Integrated Pest Management Policy
City of North Vancouver

1. Purpose

The purpose of this policy is to develop pest management approaches that eliminate the cosmetic use of synthetic pesticides on public lands within the City of North Vancouver, consistent with the precautionary principle in its application to human and environmental health. In this case, the precautionary principle means that the absence of full scientific certainty shall not be used as justification to postpone seeking alternatives to pesticides where there is a risk of serious or irreversible harm to human health or the environment.

A fundamental component of the Environmental Protection Program and the Official Community Plan relate to demonstrating civic leadership in environmental stewardship and protecting of the natural resources of the City of North Vancouver. Ensuring a precautionary approach to Pest Management on public lands is consistent with the City vision of creating a more sustainable community.

The City, in carrying out its operations, will assume synthetic pesticides are potentially hazardous to human and environmental health. City departments must give preference to available organic or non-pesticide alternatives when considering the use of pesticides on City property. All pest control within the public jurisdiction of the City of North Vancouver (including all departments and municipal contractors) must be conducted through an Integrated Pest Management approach.

Integrated Pest Management (IPM) is an ecological approach to suppressing pest populations (e.g., weeds, insects and diseases, etc.) in which all necessary techniques are consolidated in a unified program, so that pests are kept at acceptable levels in effective, economical and environmentally safe ways. Pest problems are often symptomatic of ecological imbalances. IPM attempts to plan and manage ecosystems to prevent organisms from becoming pests. Pest management programs strive to avoid pest problems by incorporating IPM principles in the design and construction of facilities and landscapes and using naturally occurring control forces, such as pest diseases, competition, predators and parasites. The judicious use of non-synthetic pesticides control strategies is

also acknowledged as part of the IPM system. In every instance, such use would be governed through application of the precautionary principle.

1.1 Need for Policy

Many citizens are concerned about the amount and location of pesticide applications in the City of North Vancouver and associated health and environmental impacts. Historically, facilities and parks have not been designed to minimize pesticide use for their long-term maintenance. It is important, in terms of cost efficiency and environmental protection, that this IPM policy be followed by all City departments and contractors who directly or indirectly manage weeds or pests, or plan, design, renovate or construct landscapes or facilities.

The City of North Vancouver recognizes its unique location and environment and celebrates the need to safeguard its waterways, ecological habitats and urban heritage. An IPM policy is an important component in environmental stewardship of all public lands and facilities.

2. Policy Statement

The City of North Vancouver will manage vegetation and pests using IPM principles and practices that:

(a) eliminate the cosmetic use of synthetic pesticides on public lands;
(b) minimize the risk to human health and the environment;
(c) utilize site specific information to determine appropriate pest management decisions;
(d) maximize the use of natural controls and alternatives to the use of synthetic pesticides, and emphasize prevention;
(e) employ design principles whereby priority is given to using plant species that provide habitat value and are compatible with local soil and climatic conditions to reduce overall resource requirements;
(f) consider community values in establishing standards of maintenance of public land; and,
(g) determine cost-effectiveness, inclusive of long-term maintenance of various public facilities and landscapes.

3. Definitions

(a) **Natural Control:** The use of living organisms (parasites, predators, pathogens) that have been approved by the Pest Management Regulatory Agency (PMRA) of Health Canada to manage pests.

(b) **Chemical Control:** The use of a synthetic chemical pesticide to suppress or control a pest.

(c) **Cosmetic Pesticide Use**: The use of pesticides for non-essential purposes where the application is purely for an aesthetic pursuit.

(d) **Cultural Practices:** Management practices that focus on the prevention of pests by maintaining healthy hosts through proper planting, pruning, mulching, irrigation, nutrient requirements and sanitation practices.

(e) **Ecology:** The study of relationships between living things, with each other and their environments.

(f) **Ecosystem:** A community of organisms and their physical environment.

(g) **Exempt Facility:** A civic facility on the list, if any, established under section 10.

(h) **Native:** Species of animals or plants that have not been introduced by people or their direct activities

(i) **Natural Area:** Open space containing unusual or representative biological, physical or historical components. It either retains or has had re-established a natural character, although it need not be completely undisturbed.

(j) **Pest:** Any organism, including weeds, insects, diseases, rodents, etc., which by the location or size of its population, adversely interferes with the health, environmental, functional or economic goals of humans.

(k) **Pesticide:** A micro-organism or material that is represented, sold, used or intended to be used to prevent, destroy, repel or mitigate a pest, and includes without limitation:

(i) a plant growth regulator, plant defoliator or plant desiccant;

(ii) a control product under the *Pest Control Products Act* (Canada), other than a device that is a control product; and
(iii) a substance that is classified as a pesticide by regulation.

(l) **Permitted Pesticides:** A pesticide on the list, if any, established under section 9.

(m) **Pest Management Plans:** A set of pest control strategies for a given pest category (e.g., weeds in turf) and site maintenance level designated as high, medium or low. All landscape pest control treatments carried out on public land in the Province of British Columbia must be conducted under a Pest Management Plan prepared in compliance with the BC Integrated Pest Management Act.

(n) **Precautionary Principle:** The principle that environmental and human health measures must anticipate and prevent the causes of environmental degradation and impairment of human health, and where there are threats of serious or irreversible damage to the environment or human health, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation and the impairment of human health.

(o) **Preventative Measures:** Management practices that are directed towards preventing the establishment of pests (e.g., site design, genetic material, optimal site selection for plant material, proper planting and cultural practices, etc.).

4. IPM Program

4.1 Integrated Pest Management (IPM): is an ecological approach to suppressing pest populations (i.e., weeds, insects, diseases, etc.) in which all necessary techniques are consolidated in a unified program so that pests are kept at acceptable levels in effective, economical and environmentally safe ways. The components of an IPM program are:

Determining Action and Injury Levels

Action level is the level of development of a weed or pest population at a specific site when action must be taken to prevent the population from reaching the injury level.

Injury level is the point in growth of a weed or pest problem where it will cause an unacceptable impact upon: public safety, recreation or health; natural and/or manageable ecosystems; economic injury to desirable plants; or the integrity, function or service life of facilities.

Selection of Optimal Strategies

- Least disruptive of natural controls
- Least hazardous to human health
- Minimize negative impacts to non-target organisms
- Least damaging to the general environment
- Best preserves natural or managed ecosystems
- Most likely to produce long-term reductions in pest control requirements
- Effective implementation is operationally feasible
- Cost efficient in the short and long term

Timing - applying a treatment action during the most vulnerable time in the life cycle of the vegetation or pest with the least impact on natural predators and/or other non-target organisms.

Monitoring - the regular surveying of sites and/or features to understand and identify the location and extent of potential pest management problems.

Record Keeping - maintaining written records of specific pest management factors observed during monitoring, information on labour and materials used in implementation of the IPM program, results of pest management ecosystems; aesthetic values; economic injury to desirable plants; or the integrity, function, or service life of facilities.

Evaluation - analysis of treatment strategies and pest management plans to determine the effectiveness of the control program. These records are helpful in developing future pest management plans.

4.2 Direct Involvement with Pest Control

All departments within the City of North Vancouver directly involved with managing vegetation and pests will implement and evaluate IPM programs in accordance with the requirements of this policy. A licensed pesticide applicator within Parks Operations will be designated as the “IPM Coordinator”. These IPM programs shall include:

- a record keeping and monitoring system, to ensure documentation of the target pest, alternative methods that were assessed and/or implemented, type and quantity of pesticide used, site and area of application, certification that notification was made;

- maintenance management guidelines, procedures, standards and pest management plans;
- IPM implementation timetables, strategy and costs;
- education and training of Municipal staff; and,
- a means of notifying and consulting in advance with the local community, in addition to signage requirements under section 6 of this policy.

As the City of North Vancouver works towards maintenance management systems, IPM programs should be expanded to include an inventory of all public lands and facilities and estimates of their annual labor and material requirements.

4.3 Design and Development

All departments within the City of North Vancouver involved with the development, review and implementation of landscape and facility designs will implement and evaluate IPM programs in accordance with the requirements of this policy. These programs shall include:

- landscape and facility design and construction criteria and standards that promote cost-effective and ecologically sound management of landscape vegetation and pests;
- a landscape facility design and construction review process that includes the City of North Vancouver, Engineering, Parks and Environment staff; and,
- timetable, strategy and costs of the IPM component of the landscape and facility design.

5. Regulatory Context

The City of North Vancouver, including all of its departments and contractors, shall comply with all laws, regulations, bylaws and policies that are directly or indirectly related to weed and pest management operations.

6. Notice of Pesticide Use

Any municipal department that uses any pesticides must comply with the notice requirements set out in the current versions of the following publications:

- "Guidelines for Treatments in Public Use Areas" (produced by the Ministry of Water, Land and Air Protection)

- "Worksafe Book 2: Occupational Health and Safety Regulation," BC Regulation 296/97 as amended by BC Regulation 185/99, sections 6.70 to 6.109.

As of May 3, 2004, these publications included the following Notice Requirements:

(a) Notices should be constructed in the following manner:

(i) rectangular in shape;
(ii) at least 21.5cm by 27.5cm when posted in external areas and at least 12cm by 15cm when posted in internal;
(iii) rain resistant where applicable;
(iv) with type of letters of sufficient size and clarity to be easily read, together with a symbol of cautionary raised hand inside a symbol of a stop sign (the stop sign applies to outdoor signs only) or a graphic otherwise approved by the appropriate authority.

(b) The notices should contain the following information:

(i) date of application and recommended unprotected re-entry time (if applicable);
(ii) description of area treated, name of pest and common name of pesticide;
(iii) other advice or precautions as appropriate;
(iv) name and telephone number of Service Licensee or responsible individual who applied the pesticides.

(c) Interval of Pesticide Notice Posting:

(i) Where the treatment area is greater than 0.8 hectares in size and the access is controlled by a fence or a gate, notices shall be posted on all major public entry points.
(ii) Where access is NOT controlled by a fence or a gate, notices shall be posted at intervals of no more than 15m.
(iii) Where treatment is less than 0.8 hectares in size, notices should be posted around the perimeter of the treatment area with at least one sign on each side of the perimeter.
(iv) Where boulevard trees or lawns are treated, notices should be posted at the beginning and end of the treated area and at intervals of 20m intervals along the boulevard.

(v) All notices referred to shall be posted in conspicuous locations so as to be visible both within and outside of the treated area.

(d) Notification Timing

(i) Notices must be placed 48 hours prior to treatment; and
(ii) should remain not less than 48 hours after treatment.

7. Exemptions

This policy does not apply to use of a pesticide for the following purposes:

- to "Permitted Pesticides" as listed in Section 9 of this policy;
- to "Exempt Facilities" as listed in Section 10 of this policy;
- in a public swimming pool;
- to purify water intended for the use of human beings or animals;
- to control or destroy pests that constitute a danger to human beings such as rodents or mosquitoes (if required to control the spread of West Nile Virus); or,
- to control or destroy structure-destroying insects

8. Municipal Contracts

As of March 1, 2005, when the City of North Vancouver enters into a new contract or extends the term of an existing contract, the contract shall obligate the contractor to comply with this policy. That is, the contractor shall submit to the City an IPM implementation plan that lists the types and estimated quantities, to the extent possible, of pesticides that the contractor may need to apply to City property during its contract.

9. Permitted Pesticides

The following pesticides, when applied under the terms and conditions outlined in this policy and all applicable provincial and federal regulations, are considered acceptable for use on public lands in the City of North Vancouver, and are exempt from the public notification requirements described in Section 6:

a) Acetic acid
b) Insecticidal soaps
c) Herbicidal soaps

d) Bt (Bacillus thuringiensis)
e) Nematodes
f) Other biological control organisms
g) Animal repellents
h) Rodenticides
i) Injected tree treatments
j) Sticky media
k) Borax
l) Dormant oils
m) Horticultural oils
n) Bordeaux mixture and other sulphur compounds
o) Lime sulphur
p) Ferric phosphate
q) Pheromone traps
r) Diatomaceous earth

10. Exempt Facilities

The following civic facilities are exempt from this Policy, as they are not open to the public:

a) City of North Vancouver Greenhouse
b) City of North Vancouver Nursery