Ontario Allied Golf Associations

c/o Royal Canadian Golf Association • 1333 Dorval Drive, Oakville Ontario • L6M 4X7

April 5, 2007

Town of Markham 101 Town Centre Blvd. Markham, ON L3R 9W3

Attention: Mavis Urguhart

Dear Mavis,

Attached please find a copy of the following:

- updated version of the Environmental Guidelines for Canadian Golf Courses,
- basic information about the IPM Accreditation Process for golf courses offered by the IPM/PHC of Canada (Appendix I)
- copy of my presentation to the General Committee from April 2, 2007,
- Golfer education poster being distributed to Canadian clubs.

The main points that the Ontario golf industry would like to make are:

- Turf on the golf course in NOT cosmetic or non-essential. The greens, tees and fairways are
 playing surfaces that are the golf course's lifeblood. Golfers expect these surfaces to be smooth
 and unblemished. We cannot expect a golfer to accept blighted playing surfaces any more than a
 tennis player would accept a cracked and weedy tennis court. Poor turf conditions will result in
 economic ruin for a golf course.
- Golf courses employ superintendents who have a minimum 2 year diploma and in most cases, a
 four-year degree in turfgrass management. They are trained and licensed to use, store and
 properly dispose of pesticides.
- These products are expense items and are used only when needed. However, when they are needed, there really are no other options. There are fungal organisms that can destroy large areas of turf overnight that must be pre-treated when the climate conditions for disease development are noted. Also, snow mould must be treated in the fall before the snow falls.
- The golf industry is committed to finding plant species and management practices that minimize
 all inputs including pesticides. We fund research at Canadian universities through the Canadian
 Turfgrass Research Foundation (CTRF). Promising alternative products at the University of
 Guelph and McGill University are still years away from a commercially available product and
 more research is required for the control of other diseases and insects.
- Golf courses have controlled access. The fact that visitors must pay to use the golf course and
 pesticide usage signs are posted at the entrance, pro shop and at the first and tenth tees,
 essentially constitutes informed consent should a person decide to use the property. If a resident
 with a sensitivity living next to the golf course wishes to be informed about spraying activity, they













- can consult the signage at the front gate or contact the superintendent since the signs are posted 24 hours in advance of spraying.
- The turf on a golf course is a very different species than turf found on a residential lawn or parkland. Creeping bentgrass and annual bluegrass were developed specifically for low mowing heights to create a quality playing surface.
- While it may be argued that North American golfers have unrealistic expectations for turf conditions due to television golf, this attitudinal change cannot be started in only one community. The Canadian golf industry has started an education program to make golfers aware of the environmental cost of perfection. A sample of these educational materials is attached. This is a long term, national program to influence consumer expectations.
- One community trying to legislate change to less manicured conditions will only drive golfers down the road resulting in economic devastation for golf courses in Markham.
- While research to find biological alternatives takes time and money, we do know from research
 conducted at Bethpage State Golf Course on Long Island by Cornell University, that Integrated
 Pest Management (IPM) does reduce pesticide use. The greens that received an IPM regime
 that included cultural amendments and some spot spraying resulted in acceptable playing
 conditions and a reduction of 35-50% of pesticide use in comparison to the regular pesticide
 regime. Unfortunately, a zero pesticide regime with cultural amendments resulted in dead
 greens. All these greens had to be re-surfaced.
- IPM Accreditation program offered by the IPM/PHC Council of Canada provides a way to ensure a golf course is practicing IPM. This process requires tracking of all pesticide use and includes an annual third party audit. Administered by Ridgetown College, affiliated with the University of Guelph and the Ontario Ministry of Agriculture and Food, this program ensures adherence to IPM through an examination and auditing process (see Appendix I). The essence of a good IPM program is to manage the growing conditions to prevent the plants from becoming stressed. This can help to avoid the need for pesticides in the first place.
- A by-law that does not exempt golf courses but allows pesticides to be used during an "infestation", such as the wording in the Toronto by-law can result in more pesticides being used than requiring an IPM program. Permitting pesticides to be used during an infestation would require a turf manager to wait for the pest level to reach an infestation. This will then require the area to be blanket-sprayed resulting in a higher total load of pesticides into the environment than the judicious spot-spraying and/or pre-treating areas within an IPM program.
- By requiring golf courses to become IPM Accredited, the Town of Markham will be able to
 monitor pesticide usage through the IPM/PHC Council of Ontario and each property will be
 audited by independent environmental auditors at no cost to the Town of Markham.

We would suggest the wording that is used for the Town of Oakville by-law that states under definitions:

IPM accredited golf course – means a golf course that:

- i. Obtains and maintains accreditation in a recognized integrated pest management program from the IPM-PHC Council of Ontario, or equivalent, as determined by the Town; and
- ii. Provides proof of IPM accreditation to the Town Clerk on or before January 31st of each year.













Golf courses are then listed under exceptions to the By-law in this manner:

Notwithstanding Article 2, it is permitted to apply or use a pesticide in the following cases:
...j. On an IPM accredited golf course, provided that any such use or application is in keeping with the integrated pest management program in place.

It should be noted that the IPM accreditation program takes a minimum of three years for full accreditation since the on-site audit may not occur until the third year after registering in the program. This delay in full accreditation should be noted within the compliance procedures. As long at the golf course can prove they are moving through the process to become accredited, they should be considered in compliance.

The Ontario golf industry will continue to promote adherence to the **Environmental Guidelines for Canadian Golf Courses** published by the Royal Canadian Golf Association in 1993 and updated in 2006 (see attachment). Canada was the first country to develop guidelines for golf courses and this document and the consultative process to develop it has since been emulated in the US and Europe.

The Ontario Allied Golf Associations is a coalition of the Royal Canadian Golf Association (RCGA), the Canadian Golf Superintendents Association (CGSA), the Ontario Golf Superintendents Association (OGSA), the Golf Association of Ontario (GAO), National Golf Course Owners Association (NGCOA) - Ontario Chapters, and other affiliated organizations, associations and member clubs. The total gross revenues of the more than 650 golf courses operating in Ontario are in excess of \$1.2 billion, directly employing more than 23,000 individuals.

Again we would like to emphasize that the Ontario golf industry is committed to the protection of our communities. We feel that the best way to minimize pesticide use is through IPM. We thank you for your kind consideration in this matter and should you have any questions or would like to discuss anything in this submission, please contact Teri Yamada, RCGA (905) 849-9700 ext. 258; or Doug Breen, OGSA (519) 664-2851 ext.240 or Ken Cousineau, CGSA (905) 602-8873 ext. 222 or Vince Kishimoto, NGCOA (905) 826-6790.

Yours sincerely,

Teri Yamada

Managing Director, Golf Industry and Government Relations

Royal Canadian Golf Association













RCGA ENVIRONMENTAL GUIDELINES - January 2007

- , Guidelines for Golfers
- , Guidelines for Design, Construction and Renovation
- , Guidelines for Owners, Directors, Managers and Superintendents

Interest in the game of golf in Canada remains high and the golf industry is faced with the challenge of providing facilities suitable to all participants while safeguarding our natural resources. The Royal Canadian Golf Association recognizes the need for a partnership among golfers, the general public, designers and developers, general managers, golf professionals and superintendents of golf courses, all of whom share a responsibility to conserve and protect the environment.

Statement of Intent

The Royal Canadian Golf Association is committed to taking every practical precaution towards ensuring that products and techniques used in the development and maintenance of golf courses present the lowest possible risk to their employees, golfers, the public and the environment.

Strategy

It is the goal of the Royal Canadian Golf Association to develop programs to communicate and promote practices that sustain an equilibrium between quality playing conditions and a healthy environment. The Association acknowledges the need to blend a certain level of government regulation with self-initiated action plans to achieve and maintain this balance. We also believe that all regulations and plans should be based on scientifically supported data and, to this end, the RCGA will continue to support turfgrass research.

We realize that everyone using, constructing or maintaining a golf course has a responsibility to ensure this balance is kept. Discussions with national, provincial and regional stakeholders have resulted in a set of recommended guidelines for golfers, golf course managers, superintendents, and golf course designers and developers, based upon the following principles:

Guiding Principles

The Royal Canadian Golf Association and its member golf courses subscribe to the following principles:

- Ensure that all operations present the lowest possible risk to employees, golfers, the public and the environment.
- Comply with all legal requirements affecting operations and products.
- Develop and implement environmental stewardship activities that conserve and enhance natural resources.
- Communicate with both the golfing and non-golfing public on issues concerning golf development or maintenance and the environment.
- , Be responsive and sensitive to community concerns.
- Communicate with and assist governments to encourage fair and attainable standards based on scientifically supported data.
- Communicate with the golf course management and golfers concerning the need to support management practices that are environmentally responsive

GUIDELINES FOR GOLFERS

The game of golf is enhanced by, and indeed, is dependent upon the natural surroundings. The quality of golf and life is enhanced by the preservation and conservation of our natural resources. The Royal Canadian Golf Association and the Canadian golf industry have developed a code of practice to ensure that the golf course continues to afford us the same natural experience for future generations. You can help to continue providing the highest quality golfing experience by considering the following guidelines.

- Enjoy the natural environment and help to enhance and protect it by respecting all local regulations.
- Avoid activities which endanger plant, fish and wildlife populations or can potentially threaten their habitat.
- , Assist in our conservation efforts by the efficient use of all water and energy resources.
- , Work with the management and directorship of your golf course to develop and implement environmental enhancement programs.
- , Golf was meant to be played in a natural environment. Support your golf course's efforts to balance course conditioning with environmental enhancement and conservation strategies.

GUIDELINES FOR DESIGN. CONSTRUCTION AND RENOVATION

Golf course development employing effective principles of environmental design can complement our natural environment. A golf course can enhance urban development, rehabilitate previously disturbed landscapes and provide an effective barrier between agricultural, native, and urban lands.

The Royal Canadian Golf Association and the Canadian golf industry recognize that vigilance is required to develop and maintain the highest possible level of environmentally sensitive golf. To help achieve the goals of preserving our natural heritage and conserving our natural resources we encourage you to adhere to the following guidelines:

1. Site Selection

- Assess the physical and economic viability of a golf course on a particular site.
- , Endeavour to select sites outside of agricultural land use zones, where possible. Should agricultural land be the only option, follow local and provincial agricultural guidelines when selecting development sites.
- Respect the unique natural features and sensitive natural areas of a property. Avoid the disturbance of these areas and incorporate these features into the design.
- , Consider present and potential natural resources when determining location.
- , Ensure conformity with all provincial and local regulatory requirements.
- Ensure that an adequate water supply is available for both the potable and irrigation needs of the golf facility and neighbouring properties on a long-term basis.
- Be open, transparent and accountable with and to the community with respect to all aspects of the project.

2. Design Considerations

- Select plant species that are best suited to the local climate and require the minimum of inputs.
- , Design the irrigation to efficiently use water only where and when needed.
- Investigate the feasibility of using alternative or supplemental sources of irrigation water.
- Maintain a vegetative buffer zone of at least ten metres adjacent to all water courses to assist in filtering any nutrients or pesticides from storm water run-off, and to moderate water temperatures.
- Retain as much natural cover as possible and enhance vegetation through supplementary planting of trees, shrubs and grasses, especially along fairways, to provide wildlife habitat and along water courses supporting a fish habitat.
- , Incorporate as many natural features and areas in the golf course design as possible to minimize disturbance of the existing ecology.
- Consider future maintenance requirements of all golf course design features. Low-maintenance features that require less intensive management are preferred.

3. Construction

- , Protect and/or re-establish native groundcover, trees and understorey species during and after construction.
- Schedule construction to protect soils by minimizing the time ground is left without cover. Protect soils during construction through the use of mulching materials, hydro-seeding or sod.
- , Monitor groundwater quality before, during and after construction.
- Avoid construction near water courses. If construction is necessary, ensure adequate measures are in place to protect water quality, fisheries and stream-side habitats. Contact the local regulatory agencies for guidance.
- Monitor streams at their entrance and exit from the property both before and after construction. The same monitoring should be applied to natural onsite lakes.

GUIDELINES FOR OWNERS, DIRECTORS, MANAGERS AND SUPERINTENDENTS

A properly maintained golf course with established turfgrass cover and mature tree stands provides much-needed greenspace relief from urban development. The filtering ability of dense, healthy turf and its thatch layer can be utilized to filter pollutants before they reach groundwater or enter rivers and streams. A golf course can be an attractive and effective transition between agricultural, native, and urban landscapes and provides for the preservation or creation of areas useful to wildlife. When managed in an environmentally conscious manner, golf courses can enhance the quality of life within a neighbourhood. Resources such as the Canadian Golf Superintendents Association's Environmental Management Resource Manual can assist golf courses with their environmental stewardship programs.

The Royal Canadian Golf Association and the Canadian golf industry are striving to preserve and enhance the natural resources with which we are entrusted. To help us achieve these goals we encourage you to adopt the principles outlined in the following guidelines.

1. Planning and Policies

- Commit to the enhancement of your golf course by incorporating Environmentally Responsible Golf principles in all aspects of planning and policy-making.
- , Prepare an environmental policy statement and action plan for your golf course. Establish an environmental committee to develop programs and foster staff, member, and public support.
- Establish a monitoring and evaluation process to assess the golf course's progress.
- , Commit to the use of environmental best management practices applicable to your site

2. Wildlife and Wildlife Habitats

- , Whenever possible, allow native vegetation to grow to provide natural/native habitat...
- In non-golf areas of the property, replace native groundcover or shrubs that may have been removed during any construction or renovation projects.
- Avoid the disturbance of riverbanks whenever possible. If bank impacts cannot be avoided, employ mitigating measures against erosion and siltation. Check with provincial and local regulatory agencies for permit requirements.
- Participate in programs such as the Audubon Co-operative Sanctuary Program for Golf Courses which provide information and environmental expertise to conserve and enhance fish and wildlife habitats on your property.

3. Clubhouse Operations

- Develop and implement a waste management program to reduce, re-use and recycle waste where possible.
- , Develop and implement a program of water and energy conservation.
- Ensure where possible drainage from asphalt or concrete areas around buildings filters through vegetation before reaching water rivers, lakes, and streams to avoid disruption to aquatic habitat.

4. Integrated Pest Management (IPM)

Pest Controls

- Reliable and accurate pest identification
- , Monitoring pest populations and environmental conditions to ensure treatments will only be applied when necessary and when the treatment will be most effective.
- Establishment of the environmental and playability impacts that can be tolerated before control measures are implemented.
- Use a combination of biological, cultural, physical, mechanical and chemical treatments to control pests in a manner that achieves a high level of effectiveness while minimizing environmental impact.
- Evaluate the effectiveness of turf management practices and pest treatment methods through the monitoring of IPM program success and determine if program changes are necessary.

Pesticide Use

- Use only products registered for use in Canada and only those specified and approved for use on golf courses.
- , Store all pesticides in an area conforming to all provincial regulations.
- All mixing and loading of pesticides should be performed in accordance with all provincial regulations.
- Dispose of all pesticide containers and pesticide wastes in accordance with provincial regulations.
- , All handling and spraying of pesticides to be performed by licensed pesticide applicators.
- . Pesticides should only be applied when wind conditions ensure a minimum of drift.
- Protect water quality by maintaining a buffer zone between all water bodies and areas of pesticide application.
- When applying pesticides near water, use low-pressure spray nozzles to further reduce the chance of drift.
- Use appropriate methods to communicate with members of the golfing and non-golfing community the nature of your application.
- Apply the correct amount of product necessary to control the target pest and do so in conformity with the specifications noted on the product label.
- Only apply when the pest population and/or history warrants treatment, as determined by pest monitoring.
- Participate in a provincial pest management accreditation, when available.

Fertilizer Use

- Use only products registered for use in Canada for only their specified and approved function.
- Store all fertilizers in an area conforming to all provincial regulations.
- Apply fertilizer only in quantities that can be utilized by the plant to minimize leaching potential.
- Protect water quality by maintaining a buffer zone between all water bodies and areas of fertilizer application.
- Use appropriate methods to communicate with members of the golfing and non-golfing community the nature of your application.
- , Participate in a provincial pest management accreditation, when available.

Water Use

- , Irrigate only the areas requiring water and limit the amount applied to the current requirements of the plant. Monitor daily.
- , Utilize water auditing to evaluate system performance to allow for efficient delivery of water through the irrigation system.
- Investigate the feasibility of alternative or supplemental irrigation water sources such as effluent or on-site storage reservoirs for storm water run-off collection.
- Conduct water quality tests of ground water and surface water at entry and exit points of the property on a regular basis.

Integrated Pest Management Accreditation

IPM Accreditation

The golf industry believes the IPM accreditation process, developed by the IPM-PHC Council of Canada and managed by Ridgetown College, will help reduce reliance on pesticides through the application of Integrated Pest Management (IPM) and Plant Health Care (PHC) principles.

The IPM Accreditation process is a four-step program:

1. IPM Accreditation Examination (\$200 fee)

One person from a golf course must demonstrate his/her knowledge of IPM by successfully completing the IPM-PHC Council *IPM Accreditation Examination* with a grade of 75% or greater. This person is known as the *IPM Agent* for the golf course and the golf course is considered *Registered*.

2. Desk Review Audit (\$435 annual fee covers all audits)

Once the golf course is *Registered*, compliance with IPM principles including pesticide usage, monitoring, pesticide reduction where appropriate and employee training and management must be shown through an annual Desk Review Audit. This review is supervised or conducted by an approved environmental auditor. When this audit is successfully completed, the golf course becomes *Accredited – Level I*.

3. On-site Audit

At least once every three years the golf course must submit to an on-site audit. Upon satisfactory completion of this on-site audit, conducted by a Certified Environmental Auditor designated through the Canadian Environmental Auditing Association, the golf course becomes *Accredited-Level II*.

Accreditation will be granted on an ongoing basis if the annual requirements set out by the IPM-PHC Council are met and the fees are paid in full.

4. Continuing Education Credits

After completing the IPM Examination, IPM Agents must obtain a minimum of 8 Continuing Education Credits (CEC) every year. CECs are obtained by attending industry conferences, meetings and seminars. IPM Agents may also write the IPM-PHC Council IPM Accreditation Examination each year instead of obtaining CECs.















April 2, 2007

Presentation to Town of Markham General Committee

Re: Regulating the Non-Essential Use of Pesticides

My name is Teri Yamada and I am the Managing Director of Golf Industry and Government Relations for the Royal Canadian Golf Association (RCGA). I am also the volunteer President of the Audubon Cooperative Sanctuary System of Canada Inc.

I have personally been involved in the municipal pesticide debates for many years as a member of the Town of Caledon Pesticide Advisory Group, and the Pesticide Use Reduction Evaluation Project Advisory Committee for Toronto Public Health. The reason for my involvement with these municipalities is the RCGA's work in pesticide reduction within the golf industry. Canada was the first country to introduce environmental guidelines for golf courses. After 18 months of consultations with both sides of this issue we published the **Environmental Guidelines for Canadian Golf Clubs** in 1993 and updated in 2006 (see Appendix I). I was then used as a consultant when the United States developed their **Environmental Principles for Golf Courses in the United States** and the European Golf Association Ecology Unit created their **Environmental Strategy for Golf in Europe**.

Our Environmental Guidelines encompass more than just pesticide use. The judicious use of water, fertilizer and all inputs are considered and the enhancement of the non-golf parts of the golf course property as wildlife habitat is also encouraged.

As an association, we spend more that \$75,000 per year on research to find hardier grass species and alternative pest controls, but adequate alternatives for all pesticides do not currently exist. If we had alternatives that would provide good pest control, we would be using them. As an example, we have spent in excess of \$500,000 over the last decade to find a biological control for snow mould, but a product is still several years away from being commercially available. Research takes time and money.

Current research shows us that the most effective way to reduce pesticide use on golf courses and still stay in business is through Integrated Pest Management (IPM). Studies conducted at the Bethpage State Park Green Course by researchers at Cornell University showed reductions of 35 to 50%, but a complete pesticide-free regime resulted in the greens needing to be completely re-grassed.

IPM reduces stress on the plant and therefore reduces the need to use pesticides in the first place. This is preferable to a by-law that allows pesticides only during an infestation. Waiting for an infestation requires a response of a blanket spraying of chemicals. This can result in the total load of pesticides being greater than allowing for spot spraying or educated pretreatment of areas within an IPM program.

State 1 1333 Dorval Other, Oxford E. ON 1784 4X7





Fungal organisms such as *Pythium* spp. are capable of destroying entire golf greens or larger acreages overnight. The only control for these disease organisms is a fungicide and it is required immediately. The summer of 2005 provided ideal conditions for pythium blight seen in the photos above. This disease strikes during hot, humid weather. Another disease that requires preventative treatment is snow mould. The fungal organisms responsible for snow mould are always present in the soil and become active during the winter months under snow cover. The fungicide must be applied before snow fall in the autumn.

The RCGA hosts the only Canadian stops on the PGA and LPGA Tours. Markham will be hosting the Canadian Open this July at Angus Glen Golf Club. It is estimated that The Open will bring approximately \$20 million of revenue into Markham using the Canadian Sport Tourism Alliance's STEAM (Sport Tourism Economic Assessment Model). Professional Tour events require a level of conditioning that can only be produced with some pesticide use.

Golf courses are truly different than home lawns. Turfgrass is the playing surface for golf and keeping it weed and disease free is equivalent to keeping cracks and weeds from developing on a tennis court. We have controlled access onto our properties through gates and green fees. Provincial posting laws require us to inform the public whenever we spray anything with signs at the entrance to the property, at the pro shop and first and tenth tees. Unlike a neighbor's front lawn, we essentially have informed consent from anyone choosing to use our golf courses. For these reasons, we feel that golf can logically be exempted from a by-law to eliminate the non-essential use of pesticides. However, we also feel it is reasonable to require golf courses to practice IPM.

We are fortunate to have an IPM accreditation program in Ontario managed by a third party that is measurable and audited. Administered by Ridgetown College, in association with the University of Guelph, this program ensures adherence to IPM through an examination, reporting and auditing process. (see Appendix II)

As the President of the Audubon Cooperative Sanctuary System of Canada Inc., I can tell you that the Audubon Program is strictly a volunteer educational program that teaches golf course owners and managers how to maintain their properties with the least impact to the environment. It is not designed to audit or monitor properties. In fact, the day-to-day

operations of the Audubon Cooperative Sanctuary Program for Golf Courses were handed back to Audubon International in New York State two years ago and the Audubon Cooperative Sanctuary System of Canada Inc. will be de-registered as a Canadian corporation with Industry Canada later this year.

The Ontario golf industry is committed to the protection of our communities. We feel that the best way to minimize our impact on the environment is through the use of IPM and not a pesticide ban. We thank you for your kind consideration in this matter and should you have any questions or would like to discuss anything in this submission, please feel free to contact me at any time.

Yours sincerely,

Teri Yamada

Managing Director, Golf Industry and Government Relations

Royal Canadian Golf Association

(905) 849-9700 ext. 258

tyamada@rcga.org



Fast greens require the use of more pesticides, water and other management inputs. Reduce speed and stay alive.

Golf courses employing Integrated Pest Management (IPM) techniques can provide healthy, much-needed habitat for both people and wildlife. We encourage you to get involved by contacting your greens committee, golf course superintendent or any of these organizations for more information.

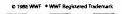














Attention Markham Council,

October 31, 2006

I have been the property manager of Remington Parkview Golf and Country Club (formerly Parkview Golf Club) for 21 years and have been a licensed land class exterminator for that same duration. I am also an accredited examiner for the Pesticide Technician Program.

After attending the meeting at the Markham theatre last Thursday regarding the non-essential use of pesticide and hearing the panel of experts I feel that a pesticide by-law is not the answer. The products in question are registered for use on the federal level by Health Canada's PMRA, and the sale and application of these same products are regulated provincially by the Ministry of Environment. The implementation of a by-law on the municipal level sounds like an unnecessary expense to Markham taxpayers. The Town has a hard enough time enforcing lawnwatering bans in the summer and as the sale of these products would not be controlled by a by-law I truly believe that illegal applications by unlicensed homeowners will occur.

Although I am a resident of Whitby where there are currently no bans in effect, I feel that everyone should have the right to apply pest control products to their own property (or have the option to hire a professional lawn care company to do so). The "Right to Choose" should prevail and people who do not feel comfortable with these products certainly have the right to opt for alternate means of lawn care. I am sure that a large percentage of voters feel this way as well.

At Remington Parkview we have always practiced IPM and, in most cases, use pest control products only as a last resort. We spot spray the property for weeds and leave large buffer areas adjacent to the Rouge and all bodies of water. Applications are carried out by licensed individuals who use these products in strict accordance to the label directions. In order for us to provide the playing conditions to which our clientele expect, these pest control products are a necessary tool. Referring to some applications as non-essential is simply not accurate, as I have personally witnessed the death of a putting green over the span of a hot weekend. This could have been avoided with a timely application of fungicide.

In the event a by-law is adopted by Markham, I would like to request an exemption for golf courses.

Most sincerely,

Dave Moon, Superintendent Remington Parkview Golf and Country Club Mike Begley, General Manager Remington Parkview Golf and Country Club Mary Evelyn Managing Director Bushwood Golf Club 10905 Reesor Road Markkham, Ontario L6B 1A8

Town of Markham 101 Town Centre Blvd. Markham, ON L3R 9W3

April 11, 2007

Attention: Mayor Scarpitti and Town Councillors

Dear Mayor Scarpitti and Town Councillors,

I am writing as the owner/operator of Bushwood Golf Club located on Reesor Road in Ward 5. We are concerned with the Town of Markham's decision to enact a by-law to restrict the use of pesticides.

We respectfully request that golf courses be exempted from such a by-law. We cannot provide golfers with the conditions they want without the use of some pesticides. If golf courses in Markham can no longer use pesticides, our customers will simply drive to the golf course down the road where the playing conditions are to their liking. This creates an unfair playing field with surrounding municipalities being able to draw customers away from Markham.

We only use pesticides when necessary. After all, these products are expensive and we would not use them if they were not necessary. To ensure they are used only as needed, we employ a qualified golf course superintendent who is licensed by the province of Ontario to apply pesticides and is educated in the principles of integrated pest management (IPM).

Yours sincerely,

Mary Evelyn





April 18, 2007

Town of Markham 101 Town Centre Blvd. Markham, On L3R 9W3

Dear Councillor Dan Horchik:

Angus Glen Golf Club has recently been informed of the Town of Markham General Committee's recommendations for the drafting of a by-law concerning non-essential use of pesticides. Angus Glen has been a proud member of Markham's business community and has had considerable involvement with Markham's charitable organizations since our opening over 12 years ago. We would like voice our opinion on what we believe is a vital step forward for both the future of our planet and also the future of the golf industry.

From our construction phase until the present day, Angus Glen Golf Club has painstakingly followed, enforced, encouraged and even celebrated the minimum use of pesticides during the maintenance of our golf course. We purchase only the safest products, even though they are also the most costly. We do this because we are committed, and our commitment has been recognized with two Toronto and Region Conservation Honour Roll Awards. We have more than our golf course to protect. Many of our employees and their families reside in homes backing directly onto these 1600 lush acres.

To further our commitment, we have actively undertaken the process to become IPM Accredited; however this is a three year process. It would be devastating to see this by-law debilitate our industry and erode the local economy by harming local business. Should this by-law be approved as is, we will not be able to provide the high quality of golf expected at Angus Glen. We could not be the privileged host of major events on the PGA Tour including the Canadian Open, which is anticipated to bring approximately \$20 MILLION of revenue into the Town of Markham this coming July.

I urge you to reconsider this by-law to include an exemption for golf courses Sincerely,

Kevin Thistle

President

Angus Glen Golf Club

Fax: Pro Shop: (905) 887-9424

Hydro One Networks 855 Pond Mills Road London, ON, N5Z 4R1

Provincial Lines and Forestry Services
Tel: (519) 690-3014, Fax: (519) 690-3044

E-mail: john bowen@hydroone.com



APPENDIX 3

November 1, 2006

Ms. Mavis Erquhart
Manager of Environmental Leadership
Town of Markham
Town of Markham Anthony Roman Centre
101 Town Centre Boulevard,
Markham, Ontario
L3R 9W3

Hydro One Request for Pesticide Bylaw Exemption

Mavis,

The implementation of a pesticide bylaw for the Town of Markham has the potential to impact on our maintenance programs unless we have a utility exemption. The herbicide applications completed by our crews are not for cosmetic purposes they are applications that are essential for the safe and cost effective operation of our electrical system. Hydro One maintains a significant power system within the Town of Markham with over 420 hectares of right-of-way, four junctions and two station sites.

Herbicides are applied inside stations to control vegetation growth. Vegetation growing inside stations poses a very serious risk to power disruption if allowed to grow in contact with station apparatus. Stations are also designed with crushed stone and an intricate grounding system to minimize the potential dangers of ground faults. Vegetation growing inside stations creates a potentially hazardous situation for employees by affecting the grounding system. Herbicide application is the only practical method of controlling vegetation and ensuring stations are safe.

Herbicides are essential for the right-of-way vegetation control program. Deciduous species such as ash, oak, poplar and maple if cut and not treated with herbicide will re-sprout. The result is numerous stems growing off the cut surface. Brush densities increase significantly along with the growth rates. Herbicides are applied selectively to cut surfaces and to small brush using low volume methods. The application of herbicides results in very low densities of tall growing species and encourages the growth of low growing compatible species such as elderberry, sumac, dogwood and raspberry. The compatible species provide excellent ground cover increasing biodiverity and wildlife habitat. Herbicides are applied approximately every six years. Application is only with the permission of the landowner. Applicators are trained, licensed or supervised as per MOE regulations, buffers are in place to water, all rules and regulations adhered too, and daily records kept on what products are used at specific locations.

Hydro One has for the most part been successful in being permitted to carry on with our herbicide programs when municipalities have passed bylaws. As per your request a summary of the bylaws from major municipalities and Hydro One impacts are presented for your review.

Hydro One Networks 855 Pond Mills Road London, ON, N5Z 4R1

hydro Gne

Provincial Lines and Forestry Services
Tel: (519) 690-3014, Fax: (519) 690-3044
E-mail: john.bowen@hydroone.com

To: Ms. Mavis Erquhart

By Fax 1-905-475-4710

Municipality	Utility Impacts
City of Peterborough Bylaw Number 05-077	Bylaw was not modified for formal utility exemption, City solicitor forwarded letter to Hydro One indicating Article 3(e) would cover our continued application of herbicide under the "risk of harm to a human" clause.
City of Windsor Bylaw Number 35-2006	Exemption for Utility Operator
City of Toronto Bylaw 456-2003	Provision to allow continued application for Transportation and Utility Rights-of-way provided other mowing and physical removal are not possible.
Region of Waterloo Bylaw Number 06-021	Wording in the bylaw does not impede our ability to continue to apply herbicides
City of Thorold Bylaw Number 52-2003	We worked with the City of Thorold providing them detailed information on our programs and we received written confirmation that our programs could continue as planned.
Town of Newmarket Bylaw Number 2006-116	We do not own facilities within the Town which would be impacted by the bylaw so no exemption was required
City of London PH-14	Utility exemption
City of North Bay Bylaw 2003-116	Our internal system for responding to bylaws failed and as such we did not achieve desired outcomes. We are in the process of working with the City to re- establish our critical station program.
Town of Perth Bylaw Number 3483	Utility corridor work allowed provided a number of conditions are adhered too. We have a very small program and these conditions are not impacting on our programs.

Hydro One requests a utility exemption in any future pesticide bylaw. Hydro One must complete scheduled maintenance programs, including the continued use of herbicide in order to ensure the safe and reliable operation of the electrical system within the Town of Markham

Should you require further information I will gladly make myself available to meet and/or to make a brief presentation to any committees up to and including council if required.

John F. Bowen Programs Officer Hydro One Inc.

Chapter 612

PESTICIDES, USE OF

§ 612-1. Definitions.

§ 612-3. Offences.

§ 612-2. Restrictions.

[HISTORY: Adopted by the Council of the City of Toronto 2003-05-23 by By-law No. 456-2003. Amendments noted where applicable.]

GENERAL REFERENCES

Property standards - See Ch. 629.

§ 612-1. Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

ENCLOSED — Closed in by a roof or ceiling and walls with an appropriate opening or openings for ingress or egress, which openings are equipped with doors which are kept closed except when actually in use for egress or ingress.

HEALTH HAZARD — A pest which has or is likely to have an adverse effect on the health of any person.

INFESTATION — The presence of pests in numbers or under conditions which involve an immediate or potential risk of substantial loss or damage.

PEST — An animal, a plant or other organism that is injurious, noxious or troublesome, whether directly or indirectly, and an injurious, noxious or troublesome condition or organic function of an animal, a plant or other organism.

PESTICIDE — Includes:

- A. A product, an organism or a substance that is a registered control product under the federal Pest Control Products Act which is used as a means for directly or indirectly controlling, destroying, attracting or repelling a pest or for mitigating or preventing its injurious, noxious or troublesome effects.
- B. Despite Subsection A, a pesticide does not include:

Editor's Note: This by-law was passed under the authority of section 130 of the Municipal Act, 2001, S.O. 2001, ch. 25. Section 2 of this by-law states that it comes into force 2004-04-01.

- (1) A product that uses pheromones to lure pests, sticky media to trap pests or "quick-kill" traps for vertebrate species considered pests, such as mice and rats.
- (2) A product that is or contains only the following active ingredients: [Amended 2004-05-20 by By-law No. 385-2004]
 - (a) A soap;
 - (b) A mineral oil, also called "dormant or horticultural oil";
 - (c) Silicon dioxide, also called "diatomaceous earth";
 - (d) Biological pesticides, including Bt (bacillus thuringiensis) and nematodes; [Amended 2005-02-16 by By-law No. 121-2005]
 - (e) Borax, also called "boric acid" or "boracic acid";
 - (f) Ferric phosphate;
 - (g) Acetic acid;
 - (h) Pyrethrum or pyrethrins;
 - (i) Fatty acids;
 - (j) Sulphur; or
 - (k) Corn gluten meal.

§ 612-2. Restrictions.

- A. No person shall apply or cause or permit the application of pesticides within the boundaries of the City.
- B. The provision set out in Subsection A does not apply when pesticides are used:
 - (1) To disinfect swimming pools, whirlpools, spas or wading pools;
 - (2) To purify water intended for the use of humans or animals;
 - (3) Within an enclosed building;
 - (4) To control termites;
 - (5) To control or destroy a health hazard;
 - (6) To control or destroy pests which have caused infestation to property;
 - (7) To exterminate or repel rodents;
 - (8) As a wood preservative;

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§ 612-3

- (9) As an insecticide bait which is enclosed by the manufacturer in a plastic or metal container that has been made in a way that prevents or minimizes access to the bait by humans and pets;
- (10) For injection into trees, stumps or wooden poles;
- (11) To comply with the Weed Control Act² and the regulations made thereunder; or
- (12) As an insect repellent for personal use.

§ 612-3. Offences.

Any person who contravenes any provision of this chapter is guilty of an offence and, upon conviction, is liable to a fine or penalty provided for in the *Provincial Offences Act.*³

² Editor's Note: See R.S.O. 1990, c. W.5.

⁵ Editor's Note: This section was passed under the authority of section 425 of the *Municipal Act, 2001*, S.O. 2001, ch. 25, and, under section 61 of the *Provincial Offences Act*, R.S.O. 1990, c. P.33, a person convicted of an offence under this section is liable to a fine of not more than \$5,000.



HOME CONTACTUS HOW DO I ...? SEARCH:

CITY SERVICES YOUR CITY GETTING AROUND THINGS TO DO ENVIRONMENT HEALTH GRANTS AWARDS

- Health effects
- Information for Lawn Care Companies
- City reports
- Public attitudes
- Indoor use
- News releases
- Advertising campaigns
- Water-wise tips for your lawn
- Fact sheets on tree care and pest management
- Stormwater pollution
- Resources in your community lean and Beautiful City

DOING BUSINESS



ACCESSING CITY HALL

Pesticides



Pesticide By-law Questions and answers

These questions are organized in four categories:

- About the Pesticide By-law
- Caring for your lawn and garden without pesticides
- Pest control products permitted under the by-law
- General questions

You'll need the latest version of Adobe Acrobat Reader to view and print PDF files

About the pesticide By-law

1. What is the Pesticide By-law?

The <u>Pesticide By-law</u> (PDF file size 16.5KB) is the City of Toronto's response to growing public concern about pesticide use. The by-law restricts the outdoor use of pesticides on public and private property in Toronto. It came into effect on April 1, 2004, and applies to anyone who uses pesticides outdoors, including homeowners, renters, lawn care companies, golf courses and property managers.

Note: Fines may be imposed for certain pesticide users as of September 1, 2005.

2. What is a pesticide?

Pesticides are products used to kill plants, insects and plant diseases. Pesticides used on lawns and gardens include herbicides (which kill plants), insecticides (which kill insects) and fungicides (which kill fungi).

3. Why did City Council pass the Pesticide By-law?

The by-law was passed to protect the health, safety and well-being of City of Toronto residents. Scientists have identified links between exposure to pesticides and health problems, including harm to reproductive and nervous systems. Children and some adults are particularly sensitive to the effects of pesticides. Pesticides also wash off lawns and gardens into the Don and Humber Rivers, which lead to Lake Ontario - the source of our drinking water.

4. is the by-law in effect? How does it work?

The Pesticide by-law is in effect. It came into force on April 1, 2004. The City is phasing in the full enforcement of the Pesticide By-law to give you time to adjust to natural lawn and garden care. Public Health Inspectors enforce the by-law. Currently an Inspector responds to a complaint about suspected pesticide use by visiting the homeowner, property

owner or meeting with a lawncare company in order to assemble all the facts.

As of September 1, 2005, a new enforcement period begins. Everyone who applies pesticides - except for homeowners and renters - are subject to fines for non-compliance. This includes lawn care companies, landscapers, commercial sites and multi-residential property managers. Homeowners and renters must comply with the by-law but are not subject to fines until September 1, 2007. If you use pesticides or hire a professional company, you should learn more about this new phase.

Full enforcement of the by-law is being phased in as follows:

- For lawn care companies, commercial properties and other pesticide users, Public Health Inspectors will begin in April 2005 to issue warnings and provide educational materials to those who fail to comply with the by-law. As of September 1, 2005, fines may be issued for non-compliance.
- For homeowners, Public Health Inspectors will initially provide homeowners with educational materials and issue warnings if pesticides have been used contrary to the by-law. As of September 1, 2007 homeowners who do not comply with the by-law may be fined.

A Public Health Inspector may issue a ticket or serve a summons for non-compliance. A ticket has a set fine of \$255.00. Under the Provincial Offences Act, a summons can carry a fine of up to \$5,000.00 and the exact fine would be determined in court.

5. What if I see someone applying pesticides? If you suspect that a pesticide has been used in violation of the by-law, you can contact Toronto Public Health at 416-338-7600. Public Health Inspectors will respond to all complaints.

Please provide as much information as possible. The more facts you provide - such as the company name and phone number, the information on any lawn signs, etc - the easier it is for the City to follow up.

We will accept anonymous complaints, but it is more helpful to sign a witness statement. A signed statement is important if the fine is contested in court or the matter is brought to court by way of a summons. The City will not share your name with the person or company being charged unless the matter proceeds to court or the information is otherwise ordered to be disclosed.

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Caring for your lawn and garden without pesticides

6. How can I <u>manage weeds</u> and insects without pesticides?

You can replace pesticide use with a natural approach that improves the health of your lawn and garden. A natural

approach includes enriching your soil with compost or fertilizer, raising the height of your lawn mower, sowing your lawn with grass seed, hand-weeding and watering properly. These techniques should give you a thick, deep-rooted lawn and healthy garden that crowds out weeds and resists insect damage. Learn more about the natural approach with Pesticide-Free...A Guide to Natural Lawn and Garden Care.

If you simply stop using pesticides without replacing them with a natural approach, your lawn or garden may take longer to adjust, and weed and insect problems may result.

If - even while following a natural approach - you have weeds or suspect an insect problem, the by-law gives you some options. The Pesticide By-law lists lower risk pest control products (PDF file size 56.7KB) that can be used for certain weeds and insects.

The by-law allows the use of pesticides to control or destroy a pest infestation to property. The City does not consider weeds or common fungal diseases in lawns an infestation. A lawn care professional or other plant health care expert can also provide advice.

7. What is an infestation?

The by-law allows the use of pesticides to control or destroy a pest infestation to property. An infestation is defined in the by-law as "the presence of pests in numbers or under conditions which involve an immediate or potential risk of substantial loss or damage."

The City does not consider weeds or common fungal diseases in lawns an infestation. Hand weeding, proper watering, mowing, applying compost and fertilizer and sowing grass seed should make your lawn thick and deeprooted, which will reduce dandelions and other weeds.

Grubs and chinch bugs are insects that exist in most lawns but can reach damaging levels under certain conditions. Insects should be monitored and counted regularly to determine if they have reached infestation levels. (See Question 8 to learn how to count grubs and chinch bugs.)

Since healthy lawns can withstand more insects without damage, infestation levels depend on the lawn and the insect. The following numbers may be used as guidelines to determine whether or not an infestation exists:

- In a well-watered lawn, 15 grubs per 0.1 m2 (approx.1 square ft) may be an infestation
- On a lawn that has been poorly watered over the season, 5-10 grubs per 0.1 m2 may present an infestation
- For chinch bugs which are measured using a waterfilled can - 20 bugs per can may be an infestation.

These numbers are guidelines, and should be considered along with other factors, such as overall lawn conditions, heavy foot traffic and other signs of stress. It's also important to confirm whether or not you actually have an insect problem, because damage could be due to other factors such as insufficient watering or poor soil conditions. If you suspect you may have an insect infestation in your lawn or garden, you are encouraged to try natural methods or

contact a licensed lawn care professional or other plant health care expert for advice.

8. How do I count grubs and chinch bugs in my lawn?

For grubs, it's wise to check for them before damage occurs - this best done in early August. Carefully use a sharp knife to cut three sides of a square roughly 30 cm (12 inches) long and peel back the grass like a piece of sod. If brown patches have already appeared, inspect several areas in the lawn including those showing damage.

For chinch bugs, use the following test:

- 1. Cut off both ends of a large can (like a coffee can);
- 2. Push the can halfway down into the lawn. Wear gloves to protect your hands;
- 3. Fill the can with water and wait a few minutes to see if chinch bugs float to the top.

Even with no signs of damage, this test should be conducted in mid to late July in several sunny spots around the lawn. If there are dead patches, test at the edge of the damaged area.

To help you identify and manage insect pests, read our fact sheets on grubs and chinch bugs.

9. Can I still use my lawn care company?

Yes, but your lawn care company must abide by the pesticide by-law and other provincial and federal regulations. For example, the herbicide restrictions on residential lawns and general parkland still apply, and in situations when pesticides are permitted, warning signs must be posted and left on the lawn for 48 hours following any application.

Talk to your lawn care or landscaping company BEFORE you begin or renew your contract. Some of the questions you might ask the company are whether they are aware of the pesticide by-law and whether the lawn care services they provide comply with the by-law. The City has also produced a fact sheet called "Choosing a lawn care company" to help you discuss the by-law with a service provider.

10. I have allergies to ragweed. How can I control ragweed without pesticides? What is the City doing to control ragweed?

Pollen from ragweed can cause allergic reactions such as watery eyes and congestion in some people, and does so from about mid-July until the end of the growing season. Ontario's **Weed Control Act** classifies ragweed as a "noxious weed" and requires it to be destroyed by pulling, cutting, digging or with a pesticide.

Under Toronto's Pesticide By-law, ragweed can be destroyed with a conventional or less-toxic pesticide, such as herbicidal soap. To minimize pesticide use, it is recommended that you first consider pulling or cutting the plants. The City's Transportation and Parks, Forestry & Recreation divisions watch for ragweed and will remove it from greenspace, public alleyways and roadsides wherever it is detected.

11. How can I care for my trees without pesticides?

Healthy trees will resist insects and disease. A natural

approach, which includes frequent monitoring for problems, spreading compost or mulch at the base of the tree, pruning and proper watering should increase plant health.

The by-law permits the use of certain lower risk pest control products, some of which may be appropriate to control insects and diseases common to trees. It's important to always read the product label. Pesticide use is also permitted to control a pest infestation to property. If you suspect you may have an insect or disease infestation, we encourage you to consult an arborist or other plant health care expert for advice.

12. How can I care for my vegetables and flower garden without pesticides?

Healthy vegetables and flowers will resist insects and disease. A natural approach, which includes frequent monitoring for problems, spreading compost or mulch, handweeding, pruning and proper watering should keep your flowers and vegetables healthy. Gardening books can show you how to combine plants to increase pest resistance and how to attract helpful organisms that will prey on damaging insects. A plant that cannot survive with natural care may be in the wrong spot, and you may solve the problem by moving the plant or replacing it with a species more suitable to the location.

The by-law permits the use of certain lower risk pest control products, some of which may be appropriate to control insects and diseases common to vegetable gardens and flowers. It's important to always read the product label. Pesticide use is also permitted to control a pest infestation to property.

13. Can I use a pesticide in my pool?

Yes. The pesticide by-law permits the use of pesticides to disinfect swimming pools, whirlpools, spas or wading pools. Algicide used for this purpose is permitted under the by-law.

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Pest control products permitted under the By-law

14. Are there any products that I can use to get rid of pests and weeds?

The by-law permits you to use certain lower risk products to control pests and weeds. These products must be or must contain only the following "active ingredients":

- A soap;
- A mineral oil, also called dormant or horticultural oil;
- Silicon dioxide, also called diatomaceous earth;
- Biological pesticides including Bt (Bacillus thuringiensis) and nematodes;
- Borax, also called boric acid or boracic acid;
- Ferric phosphate;
- Acetic acid:
- Pyrethrum or pyrethrins;
- Fatty acids:
- Sulphur; and

Corn Gluten Meal.

Other pesticides may only be used in certain situations listed in the by-law, such as to disinfect swimming pools, spas or wading pools, to exterminate or repel rodents and to control or destroy a pest infestation to property. The City does not consider weeds or common fungal diseases in lawns an infestation.

You can find information on these products in most garden centres and hardware stores and you can also read our handy <u>fact sheet</u> (PDF file size 56.7KB). Before reaching for any product we encourage you to try a natural approach to lawn or garden care, such as hand-weeding, proper watering or seeding to solve the problem.

15. How do I know I'm buying products that are permitted for use?

The by-law names "active ingredients" that can be used but does not identify the product brand names. When purchasing a product, you will need to carefully read the label to find the right product. The "active ingredient" is listed on the front label next to the word "Guarantee." Some product labels list more than one "active ingredient" - you must ensure that only the active ingredients named in the by-law are listed.

For example, you may find a product whose label reads "Guarantee: Silicon Dioxide...80%." This would be a permitted product, unless the label lists additional active ingredients that are not named in the by-law.

The label on the product tells you what specific insects, weeds or other pests it is meant to control and how it should be used. It's important to follow the directions on the label. You can find information on these products in most garden centres and hardware stores and you can also read our handy fact sheet (PDF file size 56.7KB).

16. If pesticides are legal to buy in stores, why aren't they legal to use?

Since there is a risk that harm may result from exposure to pesticides, the City has passed the by-law to protect the health, safety and well-being of City of Toronto residents by restricting their use. The City's by-law regulates the use of pesticides but it does not ban pesticides. Pesticides may be used in the circumstances listed in the by-law, such as to control termites or to control or destroy a health hazard.

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General questions

17. How do I dispose of pesticides?

It's important not to dispose of leftover pesticides in your garbage, down the drain or down storm sewers. You should always read the label for information on disposal. The City operates depots to collect and safely dispose of pesticides. You can drop off your leftover pesticides at a depot or at a Councillor Community Environment Day. Also, the City's "Toxics Taxi" may be able to come to your home and pick

them up. For more information call the Household Hazardous Waste Hotline at 416-392-4330 or visit the <u>City's</u> Web site.

18. Will I still be able to use pesticides indoors?

You will still be able to use pesticides for indoor use. This bylaw only restricts the use of outdoor pesticides. However, indoor pesticides may harm your health, your family and pets. The City of Toronto's website has useful <u>information</u> on non-toxic methods for controlling indoor pests.

19. Are pesticides being used to control West Nile Virus (WNV)?

Yes. The by-law permits the use of pesticides to control or destroy a health hazard, such as WNV. Pesticides are being used as part of a larger prevention and monitoring program to combat the spread of WNV. For more information on West Nile Virus, please visit Toronto Public Health's Web site.

- 20. Have any other cities passed pesticide by-laws?
 Yes. Over 70 cities and towns across Canada, including
 Halifax and Montreal, have passed by-laws to restrict
 pesticides. Several Ontario municipalities, such as Caledon
 and Peterborough, have passed such by-laws.
- 21. I want to show my neighbours that I don't use pesticides. Where do I get a "pesticide free lawn" sign? You can receive a free lawn sign, as well as advice on composting and lawn care, by calling the City's Lawn Improvement Helpline at (416) 397-LAWN (5296).

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