by the Federal Pest Management Regulatory Agency indicate that the major use of pesticides is for agricultural purposes. Some other uses include:

- outdoor insect control
- indoor insect control
- wood preservatives
- anti-fouling for boats/vessels
- control of micro-organisms and algae within swimming pools and ornamental ponds
- control of micro-organisms within water used for potable purposes
- flea control on pets and other animals
- aquatic weed control in harbours
- insect repellents applied to the skin of people and animals
- cosmetic control of weeds and insects for lawn and garden care
- control of interfering plants along utility and trail corridors

One of the largest uses of pesticides in the urban environment is for cosmetic improvement of residential lawns.

*How are Products Regulated?*

Pesticides are regulated for use by the Health Canada's Pest Management Regulatory Agency (PMRA). The PMRA assesses new pesticide products and decides if and how they may be used by the Canadian public and professional pesticide applicators.

*How are Commercial Applicators Regulated?*

The Ontario Ministry of the Environment regulates who may apply pesticide products. While the general public may purchase, store and apply retail pesticide products, only applicators licensed by the Ministry of the Environment may provide a commercial pesticide application service or use higher strength, specialty or bulk products not available at the retail level. Ontario maintains and enforces regulations that govern how, when, where and by whom, pesticides may be applied. Licensed applicators are required to undergo training in the proper application, storage and disposal of pesticide products. Furthermore, licensed applicators must also adhere to a variety of regulated procedures governing where, when and how pesticides can be applied and must also post warning signs on lawns that have been treated.

Lawn care firms that apply pesticide products have begun to address growing public concern over cosmetic pesticide use by developing a proposal for self regulation based upon the principles of Integrated Pest Management (IPM).

How are “Do-It-Yourselfers” Regulated?

Do-it-yourselfers using retail pesticide products are not required to obtain any training in the application, storage or disposal of the product nor are they required to post any signage.

Pesticide Disposal

The disposal of unused or tainted pesticide products depends on the specific product, but in general chemical pesticides are classified as hazardous wastes. The improper disposal of pesticides can pose a serious risk to the public and to the environment. The Kingston Area Recycling Center’s Household Hazardous Waste Depot accepts waste pesticides from the public for proper disposal.

**Q2: Are pesticides used on public lands?**

In 1992 the former City of Kingston’s Parks Department created a policy for turf management on public lands. The policy, which remains in effect today, utilizes an integrated pest management (IPM) approach that essentially treats chemical pesticide use as a last resort for dealing with serious infestations that threaten the viability of natural assets like turf, golf course greens and gardens. The result of this policy has been that pesticides are applied to outdoor lands so infrequently now that it is no longer cost-effective for City parks staff to hold licenses to apply pesticide products.

Pesticides are applied onto municipally-owned properties for indoor control of insects, within swimming pools and for other, non-cosmetic purposes.

**Q3: Is a restriction of chemical pesticide use warranted from a public health or environmental protection perspective?**

There are literally thousands of scientific papers published documenting investigations into potential linkages between various pesticides and various unwanted health effects – with many findings both for and against the potential for health risks. It is clearly beyond the abilities of a municipality such as Kingston to provide a thorough compilation and analysis of all the toxicological data available on the subject of cosmetic pesticide use – in fact, that is one main reason why the evaluation and regulation of individual pesticide products is a Federal responsibility. When faced with concerns of potential chronic or subtle toxicities that the current system of product evaluation may not be capable of assessing, the Federal Government tasked its House of Commons Standing Committee on Environment and Sustainable Development to undertake a review of pesticide use in Canada. The committee made a large number of conclusions and recommendations. Conclusions of the committee that are particularly germane to the municipal issue are:

- *Give absolute priority to the protection of human health and the environment within any decision making process regarding the regulation of pesticide use.*
- *A precautionary approach should be embraced so that protective measures can still be adopted even in instances where a lack of scientific certainty exists.*
- *“The most effective way to protect human health and the environment is undeniably to prevent the generation of polluting substances in the first place, rather than minimizing or mitigating the risks associated with their use.”*
- *“Given what is known or suspected about the harmful effects of these products and given the purely aesthetic purposes they serve, the Committee favours a ban on the use of pesticides for cosmetic purposes. It is questionable however, whether the Canadian public would accept a country-wide ban at this time. It is therefore essential to enlist public cooperation by sensitizing people to the risks of pesticide use through an aggressive education campaign.”*

Other notable organizations who have published similar opinions advocating for the restriction of cosmetic pesticide use as a precaution against potential chronic health effects include:

- The Ontario College of Family Physicians
- Canadian Child Institute
- Canadian Cancer Society
- Toronto Board of Health

It should also be noted that our own KFL&A Health Unit issued an information release in May, 2001 urging local residents use alternatives to chemical pesticides for lawn and garden care. The release is provided as Appendix A of this report and specifically states, “There is some evidence that excess exposure to pesticides in the long term may be detrimental to younger children and pregnant women” ... “It is prudent therefore to use other effective methods of lawn and garden care, and reduce unnecessary exposure to pesticides among people who may be at risk.”

These are the opinions of respectable and reliable authorities on issues of public health and it would seem reasonable to defer to their expertise. ***Therefore it is the opinion of this report to Council that the cosmetic use of chemical pesticides is non-essential and may pose a health risk to some members of the public, and that in the absence of clear scientific evidence on the long term safety of chemical pesticides, a precautionary approach seems a reasonable course of action for City Council to adopt for private and public lands.***

**Q4: Are all pesticides potentially harmful?**

A review of information from various authoritative sources indicates that most of the concern over potential long term or chronic health effects is associated with synthetic chemical pesticides such as organochlorines, organophosphates and phenoxy herbicides. The same information indicates that other pesticide products are available and are generally accepted to be more benign from a health and environment perspective. Products generally deemed to pose less risk to health and the environment are:

- Insecticidal and herbicidal soaps
- Bt (bacillus thuringiensis)
- Nematodes
- Injected tree treatments
- Sticky media
- Borax
- Dormant and horticultural oils
- Bordeaux mixture and other sulphur compounds
- Diatomaceous earth
- Pheromone traps
- Pruning paint
- Corn gluten meal

**Q5: Is a municipal restriction of pesticide use on private property legal?**

In the precedent setting case of the Town of Hudson vs. Spraytech, the Supreme Court of Canada upheld the municipality's right to enact by-laws to protect the health and well being of its citizens. The prevalent opinion is that the Supreme Court's decision also enables Ontario municipalities to enact similar controls on cosmetic pesticide use on private property. Also, two other Ontario municipalities (towns of Cobalt and Perth) have enacted pesticide control by-laws which so far have not been legally challenged.

In response to the House of Commons Standing Committee on Environment and Sustainable Development's recommendations to phase out pesticide products used for cosmetic purposes, Health Canada has indicated that the Supreme Court has empowered Canadian municipalities to take the lead in this respect and that they should do so if so inclined.

While these opinions and situations provide a fairly strong level of comfort in support of a municipality's ability to pass a pesticide restriction by-law, a definitive interpretation can only be made through the courts in response to some legal action against an Ontario by-law – and even then, the specific wording of each by-law may have a bearing on its legality.

**Q6: Would a restriction on cosmetic pesticide use pose an insurmountable barrier to those intent on pursuing green lawns and vibrant gardens?**

There is little doubt that chemical pesticides do provide effective control of many common weeds and insects. There are however, many sources of information on alternatives to chemical pesticides for the cosmetic enhancement of lawns and gardens. As a testament to the viability of pesticide alternatives, many lawn care companies are offering "organic" or "environmentally considerate" lawn care programs with either no or reduced pesticide use.

In general, other "bans" on cosmetic pesticide use have recognized the need to allow for continued use of pesticides in the event of serious infestations which can threaten one's ability to maintain a lawn or garden.

**Q7: What are the potential options for a municipal restriction of chemical pesticide use?**

This report identifies four (4) general approaches that seem to be available to a municipality intent on reducing or eliminating cosmetic pesticide use on private lands. The four basic areas of action could be used independently but would likely be most effective if combined.

**Option 1: Lobby other levels of government to regulate cosmetic pesticide products and use.**

It is clear that the regulation of pesticide product and pesticide application are federal and provincial responsibilities respectively. These upper levels of government are also in a better position to take a consistent approach to cosmetic pesticide reduction or elimination making the “rules” clear and equivalent for all, thus eliminating the confusion caused by a patchwork of differing municipal initiatives. Provincial and federal governments also have greater ability to fund the inspection and enforcement of any such regulatory measures as well as the expertise required to deal with the scientific issues surrounding pesticide use.

The House of Commons Standing Committee on Environment and Sustainable Development recommended, in their report on pesticides that the federal Pest Management Regulatory Agency phase out the regulation of all pesticides intended for cosmetic use purposes. Since then, Health Canada (the parent ministry of the PMRA), has chosen to address the committee’s recommendation by deferring responsibility for management of cosmetic pesticide use to the municipal level based upon the findings of the Supreme Court of Canada in Hudson vs. Spraytech.

**Option 2: Provide awareness and education to the public about the potential risks associated with cosmetic pesticide use and about some of the alternatives to chemical pesticides.**

It is unreasonable to expect that any initiative to reduce or eliminate cosmetic pesticide use on private lands will be successful without a component of public education. Virtually all organizations or jurisdictions who have considered the issue of cosmetic pesticide reduction have identified this need.

Given the aspects of public health involved in the issue of cosmetic pesticide use, it would be logical to solicit the cooperation of the local health unit in developing and implementing a public awareness/education campaign for City of Kingston residents and businesses.

If the City establishes a task force, the Health Unit will be consulted regarding public consultation methods and content.

**Option 3: Create policies and by-laws that reduce pesticide use by requiring Integrated Pest Management (IPM) approaches on private lands.**

As stated above, the lawn care industry has moved toward the voluntary adoption of an Integrated Pest Management approach and creating a professional organization (IPM-PHC Council of Ontario) that provides IPM accreditation to qualified firms. The IPM approach is touted as a system of managing lawns and gardens to avoid the unnecessary or indiscriminate use of chemical pesticides. The City may wish to create a policy that requires pesticide application on private properties to be undertaken only by IPM-accredited firms.

**Option 4: Create policies and by-laws to restrict cosmetic pesticide use on public and private lands.****Public Lands**

The existing policy is valid and has resulted in very infrequent use of chemical pesticide products, however it was developed for the former City of Kingston and is not widely implemented beyond the operations of Parks and Arenas Division (although Parks and Arenas manages the majority of municipally-owned property). The creation of a new policy for pesticide use on all municipally-owned lands will provide direction to all City staff and aid in eliminating the cosmetic use of pesticides on public lands. Such an updated policy would also provide clarity to the public on the issue of pesticide use on public lands and within public buildings.

**Private Lands**

The creation of a by-law controlling how pesticides can be used on private lands may be effective in reducing or eliminating cosmetic pesticide use on private property. As evidenced by the variation in by-laws created by other municipalities there is significant flexibility in how the City of Kingston may wish to approach the control of cosmetic pesticides on private property. A by-law should provide direction on which pesticides can be applied, for what purposes, where and by whom. An effective model for evaluating and developing such policies and by-laws might be a sub-committee of Council such as the Solid Waste Management Task Force or a group made up of Council and community representatives.

**Q8: What are the potential implications of each option?**

The four potential options identified above can be evaluated based on the following criteria:

- ***Effectiveness*** – likelihood to create the desired outcome of reduced or eliminated cosmetic pesticide use by using the appropriate resources from the municipality.
- ***Side Effects*** - likelihood of creating counter-productive side effects.
- ***Timeliness*** – the speed at which the desired outcomes of the option would be achieved.
- ***Cost*** – the cost to the municipality.



- **Legality** – would implementation of the option be legal and not subject to a successful legal challenge?
- **Liability** – would implementation of the option expose the municipality to any potential liabilities or risks?
- **Economics** – would implementation of the option pose a negative impact to a particular business?

### **Option 1: Lobby Other Governments to Take Action**

**Effectiveness: Not likely to create the desired outcome.**

The House of Commons Standing Committee on Environment & Sustainable Development recommended that Health Canada revise its Pesticide Products Act to, among other things, no longer permit products used for cosmetic purposes. Health Canada has followed up many of the Committee's recommendations and has made revisions to the Pesticide Products Act – but they have not acted to restrict products used for cosmetic purposes. Instead they have deferred to the Supreme Court of Canada's decision and have stated that individual municipalities should make controls on cosmetic pesticide use as they feel necessary. Therefore it would not seem reasonable to expect the federal government to change its recently adopted approach. While it would be useful to pursue this option to indicate our support for Federal leadership on this issue, it is unlikely to be effective unless many other municipalities request the same.

**Side Effects: None identified.**

**Timeliness: Not likely to be achieved.**

**Cost: No significant costs other than correspondence.**

**Legality: No legal issues.**

**Liability: No liability identified.**

**Economics: No businesses adversely impacted.**

### **Option 2: Undertake Public Awareness & Education Campaign**

**Effectiveness: Reasonable likelihood of obtaining the desired outcome.**

By providing the community with accurate information it is reasonable to expect that, like other health-related campaigns such as smoking and drinking and driving, that a percentage of the population will modify their behavior to produce

the desired outcome of reduced cosmetic pesticide use. It is unlikely that this method alone will be sufficient to create a majority change in behavior.

**Side Effects: Some negative side effects identified**

A public information campaign aimed at reducing pesticide use may precipitate a counter campaign from the pesticide industry and applicators. The resulting conflict of information would create confusion and would dilute the City's efforts to influence the public to reduce pesticide applications for cosmetic purposes.

**Timeliness: Results within 2 – 4 years**

**Cost: Approximately \$50,000 with annual maintenance costs of \$8,000.**

Cost estimate based upon the programs undertaken by the City of Ottawa and the Region of Halifax.

**Legality: No legal issues.**

**Liability: No liability identified.**

**Economics: Impacts to commercial applicators and retail sellers of pesticides who would likely experience a loss in business associated with pesticides.**

Some loss in business expected as consumers choose to not use pesticides for cosmetic purposes. This loss may be offset by consumers seeking firms to undertake alternative lawn and garden care services and retailers who sell alternative consumer products.

**Option 3: Create By-Laws Requiring IPM on Public & Private Lands**

**Effectiveness: Possible likelihood of obtaining the desired outcome.**

The principles of Integrated Pest Management (IPM) should result in a reduction in cosmetic pesticide use. It is unlikely however that it will eliminate pesticide use for cosmetic purposes unless the public's expectations with respect to benign weeds such as dandelions changes. Also, it is not reasonable to expect the "do-it-yourselfers" to become accredited or even familiar with IPM. Therefore, only those applications made by IPM accredited firms would realize the desired reductions.

One local golf course has adopted an Integrated Pest Management approach for its golf course operations and estimates that it has allowed for a 60% reduction in herbicide use.

**Side Effects: Some possible negative side effects identified.**

Property owners who do not agree with an IPM approach may choose to undertake an application themselves creating a situation where a less-trained person is applying, storing and disposing of pesticide product.

**Timeliness: Results within 1 year of by-law implementation.**

**Cost: Unknown. Likely moderate.**

Costs would be a function of the resources required to enforce the by-law. It is likely that a by-law allowing pesticide application only by licensed applicators working for IPM-accredited firms may not be particularly onerous to enforce at the commercial level since compliance would be easy to establish. However, enforcement of “do-it-yourselfers” would be difficult. Presumably, an enforcement action against a private individual could only be successful if the individual confessed to the application of pesticide product. Evidence could also be gathered by collecting soil samples from the affected lawn and having them analyzed for a suite of potential pesticides but this is not considered practical and would be very costly – begging the question if enforcement against private individuals would be possible.

The current situation is that the City does not have the resources to enforce all current by-laws; therefore Council would have to decide whether to increase resources to administer and enforce a new by-law.

**Legality: Legal issues possible.**

Since a by-law of this nature is not similar to the one dealt with by the Supreme Court of Canada in Hudson vs. Spraytech, a qualified legal opinion will be required to determine if this option is feasible.

**Liability: Some liability identified.**

As with any by-law, the city has a responsibility to enforce it and any damages resulting due to our non-enforcement could be the cause for a civil suit against the City.

**Economics: Some economic impact to private sector.**

Minor loss of business to commercial applicators who cannot become IPM-accredited or if IPM programs are not marketable. A loss of retail pesticide sales would be expected if “do-it-yourselfers” comply with the by-law.

**Option 4: Create a By-Law Restricting Cosmetic Pesticide Use****Effectiveness: Reasonable likelihood of obtaining the desired outcome.**

The creation of a by-law restricting cosmetic pesticide use will likely be very effective in reducing cosmetic pesticide use by commercial applicators. It will likely be less effective in reducing use by “do-it-yourselfers”.

**Side Effects: Some potential negative side effects identified.**

Even with a restrictive by-law in effect many property owners may resist changing to alternative methods or accepting the presence of dandelions and other aesthetic concerns. This may cause property owners to go against the by-law and apply retail-sourced cosmetic pesticides themselves. This creates a situation where pesticide product is being applied, stored and disposed of by an untrained person – presumably this creates a situation of higher risk than an application by a trained and licensed applicator.

**Timeliness: Results likely within 1 year of by-law implementation.****Cost: Unknown. Likely substantial.**

Costs would be a function of the resources required to enforce the by-law. As with Option 3, enforcement against commercial applicators would be more straightforward than against private individuals applying retail-sourced pesticides products. Witness statement or evidence of product containers would likely be required to allow for any successful enforcement action. Evidence could also be gathered by collecting soil or vegetation samples from the affected lawn and having them analyzed for a suite of potential pesticides but this is not considered practical and would be very costly – begging the question if enforcement against private individuals would be practical. The bottom line is that enforcement will be difficult and could be costly.

Depending on how the by-law is written, the resource requirements required to support it could be significant, especially if the by-law prescribes needs for permits for no-cosmetic applications and conditions over and above those required by the Ministry of the Environment. Some cost recovery may be possible through licensing fees for non-cosmetic applications.

The current situation is that the City does not have the resources to enforce all current by-laws; therefore Council would have to decide whether to increase resources to administer and enforce a new by-law.

**Legality: No legal issues expected.**

There is general agreement from those providing legal advice on the issues of pesticide by-laws that a by-law imposing a general restriction on cosmetic pesticide applications would be legal for an Ontario municipality.

**Liability: Some liability identified.**

As with any by-law, the city has a responsibility to enforce it and any damages resulting due to our non-enforcement could be the cause for a civil suit against the City.

**Economics: Some economic impact to private sector.**

Potential loss of business to commercial applicators that lose cosmetic application business. May be offset by new markets in alternative treatments. A loss of retail pesticide sales would be expected if “do-it-yourselfers” comply with the by-law. An alternative outcome may be that there are increases in business as lawn care firms provide more labour intensive services.

**Q9: What have other jurisdictions done and what have their outcomes been?**

In Ontario, by-laws restricting cosmetic pesticide use have been enacted by two municipalities – Town of Cobalt in 2002 and Town of Perth in 2003. Neither of these by-laws has been challenged.

The City of Toronto’s Board of Health has completed an extensive study of the pesticide issue and is recommending the City proceed with a by-law restricting cosmetic pesticide use.

Several other Ontario municipalities are well-advanced in their decision-making process regarding the pesticide issue: the City of Ottawa, the Region of Waterloo, Town of Caledon, etc. Other Canadian municipalities with by-laws restricting cosmetic pesticide use include Halifax, Nova Scotia and several Quebec municipalities. The Province of Quebec was also considering a provincial-level restriction on cosmetic pesticide use on private property.

In Halifax a 2-year phase in approach was adopted. Halifax allows pesticide application for non-cosmetic purposes through a permit process. Enforcement of the Halifax by-law is only in response to complaints and relies only on eye witness testimony and the physical evidence such as product containers. Halifax estimated a total cost to implement their pesticide by-law and awareness program of \$216,000 with approximately \$100,000 operational costs following start-up. The operational cost was expected to be offset by about \$37,000 of revenue from permits and fines.

The Town of Hudson, Quebec estimates 90% voluntary compliance with their by-law but no formal studies have been undertaken to support his estimate.

## **MOVING AHEAD – A PESTICIDE REDUCTION TASK FORCE**

The previous discussions indicate that many uncertainties exist with respect to the City of Kingston's role in reducing pesticide use on private lands and that each municipality that has gone before us has opted for different approaches in how they ultimately chose to regulate pesticide use.

While this Report to Council recommends moving forward with policies that will affect a reduction in pesticide use, it also identifies a need to create a publicly-accountable body that will review the options in more details, seek input from the community and make a recommendation for the next steps. Therefore this report is recommending the formation of a Pesticide Reduction Task Force. The task force would be structured in a similar fashion to the Solid Waste Management Task Force. It would be a standing committee of Council formed for the express purpose of:

- Reviewing, and potentially developing new potential options for policies and by-laws to reduce cosmetic pesticide use.
- Undertaking a more detailed evaluation of potential options.
- Determining the best means of improving and changing public awareness of cosmetic pesticide issues.
- Receiving, compiling and synthesizing public comment.
- Recommending harmonized policies and/or by-laws for reduction of pesticide use on public and private lands.

The Pesticide Reduction Task force would include interested members of City Council and would be provided with clerical support from Council Support Division as well as technical support from other City divisions on an as-needed basis. The task force would meet at least once per month and would make recommendations to the Committee of the Whole by December of 2003.

### **EXISTING POLICY/BY-LAW:**

A policy to minimize pesticide use on public (municipal) lands was developed in 1992 by the former City of Kingston Parks Department. The policy provides a decision making process for turf care management that seeks to use chemical pesticides as a "last resort".

City Council has also approved a voluntary policy not to use a particular pesticide (chlorpyrifos) on public lands under any circumstances.

Various by-laws are currently in place which may have the effect of promoting chemical pesticide use. These existing by-laws deal with the curtailing of, among other things, tall grass and weeds as well as noxious weeds.

Project Priority: The Pesticides By-law has been approved by Council as a low priority on the "Go Slow" list of projects. A project form has not been approved by Senior Managers for this project. However, prior to establishing the Task Force, a project form will be completed with resources identified.

**LINK TO STRATEGIC PLAN:**

There is no direct link to the strategic plan. However, an indirect link may be present insofar as the reduction of cosmetic pesticide use may be perceived as improving air quality within urban environments.

**FINANCIAL CONSIDERATIONS:**

No direct costs associated with the implementation of recommendations contained within this report other than some clerical support required from Council Support for the Pesticides Reduction Task Force.

**CONTACTS:**

Paul MacLatchy, P.Eng. – Manager Environment Division.

**DEPARTMENTS/OTHERS CONSULTED AND AFFECTED:**

Department of Corporate Services – Legal Services  
Department of Corporate Services – Council Support  
Department of Planning & Development Services – Building & Licensing Division  
Department of Community Services - Parks & Arenas Division  
Department of Community Services – Culture & Recreation Division  
Department of Operations – Buildings & Properties Division  
Department of Operations – Airport Division  
Kingston Environmental Advisory Forum  
Cataraqui Region Conservation Authority  
KFL&A Health Unit  
Corrections Canada  
Department of National Defense – CFB Kingston

**NOTICE PROVISIONS:**

Notice provisions would not be required until a preferred option is chosen by Council. The Pesticides Reduction Task Force would also make recommendations on the level of public consultation appropriate.

**APPENDICES:**

APPENDIX A – Frequently Asked Questions

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Cynthia Beach, P.Eng.,  
Commissioner of Planning & Development Services

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Bert Meunier  
Chief Administrative Officer



**REPORT TO COUNCIL 03-120**

**POTENTIAL MUNICIPAL STRATEGIES FOR REDUCING COSMETIC PESTICIDE USE**

**APPENDIX A**

**FREQUENTLY ASKED QUESTIONS**

# **City of Kingston**

## **Pesticides – Frequently Asked Questions**

(with thanks to the City of Ottawa and Town of Perth)

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### **1. Has the City of Kingston banned pesticides?**

No. Pesticides are strictly regulated on municipally owned property through policies put in place in 1992 by the Parks and Arenas Division. There are no municipal controls on pesticide use on private property or on public property administered by other levels of government.

### **2. Can the City of Kingston ban the use of pesticides for cosmetic purposes on private property?**

Yes. The Supreme Court of Canada ruled that a Quebec municipality can restrict pesticide use on private property and it is generally accepted that the Court's ruling allows Ontario municipalities to do the same.

### **3. Can the City of Kingston ban the sale of pesticides?**

No. The Provincial government, through the Pesticides Act, regulates the sale of pesticides. However, the City can discourage the purchase and use of chemical pesticides through public education and awareness campaigns which promote the use of non-chemical alternatives to lawn care. The City can also require that retail outlets post information on any Pesticide By-Law or Public Awareness & Information Programs.

### **4. What is the current policy of the City of Kingston with respect to pesticides?**

The policy developed by the Parks and Arenas Division calls for pesticide use only as a last resort where there is a threat to human or animal health or where the viability of trees, shrubs or other "natural infrastructure" is threatened. This policy, however, is generally followed only by the Parks and Arenas Division and the properties they oversee. The City of Kingston does use pesticides for control of insects in indoor work places, to control rot within wooden construction (PT lumber), to control algae and other aquatic plants within Portsmouth Olympic Harbour, to control plant growth adjacent to runways and taxiways at Norman Rogers Airport, and for the control of insects within greenhouse operations.

### **5. What does cosmetic use of pesticides mean?**

Opinions vary, but generally "cosmetic use" refers to the non-essential use of pesticides. "Non essential use" of pesticides refers to their use in certain situations where the application is purely for an 'aesthetic pursuit' (Reference citation June, 2001, Supreme Court Ruling: Hudson vs. Spraytech). One suggestion is that a "non-essential" use may be one where pesticides are applied when no pests or infestations are present within the lawn, or when unwanted species (such as dandelions) are present but do not pose a risk to human or animal health or the environment.

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**6. Does this issue include agricultural pesticide use?**

No. The issue of cosmetic pesticide use pertains to the non-agricultural use of pesticides.

**7. Why are pesticide reduction programs focused on non-agricultural uses when agricultural uses far greater amounts of chemical pesticides?**

The issue of cosmetic pesticide use is driven by its potential chronic health effects on people. Since the majority of people live in urban areas, and since the application rates of pesticides is generally higher per acre on urban lawns, it makes sense to target this type of use in the area where most of us live and work.

**SECTION 2 – HEALTH ISSUES**

**1. What are pesticides?**

The term pesticide refers to chemical substances that are biologically active and interfere with the normal biological processes of living organisms deemed to be pests, whether these are noxious plants or weeds, insects, mould or fungi. A pesticide can be an insecticide, herbicide or fungicide. Pesticides are present in many everyday products such as flea collars, ant traps, insect sprays, pressure treated lumber and lawn fertilizers.

**2. Are pesticides harmful to one's health?**

Yes, No and Maybe. There is no doubt that human beings and the environment can suffer significant acute health impacts due to exposure of pesticides - pesticides are designed to be toxic to life. Pesticides account for many poisonings and deaths in Canada and around the world. Prevention of acute health and environmental effects of pesticides have been the premise on which the evaluation, regulation and use of these products has been based in Canada and around the world. Only recently have people begun to consider that other more chronic or complex effects due to exposure to low concentrations of one, or mixtures, of pesticides may be possible. People have also begun to be concerned over the effects pesticide products can have on the most sensitive members of our societies such as developing and young children, those with chemical sensitivities and those with immune systems compromised by old age.

In Canada and the United States the evaluation of possible health and environmental effects from specific pesticides is typically the responsibility of the industries which produce them. Many scientific studies are available which demonstrate that specific pesticides are safe when used as directed. Regulatory agencies responsible for allowing these products to be used rely on the scientific evidence provided by the manufacturers and by peer reviewers. However, many independent studies and research conflict with the findings that pesticides regulated for use in Canada and elsewhere are safe. Many studies provide strong correlations between exposure to

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legal pesticides and a host of chronic ailments such as breast cancer, childhood leukemia and non-Hodgkin's lymphoma but no "proof".

Faced with this discrepancy and uncertainty between scientific findings, many highly reputable organizations (Parliamentary Standing Committee on Environment & Sustainable Development, Ontario College of Family Physicians, Canadian Institute of Child Health, Canadian Cancer Society, Toronto Board of Health, etc.) have advocated a precautionary approach – especially when the pesticide is used for non-essential or cosmetic purposes.

**3. Has anyone died as a result of exposure to pesticides?**

Yes. The Canadian Associations of Physicians for the Environment takes the position that pesticide products have been estimated to account for thousands of deaths each year globally.

**4. How are people exposed to pesticides?**

Pesticides can enter a person's body by three possible routes: by the lungs, by the mouth or through the skin. Skin contact is the most likely exposure to lawn care pesticides. Spray application of pesticides increase the chances that the applicator or those nearby may inhale fine drops or mists. Lawn care pesticides may also be tracked into people's homes.

Children are particularly likely to be exposed to pesticides due to their explorative behavior and tendency to come into contact with grass, pet flea collars, ant traps, and perhaps most ominously, pesticides that are not stored out of their reach within garages, basements and elsewhere in the home environment.

**5. Are children and pets more vulnerable to pesticide exposure than others?**

Yes. Children are particularly vulnerable to the effects of pesticide exposure due to the specific characteristics of their development and physiology. For example, children eat more food, drink more water and breathe more air per kilogram of body weight than adults and can therefore absorb larger quantities of any pollutants, such as pesticides, present (Parliamentary Standing Committee on Environment and Sustainable Development).

In general, studies find that children have lower tolerance for pesticides. On the whole, children are typically more sensitive to the effects of pesticides because the enzymes and organs that rid their bodies of toxic chemicals are not yet fully developed. Children are also smaller and lighter than adults so they receive a proportionally larger dose per exposure than adults (Toronto Public Health, April, 2002).

**6. If pesticides are used as directed, do they still have a health impact?**

Maybe. The federal Pest Management Regulatory Agency (PMRA) regulates chemical pesticides due to their potential to cause health impacts. Even with approval, the PMRA acknowledges that there are associated risks that can be managed through labeling information (Toronto Public Health, April, 2002). For example, a label might indicate that a product might be considered "safe to use" provided that humans are not exposed.

**7. If pesticides are used just once in a while can they still be harmful?**

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Maybe. There are risks whenever there is human, animal or environmental exposure to pesticides. The uncertainty created by conflicting scientific opinions should encourage people to take a precautionary approach and eliminate unnecessary risks wherever possible.

**8. If I spray pesticides on my lawn, how long should I wait before the grass is safe to sit or play on?**

Warning labels on chemical pesticides give a good indication of the toxicity of the product. However, “safe” is a very subjective term. Lawns sprayed by professional applicators must be posted for a minimum of 48 hours to warn passersby of the presence of pesticides – however this time period is not specific to the toxicity or persistence of any particular product. Unfortunately, due to both environmental and human variables there is no certainty that toxic substances will react according to label specifications.

## SECTION 3 – ENVIRONMENTAL ISSUES

**1. Do pesticides harm the environment? (in general)**

Yes. Pesticides are known to move from point of application into the air, water and soil. Some garden pesticides may persist in the environment, which may result in unintended exposure to other species. Once in the environment, certain pesticides break down relatively quickly, whereas others persist and remain toxic over longer periods of time or transform into by-products with potential toxicities as well.

Recent studies have documented that common pesticides such as Atrazine persist in the environment and are likely causing interference with the reproductive abilities of amphibians in our wetlands, rivers and lakes.

Urban bird populations can be at risk due to their tendency to ingest lawn care pesticides applied in granular form.

Many chemical pesticides are non-specific. That is to say they are toxic to more than just the pest that they are being used to control. For example, the use of Malathion sprays for urban mosquito control has been shown to create lethalties in birds, small mammals and many other benign or beneficial insects that may also be exposed.

Non-specific pesticides also act to kill beneficial soil bacteria that are needed by your lawn to keep disease in check.

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## **2. If my neighbour uses pesticides, can it leach into my backyard or blow onto my property?**

Yes. Pesticides are known to move from point of application into air, water and soil. Wind, rainfall and absorption are all methods by which properties near a point of application can become exposed.

## **SECTION 4 – ALTERNATIVES TO CHEMICAL PESTICIDES**

### **1. If pesticides are not used to control weeds and insects, what can be used?**

In Eastern Ontario, the four main problems for lawns are grubs, crabgrass, chinch bugs and other weeds. The strongest defense against weeds and insects is a healthy lawn, which can be achieved through practices such as proper watering, grass mulching, aerating the soil, top dressing, and over-seeding. Examples of non-chemical treatments are:

- Nematodes – microscopic roundworms that parasitize and kill insects such as grubs.
- Corn gluten meal – which kills the roots and shoots of weed seedlings.
- Diatomaceous earth – tiny razor sharp powder particles derived from sea organisms (diatoms) which pierce the bodies of insects such as chinch bugs, aphids, earwigs, beetles, slugs and spider mites.
- Hand weeding – manual removal of weeds such as dandelions, plantain and crabgrass.
- Insecticidal soaps/oils & lime/sulphur – sprayed on plants to control a variety of insects.

### **2. Can I still have a full green lawn without pesticides?**

Lush green lawns are often chemically dependent, and therefore prone to disease. The goal is for people to have safe, healthy lawns and gardens that are not dependent on chemicals for their appearance. Many lawn care companies and garden centres now specialize in organic gardening and non-chemical alternatives and can offer expert advice and service.

### **3. Do alternatives cost more?**

Commercially applied alternative treatments generally cost between 10 and 25% more than conventional chemical treatments. Do-it-yourselfers can expect to spend a little more time in the garden and a little less money buying chemical products.

### **4. Do alternatives take more time to apply and show results?**

Yes. Unlike chemical treatments that are designed to kill problems quickly, alternative measures will take time to cure a chemical-dependent lawn.

### **5. What about people with health conditions such as asthma? Do alternatives present health concerns as well?**

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No. Non-chemical alternatives are considered safer to humans than chemical products. If alternative methods are not sufficient to manage noxious weeds that present potential health risks such as poison ivy, then lower toxicity chemicals are also available.

## **6. Where can I find more information on alternatives?**

Many organizations are convinced of the benefits of reducing chemical pesticide use – and therefore they offer excellent sources for those seeking information on chemical alternatives. Just a few examples include:

- Health Canada – Pest Management Regulatory Agency ([www.healthylawns.net](http://www.healthylawns.net))
- Ontario Ministry of the Environment
- Pesticides Reduction Kingston
- City of Ottawa
- Toronto Public Health ([www.city.toronto.on.ca/health](http://www.city.toronto.on.ca/health))

## SECTION 5 – OTHER JURISDICTIONS

### **1. What is the federal government’s position on pesticide use?**

“The Government of Canada is committed to ensuring that Canadians are better protected from health and environmental risks posed by pesticides” (Government of Canada website).

Anne McLellan, Minister of Health, recently introduced in the House of Commons a bill to enact a new Pest Control Products Act (PCPA). The bill is designed to safeguard Canadians, especially children, and will help ensure a safe and abundant food supply. Pesticides must receive registration from the federal government under the PCPA in order to be used in Canada. The federal government has not taken this opportunity to ban cosmetic uses of lawn and garden pesticides, preferring to rely upon the Supreme Court of Canada precedent and leave this issue to be dealt with by municipal governments.

### **2. What is the provincial government’s position on pesticide use?**

Ontario is working with its provincial and federal partners to develop a proposal for a new national system for classifying pesticides in Canada through the Federal/Provincial/Territorial Committee on Pest Management and Pesticides. The Ontario Ministry of the Environment is working with the federal Pest Management Regulatory Agency, other provincial agencies and stakeholders on implementing the Healthy Lawns Strategy. The strategy aims to reduce reliance on pesticide use for lawn care through promoting Integrated Pest Management principles and the use of reduced risk products (Ontario MOE Fact Sheet).

The Province of Quebec is working on a province-wide ban on cosmetic uses of chemical pesticides.

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### **3. What about other municipalities?**

Since the Supreme Court of Canada ruled in favour of Hudson's right to enact a by-law restricting pesticide use, more than 50 municipalities in Quebec have enacted similar by-laws. The province of Quebec is considering legislation that will provide a province-wide ban on the cosmetic use of chemical pesticides within three years. Pesticide by-laws have been passed in Halifax, Nova Scotia, Shediac, New Brunswick, Cobalt, Ontario, Perth, Ontario and Port Moody, BC. Other municipalities considering the issue and carrying out public education include Ottawa, Toronto, Guelph, Waterloo, Hamilton, London, Barrie, New Tecumseh and Caledon.

### **4. Can a legal product like pesticides be banned?**

Pesticide products are evaluated and approved at the federal level while provinces approve the method of how and by whom they may be applied. The Supreme Court of Canada's decision in Hudson vs. Spraytech clearly provides municipalities with the ability to pass by-laws banning or restricting the use of chemical pesticides.