

**Halifax Regional Municipality
Pesticide By-law P-800
Respecting the Regulation of Pesticides, Herbicides
and Insecticides**

2001 Overview

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Pesticide By-law P-800 Respecting the Regulation of Pesticides, Herbicides and Insecticides 2001 Overview

Section 1

Getting Started

Introduction/ Preamble

The intent of this document is to provide the reader with a general overview and snapshot of this year's roll out of the new Pesticide By-law (P-800). It is presented in (4) Sections (Getting Started, Underway, Costs, and Stakeholder/ Community Feedback) in order to help provide an organized and chronicled description on how the different initiatives and processes were structured, put in place, managed and carried out. The 4th section provides a synopsis of community and stakeholder feedback.

Brief History Leading up to the Pesticide By-law

Discussions towards a municipal pesticide by-law 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 have the regulation of pesticide type products a municipal responsibility through the Municipal Government Act (MGA) and Halifax Regional Council forwarded on 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 use 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 adhoc Pesticide Advisory Committee, made up of industry, community, appropriate regulatory and environmental interests was established later that same year.

The Committee met on numerous occasions with two distinct positions being established, literally from day one.

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 held during the formal reading process.

After this somewhat lengthy, but very open public process, By-law P-800, Respecting the Regulation of Pesticides, Herbicides and Insecticides became effective August 19, 2000.

A very general overview of the implementation stages is 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, licenced 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.

Getting Ready for April 1, 2001

By-law P-800 regulates certain uses of pesticides on residential properties throughout all of HRM, which represent almost 40% of the entire provincial population, as well as on all municipally owned properties within HRM. Subsequently, a region wide policy affecting many people.

The By-law also had a number of complexities and processes that needed to be properly put in place and articulated to the public.

The phased approach to the By-law helped provide some immediate protection for special population groups while allowing the community and landscape industry to adapt to more sustainable maintenance practices, including the reduction in the use of pesticides over a two year transition period.

Staff needed to take full advantage of this transition period, while at the same time ensuring all of the processes to roll out the By-law were promptly and properly put in place and clearly articulated to the public. A concurrent public awareness and education program on sustainable gardening and landscape maintenance practices, including alternatives to pesticides also had to be coordinated and implemented in the very early stages.

A number of initiatives needed not only to be started but also ready to go by April 1, 2001. Brochures, fact sheets, web sites, Property Registration Systems etc. also had to be in place.

Start up Funding

The new Pesticide By-law was approved by Regional Council in August 2000 well into the fiscal year. Subsequently there was no identified funding in the 2000-2001 current operating budget for start up costs to implement the new Pesticide By-law.

Therefore, staff approached and received approval from Regional Council to access up to \$200, 000 from the Variable Operating Stabilization Reserve to fund start up costs that could not be found within the current operating budget. Funding was required for such things as information processing and handling costs, advertising, public information and education and other related start up costs. Through the maximizing of internal resources and other measures, staff were able to limit the amount required from the Operating Stabilization Reserve to \$120, 000, realizing a substantial savings for tax-payers, from the earlier estimates.

Process Mapping, Project Management - Getting Underway

Park and Recreation Services, through the Strategic and Sustainable Resource Management section is the lead Business Unit.

A series of facilitated Process Mapping workshops, took place in October and November of 2000 to determine responsibilities, roles, links, budgets etc. All affected Business Units (i.e. Finance, Shared Services, Planning, Development, Information Services, Parks and Recreation, Legal Services) participated.

After the Process Mapping was completed, Project Management updates commenced in December 2000, with five periodic updates from late Winter to Spring 2001 on the progress of the various initiatives. This helped keep everyone informed as to progress and critical dates. Several reports were forwarded to Regional Council during the, “getting ready” period as well.

Some examples of the internal cooperation and efforts between Business Units under a Matrix Management type model (teams/ individuals from different BU’s come together as required to complete a specific task) included:

Business Unit Participation

Parks & Recreation Services - Lead Business Unit

Shared Services - Call Centre & Business Centres - adm. support, tier one calls, etc.

- Geographic Information Services (GIS) in conjunction with **Information Services** developed and put in place a complex record management and geographic mapping links for the Property Registration System.

- Marketing, Design and Communications staff of Shared Services assisted with design, advertising, displays, brochures, fact sheets and other collateral materials and with the overall communications plan and corporate logo and word mark.

By-law Enforcement - section of **Community Projects** is overseeing enforcement related matters.

Legal Services - has provided timely legal advice as we have progressed with the rollout.

Solid Waste Management - has partnered on some sustainable practices (alternatives to pesticides) research trials along with other internal and external partners.

The corporate **Environmental Initiatives Committee** has assisted with the promotion of sustainable practices, particularly through the Naturally Green newsletters.

In December of 2000, internal volunteer Train the Trainer workshops on the new Pesticide By-law were held. Over 40 staff, representing all of our Business Units participated. An awareness session was also held for Regional Council members in the Spring of 2001.

External Participation

There has been considerable and continuous liaison with various levels of government, agencies, community groups, industry, senior staff, council and other stakeholders.

Clean Nova Scotia - through a partnered contract, has carried out the Pesticide Permit Application property assessment program and related public education and awareness efforts.

Various Documents/ Forms Developed (first year)

In order to administrate and manage certain processes within the new Pesticide By-law, and keep it reasonably simple and straight forward some various forms were developed this year.

These include:

- Physicians Letter Form - required to register property for medical reasons
- Property Registration Form - register property for medical reasons
- Property Owner Notification Letter - property owners within 50 metres of a Registered Property receive this letter from HRM
- Deregistration Letter - notify property owners within 50 metres of a deregistered property
- Pesticide Permit Application Form
- Pesticide Permit

These forms are available at all of our HRM Business Centres and on line from our Web Site.

Other Documents

- Administrative Order #23 - Permitted Products List
- Enforcement Policy - By-law P-800
- Public Education and Awareness Programs
 - Series of brochures and fact sheets on Sustainable Practices
 - Brochures, info sheets on By-law

Section 2

Operational Overviews

By-law Enforcement - This function was carried out by the By-law Enforcement section of Community Projects, through a contract with the Canadian Corps of Commissionaires. Enforcement coverage was provided 7 days a week, Monday to Friday, 8:30 am to 7:00 pm and week-ends and holidays from 8:30 am to 4:30 pm, allowing for maximum coverage and adequate time off for the personnel involved. The period ran from about April 15 - October 31, 2001.

Since April 1st, 2001, pesticide enforcement officers have responded to approximately 400 complaints/queries. During this time, enforcement officers adhered to HRM policy regarding enforcement. The enforcement policy was approved by Regional Council.

This policy includes:

- Enforcement of the by-law will be reactive to complaints received and preventative enforcement patrols seeking violations will not be undertaken.
- Response time 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 completed;

- Investigation into alleged violations will rely primarily upon eye witness 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 condition restriction. As a result micro-climate information will only be available through eye witness testimony;
- Plant samples will not normally be taken at the scene of an alleged violation and tested for pesticide residues.

Violations

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

Keeping this policy in mind, enforcement personnel attempted to educate both commercial and do-it-yourself applications through all available means such as literature, informing them of alternative methods and where to find the information necessary to maintain a pesticide-free lawn. Enforcement personnel were also required to mediate situations on numerous occasions and repeatedly attempted to persuade everyone that the by-law was enacted and therefore enforceable.

This year being the first of a two year transition period and phase in towards a total ban on residential property, an educational and awareness approach was taken. However, serious blatant and/ or repeat violations of the By-law were responded to in a more direct manner. This year a total of 14 tickets were issued, 13 to commercial applications and one to a private citizen.

The personnel involved with the Pesticide By-law Enforcement were sworn in as special constables and wore the uniform of the Canadian Corps of Commissionaires. Each received additional training on pesticides and by-law enforcement arranged through HRM.

While it was observed that a number of people, commercial applicators and individual citizens, were at first reluctant to accept the changes incurred by the enactment of this by-law, they almost all agreed that it was a good thing. Growing pains and misunderstandings were to be expected and were dealt with in a professional manner which was attested to by the positive feedback from the public.

Because of the operational enforcement success experienced this year, it is planned to continue this same approach to enforcement for 2002 season, and that every effort be made to re-acquire the same people from the Commissionaires. This will serve to reduce the time spent on educating new personnel and would result in immediate enforcement response.

This is a very cost effective approach for HRM as well.

Pesticide Permit Applications and Assessment

In accordance with Section 6 of the Pesticide By-law, under the notwithstanding clause 6(2), a pesticide application maybe carried out within a prohibited area if it is 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.

An effective, yet simple Pesticide Permit Application system was established.

A key factor in the success and prompt turn around time in processing requests was Regional Council's approval on May1, 2001, the assigning of on site inspectors to carry out and approve routine on site pesticide permit applications when and as required.

Further, Regional Council also approved on January 9, 2001, an amendment to Administrative Order #15 (Respecting Licence, Permit and Processing fees) that there be no fee for a Pesticide Application Permit. This helped prevent a cost deterrent to properly applying for a permit.

Project Overview

Since April 23, 2001, Clean Nova Scotia (CNS) has been working with the Halifax Regional Municipality to implement the pesticide application permit process and public education components of the recent pesticide ban and by-law. Specifically Clean Nova Scotia has assessed applications received by the municipality requesting the permitted use of pesticides for cosmetic landscaping purposes within the restricted/ buffered areas. The application assessment process involves a visit to the affected property and a determination of whether a pesticide spraying permit can and should be issued under the special conditions allowed in the by-law. Clean Nova Scotia also responded to public inquiries regarding the pesticide by-law, natural landscaping alternatives, and permitted pest control methods and products.

Training and Preparation

Six Clean Nova Scotia staff members received training provided by the HRM specific to the project. The training covered natural landscaping alternatives, types of pesticide products, and an overview of the by-law. Additional training on weed identification and control was provided by the Nova Scotia Agricultural College. Clean Nova Scotia staff also researched their own materials by internet and the library, as well as purchased resource manuals for in office and field use.

Application Review Process

Application Pick Up

Clean Nova Scotia visits the HRM Business Centre office each day to collect the pesticide permit applications received the day before. Applications are normally picked up in the morning or mid day depending on the number of applications being received.

Site Visit

Each site visit was (whenever possible) booked in advance with the homeowner. Once a permit application is received by CNS, an appointment is scheduled and a pesticide permit assessor (normally two assessors) visits the affected property. While on site the assessor(s) examines the property to determine that the conditions described in the application are accurate including:

- i) type of pest
- ii) threat to human health, or infestation likely to spread to other properties
- iii) extent of damage
- iv) whether the condition is treatable

When the problem is not obvious, the assessor asks the homeowner to point out the problem. The assessor completes a checklist and then discusses the pest problem with the property owner. The homeowner is provided with information on natural alternatives to controlling and preventing the specific pest problem (see *educational materials* below), and any questions the property owner has are addressed by the assessor. If the conditions described in the application match those found on the property and meets the notwithstanding clauses in the By-law, the assessor issues the permit providing a copy to the homeowner and describing the special requirements for applying the pesticide. If conditions are not as described in the application and/ or do not meet the notwithstanding criteria, then the permit is rejected and the homeowner receives a copy of the rejected permit form. If the pest exists but is not deemed to be at an infestation level, then the homeowner is advised of the right to re-apply should the pest problem become worse.

Once site assessments are completed, the permit form (either rejected or approved), along with a copy of the application form are returned to the HRM Business Centre. Clean Nova Scotia also maintains a copy of each permit and application form.

While most property owners have expressed satisfaction with the property assessment, however in a very few cases property owners have expressed dissatisfaction with Clean Nova Scotia's evaluation as well as the permit approval process. In all cases CNS has made every effort to explain the process and the reason for rejection.

Educational Materials

Each property owner that received a site visit is provided with an information package that includes: HRM Naturally Green Pest Control Information Sheet - Outlining common pests and suggested remedies and prevention methods.

HRM Naturally Green Lawn Care Information Sheet - Outlining natural (organic) techniques for healthy lawns and lawn care as well as soil conditioning.

HRM Naturally Green Pesticide Ban Information Pamphlet - Discussing details of the by-law and permitted pest control products.

Other Materials - Other materials are occasionally provided such as pictures and descriptions of pests and natural control methods. This material comes from reputable sources including Rodales and Morton and Associates. We have also found and distributed pest information from a number of web sites including www.tulsmastergardeners.org and www.laters.com, among others.

Telephone Inquiries

Clean Nova Scotia has also provided information on a range of landscaping and pesticide by-law topics over the phone. Generally telephone inquiries fall into the following categories.

- i) Specific Control Measures for a Pest Problem - Seeking solutions for pest and weed problems ranging from dandelions to chinch bugs.
- ii) Details of Pesticide By-law - These questions range from simple to detailed inquiries on issues such as affected properties, signage requirements, notification requirements.
- iii) General Dissatisfaction with the Ban - Complaints about the permitting process, or the

- pesticide by-law.
- iv) Permitted Pest Control Products - Products that are not covered by the ban.
- v) Complaints About Pesticide Use - Specific complaints about neighboring properties applying pesticide.

A total of 137 phone enquiries were responded to from April 24 to October 18, 2001.

Pesticide Permit Application Statistics

In addition to a large number of general enquiries and requests, Clean Nova Scotia conducted a total of 162 application reviews and site visits for Pesticide Permit Applications. Approximately 70% met the requirements of the By-law and were approved with the balance not meeting the By-law conditions were rejected. The breakdown indicates that approximately 85% of the requests were for chinch bug with the balance for other insect infestations.

Analysis

The rate of approval indicates that the majority of applications are accurate in the description of the pest problem and it meets the conditions in the notwithstanding clauses in the By-law. Most of the rejected permits were because the conditions were not at an infestation level and/ or did not comply with the By-law. Also in a number of cases the pest problem could not be found at all, suggesting the application may have been made in anticipation of the problem occurring. There should be no denying the fact that a significant number of the applications which were rejected showed some “problem” with a lawn such as dead or dormant areas, but that an inaccurate diagnosis had been made by either the homeowner, or as was more often the case, the lawn care company.

The data clearly shows that the majority of applications for spraying come from the Dartmouth/ Cole Harbour area. Assessors have found that soil conditions in some of the subdivisions in these areas appear to be poorer, and lawns are more susceptible to pest infestations. Over the course of the Summer it was noted that the average soil depth in these areas was between 2 and 3 inches (5 - 7 cm). It is recommended that there be a minimum of at least 6 - 8 inches (15 - 20 cm) of good quality top soil for turf.

Adequate and proper soils combined with sustainable maintenance practices would probably reduce the pesticide application requests greatly in these areas with poor, thin soils.

There also appeared to be signs of a “follow the leader” effect that happens in many neighborhoods. This phenomenon was noticed in Cole Harbour, the Montebello area of Dartmouth as well as Sackville and Bedford. Analysis of the data shows clusters of applications on streets all coming in a one or two week period.

Chinch bugs overwhelmingly represent the majority of pest problems. The chinch bug problem seemed to peak during the first week of August.

In the first two months of the program Clean Nova Scotia (CNS) contacted all applicants and set appointments to perform the site visits. This practice was discontinued in mid to late July when the applications became too numerous. CNS made this decision in order to facilitate the **desired turn around of 24 hours. This was accomplished over 95% of the time.** This would have been impossible had they endeavored to contact and set appointments with all the applicants during the very

peak season. By late September they were again in a position to call ahead and set appointments for site visits.

While the turnaround has certainly met the standard desired, the trade off has been the inability at times to meet with all homeowners during the very peak season. It is important to stress though that all homeowners received information along with the permit decision. All homeowners were left with a copy of Sustainable Turf Maintenance and a copy of the information sheet relevant to the particular pest they wished to control. Where applicable CNS made personal notes on the sheets which they felt were relevant to that particular lawn. For example if the grass was cut too short, was in need of watering, or the soil depth was insufficient.

Overall the permitting process has gone quite well. Most applicants have been receptive to the assessors' educational information and expressed an interest in changing landscaping practices to minimize need for chemical treatments. Clean Nova Scotia did receive a couple of complaints about improper notification from chemically sensitive property owners, and these enquiries were brought to the attention of By-law Enforcement.

The partnership with Clean Nova Scotia to carry out the Pesticide Permit Application Assessments and related Public Education and Awareness Programs has been operationally very successful and cost effective for HRM. A similar program is planned for 2002-03.

Property Registry & Call Centre

In accordance with Section 7 of the Pesticide By-law a **Pesticide Property Registry** was established and upon submission of the appropriate documents, including two physicians letters 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, a property owner could register his/ her property.

There were 182 medically registered properties in 2001. There is no fee to medically register a property as per the direction of Regional Council. A number of callers advised that since they were already within 50 metres of a buffered public property they did not register their property. It is therefore assumed that the Property Registry may have been much larger if this had not been the case.

A very general breakdown of Medically Registered Properties includes:

- Halifax Area - 42% approx.
- Dartmouth Area - 21% approx.
- Bedford/ Sackville/ Fall River Area - 20 % approx.
- Cole Harbour/ Eastern Shore Area - 7%
- Other Areas - 10%

One property was deregistered in 2001.

The Property Registrations, along with other routine administrative functions such as permit requests were handled by our HRM Business Centres. Documents and information was available at all HRM Business Centres as well as on-line on our corporate web site. **This helped provide immediate and**

readily available information for the public.

In accordance with the Pesticide By-law, Section 8, HRM advised in writing, of the registered properties to owners of affected properties within 50 metres of these medically registered properties. Several thousand letters were issued.

Also in accordance with Article 9, of the By-law, HRM provided monthly updates (hard copy and electronic form where available) of the Registered Properties to each commercial pesticide applicator, that HRM was aware of, operating in the municipality.

In addition to this and beyond the requirements of the By-law, HRM also provided overall lists of all affected properties by the By-law on our corporate web site for the public and industry and this was regularly updated. This service was extensively used by the public and industry.

Generally, the Property Registry and related functions appeared to run quite well and a similar process involving our HRM Business Centres is planned again for 2002-03.

Call Centre

In order to maximize existing HRM resources, tier one, Pesticide By-law related calls were handled through the Central Call Centre which processed 4, 000 - 5, 000 general pesticide enquiries this Summer. It is planned to utilize this same practice again for 2002-03.

Public Awareness and Education Programs and Overall Communications Plan

The overall Communications Strategy on the new Pesticide By-law and the accompanying Public Awareness and Education Programs on Sustainable Gardening and Landscape Maintenance including alternatives to pesticides is of paramount importance and needed to be initiated very early in the process with programs in place by April 1, 2001.

With the assistance of the Marketing staff of Shared Services, a detailed Communications Plan for the roll out of the Pesticide By-law was established in November 2000, with an Information Report to Regional Council on January 11, 2001.

This Communications Plan identified a number of items such as logo/ word marks, key messages, advertising, web sites, collateral materials such as fact sheets, brochures, posters, decals, etc., printing needs, exhibits, radio and media advertising. A copy of the Communications Plan was forwarded to Regional Council on January 23, 2001.

A follow up Communications Framework was established and put in place for 2001-02 as well with similar items.

Communication Key Activities Included:

Internal Training on the By-law (examples)

- 40 HRM staff representing all Business Units volunteered and participated in the Train the Trainer program in December 2000.

- By-law Enforcement, Administration (Business Centre staff) and Clean Nova Scotia staff participated in Technical Workshops on Pesticides in April 2001.
- An orientation sessions on the Pesticide By-law was held for members of Regional Council in April 2001.
- Briefings were held with Call Centre staff in May 2001 on the By-law.
- Various articles were placed in the Corporate Newsletter as well as corporate communications on e-mail for major initiatives (i.e. HRM All)

Communication Items

- Logo and word mark (Naturally Green) developed and put in place. The logo was designed by Kelsie Williams of Shared Services
- Web site established
- Pesticide By-law Brochure developed
- Display Unit developed for Trade Shows, Public Displays
- Series of radio ads in April - May 2001
- Several series of newspaper ads - Spring - Summer - Fall 2001
- Major articles in three "Naturally Green" newsletters which go to all households in HRM
- Several information reports and updates to Regional Council
- Several PSA's sent out at key bench mark dates of the By-law
- Several articles in national and local magazines
- Several dozen newspaper, radio and T.V. interviews, locally, regionally and internationally
- Public Workshops - Spring & Fall Series

Public Awareness and Education Program on Sustainable Gardening and Landscape Maintenance

This initiative included a somewhat social marketing approach to get to the grass roots (please excuse the play on words) level at the very start.

A key component was a Train the Trainer Program on Sustainable Gardening and Landscape Maintenance. This very successful program, led by local radio garden personality Marjorie Willison saw over 110 volunteer trainers from throughout HRM participate.

These volunteers were then instrumental in carrying out the Public Workshops (12 in total) partnered with the Regional Library in the Spring of 2001. They, along with HRM staff did a number of similar workshops for Garden Clubs, PTA's, Community Groups, etc. throughout HRM on a request basis.

This past Fall, a similar series of Public Workshops on Sustainable Practices took place at most regional library branches throughout HRM partnered with Landscape Nova Scotia as well again with the Regional Library.

These public workshops have been very popular and well attended.

Other Public Awareness and Education Items include:

- Brochure on Pesticide By-law
- Several different Fact Sheets on Sustainable Maintenance Practices
- Recipe Cards, Posters, Decals
- Regularly updated Web Site (Pesticide By-law - Naturally Green)
- Articles in the Naturally Green Newsletter
- Various newspaper, radio and T.V. articles
- Participation at two major Home Shows in HRM
- Educational Posters (Spring; Fall) in Daily News/ National Post
- Clean Nova Scotia Newsletters
- PSA's on major initiatives

Staff is presently lining up speakers and proposed programs for the 2002-03 period including some internationally renown authors on the topic of sustainable practices.

It is planned to continue on with the Communications Framework and Public Education and Awareness initiatives for 2002-03, however some of the key messaging will highlight that we will be in the final transition year before a total ban on affected properties, effective April 1, 2003. This is an important message to convey to the public.

Research & Education

HRM has accessed a number of excellent resources and information on sustainable maintenance practices and has made electronic links to them from our Web Site so the general public can have readily available access to them as well. Our web site is very popular, locally and nationally. **Our website received over 10, 000 hits this summer alone.**

HRM's efforts are also showcased as a national case study on the Canadian Centre for Pollution Prevention, Responsible Pest Management Website, in conjunction with the Federation of Canadian Municipalities (FCM).

HRM in partnership with the Provincial Resource Recovery Board, FCM Federal Green Municipal Enabling Funds, Dalhousie University (Dr. David Patriquin) and others has initiated some MSW compost topdressing research trials on our sport fields. We have over 330 various HRM owned sport fields located throughout HRM that could benefit greatly from topdressing and related sustainable maintenance practices. However, we need to determine the operational, environmental and cost effectiveness of using MSW compost as part of an overall integrated sustainable maintenance program. If successful, which we think it will be, it will help complete the ecological cycle from curb side green bin to field, and provide a cost effective market for MSW compost produced in the two privately operated composting facilities.

It is planned to continue on with this and related research on sustainable practices in 2002-03 and beyond. Sustainable Landscape Maintenance Practices include alternatives to pesticides.

Section 3

Costs

Start-up Costs

The Pesticide By-law was approved by Regional Council in August of 2000 well into the fiscal year, with major start up and roll out costs, subsequently not identified in the current fiscal year budget.

Therefore, in late November of 2000, Regional Council approved a staff recommendation that a maximum of \$200, 000 be withdrawn from the Variable Operating Stabilization Reserve to fund the balance of start up costs for the new Pesticide By-law that could not be found within the current operating budget.

Estimated **start up costs** as determined by an interdisciplinary team of staff included:

IS/ GIS Development Costs	\$ 45, 000
Shared Services Interim Staff	29, 000
Parks & Recreation Interim Adm. Staff	15, 000
Public Awareness, Advertising, Communications	70, 000
Registration Services	40, 000
Other interim costs (Public Workshops, etc.)	<u>15, 000</u>
Total	\$214, 000 Estimated Costs \$120, 000 Actual Costs

Staff was able to maximize both internal and external resources and streamline some other processes resulting in savings of about 45% from the earlier estimates. This netted an approximate \$94, 000 savings for tax payers as only \$120, 000 was needed from the VOS Reserve Fund. All required start up efforts and processes were met.

2001-02 Fiscal Year Costs

In the earlier supplementary reports to Regional Council (Spring 2000) staff advised that the **annual operating costs** to put in place the new Pesticide By-law could range up to \$308, 000 or more.

An amount of \$218, 000 was approved by Regional Council in the 2002-03 operating budget towards implementation of the new Pesticide By-law. Major costs included Communications Plans and Public Awareness and Education Programs (\$80, 000 approx.), overall Administration (i.e. call centre/ business centres/ information handling/ mail outs/ adm. support/ etc.) (\$103, 000 approx). By-law and Permit assessments and related activities (\$35, 000 approx.), etc. An amount of approximately \$32, 000 was designated towards enforcement.

Staff was able to reduce the original estimated costs through maximizing existing internal resources and processes (i.e. Corporate Call Centre, Business Centres, By-law Enforcement, Strategic and Sustainable Resource Management Group, etc.) and through some very cost effective partnerships with external agencies such as Clean Nova Scotia, and the Regional Library, Landscape Nova Scotia, and others.

The Public Awareness and Education Programs initiated are also much more comprehensive than in the original estimates as is the Pesticide Application Permit process and accompanying public education program. Partnerships as previously mentioned were instrumental in putting in place these operationally and cost effective programs.

Long Range Costs

After 2003, when the By-law has been fully phased in, and implementation continues to go well, we may be able to substantially reduce the direct costs attributed to it. The Pesticide By-law is part of the overall corporate environmentally sustainable initiatives (Naturally Green). This includes other ongoing efforts such as the sustainable maintenance research trials on athletic fields (i.e. MSW compost topdressing). Council may wish to look at investing any savings in the Pesticide By-law into operationalizing some of these efforts such as sustainable park and athletic field maintenance programs based on the research and its findings at that time. However, this is a decision for later years.

Section 4

Comments, Stakeholder Feedback and Suggestions Administrative Order #23, etc.

Comments/ Feedback From the Public/ Stakeholders - General Synopsis

The new Pesticide By-law is not a stand alone initiative. It is a component of a much larger corporate umbrella addressing issues of environmental sustainability. HRM recognizes that our natural surroundings must be sustainably maintained and managed to help ensure quality and healthy community living now and for the future.

The Pesticide By-law therefore has been promoted in conjunction with the corporate “Naturally Green” initiatives.

The By-law regulates the use of pesticides on the residential properties of almost 40% of the entire provincial population, who happen to live within HRM, and on all HRM owned property.

Subsequently we are talking about a piece of legislation that touches many people and their residential properties thus making the overall communications and public awareness initiatives so important as well as the feedback from the public to determine the effectiveness of the communications and awareness programs and on the By-law itself.

In a commissioned public survey carried out by Corporate Research Associates Inc., on behalf of HRM, in August 2001 **awareness was high across the Region of the fact that the HRM Municipal Council had implemented a by-law to regulate certain aspects of pesticide use in the Municipality, with over 92% of home owners being aware.**

In May of 2001, students at Armbrae Academy surveyed 123 households located in the metro area. This poll indicated that 88% were aware of the new By-law with 7% of respondents not in favour of the ban.

On the national level, for comparison purposes, in late October 2001, The Globe and Mail carried a

story on a Public Survey carried out in Ontario. The survey indicated that over 82% of respondents backed a **total ban** on pesticide use in residential areas.

Overall, the vast majority of residents are aware of the By-law and appear to support its general intent. This is based on the survey information and direct feedback to staff through several thousand enquiries. However, residents want to know what are the alternatives to synthetic pesticides, how do they obtain information/ products and are they reasonably cost effective. The Corporate Research survey reflected this as well with approximately 85% of respondents being interested in learning more about alternatives to pesticides.

HRM has been addressing this need through a number of public workshops on Sustainable Gardening and Landscape Maintenance, partnered with the Regional Library and Landscape Nova Scotia. Attendance has been quite good at each of these Sessions with several hundreds of people having participated to date providing another indicator of the public's interest in regulating pesticide use on residential properties and using alternative practices to pesticides.

It is noted that some polarized views still exist regarding the By-law. There are some that believe that the By-law still does not go far enough in regulating pesticides, while a completely opposite view that the By-law goes too far is held by a few, particularly in the segment of the landscape industry directly involved with pesticide applications. Some major pesticide application companies have now though diversified their operations and are experiencing new business opportunities.

Formal requests for changes to the By-law were sent to the Mayor's Office from the Medical Society of Nova Scotia and Landscape Nova Scotia, which is the local landscape industry trade association. These were referred to staff for comments.

The Medical Society questioned the need for two physicians letters to medically register a property in the Property Registry. It was explained to them that this was the recommendation from the Pesticide Advisory Committee to Regional Council which had representation from the appropriate medical community. Further, with just one year left in the Property Registry, by the time a formal process was completed to amend the By-law, the Property Registry would be redundant with the full ban on affected properties in place.

In a letter to the Mayor, dated August 14, 2001, Landscape Nova Scotia on behalf of its membership advised that it was committed to pesticide reduction through the use of integrated pest management. Staff was very pleased to hear this commitment.

Landscape Nova Scotia suggested in its letter that a proper pest management scheme would look at all pests in the landscape and have the ability to deal with infestations before significant damage were to occur. Landscape Nova Scotia did not feel that the By-law provided the ability to deal with weed and disease infestations.

Regarding weeds, the Pesticide Advisory Committee to Council did not as a whole consider weeds as an infestation issue, however did propose remedies for plants that could cause human health concerns.

These conditions were incorporated into the By-law. Sustainable remedies for weed control include mechanical removal and cultural practices that improve the soil and turf and mitigate weed issues and are readily available, although in some cases it may be more expensive initially.

The By-law does not presently have a remedy for a serious residential landscape disease situation. Serious disease infestations are not overly common on residential landscapes, and in 2001 staff was not aware of any serious disease situations on residential landscapes in HRM.

Nonetheless, this could potentially pose a concern in the future and requires further investigation.

Staff was also requested in the Summer to provide Regional Council with some strategies to go to the Province to have medical offices included in the Pesticide By-law. These strategies were forwarded in a Report at the August 26, 2001 Regional Council meeting. However Council, in a majority vote decided to leave the By-law as is regarding this matter.

Based on the feedback from the public and their understanding and awareness of the By-law, at this point in time, other than possible future consideration for a remedy for a serious disease infestation, staff does not foresee a need for major changes to the Pesticide By-law. It is noted that Federal policies would supercede any local legislation regarding federal quarantine disease pests such as plum pox virus, etc.

At the moment and at the request of Regional Council (Sept. 4, 2001) staff is investigating potential benefits for HRM and its citizens through involvement with, "My Home - Our Environment", a nation wide initiative being led by the B.C. Landscape and Nursery Association. This group is presently working on its draft organizational documents and operating principles which it hopes to have in place in 2002. Some of its proposed recommendations for pesticide risk reduction may be of some value for HRM, particularly public education and awareness programs.

In conjunction with this and at the request of Regional Council, staff is also closely monitoring the efforts of the Pest Management Regulatory Agency (PMRA), the federal agency responsible for the licencing and control of pesticide products in Canada. The 2000 House of Commons Report on Pesticides from the Standing Committee on Environment and Sustainable Development made a number of recommendations on the management and use of pesticides in Canada. These included an evaluation of the performance of the Pest Management Regulatory Agency (PMRA).

From these recommendations came the 2001 PMRA "Action Plan on Urban Use Pesticides" and related, "Healthy Lawns Strategy".

HRM staff has forwarded various questions this year to the PMRA in order to help provide us with a clearer and more exact indication of what is happening at the federal level on pesticides and any potential impact and time frames at the provincial and municipal levels. After various enquiries we have received some responses, however some of the processes, i.e. review of most commonly used turf pesticides; pesticide products reclassification systems; etc. have not been indicated as being completed

yet and this is critical information towards any considered changes to HRM's Pesticide By-law. Consequently, staff is awaiting this information prior to considering any proposed changes for Council's consideration. Staff does recommend though that if there are any proposed changes to the By-law they be done at the same time as the amending process could be somewhat lengthy, based on past experience and also keeping in mind the lead time required to produce brochures, fact sheets, etc. and provide reasonable advance notice to the public and industry.

Administrative Order #23 (Permitted Products List)

Administrative Order Number 23, Respecting Pesticides, Herbicides, and Insecticides

Excluded From the Pesticide By-law is a companion document to the Pesticide By-law P-800 and provides a list of Permitted Pesticides that 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 believe there should be a formal science based protocol to amend the Permitted Products List. Staff also suggest that it be a clear and transparent process with established time lines to allow for appropriate changes (if required) to collateral materials, web sites, brochures, etc. that reference the Permitted Products list, thus giving the public ample notification of changes.

A proposed Protocol to Amend Administrative Order #23 was presented for Regional Council's consideration on June 5, 2001, however Regional Council requested that staff re-review the proposed recommendation in conjunction with the present efforts of the federal **Pest Management Regulatory Agency (PMRA)** and its **Healthy Lawns Strategy**.

Since the interim report to Regional Council on June 19, 2001, staff is awaiting important information from the PMRA on the results of some of the key initiatives they have been mandated by the Federal Government to carry out under the Healthy Lawns Strategy. This includes a re-evaluation of the seven most commonly used lawn pesticides; a federal reclassification system for residential use pesticides; an enhanced pesticide safety review process; to name a few that are to be completed by the end of this fiscal year.

Upon receipt and review of this and some other information, staff should then be in a position to again return to Regional Council with a recommendation for a protocol to carry out amendments to Administrative Order #23.

At the request of Regional Council, Diatomaceous Earth was added this Summer to the Permitted Products List.

Diatomaceous Earth does meet the Protocol Procedures as proposed by staff.

Regarding Administrative Order #23 and the Permitted Products List, it is planned to enhance the communications and information to the public in 2002 on the permitted products list; what they are

useful for; and general application procedures.

It is planned to accomplish this through the Public Education Workshops, Fact Sheets and Brochures and on the Web Site.

Communication and Public Awareness has been a key factor in all of the Pesticide By-law related initiatives and will continue to be.

Stephen King
December 2001