# CITY OF ENCINITAS ADMINISTRATIVE MANUAL

Policy Title: <u>Integrated Pest Management Policy</u> Section: Council Policy

Responsible Department: City Manager Number: C031

Approved By Council Originally Approved: 06-24-15

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# 1.0 POLICY STATEMENT

Overreliance on pesticides can have unintended effects on the environment, humans and non-target organisms. The City of Encinitas is committed to sustainability and protecting the health of its residents. For this reason, all departments will evaluate and give preference to non-pesticide management practices and use reasonably available alternative pest control methods, in order to minimize pesticide use through Integrated Pest Management (IPM).

IPM is a strategic approach that focuses on long-term prevention of pests and minimizing their damage by selecting and applying the most effective and least toxic pest control methods. These include cultural, mechanical, biological, and chemical technologies that are implemented for a given site and pest situation in ways that minimize economic, health and environmental risks. This policy strives to protect public health and reduce the impacts pesticide use has on the environment.

This IPM policy shall apply to all pest control activities and pesticide use in buildings and related facilities; grounds and open space; and other property owned or managed by the City of Encinitas and conducted by city staff or contractors. City officers, employees and contractors are required to follow this policy.

## 2.0 PURPOSE

The IPM policy is intended to provide guiding principles for pest and vegetation management that will protect and preserve public and environmental health, water quality, and desirable species. The goal of the city's IPM policy is to utilize the most environmentally sound approaches to pest management, and to reduce where possible, the volume and toxicity of chemical pest control treatments.

The objectives of this policy are to develop and implement a standard Integrated Pest Management Plan (Plan) and provide procedural guidelines for implementation.

## 3.0 DEFINITIONS

- A. "City" means the City of Encinitas.
- B. "Glyphosate" means a specific broad-spectrum, post emergent, non-selective, systemic herbicide, (C₃H<sub>8</sub>NO₅P) which effectively kills or suppresses most plant types, including grasses, perennials, vines, shrubs, and trees.

- C. "Integrated Pest Management (IPM)," means a decision-making process which selects, integrates, and implements long-term pest control strategies to prevent or control pest populations without unnecessary pesticide use. IPM uses a "whole systems approach", looking at the target species as it relates to the entire ecosystem. Control methods are cultural, physical, mechanical, biological, or chemical in nature and include effective monitoring and inspection to detect pest problems and correct inadequate conditions. Action to control pests is only undertaken when predetermined action thresholds are met. All control methods must be effective, with the least-risk to health and the environment and include use of preventative solutions to avoid future pest problems.
- D. "Integrated Pest Management Plan (Plan)" means Administrative Policy G009 which describes the implementation guidelines, procedures, and fundamental principles of IPM.
- E. "Neonicotinoids" means synthetic chemical insecticides that are similar in structure and action to nicotine a naturally occurring plant compound.
- F. "Pest" means any of the following that is, or is liable to become, dangerous or detrimental to the agricultural or nonagricultural environment of the state: (a) Any insect, predatory animal, rodent, nematode or weed; (b) Any form of terrestrial, aquatic, or aerial plant or animal, virus, fungus, bacteria, or other microorganism (except viruses, fungi, bacteria, or other microorganisms on or in living man or other living animals); and (c) Anything that the director (of CDFA), by regulation, declares to be a pest. California Food and Agricultural Code (FAC).
- G. "Pesticide" means any substance or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, as defined in California Food and Agricultural Code (FAC) section 12754.5, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever.
- H. "Reasonable Alternative" means a feasible option for pest control which considers the economic, social, and environmental costs and benefits of the proposed choices.
- I. "Antimicrobial Agents" means any substance or mixture of substances intended for inhibiting the growth of or destroying any bacteria, fungi pathogenic to human and other animals, or viruses declared to be pests under Section 12754.5 of the California Food and Agricultural Code, except slime control agents, substances intended for the use in or on humans or other animals, and use in or on processed food, beverages, and pharmaceuticals. Antimicrobial agents include, but are not limited to, disinfectants; sanitizers; bacteriostats; sterilizers; fungicides and fungi-stats applied to raw material or manufactured products.
- J. "Best Management Practices (BMP)" means actions based on current science and technology that have been proven to be effective in the control and management of the site or pests to prevent or reduce the

- incidence of pest problems, with careful consideration given to protect public health and safety, wildlife and the environment.
- K. "Contract" means a binding written agreement, including but not limited to a contract, lease, permit, license or easement between a person, firm, corporation or other entity, including a governmental entity, and a city department, which grants a right to use or occupy property of the city for a specified purpose or purposes.
- L. "Contractor" means a person, firm, corporation or other entity, including a governmental entity that enters into a contract with a city department.
- M. "Eco-exempt" means pesticides designated by U.S. EPA as minimum risk pesticides by Federal Insecticide, Fungicide, Rodenticide Act Section 25(b) and California Code of Regulations Section 6147, or products approved for organic production systems by the National Organic Program.
- N. "Organic Materials Research Institute (OMRI)" means an organization that determines which input products are allowed for use in organic production and processing.
- O. "Special Use Pesticides" means materials that do not meet the criteria for use but are considered critical to the protection of public health and safety, the environment, wildlife, or the preservation of city property.
- P. "Toxicity Category I, II, III, IV Pesticide Product" means any pesticide product that meets the United States Environmental Protection Agency criteria for the appropriate toxicity categories and bearing on the front label panel the word Danger, Warning, or Caution, as specified in Section 156.10 of Title 40 of the Code of Federal Regulations.
- Q. "Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)" means a requirement for the State of California to publish a list of chemicals known to cause cancer, birth defects, or other reproductive harms. The state regularly updates the list, which currently includes hundreds of chemicals. (https://oehha.ca.gov/proposition-65/proposition-65-list).
- R. "Highly Invasive Species" means these species have severe ecological impacts on physical processes, plant and animal communities and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically. (https://www.cal-ipc.org/plants/inventory/)

## 4.0 METHODOLOGY

In support of this policy, IPM Plan G009 describes the implementation guidelines and procedures. The Plan incorporates fundamental principles of IPM, as described below.

## A. Education

Education is a critical component of the Plan. A representative from the appropriate departments using IPM is responsible for educating city staff, contractors, and the public about the IPM Policy and the IPM Plan.

## B. Identification

The accurate identification of pests will result in the appropriate control methods to use in conjunction with correct action thresholds. Proper identification of pests reduces the possibility that control methods will be implemented when they are not necessary. University of California Cooperative Extension, the San Diego Agricultural Commissioner's office, licensed pest control professionals and other appropriately trained individuals should be consulted for pest identification resources.

# C. Monitoring and Record Keeping

Monitoring methods by each site will be used at regular intervals and data will be systematically recorded. City staff will coordinate and utilize standardized pest mapping protocols.

#### D. Establish Threshold Level

Before taking any pest control action, an acceptable threshold level of treatment for each target pest and site will be established. Threshold levels for common pests are at levels which environmental conditions indicate that pest control action may be taken. The threshold level is critical to guide future pest control decisions. In some instances, treatment could be required by federal or state law. Upon determining that treatment is necessary, the following criteria should be used to help select the appropriate IPM treatment strategy:

- a. Least disruptive of natural controls
- b. Least hazardous to human health
- c. Least toxic to non-target organisms
- d. Cost effective in the short and long-term

## E. Treatment Strategies

Each city department shall make its own determination about appropriate and effective treatments, based on site-specific requirements. Commitment to the most environmentally sound approach is expected, with non-chemical methods considered first. Prevention, cultural control, mechanical/physical control, biological control and chemical control are the techniques used in IPM. In general, a combination of treatments is more effective than a single approach. City departments are encouraged to seek out and experiment with innovative IPM treatments (and combinations of treatments) and share this information. The following treatment strategies are listed in the order in which they should be executed:

Prevention: This is the most effective pest management strategy. By reducing the capacity of the ecosystem to support target pest populations through design and appropriate management, the opportunities for pest establishment can be reduced or eliminated.

Cultural: Cultural control is the use of management activities that prevents pests from developing due to enhancement of favorable conditions.

Mechanical/Physical: Mechanical control is accomplished by using physical methods or mechanical equipment to control pest infestations.

Biological: Biological controls include the introduction or enhancement of natural enemy populations to target pests. Introduction of non-indigenous organisms has an associated risk factor and should be thoroughly evaluated prior to implementation.

Chemical: Chemical control of pests is accomplished by using chemical compounds registered as pesticides.

## F. Training

Ensure that city staff and contractors are certified by the California Department of Pesticide Regulation in the use of pesticides that are approved for use by the city and that applicators follow label directions, precautions, and application regulations.

# 5.0 **PESTICIDE USE**

It is the goal of the city to use pesticides only when necessary and pesticide selection should be the most effective and least toxic option. The use of toxicity Category I and II pesticides shall be eliminated unless no other means of pest control is effective (see Section 5.2) and the use of toxicity Category III and IV pesticides shall be minimized to the greatest extent possible.

- 5.1 Except as noted under the Special Use Category Subsection 5.2 and Exemptions Subsection 5.3 pesticides shall not contain ingredients identified in the following sources:
  - Products listed as Toxicity Category I or II;
  - ii. California's Proposition 65 list the Safe Drinking Water and Toxic Enforcement Act of 1986; as it pertains to pesticides;
  - iii. California's Department of Pesticide Regulation groundwater protection list Food and Agriculture Code 13145(d);
  - iv. Organophosphates, organochlorines, or carbamates listed by the United States Environmental Protection Agency Office of Pesticides Programs or California Environmental Protection Agency Department of Pesticide Regulation Chemical Inquiries Database;
  - v. A known carcinogen, probable carcinogen, or possible carcinogen as it relates to pesticides, by the United States Environmental Agency as per "List of Chemicals Evaluated for Carcinogenic Potential;
  - vi. Any known endocrine disruptor listed by the United States Environmental Protection Agency;

- vii. Neonicotinoids: Recent research suggests that there is a possible link between pesticides that contain neonicotinoids and the die-off of plant pollinators including honeybees, native bees, butterflies, moths and other insects. Neonicotinoids are synthetic chemical insecticides that are similar in structure and action to nicotine a naturally occurring plant compound. Neonicotinoids are absorbed into plant tissue and can be present in pollen and nectar making them potentially toxic to pollinators; and
- viii. SGARs Second Generation Anticoagulant Rodenticides active ingredients brodifacoum, bromadiolone, diffenacoum and difethialone.

## 5.2 Special Use Category

There may be circumstances where it is necessary to use a pesticide that does not meet the criteria for use under Section 5.1 which are critical to the protection of public health, the environment, wildlife, safety, or the preservation of City property. These products will only be used in conjunction with an IPM plan where other products and methods do not adequately control the pest based on the recommendation of a licensed pest control advisor in conjunction with City Staff.

## 5.3 Exemptions (Special Use)

Improving and Maintaining Water Quality

Notwithstanding any other provision of this Section, this Subsection shall not apply to the use of any pesticide for the purpose of improving or maintaining Water quality at:

- i. Drinking water treatment plants
- ii. Wastewater treatment plants
- iii. Reservoirs
- iv. Related collection, distribution, and treatment facilities

## 5.4 Emergency

Notwithstanding any other provision of this Section, this Subsection shall not apply in the event that an emergency pest outbreak poses an immediate threat to public health or significant economic damage will result from failure to use an eliminated pesticide.

In the event an emergency pest outbreak poses a threat to public health or severe economic damage, treatment other than that outlined above may be required.

The affected building or area shall be closed off and quarantined until such time corrective action is taken.

Signs shall be posted 12 to 24 hours in advance of application and remain in place for 72 hours following the application, pursuant to state law unless the manufacturer's label specifies a longer posting period.

When circumstances determine the need to use products which fall under the Special Use Category or Exemptions, the following shall occur:

- i. Approval by the city department director or its designee in writing;
- ii. Make a good-faith effort to find alternatives to the eliminated pesticide;
- iii. Demonstrate that effective economic alternatives to the eliminated pesticide do not exist for the particular use; and,
- iv. Develop a reasonable plan for investigating alternatives to the eliminated pesticide.

Choice of pesticide and application may be superseded by county, state, or federal regulations to mitigate quarantined pests or vectors of human or animal disease, e.g. rodents, mosquitoes, highly invasive species.

