

**City of Mill Valley
Integrated Pest Management Policy**

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I. PREAMBLE

The City of Mill Valley is nestled amongst majestic redwood groves at the base of Mt. Tamalpais. This amazing landscape draws to it people who appreciate the spiritual and physical power of nature. Many Mill Valley residents are very committed to environmental stewardship and support local government efforts to reduce pesticide use.

City Staff tasked with maintaining City infrastructure, parks, fields and open spaces also have a deep commitment to environmental protection. Examples of natural methods of pest and weed control employed by City staff at the City's Municipal Golf Course are:

- Installation of owl boxes to encourage nesting and management of local rodent populations.
- Installation of beneficial insect gardens that attract and house predatory insects.
- Installation of California native gardens that match local microclimates and provide habitat to local insects and wildlife.
- Use of *Bacillus thuringiensis* (Bt), a soil-dwelling bacterium commonly used to control omnivorous leaf-roller populations.
- Hand pulling of weeds in medians to reduce pre-emergence pesticide applications.
- Replacing inorganic fertilizer applications on selected athletic fields with composting to increase soil health and water conservation.
- Soil aeration and compost topdressing of athletic fields and golf course greens to control thatch layers and reduce insecticide and fungicide applications.

These efforts, along with establishing acceptable threshold levels of pest activity and a "no action" approach have already significantly reduced pesticide use within the city. The City will continue to implement biological controls, adjust cultural practices, and modify habitats to match local micro climates - all practices that meet the intent of an Integrated Pest Management (IPM) policy to reduce and control pests.

New Requirements

The 2013 Phase II Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit¹ (hereafter Phase II Permit), Attachment G, outlines Total Maximum Daily Load (TMDL) requirements. The *Urban Creek Diazinon and Pesticide Toxicity TMDL* (Resolution # R2-2005-0063) requires the adoption of an Integrated Pest Management (IPM) Policy or Ordinance applicable to all the CITY's operations and property and consistent with the TMDL implementation plan requirements.

In addition, the Phase II Permit requires the CITY to implement a landscape design and maintenance program to reduce the amount of water and pesticides used during CITY operations and activities. The CITY must evaluate pesticide use and application activities performed and then implement practices that reduce the discharge of pesticides. By implementing the IPM Policy the CITY will comply with the pesticide-related landscape management measures.

It is the purpose and intent of this IPM Policy to reduce reliance on and minimize use of pesticides which threaten water quality in CITY's operations and on CITY property. It is also the purpose and intent of this IPM Policy to outline how CITY departments are to perform pest management and to ensure compliance with the CITY's IPM Policy. In addressing pest management needs, the CITY shall focus on long-term prevention or ongoing suppression of pest problems, including consideration of a "no action" approach to minimize or preclude the need to use chemical pest control methods.

The CITY recognizes that pesticides are potentially hazardous to human health, wildlife, and the environment and the CITY shall give preference to available, safe, and effective non-pesticide alternatives and cultural practices when considering options for pest management on CITY property.

A. CITY Policy

It is the policy of CITY that:

¹ Order No. 2013-0001, adopted February 5, 2013

1. Departments performing pest management will comply with the CITY's IPM Policy. This policy will apply to all property owned, leased, or managed by the CITY, including all CITY departments.
2. Departments will require contractors providing pest management services to the CITY to comply with the CITY's IPM Policy.
3. The CITY's IPM program will include the following components:
 - a) Educate and train CITY staff in the IPM program, practices and policy.
 - b) Require CITY pesticide application contractors to implement the IPM Policy on all property owned, leased, or managed by the CITY and to report the types and amounts of pesticides used by the contractor on CITY said property.
 - c) Reduce to the maximum extent practicable the use of pesticides.
 - d) Consider taking a "no-act ion" approach in addressing certain pest control issues.
 - e) Review and consider available non-chemical options before using a chemical pesticide.
 - f) Identify pests and least toxic methods to control pests.
 - g) Identify, evaluate and minimize or eliminate conditions that encourage pest problems.
 - h) Conduct careful and efficient inspection, monitoring, and assessment of pest problems by designated personnel or contractor knowledgeable of IPM methods.
 - i) Maintain records by CITY departments on IPM methods considered and used to prevent and control pests.
 - j) Comply with all applicable state and federal regulations, including pesticide use and reporting.
 - k) Provide open public access to all IPM program information and records.
 - l) Conduct decision-making based on the best available science and data.
 - m) Refer residents and pest control operators to the Marin County Stormwater Pollution Prevention Program and the University of California State-wide Integrated Pest Management Program for information on less toxic methods of pest control; and,
 - n) Keep the County Agricultural Commissioners informed of water quality issues related to pesticides and of violations of pesticides regulations (e.g., illegal handling) associated with storm water management;
4. The City will not use "Pesticides of Concern" as defined by the San Francisco Bay Regional Water Quality Control Board in Attachment G of the 2013 Phase II Permit.

B. IPM Goals

IPM goals regarding pesticide selection and use include:

1. Use pesticides only when necessary and select a pesticide that is both effective and least toxic.
2. Designate playgrounds and picnic table areas on CITY property as pesticide-free.
3. Comply with the Phase II Permit by incorporating the following practices into the City's landscape maintenance and design program(s):
 - a) Evaluate pesticides, herbicides and fertilizers used and application activities performed and identify pollution prevention and pollution source control opportunities.
 - b) Collect and properly dispose of unused pesticides, herbicides, and fertilizers.
 - c) Create a soil microbial community through the use of compost, compost tea, or inoculation;
 - d) Use native and/or climate appropriate plants to reduce the amount of water, pesticides and fertilizers used;
 - e) Practice grasscycling on decorative turf landscapes to reduce water use and the need for fertilizers;
 - f) Prevent application of pesticides and fertilizers during irrigation or within 48 hours of predicted rainfall with greater than 50% probability as predicted by National Oceanic and Atmospheric Administration (NOAA)20;
 - g) Limit or replace pesticide use with alternatives such as conducting manual weed and insect removal;

- h) Prohibit application of pesticides as required by the regulations DPR 11-004 Prevention of Surface Water Contamination by Pesticides enacted by the Department of Pesticide Regulation;
- i) Minimize irrigation run-off by using best management practices to limit evapotranspiration.
- j) Reduce mowing of grass to allow for greater pollutant removal, but not jeopardizing public safety.

II. DEFINITIONS FOR USE WITH THIS POLICY

- A. "Best Management Practices" or "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.
- B. "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, lease or occupy property of the CITY for a specified purpose or purposes, or requires that the pesticides be applied.
- C. "Contractor" means a person, firm, or corporation or other entity, including a governmental entity that enters into a contract with the CITY; this may include pest management services. "CITY Department" means any department of the CITY and may include pesticide applicators hired by a CITY Department to apply pesticides on CITY property. CITY Department does not include any other local City or any federal or state City.
- D. "CITY Property" means property owned, leased or managed by the CITY.
- E. "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.
- F. "Integrated Pest Management" or "IPM" means a decision-making and record-keeping process for managing pests that uses monitoring to determine pest injury levels and combines biological, cultural, mechanical, physical, and chemical tools and other management practices to control pests in a safe, cost effective, and environmentally sound manner that contributes to the protection of public health and sustainability. This method uses extensive knowledge about pests, such as infestations, thresholds, life histories, environmental requirements, and natural enemies to complement and facilitate biological and other natural control of pests. The method involves the use of non-chemical pest control methods and the careful use of least-toxic chemical methods when non-chemical methods have been exhausted or are not feasible.
- G. "IPM Coordinator" means the designated employee experienced in IPM field and office work and is responsible for IPM program coordination for the CITY.
- H. "IPM Policy" means this Integrated Pest Management Policy.
- I. "Organic Materials Research Institute" or "OMRI" means an organization that determines which input products are allowed for use in organic production and processing.
- J. "Pest" means any pest as defined in Section 12754.5 of Chapter 2 of Division 7 of the California Food and Agricultural Code. Pest includes any of the following that is or is liable to become, dangerous or detrimental to the public health or the agricultural or nonagricultural environment of the state:
 - (1) Any insect, predatory animal, rodent, nematode or weed;
 - (2) 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);
 - (3) Anything that the Secretary of the California Department of Food and Agriculture or the Director of Pesticide Regulation for the California Department of Food and Agriculture by regulation declares to be a pest.

- K. "Pest Control Adviser" or "PCA" means any person possessing a current pest control adviser license issued by the California Department of Pesticide Regulation. The PCA license is required for making pest control recommendations in the landscape setting.
- L. "Pest Control Operator" or "PCO" means any person possessing a current pest control operator license issued by the California Department of Pesticide Regulation. The PCO license is required when performing structural pest control.
- M. "Pesticide" means pesticide as defined in Section 12753 of Chapter 2 of Division 7 of the California Food and Agricultural Code. Pesticide includes any of the following:
 - (1) Any substance or combination of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling or mitigating any pest which may infest or be detrimental to vegetation, man, animals or households or be present in any agricultural or nonagricultural environment whatsoever;
 - (2) Any spray adjuvant.
- N. "Pesticide applicator" means any person or company hired by a CITY Department who applies pesticides, as defined in this section, to property owned, leased or managed by the CITY.
- O. "Pesticide List" and "List of Pesticides" are used interchangeably.
- P. "Pesticides of Concern" are defined by the San Francisco Bay Regional Water Quality Control Board in Attachment G of the 2013 Phase II Permit and include organophosphorous pesticides (chlorpyrifos, diazinon, and malathion); pyrethroids (bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin, and tralomethrin); carbamates (e.g., carbaryl); and fipronil.
- Q. "Phase II Permit" means the State Water Resources Control Board's Phase II Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) General Permit, Order No. 2013-0001, adopted February 5, 2013.
- R. "Request for Proposal" or "RFP" means an invitation for suppliers to submit a proposal on specific supplies or services. The Request process brings structure to the procurement decision. The RFP may dictate to varying degrees the exact structure and format of the supplier's response.
- S. "Special Use Pesticides" means materials that do not meet the IPM Policy criteria for use, but are considered critical to the protection of public health and safety, the environment, wildlife, or the preservation of CITY property.
- T. "Toxicity Category I; II, III, IV product" means any pesticide, as defined in this section, meeting 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.

III. IPM COORDINATOR

A. Designation of IPM Coordinator

The CITY's Public Works Director shall designate an IPM Coordinator who will operate within the CITY to coordinate implementation of the IPM Policy.

B. Responsibilities of IPM Coordinator

The IPM Coordinator shall:

1. Ensure each CITY department understands the requirements of the CITY IPM Policy.
2. Organize IPM trainings for staff as needed.
3. Develop Best Management Practices (BMPs) and work with CITY staff performing pest management to develop forms summarizing pesticide use, and a form for exemption requests.
4. Ensure that any public health issues are addressed as needed.

5. Use a standardized design for a pesticide application notification sign that includes the date of application, the name and type of product used, the signal word, and a contact telephone number where the public may call for information about the proposed application.
6. Establish and maintain an accurate pesticide application recordkeeping and reporting system that includes CITY's own use of pesticides and pesticides used by contractors on CITY-owned, leased and maintained property. The recordkeeping and reporting system will identify any pesticides of concern.
7. Review such records and reports to ensure compliance with the IPM Policy.
8. Develop and maintain a list of pesticides that may be used by the CITY. Request information and maintain records on inert ingredients from manufacturers of any pesticide used on CITY property.
9. For Phase II Permit annual reporting purposes, track the CITY's pesticide use, best management practices, trainings offered or attended, and progress towards any benchmark reductions.
10. Provide information to the CITY's Storm water Coordinator for the stormwater Annual Report and the reporting required by the *Urban Creek Diazinon and Pesticide Toxicity TMDL* and by *Phase I Permit Provision E.II.j. Landscape Design and Maintenance*.

C. CITY Departments and Offices Requiring Pest Control on an As-Needed Basis

CITY departments and offices requiring pest control on an as-needed basis are to maintain a Best Management Practices (BMP) fact sheet. *Treatment Report Forms* will provide a record of any treatments made at that site. BMP and treatment report forms shall be developed by the IPM coordinator with the assistance of CITY staff.

BMP fact sheets are to outline employee responsibilities in maintaining a pest free environment, identify pests likely to be encountered, identify who to contact when pests are found, and articulate immediate steps to mitigate the problem until pest management professionals arrive.

Treatment report forms shall document any pesticide or other treatment on the site documenting the treatment date, pest, and material or practice applied. BMP and treatment report forms are readily available to staff, the IPM Coordinator, and members of the public upon request.

Assessment of Condition/Need

When a report of a pest problem is received, an assessment will be performed by a person knowledgeable in pest management. This assessment should confirm and identify the pest, establish what actions have already been taken, and if further action is deemed necessary that person will contact the appropriate department responsible for performing pest management functions. That department, in consultation with the IPM coordinator (as needed), will determine whether a pest complaint warrants further action. Appropriate non-chemical options such as cultural practices and additional BMPs shall be considered at this time.

If it is determined that it may be necessary to use a pesticide in the landscape, an assessment of the site and pest will be done by a licensed Pest Control Adviser. For structural treatment, a licensed Pest Control Operator will determine appropriate products for treatment that will include only those pesticide products allowed for use on CITY property and will follow the "Guidelines for Pesticide Selection" (Section VI). These recommendations for treatment shall specify the material to be used, the pest to be controlled, the rate of application, the dilution, and specify practices to address environmental or health hazards associated with that material's use.

Playgrounds and picnic areas shall be designated as pesticide-free zones. No chemical controls shall be used in these areas unless required to protect public health and safety per the Limited Use Exemption Process. Products will only be used in conjunction with a comprehensive renovation program based on best management practices and every effort will be made to reduce the need for additional treatment in the future.

Buffer zones around pesticide-free zones and adjacent to waterways and wetlands will be determined by Federal, state, and local requirements.

No rodenticide baits will be applied in open areas unless under an exemption, and no such baits will be used in areas where owl boxes are present. Mechanical snap traps are to be used whenever possible and practical on CITY properties.

In areas where it is determined appropriate to use rodenticides, they shall only be used in association with anchored and locked bait boxes.

Guidelines for Pest Treatment

If it is determined that treatment is needed, the following criteria are to be used in determining the appropriate treatment strategy:

1. Least-disruptive of natural controls;
2. Least-hazardous to human health;
3. Least-toxic to non-target organisms;
4. Protective of wildlife and the native habitat;
5. Least-damaging to the general environment;
6. Cultural, biological, and mechanical solutions have been considered and evaluated;
7. Prior treatments used on site to control the pest and an evaluation of the success of that approach;
8. Most likely to produce a permanent reduction in the environment's ability to support target pests; and
9. Cost effectiveness in the short and long term.

VI. GUIDELINES FOR PESTICIDE SELECTION

A. Development of List of Pesticides allowed for Use on CITY Property

It is a goal of CITY to minimize the use of pesticides by giving preference to eco-exempt products and those approved by the Organic Materials Research Institute (OMRI) or by the National Organic Program for use in organic systems as available and effective.

The IPM coordinator will maintain a list of pesticides allowed for use as part of the CITY's IPM program. This list will include the EPA registration number, the active ingredient(s), the signal word, the product formulation, and use.

This list will be developed by the IPM coordinator in cooperation with CITY departments and will be available for review and comment by the Public Works Director within sixty (60) days after the adoption of this policy. Any proposed changes are to be submitted to the Public Works Director for approval.

B. Chemical Prohibitions for the Pesticide List

Except as noted under the special use category, pesticides included in the pesticide list shall not contain ingredients identified in the following sources:

1. California's Proposition 65 list (the Safe Drinking Water and Toxic Enforcement Act of 1986, materials known to the State to cause cancer or reproductive or developmental toxicity).
2. Organophosphates, or organochlorines, or carbamates listed by the United States Environmental Protection Agency (Office of Pesticides Programs, Document 735-F-99-14, May 1999), or California Environmental Protection Agency, Department of Pesticide Regulation Chemical Inquiries Database.
3. The City will not use "Pesticides of Concern" as defined by the San Francisco Bay Regional Water Quality Control Board in Attachment G of the 2013 Phase II Permit.

C. Special Use Pesticide Category

There may be circumstances when it is necessary to use a pesticide that does not meet the criteria for use under Section V.B.(1)-(3). The pesticide list may include these special use categories of materials that are considered critical to the protection of public health, the environment, wildlife, safety, or the preservation of CITY property. These materials will only be used in conjunction with an IPM program where there are no feasible alternatives. These products will be identified on the pesticide list which will specify:

1. The particular criteria that is inconsistent with Section B above.
2. The specific circumstances and conditions for which the product may be used.
3. The method of application.

4. How the site is to be managed to preclude potential exposure.

D. Benchmark Pesticides

Some of these special use pesticide category products may pose a particular environmental concern or health risk. There may be circumstances when the analysis of alternatives for a particular site indicates the necessity for limited use of such products. Benchmark reductions for these products will be developed as part of the site-specific pest management plans. Because these are products of particular concern, it is the goal of the CITY to eliminate benchmarked products. Their use will be reduced over time as effective less toxic alternatives are identified, and those alternatives are added to the pesticide list to substitute for the benchmarked pesticide.

Departments having the need to use bench marked products will annually provide an explanation of why product use was necessary, discuss potential alternatives, and outline a plan for implementation of feasible alternatives at a meeting with the IPM Coordinator. Progress towards meeting the benchmarks for reduction will be reviewed at that time.

A pesticide product not listed in the special use pesticide category may still be targeted for benchmark reductions if identified by the IPM Coordinator.

E. Limited Use Exemptions

CITY departments responsible for performing pest management shall submit a request for an exemption to the IPM coordinator to use a pesticide that is not on the pesticide list as per Sections (B) and (C) above. The IPM coordinator may approve a limited use exemption request if the material is being used in association with an active IPM program and the department, through submittal of an exemption request form, has demonstrated that:

1. A compelling need to use the pesticide, such as public health or safety, or substantial economic detriment;
2. The investigating of all available options and finding of no viable alternatives;
3. The development of a plan to preclude the need for future use; and
4. It is the department's intent to use the material for a limited period of time.

The IPM coordinator shall report any limited use exemptions as part of the annual report to the Public Works Director.

VII. CONTRACTS, NOTIFICATION, AND RECORDKEEPING

A. IPM Contracts

All contractors who manage pests on CITY owned, leased, or managed property shall be required to adhere to the guidelines established in the CITY's IPM Policy.

Contractors are required to maintain records of pest control activities, and submit a summary of activities to the department upon completion of the job. Contractors providing regular and ongoing service shall submit summaries to the department on a monthly basis.

Records are to include the date, name of the pest, the site/location where the work was done, name of the technician performing the work, and corrective action(s) taken. If a pesticide was used, the product name and amount applied must also be reported.

Contractors are required to comply with the notification requirements as listed in this policy.

B. Notification

The CITY shall provide the public and its employees with notification of pesticide applications through the use of signs.

1. Signs should be posted at all regular public and employee points of entry to the treated area pursuant to state and/or federal law, CITY IPM Policy, and according to product label instructions.
2. Signs shall be posted 24 hours in advance of application and remain in place for 24 hours following the application unless the manufacturer's product label specifies a longer posting period. If volatile pesticides are sprayed indoors for structural application, notification signs shall be posted seven (7) days in advance of application and remain in place for seven (7) days following the application.
3. Signs shall contain the name and active ingredient(s) of the pesticide product, the target pest, signal word indicating the toxicity category of the pesticide product, the re-entry interval as determined by the product label or regulation, the name and contact number for the CITY department responsible for the application.
4. Signs should be of a standardized design that is easily recognizable to the public and employees.
5. CITY departments shall not be required to post signs in right-of-way locations that the general public does not use for recreation or pedestrian purposes, such as median strips.
6. CITY departments may obtain authorization from the IPM coordinator to apply a pesticide without providing a 24 hour advance notice if there is a compelling need to use the pesticide, such as a threat to public health, safety, CITY property, or substantial economic detriment. Signs shall be posted as soon as possible prior to application, and remain posted following the application for 24 hours.

C. Recordkeeping and Reporting

The CITY's IPM program is based on BMP fact sheets that guide pest management practices, careful and efficient inspection and monitoring of pest problems, as well as the maintenance of records by designated personnel who are knowledgeable in IPM methods.

All records and information concerning the CITY IPM program will be made available to employees and the public upon request in accordance with all applicable state and CITY laws governing public access to information.

The Public Works Department is responsible for IPM program implementation and shall maintain records of pest related treatments, including management, cultural practices, and chemical methods. These records shall be maintained per the CITY and state records retention policies and/or law.

Contractors shall: Maintain application records and treatment information as outlined in Section VII.C.I) and are to provide this information to the IPM Coordinator immediately upon completion of treatment so the department can fulfill reporting obligations. For structural treatments, the contractor will also update the treatment report form immediately following treatment.

The IPM Coordinator shall: Maintain all necessary records in order to prepare an annual report that includes a review and summary of the CITY's pesticide use, cultural practices and non-chemical pest control activities, exemptions granted, training offered, any proposed modifications to the CITY's pesticide list and any suggestions for amendments or resources needed for effective implementation of the IPM Policy.