COUNCIL POLICY

SUBJECT: INTEGRATED PEST MANAGEMENT POLICY

ISSUED: JANUARY 25, 2010 **INDEX REFERENCE:**

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(Replaces 03/166)

1. Purpose

This policy describes the approach to pest management used on public lands within the District of Saanich. The Integrated Pest Management (IPM) approach is designed to eliminate the non-essential use of pesticides.

IPM is not a single pest control method but, rather, is a series of pest management evaluations, decisions and controls. The IPM approach is consistent with the precautionary principle, and also with the vision set forth in Saanich's Official Community Plan (2008) and Strategic Plan 2009-2013 (2009) which state that Saanich is a model steward, restoring and protecting air, land, and water quality, the biodiversity of existing natural areas and ecosystems, the network of natural areas and open spaces, and urban forests.

2. Need for Policy

Many citizens are concerned about the amount and location of pesticide applications and associated health and environmental impacts. Saanich recognizes its unique location and environment and celebrates the need to safeguard its waterways, ecological habitats, and cultural heritage. An IPM policy is an important component in environmental stewardship of these features.

This IPM policy demonstrates Saanich's commitment to eliminating non-essential pesticide use on public lands, with the highest standards possible. These standards have been adopted in Saanich "Pesticide Bylaw, 2010, No. 9054", or any successor bylaw, making the policy and bylaw complementary to achieving the goal of eliminating non-essential pesticide use on all lands in Saanich.

3. Definitions

Action level: The level of pest population establishment when action must be taken to prevent the population from reaching the injury level.

Biological 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.

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.

Early detection / rapid response (EDRR): A coordinated approach to invasive species or noxious weed management that focuses on identifying, surveying, and monitoring selected areas to detect populations of invasive species that are new to or approaching a region, and to prevent their expansion at or before their earliest stage of establishment.

Ecological approach: Planning and management activities that consider ecosystems and the relationships among and between all organisms, including humans, and their environment.

Ecosystem: A complex system of organisms and their physical environment that function together, circulating nutrients and energy.

Excluded pesticide: Those pesticides which, by excluding them from compliance with the requirements imposed on a licensee, permit holder or confirmation holder under the Act, will not increase the risk of unreasonable adverse effects from their use. Includes federally labelled Commercial and Domestic (or Domestic only, as indicated) pesticides that are excluded in accordance with Schedule 2 of the Provincial Integrated Pest Management Regulation (Appendix A).

Invasive species: An alien species whose introduction does or is likely to cause environmental or economic harm, or harm to human health.

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

Integrated pest management (IPM): As defined in the *Integrated Pest Management Act (Statutes of BC 2003, Chapter 58)*, Integrated Pest Management means:

"a process for managing pest populations that includes the following elements:

- (a) planning and managing ecosystems to prevent organisms from becoming pests;
- (b) identifying pest problems and potential pest problems;
- (c) monitoring populations of pests and beneficial organisms, damage caused by pests, and environmental conditions;
- (d) using injury thresholds in making treatment decisions;
- (e) suppressing pest populations to acceptable levels using strategies based on considerations of biological, physical, cultural, mechanical, behavioural and chemical controls in appropriate combinations, and environmental and human health protection;
- (f) evaluating the effectiveness of pest management treatments."

Integrated pest management program: A program for managing pest populations or reducing damage caused by pests, using integrated pest management principles. The IPM program is implemented through a series of landscape-specific plans that describe the methods of handling, preparing, mixing, applying and otherwise using pesticides and pest management methods within that program.

Native species: Organisms that have not been introduced to a place by people or their direct activities; that are known to have existed in an area prior to the influence of humans.

Natural areas: Spaces containing representative biological, physical or historical components. They either retain or have had re-established a natural character, although they need not be completely undisturbed.

Noxious weeds: Plant species that are capable of inflicting agricultural loss or ill health on people, or are subject to the "Noxious Weeds Bylaw, 2000, No. 8080", or any successor bylaw.

Pest: An injurious, noxious or troublesome living organism, but does not include a virus, bacteria, fungus or internal parasite that exists on or in humans or animal.

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:

- (a) a plant growth regulator, plant defoliator or plant desiccant;
- (b) a control product under the *Pest Control Products Act* (Canada), other than a device that is a control product; and
- (c) other substances classed as a pesticide by the *Integrated Pest Management Act* (British Columbia).

Precautionary principle: The absence of full scientific certainty shall not be used as a reason for postponing decisions where there is a risk of serious or irreversible harm to the environment.

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.).

4. Policy Statement

Saanich will manage pests through an IPM program that is designed to eliminate the non-essential use of pesticides by applying the following principles and practices.

4.1 Principles

- (a) Ecosystems will be managed and landscapes planned to prevent organisms from becoming pests. An ecological approach that uses appropriate preventative measures will be applied, with consideration given to native species diversity.
- (b) Safeguarding human health, the environment, and non-target organisms will be primary considerations when developing pest management strategies, action levels and injury thresholds.
- (c) A formal system will be undertaken to monitor populations of pests and beneficial organisms, pest damage, and environmental conditions. Monitoring means the regular surveying of sites and/or features to understand and identify the location and extent of potential pest management problems.

- (d) Written, photographic, and map records will be maintained and used to record monitoring data and to develop future pest management plans. Records will describe the target pest, implementation timetables, specific management factors used, alternative methods assessed and/or implemented, type and quantity of pesticide used, site and area of application, certification that notification was made, measurable responses to treatments; costs and amounts labour and materials used; results of pest management upon ecosystems and aesthetic values; economic injury to desirable plants, if any, and/or to the integrity, function, or service life of facilities. All of this information shall inform the decision-making process and be used in the evaluation of each IPM plan.
- (e) Data collected through monitoring and record-keeping will be used to regularly evaluate treatment effectiveness. This includes analysis of treatment strategies and the modification of existing Pest Management Plans.
- (f) As a provincially accredited pesticide license holder, Saanich will submit an Annual Report of Pesticide Use to the Ministry of Environment and will provide a copy to appropriate Saanich advisory committees.
- (g) An education program will be initiated that (1) encourages the community to accept higher levels of weeds in exchange for diminished use of synthetic chemicals, and (2) informs the community about pest occurrences and threats with the goal of encouraging changes in behavior that result in improved pest control and reduced threats.
- (h) Potential and confirmed pest problems will be addressed using a combination of cultural, physical, mechanical, biological, behavioural, and chemical treatments to suppress pests to acceptable levels. Greater emphasis shall be placed on prevention and reduction than control.
- (i) Injury thresholds and action levels for each landscape type will be established and used in making treatment decisions.
- (j) Chemical pesticides will be used only when other options are not available, feasible, or effective. The least toxic pesticide that effectively controls the pest will be used. Such pesticides generally have short residual effects and/or specifically affect target pests. Such pesticides:

- (i) are least disruptive of natural (e.g., biological) controls,
- (ii) are least hazardous to human health,
- (iii) minimize negative impacts to non-target organisms,
- (iv) are least damaging to the general environment.
- (k) Treatment actions shall be applied during the most vulnerable time in the lifecycle of the pest while having the least impact on natural predators and nontarget organisms.
- (I) An early detection / rapid response (EDRR) approach will be adopted to ensure new pests are prevented from spreading, with the goal being eradication.
- (m) Cost-effectiveness will be determined and applied, inclusive of long-term maintenance of various public facilities and landscapes.

4.2 Training

To ensure appropriate and current understanding and implementation of IPM principles, Saanich staff will be provided with necessary and appropriate training, including but not limited to Pesticide Applicator's certification and qualification for the Plant Health BC Pest Management Accreditation program.

4.3 Compliance and Coordination

The IPM Program shall be administered in accordance with this policy. An IPM Coordinator, who is a licensed pesticide applicator, shall be appointed to oversee and coordinate the IPM Program. Any IPM Plans prepared by or for Saanich shall be submitted to the IPM Coordinator for review and approval and must include all of those components described in sections 4.1 and 4.2 above.

5. Regulatory Context and Application

This policy provides the basis for Saanich "Pesticide Bylaw, 2010, No. 9054", or any successor bylaw and is accompanied by Saanich's Integrated Pest Management Plan, which describes prescriptions for treatment and monitoring of various landscapes, hard surfaces, and natural areas, and the IPM Program is in accordance with applicable federal and provincial legislation including: Pest Control Products Act, Fisheries Act, Migratory Birds Act, Plant Protection Act, Workers' Compensation Act, Integrated Pest Management Act and Regulations, Environmental Management Act, Weed Control Act, Wildlife Act, and Invasive Plant Regulations.

This policy applies to all lands owned or held by Saanich or under the jurisdiction of Saanich.

6. Treatment Notices

6.1 Regulatory Requirements

Any Saanich department or contractor doing work for Saanich that is using pesticides must post a Treatment Notice in compliance with the requirements set out in the Integrated Pest Management Regulations, Section 10. A blank form can be found under the Environmental Protection Branch of the Provincial Ministry of Environment at http://www.env.gov.bc.ca/epd/ipmp/forms/pdf/wcb_treat_notice.pdf [accessed 14 Aug 09]. This form also meets the requirements of WorkSafeBC (if workers can read English) and is designed for posting in and around buildings and outdoor public use areas.

The following specifications apply:

(a) Treatment Notice size

The minimum size of the treatment notice for outdoor posting is about standard letter size (22 x 28 cm). The notice is to be clearly visible to a person approaching a treated area. It may be appropriate to increase the size of the notice so that it can be posted at less frequent intervals around the treatment area and still meet the "clearly visible" requirement.

(b) Treatment Notice content

The following is provided to assist in completing the content requirements.

- (i) Description of the treatment area must be specific enough to allow the reader to accurately identify the area being treated.
- (ii) Name of targeted pest describe either the pest or the pest complex. Be specific enough to allow the reader to confirm that the pest is listed on the pesticide label (e.g., leafrollers, powdery mildew, broadleaf weeds).
- (iii) Registration number and active ingredient(s) of the pesticides to be used these are *Pest Control Product Act* (Canada) Registration

numbers and the active ingredients under the "Guarantee" on the pesticide label.

- (iv) Date and start time and any proposed alternate dates for pesticide use are to be listed so that the public knows when the treatment was done or is to be done. An alternate date and time should be provided if a treatment may be postponed due to adverse weather conditions (e.g. rain or winds over 8 km/hr). The alternate date is not to be used to identify possible re-treatments new notices should be posted close to the actual treatment date.
- (v) Name of licensee and license number and a phone number of the licensee where a person can obtain more information – where a person can obtain information on the treatment method or what will be or was treated.
- (vi) Precautions to minimize exposure to a pesticide or its residues, including the period during which people should not enter a treated area – when such precautions are specified on a label or Material Safety Data Sheets, these should be included on the posted notice. A typical precaution is to avoid contact with treated areas. For unprotected worker re-entry to a treated site, WorkSafeBC has identified minimum re-entry times. These should be placed on the notice when appropriate. These found can be at http://www2.worksafebc.com.

(c) Locations for Treatment Notice Postings

The primary aim of posting treatment notices is to ensure that individuals entering a treatment area are aware that treatment will occur near their residences or for general public areas so that individuals are alerted that treatment occurred, before they enter the treatment area. Suggested locations for posting include:

- (i) So that it can be seen as a person approaches each gate or opening to a treatment that occurs within a fenced area; and
- (ii) At intervals around the treated area so that a notice will be clearly visible to anyone approaching the treated area from the different directions that it may be accessed. The spacing of notices will depend on the size of the notice and lettering. Notices should generally be posted beside paths leading to a treated area.

Note that the regulations specify posting is required when pesticide is used in outdoor public use areas defined as landscaped areas maintained for public passage or recreation.

BC Ministry of Environment considers examples of these areas to be: turf in parks, ornamental beds in parks where people walk or play and areas immediately adjacent to them, school playgrounds and fields, the land around bus stops and rest areas and points of interest; and boulevards in residential and commercial areas (where people may walk across them).

Examples of areas that BC Ministry of Environment considers do not require posting are boulevards and medians along highways or in industrial areas, away from residential or commercial buildings and stopping areas.

6.2 Additional Notification Effort

In addition to the above regulatory notice requirements, Saanich takes further steps to inform and educate the public about the IPM program.

- 1. When required to post signs:
 - (a) At locations where synthetic pesticides are to be used, Treatment Notices will be printed on red paper or with a red border. On the back of each notice text will be provided that explains in plain terms why a synthetic chemical is being used; for example, to control an infestation of introduced alien plant that threatens a rare native species or critical habitat.
 - (b) At locations where excluded pesticides, as listed in Appendix A and permitted under Saanich's "Pesticide Bylaw, 2010, No. 9054", or any successor bylaw are to be used, Treatment Notices will be printed on yellow paper or with a yellow border. On the back of each notice text will be provided that explains in plain terms why the treatment is being applied; for example, to control weeds where other methods have failed.
- 2. At locations where fertilizers are to be used, a notice will be printed on green paper or with a green border that provides the dates and nature of treatment and a contact name and number the public can use if they have questions.

7 Exclusions

Excluded pesticides are not required to follow Section 6.1 of this policy but are required to follow the IPM policy otherwise.

This policy does not apply to the use of a pesticide (some of which are listed in Appendix A) for the following purposes:

- (a) in a public pool;
- (b) to purify water intended for the use of human beings or animals;
- (c) inside a building;
- (d) to control or destroy animals or plants that constitute a danger to human beings;
- (e) to control or destroy structure-destroying insects.

APPENDIX A - EXCLUDED PESTICIDES

The following federally-labelled Commercial and Domestic (or Domestic only, as indicated) pesticides are excluded from this policy, in accordance with Schedule 2 of the Provincial Integrated Pest Management Regulation:

- 1. acetic acid (DOMESTIC)
- 2. animal repellents (DOMESTIC and COMMERCIAL) except thiram
- 3. anti-fouling paints (DOMESTIC and COMMERCIAL)
- 4. antisapstain wood preservatives used on private, industrial land owned by the company or person responsible for the application (COMMERCIAL)
- 5. asphalt solids (pruning paints) (DOMESTIC and COMMERCIAL)
- 6. bacillus thuringiensis kurstaki (Btk) (DOMESTIC)
- 7. bactericides used in petroleum products (DOMESTIC and COMMERCIAL)
- 8. boron compounds (DOMESTIC)
- 9. boron compounds with up to 5% copper for insect control and wood preservation (COMMERCIAL)
- 10. capsaicin (DOMESTIC, COMMERCIAL and RESTRICTED)
- 11. cleansers (DOMESTIC and COMMERCIAL)
- 12. corn gluten meal (DOMESTIC and COMMERCIAL)
- 13. d-phenothryn (DOMESTIC)
- 14. d-trans-allethrin, also referred to as d-cis, trans allethrin (DOMESTIC)
- 15. deodorizers (DOMESTIC and COMMERCIAL)
- 16. fatty acids (DOMESTIC)
- 17. ferric phosphate (DOMESTIC and COMMERCIAL)
- 18. ferrous sulphate (DOMESTIC and COMMERCIAL)
- 19. hard surface disinfectants (DOMESTIC and COMMERCIAL)
- 20. insect bait stations (DOMESTIC)
- 21. insect pheromones (DOMESTIC and COMMERCIAL)
- 22. insect repellents (DOMESTIC)

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- 23. laundry additives (DOMESTIC and COMMERCIAL)
- 24. material preservatives (DOMESTIC and COMMERCIAL)
- 25. methoprene (DOMESTIC)
- 26. mineral oils for insect and mite control (DOMESTIC)
- 27. n-octyl bicycloheptene dicarboximide (DOMESTIC)
- 28. naphthalene for fabric protection (DOMESTIC)
- 29. paradichlorobenzene for fabric protection (DOMESTIC)
- 30. pesticides in aerosol containers (DOMESTIC)
- 31. pesticides registered under the federal Act for application to pets (DOMESTIC and COMMERCIAL)
- 32. piperonyl butoxide (DOMESTIC)
- 33. plant growth regulators (DOMESTIC)
- 34. polybutene bird repellents (DOMESTIC and COMMERCIAL)
- 35. pyrethrins (DOMESTIC)
- 36. resmethrin (DOMESTIC)
- 37. rotenone (DOMESTIC)
- 38. silica aerogel, also referred to as silica gel, amorphous silica and amorphous silica gel (DOMESTIC and COMMERCIAL)
- 39. silicon dioxide, also referred to as "diatomaceous earth" (DOMESTIC and COMMERCIAL)
- 40. slimicides (COMMERCIAL)
- 41. soaps (DOMESTIC and COMMERCIAL)
- 42. sulphur, including lime sulphur, sulphide sulphur and calcium polysulphide (DOMESTIC)
- 43. surfactants (DOMESTIC and COMMERCIAL)
- 44. swimming pool algicides and bactericides (DOMESTIC and COMMERCIAL)
- 45. tetramethrin (DOMESTIC)
- 46. wood preservatives (DOMESTIC)