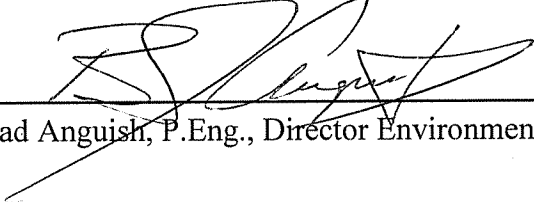


Halifax Regional Council
January 11, 2005

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:



Brad Anguish, P.Eng., Director Environmental Management Services

DATE: January 5, 2004

SUBJECT: 2004 Program Overview - Pesticide By-Law

INFORMATION REPORT

ORIGIN

April 6, 2004, Halifax Regional Council Committee of the Whole - Pesticide By-Law Insecticide Permit Process.

BACKGROUND

At its April 6, 2004, meeting, Regional Council unanimously supported a staff recommendation to continue with the third party pesticide permitting approach that also enhanced community and industry stewardship opportunities.

Council also approved forwarding a letter to the Federal Minister of Health, specifically requesting that the federal recommendations to improve human health and environmental protection through changes to the Federal Pest Control Products Act and the Pest Management Regulatory Agency (PMRA) be expedited. Further, Council requested that the PMRA expedite the process to bring safer pest control products onto the market, as requested by the House of Commons Standing Committee on the Environment and Sustainable Development.

The third and final recommendation approved by Council on April 6, 2004, was to forward a letter to the Provincial Minister of Environment and Labour, specifically requesting that pesticide use information collected through the provincial pesticide applicators certification programs be made available to HRM to help better determine trends and overall pesticide use. Further, Council requested that the Nova Scotia Department of Environment and Labour (NSDEL) enhance its public education and awareness efforts towards more sustainable landscape maintenance practices including working more closely with the landscape industry and HRM.

DISCUSSION

Attached is a copy of the 2004 Pesticide Program Overview that provides comprehensive summaries of the various activities and programs. Each section also notes opportunities to continue to enhance service delivery.

Overall, the pesticide programs were responsive and cost effective. The on-line permit application process for residents and pesticide application companies was successfully implemented. Over 90% of permit applications were completed and processed on-line substantially reducing processing time. The third party inspector, the Ecology Action Centre, conducted a thorough and satisfactory pesticide permit application assessment process and effectively reduced average response time, all within budget. Third party partnerships have proven to be very cost and operationally effective for HRM and provide stewardship opportunities for the community and industry.

Regarding enhanced community and industry stewardship, the community responded with excellent suggestions regarding such things as signage and alternative control recommendations. These are noted in the attached 2004 Program Overview.

Several members from the landscape industry attended the HRM on-line permit training sessions and Landscape Nova Scotia initiated a new Environmental Stewardship Award of Excellence for its membership this year based on sustainable practices.

In response to an earlier request from Regional Council, Landscape Nova Scotia is also partnering with HRM, and others, towards information and education workshops on the importance of topsoil in new home construction sites. Sufficient quantity and quality topsoil is a fundamental requirement of sustainable landscaping. Healthy soils and plants are the best defence against pests.

In accordance with Regional Council's direction, letters were forwarded to the Federal Minister of Health and to the Provincial Minister of Environment and Labour. With respect to the federal letter, staff was advised on November 1, 2004, by the Pest Management Regulatory Agency (PMRA) that the new Pest Control Products Act (PCPA) passed by Parliament in 2002 will be brought into force sometime in 2005, once existing regulations have been revised and new regulations have been made. Regarding the provincial letter, HRM received a response letter on October 8, 2004, from NSDEL that advised much of the data that HRM requested is either not collected or not collected in a form that can assist HRM's needs. This is unfortunate because the trend of pesticide sales within HRM would be a good program indicator.

Summary

HRM has gone to great lengths regarding pesticide use reduction aimed at improving human health and environmental protection. A By-Law has been enacted and successful comprehensive public education and awareness programs on sustainable alternatives to pesticides have been conducted.

The Community and Landscape Industry have assumed a shared stewardship role along with the Municipality with a common goal of a "healthy, sustainable, vibrant community".

Proposed actions and potential opportunities at the federal and provincial levels as noted in this report and in the attached 2004 Program Overview would provide great value, consistency, and enhanced human health and environmental protection. They just need to happen.

BUDGET IMPLICATIONS

Noted in Section 4 of the attached 2004 Program Overview.

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.

ALTERNATIVES

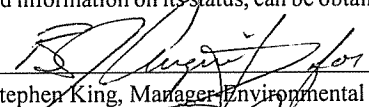
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ATTACHMENTS

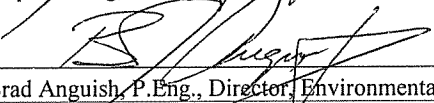
2004 Program Overview - Pesticide By-Law

Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by:


Stephen King, Manager Environmental Performance, EMS, 490-6188

Report Approved by:


Brad Anguish, P.Eng., Director Environmental Management Services, 490-4825

2004 Program Overview

Halifax Regional Municipality

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

December 2004

Stephen King
Manager - Senior Advisor
Sustainable Environment Management Office
Environmental Management Services



Section 1

Introduction

The intent of this document (2004 Program Overview) is to provide the reader with a general overview of the 2004 Pesticide By-Law related activities.

It is presented in five sections:

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 - Data Management

3.6 - Pesticide Permit Application Statistics

Section 4 - Costs, Administration

4.1 - Operating Budget & Costs

4.2 - Administration

Section 5 - Summary

5.1 - Provincial, Federal Levels

5.2 - Administrative Order #23

5.3 - General Summary

Each section also identifies opportunities/ recommendations to continue to enhance programs and service. Halifax Regional Municipality is committed to a “Healthy, Sustainable Vibrant Community” and continuous performance review and enhancement.

Section 2

Background (Brief history leading up to the By-Law)

The fundamental principles behind By-law P-800 include human health and environmental protection.

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 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 adhoc 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 by-law 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-Law P-800, Respecting the Regulation of Pesticides, Herbicides and Insecticides, became effective August 19, 2000. This by-law balanced the restriction of pesticide products with a notwithstanding clause which enabled pesticide use under very specific conditions and incorporated a process to notify neighbouring properties.

A general overview of the By-Law 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.

The **2001, 2002 and 2003 Overview Reports** are available on-line at www.halifax.ca (follow the Pesticide By-Law or Naturally Green links to the Pesticide By-law web site).

Section 3

3.1 By-Law Enforcement

Pesticide By-Law enforcement is carried out by the HRM By-Law Enforcement Section of the Community Projects Division of Environmental Management Services.

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 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 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

The number of By-Law Enforcement complaints received between April 1, 2004, and October 1, 2004, was 67. In comparison, 98 complaints were received in 2003, 111 in 2002 and approximately 400 in 2001.

This year 64 of the cases were closed for the following reasons:

- 59 cases were invalid (cases where the By-Law Officers could not substantiate the complaint);
- 5 cases were closed due to owner compliance (the situation was addressed through education, education of the property owner).

Three cases are listed as still active as of January 5, 2005:

- in one case a summary Offence Ticket (SOT) has been issued and a court arraignment date set;
- the other two cases are still under investigation and in the Witness Statement process.

The majority of the complaints received this season were that signage was not posted 24 hours in advance of the spraying. In order to determine the timing of the sign posting vs. the application time By-Law Officers must rely solely on information provided in witness accounts. If the information provided by the witness or witnesses does not substantiate a violation of the by-law or if the witness is not prepared to testify in court, By-Law Enforcement can do little more than educate the property owner regarding the requirements under the by-law.

By-law Enforcement Opportunities

By-Law Enforcement Services has undertaken initiatives over the past year to enhance HRM's ability to enforce by-laws. Amendments were made to numerous by-laws including the Pesticide By-Law where individuals who are in violation of the by-law can be issued a summary offense ticket. This initiative provided a new enforcement tool for By-Law Enforcement Officers. A two day training session was facilitated by staff from Police and Legal Services to outline the summary offence ticket process, and also enhance By-Law Enforcement Officers investigative skills. The training session covered topics such as evidence gathering, witness statement note taking, and case file management skills.

3.2 Communication, Education & Awareness Programs

The overall Communications Strategy on the Pesticide By-Law and the accompanying Public Awareness and Education Programs on Sustainable Gardening and Landscape Maintenance alternatives to pesticides is of paramount importance and key to the success of the corporate pesticide use reduction initiatives.

The Pesticide By-Law is not a stand alone initiative. It is an integral component of a much larger corporate umbrella addressing issues of environmental sustainability.

HRM is working towards a “**Sustainable Community**” that uses its resources wisely, reduces waste, promotes sustainable practices and provides quality services to its residents. This is consistent with the corporate theme of a “healthy, sustainable, vibrant community”. The Pesticide By-Law therefore has been promoted with this theme and direction in mind.

Through continuous monitoring of calls and information requests, staff was able to prioritize public information and education needs and address them accordingly. As an example, more detailed information was made available this year regarding “chinch bug” management and sustainable landscape maintenance practices.

Major Components of the 2004 Public Education and Awareness Initiatives Include:

Examples

- Reprinting of Fact Sheet Series (7 different)
- Articles in 3 editions of the Naturally Green Newsletter that is delivered to all households in HRM
- Spring and summer TV commercials on Sustainable Maintenance
- Special newspaper insert in conjunction with Landscape Nova Scotia on Sustainable Practices
- Focused information mail-out to all 2003 Pesticide Permit recipients on sustainable alternatives to pesticides
- Several newspaper articles
- Naturally Green and Sustainable Practices website
- HRM Corporate Call Centre
- Ecology Action Centre
- Pesticide By-Law brochure

Public Displays, Home Show, Expositions, etc.

Examples include:

- NS Homebuilders Home Show - Halifax Forum - March 2004 - Over 16,000 visitors
- Fall Home Show - Exhibition Park - October 2004 - Over 32,000 visitors
- Energy-Environment Roundtable - Halifax Hall - July 2004
- Canadian Parks & Recreation Conference - Halifax - October 2004
- Various smaller scale community events throughout the year

Telephone Enquiries

The HRM Corporate Call Centre acts as a first point of contact, providing names and instructions on accessing information and, if required, initiates an LIS service request for more detailed pesticide related enquiries. The Call Centre responded to approximately 430 Pesticide By-Law related enquiries this summer. This level of call volume is significant because it is substantially lower than the 10,000 calls received in the first years (2001 and 2002) of the By-Law. Approximately 1,700 calls were received in 2003.

Approximately 97% of the general pesticide enquiry calls were resolved immediately after speaking with a Call Centre Agent. Information was provided to the Call Centre Agents enabling them to provide an immediate response to frequently asked questions.

The Ecology Action Centre, the contracted vendor responsible for doing on-site permit inspections, also provides detailed information over the phone to the public on a wide range of landscaping and pesticide by-law topics. In 2004 they fielded approximately 1,000 calls, about two thirds regarding the By-Law and Sustainable Practices and one third specific to their permits.

Face to Face Enquiries

Besides receiving 3,454 pesticide applications from residents, the various HRM Customer Service Centres were available to respond to general public enquiries about the Pesticide By-Law.

The Ecology Action Centre also played a key role in providing on-site information regarding sustainable landscape practices and the pesticide application process. Information was provided not only to individual applicants, but also to any neighbours present during the on-site visit.

The Ecology Action Centre also prepared presentations for high school classes, and for the Nova Scotia Museum of Natural History "Nature Week". Other presentations and information packages have been provided to businesses and residents on request. Information packages were also hand delivered to a wide range of garden centres and retailers that carry pesticides.

HRM Website Resources on Pesticide By-Law and Sustainable Management Practices

Along with our own programs and information, HRM has also 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 access to them as well. Our Naturally Green and Pesticide By-Law web sites received over 27,000 visits this past summer. This is an increase from the 2001 benchmark of about 10,000 visits.

Education and Awareness Partnerships

In order to maximize resources and directly reach as many people as possible, a number of internal/ external partnerships and a somewhat social marketing approach has been utilized over the past 4 years in order to get to the community grass roots, figuratively and literally.

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 internal partners including the Halifax Regional Library, HRM Environmental Initiatives Committee, various internal HRM units such as: Marketing, Design and Print Services, HRM Customer Service Centres and HRM Corporate Call Centre. There were other external and internal partners as well.

These partnerships helped leverage other funding, training and communication opportunities

providing excellent value for HRM tax payers.

Industry Education/Workshop

One of the key service enhancements in 2004 was the establishment of a fully automated on-line pesticide permit application system for both homeowners and for pesticide application companies.

HRM's Information Services Division provided a hands-on workshop for landscape industry representatives which appeared to be well received and successful.

Public Education and Awareness Opportunities

The companion public education program to the Pesticide By-Law of "Sustainable Gardening and Landscape Maintenance Practices" has gone well since its inception with the By-Law in 2000.

Professional third party public surveys indicate that over 90% of HRM residents have decided to pursue sustainable landscape maintenance practices.

However, there is a need to continue a strategic approach to healthy people and communities through environmentally sustainable practices.

External partnerships with qualified groups and associations have provided excellent value and success.

This year HRM has commenced main streaming the By-Law and this includes consideration of longer term (i.e. 3-5 years) third party contract for public education and awareness programs in conjunction with the pesticide permitting process.

Other educational opportunities for future consideration where budgets permit include:

Issue	Potential Remedy
<ul style="list-style-type: none">Some residents and companies expressed concerns regarding residents who purchase pesticide products from local retailers	<ul style="list-style-type: none">Continue to lobby Health Canada to put in place approved health and environmental protection changes to the Pest Control Products Act regarding pesticide sales.Include retail outlets in overall communications strategies where resources permit

<ul style="list-style-type: none"> Some of the Information Sheets provided to residents are becoming dated or inconsistent with current communications objectives 	<ul style="list-style-type: none"> Update this information in a revised education strategy as per resources available
<ul style="list-style-type: none"> Some residents have expressed interest in local examples of pesticide-free maintenance 	<ul style="list-style-type: none"> Create a pesticide- free property data base for HRM residents where resources and opportunities permit

3.3 Pesticide Permit Application/ Assessment/ Education

Background

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.

Pesticide Permit Application system was established in 2001 to assist with the administration of these notwithstanding clauses.

On May 1, 2001 Regional Council approved the assigning of on-site pesticide permit application approval/ rejection capability for permit inspectors. This helped streamline the process.

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. Staff believe this helped prevent a cost deterrent to properly apply for a permit.

Pesticide Permit Application Process

First a resident fills out a pesticide application form and submits it to one of the HRM Customer Service Centres. This information is reviewed by the Customer Service Centres to ensure it is pertinent and complete, and is then added to a database and sent to the third party inspectors for an on-site assessment of the pest problem. Should the inspectors give their approval, the resident can choose a landscape/pest control company to correct the problem, or they can apply pesticides themselves. Educational materials are provided to the resident on sustainable landscape methods and alternatives whether or not the application has been approved.

New in 2004: On-line Permit Capability

In response to some concerns raised in 2003 regarding turnaround times for pesticide applications, in 2004, HRM put in place a fully automated on-line pesticide permit application process both for the individual homeowner and for the commercial pesticide application companies.

Approximately 90% of permit applications were carried out electronically in 2004.

The on-line permitting process greatly reduced the amount of paperwork for everyone involved. The electronic transfer of information improved processing time considerably and reduced the number of missed applications. The Crystal Reporting System has made finding information very quick and efficient. Positive comments from applicants and commercial pesticide application companies have further reinforced the success of the on-line process.

On-Site Pesticide Permit Application Assessment

On-site inspections were conducted by the Ecology Action Centre (EAC).

The Ecology Action Centre (EAC) is a non-profit organization that has been providing information to the public regarding environmental issues for over 30 years. The EAC was the successful bidder in response to a request for proposals respecting the Halifax Regional Municipality (HRM) Property Pesticide Application Assessment Program and Related Public Education and Awareness Program. The EAC has been a supporter of the pesticide bylaw since its inception and shares the fundamental objectives of human health and environmental protection. Once the applications are received, appointments (where feasible) are made and schedules of the day's site visits arranged. All applications are sorted into geographic areas and an inspector assigned to that area for the day.

The EAC was contracted to deliver permit inspections on average within 2 business days. Over 80% of the inspections were delivered within 1 business day and over 60% of inspections were delivered within 1 calendar day (including weekends and holidays). The average response time was approximately 1.2 business days, or 1.7 calendar days. Response times were improved from last year primarily due to electronic processing of permit applications and additional resources (within original budgets) provided for inspections during peak periods. When inspectors arrived, residents often commented on the prompt response times.

Pesticide Permit Inspection Programs

This year 3,365 permit applications were received, representing approximately a 13% decrease compared with 2003 figures. As in 2003, approximately 99% of applications were for chinch bug problems, white grubs (9 applications), webworms (6 applications), and leather-jackets (3 applications) were the other most frequently cited problems. Approximately 98 % of applications were submitted by companies on behalf of their clients. Approximately 82% of applications were approved which is a decrease from 90% approval rate in 2003.

The lower number of applications and reduced approval rate this year may be due in part to the cool wet summer experienced in HRM. Cool wet conditions are not conducive to chinch bug activity, therefore diminishing the number one problem in HRM. Heightened awareness of pesticide use concerns and the development of alternative approaches may have also contributed to the reduced permit application numbers.

Rejected permit applications fall into four main categories:

- problems on the property but these were not pest problems,
- pests were correctly identified but not considered infestation levels,
- residents were not interested in pesticide use despite an application being submitted for their property,
- repeat applications for the same property.

Some of these cases draw unnecessarily on program resources since inspectors are not intended to provide landscape diagnosis and monitoring services.

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 Customer Service Centre. The Ecology Action Centre also maintains a copy of each permit and application form and this information is entered into a spread sheet for easy data management.

Education Program

The Ecology Action Centre also carried out a companion public education and awareness program on sustainable alternatives to pesticides.

There were five major education activities including; a mail-out to pesticide permit recipients in 2004, education related to regular phone calls and permit inspections, presentations to students, information for retail staff and customers, and development of online information resources.

This was the first year for a mail-out to pesticide permit recipients from the previous year, providing helpful tips and approaches to minimize re-occurrence of pest problems. The letter highlighted steps that residents could take if they had received a permit for chinch bug control. There were some

concerns raised by a small number of residents and companies, but these were generally addressed by highlighting the positive intent of the letter for those who had previous pest problems.

Inspections form an integral part of the education programs since they provide opportunities to discuss pest problems directly with the residents. Residents were generally receptive, and especially interested in the removal of diazinon from the market this year. Although it is in the process of being removed from the market as directed by the federal Pest Management Regulatory Agency (PMRA), supplies were still available in 2004 and some residents were surprised that it would still be used.

EAC carried out presentations for high school classes and for the NS Museum of Natural History "Nature Week". Other presentations and information packages were provided to businesses and residents on request. Information packages were delivered to a wide range of garden centers and retailers that carry pesticide products. This was a modestly successful educational opportunity, and many retailers suggested that earlier in the Spring would be a more effective time for helping their staff.

Pesticide bylaw and sustainable landscape maintenance information was also made available on the EAC website at www.ecologyaction.ca (follow the Pesticide Bylaw Info link in the lower left panel). The EAC website provides links to HRM, Landscape Nova Scotia, and other useful resources.

The Ecology Action Centre was featured in two local newspaper articles, four local radio programs, and one national television program, each providing favourable coverage of the HRM pesticide by-law programs.

Pesticide Permit Administration/ Process Opportunities

As indicated in 3.2 Communication, Awareness and Education, external partnerships with qualified third parties has provided excellent value and success. This year HRM has commenced main streaming the By-Law and this includes consideration of longer term (i.e. 3-5 years) third party contract for pesticide permit application assessment programs and related public education.

Some additional opportunities identified by EAC for staff consideration include:

Issue	Potential Remedy
Inspection programs	
Properties are often difficult to locate since many are located in new development areas	Provide a means for residents or companies to provide directions to properties on their permit application
Some permit applications are frivolous and therefore draw unnecessarily on HRM program resources	Implement a small user fee for permit applications if this becomes a resourcing issue. This would require Regional Council approval.
Some residents are not aware that an application has been submitted by their lawncare company until an inspection occurs	Enforce requirement for companies to obtain signatures from residents before submitting an application to prevent this situation.

Some residents are not clear on their responsibilities for signage and notification, conditions and requirements on the permit form may not be clear (excerpts from the By-Law, legal language)	Provide clear instructions similar to text given on website, as an additional handout with permit forms after inspections.
Some residents fail to make changes in order to prevent pest problems from re-occurring, but are still granted a permit year after year	Explore mechanisms to ensure that residents employ better practices that help prevent dependence on pesticides
Repeat applications are sometimes received for the same property immediately after each rejection (multiple times)	Clarify that the electronic process for applications should not be abused, the intent is to streamline program delivery not facilitate greater numbers of permit applications
Some calls are referred to the EAC from the HRM Call Centre, some callers express frustration even with necessary referrals	Coordinate responses with HRM Corporate Call Centre to handle some of these calls without referrals
Some residents have expressed concern regarding permits granted near schools, wells and other sources of water, and near residents with specific health concerns. Permits are assessed and approved within the current language of the By-Law.	Continue to improve the property review process, ensure consistency with federal and provincial guidelines, legislation, and policies. Federal implementation of the new Pest Control Products Act and recommended changes to the Pest Management Regulatory Agency would help greatly.
Pesticide signs posted on properties were sometimes folded or collapsed, making it difficult to read the posted information	Enforce signage requirements

3.4 Research, Partnerships

Several partnerships and sustainable practices research has been undertaken since 2000 and these are chronicled in the 2001, 2002, and 2003 Program Overviews. They have provided excellent value and success.

Partnerships and Research Opportunities for 2004 and beyond include:

Topsoil Availability/ Sustainability Partnership

Sufficient and proper topsoil is a fundamental component of sustainable gardening and landscape maintenance. The best defence against pests is healthy plants and soil.

This year Regional Council raised the issue of insufficient and/ or poor quality topsoil at new home construction sites resulting in pest and maintenance problems for the homeowners shortly thereafter. Regional Council therefore asked staff to look at ways where HRM could influence better topsoil practices at new home construction sites.

Staff provided Regional Council with an Information Report this fall outlining a three phased approach:

1. Soils Project with Landscape Nova Scotia

This partnership opportunity involving a number of key partners and stakeholders will provide much needed education and awareness on the importance of topsoil, and establish a new paradigm that addresses sustainable long term solutions.

2. Link to Regional Planning

Look at topsoil within the context of environmental sustainability.

3. Future Legislative Opportunities

Create/amend municipal by-laws if necessary.

Further Research Opportunities

Depending upon resource availability, future third party applied science research on such things as the link between compost topdressing and chinch bug control may be beneficial.

Strategic Activities - EAC Partnership

EAC has initiated several strategic activities, beyond the contract requirements, that will greatly enhance By-Law programs including: a move to register insecticidal soaps for chinch bug control in Canada, developing a database of pesticide-free properties in HRM, and observing factors related to chinch bug problems identified during inspections.

Commercial insecticidal soap products have already been registered for use on chinch bug in the U.S., EAC has encouraged two manufacturers in Canada to register their products. It is hopeful that these could be available by next year, this would help residents and companies develop better programs for chinch bug control. Correspondence with the PMRA suggests that in the meantime homeowners may use household soaps, but not commercial insecticidal soaps, as a physical control for chinch bugs.

Residents have expressed interest in accessing local examples of successful pesticide-free landscape maintenance. Directing residents to such properties would be helpful for sharing information and experience regarding alternatives to pesticides.

EAC inspectors collected basic site observations on over 2800 properties for the following 12 factors relevant to chinch bug problems.

1. Soil depth	7. Sun exposure and aspect
2. Grass species composition	8. Lawn slope
3. Presence of other lawn plants	9. Presence of short mowing
4. Presence of thick thatch	10. Presence of chinch activity on adjacent properties
5. Presence of trees and shrubs or other shade cover	11. Chinch bug numbers
6. Age of lawn (since installation or renovation)	12. Damaged lawn area

Many of these factors are related to landscaping for new homes or renovation of existing lawns. Determining the relationships between these factors and their relative importance can help improve recommendations for property owners and landscapers. Findings may also influence strategic initiatives such as targeting the improvement of soils for turf in new development areas of HRM. Finally, the research may help with planning for changes in pesticide bylaw program directions and costs.

A website was created with science-based information related to all aspects of chinch bug problems, preventive approaches, monitoring, and control. The development of this website was based on extensive review of research literature in Canada and the U.S. The site is now an educational resource for residents, landscapers, and municipal staff that would like to minimize or eliminate their need for pesticides. This web site is linked to the EAC web site at www.ecologyaction.ca.

3.5 Data Management

Permit Application Database

Currently a database is maintained and administered by HRM Customer Service Centres. When applications are received, information is recorded on the Pesticide By-Law System (PBS). PBS is an oracle database that produces reports in adobe reader (.pdf) format.

Once entered into the database, the application is assigned an identification number and forwarded to the Ecology Action Centre for the on-site assessment.

The PBS is used by the Sustainable Environment Management Office (SEMO) and the Customer Service Centres to track the progress of the applications. During inspection the application is either approved or rejected. Once the inspection is complete, the Ecology Action Centre (EAC) will provide a paper copy back to the Customer Service Centres for data input.

Hansen LIS - Enquiry Tracking System

There are a number of LIS problem codes designed to handle various types of enquiries. As of July 17, 2003, problem codes were established to handle the following types of enquiries: general information enquiries, pesticide permit requests, pesticide permit process questions, questions about affected properties, technical questions about which types of pesticides are permitted/ not permitted, requests for information workshops and other questions.

Typically these service requests are logged by the Customer Service Centres or Corporate Call Centre for action by By-Law Enforcement or the Sustainable Environment Management Office (SEMO) or the Ecology Action Centre (EAC).

On-line Permit Applications

In 2004, HRM put in place a fully automated on-line pesticide permit application process both for individual homeowners and for the commercial pesticide application companies.

The on-line permitting has greatly reduced the amount of paper work and the electronic transfer of information substantially reducing processing time.

3.6 Pesticide Permit Application Statistics

As of October 28th, the Ecology Action Centre (EAC) responded to 3,365 application reviews and site visits. The number of applications (3,365) reviewed this year was approximately 13% lower than in 2003 (3,863).

Permit Decisions	2004	Percent	2003	Percent
Approved	2765	82%	3505	91%
Rejected	550	16.5%	358	9%
Other *	50	1.5%	0	0%
Totals	3365	100%	3863	100%

* The other category, although very small is made up of duplicate applications that weren't caught before being entered, customers who didn't want to spray, applications that were submitted but a permit wasn't necessary.

How applications were received:

Applicants	On-line	Percent	Mailed/ Walk-ins	Percent
Commercial Applicators	2910			
Homeowners	62			
Totals	2972	89%	393*	11%

* **Note:** Over 98% of the total 3,365 permit applications were submitted by commercial companies. **Over 99% of all applications were for chinch bug.**

Pesticide Permit Process On-line Opportunities

The HRM Customer Service (Business) Centre staff offered the following suggestions to enhance service delivery of the permitting process:

Suggestions for the Commercial Pesticide Application Companies include:

- ▶ Provide details/ direction to a property if in an out of the way area
- ▶ Direct communication with the HRM Customer Service staff if there are issues with a permit. This helps prevent duplicate applications and/ or provides necessary missing information.
- ▶ Ensure up front collection of the property owner signatures and approval to prevent situations where the homeowner was unaware of the application and in some cases did not want pesticide spraying carried out. This happened in a few cases with the on-line permitting by Pesticide Application companies.

Suggestions for On-line Permit Process or Homeowners include:

- ▶ Provide some further clarity on the homeowner application, i.e. a section where the homeowner can apply directly and have a commercial pesticide application carry out the application.
- ▶ A box to indicate whether the homeowner plans to apply the pesticide themselves.

These suggestions can help further streamline the process and enhance service delivery.

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 Centres, 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 the Ecology Action Centre, Landscape Nova Scotia, Clean 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 administrate 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 been relatively consistent since the inception fo the Pesticide By-Law, including the 2004-2005 budget. **To date, since the By-Law’s inception in 2000, savings approaching half a million dollars have been realized from the original estimates.** Effective community and industry partnerships and stewardship have been key to this success.

Program Component	Budget (04/05)	2004 Costs (est.)
Public education, communications, advertising, promotion, etc.	\$40,000	\$40,000
Permit Review Process & Education Program	\$85,000	\$83,000
Administrative Support & Related	\$35,000	\$35,000

By-Law Enforcement	\$32,000	\$32,000
Totals	\$192,000	\$190,000

4.2 Administration

The Pesticide By-Law and related public education and awareness programs on sustainable practices are managed overall by the Sustainable Environment Management Office (SEMO). Besides administration, this unit is responsible for the detailed technical responses and media enquiries as well.

Administration Opportunities

The Sustainable Environment Management Office (SEMO) will continue to manage and administrate the Pesticide By-Law and related programs. However, as we continue to mainstream the service and activities consideration will be given to longer term third party contracts for the pesticide permitting process and related public education and awareness and applied science research where funding is available.

Section 5

Summary

5.1 Provincial & Federal Levels

At the **federal level**, the new **Pest Control Products Act** was approved by Parliament in December 2002; however, the implementation and administrative policies have not been put in place yet. This federal legislation is aimed at protecting human health and safety and the environment by regulating products used for the control of pests.

The **Pest Management Regulatory Agency (PMRA)** advised on November 1, 2004, that the new Pest Control Products Act (PCPA) will be brought into force, by an Order in Council, sometime in 2005, once existing regulations have been revised and key new regulations have been made.

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.

There are approximately 150 registered vendors province wide and about 2,000 certified applicators province wide, according to the Provincial Department of the Environment and Labour.

Provincial and Federal Legislative Opportunities

At the **federal level**, although a new Pest Control Products Act was passed by Parliament in December 2002, the administrative and policy components are not yet in place. Therefore, the new measures to improve human health and environmental protection have not been put in place.

There have also been several delays with the federal agency (PMRA) responsible for pesticides regarding pesticide re-evaluations, re-reviews, re-classifications, public education and awareness, etc.

More prompt action by these federal agencies would also provide improved human health and greater environmental protection, help bring safer products onto the market, and on a national scale better educate the public about sustainable alternatives to pesticides.

At the **provincial level**, staff see potential opportunities for the provincial department of the Environment and Labour to share pesticide-use general information which would help determine trends, effectiveness, etc.

In 2004, HRM staff met with representatives of the Nova Scotia Department of the Environment and Labour (NSDEL) to determine what information collected by NSDEL would be helpful.

In a letter received October 8, 2004, from the Nova Scotia Department of the Environment and Labour they advised, “the database has some limited capacity to generate summary records but this is not its primary function. As a result, much of the data that HRM requested is either not collected or not collected in a form that can address HRM’s needs”.

At least for now the Nova Scotia Department of the Environment and Labour (NSDEL) has a clear understanding of what data would be helpful to HRM as the NSDEL works towards enhancing its database collection and capabilities around pesticide use.

5.2 Administrative Order #23

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 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 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 efforts at the time of the federal Pest Management Regulatory Agency (PMRA) and its Healthy Lawns Strategy.

Over the past three and one-half years, staff has been 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 re-classification system for residential use pesticides; and an enhanced pesticide safety review process, to name a few that were to have been completed by the end of the 2001-02 fiscal year.

In an e-mail dated November 1, 2004, the Pest Management Regulatory Agency (PMRA) has advised, "Discussions between the federal, provincial and territorial partners involved with the Proposal for a Harmonized Pesticide Classification System for Canada are ongoing. Comments gathered during the initial consultation have been analysed and have been incorporated into the current discussions."

The PMRA also advised that the re-evaluations are ongoing. They are still not complete.

Opportunities Regarding Administrative Order #23

Depending upon what continues to happen at the federal level regarding pesticide re-reviews and re-classifications, 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. This includes possible consideration in 2005 of corn gluten as a weed inhibitor and insecticidal soap for chinch bug control.

5.3 General Summary

Overall, the roll out of the By-Law P-800, Respecting the Regulation of Pesticides, Herbicides and Insecticides and related education and awareness programs appears to be going well.

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 3-4 years, is embracing Regional Council's leadership and direction in pesticide reduction by practising sustainable alternatives to pesticides in the maintenance of their own properties.

Details and overviews of the various processes related to the Pesticide By-Law are discussed in the preceding sections of this report. Opportunities and options to continue to streamline and enhance service delivery of the By-Law and related functions are also presented in each appropriate section. This also includes enhancing human health and environmental protection.

As HRM continues to mainstream the By-Law and related activities, consideration will be given to longer term third party partnerships/ contracts for the permitting process and related public education and awareness and applied science research where funding is available.

Communication, public awareness and feedback have been key factors in all of the Pesticide By-Law related activities and will continue to be.