



APPENDIX A

City of Merced Integrated Pest Management Policy

I. PREAMBLE

The City of Merced (City) is committed to implementing an Integrated Pest Management (IPM) approach to guide the management of its facilities, landscaped areas, and rights-of-way. The IPM approach promotes the protection of the residents and visitors, as well as the local waterways, and utilizes a pest management strategy that promotes the long-term suppression of pest problems with minimum impact on non-target organisms and the environment.

The adoption of this IPM Policy facilitates compliance with the Phase II Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit and the Basin Plan Amendment (BPA) for the Control of Pyrethroid Pesticide Discharges (Resolution R5-2017-0057).

II. APPROACH

For the purposes of its IPM policy, the City adopts the following University of California Statewide Integrated Pest Management¹ (UC-IPM) definition:

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.

III. PURPOSE

It is the purpose and intent of this IPM Policy to:

- a) Reduce reliance on and minimize the use of pesticides² as a part of City operations and on City property and rights-of-way that may adversely impact water quality; and
- b) Outline how City departments are to perform pest management so that it is consistent with this IPM Policy.

IV. SCOPE

The IPM Policy governs City employees and contractors hired by City departments and persons acting under the authority of the City in the care and maintenance of City facilities, landscaped areas, and rights-of-way.

The term “pesticides” is a general term that includes herbicides, insecticides, fungicides, and rodenticides.

V. POLICY

It is the policy of the City that:

¹ <https://www2.ipm.ucanr.edu/what-is-IPM/>

² As defined in Section 12753 of Chapter 2 of Division 7 of the California Food and Agricultural Code.



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1. Departments performing pest management will conform with the City's IPM Policy.
2. The City's IPM approach will include the following:
 - a) Educate and train City staff in the IPM program, practices, and policy.
 - b) Require City staff and pesticide application contractors to implement the IPM Policy on all City facilities, landscaped areas, and rights-of-way and to maintain records on and report the types and amounts of pesticides used, as well as IPM methods considered and used to prevent and control pests.
 - c) Reduce to the maximum extent practicable the use of pesticides.
 - d) Consider taking a "no-action" approach in addressing certain pest control issues.
 - e) Review and consider available non-chemical options before using a chemical pesticide.
 - f) Identify 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 on IPM methods considered and used to prevent and control pests.
 - j) Comply with all applicable local, State of California (State), and federal regulations, including pesticide use and reporting.
 - k) Conduct decision-making based on the best available science and data.
 - l) Refer residents and pest control operators to the City's stormwater program and the Merced County Department of Agriculture Weights and Measures³ for information on less toxic methods of pest control.
 - m) Provide public access to the City's IPM Policy.
3. IPM Policy General Requirements:
 - a) Eliminate the use of Category I pesticides.
 - b) Minimize the use of Category II, III, and IV pesticides.
 - c) Eliminate the use of pesticides that are classified by government agencies as known carcinogens, reproductive toxicants (teratogens, mutagens), endocrine disruptors, carbamates, organophosphates, or ground water contaminants.
 - d) Use pesticides only when necessary and select a pesticide that is both effective and least toxic.
 - e) Develop pest-specific plans to prevent or reduce the incidence of pest problems.
 - f) Require City staff and pesticide application contractors to comply with the Phase II Permit requirements to reduce the amount of pesticides and herbicides used during municipal operations and activities by implementing the City's [Landscape Design and Maintenance Program].

³ <https://www.countyofmerced.com/154/Weights-and-Measures-Department>



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VI. IMPLEMENTATION

This IPM Policy shall be implemented by City departments and through an IPM Coordinator. Several areas important to the implementation of the IPM Policy are outlined below, including a description of the IPM Coordinator role.

a. IPM Coordinator

The Tax Services Manager is designated as the City's IPM Coordinator and is responsible for coordinating with the departments involved in pest management to ensure that the IPM Policy is implemented. The IPM Coordinator is assisted by the City's Water Quality Control Division.

The primary responsibilities include the following:

1. Education and Training:
 - a) Communicate the goals and requirements of the IPM Policy to City departments.
 - b) Request and maintain information regarding the City's IPM trainings offered or attended.
 - c) Provide information to City staff performing pest management as needed to ensure that the requisite IPM practices are implemented.
2. IPM Applications and Guidelines:
 - a) Ensure City staff and pesticide application contractors are authorized as Pesticide Applicators and are complying with the City's IPM Policy.
3. Product Selection and Product Use Approval:
 - a) Work with City staff performing pest management to develop a form for exemption requests.
 - b) Ensure that no products on the prohibited use product list are applied unless the City approves an exemption request.
4. Pesticide Application Contracts:
 - a) Ensure that contracted pesticide applicators are appropriately trained and certified, implement IPM, and follow the City's standard operating procedures.
5. Record Keeping:
 - a) Work with City staff performing pest management to develop forms summarizing pesticide use.
 - b) Provide direction regarding the pesticide application recordkeeping and reporting of the methods and pesticides used/applied on the City's facilities, landscaped areas, and rights-of-way.
 - c) Review the pesticide application records (Pesticide Use Reports (PURs)) and follow-up reports to ensure that the activities are consistent with the IPM Policy.
 - d) Provide information to the City's Water Quality Control Division for the stormwater Annual Report or other required reporting, as needed.



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Education and Training

Education and training of appointed personnel is critical to the success of the IPM Program. Key staff and contractors involved in pest management or application will be educated in IPM policies and procedures. Education may include classroom training, on-site training, or informal meetings and will typically be held once a year. IPM topics discussed may include, but not be limited to, pest control action thresholds; pest management decisions; pest monitoring and identification; prevention; control; and effectiveness evaluations.

IPM Applications and Guidelines

Only persons specifically authorized by the IPM Coordinator as Pesticide Applicators will be permitted to bring or use pesticides on City property. Pesticide applicators must follow regulations and label precautions. Applicators will have training in IPM and must comply with the City's IPM Policy.

Product Selection and Product Use Approval

Except for pesticides granted an emergency exemption, the City will not use any products on the prohibited use product list.

1. Prohibited Use Products: Pesticides used by the City shall not contain the following ingredients:
 - a) 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 Department of Pesticide Regulation Chemical Inquiries Database.

If it is determined that an EPA registered pesticide must be used, then the least-toxic material will be chosen.

Pesticide Application Contracts

Where pesticide management and/or applications are provided by contractors, the City will contract with IPM-trained and/or IPM-certified pest control applicators. A clause will be included within the contract to ensure that pesticide applicators implement IPM and follow the City's standard operating procedures.

As detailed in the City's standard operating procedures, contractors are responsible for the filing of all required records and reports, including, but not limited to, Notice of Intent to Apply and PURs, as specified by all county, State, and federal agencies.

Record Keeping

The City shall maintain records of the IPM methods used and pesticide applications for a period consistent with the City's record retention policy. This information may also be reported within City stormwater Annual Reports or other required reporting. The information reported shall include the following:

1. All the information listed below will be documented on an official Pest Control recommendation form to be supplied by a Pest Control Adviser (PCA) annually prior to any pest control operation. The form will include:
 - a) Name of the entity responsible.
 - b) Specific site of the application.



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- c) The target pest.
 - d) The date the pesticide was used and re-entry period if applicable.
 - e) Date of expiration of the PCA recommendation.
 - f) Schedule, timing, and conditions.
 - g) The name and active ingredient of the pesticide to be applied and EPA registration number.
 - h) The pesticide signal word.
2. The IPM Coordinator or PCA will prepare a follow-up record to include:
 - a) Prevention and other non-chemical methods of control used.
 - b) Chemical methods used.
 - c) The effectiveness of the pesticide or management action.
 - d) If application was undertaken in a pest control emergency, provide explanation of circumstances of the emergency.

VII. RECOMMENDED PEST CONTROL PRODUCTS

The City recommends that the pesticides purchased for use on City facilities, landscaping, or rights-of-way follow the guidelines of the IPM Policy such that they are the most effective and present the lowest risk to the environment. Pesticide application should only be used when needed and in combination with other approaches to ensure effective, long-term control.

Research less-toxic products on the internet. Programs like, but not limited to, Our Water Our World (OWOW), partner with cities and counties to promote less-toxic, eco-friendly pest solutions and products. Their sites contain lists of less-toxic pesticides that are compatible with IPM policies.

Those purchasing pesticides on behalf of the City should consult these lists prior to selecting a pesticide for purchase. Contracted pesticide applicators should also be encouraged to utilize the lists when purchasing materials for application on City property.

VIII. PRACTICES

Pest control chemicals are stored in secure locations as follows: Public Works Corporation Yard Building #6. Wastewater Treatment Plant Land Application Building. Fire Stations 51-55.

CHEMICAL APPLICATION PRACTICES	
User Qualifications	■ Chemical application and advice on pest management problems will be made by the IPM Coordinator or a licensed pest control company. ■ If pesticides are required, City staff will determine, or coordinate with a licensed pest control company to determine, the best product and application in accordance with the approval requirements. ■ Only trained personnel can prepare and use all chemicals.
Species Considerations	■ Time the treatment to coincide with the presence of the pest. ■ Use a selective chemical that has the least effect on non-target species and treat only the area affected.



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User Safety	■ Users must wear protective clothing and equipment appropriate to the pest chemical application used. ■ Eating, drinking, and smoking must be prohibited when using or handling chemicals. ■ Users must be familiar with the chemicals they are likely to be using, the effects the chemicals may have on the body, and how the chemicals may enter the body. ■ Users must be aware of the signs and symptoms of acute poisoning related to chemicals they are using. They must stop work if they are feeling ill and seek medical advice.
Equipment	■ Equipment must be frequently checked and properly maintained, both for health and safety reasons and to minimize spray drift.
Weather/Time Restrictions	■ Spraying must not be carried out in unsuitable weather. Anyone operating sprayers must have access to a wind-speed meter, and only spray when the wind speed is negligible. ■ Spraying must not take place within 48 hours of a rain event. ■ Hours of work must be controlled so that building occupants are not exposed.

BASIC PLANT AND FUNGI CONTROL PRACTICES

Maintenance	■ Keep the building grounds well-maintained. Clear plant debris. ■ Maintenance personnel may use mulch and other landscaping best practices, warding off weeds and other pests. ■ Keep vegetation trimmed at least 18 inches from the building.
Plantings	■ Maintain and plan landscape features to eliminate safe havens for pests. ■ Avoid monocultures by mixing plant species in planters and gardens.
Manual Controls	■ Landscaping may be hand weeded and chemical control shall be kept to a minimum. This measure prevents human and environmental exposure to hazardous chemicals.
Chemical Controls	■ When chemical use is necessary, replace hazardous substances with least-toxic chemicals.

BASIC ANIMAL PEST CONTROL PRACTICES

Site/Building Cleanliness	■ Keep garbage containers clean, free of odors, and covered. Sanitation measures reduce habitat and food sources for pests. ■ Keep areas around garbage containers free of spillage or garbage to prevent the collection of trash or debris on the ground around or underneath the containers. ■ Keep grounds free of high weeds, trash, old equipment, and debris, as these conditions create ideal harborage for rodents.
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IX. DEFINITIONS FOR USE WITH THIS POLICY

1. “Basin Plan Amendment” or “BPA” means the regulatory requirements for the Control of Pyrethroid Pesticide Discharges that was adopted by the Central Valley Water Board on June 8, 2017, with the adoption of Resolution R5-2017-0057. The BPA established measurable pyrethroid concentration goals and an implementation program for the control of pyrethroid pesticides that are or could potentially impact aquatic life in the Sacramento and San Joaquin River watersheds.
2. “Contractor” means a person, firm, or corporation or other entity, including a governmental entity that enters into a contract with the City for pest management services.
3. “Integrated Pest Management” or “IPM” means 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.⁴
4. “IPM Coordinator” means the designated agent or employee experienced in IPM field and office work and is responsible for IPM program coordination for the City.
5. “IPM Policy” means this Integrated Pest Management Policy.
6. “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:
 - 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);
 - c) 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.
7. “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.
8. “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.

⁴ <https://www2.ipm.ucanr.edu/what-is-IPM/>



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9. "Pest-Specific Plan" means a written plan addressing the management and control of a particular pest. Components of Pest-Specific Plans should include pest biology, impacts, pest thresholds, recommended treatments, monitoring frequency, cultural practices, and site modifications to prevent or reduce the incidence of pest problems.
10. "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:
 - a) 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;
 - b) Any spray adjuvant.
11. "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.
12. "Pesticide Use Report Form" or "PUR" means a document that records pesticide use or other treatment practices within and associated with City owned, managed, or leased structures.
13. "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 No. CAS000004, Order No. 2013-0001, adopted February 5, 2013, and subsequent reissuances of this Order.
14. "Signal Word" means the toxicity category word on the pesticide label: Danger, Warning, Caution or None Required. See Toxicity Category I; II, III, IV product.
15. "Toxicity Category I; II, III, IV product" means any pesticide, as defined in 40 Code of Federal Regulations Section 156.10, meeting the appropriate toxicity categories and bearing on the front label panel the signal word Danger, Warning, Caution or None Required.