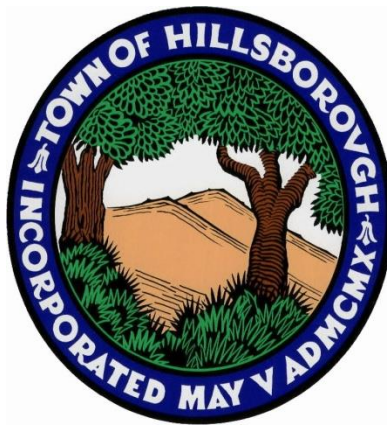


TOWN OF HILLSBOROUGH

Integrated Pest Management Policy & Standard Operating Procedures for Policy Implementation



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2014 – INTEGRATED PEST MANAGEMENT POLICY AND STANDARD OPERATING PROCEDURES FOR POLICY IMPLEMENTATION

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SCOPE OF WORK FOR INTEGRATIVE PEST MANAGEMENT

The Town of Hillsborough (Town) has an Integrated Pest Management Policy (*see* Attachment A: Integrative Pest Management Policy). The Town's Integrated Pest Management Policy (IPM) strives to promote Integrated Pest Management best practices as strategies to improve water quality in local creeks and the San Francisco Bay, and independent of the policy, minimizes health hazards to individuals from pesticide exposure. IPM emphasizes the use of extensive knowledge about the target pests, such as infestation thresholds, life histories, environmental requirements and natural enemies to compliment and facilitate biological and other natural control measures of pests. The IPM allows for the use of the least toxic pesticides only as a last resort for controlling pests.

Service provider(s) shall conform to Town's IPM Policy in the following manner:

1. Furnish all supervision, labor, materials, and equipment necessary to evaluate, monitor, and provide pest management services for the Town of Hillsborough buildings, parks and landscape areas.
2. Whenever feasible, utilize pest management techniques that employ least toxic chemicals and non-pesticide alternatives.
3. Using IPM strategies, control structural pests that include:
 - a. Insects and other arthropods: These include ants, cockroaches, yellow jackets and other wasps and bees, and any other arthropod pest not specifically excluded from the contract.
 - b. Mice and rats: Adequately suppress rats and mice found inside and outside buildings. Service pick-up and proper disposal of dead vertebrates.
 - c. Pests excluded from service:
 1. Termites and other wood destroying organisms
 2. Mosquitoes (mosquito abatement)
 3. Pests that primarily feed on outdoor vegetation unless they are invading a structure
 4. Birds, bats, snakes and all other vertebrates not listed above
 - d. Removal of stinging insects: service provider will remove nests of stinging insects within the property boundaries of specified buildings. Identify options where bee hives can be relocated and not destroyed.



- e. Reduce pest problem hotspots with the goal of solving structural and hygiene challenges so that facilities currently requiring a monthly service can reduce their service needs.
4. Control pests while minimizing human exposure, secondary poisoning to non-target animals and pesticide-related water pollution by adhering to the following conditions:
 - The following products may not be used for insect control:
 - Products with the active ingredient on the list of chemicals that are known to the State of California to cause cancer or reproductive toxicity (Prop 65).
 - Organophosphate products (e.g., diazinon or chlorpyrifos)
 - Carbamate products (e.g., carbaryl)
 - Pyrethroid products (e.g., Allethrin, Beta-Cyfluthrin, Bifenthrin, Cyfluthrin, Cypermethrin, Deltamethrin, d-trans allethrin, Esbiothrin, Esfenvalerate, lambda-Cyhalothrin, Permethrin, Phenothrin, Prallethrin, Resmethrin, s-Bioallethrin, Sumithrin, Tau-Fluvalinate, Tetramethrin, Tralomethrin)
 - Fipronil
 - Containerized baits are preferred for ant control
 - No spray insecticides may be used except insecticidal soaps and plant-based products (e.g., pyrethrins, mint oil, rosemary oil, etc.). Emergency use of other pesticides may be authorized by the City employee responsible for administering the service agreement (Project Manager).
 - Trapping and exclusion will be the primary rodent control methods. To prevent bait resistance and secondary poisoning, rodent baits will only be used when trapping and exclusion are unsuccessful and in consultation with the Project Manager.
 - No outdoor applications of pesticides of any kind will be applied on impervious surfaces when a 40% or greater chance of rain is forecast within three days unless the pesticides are containerized baits that will not contribute to runoff pollution.
 - Prior to application, notify manager or supervisors overseeing the employees in the working areas that are to be treated with any pest control product other than containerized baits. New products that the service provider may wish to use mid-contract must be approved by the Project Manager prior to use.



5. Respond to new or emergency pest management requests within 24 hours of service call.
6. Reduce pest populations at sites designated by the Project Manager that have historically had regular pest problems requiring periodic service with the goals of:
 - a. Reducing the frequency and severity of pest problems using IPM strategies,
 - b. Reducing access and favorable conditions that support pests, and
 - c. Reducing need for monthly pesticide applications. If the City does not provide the repairs or hygiene needed, the service provider is not responsible for the continuation of pest problems. Frequency of site visits may be reduced or eliminated at the discretion of the Project Manager when pest problems subside.
7. Contractor shall obtain and comply with pest specific to the Town's accepted Best Management Practices (BMPs) such as www.cabmphandbooks.com and Standard Operating Procedures (SOPs) stated within the Town's IPM Policy. If contractors wish to propose the use of other BMPs and SOPs, the contractor must submit a copy of the proposed BMPs and SOPs in writing to the contract manager for review and approval. Town approval of BMPs and SOPs will be based on degree of conformance with the Town's IPM Policy, MP and SOPs.
8. Pest management and pesticide use tracking and reporting. The following records will be kept and procedures followed while servicing these sites:
 - a. *Inspection Report*. Provide inspection and service receipt to Project Manager or their designee after each site visit.
 - b. *Pesticide Use Report*. Provide monthly pesticide reporting information using the standard California Department of Pesticide Regulation form PR-ENF-060 or equivalent. The Pesticide Use Report shall contain the following information:
 1. Date and time of pesticide application or service,
 2. Site of the pesticide application (and Project ID/Purchase order, if applicable),
 3. Manufacturer and name/formulation of product applied,
 4. Pesticide EPA registration number,
 5. Targeted pest,



6. Amount of product applied,
7. Town generated work order with reference number,
8. Date of time of receipt of request and to include the following:
 - i. Name of site contact
 - ii. Prevention and other non-chemical methods of control use
 - iii. Recommendations for further prevention
 - iv. Recommendation for continued treatment based on IPM (including cause of problem source of pest entry to facility, etc.)
 - v. Square footage of area serviced
9. The Town may withhold payment for services until the report for the invoice month is received and approved. The report shall include location inclusive of the contract agreement with the Town of Hillsborough.

9. Proof of Qualifications

- a. Service provider will be in compliance with all federal, state, and local pest control operator requirements and regulations and maintain current licenses. Service provider will be IPM-certified. Service provider for landscaping shall be trained by a professional company such as the Bay-Friendly Landscaping and Gardening Coalition. The following firms offer instruction and certification determined by the Regional Water Quality Control Board to satisfy standards of training for IPM:
 1. Eco Wise Certified. <http://ecowisecertified.org/index.html>
 2. Green Shield. <http://www.greenshieldcertified.org/getcertified/>
 3. GreenPro. <http://www.npmagreenpro.org/>
 4. Bay-Friendly Landscaping & Gardening Coalition. <http://bayfriendlycoalition.org/>

This is not intended as an endorsement of any particular firm. To determine if other firms may offer qualifying training, please contact the Regional Water Quality Control Board at 510-622-2300, or info1@waterboards.ca.gov.



INTEGRATIVE PEST MANAGEMENT POLICY

GOAL

The Town of Hillsborough 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 owned or managed by the Town to the maximum extent practicable.

Employees implementing pest management operations will use Integrated Pest Management (IPM) techniques that emphasize non-pesticide alternatives and, when necessary, employ the least toxic chemicals. Preference will be given to contractors who implement IPM. The Town departments and their contractors that apply pesticides will develop and maintain an active IPM Plan to ensure the long-term prevention and suppression of pest problems with minimum negative impacts on the health and safety of the community and environment. The Town will track employee and contractor pesticide use and prepare an annual report summarizing pesticide use and evaluating pest control activities performed.

The Town will review its purchasing procedures, contracts or service agreements with pesticide applicators and employee training practices to determine what changes can be made to support the goal of pesticide reduction and promote the purchase and use of the least harmful chemicals.

The Town 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.

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.

Antimicrobial agents are not included in this definition of pesticides. In general, the intent of antimicrobial agents is to reduce or mitigate the growth or development of microbial organisms. They are used to avoid health hazards and include in-door cleaning, spa and swimming pools, medical sterilizer and sanitizer products.

Integrated Pest Management 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 non-target 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); cultural controls (e.g., mulching, diskings, or alternative plant type selection); and reduced risk chemical controls (e.g., soaps or oils).

Town owned or managed property 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.

REQUIRED USE OF INTEGRATED PEST MANAGEMENT

Employees and Contractors implementing pest management controls will use 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 Town are **REQUIRED** to implement IPM to control pests. Landscaping Contractors will have to be certified or they will be required to hire only IPM-certified pest control contractors to apply pesticides. The contract specifications outline the implement IPM methods.

The Town has established written standard operating procedures for pesticide use to ensure implementation of this IPM policy and to require municipal employee, landscaping contractors and pest control contractors to comply with the standard operating procedures.

The Town is tracking employee and contractor pesticide use and prepares an annual report summarizing pesticide use and evaluating pest control activities performed consistent with the municipal regional stormwater permit's requirements.

The Town annually reviews 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 Town will continue to offer and 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.



DECISION MAKING HIERARCHY TO CONTROL PESTS

The IPM-based hierarchical decision making process 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.



STANDARD OPERATING PROCEDURES FOR IMPLEMENTATION OF INTEGRATIVE PEST MANAGEMENT POLICY

OBJECTIVE

To minimize the use and reliance on pesticides that threaten water quality by implementing the Town's policy for integrated pest management (IPM) by all Town employees and contractors hired to manage pests on Town property.

RESPONSIBLE PARTIES

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

CONTRACTS & CONTRACTORS

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

1. Include a copy of the Town'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 Town's IPM policy in the contract's specifications.
3. Meet with the contractor to review the Town's IPM policy.

MUNICIPAL EMPLOYEES

Town employees who are authorized to manage pests are required to implement the Town'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 quality¹ especially in formulations and situations that pose a risk of contaminating storm water runoff.
6. Train employees on IPM techniques, pesticides-related storm water pollution prevention methods, the municipality's IPM policy, and these standard operating procedures.

As part of the Town's annual report for the municipal regional storm water 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 quality¹ (as required by municipal regional storm water permit Provision C.9.b.).

¹ The municipal regional storm water 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)