



## **San Mateo Countywide Water Pollution Prevention Program Model Integrated Pest Management (IPM) Policy**

### **GOAL**

The City of Foster City seeks to protect the health and safety of its employees and the general public, the environment and water quality, as well as to provide sustainable solutions for pest control through the reduced use of pesticides on property including buildings owned or managed by the City by applying Integrated Pesticide Management principles and techniques. The municipal regional stormwater permit requires that the City of Foster City minimize reliance on pesticides that threaten water quality.

### **REQUIRED USE OF INTEGRATED PEST MANAGEMENT**

Employees implementing pest management controls will use Integrated Pest Management (IPM) techniques that emphasize non-pesticide alternatives. Pesticides will only be used after careful consideration of non-chemical alternatives and then the least toxic chemicals that are effective shall be used. Pest control contractors hired by the City of Foster City are required to implement IPM to control pests. This will be achieved by hiring only IPM-certified pest control contractors or by including contract specifications requiring contractors to implement IPM methods.

The City of Foster City will establish written standard operating procedures for pesticide use to ensure implementation of this IPM policy and to require municipal employees and pest control contractors to comply with the standard operating procedures.

The City will track employee and contractor pesticide use and prepare an annual report summarizing pesticide use and evaluating pest control activities performed consistent with the municipal regional stormwater permit's requirements.

The City will review its purchasing procedures, contracts or service agreements with pest control contractors and employee training practices to determine what changes, if any, need to be made to support the implementation of this IPM Policy.

The City will perform educational outreach and/or support Countywide or regional efforts to educate residential and commercial pesticide users on a) goals and techniques of IPM, and b) pesticide related water quality issues consistent with the municipal regional stormwater permit's requirements.

The IPM-based hierarchical decision making process that will be used to control pests will include the following:

1. Based on field observations evaluate locations and sites where pest problems commonly occur to determine pest population, size, occurrence, and natural enemy population, if present. Identify conditions that contribute to the development of pest populations, and decisions and practices that could be employed to manage pest populations;
2. Design, construct, and maintain landscapes and buildings to reduce and eliminate pest habitats;
3. Modify management practices including watering, mulching, waste management, and food storage to discourage the development of pest population;
4. Modify pest ecosystems to reduce food, water sources, and harborage;
5. Prioritize the use of physical controls such as mowing weeds, using traps, and installing barriers;
6. Use biological controls to introduce or enhance a pests' natural enemies;
7. When pest populations reach treatment thresholds (based on how much biological, aesthetic, economic or other damage is tolerable) non-pesticide management activities will be evaluated before considering the use of pesticides;
8. When pesticides are necessary, select reduced risk pesticides and use the minimum amounts needed to be effective;
9. Apply pesticides at the most effective treatment time, based on pest biology, monitoring, and other variables, such as weather, seasonal changes in wildlife use, and local conditions; and
10. Whenever possible, use pesticide application methods, such as containerized baits, that minimize opportunities for mobilization of the pesticide in stormwater runoff.

Departments performing pest management activities will identify an IPM coordinator who is responsible for assisting staff with implementation of this IPM policy.

## BACKGROUND

Pesticides are defined as: any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest. Pests can be insects, rodents and other animals, unwanted plants (weeds), bacteria or fungi. The term pesticide applies to herbicides, fungicides, insecticides, rodenticides, molluscicides and other substances used to control pests.

Integrated Pest Management (IPM) is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and nontarget organisms, and the environment.

IPM techniques could include biological controls (e.g., ladybugs and other natural enemies or predators); physical or mechanical controls (e.g., hand labor or mowing, caulking entry points to buildings); cultural controls (e.g., mulching, alternative plant

type selection, and enhanced cleaning and containment of food sources in buildings); and reduced risk chemical controls (e.g., soaps or oils).

City owned or managed property/facility includes but is not limited to parks and open space, golf courses, roadsides, landscaped medians, flood control channels and other outdoor areas, as well as municipal buildings and structures.



**City of Foster City**  
**Standard Operating Procedures for Pesticide Use and Implementation**  
**of Municipality's Integrated Pest Management Policy**

**Purpose:** To minimize the use and reliance on pesticides that threaten water quality by implementing the city's policy [or ordinance] for integrated pest management (IPM) by all municipal employees and contractors hired to manage pests on municipal property.

**Responsible Parties:** All city personnel that as part of their municipal job duties are authorized to plan, manage, and control pests including pesticide applications and all city personnel that administer municipal contracts for applying pesticide on municipal property.

**Contracts & Contractors:** Contracts shall include a requirement that the contractor shall adhere to the city's IPM policy. This will be accomplished by using the following procedures:

1. Include a copy or link to the municipality's IPM policy in the contractor solicitation documents, e.g., Request for Proposal or Request for Quote, and make it clear that the pest control services being solicited must comply with the IPM policy.
2. Include a copy of the municipality's IPM policy in the contract's specifications.
3. Meet with the contractor to review the City's IPM policy.

**Municipal Employees:** Municipal employees who are authorized to manage pests are required to implement the city's IPM policy. This will be accomplished by using the following procedures:

1. Use cultural practices and pest prevention measures to minimize the occurrence of pest problems.
2. Set a threshold of tolerance for pests.
3. Use biological and physical controls that are environmentally appropriate and economically feasible to control pests.
4. Use chemical control as a last resort, and then the least toxic product will be used. Where feasible for structural pest control, insecticides will be applied as containerized baits.
5. Avoid the use of pesticides that threaten water quality<sup>1</sup> especially in formulations and situations that pose a risk of contaminating stormwater runoff.
6. Train employees on IPM techniques, pesticides-related stormwater pollution prevention methods, the municipality's IPM policy, and these standard operating procedures.
7. As part of the municipality's annual report for the municipal regional stormwater permit, report on the IPM policy's implementation by showing trends in the quantities and types of pesticides used and suggest reasons for any increases in uses of pesticides that threaten water quality<sup>1</sup> (as required by municipal regional stormwater permit Provision C.9.b.).

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<sup>1</sup> The municipal regional stormwater permit identifies the following pesticides as having a concern to water quality: "organophosphorous pesticides (chlorpyrifos, diazinon, and malathion); pyrethroids (bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin, and tralomethrin); carbamates (e.g., carbaryl); and fipronil." (Provision C.9)