An examination of the rejected Ottawa pesticide by-law with a focus on the Provincial Policy Statement and the Ottawa Official Plan.

Joel Theriault Student Number 2301299

Planning and Environmental Assessment Law CML 4114JF

Professors
Charles Birchall
Rodney Northey
Kristi Ross

Due Date: January 24, 2006

"Give health and safety precedence in making risk management decisions, over economic and other considerations. Balance Health Canada's mandate to protect the health and safety of Canadians, with the right of individuals to make personal choices. Where these two interests are at odds, decisions must always favour the former over the latter." *Maintaining and Improving Health is the Primary Objective -* **Health Canada***

^{*} http://www.hc-sc.gc.ca/ahc-asc/alt_formats/hpfb-dgpsa/pdf/pubs/risk-risques_e.pdf

Table of Contents

Introduction Defining Sustainability	1
1) Watershed Protection Measures	9
OOP 2.4.3 Watershed and Subwatershed Plans	10
PPS Part V: Policies 2.0 Wise Use and Management of Resources	10
1A) Protection of surface waters	11
OOP 4.7.6 Stormwater Management	13
1B) Protection of groundwater / aquifers	14
OOP 2.4.4 Groundwater Management	15
OOP 4.8.2 Wellhead Protection	15
2) Protection of Human Health	16
PPS Part IV: Vision for Ontario's Land Use Planning System	16
PPS Part V Policies: 3.0 Protecting Public Health and Safety	17
OOP 4.8 Protection of Health and Safety	17
3) Planning for the long term economic interest of	
the municipalities and province.	17
PPS Part IV: Vision for Ontario's Land Use Planning System	18
PPS Part V: Policies - 1.7 Long-Term Economic Prosperity	18
4) Implementation of the OOP / PPS	21
OOP 5.1 Introduction	21
OOP 2.4 Maintaining Environmental Integrity	22
PPS Part V: Policies - 4.0 Implementation and Interpretation	23
OOP 5.4 Interpretation	24
5) Other Obligations - Aboriginal Rights	28
6) Conclusion	33
OOP 2.4 Maintaining Environmental Integrity	35

Introduction

In November of 2005, the Ottawa city council narrowly rejected a proposed pesticide by-law which would have banned non-essential (inherently cosmetic) uses of pesticides within the city limits. It is the focus of this paper to examine the matter from a legal perspective. The paper intends to answer the question of whether a rejection of the proposed bylaw "is consistent with" the Ottawa Official Plan (OOP) and the Provincial Policy Statement (PPS). The standard of conformity was changed in March 2005 from "have regard to" to the more rigorous "be consistent with" standard, decreasing the scope of allowable discretion that municipal officers such as councilors may exercise when making municipal decisions.

The new Provincial Policy Statement came into effect on March 1, 2005. This coincides with the effective date of Section 2 of the *Strong Communities (Planning Amendment) Act, 2004*, which requires that planning decisions on applications that are subject to the new PPS "shall be consistent with" the new policies.²

The paper will also touch upon Canadian law in respect of aboriginals, including whether the decision conforms to the federal, provincial, and subsequent municipal fiduciary obligations towards the aboriginal peoples living in the country.

It should be noted from the outset that the Official Plan may be more stringent in regards of health and environmental protection than the Provincial Policy Statement³, but may not allow a lower standard. One common thread between both the Ottawa Official Plan (OOP) and Provincial Policy Statement (PPS) is that they are intended as a guide to ensure sustainable development.

_

¹ Decisions of municipal council "shall be consistent with" the PPS - Part 5 Policies : Section 4.2 Provincial Policy Statement 2005

² Provincial Policy Statement - http://www.mah.gov.on.ca/userfiles/HTML/nts_1_8198_1.html

The goal of the Ottawa 20/20 initiative is sustainable development. The classic definition of sustainable development is: "Meeting the needs of the present without compromising the ability of future generations to meet their own needs"⁴. Sustainable development is a strategy that requires the integration of economic growth, social equity, and environmental management. It is about ensuring a better quality of life for everyone, now and for generations to come⁵.

The PPS gives indication of the relevant factors in determining whether or not decisions support the requirement of sustainable development.

The Province's natural heritage resources, water, agricultural lands, mineral resources, and cultural heritage and archaeological resources provide important environmental, economic and social benefits. The wise use and management of these resources over the long term is a key provincial interest. The Province must ensure that its resources are managed in a sustainable way to protect essential ecological processes and public health and safety, minimize environmental and social impacts, and meet its long-term needs.⁶

A definition of sustainable development has also been developed by the judiciary. Justice Feldman J.A. in the case of Croplife v. Toronto⁷ referred to an the earlier case of Hudson v. Spraytech 2001 where Justice L'Heureux Dubé of the Supreme Court of Canada "referred to the definition in para. 7 of the *Bergen Ministerial Declaration on Sustainable Development* (1990) as follows":

In order to achieve sustainable development, policies must be based on the precautionary principle. Environmental measures must anticipate, prevent and attack the causes of environmental degradation. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

Does the rejection of the Ottawa pesticide by-law contribute or diminish from the

³ Part 5 Policies - Section 4.6 Provincial Policy Statement 2005

⁴ *Our Common Future* (1987), final report of the World Commission on Environment and Development (Brundtland Commission).

⁵ Ottawa 20/20 Official Plan

⁶ 2005 Ontario Provincial Policy Statement - Part IV: Vision for Ontario's Land Use Planning System

required sustainable development in the province or in the region? The following issues must be addressed to adequately answer the questions.

Does the decision increase the quality of life for the current generation of people living in the municipality?

Anne MacCallum, Alison Leeming, Linda Nolan-Leeming and many others spoke (at the October 20, 2005 pesticide debates) to the council about their chemical sensitivities and how current pesticide applications within the city were significantly reducing their quality of life.

<u>Dr. Gwynne Jones, Intensive Care Unit, Ottawa Hospital</u> explained that he has seen many more patients with cancer and severe illnesses than ever before, an increasing number of which are unexplainable illnesses. ⁸

Rosario Holmes, Certified Asthma Educator, Lung Association indicated that studies have shown that lawn and garden pesticides to not alleviate allergies and in fact, it is dangerous for asthma sufferers to be exposed to those pesticides. 9

<u>Linda Nolan-Leeming, Pres. Allergy & Environmental Health Assoc. of Ottawa</u> indicated that like her daughter, she too has environmental sensitivities and suffers from Multiple Chemical Sensitivity (MCS), which is recognized as a legal disability by the federal and provincial government and the Human Rights Commission. It is also recognized in Denmark as a new health disorder and is caused by exposure to chemicals... ¹⁰

<u>Françoise Gour</u> spoke as a person with moderate to severe environmental allergies. She lives in an environmentally-safe building at the Barrhaven Non-profit Housing Co-op and all the tenants of this 7-unit building have severe environmental allergies. The building is subsidized by the City, which means that environmental allergies are legally recognized. She believed it is irrelevant where pesticides are sprayed and for what purpose (agricultural or cosmetic use) because it all affects her. If the by-law were put in place and these chemicals removed from her community, it would go a long way to making a huge and positive difference in her life.¹¹

Françoise is a prime example of the financial implications of allowing the use of

⁷ Croplife v. Toronto [2005] CanLII 15709 (ON C.A.)

⁸ Ottawa Pesticide Debate Minutes - October 20, 2005

http://ottawa.ca/calendar/ottawa/citycouncil/hrssc/2005/10-20/minutes26.htm

⁹ Ibid.

¹⁰ Ibid.

pesticides within municipal limits. The city is currently subsidizing her building which houses many of those with chemical sensitivities. Linda Nolan-Leeming indicates that this disorder is caused by exposure to chemicals, which would include pesticides. The financial implication of a by-law reducing the exposure of citizens to pesticides would be that less people would develop chemical sensitivities, and the municipality would incur less expenses in regards to housing subsidies. Less people with pesticide related illnesses would also seem to increase the quality of life for those living in the municipality.

Does the decision compromise the ability of future generations to meet their needs?

Louise Hannant, Allergy and Environmental Health Association explained that she had always lived a healthy life until she moved into a new home and she became ill with fatigue syndrome. Coincidentally, she later learned the lawn of her new home had been treated with weed and feed by the previous homeowner.¹²

During the debate, Louise made it clear that she loved to work in her home garden during the summer months. After several years of garden work, she suddenly became ill with fatigue syndrome, which she associated with the pesticides previously applied in the garden. Rejection of the by-law will mean that pesticide usage continues in the city and that more lands may become unsuitable for routine activities (like gardening) or possibly even development. Urban areas of the city core with years of accumulated pesticides may need to be designated as brown fields to prevent similar health occurrences. If no such designations occur (and subsequent clean ups), other residents may develop the same health problems. In essence, the people living in the homes at the present moment maybe permanently destroying the land for all generations to come. Does the decision to

¹¹ Pesticide Debates, Ibid.

¹² Ibid

reject the pesticide by-law banning non-essential uses meet the needs of future generations?

Caroline Harris-McDonald, Chair, Environmental Committee, Blackburn Hamlet Community Association spoke about the negative effects of pesticides and the effects on children, wildlife, groundwater, et cetera, noting that studies have associated many of the common lawn and garden pesticides used to **birth defects**, developmental delays, motor dysfunction, and immune and nervous system disruption. She commented that children are at particular risk because of their small size, weaker immune system, and the many hours they spend playing outside. She noted that the paper prepared by Ontario College of Family Physicians entitled "Environmental Setting and Children's Health", states that the data implicates pesticides "as inducing damage to children's immune, endocrine, nervous and reproductive systems as well as congenital anomalies, and cancer".

Would the term 'future generations' not also include those who are unborn at the moment? Studies are increasingly linking contact of future parents with pesticides to birth defects and health problems for future infants. Is the failure to protect the current generation of child bearers consistent with the obligation to protect the needs of future generations (I.e. living a reasonably healthy life)?

<u>Dr. John Molot</u> referred to the literature review produced by the Ontario College of Family Physicians and the association it makes on the effects of pesticides on children. He noted that the literature makes associations with the types of exposure and potential developmental problems, leukemia and the particular vulnerability of kids, **from before they are born for the rest of their lives**.¹³

Karen Eck, Leader, Ottawa Anaphylaxis Support Group also spoke as the mother of two small boys who have life-threatening multiple food and environmental allergies and asthma... She indicated that asthma diagnosed before 5 years of age is associated with exposures to many things in the first year of life including, among others, pesticides and herbicides.¹⁴

<u>Susan Harvey</u> spoke as a mother of a 5-year old child currently undergoing treatment for leukemia. She indicated that she worried that her own repeated exposure to pesticides and herbicides improperly sprayed on lawns in her neighbourhood prior to her daughter's birth, may be partly to blame for her child's illness. She added that living in an upper income neighbourhood increases a child's risk of contacting leukemia by 14%, because

¹⁴ Pesticide Debates, Ibid.

¹³ Pesticide Debates, Ibid.

people in those neighbourhoods use more chemicals on their lawns. 15

<u>Dr. Marge Sanborn</u> stated that in a 2004 study, the Systematic Review of Pesticides on Human Health Effects reported the following: premature births, serious birth defects, genetic malformations, low-weight babies and infertility; a strong incidence of non-Hodgkins lymphoma and genetic damage to cells. She pointed out that 40% of children with leukemia have slow metabolic rates, and are impacted by insecticides and pesticides.¹⁶

Anna Van den Kamp said her child has no protection from what may already be in her breast milk. She spoke about the fact that toxins have been found in the breast milk of Inuit women in the north, as well as in women from this area, and she asked for the Committee's help in protecting herself and her child from these toxins. ¹⁷

Based on comments received by council at the pesticide debates October 20, 2005 it does not seem as though council has taken into consideration the needs of future generations when deciding to reject the by-law. Sufficient medical evidence was adduced linking pesticide contact for child bearers to health problems for their future children.

Does the decision "anticipate, prevent and attack the causes of environmental degradation"?

During the debates, many council members cited the lack of clear medical evidence as a reason why they did not support the by-law. However, there was overwhelming support for the precautionary principle among those who participated in the debates (and in the jurisprudence as previously mentioned).

Eric Lunn supported a by-law for pesticide reduction. He compared this issue to that of smoking and the fact it took literally decades before the connection was made between smoke and/or second-hand smoke and lung cancer. He urged committee to err on the side of caution and not to fail the children and people of the community.¹⁸

16 Ibid.

¹⁵ Ibid.

¹⁷ Ibid.

<u>Dr. Scott Findlay, Director of the Institute of the Environment, University of Ottawa</u> With regards to the argument that there is no scientific proof that pesticides are harmful, he advised there is no such thing as scientific proof, but only scientific evidence. He went on to state that proof, beyond a reasonable doubt, would never be attained because the experiment would require using test groups of children and would therefore never be done.¹⁹

The OOP and PPS contain many other factors and guiding principles which must be assessed in the determination of sustainability. One guiding principle in decision making found in the OOP is that Ottawa is to be **A Green and Environmentally-Sensitive City.** To accomplish this goal it is necessary to maintain **Clean Air, Water and Earth.** In reaching this goal, its necessary that "All people work to improve the quality of the natural environment ... and protect natural resources ..."²⁰

Does the decision to reject the by-law conform to this guiding principle? Did the decision to reject the by-law improve / maintain the quality of the natural environment or protect natural resources like the soil, water, or wildlife?

According to the Health, Recreation and Social Services Committee pesticide report, "A study of experiences in other cities confirms this suggestion that only the combination of education **and** a by-law can deliver significant reductions in pesticide use." Arguably, if reduction of pesticide dispersion meets these goals and factors of sustainability (better than a proliferation of pesticide use), and empirical studies indicate that legislation is needed to reduce pesticide usage, how could the rejection of a pesticide by-law possibly be in accord with the requirement for sustainable development?

Though there is no identical form of guiding principle corresponding with the

¹⁸ Pesticide Debates, Ibid.

¹⁹ Ibid.

²⁰ OOP, Ibid.

 $^{^{21}\} http://ottawa.ca/calendar/ottawa/citycouncil/occ/2005/10-26/hrss/ACS2005-PGM-POL-0058.htm$

OOP, the preamble of the PPS sets out similar goals.

It also supports the provincial goal to enhance the quality of life for the citizens of Ontario. Provincial plans and municipal official plans provide a framework for comprehensive, integrated and long-term planning that supports and integrates the principles of strong communities, a clean and healthy environment and economic growth, for the long term.²²

Maintenance of environmental integrity while allowing development is a theme which runs throughout both documents. Relevant sections of the OOP and PPS offering an opportunity for a more substantive analysis than guiding principles and the preamble can be grouped into several categories: watershed protection, protection of human health and life, planning for the long term economic prosperity of the municipality and province. The first and second categories could also be included as subcategories for ensuring the long term economic prosperity of the province. This is because poor water quality can be associated with long term medical problems. Medical problems can be associated with medical expenses, which the province is obliged to pay under a public health care system.

<u>Dr. Robert Cushman</u> stated that education plus legislation together can move much further, which is what this by-law is all about. He remarked that no one could belittle the impacts that pesticides have had on public health. There are a number of issues to be considered, including economics, health, individual rights, and a level playing field. He remarked that the risk of cancer has increased and 48% of the provincial budget goes into health care.²³

As such, failure to protect water quality is not consistent with planning for the long term economic prosperity of the province.

1) Watershed Protection measures

Tragedies like that occurring in Walkerton, Ontario have focused much attention

-

²² PPS. Ibid.

²³ Pesticide Debates, Ibid.

at all levels of government towards source water protection. Given the intermingling of ground and surface waters, attention has been focused on both of these water sources. During the debates, concern about the water quality was raised by a number of proponents of the ban.

Meredith Brown, Ottawa Riverkeeper expressed concern about the impact pesticides have on the water table, indicating that once sprayed, these chemicals can get into waterways and into the City's drinking water. She was concerned that no one is looking at the cumulative effect those chemicals are having on people's bodies and noted that water filtration plants are not designed to eliminate these chemicals...²⁴

Recent studies (which were also mentioned during the debates) indicate that pesticides are in fact entering the waterways, which should cause alarm for local residents as well as others who are connected to the watershed.

In the summer of 2003 water samples from the Rideau River, Mosquito Creek and Sawmill Creek were collected by Ottawa City staff, and analysed for pesticides at the University of Guelph. Samples were obtained at three occasions of wet and three occasions of dry weather.

- Pesticides were detected at least once in every location sampled.
- Pesticides were detected in 63% (27/43) of the samples.
- The four pesticides detected (herbicides mecoprop (MCPP). dicamba, and 2,4-D, and the insecticide diazinon) are four of the top five pesticides used by lawn care applicators. None of the pesticides that are used only for agricultural purposes were detected.
- Phenoxy herbicides (weedkillers) were present in 60% (26/43) of the samples. 25

The scope of attention at the municipal and provincial levels has also broadened from individual streams and rivers to the entire watershed. Increased attention to the larger watershed has been the result of increased scientific knowledge regarding water transfer.

OOP 2.4.3 Watershed and Subwatershed Plans

Watershed and subwatershed plans attempt to balance environmental protection,

²⁴ Ibid.

 $^{^{25}\} http://www.flora.org/healthyottawa/pesticidereportkeypoints.htm$

conservation and restoration with development and land-use practices to ensure the long-term health of the watershed. Drawing on fieldwork and scientific analysis, these plans identify stressors on natural systems and propose measures to mitigate these stressors and enhance natural systems.

A subwatershed plan will be undertaken:

B) If the environmental health and condition of the subwatershed area is degraded or at risk of degrading;

Given the test results indicating pesticides in the local waterways, a subwatershed plan should (according to the OOP) be undertaken as a preliminary step to prevent further degradation. As also indicated, the province has also dedicated itself to watershed protection. Key to the realization of watershed protection is protecting all water sources, both surface and ground, as they intermingle.

PPS Part V: Policies

2.0 Wise Use and Management of Resources

Ontario's long-term prosperity, environmental health, and social well-being depend on protecting natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits.

- **2.2.1** Planning authorities *shall protect*, improve or restore the *quality and quantity of water* by:
- B) *minimizing potential negative impacts*, including cross-jurisdictional and cross-watershed impacts;
- C) identifying surface water features, ground water features, hydrologic functions and natural heritage features and areas which are necessary for the ecological and hydrological integrity of the watershed;
- D) implementing necessary restrictions on development and site alteration to:
- 1. protect all municipal drinking water supplies and designated vulnerable areas; and
- 2. protect, improve or restore *vulnerable* surface and ground water, *sensitive surface* water features and sensitive ground water features, and their hydrologic functions;
- E) maintaining linkages and related functions among surface water features, ground water features, hydrologic functions and natural heritage features and areas;
- F) promoting efficient and sustainable use of water resources, including practices for water conservation and *sustaining water quality*;
- G) and ensuring stormwater management practices *minimize stormwater volumes and contaminant loads*, and maintain or increase the extent of vegetative and pervious surfaces.

Given the reports indicating that pesticides were finding their way into the watersources

and the large tracts of land within Ottawa whose storm culverts run directly into the streams and rivers, is the decision to reject the Ottawa pesticide by-law consistent with the OOP or the PPS? Does it in any way further source water protection?

1A) Protection of surface waters

Significant attention has been directed towards protection of surface waters from contamination, as well as the areas where surface water flows. Threats to surface waters from pesticides generally arise when rainwater mixes with pesticides (which have been applied to lawns and gardens), and makes its way into local rivers. A secondary (though less frequently used in urban areas) potential source of surface water contamination arises from aerial applications of pesticides. During aerial applications (especially in high wind situations), the potential for spray drift to directly enter the surface water is always present.

<u>Frances McInnes of the Alta Vista Environmental Network</u> spoke in favour of the by-law. She indicated that despite pesticide reduction talks hosted by the City over the past three years, there has been an increase in pesticide use. She recalled incidents where her neighbours were exposed to pesticides when they were sprayed in strong winds...²⁶

<u>Derek Pinto</u> spoke as a member of the local Green Party Electoral District Association and he shared three particular points with respect to why he believed pesticides should be banned: - chemicals do not seem to stay put; they are carried on the wind onto neighbouring lawns;²⁷

A third manner in which pesticides may enter surface waters would be if they were absorbed into the aquifer and subsequently fed into local waterways by natural springs. Speaking by analogy, if the earth is a cigarette butt, our aquifers will be well protected during the initial periods of pesticide use. This is because the ground will act as a filter to trap most of the poisons. However, these pesticides will eventually make their way into

_

²⁶ Pesticide Debates, Ibid.

²⁷ Ibid.

the aquifer and even a complete ban at the moment would not prevent these toxins from reaching their final destination. Also like a cigarette butt, the more contaminated the ground becomes, the more poison will seep through and enter the aquifer. Once these pesticides have entered the aquifer, they may remain there indefinitely or maybe pushed up through underground springs (fractured rock setting here in Ottawa) and enter the surface watershed. Either way, they will be consumed by humans as we depend on both surface and ground waters.

OOP 4.7.3 Erosion Prevention and Protection of Surface Water

Protecting stream corridors and the surface water environment serves the dual purpose of preserving and enhancing the environmental quality of stream and river corridors and their aquatic habitat, as well as reducing risks from hazards associated with watercourses. Ensuring that development is set back an appropriate distance from watercourses helps serve these purposes by ensuring a healthy, natural riparian zone and providing a margin of safety from hazards associated with flooding and unstable slopes.

- 10) In support of the policies of this Plan, the City will:
- A) Support initiatives of the Ministry of Agriculture, Food and Rural Affairs, other provincial ministries, farming organizations, Conservation Authorities and others, which encourage sound agricultural land management and soil conservation practices and other measures that minimize or eliminate the amount of pesticides, nutrients, silt and other contaminants that can enter the ground and surface water systems of Ottawa;

Is the rejection of the initiative put forward and supported by a plethora of environmental and health associations consistent with the city obligation to support initiatives that encourage measures "that minimize or eliminate the amount of pesticides ... that can enter the ground and surface water systems of Ottawa"?

How does the by-law, rejecting the ban on pesticides, promote the goal of protecting surface or groundwater resources if empirically, a by-law is needed to significantly reduce pesticide use (and subsequently spread into the environment). The presence of testable levels of pesticides in the local watershed is an indicator of a current

problem that must be addressed. Even more troubling is that "some detections exceeded the standard for protection of aquatic species" 28.

Carmen Rodrigue, Registered Nurses Association of Ontario stated she represents 23,000 nurses whose wish is to advance individual and public health. She emphasized the need for regulation and spoke in favour of a by-law. The Association has taken a public stand on the issue and supports the precautionary principle. Ms. Rodrigue said the use of pesticides yields no benefits, and there is scientific evidence linking pesticides to illnesses. She indicated that pesticides were found in the Rideau River in 2003, supporting the widely held view that they travel far and wide: they also affect the groundwater.²⁹

OOP 4.7.6 Stormwater Management

The City's commitment to plan on a watershed and subwatershed basis is outlined in Section 2.4.3. The City will implement the recommendations of the watershed, subwatershed and environmental management plans through the implementation mechanisms of this Plan or other appropriate mechanisms. In reviewing applications, the City will require that stormwater site managements plans be submitted in accordance with the guidance set out in the environmental management, subwatershed and watershed plans.

Policies - Where no subwatershed plan or environmental management plan exists, the City will review stormwater site management plans to ensure that:

The quality of water that supports aquatic life and fish habitat is not adversely affected;

The quality of water that supports water-based recreational uses is not affected; Groundwater is not negatively impacted;

The fact that pesticides were found in testable levels in local watersheds is troubling. The fact that several of these tests demonstrated higher concentrations that allowable guidelines is more troubling. Is the decision to reject the by-law consistent with the cities Stormwater Management policies? Is rejection of the by-law an "appropriate mechanism" to protect the quality of storm water which will inevitably mix with surface and ground waters?

1B) Protection of groundwater / aquifers

²⁹ Pesticide Debates, Ibid.

Joel Theriault 2301299

²⁸ Meg Sears - Coalition for a Healthy Ottawa : January 19, 2005

According to Meg Sears of the Coalition for a Healthy Ottawa, "In Ottawa there are many developments approved on fractured rock with thin soils, where the development is actually on the groundwater recharge area. The aquifer is not protected from chemicals applied to lawns, and people are not protected from pollution from their neighbours' turf."

Section 2.4.4. of the OOP indicates that a Groundwater Management Strategy will be finalized in 2004. However, as of January 2006, it appears as though this project has not been completed. Given the inadequate ground water mapping system and non-existent groundwater management strategy, could it be said that the rejection of the Ottawa pesticide by-law protects the quality of groundwater in the region?

OOP 2.4.4 Groundwater Management

Policies

- 1) Where monitoring and characterization of the groundwater resource has indicated degradation of the resource function, the zoning by-law will restrict uses to prevent further impacts on that function.
- 2) Where monitoring and characterization of the groundwater resource has indicated that a significant resource function exists, the zoning by-law will restrict uses to protect that function.

Dependence of the municipality on the groundwater resource should add an extra layer of protection to groundwater resources. Sufficient scientific evidence was lead indicating the presence of pesticides in the surface waters of the area. It is well known that groundwater consists of surface water which has filtered through the ground, into the aquifer. Though no evidence (that I am aware of) was presented indicating the presence o pesticides in the groundwater, one can assume that finding pesticides in the local aquifer would be a degradation of the resource function (to provide clean drinking waters). Without any restriction on pesticide use, it is only a matter of time before pesticides have contaminated the aquifer.

OOP 4.8.2 Wellhead Protection

A wellhead protection area is the surface and subsurface area surrounding a well

supplying a public water system, through which contaminants are reasonably likely to move forward and reach the well. The City is undertaking studies to define wellhead protection areas at City-owned well sites. The purpose of the studies is to draft policies to protect the municipal water supply from land uses that pose a threat to the quality and quantity of groundwater being extracted from the wells. The studies define the wellhead protection areas, capture zones and recharge zones for each well. Where Wellhead Protection Areas have been identified, they are designated on Schedule K. Policies

The City will undertake a Wellhead Protection Study to be completed in 2003 to define Wellhead Protection Areas at City-owned well sites and to develop policies for their protection.

The zoning by-law will restrict land uses that have the potential to cause contamination of the groundwater resource in areas identified on Schedule K as Wellhead Protection Areas.

As of January 2006, I don't believe the wellhead protection studies have been done. In the likely event that they have not been completed, guidance for protection measures could flow from the Oak Ridges Moraine Plan, Draft 2001³⁰. The draft indicates that the storage of toxic or hazardous materials is not to be permitted on the Moraine. Specifically listed as being prohibited is the warehousing of pesticides and other chemicals. Presumably we can infer that pesticides are not to be stored on the Moraine because a spill could be detrimental to the quality of the Moraine.

However, small scale application of pesticides covering a larger area (as opposed to a single spill) could equally have negative effects. As such, it would be appropriate to prohibit the use of pesticides in wellhead protection areas. Given the scientific uncertainty behind ground water movements, a large barrier (from pesticide use) from city wellheads would be appropriate to prevent their contamination. It should also be noted that many of the rural residents are using their own private wells, and do not receive any protection from city wellhead protection area policies.

2) Protection of Human Health

The link between the protection of human health and a prosperous society is no longer disputable. As such, both the province of Ontario and the municipality of Ottawa recognize the importance of protecting the health of residents.

PPS Part IV: Vision for Ontario's Land Use Planning System

It is equally important to protect the overall health and safety of the population. The Provincial Policy Statement directs development away from areas of natural and human-made hazards, where these hazards cannot be mitigated. This preventative approach supports provincial and municipal financial well-being over the long term, protects public health and safety, and minimizes cost, risk and social disruption.

PPS Part V Policies: 3.0 Protecting Public Health and Safety

Ontario's long-term prosperity, environmental health and social well-being depend on reducing the potential for public cost or risk to Ontario's residents from natural or human-made hazards. Development shall be directed away from areas of natural or human-made hazards where there is an unacceptable risk to public health or safety or of property damage.

As demonstrated when reading the PPS, making a clear distinction between protection of human health and ensuring the long term economic viability of the municipal and provincial governments is difficult. One issue which seems not to be given due attention in the PPS is that the province must pay for the health care costs of its citizens in the event that they become ill. As such, policies which encourage the use of toxic chemicals in the vicinity of high concentrations of people would clearly be contrary to the spirit of the PPS as it does not protect the financial viability of the province in the long term. The municipality also hints to the requirement of protecting human health, though seemingly fails to address the case at hand (I.e. exposure to toxic chemicals).

OOP 4.8 Protection of Health and Safety

These hazards include contaminated sites, mine hazards, and land affected by noise. This Plan includes measures to protect people and new development from the impacts of these natural and human-made conditions.

Joel Theriault 2301299

 $^{^{30}\} http://www.mah.gov.on.ca/userfiles/HTML/nts_1_6850_1.html$

3) Planning for the long term economic interest of the municipalities and province.

During the pesticide debates, the medical community made it very clear that they were united in favor of the by-law because of a continual increase of knowledge regarding health and environmental effects of the pesticides we use. They cited the lack of adequate testing on individual chemicals and the impossibility of testing the effects of the chemicals as they mixed, not to mention the cumulative effects over longer time periods.

PPS Part IV: Vision for Ontario's Land Use Planning System

Strong communities, a clean and healthy environment and a strong economy are inextricably linked. Long-term prosperity, environmental health and social well-being should take precedence over short-term considerations.

PPS Part V: Policies - 1.7 Long-Term Economic Prosperity

1.7.1 Long-term economic prosperity should be supported by: planning so that major facilities (such as airports, transportation/transit/rail infrastructure and corridors, intermodal facilities, sewage treatment facilities, waste management systems, oil and gas pipelines, industries and resource extraction activities) and sensitive land uses are appropriately designed, buffered and/or separated from each other to prevent adverse effects from odour, noise and other contaminants, and minimize risk to public health and safety;

Although the focus of the former section is not in respect of pesticide use, the underlying theme behind the policy seems to be that protection of public health is key to maintaining long-term economic prosperity. Does the rejection of the Ottawa pesticide by-law meet the requirement of protecting public health which in turn will promote economic prosperity?

As previously indicated, directly related to the health of Ontario citizens and the

burden for medical costs on the public purse is source water protection. During the Walkerton inquiry report, Justice O'Connor indicated that source water protection is an efficient and cost effective way of keeping contaminants out of drinking water.

It lowers risk cost-effectively, because keeping contaminants out of drinking water sources is an efficient way of keeping them out of drinking water. This is particularly so because some contaminants are not effectively removed by using standard treatment methods. As a result, protecting drinking water sources can in some instances be less expensive than treating contaminated water. Moreover, protecting sources is the only type of protection available to some consumers - at present, many rural residents drink untreated groundwater from wells. The protection of those groundwater sources is the only barrier in their drinking water systems.³¹

It may be implied that lowering risk cost-effectively, as indicated in the above mentioned paragraph, refers to the cost of treating contaminated water. It should also be noted that many chemicals cannot be removed in a cost effective manner. Other financial benefits to source water protection include lesser medical expenses on the public purse. More removed financial benefits to the province would include preventing the need for major new water infrastructure by allowing peoples to depend on their own water sources. A major infrastructure expansion to service remote area's with contaminated ground water sources would be a significant financial burden on the government.

Furthermore, because of the uncertainties inherent in the science of hydrogeology, and the gross inadequacies of mapping Ontario's aquifers, it is nearly impossible to accurately determine the flow of ground water. As such, pollution in the form of unnecessary pesticide use in a municipality such as Ottawa could have implications for ground water users hundreds of miles away. Because of the vast territory which could be contaminated, huge quantities of wells would need to be tested to determine if they were

contaminated. Most worry some is the realization that once aquifers become polluted, it is near impossible and financially non-feasible to restore them to their natural state.

Additional financial benefits which maybe lost if ground and surface waters become contaminated with pesticides include loss of revenue from fishing and hunting licenses as fewer people will participate in these activities. Non-resident sportsmen will have a greater likelihood of traveling to more pristine area's in search of game, reducing the amount of tourism dollars being injected into the province.

<u>Jean Cottam</u> explained that her dog was diagnosed with Canine Malignant Lymphoma after he came in contact with herbicides that had been sprayed.³²

The effects of these chemicals on wildlife is greatly uncertain, especially in the chemical soup mixture to which they are being exposed. Local industries such as water bottling in the province maybe adversely affected (if not by way of reduced water quality, by bad publicity) leading to an employment decline in the Ontario water bottling industry.

Actual or perceived pollution of the Ontario waterways could also lead to an increased distrust in municipal water systems, leading to increased demand for bottled water (out of province assuming the previous statement to be true). An increased consumption of bottled water would mean that more bottles are being produced (with environmental impacts in production), more bottles are being disposed of into landfills (a different type of environmental problem), and a lot of energy being wasted in the process.

Source water pollution could also eventually lead to altered settlement patterns of people, with Ottawa area being least appealing to those with the financial freedom to settle in the location of their pleasing. Unfortunately for Ontario, these individuals would also be the most educated class, desperately needed for the long term economic

³¹ Part Two: Report of the Walkerton Commission of Inquiry

prosperity of the province. Also along these lines are the studies which indicate that exposure to pesticides at a young age (or as a fetus) can lead to mental retardation.

Barbara Stein, Ever Green Pest Control made reference to a study of Mexican children damaged by pesticide use, noting that the following effects were observed:

- · Had trouble with 30-minute recall;
- · Had problems with hand-eye coordination;
- · Showed less creativity and were more aggressive. 33

François Savard, a qualified math and science teacher and former head of the environmental protection office at the Ottawa International Airport from 1990 to 2001, spoke in support of the proposed by-law. He discussed chlorinated synthetic pesticides and their effect on the human brain, hormones and gonads. He also noted that synthetic pesticides disrupt hormonal and nervous system balance in animals and insects.³⁴

Chemicals affecting the brain seem to indicate a reduction of IQ. This correlates to a loss of the leaders and geniuses, and also increases the number of people in society which are dependent (largely financially) upon the government for their care. The previous examples are but a few of the possible financial implications of failure to protect water at the source and are intended to draw on the wide variety of possible financial implications of failure to protect source water.

Groundwater is simply surface water that has filtered through the ground. Thus, it is necessary to prevent toxins from being discharged into rivers and streams. As such, policies reducing the amount of unnecessary toxins being dispersed is the only way to conform to the requirement of source water protection. Does rejection by the City of Ottawa of a by-law banning the use of non-essential pesticides contribute to the long term financial prosperity of Ontario by protecting water sources?

4) Implementation of the OOP/PPS

³² Pesticide Debates, Ibid.

³³ Pesticide Debates, Ibid.

Guiding principles, plans, and policies carry no more weight that airy speeches by politicians unless there exists some device to implement them. Unfettered discretion maybe the largest impediment to implementation of provincial and municipal policies and official plans but fortunately no such discretion exists.

OOP 5.1 Introduction

Implementation of the Official Plan is accomplished through a myriad of tools. They generally fall into the following categories. Only some examples have been identified for illustration purposes, but there are many more.

Setting Targets and Monitoring Change

- Set targets for walking, cycling and transit use;
- Monitor decisions of the Ontario Municipal Board vis-à-vis policies in this Plan;
- Monitor trends that may impact on the population projection framing this Plan. Approval of Regulations and By-laws
 - Adopt a comprehensive zoning by-law to implement the Plan;
 - Adopt a woodland preservation by-law.

It can be inferred that in order to be consistent with the PPS, the municipality will set targets, implement methods to reach those targets, and monitor change. In the event that these alternate methods fail to reach the targets, a by-law should be used to bring the municipality to conformity with the PPS. This inference can also be drawn from the OOP itself.

OOP 2.4 Maintaining Environmental Integrity

The City also adopts policies outside these plans to support human health and the health of the environment. In 2002 the City adopted a city-wide strategy for reducing the cosmetic use of chemical pesticides on private property. The strategy is based on a strong public education approach, with specific reduction targets to be met by 2005. The targets are:

- 70 per cent reduction on residential properties;
- 100 per cent reduction on school, daycare, homes for the aged and hospital properties;
- 65 per cent reduction on all remaining non-residential properties.

While the OOP doesn't specifically indicate that if these targets are not met, the inference

³⁴ Pesticide Debates, Ibid.

can be drawn that a by-law must be implemented if the targets are not met. When OOP 5.1 is read with OOP 2.4, one can infer that the municipality has a plethora of tools available to it to reach the desired results. OOP 2.4 indicates that the pesticide reduction targets were among these desired results. Studies done by Decima corporation validated that public education alone had failed to meet the desired targets.

Mr. Kanellakos "concurred (with Councillor Deans) that education did not get the results staff hoped, but he thought staff were also clear and it has been validated by other organizations that the by-law is needed in addition to education".³⁵

As demonstrated, pesticide reduction to the desired levels failed with public education alone. Independent sources indicate that such reduction requires a by-law. Reduction targets are enforceable against municipal council (as opposed to resolutions) as they are contained within the OOP. As such, failure to implement the proposed by-law clearly seems contrary to the OOP and would ground an actionable cause of action to the Ontario Municipal Board. The main problem with bringing a cause of action to the OMB at the moment is that the OOP does not yet have any legal standing because the entire document is under appeal.

City Council adopted the new Official Plan in May 2003, and forwarded it to the Province for approval. The Minister of Municipal Affairs and Housing modified and approved the plan in November. Many individuals and organizations have appealed the Minister's decision to the Ontario Municipal Board and thus the Plan is not legally in effect at this point The entire plan has been appealed by several parties, while other appeals address specific sections of the Plan. The appeals address a range of matters, including the plan's growth management strategy and the urban boundary, the status of community design plans, affordable housing, and retail and commercial policies. ³⁶

However, this would not preclude a non-legal challenge (AKA educational meeting) based on the terms of the OOP. Likewise, a legal action could be brought under the PPS,

2

³⁵ Pesticide Debates, Ibid.

³⁶ Frequently Asked Questions - http://ottawa.ca/city_services/planningzoning/2020/op/faq_en.shtml

as it does have full legal standing.

PPS Part V: Policies - 4.0 Implementation and Interpretation

- **4.1** This Provincial Policy Statement applies to all applications, matters or proceedings commenced on or after March 1, 2005.
- **4.2** In accordance with Section 3 of the *Planning Act*, as amended by the Strong *Communities (Planning Amendment) Act*, 2004, a decision of the council of a municipality, a local board, a planning board, a minister of the Crown and a ministry, board, commission or agency of the government, including the Municipal Board, in respect of the exercise of any authority that affects a planning matter, "shall be consistent with" this Provincial Policy Statement.

Comments, submissions or advice that affect a planning matter that are provided by the council of a municipality, a local board, a planning board, a minister or ministry, board, commission or agency of the government "shall be consistent with" this Provincial Policy Statement.

It should be noted that the Ottawa Official Plan specifies that all municipal decisions will "have regard to" the OOP. However, the wording of the plan was passed before the legislated change in terminology. As such, the OOP is now expected to "be consistent with" the OOP. However, the OOP specifically indicates that there is no time frame for making decisions that meet this standard. As such, what can be implied is that the municipality can do whatever it so desires so long as eventually, it makes decisions that conform to the OOP and PPS.

OOP 5.4 Interpretation

The following policies provide guidance for the understanding and interpretation of the text, maps, schedules, figures and images of the Plan.

6) The implementation of this Plan will take place over time and the use of the word "will" to indicate a commitment to action on the part of the City should not be construed as a commitment to proceed with all of these undertakings immediately. These commitments will be undertaken in a phased manner, as determined by City Council, and subject to budgeting and program availability.

With this interpretation guide alone, it seems as though a strong argument could be made that refusal to implement the pesticide by-law was absolutely justified. However, other principles from the plan indicate that a specific time frame was agreed to by the council, and that council was obliged to follow through with that commitment. That the municipality be "A Responsible and Responsive City" is one of the guiding principles throughout the plan. One relevant factor in this assessment is that of accountability.

 Accountability - The City demonstrates leadership by following through and sticking to its decisions and by conducting on-going strategic monitoring and making appropriate adjustments.

The principle of accountability would seem to indicate that city council will follow through with its public promises. OOP 5.1 (as previously mentioned) also supports the notion that when alternatives to passing of a by-law have failed, a by-law is to be implemented.

In 2002, Council directed staff to prepare a by-law should public education alone fail to sufficiently reduce the cosmetic use of pesticides. ³⁷

After a rigorous 3 year education campaign, it was realized that education alone would not solve the problem and that a by-law was needed should council wish to sufficiently reduce the use of pesticides.

Councillor Deans went on to state however, that there is no community consensus. She was concerned when, in 2002, Council set some very aggressive targets and now, three years later, she did not think the majority of the public have been brought along to fully support a by-law. She was concerned that even after spending \$1M over the last three years on an education campaign, the City has been unable to change public attitude... He (Mr. Kanellakos) concurred that education did not get the results staff hoped, but he thought staff were also clear and it has been validated by other organizations that the by-law is needed in addition to education. ³⁸

<u>Jillian Victor and her daughter Victoria</u> spoke about the concerns they had about pesticides. Victoria indicated that sometimes she cannot walk to school because people have sprayed pesticides. Mrs. Victor indicated that three years ago Council made a

_

³⁷ HRSC Pesticide Report October 13, 2005

³⁸ Pesticide Debates, Ibid.

promise to protect the children from the cosmetic use of pesticides on lawns and gardens. Education has not reduced the targeted amount of pesticide use and the promise was made that if the targets were not met, then the by-law would come into force.³⁹

At the outset, the council set reduction standards (by way of percentage reduction) in regards to pesticide use as an objective test which could be used by any party to determine whether or not there was a 'sufficient' reduction in pesticide use.

Unfortunately, these targets have not been realized.

The City of Ottawa has tried harder than many cities to reduce the use of pesticides without regulation. The fact that the aggressive, three-year education campaign begun in 2002 did not produce an actual reduction in the non-essential use of pesticides suggests that a change in behaviour will likely require the strong message about health and the environment that a by-law sends. A study of experiences in other cities confirms this suggestion that only the combination of education and a by-law can deliver significant reductions in pesticide use.⁴⁰

Possibly more troubling is the fact that the pesticide industry seems to be decreasing the promotion of non-pesticide alternatives.

The councillor (Cullen) pointed that the Decima Survey found that in 2003, 34% of residents that hired lawn care companies were not offered a choice between chemical and non-chemical methods: that percentage grew to 41% in 2005. He felt that, although Nutri-Lawn might be working towards a transition between the two techniques, many companies were not.⁴¹

After the empirical demonstration that targeted levels of reduction have not been met, and the statement by the council that should these levels not be met, a by-law would be implemented, is the rejection of a by-law consistent with the accountability guideline?

A sub-issue which should be addressed is whether or not the proposed by-law would actually have reduced pesticide usage in the city limits given the fact that residents

³⁹ Ibid.

⁴⁰ Pesticide Debates, Ibid.

would still have access to the products in local store fronts.

Councillor Deans referred to the comment made that someone would use more and asked how much research staff has done that would take Council to the conclusion that a by-law would achieve reductions. Mr. Jacobs responded by stating the by-laws implemented in other municipalities are relatively new and staff need to monitor the progress and, if necessary, revisit it, in order to achieve the efficiency of the by-law. He confirmed that the City of Halifax is achieving reductions. The councilor was interested to see what Halifax has in terms of how they measured the reduction because the committee heard a lot of evidence that was contradictory and she found it difficult to judge which side was painting an accurate picture. 42

If the decision could be grounded on the true premise that a pesticide by-law would actually increase the amount of pesticides being used, and would cause people without formal training to apply the chemicals (thus increasing likely-hood of danger to health), it may be justified. However, this line of thinking seems very contrary to actual effects being found in other municipalities like Halifax, who have implemented similar by-laws.

Halifax's pesticide bylaw performance just keeps getting better and better, thanks to leadership provided by HRM's Mayor, Council and staff.⁴³

Others seemingly argued that the most effective way to reduce pesticide use within the municipality was to keep the status quo and not implement a by-law.

Patrick O'Toole, Sandler's Sales Institute, Kitchener indicated he has been involved in the lawn care company business for over 20 years. With regards to the precautionary principle mentioned previously, he explained it was a simple concept brought up in 1992 which referred to the ozone layer and it basically said that in lack of scientific evidence, that caution be used. However, with pesticides used in the urban environment, the PMRA has already used this principle in allowing their use in Canada and there is a lot of scientific evidence on pesticide use. He compared the compliance of the blue box program (97% without a by-law) to seat belt legislation which is enforced by law, but

⁴² Pesticide Debates, Ibid.

⁴¹ Ibid.

⁴³ Helen Jones MSc, EdD - Past Member, Pesticide Bylaw Advisory Committee http://www.flora.org/healthyottawa/halifax.htm

which only has a 91% participation rate.⁴⁴

However, the reasoning seems faulty in the sense that it was empirically demonstrated that the only way to meet pesticide reduction targets was to implement a by-law. The reasoning is also faulty based on real world conceptions of actually implemented laws, such as speed limit laws. Is it appropriate to suggest that the best way to reduce the speeds of traveling vehicles is to eliminate the speed limit?

Apart from municipal obligations to "be consistent with" the Provincial Policy Statement and adhere to the Ottawa Official Plan, they have seemingly ignored obligations to the aboriginals of the region and the far north.

6) Aboriginal Rights to Fish and Hunt for sustenance

Although not definitively decided by the courts, there is strong support for the proposition that the provinces owe the same fiduciary duty to aboriginals as does the government of Canada.

When the British North America Act, 1867 [now the Constitution Act...] created federal and provincial crowns in Canada, it did not affect the existing constitutional understanding of the Crown or the nature and extent of its pre-Confederation obligations and responsibilities. It merely divided the powers, responsibilities, and benefits of a single and indivisible Canadian Crown among the newly created federal and provincial Crowns. This division included the Crown's pre-existing fiduciary obligations to Native peoples ... this must mean, at a minimum, that the aboriginal people to whom the Crown in all its emanations owes an obligation of protection and development, must not lose the benefit of that obligation because of federal-provincial jurisdictional uncertainty.⁴⁵

The municipal government's duty to aboriginals stems from the fact that they are created by Ontario statute, and act as agents of the province in the best interest of the citizens.

_

⁴⁴ Pesticide Debates, Ibid.

⁴⁵ Leonard I. Rotman, "Parallel Paths: Fiduciary Doctrine and the Crown-Native Relationship in Canada"

The notion is partly grounded in the fact that municipal decision must "be consistent with" the provincial policy statement. Because of the agency type relationship, they seemingly have the same obligations towards aboriginals as does the province. Is the decision consistent with the fiduciary obligation owed to aboriginal peoples?

The starting point of one possible argument based on aboriginal rights is the right to hunt and fish, stemming from the practices of aboriginal people since time immemorial. The courts tell us that aboriginal rights, including the right to hunt and fish is to be read purposively⁴⁶. A purposive interpretation would likely tell us that the right to fish and hunt includes the right to make use of the animals for sustenance purposes, a practice done since time immemorial. Key to the ability to fully use the animals is the requirement that they live in a clean environment, free from toxic substances. If the government allows the an area to become polluted to the point that the animals are no longer fit for human consumption, what use to aboriginals is the right to fish and hunt?

While it's true that not all environmental degradation can be prevented by the Canadian Government, it would seem that the government would be required to minimize the degradation (in its jurisdiction) to the lowest feasible levels when traditional aboriginal food sources are threatened.

Assuming that the residents of southern Ontario are the only ones who will be affected by their self-imposed environmental degradation arises from the false assumption that all things are not connected. Studies are increasingly indicating the vast extend of ground water movement and the intermingling of surface and ground waters. Surface waters from Ottawa flow into streams, which turn into rivers, and dump into the

1996

⁴⁶ R. v. Gladstone [1996] 2 S.C.R. 723

oceans. Along this course, the pesticides are consumed by fish and wildlife, which are subsequently consumed by local aboriginals. The pesticides that Ottawa residents spray on their lawns to kill visually unpleasant weeds and then consumed by societies around the world that harvest ocean wildlife, including the Inuit of the far north. According to Meg Sears of the Coalition for a Healthy Ottawa,

A recent paper by Ottawa biologist Jules Blais described how pollution is carried by birds, that then leave toxins in their droppings in the north. They do not biodegrade nearly as quickly, and over the years (the toxins) have built up in the ecosystem many hundreds of miles from where they were first dumped by men. Fish in the Great lakes are polluted with toxaphene – sprayed on cotton. Chemicals travel north and concentrate by the "grasshopper effect".

Migratory birds, such as geese and mallards, also consume the pesticides applied in Southern Ontario (including the nations capital) and are subsequently consumed by hunters in far away lands. It is important to note that it affects both aboriginal and non-aboriginal people living in the north that choose to harvest these animals, a traditional food source upon which many are still dependent. It should be noted that the Ontario government recently passed the Hunting and Fishing Heritage Act 2001, statutorily guarantying the right to hunt for all members of society (regardless of ethnic origin) meaning that statutory (as well as constitutionally) protected rights maybe violated by the decision of city council.

In determining whether the infringement is justified, one question that must be asked (to address the aboriginal argument) is "whether there has been as little infringement as possible in order to effect the desired result" Can it truly be said that if there are feasible alternatives to the use of pesticides and the government elects not to

make use of them ... that it has infringed the aboriginal right to hunt and fish as little as possible? The following example regarding cinch bug grubs is an excellent demonstration of non-pesticide alternatives which are not being used.

Jody MacInnis, Production Manager, Nutri-Lawn indicated he was an accredited pesticide examiner with the Ministry of the Environment and has worked in the lawn care industry for 14 years.... Councillor Cullen made reference to the Organics Free program offered by Nutri-Lawn, and inquired that, should Council pass the by-law, this would not be something the company can market and use. Mr. MacInnis said it was possible to promote organic products when lawns are healthy, but confirmed that organics do not eliminate weeds or insects. When asked to respond, the City's horticultural advisor, Anne Jackson-Hughes said she did not agree, stating that many of the insect problems can be managed by improving horticultural practices; once the soil structure has been improved, weeds can be more easily pulled out and are much less of a problem.⁴⁸

<u>Darcy Olds, Bayer Crop Science</u> informed the committee that he is a graduate of the Ontario Agriculture College, has a certified Crop Protection Consultant certificate, and has worked in the industry for the past 12 years, currently employed with Bayer. He noted that one of the products they manufacture is Merit, which is used extensively to protect lawns from damage caused by grubs.⁴⁹

Roger Mongeon, President, Weed Man ... noted that while the Decima survey found that 54% of residents claim they have not decreased their pesticide use, that does not mean overall pesticide use has not decreased. He indicated that in 2002, they had 9,000 customers and now they are close to 18,000 and they use a lot less pesticide than originally used. He provided the following comments on behalf of Paul Poisson who was unable to complete his presentation within his allotted time:

· Groupe Vertdure is convinced that Merit is needed to control grubs;⁵⁰

The previous quotes from the pesticide debates indicate the widespread use of Merit in treating cinch bug grub infestations within the city. However, the question that must be asked is whether there are non-pesticide alternatives which would be less environmentally damaging and accomplish the same goal.

Residents will receive better instruction in a variety of effective non-toxic steps they can follow to solve lawn pest problems before applying for a permit to apply pesticides (which in many cases may prove to be unnecessary). For example, using a shop vacuum

⁴⁷ R. v. Sparrow [1990] 1 S.C.R. 1075

⁴⁸ Pesticide Debates, Ibid.

⁴⁹ Ibid.

⁵⁰ Ibid.

on areas affected by chinch bugs is 100% effective, removing all the eggs, all the nymphs, and all of the adults (according to the Wolfville NS Parks Department)⁵¹.

The previous quote indicate that the use of pesticides to treat cinch bug grub infestations is not necessary. Furthermore, it seems as though using a shop-vac would be as cost effective (and more environmentally friendly) as applying pesticides to the lawn. As such, applying pesticides to treat such infestations does not meet the test of minimal impairment. If it can be demonstrated that the use of pesticides is not needed, does rejection of a by-law proposing to ban non-essential uses of pesticides within the municipality meet the requirement of minimal infringement?

Given the firm stance that the medical community has taken against exposure to these chemicals, it also seems contrary to the fiduciary duty to the aboriginals to allow their traditional food sources to become saturated with these toxic chemicals. The following medical organizations are among those endorsing the pesticide by-law to ban the non-essential use of pesticides, citing health and environmental concerns.

Canadian Cancer Society Ontario College of Family Physicians Canadian Association of Physicians for the Environment Children's Hospital of Eastern Ontario Canadian Coalition for Health and Environment Allergy & Asthma Information Association Canadian Institute of Child Health Canadian Liver Foundation Canadian Physiotherapy Association Canadian Public Health Association Council of Canadians Environmental Illness Society of Canada Learning Disabilities Association of Canada Physicians and Scientists for a Healthy World Ontario Public Health Association

Registered Nurses Association of Ontario

⁵¹ Helen Jones MSc, EdD - http://www.flora.org/healthyottawa/halifax.htm

Gideon Forman, Canadian Association of Physicians for the Environment asked that the Committee pass the strongest possible by-law, given that this has the support of serious health care organizations representing doctors, nurses and 30,000 health associations and professionals. Mr. Forman asked that the by-law also apply to rural residents, so as not to create a second class of citizens with less protection.⁵²

Creating a second class of less protected citizens should be of concern. The people of the north, like infants feeding on breast milk, are unknowingly and unwillingly being exposed to pesticides from southern Ontario. Is the government not creating a lower tier of citizens when it allows its rural residents to unnecessarily spray pesticides, which are subsequently consumed by those dependent on wildlife which comes into contact with the chemicals?

Conclusion

Though opponents of the by-law raised many important points during the debate, rejection of the Ottawa Pesticide by-law seems to be contrary to both the OOP and the PPS. Additionally, it seems to infringe upon the right to hunt for all residents of Ontario (under the Hunting and Fishing Heritage Act 2001) and specifically, constitutionally protected rights for Aboriginals. The decision does not meet the needs of the present or future generations, and as such does not appear to be consistent with the requirement of sustainable development. This becomes more evident as councilors seemingly rejected the by-law citing a lack of clear medical evidence. At the same time, the medical community was firmly united in favor of the pesticide by-law, citing medical and environmental concerns. The decision does not adhere to the approach towards

_

⁵² Pesticide Debates, Ibid.

sustainable development cited by Justice L'Heureux Dube⁵³, when he indicated that sustainable development provided that a "lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation".

Most troubling about the decision is that it does not enhance the long term economic prosperity of the municipality or province as a whole. The decision actually detracts from the long term needs of the province, given the fact that Ontario operates a public health care system and must care for its citizens in the event that they become ill from these toxins. Though the city councilors have broad discretion in making decisions for the municipality, it appears as though they have exceeded their jurisdiction by so blatantly ignoring the OOP, PPS, and obligations towards anglers and hunters whose statutory and constitutional rights are being infringed.

OOP 2.4 Maintaining Environmental Integrity

Typically, change occurs through small steps, each one of which may have little impact on the environment but that - taken together - may have large and unplanned cumulative effects.

As I indicated to city council during the pesticide debates October 26, 2005:

The message sent by Ottawa if it fails to implement the proposed by-law is that one community can't make a difference in the larger struggle to preserve the integrity of the environment. It is analogous to saying that by preventing the spill of 1 gallon of oil into the ocean, there will be no environmental benefits. What is not being taken into account is the potential cumulative effects of this bylaw (both over time within the city and the effects on other municipalities), which could (speaking by analogy) prevent the spill a thousand times over.

At the end of my 5 minute speech, I left council to ponder the following thoughts.

On the bottom line, (1) if the scientists have conflicting views regarding the health and environmental effects of the pesticides we spray, and (2) the

Ξ

⁵³ Hudson v. Spraytech [2001] SCC 40

possible health and environmental effects of exposure to the pesticides could be grave, and (3) the pesticides are cosmetic and not truly required and (4) the government must pay the health care costs of its citizens in the event that they become ill from exposure to the pesticides and (5) the users of the pesticides are not the only ones affected by them (Conclusion) why would we continue to allow their use when not absolutely required?

Bibliography

Canada, Health Canada, *Maintaining and Improving Health is the Primary Objective*. http://www.hc-sc.gc.ca/ahc-asc/alt_formats/hpfb-dgpsa/pdf/pubs/risk-risques_e.pdf

Croplife Canada v. Toronto (City) [2005] CanLII 15709 (ON C.A.)

Helen Jones, "Is Halifax's pesticide bylaw working? You bet!", Online: Coalition for a Healthy Ottawa

http://www.flora.org/healthyottawa/halifax.htm

"Highlights and Discussion of the City of Ottawa 2003 Surface Water Pesticide Monitoring Program Summary Report", Online: Coalition for a Healthy Ottawa http://www.flora.org/healthyottawa/pesticidereportkeypoints.htm

Hudson v. Spraytech [2001] SCC 40

Ontario, Attorney General, *Part Two: Report of the Walkerton Commission of Inquiry : A strategy for Safe Drinking Water* (Toronto : Queen's Printer for Ontario, 2002) http://www.attorneygeneral.jus.gov.on.ca/english/about/pubs/walkerton/

Ontario, Ministry of Municipal Affairs and Housing, Oak Ridges Moraine Plan, Draft 2001

http://www.mah.gov.on.ca/userfiles/HTML/nts 1 6850 1.html

Ontario, Ministry of Municipal Affairs and Housing, *Ontario Provincial Policy Statement* (2005 March)

http://www.mah.gov.on.ca/userfiles/HTML/nts_1_8198_1.html

Ontario, Municipality of Ottawa, *Frequently Asked Questions* http://ottawa.ca/city_services/planningzoning/2020/op/faq_en.shtml

Ontario, Municipality of Ottawa, *Ottawa Official Plan* (2003) http://ottawa.ca/city_services/planningzoning/2020/op/index_en.shtml

Our Common Future (1987), final report of the World Commission on Environment and Development (Brundtland Commission).

Ottawa, Health, Recreation and Social Services Committee, *Minutes 26 -Pesticide Debate* Minutes, (20 October 2005).

http://ottawa.ca/calendar/ottawa/citycouncil/hrssc/2005/10-20/minutes26.htm

Ottawa, Health, Recreation and Social Services Committee, *Pesticide Report* http://ottawa.ca/calendar/ottawa/citycouncil/occ/2005/10-26/hrss/ACS2005-PGM-POL-0058.htm

Rotman, Leonard I. *Parallel Paths: Fiduciary Doctrine and the Crown-Native Relationship in Canada*. (Toronto: University of Toronto Press, 1996).

R. v. Gladstone [1996] 2 S.C.R. 723

R. v. Sparrow [1990] 1 S.C.R. 1075