

SUBMITTED BY:

PO Box 1749 Halifax, Nova Scotia B3J 3A5, Canada

Item No. 1 Halifax Regional Council January 12, 2010

TO:

Mayor Kelly and Members of Halifax Regional Council

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Phillip Townsend, Director, Infrastructure and Asset Management

DATE:

December 14, 2009

SUBJECT: 2009 Program Overview Report - HRM Pesticide Bylaw

INFORMATION REPORT

ORIGIN

Staff is providing Regional Council with a copy of the 2009 Final Overview Report.

BACKGROUND

Pesticide Bylaw P-800 was approved by Regional Council in August 2000. The fundamental intent was to protect human health and the environment.

The annual report provides Regional Council and the public a general overview of activities and opportunities.

DISCUSSION

Overall, the pesticide education and awareness programs and ByLaw are meeting the original intent of protecting human health and the environment.

With the apparent reduction in applications and permits, and the UNSM resolution for a Province wide ban on pesticides, this program is entering a transitionary phase. With a possibility of greater Provincial regulation and legislation regarding pesticides, the HRM ByLaw may become moot. As of the writing date of this report, there are not any concrete indications of a change to precede the 2010 season.

The current Permitting and Education contract has completed the third year of the three year agreement. The vendor, Clean Nova Scotia, has performed well according to the terms of the solicitation.

A new contract is required within the next couple months for the 2010 season. During the month of January, staff will assess potential for changes to the current contract specifications - in particular related to the apparent need to prepare for transition and minimize future contractual commitments that may become redundant or substantially different. Certainly, the next contract will be either a one year term or clearly renewable contingent on legislative and financial appropriateness.

BUDGET IMPLICATIONS

Provincial adoption of regulation that meets or exceeds Regional Council expectations may deem the ByLaw moot and result in a potential operational cost reduction of up to \$91,000 for education and permitting.

At this juncture, there are no activities indicating alteration in action in the 2010 / 2011 fiscal year.

FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

Attachment 1 - ByLaw P 800 Attachment 2 - Administrative Order 23 Attachment 3 - UNSM Resolution Attachment 4 - 2009 Program Overview

A copy of this report can be obtained online at <u>http://www.halifax.ca/council/agendasc/cagenda.html</u> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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Report Prepared by:

Richard MacLellan, Acting Manager, Sustainable Environment Management Office, 490-6056

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Financial Approval by:

Cathie O'Toole, CGA, Director of Finance, 490-6308

Attachment 1

HALIFAX REGIONAL MUNICIPALITY BY-LAW P-800 RESPECTING THE REGULATION OF PESTICIDES, HERBICIDES AND INSECTICIDES

BE IT ENACTED by the Council of the Halifax Regional Municipality pursuant to Sections 533 and 171(1)(c) of the *Municipal Government Act* as follows:

Short Title

1. This By-law shall be known as By-law No. P-800 and may be cited as the "Pesticide By-law."

Definitions

- **2.** In this By-law,
- (a) "affected property" means a property all or part of which lies within the spraying prohibition radius of a property registered in the Halifax Regional Municipality Pesticide Notification Registry;
- (b) "commercial applicator" means any person, firm or corporation any part of whose business involves the application and use of pesticides;
- (c) "Inspector" means any person designated for such purpose by the Regional Council;
- (d) "Municipality" means Halifax Regional Municipality;
- (e) "owner" means a person who is assessed as the owner of a property on the Assessment Roll of the Municipality;
- (f) "pesticide, herbicide or insecticide" means any pesticide as defined under the *Environment Act*, Stats, N. S. 1994-95, C. 1, as amended and means
- i any substance that is intended, sold or represented for use in preventing, destroying, repelling or mitigating, directly or indirectly, any pest,
- ii any substance that is a pest control product within the meaning of the *Pest Control Products Act* (*Canada*) or is intended for use as a pest control product,
- iii any substance that is a plant growth regulator, a defoliant or a plant desiccant,
- iv a fertilizer within the meaning of the *Fertilizers Act (Canada)* that contains a substance referred to in subclause I, ii or iii,

v or any other substance designated as a pesticide in the regulations to the *Environment Act*,

but does not include a substance that is intended, sold or represented for use in potable water to prevent or destroy bacteria, parasites or viruses if the substance is not a pest control product within the meaning of the *Pest Control Products Act (Canada)*;

- (g) "pesticide application" means the application and use of pesticides for the maintenance of outdoor trees, shrubs, flowers, other ornamental plants and turf on the part of a property used for residential purposes or on property of the municipality;
- (h) "treated property" a property upon which a pesticide application has taken place.

Prohibition on Municipal Property

3. No person shall carry out or permit or suffer to be carried out any pesticide application on property owned by the Municipality.

Prohibition Around Public Areas

4. Commencing April 1, 2001, no person shall carry out or permit or suffer to be carried out any pesticide application on property all or part of which lies within a 50 metre radius measured from the boundary of a property containing any school. licensed day care centre, park, playground, licensed senior citizens' residence, university, church or hospital.

Prohibition Within Halifax Regional Municipality

5. (1) Commencing April 1, 2003, no person shall carry out or permit or suffer to be carried out a pesticide application within the Halifax Regional Municipality.

(2) After April 1, 2003, the Municipality shall cease to maintain the Pesticide Registry pursuant to Section 7 of this Bylaw and the provisions of Sections 7 to 10 inclusive shall no longer apply.

6. (1) Notwithstanding any provisions of this Bylaw, the pesticide applications of those pesticides which are identified as "Permitted Pesticides" in an Administrative Order enacted by the Halifax Regional Council are permitted and the provisions of the Bylaw do not apply to these exclusions.

(2) Notwithstanding any provisions of this Bylaw, a pesticide application may be carried out to control or destroy plants or insects if such plants or insects constitute a danger for human beings or to control or destroy insects which have infested a property, if such pesticide application is specifically permitted by the Inspector for that purpose and the pesticide application is carried out subject to such terms and conditions as shall be prescribed by the Inspector.

(3) The owner of a property, prior to carrying out a pesticide application on the owner's property pursuant to subsection (2) shall notify the owner of on any property all or a part of which is within a 50 metre radius of the property to which the pesticide application is to be made, received within 5 days of the proposed application, provided however, if a commercial applicator provides notification in respect of the pesticide application, the owner of the property is not required to provide notification in respect of the same pesticide application.

- (4) A commercial applicator may give notice of more than one application in the same notice.
- (5) Notification shall be in writing and shall contain the following information:
- (a) the location of the pesticide application;
- (b) the date and approximate start time of the pesticide application, within a 24 hour period, and, in the event of inclement weather, an alternate date or dates on which the pesticide application may occur;
- (c) the brand name and registration number of the pesticide product which will be used;
- (d) the name and telephone number of the person or company making the pesticide application.

(6) If the owner of a registered property and an owner of an affected property or a commercial applicator subject to the notice requirements of this bylaw can reach an agreement on notification provisions acceptable to both parties other than those described herein, then the requirements prescribed by this Section are waived in favour of the agreed to requirements.

(7) The provisions of subsection (6) shall not take effect unless the agreement referred to therein is reduced to writing and signed by both parties.

(8) A notification agreement entered into pursuant to subsection (6) may be terminated by either party by providing 14 days written notice to the other party.

Property Registration

7. (1) There is hereby established a Halifax Regional Municipality Pesticide Registry.

(2) The Registry shall be administered by the Inspector.

(3) An owner of a real property wishing to have that property listed on the Registry shall pay the registration fees prescribed by Administrative Order 15 and provide to the Inspector the following information:

- (a) name of the owner;
- (b) mailing address of the owner;
- (c) civic address of the property to be registered;
- (d) daytime and evening telephone number(s), one of which is designated as the primary contact number; and
- (e) a letter from two physicians licensed to practice medicine in the Province of Nova Scotia expressing an opinion that a named resident of the property to be registered is hypersensitive to and suffers adverse medical reactions as a result of exposures to pesticides which are potentially life-threatening.

(4) On receipt of the information prescribed in subsection (3) and the applicable fee, the Inspector shall include the identified property in the Registry.

(5) The registration period shall be from April 1, 2001 to March 31, 2003.

(6) A separate registration application shall be made and registration fee paid for each property wished to be registered.

- (7) The registration of a property shall cease when
- (a) the owner who applied to register the property files with the Inspector a written notice to the effect that the owner no longer wishes the property to be registered;
- (b) the owner who applied to register the property or a new owner files with the Inspector a written notice that the registered property has changed ownership; or
- (c) the municipality receives a Deed Transfer Tax Affidavit indicating that the registered property has been sold; or
- (d) on April 1, 2003.

(8) The Inspector shall forthwith notify by ordinary mail the owners of all properties previously affected by the registration that their properties are no longer subject to the notification requirements of this Bylaw.

Notice To Owner Of Affected Properties

8. (1) Within 10 days of the entry of property in the Registry, the Inspector shall mail to the owner of each affected property a letter, addressed to the mailing address of the owner of the affected property as contained in the Assessment Roll of the Municipality, informing the landowner of

- (a) the existence of the Registry;
- (b) the civic address of the registered property;
- (c) the name, mailing address and the telephone numbers of the owner of the registered property as provided in the application for registration; and
- (d) the effect of this Bylaw on affected properties.

but the letter shall not disclose the identity of any individual who is the subject matter of a medical opinion provided to the Inspector pursuant to Section 7(3)(e) or the nature of the medical condition of that individual, provided that this restriction does not prevent the Inspector from identifying the individual as the owner of the property, if such be the case.

(2) If the affected property is not occupied by the owner of the property, the owner shall forthwith notify the occupant of the information contained in the letter sent to the owner pursuant to subsection (1).

Notice To Commercial Applicators Of Pesticides

9. (1) On or before the end of February in each year, the Inspector shall mail to each commercial

applicator of pesticides operating in the municipality and known to the Inspector a printed list of all registered and affected properties and the restrictions that apply to each property.

(2) At least monthly during the period from March to October in each year, the Inspector shall mail to each commercial applicator of pesticides operating in the municipality and known to the Inspector a printed updated list containing all registered and affected properties added to the Registry within the preceding month and the restrictions that apply to each property.

(3) The requirements of subsection (1) and (2) do not relieve any commercial applicator of pesticides from the responsibility of determining the restrictions that apply to a pesticide application on any property in the municipality.

Pesticide Applications Prohibited On Certain Affected Properties

10. No person shall carry out or permit or suffer to be carried out any pesticide application on an affected property all or part of which lies within 50 meters of the boundary of a registered property.

Rules Respecting Pesticide Applications

11. (1) When a pesticide application is to take place on a property, the owner of the property or any commercial applicator of pesticides shall post signs in a prominent place on the property not less than 24 hours prior to the pesticide application and keep the signs continuously posted for a period of 4 days after the pesticide application and if such property abuts or is adjacent to a public street or private road shall post signs facing each such street or road, and signs shall be placed one sign within 3 meters of each of the property lines separating the treated property from the adjoining property and thereafter one sign for each 16 meters of frontage abutting or adjacent to such street or road.

- (2) The signs prescribed by subsection (1) shall
- (a) be square or rectangular, measuring not less than 25 centimeters by 25 centimeters;
- (b) be bright yellow in colour;
- (c) be made of a material that is weather resistant and shall be placed on a support that is weather resistant;
- (d) bear the words, in letters, black in colour, of at least 24 point type:
 "Warning Pesticides In Use"; and the symbol of a skull and crossbones at least 4.5 inches in diameter and shall indicate the commercial name of the pesticide used or to be used in the pesticide application and shall further indicate that all contact with the portion of the treated property upon which the pesticide application has taken place must be avoided; and
- (e) shall bear a contact telephone number for the applicator of the pesticide and the date of application.

and the signs required pursuant to this By-law, or signs substantially similar to such signs shall not be used for any other purpose.

(3) There shall be no pesticide application within 2 meters of any property line unless the permission of the adjoining lot owner has been obtained in writing.

(4) There shall be no pesticide application within 5 meters of a bus stop, mailbox or a facility which contains a post office.

(5) The pesticide application shall be applied in accordance with the written instructions of the manufacturer and the label on the container.

(6) There shall be no pesticide application by means of spraying or fogging on trees or shrubs of a height equal to or greater than 2 meters when the wind velocity exceeds 8 km/hr.

(7) There shall be no pesticide application by means of spraying or fogging on trees or shrubs of a height less than 2 meters when the wind velocity exceeds 18 km/hr.

(8) There shall be no pesticide application when it is raining.

(9) There shall be no pesticide application when the temperature exceeds 27 degrees Celsius unless otherwise indicated on the pesticide's label.

(10) There shall be no pesticide application on trees during their blooming period.

Penalty

12. (1) A person who does anything prohibited by this bylaw is guilty of an offence and is liable on summary conviction to a penalty of not less than \$100 and not more than \$2000.00 and, in default of payment, to imprisonment for a term not exceeding thirty (30) days.

(2) A person alleged to have violated this bylaw given notice of the alleged violation may pay a penalty in the amount of \$100.00 to the Halifax Regional Municipality; provided that, said payment is made within a period of fourteen (14) days following the day on which the alleged violation was committed, and where the said notice so provides, payment shall be in full satisfaction, releasing and discharging all penalties and imprisonments incurred by the person for said violation.

Done and passed by Council this 15^{th} day of <u>August</u>, 2000.

Mayor

Municipal Clerk

I, Vi Carmichael, Municipal Clerk for the Halifax Regional Municipality hereby certify that the above-noted by-law was passed at a meeting of the Halifax Regional Council held on August 15, 2000.

Vi Carmichael, Municipal Clerk

BY-LAW P-800

Notice of Motion: First Reading: "Notice of Intent" Publication: Second Reading: Approval of Minister of Housing and Municipal Affairs: Effective Date:

Amendment # 1 (V-101) Amending Subsection (1) of Section 12

Notice of Motion: First Reading: "Notice of Public Hearing" Publication: Second Reading: Approval of Minister of Housing and Municipal Relations: Effective Date: August 19, 2003 August 26, 2003 September 6, 2003 September 23, 2003 N/A September 27, 2003

April 25, 2000 May 2, 2000 May 6, 2000 August 15. 2000 N/A August 19, 2000

HALIFAX REGIONAL MUNICIPALITY ADMINISTRATIVE ORDER NUMBER 23

RESPECTING PESTICIDES, HERBICIDES AND INSECTICIDES EXCLUDED FROM THE PESTICIDE BY-LAW

BE IT RESOLVED as an Administrative Order of the Council of the Halifax Regional Municipality as follows:

Short Title

1. This Administrative Order may be cited as the Pesticide By-law Exclusion List Administrative Order.

Permitted Pesticides

2. The following substances are deemed permitted pesticides and shall be excluded from provisions of the Pesticide By-law:

- (1) Insecticidal soaps
- (2) Herbicidal soaps
- (3) Bt (Bacillus thuringiensis)
- (4) Nematodes
- (5) Other biological control organisms
- (6) Animal repellents
- (7) Rodenticides
- (8) Injected tree treatments
- (9) Sticky media
- (10) Borax
- (11) Dormant oils
- (12) Horticultural oils
- (13) Bordeaux mixture and other sulphur compounds
- (14) Lime sulphur
- (15) Ferric phosphate
- (16) Pruning paint
- (17) Pheromone traps
- (18) Pyrethrum (or pyrethrin)
- (19) Diatomaceous earth
- (20) Acetic Acid
- (21) Corn Gluten Meal

Done and passed in Council this 22nd day of August, 2000.

Walter R. Fitzgerald Mayor

<u>Vi Carmichael</u> Municipal Clerk

I, Vi Carmichael, Municipal Clerk of the Halifax Regional Municipality, hereby certify that the above-noted Administrative Order was passed at a meeting of the Halifax Regional Council held on August 22, 2000.

<u>Vi Carmichael</u> Vi Carmichael, Municipal Clerk

Notice of Motion:	August 15, 2000
Approved:	August 22, 2000
Amendment No. 1 Addition to Permitted Pesticides	
Notice of Motion:	May 8, 2001
Approved:	June 5, 2001
Amendment No. 2 Addition to Permitted Pesticides	
Notice of Motion:	May 27, 2003
Approved:	June 10, 2003
Amendment No. 3 Addition to Permitted Pesticides	
Notice of Motion:	June 14, 2005
Approved:	June 21, 2005

Service Nova Scotia and Municipal Relations

Resolution 1C – Province-Wide Ban on the Use and Sale of Non-Essential Pesticides UNSM Resolutions Committee

WHEREAS under the *Municipal Government Act*, the Halifax Regional Municipality is the only municipality in Nova Scotia with the authority to ban the use of non-essential pesticides on residential property; and

WHEREAS in 2007 the Union of Nova Scotia Municipalities passed a resolution requesting that the Province of Nova Scotia broaden the existing legislation to permit any municipal unit in the Province to institute bylaws to manage, including but not limited to, banning the use of nonessential pesticides on lands within its boundaries but exclusive of land that is zoned for agriculture or forestry; and

WHEREAS this resolution was not acted upon by the previous Provincial Government; and **WHEREAS** the Canadian Cancer Society has advocated for reducing exposure to pesticides, particularly children, who are generally more susceptible to the potential toxic effects of pesticides; and

WHEREAS health experts have established a connection between many widely used landscape pesticides and serious illness including many different types of cancers; and

WHEREAS by the Fall of 2009, the Government in New Brunswick will ban the sale and use of more than 200 over-the-counter lawn care pesticide products, and the use of all 2,4-D products on domestic lawns on a province-wide basis; and

WHEREAS the Government of PEI is also drafting regulations for a province-wide pesticide ban on residential properties pending the actions of New Brunswick and Nova Scotia; and WHEREAS on April 22, 2000, the Presidence of Optonia institute degree wide here on the

WHEREAS on April 22, 2009, the Province of Ontario instituted a province-wide ban on the cosmetic use of pesticides which overrides all municipal pesticide bylaws and establishes one clear set of rules; and

WHEREAS in 2006 the Province of Quebec banned the use of 20 active pesticide ingredients considered toxic to humans and the environment resulting in 210 lawn-care products being removed from the market; and

WHEREAS establishing a province-wide ban on the use and sale of cosmetic pesticides would override all existing municipal bylaws thus creating a level playing field for all municipalities;

THEREFORE BE IT RESOLVED that the UNSM write to the Provincial Minister of Health requesting that the Province institute a province-wide ban on the use and sale of non-essential pesticides; and

FURTHER BE IT RESOLVED that the Province use the legislation prepared by the Provinces of New Brunswick, Ontario and Quebec as a guide in preparing a made-in-Nova Scotia approach to this important issue.

Background:

In 2007, the UNSM passed a resolution requesting that the Province of Nova Scotia broaden the existing legislation to permit any municipal unit in the Province to institute bylaws to manage, including but not limited to, banning the use of non-essential pesticides on lands within its boundaries but exclusive of land that is zoned for agriculture or forestry. The Province's response at the time was that it would consult with HRM on lessons learned from their pesticide management bylaw and report back to UNSM. The UNSM office has not been contacted by the

Province since their response to the initial resolution was sent.

Over the past year Ontario and New Brunswick have introduced province-wide legislation banning the sale and use of pesticides for cosmetic purposes. PEI is also considering regulations pending the actions of the other Maritime provinces. Given the new majority government in Nova Scotia, the timing is right to recommend a province-wide ban which would put all municipalities on a level playing field.

COMMITTEE RECOMMENDATION: *The Committee recommends this resolution.*

2009 PROGRAM OVERVIEW Halifax Regional

NOVEMBER 2009 RICHARD MACLELLAN, MANAGER

Sustainable Environment Management Office Infrastructure and Asset Management



Pesticide By–Law P-800 Respecting The Regulation of Pesticides, Herbicides And Insecticides

Section 1—Introduction Section 2—Background Section 3—Program Components Section 4—Cost, Administration Section 5—Summary











One of the homes which took part in the 2009 GreenYards program

"The whole program was very helpful, with regards to which plants I can plant in <u>my</u> backyard that will grow well."

Executive Summary

By-Law P-800, Respecting the Regulation of Pesticides, Herbicides, and Insecticides (commonly known as the Pesticide By-Law) was approved by Halifax Regional Council in August 2000. The fundamental intent of the Pesticide By-Law (P-800) is to protect human health and the environment.

2009 Program Overview: The Numbers

Pesticide applications saw a significant drop in 2009 compared with the previous year. The drop could be attributed to the amount of rain HRM experienced through June. According to Environment Canada's climate data, rainfall in June 2008 amounted to 69.1mm while in the same period in 2009, 149.6mm of rain fell. Typically the warmer temperatures in June see female chinch bugs leaving sheltered areas and laying eggs in the grass and soil in a dry, hot area. With over two times the rain in 2009 versus 2008, it is possible any eggs that were laid did not survive to hatching in the wet conditions. Lawn care companies also reported a decrease in the amount of chinch seen this year. Another factor that may be contributing to the decline in applications is some lawn care companies in HRM are using alternative products to treat for chinch. Reports have come in that these products have been effective in controlling chinch and consequently, the need for pesticides is reduced. Homeowners have also expressed their desire for a pesticide free lawn to their lawn care companies and are using sustainable techniques such as soap and water to control chinch populations before they become a problem.

Retailers across the Halifax Regional Municipality (HRM) were encouraged to participate in the permitted substances signs for their products and retail store displays again this year. Overall, there were 24 visits to retailers this year and over 200 homeowners were engaged. Retail staff training was also completed to help retail staff in HRM understand the bylaw and learn about alternatives to pesticides and sustainable landscaping practices that they can recommend to customers.

Clean Nova Scotia (CNS) continued to engage homeowners with the highly successful home visit-based sustainable landscaping education program called GreenYards and through the GreenLine, a phone line in place to answer questions on the bylaw, pest control, and anything pest or turf related.



One of the lawns in our GreenYards program

ENFORCEMENT

"There has been a distinct leveling-off of call numbers in recent years. The number of By-Law Enforcement complaints received between April 1, 2009 and October 31, 2009 was 42. In comparison, 48 complaints were received in 2007, 47 complaints were received in 2006, 47 in 2005, 71 in 2004, 106 complaints were received in 2003, 111 in 2002

and approximately 400 in 2001."

APPLICATION PROCESSING

195 pesticide permit applications were received from June 23 to September 25, 2009. Most (97%) applications were for the control of chinch bug and 3% were for the control of white grub Of the 195 applications, 102 (52%) were approved, and 93 (47%) were rejected. 100% of all inspections were carried out within 1 business day of receiving the permit request. 100% of all applications were submitted by lawn care companies.







PUBLIC EDUCATION AND AWARENESS

Since its inception in 2000, a companion comprehensive public education and awareness program to the Pesticide By-Law has been in place. This includes a series of Sustainable Landscape Maintenance Fact Sheets, brochures, TV advertisements, web site, *Naturally Green* newsletter, etc.

2009 featured the following highlights:

GreenLine

The GreenLine telephone response system continued to field inquiries on the Pesticide By-Law and sustainable landscaping. Most of the 326 calls from March 31 to October 31related to pesticide permitting, general bylaw inquiries and turf maintenance.

Website

The Sustainable Landscaping pages of Clean Nova Scotia's website were updated throughout the season to reflect the information requests we received through the GreenLine and online communication. This included fact sheets on ticks, ants, chinch bugs and a link to the David Suzuki Foundation Pesticide Free Website. The GreenLine received positive feedback regarding the comprehensive content on the website including information on seasonal landscaping practices that work toward a sustainable, healthy landscape.

Public Education

There were seven lunch and learns, seminars and evening community presentations throughout the season. In total, 99 people were engaged. The presentations ranged from sustainable landscaping and permitted product information to adapting lawns to pollinators and native landscapes. We received positive feedback and some attendees went on to participate in the Green Yards program. New brochures were created as a result of these presentations including one for the YMCA Centre for Immigrant Programs and one for the Spryfield Urban Farm Museum called Going Natural – A guide to converting your lawn back to nature.

"The report was a very good reference for a new homeowner."

RETAILER/CONSUMER EDUCATION

Clean Nova Scotia continued to work with retailers across HRM to educate them and their consumer's in-store on the Pesticide By-Law and the use of alternative, eco-friendly pesticide products. Stores were contacted beginning in April to determine what pesticide signage needed replacement, including the laminated poster and shelf talker tags that explain the Pesticide By-Law and highlight actual products permissible under the regulations.

GREEN YARDS EDUCATION PROGRAM

This program was designed by Clean Nova Scotia in 2007 and has seen great success. It is offered at no cost to homeowners wishing to learn more about sustainable landscaping. Homeowners are offered a site visit to assess the property and demonstrate sound management practices, and then forwarded a detailed report showing where and how to improve their lawns naturally, including areas where a landscaping contractor might be beneficial.

This 2009 season, we have visited and sent reports to 146 households, up from 137 in 2008 and 114 in 2007.

SUMMARY / EFFECTIVENESS

Independent surveys, consistently dropping permit application numbers, public feedback and anecdotal information indicate that the By-Law is meeting its fundamental intent.

A remaining challenge is addressing the public's continued concerns with the sale of restricted domestic use pesticides. Efforts at the federal and provincial levels would be an effective response and would greatly enhance the overall effectiveness of human health and environmental protection. "The handson information was most helpful."



Full Report on By-Law P-800, 2009

Section 1 – Introduction

This report, intended to provide a detailed overview of the 2008 Pesticide By-Law Program, is divided into five sections as follows:

Section 1 - Introduction

Section 2 - Background (History)

Section 3 - Program Components

3.1 - By-Law Enforcement

3.2 - Communication, Education & Awareness

3.3 - Pesticide Permits & Data

3.4 – Research, Partnerships

3.5 - European Fire Ants

3.6 - Data Management

Section 4 - Costs, Administration

4.1 – Operating Budget & Costs

4.2 - Administration

Section 5 – Summary

5.1 - Key Focus Areas & Opportunities for 2009 and Beyond

5.2 - Provincial, Federal Levels

5.3 – Administrative Order #23

5.4 – General Summary

Appendix A - HALIFAX REGIONAL MUNICIPALITY BY-LAW P-800 RESPECTING THE REGULATION OF PESTICIDES, HERBICI DES AND INSECTICIDES

Appendix B - Administrative Order #23

Opportunities and recommendations to continue to enhance programs and services are highlighted in Section 5, under Key Focus Areas: Recommendations. Halifax Regional Municipality is committed to a "Healthy, Sustainable Vibrant Community" and continuous performance review and enhancement.

Section 2 – Background (History)

The fundamental principles behind By-law P-800 include human health and environmental protection. Discussions towards a municipal pesticide bylaw began in earnest in 1997 when a Regional Councillor raised a question at Council on behalf of his constituents regarding regulating "toxic" products. In 1998 a second Regional Councillor lobbied to make the regulation of pesticide type products a municipal responsibility through the Municipal Government Act (MGA) and Halifax Regional Council forwarded the request to the Province of Nova Scotia.

In the spring of 1999 the Province granted authority to Halifax Regional Municipality (HRM) to regulate pesticide use within the municipality, with the enabling legislation specific to residential property and property owned by the Municipality. HRM Council in the summer of 1999 requested that an Advisory Committee be set up to provide advice to them on a pesticide related by-law. Subsequently an ad hoc Pesticide Advisory Committee, made up of industry, community, appropriate regulatory and environmental stakeholders, was established later that same year. The Committee met on numerous occasions, with two distinct positions being established. One position sought a restriction on all pesticide use, while the other argued against the need for a bylaw or restrictions. Therefore, in December of 1999, reports were forwarded to Regional Council on consensus and non-consensus items. During the spring and summer of 2000, five supplementary reports were forwarded to Regional Council from staff, and three public hearing sessions were held during the formal reading process. After this somewhat lengthy but very open public process, By-LawP-800, Respecting the Regulation of Pesticides, Herbicides and Insecticides, became effective August 19, 2000. This bylaw balanced the restriction of pesticide products with a notwithstanding clause that enabled pesticide use under very specific conditions and incorporated a process to notify neighbouring properties. The By-Law implementation stages were as follows:

Year 1 (2000/01): Ban on cosmetic use of pesticides on municipal property and commencement of public awareness programs.

Years 2 & 3 (2001/02): Commencing April 1, 2001, a ban on cosmetic use of pesticides on residential properties located within a 50 metre radius of:

• a property registered as being occupied by persons at risk who provide medical documentation;

• the boundary of any property containing any schools, licensed day care, playground, park, church, licensed seniors' residence, university or hospital.

Year 4 (2003): Commencing April 1, 2003, a general ban on the cosmetic use of pesticides would apply to all properties in HRM affected by the By-Law. The overview reports from 2001 to the present are available on-line at www.halifax.ca (follow the Pesticide By-Law or Naturally Green links to the Pesticide By-Law web site).

"Talking to a person on site made the information easier to understand."



THE PRESENT – OVERVIEW

This is year 6 of the full implementation of the HRM By-Law. Removing banned products from the shelves in HRM is an important step toward the reduction of pesticides because, while the Pesticide By-Law prohibits the use of cosmetic pesticides on residential and municipal properties, it does not prevent the sale of such pesticides. Several stores around HRM have taken traditional pesticides off their shelves. Several more local retailers do not carry traditional pesticides and they are offering a variety of effective alternatives to maintain a healthy turf. It is important for the consumer to support these companies and help HRM become pesticide free.

Across Canada, provinces are making efforts to ban pesticide use for cosmetic purposes. Quebec has had a provincial ban in place since 2003. Ontario banned more than 295 chemical pesticides products as of April 22, 2009. PEI has announced it intends to ban lawn and garden pesticides starting in 2010. In the fall of 2008, BC mayors and councilors passed a collective resolution asking the provincial government to implement a province-wide ban. Alberta has announced that weed and feed type fertilizers will be banned starting in 2010.

HRM was one of, if not, the first municipality to take action on pesticides. In this, as with other Environmental Management practices, Halifax Regional Municipality has been an acknowledged leader, and in many instances, our by-law has provided a template for other areas to take action. Since the inception of the permit program, HRM has engaged a qualified independent third party to administer the pesticide permit program. It also includes a parallel public education program on sustainable alternatives to pesticides.

Section 3 – Program Components

3.1 By-Law Enforcement

BY-LAW ENFORCEMENT OFFICERS

There is a team of By-Law Enforcement Officers who conduct the pesticide investigations to determine if a violation exists. The Officers are sworn special constables under the Police Act and work within the Community Projects division of Halifax Regional Police. In addition to conducting pesticide investigations, the By-Law Enforcement Officers also enforce the Municipal Government Act, Part XV Respecting Dangerous or Unsightly Premises and a number of other HRM By-Laws.

ENFORCEMENT STRATEGY

The enforcement strategy for the pesticide by-law has been in accordance with the Regional Council approved Pesticide By-Law Enforcement Policy. This policy provided the strategic direction that:

- Enforcement of the by-law will be reactive to complaints received and preventative enforcement patrols seeking violations will not be undertaken;
- Response times to complaints will depend upon location of the alleged violation and resources available. It is anticipated that given the staffing levels and the size of the municipality, staff will typically arrive after the alleged application has been applied;

• Investigation into alleged violations will rely primarily upon eyewitness testimony and physical evidence such as product containers;

General Environment Canada weather reports will be utilized to determine alleged violations of the by-law's weather restriction. As a result micro-climate information will only be available through eye witness testimony.

For alleged violations, Council direction provided that:

• The first approach to achieving compliance with the by-law will be through attempted education, mediation and persuasion of alleged violators; Repeat violations will be ticketed and/or prosecuted where sufficient evidence is available to support such action.

BY-LAW ENFORCEMENT OPERATIONAL ACTIVITY

"There has been a distinct leveling-off of call numbers in recent years. The number of By-Law Enforcement complaints received between April 1, 2009 and October 31, 2009 was 42. In comparison, 48 complaints were received in 2007, 47 complaints were received in 2006, 47 in 2005, 71 in 2004, 106 complaints were received in 2003, 111 in 2002

and approximately 400 in 2001."

Of the 42 complaints received in over the 2009 season, 17 were invalid complaints and 4 homeowners received educations on the pesticide by-law. 4 of these cases were in relation to homeowner activities, all others were related to commercial applicators. All of these cases have been closed.

3.2 Communication, Education and Awareness

PRINT MATERIALS AND SIGNAGE

Where possible, materials were printed on recycled or FSC-certified paper to support HRM's broader environmental commitments.

• The brochure, Your Naturally Green Lawn, was distributed throughout the summer by Pesticide program staff at events listed below, and by Clean Nova Scotia staff at other events as well. Brochures were provided to participants in the GreenYards education program and to pesticide permit applicants. They were also left at displays in retail outlets where residents purchase lawn treatment products.

• Over 30 posters were distributed to various venues across HRM to promote the GreenYards program. Locations included farmer's markets, community centers and libraries along the eastern shore, downtown Halifax, Fall River and Sackville area, to name a few.

• Brochures were created this year to meet the requests brought forward by the general public including one on sustainable landscaping for English as second language immigrants from the YMCA Centre for Immigrant Programs and another called "Going Natural – A guide to converting your lawn back to nature".



• for more information.

• Additional "shelf-talker" tags were printed in 2009 to refresh the stock for retailers who displayed them in past years and to provide to the stores not previously carrying them. Customers are already cued to check this type of display mechanism, which usually denotes a sale or special item, and there is little extra effort required by the retailer to maintain these. Also, only a few sizes are required and they work with a variety of shelf sizes and product display layouts.

The colourful lawn signs prepared in 2007 were used again this year to acknowledge and celebrate participants in the GreenYards program. These signs also served to promote the success of sustainable landscaping in the neighborhoods in which they were displayed.

"Liked the encouragement I received that I could do many things myself to have a better lawn."

RETAILER AND IN-STORE EDUCATION EFFORTS

• The retail staff training presentation developed last year was offered again to all interested retailers in HRM. The presentation begins with an overview of the by-law and permitting process and then goes into greater detail about sustainable landscaping methods and safe alternatives that store staff could recommend to their customers.

• During in-store education display appearances in May, June, July, and August staff spoke to approximately 207 consumers on the By-Law and sustainable lawn care. Staff also distributed brochures and factsheets and 18 homeowners signed up for Green Yards as a result of the store display.

Displays (posters and shelf-talkers) were mounted in prominent locations in May in retail stores across HRM and were accompanied where possible by Clean Nova Scotia pesticide brochures and HRM factsheets. These displays were monitored regularly for worn signage and necessary information replenishment.

RESPONDING TO CONCERNS

Response to homeowner concern was facilitated primarily through incoming calls on the GreenLine and coming in via email. Staff offered direct, personal interaction in cases of complaint or concern, sometimes in cases where a perceived pest intrusion fell outside the By-Law. An example of this was offering entomological information and links to other assistance for the European fire ant situation. While the fire ants are outside the by-law, HRM enlisted Clean Nova Scotia to provide information to residents and monitoring assistance.

GREENLINE: Sustainable Landscaping and Pesticide information by telephone

- Responded to 326 calls from the public
- Average response time was less than 24 hours.
- Most calls were fielded "live".

Most callers sought information about the GreenYards program, European fire ants, permit applications, and solutions for controlling chinch bug.

GREEN YARDS PUBLIC EDUCATION PROGRAM

- The GreenYards program pre-survey, developed to gauge homeowner knowledge and cultural practices was stream-lined this year in response to homeowner comments and staff experience.
- 147 visits in total were performed.

• The program was very successful again this year, with homeowners calling the GreenLine or sending email messages expressing their pleasure with the staff and the comprehensive report.

- 49 of 144 homeowners (34% of project participants) responded to our post-survey.
- A number of participants displayed the GreenYards lawn signs promoting the

GreenYards program and sustainable landscaping. Appointments were made as a result of this advertising.

SEMINARS AND PRESENTATIONS

• There were sixteen store displays carried out at various retailers between May and the end of August. 207 people were engaged at these displays and fact sheets and brochures were distributed. 18 homeowners signed up for the Green Yards program as a result of these displays.

• Seven presentations were delivered in a lunch and learn format, seminar style or casual evening/weekend presentation. 99 people were engaged. The topics ranged from sustainable landscaping to adapting lawns to pollinators and urban landscapes. Brochures were developed to compliment the unique presentations including one on sustainable landscaping for English as second language immigrants from the YMCA Centre for Immigrant Programs and another called "Going Natural – A guide to converting your lawn back to nature".

• The success of these events was due in large part to the delivery. The general sustainable landscaping presentations began with a 30-35 minute presentation followed by a question and answer period. It is recommended that presentations in this format continue as part of the education and awareness campaign. Having a question and answer period helps to understand the concerns of the audience and generally compliments the presentation. Staff set up a booth for Ocean's Day in June; spoke to over 35 people on sustainable lawn care and distributed brochures and fact sheets. 4 people signed up for the Green Yards program.



WEBSITE

• In support of and in addition to HRM's pesticide site, information continued to be posted on the Sustainable Landscaping site under the Clean Nova Scotia domain. This included a description of the By-Law and pesticide permitting, a list of permitted substances, a registration form for the GreenYards program, sustainable landscaping information, relevant website links and new fact sheets as they were created.

• For the period of January 1, 2009 and September 16, 2009 (nearly 10 months), this site had over 31,000 visitors. Just over 20% of these were referred from the Clean Nova Scotia main page, with the rest either directly entering the site name or referred by a search engine. Search terms covered a variety of topics however, an overwhelming proportion of visitors sought information regarding ants and ant control. The top most-search-for terms to that resulted in hits to the site from Google were:

Term	Count
borax ants	546
ant control	542
borax and ants	171
ant problem	168

OTHER PUBLICITY

- An article in Clean Nova Scotia's Clean and Green publication.
- Pesticide By-Law and sustainable landscaping information were featured on the Clean Nova Scotia booth at the Ocean's Day festival in June.

• Pesticide By-law and sustainable landscaping information attended/held an information booth at Lawrencetown Beach for the Surfing Association of Nova Scotia annual family surfing event.

Pesticide by-law and sustainable landscaping information was featured on the Clean Nova Scotia homepage.

3.3 Pesticide Permits & Data

PERMIT APPLICATIONS

•Total number of permit applications: 195. Total approved: 102 (52%). The majority of the permit requests arrived in July and August.

Permit decisions from 2003-2006 are as follows:												
Decisions	2009	%	2008	%	2007	%	2006	%	2005	%	2004	%
Approved	102	52%	240	54%	138	45%	628	40.7%	595	40%	2765	82%
Rejected	93	48%	204	46%	169	55%	914	59.3%	896	60%	550	16.5%
Other	0	0%	0	0%	0	0%	0	0%	0	0%	50	1.5%
Totals	195	100%	444	100%	307	100%	1542	100%	1501	100%	3365	100%



Response Time

• Respecting a homeowner's need for action on a perceived problem, it was initially decided that the inspection required for a permit would be carried out within two business days of the request being received.

99% of permit inspections were carried out within one business day. All permit inspections were carried out within 2 business days.



Reason for Applying

Applicants were overwhelmingly consistent in identifying a chinch bug infestation as the reason they were applying. One other pest was named in a few other applications

Over the last six years, the most commonly cited reason for a pesticide-permit application has been a perceived chinch bug infestation.

• This year, the month of June received significantly more rain than past years. According to Environment Canada's climate data, rainfall in June 2008 amounted to 69.1mm while the same period in 2009, 149.6mm of rain fell. The sizable decrease in applications this year could be a result of the rain fall in June, during the period that chinch bugs typically lay their eggs.

• Feedback from lawn care companies indicated that they weren't seeing the chinch numbers like they have been in the past number of years.

• Some lawn care companies are offering treatments with alternative products that don't require permits. These include Neem oil a regulated product called Safer's Trounce for chinch bug. Part of the decrease in applications may also be explained by these lawn care companies using alternative products.

A declining number of permit applications is good, and is no doubt attributable to successful education and awareness efforts over the years. However, to make any extreme adjustments to these efforts on the basis of this year's sharp drop would be precipitous. Until a few more years show similar results, it is not recommended that education and awareness efforts be significantly lessened. A cultural norm is rarely established in so short a time. Our waste reduction education program dates back 10 years, and yet a level of ongoing education efforts remain necessary to prevent backsliding behaviors and a drop in diversion rates.



Pests cited as justification for pesticide application		
Chinch bug	190	
White Grub	5	

3.4 - Partnerships GENERAL

In order to maximize resources and directly reach as many people at the community 'grass roots' as possible, internal/external partnerships within a social marketing approach have been utilized over the past several years.

Public awareness and educational efforts have included external partners such as the Canadian Wildlife Federation, Dalhousie University, Nova Scotia Agricultural College, Landscape Nova Scotia, Clean Nova Scotia, Ecology Action Centre, and garden centers and retailers in the region. Internal partners have included the Halifax Regional Library, HRM Environmental Initiatives Committee, various internal HRM units such as: Marketing, Design and Print Services, HRM Customer Service Centers and HRM Corporate Call Centre. There are other external and internal partners as well.

These partnerships have helped leverage other funding, training and communication opportunities providing excellent value for HRM taxpayers. Since the inception of the permit program, HRM has engaged a qualified independent third party to administer the pesticide permit program. It also includes a parallel public education program on sustainable alternatives to pesticides. HRM has chosen to work with a third party in this way because we've found that doing so ensures a collaborative grassroots approach, while remaining cost and operationally effective.

Clean Nova Scotia

In 2007 and continuing through to 2009, Clean Nova Scotia has delivered the Pesticide Permit Application program and the accompanying education efforts. This organization was the first to deliver this program, doing so from 2001-2004. Through this partnership, the reach of the program has been extended throughout the Clean Nova Scotia suite of programs and community network of partners. Relationships with retailers have been developed and strengthened, which will prove key as the efforts to mainstream the By-Law carry forward.

Founded in 1988, Clean Nova Scotia is a not-for-profit organization guided by a Board of Directors with representation from the realms of business, academics, government, and the community at large. Over the last 21 years, the organization has evolved into an effective, high profile institution with a broad mandate to work with individuals, government, business, and communities to improve the environment. Its mission statement reads, "Clean Nova Scotia seeks to create a cleaner, healthier environment by informing, enabling, and inspiring Nova Scotians to respect and consider the environment in all their choices."

Clean Nova Scotia is effective in part because they are independent, yet able to work with business, governments and communities, collaboratively and in a non-adversarial way.

2009 Networking and Partnerships

In the course of administering the program, Clean Nova Scotia met and conferred with representatives from a number of organizations including the Museum of Natural History and the Nova Scotia Department of Environment.

3.5 – European Fire Ants

In June of last year, HRM engaged both the Canadian Food Inspection Agency (CFIA) and the Provincial Department of Environment to work on the ant situation that had developed. In late June, the CFIA confirmed the presence of the European Fire Ant (*Myrmica rubra* Linnaeus) in HRM. It is not a regulated pest in Canada and in addition to Nova Scotia; it is known to be present in North Eastern United States, Ontario, Quebec and New Brunswick.

While the notwithstanding clause in the HRM Pesticide By-law (6(2)) places this issue outside the by-law, HRM engaged Clean Nova Scotia to act in a public information role, responding to homeowner inquiries, providing information on sustainable solutions and referring sample identification to Andrew Hebda at the Museum of Natural History.

"The information for or ganic methods
 of weed con Following this species confirmation, Clean Nova Scotia drafted a fact sheet for distribution. A media release on July 10 last year brought attention to the issue and provided the opportunity to inform the public of the situation. Clean Nova Scotia began tracking confirmed and suspected locations of the ants and encouraged the public to bring samples to Andrew Hebda for identification. The bulk of the fact sheet focused on identification of the ants, their biology, and suggested management and control.
 An article remains posted on the HRM and Clean Nova Scotia website encouraging home-

ful."

An article remains posted on the HRM and Clean Nova Scotia website encouraging homeowners to take steps to get rid of ants. These steps include having the ants properly identified. Homeowners were asked to speak to their neighbors to find out limits of population and were sent information on treatments.

3.6 - Data Management

PERMIT APPLICATION DATABASE

Permit applications are entered into an electronic database which is maintained and administered by HRM Customer Service Centers. Once entered into the database, the application is assigned an identification number and forwarded to Clean Nova Scotia for the on-site assessment. During the inspection, the application is either approved or rejected. Once the inspection is complete, Clean Nova Scotia provides a paper copy to the Customer Service Centers for data input.

Data management and transfer was swift as each day's batch of permit requests could be imported directly into Clean Nova Scotia's complementary pesticide database. During this process, Clean Nova Scotia has complied with all confidentiality and privacy expectations.

Section 4 - Costs, Administration 4.1 Operating Budget and Costs

MAXIMIZING RESOURCES

Since the inception of By-Law P-800 in 2000, several internal and external partnerships have been developed that not only help keep costs down, but also help provide for an enhanced pesticide use reduction program and related public education and awareness campaign on sustainable landscape maintenance.

Internally, we have utilized centralized corporate resources such as the Call Centre, HRM Customer Service Centers, By-Law Enforcement, in-house marketing and communication staff and positioned the pesticide use reduction initiatives under the "Naturally Green" corporate umbrella. This has allowed further partnering and cost sharing through joint newsletters, promotion and advertising.

Externally, HRM has partnered with Clean Nova Scotia, the Ecology Action Centre, Landscape Nova Scotia, various community groups, the Nova Scotia Agricultural College, Halifax Regional Libraries and others, in delivering a comprehensive public education and awareness program on sustainable gardening and landscape maintenance. Original estimate (2000) to annually administer the Pesticide By-Law was \$308,000.

Effective internal and external partnerships has allowed staff to keep the annual operating costs substantially below the original estimate yet still deliver responsive programs and services. The budget has remained relatively consistent since the inception of the Pesticide By-Law, including the 2007 budget. To date, since the By-Law's inception in 2000, savings of over \$700,000 have been realized from the original estimates. Effective community and industry partnerships and stewardship have been key to this success.

2009 APPROXIMATE COSTS

Contracted Permit Process and Companion Public Education Program	\$ 91,000
By-Law Enforcement, Administration, etc. * (Carried out by centralized HRM Services)	\$ 75,000
Total * The Full Time Equivalents (FTE's) were transferred several years ago to the Centralized Services Group.	\$166,000

4.2 Administration / Policy Direction

The Sustainable Environment Management Office of the Infrastructure and Asset Management Department is responsible overall for the strategies management and policy direction of the Pesticide By-Law and related public education and awareness programs on sustainable practices.

Section 5 – Summary 5.1 - Key Focus Areas & Opportunities for 2010 and Beyond

AT SOURCE - IN-STORE FOCUS

Retailers were contacted in mid-April to open up the lines of communication and assess the needs of each store in terms of posters, replacement shelf talkers and retail staff training op-



portunities. Early communication was also important to discuss potential in-store displays throughout the season. Promotional products created in 2007 were effective again this year for public awareness in stores across HRM.

Retail staff training occurred again this year. It has been recognized that when in doubt, customers will ask a salesclerk for help, sometimes even without reading offered guidance materials. Therefore, we saw a real opportunity to work with retailers to offer their staff enhanced training opportunities around the importance of sustainable landscaping products to human health and the environment, and the key points of the Pesticide By-Law, and the risks to the customer of noncompliance. The benefit to the retailer is a knowledgeable, empowered, and more helpful sales force with increased loyalty to the employer. A continuing effort in education for store staff will increase awareness of the by-law and help staff and their cus-

tomers make the best choices when it comes to maintaining their landscapes in a pesticide free way.

ENHANCED COMMUNITY-WIDE AWARENESS

Education and awareness are as vital to this program now as they were at the programs inception. Residents continue to call into the GreenLine or send requests for information via email. We are still seeing customers at major retailers that don't realize there is a pesticide ban in place and are further confused that retailers are able to sell banned pesticides.

HRM has a relatively large percentage of transitional and transient population with the student body and military taken into account. Add to this, immigrants from other areas of Nova Scotia, Canada and the world, and there is a large number of households to whom HRM's by -laws are all new. Maintaining awareness among the static population while creating awareness in new residents means that education is an ongoing task, and there will be certain key promotional and educational tools that will need to be carried forward year to year. Materials distributed through HRM's Customer Service Centers and posted on the HRM pesticide website are essential. To work in tandem with the HRM Pesticide website, Clean Nova Scotia continued to post new information on the sustainable landscaping pages of their website. Fact sheets were developed and posted as well as a range of useful links for people looking for more information.

By reiterating HRM's pesticide information, this site provides a 'second voice' with the same message: sustainable landscaping is better for human health and environmental protection.

CONTINUE TO MAINSTREAM THE BY-LAW

HRM will continue to mainstream the By-Law and related programs and services. Over the next few years, it will be essential to monitor education efforts to determine where the best results lie, and stay tuned to the influence of external factors such as weather or particular cycles of pest infestation that may affect bylaw compliance.

EARLIER START

The education program began mid April this year compared with early March in 2008. The earlier March start is recommended in future years because it allows for greater communication with the retailers before they become too busy with the start of the season. An earlier start would make the most of the educational opportunities throughout the season, allowing for retail staff training and distribution of posters and shelf talkers before the season is fully underway.

5.2 Provincial & Federal Levels

AREAS OF RESPONSIBILITY

The registration, classification, and sales of pesticide products are federal responsibilities, with the Province of Nova Scotia responsible for vendor and applicator licenses, monitoring and data collection. The federal Pest Control Products Act was approved by Parliament in December 2002; however, the implementation and administrative policies only came into effect in June 2006. The federal agency responsible for the pesticide re-evaluations, reviews, reclassifications, public education and awareness is the Pest Management Regulatory Agency (PMRA), a division of Health Canada. In 2007, the PMRA sent out a request for comments on and reactions to a proposed domestic class pesticide harmonization.

At the provincial level, the Nova Scotia Department of the Environment and Labour administers the provincial pesticide applicators and vendors certification program. Business operators (vendors) are required to certify annually and report year-end sales records by pest. Pesticide applicators are required to renew their pesticide application certificates every five years.

PROVINCIAL AND FEDERAL LEGISLATIVE OPPORTUNITIES

At the provincial level, there is a potential opportunity for the Nova Scotia Department of Environment to enact legislation, similar to the Pesticide Code enacted in Quebec and Ontario, which provides province-wide consistency and enhanced human health and environmental protection by restricting cosmetic pesticide use and sales across the province.

Quebec has had a provincial ban in place since 2003. Ontario banned more than 295 chemical pesticides products as of April 22, 2009. PEI has announced it intends to ban lawn and garden pesticides starting in 2010. In the fall of 2008, BC mayors and councilors passed a collective resolution asking the provincial government to implement a province-wide ban. Alberta has announced that weed and feed type fertilizers will be banned starting in 2010. Nova Scotia could take these examples to enact it's own pesticide legislation.

In 2007, the Nova Scotia Department of Environment and Labour released its *Environmental Goals and Sustainable Prosperity Act*, setting out 21 far-reaching goals in areas including ecosystem Protection, Air Emissions and Water Quality. The overall goal of the act is, "Nova Scotia aims to have one of the cleanest and most sustainable environments in the world by 2020." It is notable that pesticides are not mentioned in this list of commitments.

5.3 Administrative Order #23

ADMINISTRATIVE ORDER NUMBER 23, RESPECTING PESTI-CIDES, HERBICIDES, AND INSECTICIDES

Excluded from the Pesticide By-Law is a companion document to the Pesticide By-Law P-800 that provides a list of permitted pesticides, products which are excluded from the provisions of the Pesticide By-Law. It was approved by Regional Council on August 22, 2000. The list includes such products as insecticidal soaps, BT (Bacillus Thuringiensis), dormant oils, lime sulphur, etc. Staff members use a science-based protocol (established in 2001) to amend the permitted products list. A challenge with Administrative Order #23 is that it requires the homeowner to read the ingredients list on products, although ways to more clearly identify products containing the permitted substances have been developed such as shelf talker tags in stores to identify the permitted products. The challenge lies in small print, long, unfamiliar chemical and substance names and possibly literacy issues. This challenge could potentially be eliminated by action at the federal or provincial levels to reclassify domestic class pesticides.

OPPORTUNITIES REGARDING ADMINISTRATIVE ORDER #23

Depending upon what continues to happen at the federal level regarding pesticide reviews and reclassifications, Administrative Order #23 may not be required in the future. In the interim, it provides local remedies until desired Federal policies and programs are in place. It will continue to be incorporated into retailer and in-store education materials.

5.4 General Summary

Overall, the implementation of By-Law P-800, Respecting the Regulation of Pesticides, Herbicides and Insecticides and related education and awareness programs appear to be effective. Permit application numbers continue to drop to reflect the actual situation of serious infestations. This allows efforts and resources to be turned to creating better education and decision-making supports at key nexus points for consumers: i.e., when they are in the store preparing to purchase a product, and when they are setting out to work in their yards. Education at these points include increased store displays to answer homeowner questions at the point of sale and the Green Yards program, providing hands on information to homeowners on their own turf.

In working effectively with community groups and retailers while continuing to lobby for the provincial and federal governments to take action, HRM continues to achieve its goals of protecting human health and a sustainable environment. Meanwhile, we monitor issues that arise affecting by-law compliance, such as the introduction of new alternative products and weather patterns, and make allowances to deal with these on an as-needed basis.

The intent of the By-Law, to protect those medically affected by pesticides and also to protect the environment, appears to be effective. The By-Law is meeting its fundamental intent.

In the bigger picture of a sustainable, healthy community, the general public, as witnessed in opinion polls, surveys and public feedback over the past 5-6 years, is embracing Regional Council's leadership and direction in pesticide reduction by practicing sustainable alternatives to pesticides in the maintenance of their own properties. Home visit opportunities to demonstrate hands-on best sustainable practices are popular and sought-after by those who seek a do-it-yourself solution.

Consumer demand is also creating a shift in the landscaping industry to more sustainable products and solutions. It is expected that at a certain point, a critical mass of the population will be educated in these cultural practices and a sustainable approach will become a cultural norm. Therefore, over time, the enforcement of the By-Law will be assisted by a growth in knowledge and expectation of the public.

Education will continue to be an important part to any ban, municipal or provincial. Providing information on effective alternatives and a list of products authorized for sale and use, including a description of their uses, will always be of value to homeowners working to maintain their turf.

Appendix A – Halifax Regional Municipality By-Law P-800

Appendix B - Administrative Order #23