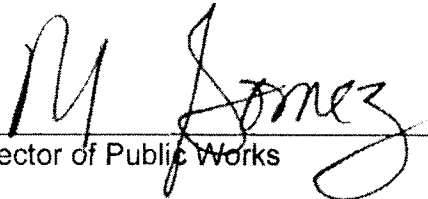


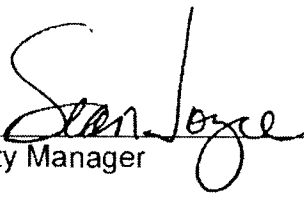


# REQUEST FOR CITY COUNCIL ACTION

**MEETING DATE:** February 23, 2016

**TITLE:** DISCUSSION OF CITY POLICY FOR PESTICIDE USE ON CITY PROPERTY

  
\_\_\_\_\_  
Director of Public Works

  
\_\_\_\_\_  
City Manager

## RECOMMENDED ACTIONS

Receive staff presentation and direct staff to implement the City-wide Pest Management Guiding Principles and Revised Integrated Pest Management (IPM) Policies as described in the staff report for the use of pesticides on City properties.

## EXECUTIVE SUMMARY

Councilwoman Christina Shea requested City Council discussion regarding developing a policy for use of organic pesticides and requested a staff presentation on the City's pesticide practices on City properties (Attachment 1). In November 2015, the City received a request from the community organization "Non Toxic Irvine" asking the City to eliminate the use of non-organic chemical based pesticides on City property. In response, staff suspended the use of non-organic pesticides on City landscapes to research organic alternatives. The information in this report was prepared to assist the City Council in its consideration of this topic.

## COMMISSION RECOMMENDATION

Not applicable.

## ANALYSIS

### City Properties

The City of Irvine, assisted by contract providers, maintains:

- More than 570 acres of community and neighborhood parks and athletic fields;
- More than 800 acres of public right-of-way, including street medians and parkways;
- 70,000 trees; and
- Nearly 1.5 million square feet of facilities.

RECEIVED AT IEM MEETING ON 3/22/16  
Committee Chair Cochran

Historically, the City and its agents have applied pesticides to control the following in or on City properties: 1) Broadleaf and grassy weeds in turf, hardscapes, undeveloped rights-of-way, bike trail edges, tree well and planter areas; 2) rodents; 3) insects in trees, planters and buildings; and 4) soil pathogens/fungi and snails. Pests controlled in interior facilities generally include ants, spiders, rodents and roaches.

### Integrated Pest Management

The City's Public Works Landscape Maintenance Division follows an Integrated Pest Management (IPM) Policy for landscape maintenance functions on City property (Attachment 2). An integrated approach to pest management represents an industry standard, prioritizing prevention and non-chemical control measures before the use of pesticide controls, in compliance with State and Federal regulations. The IPM method is a systematic approach that uses extensive knowledge about pests and their hosts, such as infestation thresholds, life histories, and environmental requirements to compliment and facilitate biological and other natural control of pests.

The systems and methods used include:

1. Prevention: Select plants compatible with the site's environment.
2. Monitoring: Determine pest levels, tolerance thresholds, impact of controls available/used.
3. Non-Chemical Control Measures: Biological, Cultural, Physical.
4. Chemical Controls: Used when other methods fail to provide adequate control, before pests cause unacceptable damage and mindful of harm to beneficial organisms and resistance, and impact on water quality. Irvine uses the least toxic pesticides, listed as Level III (Levels range from I to III) as defined by the Environmental Protection Agency (EPA). Pesticides are recommended by a licensed California Pest Control Adviser and applied by Licensed Qualified Applicators pursuant to Department of Pesticide Regulation guidelines.
5. Advanced Notification: Signs are posted at park entrances 48 hours prior to application, and remain for 72 hours after the application.

Facilities maintenance for City public buildings pest management is implemented with similar steps following State and Federal regulations. Facilities IPM guided strategies include prevention measures such as good housekeeping and sealing points of entry, and mechanical and non-chemical measures that include using deterrents and removal of pests. Pesticides controls are applied when other methods fail and to prevent damage and risk to public health.

### Pesticides

A pesticide is any substance, or mixture of substances, used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest that may be detrimental to vegetation, humans or animals. By definition, whether the

chemical is organic or synthetic, it is still a pesticide if the intent is to treat for a pest. The City's IPM practices include using organic fertilizer, using beneficial insects and landscape design adjacent to buildings that reduce pest habitat.

City policies regarding pesticide use apply only to properties managed by the City. The City does not have legal authority to regulate the use of pesticides by external agencies or organizations.

#### Next Steps

Following are options for City Council consideration of this matter and possible direction to staff. These options incorporate the use of organic pesticides in all City properties as part of the City's maintenance protocols:

A. City-wide Pest Management Guiding Principles:

1. Emphasize use of effective organic pesticides in and on all City properties whenever practical.
2. Limit exposure to any pesticides where children and the general public congregate.
3. Use EPA Level pesticides in a targeted manner, and only if deemed necessary to protect public health and economic impact by a licensed pest control adviser and City staff, when pests cannot be managed by other methods.

B. The Landscape Maintenance IPM policy could be modified as follows:

1. Parks, Fields and Playgrounds – Prioritized Use of Pesticides:
  - a. Use organic pesticides first, when pesticides are needed.
  - b. Use Clean Water Act allowed pesticides.
  - c. EPA Level III "caution" label pesticide only when deemed necessary to protect public health and economic impact by a licensed pest control adviser and City staff.
2. Rights of Way (Street medians/parkways) – Prioritized Use of Pesticides:
  - a. Use organic pesticides first, when pesticides are needed.
  - b. Use Clean Water Act allowed pesticides.
  - c. EPA Level III "caution" label pesticide only if deemed necessary to protect public health and economic impact by a licensed pest control adviser and City staff.
  - d. EPA Level II "warning" label pesticides, only if deemed necessary to protect public health and economic impact by a licensed pest control adviser and City staff, when other methods do not adequately control the pest.
  - e. EPA Level I "danger" label pesticides, only if deemed necessary to protect public health and economic impact by a licensed pest

- control adviser and City staff, when other methods do not adequately control the pest.
3. Facilities/Buildings – Prioritized Use of Pesticides:
    - a. Use organic pesticides first, when pesticides are needed.
    - b. Use Clean Water Act allowed pesticides.
    - c. Bait formulations of insecticides will be used where appropriate.
    - d. EPA Level III “caution” label pesticide only if deemed necessary to protect public health and economic impact by a licensed pest control adviser and City staff.
    - e. EPA Level II “warning” label pesticides, only if deemed necessary to protect public health and economic impact by a licensed pest control adviser and City staff, when other methods do not adequately control the pest.
    - f. EPA Level I “danger” label pesticides, only if deemed necessary to protect public health and economic impact by a licensed pest control adviser and City staff, when other methods do not adequately control the pest.
  
  4. Other City Properties – Prioritized Use of Pesticides:
    - a. Use organic pesticides first, when pesticides are needed.
    - b. Use Clean Water Act allowed pesticides.
    - c. EPA Level III “caution” label pesticide only if deemed necessary to protect public health and economic impact by a licensed pest control adviser and City staff.
    - d. EPA Level II “warning” label pesticides, only if deemed necessary to protect public health and economic impact by a licensed pest control adviser and City staff, when other methods do not adequately control the pest.
    - e. EPA Level I “danger” label pesticides, only if deemed necessary to protect public health and economic impact by a licensed pest control adviser and City staff, when other methods do not adequately control the pest.

With this prioritized approach, organic pesticides would be used first and as long as they are effective managing pests to meet Irvine’s standards. The second tier, “Clean Water Act allowed pesticides” would exclude pesticides containing chemicals on the State list known to cause cancer, birth defects or other reproductive harm. This State list is updated annually based on input from two scientific committees, and other measures, to address changing information. Synthetic pesticides would be used only if other treatment options fail to control pests posing a risk to public health and economic impact. Prohibiting the use of synthetic pesticides could leave the City vulnerable to infestations and loss of plant materials on City property.

#### **ALTERNATIVES CONSIDERED**

The City Council can provide any alternative direction for the use of organic and synthetic pesticides on City property. The City Council may also consider directing the

prioritized approach described above be implemented as a pilot program and evaluated for effectiveness to assist in identifying potential unintended consequences of a complete prohibition of synthetic pesticides.

#### **FINANCIAL IMPACT**


The financial impact to City maintenance operations will vary depending on the direction provided to staff by the City Council. Any changes to maintenance cost could be presented with the Fiscal Year 2016-17 budget process, for the City Council's consideration.

**REPORT PREPARED BY** Dennis Chiotti, Landscape Maintenance Superintendent  
Veronica Dolleschel, Senior Management Analyst

#### **ATTACHMENTS**

1. January 21, 2016 Memo from Councilwoman Christina Shea
2. Integrated Pest Management Policy for Landscape Maintenance

# Memo

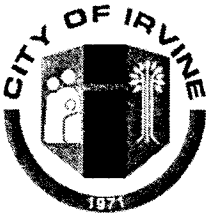
To: Sean Joyce, City Manager  
From: Councilmember Shea   
Date: January 21, 2016  
Re: **Agenda Request – Organic Pesticide Policy**

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Please place on the February 23, 2016, Council agenda, a discussion to develop a policy that will eliminate the use of all toxic chemicals on City properties, and replace them with organic alternatives.

Please ask our Staff to prepare a presentation of our current practices, and be prepared to discuss how such a policy might be implemented.

cc: City Council  
City Attorney  
City Clerk



Public Works Department  
Landscape Maintenance Division  
Policies and Procedures

**INTEGRATED PEST MANAGEMENT PROGRAM**

REVISED: 3/17/09

**PURPOSE:** To establish criteria for an Integrated Pest Management (IPM) Program.

**POLICY:** The City of Irvine Landscape Division will focus on long-term prevention or suppression of pest problems with minimum impact on human health, the environment, and non-target organisms with the limited use of pesticides.

**PROCEDURES:**

1. Prevention

Landscape staff shall review all new development and rehabilitation project plans to verify the plants selected are compatible with the site's environment.

2. Monitoring

The Landscape Division shall hire a consultant to provide regular monitoring services for all of the City's landscape.

- The consultant shall determine if pest populations are increasing, decreasing, or staying the same and to determine when to use a control tactic.
- The consultant shall provide monthly monitoring records which include information such as date of examination, pests found, size and extent of the infestation, location of the infestation, control options utilized, effectiveness of the control options, labor and material costs.

3. Non-Chemical Control Measures

Cultural controls are modifications of normal plant care activities that reduce or prevent pests.

- Cultural control methods include adjusting the frequency and amount of irrigation, fertilization, and mowing height.
- Mechanical control tactics involve the use of manual labor and machinery to reduce or eliminate pest problems using methods such as handpicking, physical barriers, or machinery to reduce pest abundance indirectly.
- Environmental manipulations indirectly control or prevent pests by altering temperature, light, and humidity and can be effective in controlling pests. Although in outdoor situations these tactics are difficult to use for most pests, they can be effective in controlling birds and mammals if their habitat can be modified such that they do not choose to live or roost in the area.
- Biological control practices use living organisms to reduce pest populations. These organisms are often also referred to as beneficials, natural enemies or bio-controls. They act to keep pest populations low enough to prevent significant economic damage. Biocontrols include pathogens, parasites, predators, competitive species, and antagonistic organisms. Beneficial organisms can occur naturally or can be purchased and released. The most common organisms used for biological control in landscapes are predators, parasites, pathogens and herbivores.

#### 4. Pesticide Controls

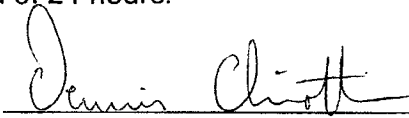
Pesticides should only be used when other methods fail to provide adequate control of pests and just before pest populations cause an unacceptable damage, as the overuse of pesticides can cause beneficial organisms to be killed and pest resistance to develop.

- Pesticides with a Caution label shall be the first option for control measures.
- Pesticides shall be approved by the Landscape Supervisor prior to use. A written recommendation of proposed pesticide, including commercial name, concentrations, allocation rates, usage and re-entry time shall be prepared by a licensed California Pest Control Advisor and site specific schedule submitted a minimum of 14 days prior to intended use. No work shall begin until written approval of use is obtained and a notice of intent has been filed with the County Agricultural Commissioner's office, as required. Copies of Material Safety Data Sheets and specimen labels shall be given to the City prior to pesticide use on City property and rights-of-way.
- Chemicals shall only be applied by those persons possessing a valid California Qualified Applicator license/certificate or have a Q.A.L./C. on site



for supervision. Application shall be in strict accordance with all governing regulations. Records of all operations shall be kept per California Department of Pesticide Regulations.

- Records of all pesticides used by the Contractor on City property shall be retained in accordance with Department of Pesticide Regulations.
- Pesticides shall be applied in a manner to avoid contamination of non-target areas. Precautionary measures shall be employed to keep the public from entering the spray zone until it is safe.
- Posting of signs shall be required at all park facilities when any aerial, large-scale or 'blanket' applications of pesticides are performed. This posting notification is part of the Safe Schools Act of 2000, with which the City of Irvine complies. Specific requirements for posting are as follows:
- Post signs at all park entrances at least 48 hours prior to spraying applications. The vendor's contact information, chemical name and application date must be listed.
- Place spray notices inside plastic page protectors. Attach them to a four-foot (4') high wooden stake. Signs must be readable 25' away from posted area.
- Leave the same signs up for 72 hours after the spraying applications are completed, then remove promptly.
- A temporary mesh fence such as orange plastic construction fencing can be erected on the perimeter of any area that is to be treated with a broadcast type application with the intent to keep people and pets off the treated area for a period of 24 hours.



Dennis Chiotti, Landscape Maintenance Superintendent      3/17/10      Date