

# Backgrounder

April 21, 1999

ACS1999-PW-ENV-0003

## **Environment - Interim Pesticide Application Protocol 1999**

## **Environnement - Intérim Protocole sur l'épandage des pesticides 1999**

### **Issue**

- in response to public concerns, in June 1998, Council banned pesticide use on City-owned trees and limited its use on City property.
- in January 1999, Council directed staff to prepare an interim pesticide application protocol to be implemented in the 1999 season, prior to development of a full Integrated Pest Management Strategy.

### **What's New**

- it is recommended that the June 1998 ban be lifted in favour of the proposed interim protocol.
- the protocol marks the first time a written policy has been developed for the application of pesticides in the city of Ottawa: it outlines conditions under which pesticides should be applied. Wherever possible, it recommends the use of alternatives to chemical pesticides, which are seen only as a last resort.

### **Impact**

- maintaining the ban on pesticides could result in increased risk to human health since pests increase in areas adjacent to controlled areas such as food and common areas. It could also cause a decline in and possible loss of significant portions of Ottawa's urban forest.
- the protocol is designed to minimize environmental impact to the minimum possible levels needed to manage the pest control program on City property and in City facilities. Any actions taken under the protocol will be within established provincial and federal guidelines and requirements for human health and safety.

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**pager 780-3310**

April 21, 1999

ACS1999-PW-ENV-0003  
(File: EW-1704-14)

Department of Urban Planning and Public  
Works

Ward/Quartier  
City Wide

- Community Services and Operations  
Committee / Comité des services  
communautaires et des opérations
- City Council / Conseil municipal

Action/Exécution

### **Environment - Interim Pesticide Application Protocol 1999**

### **Environnement - Intérim Protocole sur l'épandage des pesticides 1999**

#### **Recommendations**

1. That the *Interim Protocol Governing the Use of Pesticides on City of Ottawa Property* presented in Document 1 be adopted and implemented.
2. That the June 1998 ban on the application of pesticides to city-owned property be lifted, in favour of the Interim Protocol in Recommendation 1.



April 21, 1999 (10:03a)

Edward Robinson  
Commissioner of Urban Planning and Public  
Works



April 21, 1999 (10:11a)

Approved by  
John S. Burke  
Chief Administrative Officer

OG:sf

Contact: Onno Gaanderse - 244-5300 ext. 1-3364

## Financial Comment

There are no direct financial implications in approving these recommendations. Funds are available within the approved departmental budget for pest control.



April 21, 1999 (9:58a)

for Mona Monkman  
City Treasurer

CP:cds

## Executive Report

### Reasons Behind Recommendations

#### Recommendation 1.

In January of 1999, CSOC directed staff to prepare an interim pesticide application protocol, for use on city-owned property, for implementation in the 1999 season, prior to the development of a full Integrated Pest Management Strategy for the City.

The *Interim Protocol Governing Use of Pesticides on City of Ottawa* (Document 1) was developed in conjunction with the SIERRA CLUB CANADA. The SIERRA CLUB reviewed existing pesticide control practices by City departments, and in other selected municipalities around North America, as part of the Interim Protocol development process.

The Interim Protocol outlines the conditions under which pesticides practices should be applied. Wherever possible, the Interim Protocol recommends the use of alternative pest control practices to using chemical pesticides. The use of chemical pesticides is recommended only as a last resort, where alternative methods have either failed or are not practical or feasible, and is based upon a set of criterion contained in the Interim Protocol.

Pesticide applications practiced by the City are well within provincial and federal pesticide application regulations.

The Interim Protocol also provides public notification guidelines.

During the preparation of the Interim Protocol, the SIERRA CLUB consulted with departments in the corporation, the Environmental Advisory Committee, and the Urban Forest Citizens Committee.

This Interim Protocol is the first time a written guideline/policy has been developed for the application of pesticides in the City of Ottawa. The Interim Protocol will serve as the guideline for staff until the implementation of the Integrated Pest Management Strategy, to be developed later this year.

#### Recommendation 2.

In June 1998, Council placed a ban on the application of pesticides to city-owned trees, and further limited the application of pesticides on city property "to non-cosmetic uses, where human health risk is identified."

Council, in a subsequent meeting in January 1999, directed that a Protocol be developed as a guideline for the eventual application of pesticides to city property beginning in 1999. The *Interim Protocol Governing the Use of Pesticides on City Owned Property* (Document 1) referred to in Recommendation 1, was developed for that purpose. With the Interim Protocol in place, staff recommend that the ban on pesticide application be lifted.

### Environmental Impact

No negative environmental impact is anticipated as recommendations fall within the MEEP Automatic Exclusion List, Section I, a) Routine Repair and Maintenance. The Interim Protocol is designed to reduce environmental impact to the minimum possible levels required to effectively manage the pest control program in city facilities. Any actions taken under the Interim Protocol will be within established provincial and federal guidelines and requirements for human health and safety.

### Consultation

#### Public Input

The Protocol was developed by the SIERRA CLUB CANADA in co-operation with City staff, and in consultation with the City of Ottawa's Environmental Advisory Committee, and the City of Ottawa's Urban Forest Citizens Committee.

The Urban Forest Citizens Committee supports the adoption and implementation of the Interim Protocol.

The Environmental Advisory Committee has some reservations about the apparent lack of statements of policy and direction in the Interim Protocol, but generally supports the protocol. Their concern will be addressed more directly in the development of the Integrated Pest Management Strategy.

## Departments Consulted

The Urban Planning and Public Works Department as maintainer of City facilities and implementor of the Protocol, and the Community Services Department, which operates programs within city buildings, parks, pools and arenas, were consulted during the development of the Protocol.

## Options and Analysis of Options

This situation calls for a choice between doing nothing (i.e. maintaining the ban on pesticide application) and implementing a pro-active maintenance initiative, the Interim Protocol (while the Integrated Pest Management Strategy is being developed.)

### Option 1 - Adopt the Interim Protocol.

The Interim Protocol (Recommendation 1) is designed to manage pests on city property with minimal human and environmental impact, on an interim basis until a complete Integrated Pesticide Management Strategy is developed for implementation. The Interim Protocol has the support of both staff and advisory committee members.

Therefore we recommend that this option be adopted.

### Option 2 - Maintain the ban on pesticide use on city-owned trees and city property.

This option could result in the decline, and possible loss of, significant portions of Ottawa's urban forest, in addition to the damage and loss suffered in the 1998 Ice Storm. The resulting impact on both air quality, infestations and aesthetics may result in numerous public complaints and a decline in the City's environmental health. Since the urban forest is a 'scrubber,' this option also could have a negative impact on Ottawa's commitment to reduce carbon dioxide by 20% of 1990 levels by the year 2005. The cost of re-establishing the lost urban forest will be significant.

The elimination of pesticides on all city property could result in increased risk to human health as pests increase in areas adjacent to controlled areas such as food and common areas. Complaints from more frequent pest sightings will probably increase. Eventually, the increasing pressure of habitat demand will mean pest invasion and infestation in human health risk areas, eventually demanding a higher level of pest control in those areas.

Therefore we recommend that this option be rejected.

## **Disposition**

The Department of Urban Planning and Public Works is responsible for implementing the Interim Protocol.

## **List of Supporting Documentation**

Document 1 - *Interim Protocol Governing the Use of Pesticides on City of Ottawa Property.*

## **Part II - Supporting Documentation**

### **INTERIM PROTOCOL GOVERNING USE OF PESTICIDES ON CITY OF OTTAWA PROPERTY**

#### **PURPOSE**

In January of 1999, Ottawa City Council directed staff to develop an integrated pest management strategy for the City of Ottawa. Realizing that such a strategy would not be in place before the spring season, Council further directed that an interim pesticide protocol be developed. The purpose of the interim protocol is to provide staff with guidelines for pest management until the development of the new integrated pest management strategy has been completed and the strategy has been implemented. Chemical pesticides will be used only in exceptional circumstances where it is determined through the application of the protocol that their use is warranted.

This protocol targets pests likely to be encountered, based on the past experience of the City of Ottawa staff. Recognizing that there may be other pest problems that arise that are not covered by this protocol, the City should contact the Pest Management Regulatory Agency's Alternatives Division (1-800-267-6315) for appropriate control methods.

#### **DEFINITIONS**

**INTEGRATED PEST MANAGEMENT (IPM):** For the purposes of this protocol, integrated pest management (IPM) will be defined as an ecological approach to suppressing pest populations (i.e., weeds, insect, etc.) in which all necessary techniques are consolidated in a unified program so that pests are kept at acceptable levels in effective, environmentally sound methods. As pest problems are frequently symptomatic of ecological imbalances, the goal is to attempt to plan and manage ecosystems to prevent organisms from becoming pests.

**PEST:** For the purposes of this protocol, pest will be defined as any living stage (including active and dormant forms) of insects, mites, nematodes, slugs, snails, protozoa, or other animals, bacteria, or fungi that can damage ecosystems or which can directly or indirectly injure or cause disease or damage in or to humans, plants, animals or property.

**PESTICIDE:** For the purposes of this protocol, pesticide will be defined as a substance that is intended, sold, or represented for use in preventing, destroying, repelling, or mitigating any target insect, nematode, rodent, predatory animal, parasite, bacteria, fungus, weed, or other form of plant or animal determined to be a pest. It is a substance that is registered as a pest control product under the Pest Control Products Act, including herbicides (for plants), fungicides (for fungi), rodenticides (for rodents), algaecides (for algae), vermicides (for worms), nematocides (for nematodes), etc.

## PROCEDURE

Upon notification of a pest problem, the City will respond to the complaint, using the following steps:

- i. IDENTIFICATION - The City will verify the problem, and identify the pest.
- ii. RISK ANALYSIS - Staff will determine the range and extent of risks posed by pest to property, human health, and the environment, and classify the problem into one of three risk categories based on the following criteria:

### CHECK EACH STATEMENT THAT APPLIES

<b>NEGLIGIBLE RISK</b>	
A pest will be considered a negligible risk if it satisfies one or more of these criteria, and satisfies none of the criteria in the medium risk or high risk categories.	The pest has little or no potential to degrade the environment or spread to other hosts.
	The pest has no negative human health effect.
	The pest will have no impact on property.
	The pest causes no safety concerns.
<b>MEDIUM RISK</b>	
A pest will be considered a medium risk if it satisfies one or more of these criteria, and satisfies none of the criteria in the high risk category.	The pest poses a potential human health risk.
	If the infestation is left untreated, the pest may have an undesirable effect on the host, property, and/or the environment, but that effect is not severe and will not become severe.
	Damage caused by the pest may be remedied.
	There is potential for the pest to spread and cause environmental damage.
	The pest may directly or indirectly cause a safety concern.
<b>HIGH RISK</b>	
A pest will be considered a high risk if it satisfies one or more of these criteria.	The pest will cause severe damage to property or the environment.
	The pest will cause adverse health effects in humans if the infestation is left untreated.

Type of pest: \_\_\_\_\_ Risk level: \_\_\_\_\_

- iii. RESPONSE - Depending on the determined risk level posed by the pest, appropriate steps will be taken.

PEST	RISK	ACTION
APHIDS, SCALES, LEAF HOPPERS, LOOPERS	Negligible	Inform the complainant of the policy the City has adopted regarding pesticide use. No further action is required.
	Medium	FOR APHIDS: Encourage adjacent residents to spray the affected tree with water using a garden hose and spray nozzle to remove the aphids.
		Introduce predators such as lady bugs, green lacewings, hover flies, and parasitic wasps.
		FOR ALL: Band the trunks of affected trees with a product such as tanglefoot.
	Prune off damaged or diseased limbs.	
High	The treatment is the same as that for medium risk.	
TENT CATERPILLARS	Negligible	Inform the complainant of the policy the City has adopted regarding pesticide use. No further action is required.
	Medium	Pick the larvae off the branches and dispose of them in the garbage.
		Break the egg masses off of lower-level twigs and dispose of the material in the garbage.
		If larvae are present en masse on a few twigs or branches, these branches can be pruned and discarded in a sealed garbage bag.
High	A judicious application of bacillus thuringiensis kurstaki, or BTK, to the affected tree may be permitted if all of the treatments for medium risk fail. Follow label instructions.	
AERIAL NESTING WASPS AND BEES	NOTE: When preparing to deal with stinging insects, always wear a long-sleeved shirt, long pants tied or taped at the ankles, socks and shoes. A hat covered with netting to protect the face and gloves to protect the hands and wrists are also recommended. If a flashlight is used, cover the lens with red cellophane wrap. Insects do not see well in red light and will not be attracted to the light.	
	Negligible	Inform the complainant of the policy the City has adopted regarding pesticide use. No further action is required.
	Medium	The nest will be situated so that it either poses a risk to health or does not. The pest therefore falls into the negligible risk category or the high risk category.
	High	Physically remove the nest. If the nest is on a branch, the branch may be cut. If possible, the nest should be removed at night, when all the bees or wasps are in the hive. Place the nest in a strong plastic bag, carefully seal the bag to ensure that the insects cannot escape, and discard. If this method fails, insert the plastic extension tube from a pressurized liquid spray applicator and release a pyrethrum pesticide (such as Concern) for 10 to 30 seconds. Block the exit to the nest.
GROUND NESTING BEES (See NOTE for Aerial nesting wasps and bees)	Negligible	Inform the complainant of the policy the City has adopted regarding pesticide use. No further action is required.
	Medium	The nest will be situated so that it either poses a risk to health or it does not. The pest therefore falls into the negligible risk category or the high risk category.
	High	Wearing protective gear, pour boiling water into ground nests and block entrance.

PEST	RISK	ACTION							
		<p>Where possible, physically remove the nest.</p> <p>If the above method fails, insert the plastic extension tube from a pressurized liquid spray applicator and release a pyrethrum pesticide (such as Concern) for 10 to 30 seconds. Block the exit to the nest.</p>							
POISON IVY		<p>NOTE: When dealing with poison ivy, protective clothing should be worn, with as much of the body as possible covered. A beekeeper's hat with a veil can be used to protect the face. It is important that all clothing that was worn while working in or near poison ivy be carefully removed (using gloves), washed in hot, soapy water, and hung to dry. Wearing rubber gloves, clean all of the tools used with a rag soaked in oil or a solvent such as turpentine or alcohol. The rags and gloves should be sealed in a plastic bag and discarded after use to prevent further contamination.</p> <table border="1" data-bbox="334 758 1516 1079"> <tr> <td data-bbox="334 758 505 821">Negligible</td> <td data-bbox="505 758 1516 821">As a human health risk exists, poison ivy falls into the high risk category.</td> </tr> <tr> <td data-bbox="334 821 505 884">Medium</td> <td data-bbox="505 821 1516 884">As a human health risk exists, poison ivy falls into the high risk category.</td> </tr> <tr> <td data-bbox="334 884 505 1079" rowspan="2">High</td> <td data-bbox="505 884 1516 978">Dig out or pull up the whole plant. Place the plant in a plastic garbage bag, seal it carefully, and dispose of it in the garbage.</td> </tr> <tr> <td data-bbox="505 978 1516 1079">If it is impossible to physically remove the poison ivy, (i.e., it is tangled in a hedge), spot treat the plant with "Poison Ivy Killer".</td> </tr> </table>	Negligible	As a human health risk exists, poison ivy falls into the high risk category.	Medium	As a human health risk exists, poison ivy falls into the high risk category.	High	Dig out or pull up the whole plant. Place the plant in a plastic garbage bag, seal it carefully, and dispose of it in the garbage.	If it is impossible to physically remove the poison ivy, (i.e., it is tangled in a hedge), spot treat the plant with "Poison Ivy Killer".
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SPIDERS (In parking meters)		<table border="1" data-bbox="334 1079 1516 1478"> <tr> <td data-bbox="334 1079 505 1142">Negligible</td> <td data-bbox="505 1079 1516 1142">No further action is required.</td> </tr> <tr> <td data-bbox="334 1142 505 1241">Medium</td> <td data-bbox="505 1142 1516 1241">Affected meters should be thoroughly cleaned. Compressed air may be used. (Repellant options are under investigation).</td> </tr> <tr> <td data-bbox="334 1241 505 1478">High</td> <td data-bbox="505 1241 1516 1478">Although there is no human health risk associated with spiders in parking control meters, there is a high risk to property (the meter) in that they cause meter malfunctions. Recognizing that spiders in parking meters result in meter malfunctions, investigation is presently underway with both the manufacturer and other municipalities for "Best Practices" to control spiders and other insects in meters.</td> </tr> </table>	Negligible	No further action is required.	Medium	Affected meters should be thoroughly cleaned. Compressed air may be used. (Repellant options are under investigation).	High	Although there is no human health risk associated with spiders in parking control meters, there is a high risk to property (the meter) in that they cause meter malfunctions. Recognizing that spiders in parking meters result in meter malfunctions, investigation is presently underway with both the manufacturer and other municipalities for "Best Practices" to control spiders and other insects in meters.	
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## CITY OF OTTAWA BUILDINGS/ FACILITIES

Meetings with City of Ottawa staff have indicated pesticide applications within municipal properties continue through a contractor. The current contract should be extended for one year beyond its expiry date (to May 2000), at which time new terms of reference will be developed that will conform to the integrated pest management strategy that is currently under development.

## SEWERS

Current practices for rat control are acceptable. Rodent cakes in cages may be used as required.

**PARKING GARAGES**

Current practices for roach control using a gel-based compound is acceptable. Pest control in the parking garage should be managed using the same terms and conditions identified in the contract for the *City of Ottawa Buildings/Facilities*, in the section above.

**COMMUNICATION**

All appropriate City of Ottawa Staff will be informed of the Interim Protocol governing pest management and pesticide applications on City properties.

Call Centre personnel will be advised of the Interim Protocol and the long-range plans to implement an integrated pest management strategy. Personnel will be provided with copies of the Interim Protocol and the information pamphlets in order to provide the public with consistent and accurate information.

An information pamphlet for the public will be developed, outlining the policy and providing information on how the public can participate.