



POLICY: INTEGRATED PEST MANAGEMENT POLICY

ORIGINAL DATE: January 11, 2010; revised May 24, 2012

PURPOSE: The purpose of the City of Newark’s Integrated Pest Management (IPM) policy is to provide for the development and implementation of provisions to minimize reliance on pesticides that threaten water quality and impairment of urban streams by pesticide-related toxicity. This IPM policy will demonstrate compliance with Federal requirements for local governments to utilize IPM in City operations and on City property in accordance with Provision C.9.a.i of the Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit issued by the California Regional Water Quality Control Board San Francisco Bay Region as Order No. R2-2009-0074, NPDES Permit No. CAS6122008, adopted October 14, 2009 and revised November 28, 2011.

The City’s IPM policy will further provide guidelines for Bay-Friendly landscaping and integrated pest management techniques, based on Alameda County’s Bay Friendly Landscaping Guidelines prepared by Stopwaste.Org. IPM practices also include Best Management Practices (BMPs) for building maintenance and should be encouraged as guiding principles for development and implementation on all City projects and designs.

I. OBJECTIVES

- A. Minimize pesticide use on City properties by following the hierarchy of controls for pest control and management listed in Section V.B.3 of this policy.
- B. Reduce the use of broad spectrum pesticides when feasible.
- C. Create awareness among City staff of less-toxic pest management techniques.
- D. Educate all City departments to practice the most appropriate approach to managing pests on City properties, including prevention.
- E. Reduce the adverse impacts to water quality due to pesticide usage, particularly from copper-based, organophosphate and pyrethroid pesticides, and other pesticides of concern.

II. SECTIONS INVOLVED

- A. Landscape / Parks Maintenance
- B. Building Maintenance

III. DEFINITION

- A. Bay-Friendly Landscaping - a whole systems approach to the design, construction and maintenance of the landscape in order to support the integrity of the San Francisco Bay watershed.
- B. Biological control - The use of biological technologies to manage unwanted pests; examples of this type of control include, but are not limited to, the use of pheromone traps or beneficial insect release for control of certain types of weeds or invasive insects in landscapes.
- C. Cultural control - The use of IPM control methods such as grazing, re-vegetation, disking, mulching, proper irrigation, seeding, and landscaping with competitive or tolerant species to manage unwanted weeds, rodents or plant diseases, plus good housekeeping.
- D. DPR - Department of Pesticide Regulations for the State of California's Environmental Protection Agency
- E. Integrated Pest Management (IPM) - IPM is the strategic approach that focuses on long-term prevention of pests and their damage from reaching unacceptable levels by selecting and applying the most appropriate combination of available 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.
- F. Mechanical controls - The use of IPM control methods utilizing hand labor or equipment such as mowers, graders, weed-eaters, and chainsaws. Crack and crevice sealants and closing small entryways (i.e., around pipes and conduits) into buildings for insect and rodent management are also mechanical controls.
- G. PCA - Pest Control Advisor is one licensed by the California Department of Pesticide Regulations according to Title 3, Article 5 of the California Code of Regulations. A licensed PCA, who is registered with the County Agricultural Commissioner, provides written pest control recommendations for agricultural pest management, including parks and rights-of-way.
- H. Pesticides - Defined in Section 12753 of the California Food and Agricultural Code as any spray adjuvant, or any substance, or mixture of substances intended

to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, as defined in Section 12754.5 (of the Food and Agricultural Code), which may infest or be detrimental to vegetation, man, animals or households, or be present in any agricultural or nonagricultural environment whatsoever. The term pesticide applies to herbicides, insecticides, fungicides, rodenticides and other substances used to control pests. Antimicrobial agents are not included in this definition of pesticides.

- I. QAL - Qualified Applicator License is a licensed applicator according to Title 3, Article 3 of the California Code of Regulations. This license allows supervision of applications that may include residential, industrial, institutional, landscape, or rights-of-way sites.
- J. QAC - Qualified Applicator Certificate is a certified applicator of pesticides according to Title 3, Article 3 of the California Code of Regulations. This certificate allows supervision of applications that may include residential, industrial, landscape, or rights-of-way sites.
- K. Structural Pest Control Operator (SPCO- Branch I, II or III) - A licensed applicator for controlling pests that invade buildings and homes according to the requirements of the Structural Pest Control Board of the California Department of Consumer Affairs.

IV. TRAINING

- A. City employees involved with pesticide applications as a normal part of their job duties and pest management contractors hired by the City will be trained as required by State of California Department of Pesticide Regulations rules, the County Agricultural Commissioner, and/or the Structural Pest Control Board.
- B. City Staff responsible for pest management on City property will provide annual training to all employees who apply pesticides as a normal part of their job duties on:
 - 1. Pesticide Safety;
 - 2. The City's IPM Program; and
 - 3. Appropriate Best Management Practices and Integrated Pest Management Technologies supported by the Alameda Countywide Clean Water Program.
- C. Pest Control Advisors and Applicators, pest management contractors, and other contract service providers serving City-owned properties will be licensed by the State of California Department of Pesticide Regulations (DPR) as a Pest Control Advisor or licensed Qualified Applicator.

V. PROCEDURE

A. Pesticide Prevention

1. The City of Newark shall institute practices that reduce pesticides and result in the purchase of fewer pesticides whenever practicable and cost-effective, but without reducing safety or workplace quality.
2. The City of Newark shall instruct all employees to implement Good Housekeeping Practices in their workstations, vehicles, break rooms, etc., to prevent the conditions that provide a food source and habitat which attract unwanted pests.

B. Pest Control and Management

1. The City of Newark, including all departments and staff herein, and contractors or individuals (QAL, QAC, SPCO) providing pest control services on City property (Applicators) shall follow the City's Integrated Pest Management Policy and utilize generally accepted Best Management Practices (BMPs) to the maximum extent practicable for the control or management of pests in and around City buildings and facilities, parks and urban landscape areas, rights-of-way, and other City properties.
2. Applicators will use the most current IPM technologies available to ensure the long-term prevention or suppression of pest problems and to minimize negative impacts on the environment, non-target organisms, and human health.
3. IPM Hierarchy of Controls

Applicators will consider the options or alternatives listed below in the following order, before recommending the use of or applying any pesticide on City property:

- a. No controls (e.g., tolerating the pest infestation, use of resistant plant varieties or allowing normal life cycle of weeds)
- b. Physical or mechanical controls (e.g., hand labor, mowing)
- c. Cultural controls (e.g., mulching, disking, alternative vegetation), good housekeeping (e.g. cleaning desk area)
- d. Biological controls (e.g., natural enemies or predators)
- e. Reduced-risk chemical controls (e.g., soaps or oils)
- f. Other chemical controls

C. Pesticide Application

1. Only City of Newark employees or appropriate licensed contractors employed by the City who are authorized and trained in pesticide

application (i.e., hold PCA, QAL, QAC, or Structural Branch Operator I, II, or III certifications/licenses) may apply pesticides to or within City property.

2. City of Newark employees are not to apply privately purchased (over the counter) pesticides. Employees shall contact the Maintenance Division for any pest control issues and may be provided with approved, less-toxic pesticides (i.e. Orange Guard, insecticidal soap). All employees shall be reminded on at least an annual basis that privately purchased (over the counter) pesticides shall not be used.
3. When recommending pesticides for use or applying pesticides, applicators will select and apply IPM methods that will have the least impact on water quality, human health and the environment, yet are still effective.
4. Notification: Employees shall be notified prior to pesticide application, particularly when pesticide application occurs within a building.
5. New contracts that are entered into with pest management contractors and other appropriately licensed contractors employed to provide services that involve pesticide application at City properties will include requirements that the contractors follow the requirements of the City's IPM Policy and implement the most current IPM technologies and Best Management Practices.

D. Restricted Chemicals

1. City of Newark employees and/or contractors employed by the City who are trained to recommend or apply pesticides will not use or promote the use of the following pesticides of concern unless specifically approved by the Public Works Director or his/her designee:
 - a. Acute Toxicity Category I chemicals as identified by the Environmental Protection Agency (EPA);
 - b. Organophosphate pesticides (e.g., those containing diazinon, chlorpyrifos, and malathion);
 - c. Pyrethroids (bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin, and tralomethrin);
 - d. Carbamates (e.g. carbaryl);
 - e. Fipronil; and
 - f. Copper-based pesticides unless:
 - i. Their use is judicious,
 - ii. Other approaches and techniques have been considered, and;
 - iii. Adverse water-quality impacts are minimized to the maximum extent practicable.

2. Applicators will always avoid applications of pesticides that directly contact water, unless the pesticide is registered under Federal and California law for aquatic use.
3. Pesticides that are not approved for aquatic use will not be applied to areas immediately adjacent to water bodies where through drift, drainage, or erosion, there is a reasonable possibility of a pesticide being transported into surface water.

E. Best Management Practices (BMPs)

This section includes BMPs and control measures to protect water quality during the use of pesticides, when it is determined through an IPM process that pesticides must be used.

1. Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of pesticides.
2. Use the least toxic pesticides that will do the job, provided there is a choice.
3. Apply pesticides at the appropriate time to maximize their effectiveness and minimize the likelihood of discharging pesticides in storm water runoff. Avoid application of pesticides if rain is expected (this does not apply to the use of pre-emergent herbicide applications when required by the label for optimal results.)
4. Employ techniques to minimize off-target application (i.e. spray drift) of pesticides, including consideration of alternative application techniques. For example, when spraying is required, increase drop size, lower application pressure, use surfactants and adjuvants, use wick application, etc.
5. Apply pesticides only when wind speeds are low.
6. Mix and apply only as much material as is necessary for treatment. Calibrate application equipment prior to and during use to ensure desired application rate.
7. Do not mix or load pesticides in application equipment adjacent to a storm drain inlet, culvert, or watercourse.
8. Irrigate slowly to prevent runoff, and do not over-water.

VI. REPORTING REQUIREMENTS

The information outlined below is reported as a part of the City's NPDES Stormwater Permit Annual Report compiled by the Public Works Department's Stormwater Program. Each pest management contractor, and/or other appropriately licensed contractors employed by the City to provide city services that involved pesticide application on City-owned properties shall submit by July 15th to the Maintenance Division Supervisor:

A. Annual Storage/Inventory Report – due July 15 of each fiscal year

City staff will report on inventory stored on City-owned properties.

Completed form should list:

1. Product name
2. Pesticide type
3. Quantity on hand (as of June 30)
4. Pesticides that are no longer legal or appropriate for applications per Federal, State, County, or City requirements.

B. Annual Pesticide Use Summary Report – due July 15 of each fiscal year

This report is required by City staff and contractors. Compilation of the monthly reports submitted by contractors per contract specifications will be considered contractor compliance of this reporting requirement.

Completed reports should list:

1. Manufacturer and product name
2. Pesticide type
3. The total quantity of each pesticide used during the prior fiscal year (from July 1 to June 30) in order to provide a cumulative accounting of pesticide use at City-owned properties.