

# THE CORPORATION OF THE DISTRICT OF CENTRAL SAANICH

## COUNCIL POLICY

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SUBJECT: INTEGRATED PEST MANAGEMENT

**Department:** Public Works

#### **PURPOSE**

The purpose of this policy is to develop pest management approaches that eliminate the non-essential use of pesticides on public lands within the District of Central Saanich, consistent with the precautionary principle.

In this case, the precautionary principle, or approach, means that the absence of full scientific certainty shall not be used to postpone seeking alternatives to pesticides where there is a risk of serious or irreversible harm to human health or the environment.

Departments must give preference to available non-pesticide alternatives when considering the use of pesticides on District property. All pest control within the public jurisdiction of the District (including municipal departments and municipal contractors) must be conducted through an Integrated Pest Management approach.

Integrated Pest Management means a decision making process that uses a combination of techniques to suppress pests and that must include but is not limited to the following elements:

- a) planning and managing ecosystems to prevent organisms from becoming pests;
- b) identifying potential pest problems;
- c) monitoring populations of pests and beneficial organisms, pest damage and environmental conditions;
- d) using injury thresholds in making treatment decisions;
- e) reducing pest populations to acceptable levels using strategies that may include a combination of biological, physical, cultural, mechanical, behavioural and chemical controls;
- f) evaluating the effectiveness of treatments.

# **RATIONALE**

Many citizens are concerned about the amount and location of pesticide applications in the District and associated health and environmental impacts.

It is important, in terms of cost efficiency and environmental protection, that this IPM policy be followed by all Municipal departments and contractors, who directly or indirectly manage weeds or pests, or plan, design, renovate or construct landscapes or facilities.

The District 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.

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#### POLICY STATEMENT

The District of Central Saanich will manage vegetation and pests using IPM principles and practices that;

- a) minimize the risk to human health and the environment;
- b) utilize site specific information to determine appropriate pest management decisions;
- c) encourage the use of natural controls and alternatives to the use of pesticides, and emphasize prevention;
- d) minimize the reliance upon chemical controls:
- e) use an ecologically responsible approach through which there is participation in the development of Natural Area Management plans that are created within the District in suitable areas:
- f) determine cost-effectiveness, inclusive of long-term maintenance of various public facilities and landscapes.

#### **APPLICATION**

This policy shall apply to all parks and highways held by the District or under the jurisdiction of the District and all the land owned by the District except lands leased to other parties.

### **DEFINITIONS**

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

**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.

**Director.** The District of Central Saanich's Municipal Engineer, Superintendent of Public Works or Director of Planning and Building Services. This includes any person acting under the Director's authority.

**Ecology**. The study of relationships between living things, with each other and their environment.

**Ecosystem**. A community of organisms and their physical environment.

**Native**. Species of animals or plants that have not been introduced by people or their direct activities. **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.

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

**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.

**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:

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(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 under the *Pesticide Control Act* (British Columbia).

**Exempt Pesticide**. Exempt Pesticide means pesticides federally labelled and are on the Pesticide Control Act Regulation Annex 1 Exempted Pesticide List.

### **Pest Management Plans**. Means a plan that describes:

- (i) a program for controlling pests or reducing pest damage using integrated pest management, and:
- (ii) the methods of handling, preparing, mixing, applying and otherwise using pesticides within the program.

**Precautionary Principle.** The principle that environmental and human health measures must anticipate, prevent and attack 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.

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

**Sensitive Ecosystem**. Private or Public lands with one or more of the following characteristics:

- a) areas or landscape features identified in the Sensitive Ecosystems Inventory for Eastern Vancouver Island and the Gulf Islands, BC Ministry of the Environment.
- b) Areas or landscape features identifies in a municipal plan, map, or zoning bylaw as environmentally sensitive, environmentally significant, an environmental protection area, development permit area for protection of the environment, or other similar purpose that is compatible with the conservation of ecological features and functions of the site; or
- c) Local government parks or other protected areas designated or managed for the conservation of ecological features and functions of the site.

# **POLICY**

### **IPM PROGRAM**

**1. Integrated Pest Management (IPM)**: Is an approach that uses a combination of techniques in an organized program to suppress 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 an effective, economical and environmentally sound manner. 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.

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*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.

### 2. Direct Involvement with Pest Control

All departments within the District of Central Saanich directly involved with managing vegetation and pests will implement and evaluate IPM programs in accordance with the requirements of this policy.

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, standard and pest management plans.
- > IPM implementation timetables, strategy and costs.
- Education and training of District staff.

### 3. Design and Development

All departments within the District of Central Saanich 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.

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These programs shall include:

> Landscape and facility design and construction criteria and standards that promote costeffective and ecologically sound management of landscape vegetation and pests.

> Timetable, strategy and costs of the IPM component of the landscape and facility design.

#### REGULATORY CONTEXT

The District of Central Saanich, 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.

### **NOTICE OF PESTICIDE USE**

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

### **Notice Requirements:**

- a) Notices should be constructed in the following manner:
  - (i) rectangular in shape;
  - (ii) at least 25 cm by 35 cm when posted in external areas and at least 12 cm by 15 cm when posted in internal;
  - (iii) rain resistant where applicable;
  - (iv) with type of letter of sufficient size and clarity to be easily read, together with a symbol of a cautionary raised hand inside a symbol of a stop sign (the stop sign applies to out 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 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 gate, notices shall be posted at intervals of no more than 15 m;
  - (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 20 m 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 24 hours prior to treatment; and

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(ii) should remain not less than 48 hours after treatment.

#### **EXEMPTIONS**

This policy does not apply to any of the following:

- (a) exempt pesticides (Appendix A) are not required to follow Section 7 of this Policy, but are to follow IPM before the use of any pesticide; or
- (b) use of a pesticide for the following purposes (some of these may be listed in Appendix A):
  - o in a public pool
  - o to purify water intended for the use of human beings or animals
  - o inside a building
  - o to control or destroy animals or plants that constitute a danger to human beings
  - o to control or destroy structure-destroying insects

#### **APPENDIX A - EXEMPT PESTICIDES**

Include the following federally-labelled Commercial and Domestic (or Domestic only, as indicated) pesticides:

- Allethrin (domestic)
- D-trans-alletrin (domestic)
- Acetic acid (domestic)
- Animal repellents (domestic and commercial) except thiram
- Anti-fouling paints (domestic and commercial)
- Antisapstain wood preservatives used on private, industrial land owned by the company or person responsible for the application (commercial)
- Asphalt solids (pruning paints) (domestic and commercial)
- Bacillus thuringiensis kurstaki (btk) (domestic)
- Bactericides used in petroleum products (domestic and commercial)
- Beta-butoxy-beta-thiocyano diethyl ether
- Boron compounds (domestic)
- > Boron compounds with up to 5% copper for insect control and wood preservation (commercial)
- Capsaicin (domestic, commercial and restricted)
- Cleansers (domestic and commercial)
- Corn gluten meal (domestic and commercial)
- > D-phenothryn (domestic)
- > D-trans-allethrin, also referred to as d-cis, trans allethrin (domestic)
- Deodorizers (domestic and commercial)
- Disinfectants
- Fatty acids (domestic)
- > Ferric phosphate (domestic and commercial)
- > Ferrous sulphate (domestic and commercial)
- > Hard surface disinfectants (domestic and commercial)
- Isobornyl thiocyanoacetate
- Insect bait stations (domestic)
- Insect pheromones (domestic and commercial)
- Insect repellents (domestic)
- Laundry additives (domestic and commercial)
- Material preservatives (domestic and commercial)
- Methoprene (domestic)
- Mineral oils for insect and mite control (domestic)
- N-octyl bicycloheptene dicarboximide (domestic)

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Naphthalene for fabric protection (domestic)

- Pest pesticides (domestic)
- Pressurized pesticides (domestic)
- Paradichlorobenzene for fabric protection (domestic)
- Pesticides in aerosol containers (domestic)
- > Pesticides registered under the federal act for application to pets (domestic and commercial)
- Piperonyl butoxide (domestic)
- Plant growth regulators (domestic)
- > Polybutene bird repellents (domestic and commercial)
- Pyrethrins (domestic)
- Resmethrin (domestic)
- Rotenone (domestic)
- > Silica aerogel, also referred to as silica gel, amorphous silica and amorphous silica gel (domestic and commercial)
- > Silicon dioxide, also referred to as "diatomaceous earth" (domestic and commercial)
- > Slimicides (commercial)
- Soaps (domestic and commercial)
- > Sulphur, including lime sulphur, sulphide sulphur and calcium polysulphide (domestic)
- Surfactants (domestic and commercial)
- > Swimming pool algicides and bactericides (domestic and commercial)
- > Tetramethrin (domestic)
- Wood preservatives (domestic)