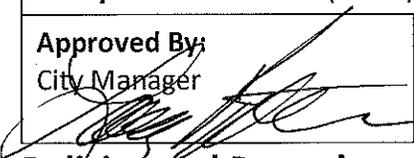


City of Sammamish

Subject: Integrated Pest Management (IPM) Policy		
Department: Public Works; Parks & Recreation; All Departments		
Policy Number: PW-01 (ver. 2)		
Approved By: City Manager 	Effective Date: 01/07/2019	Supersedes: All Previously Approved Pest Management Policies

Policies and Procedures

1. SCOPE

This policy and procedure applies to all City of Sammamish departments and staff that use pesticides in any way. Any service providers with the City involved in pest management and subject to a contract signed after the effective date are also required to comply with the procedures listed above through coordination with the City staff person managing or supervising the contract.

2. PURPOSE

"Finding a Better Way" - The purpose of this policy is to provide City of Sammamish employees and contractors with an overview of integrated pest management (IPM) principles and specific policy-based direction for implementing those principles. It is expected that this policy will ensure that all City operations and contracted services that manage pests or vegetation on City property do so in an environmentally sensitive manner while addressing public health, safety, economic and aesthetics requirements.

The goals of this policy are to:

1. Create awareness among City staff, City contractors and citizens of integrated pest management techniques and environmental stewardship.
2. Provide a means of educating all City departments to practice the most appropriate approach to managing pests on City property.
3. Reduce and/or eliminate use of pesticides in Sammamish that pose known significant human or animal health, or environmental risks.
4. Establish a program where pesticides categorized as toxic or persistent are used only when a pest is deemed a threat to public health, safety, the environment, or to prevent economic damage (emergency or exemption) and only after other alternatives have been evaluated and

judged to be ineffective. If pesticides are used, provide guidelines on safe storage, handling, use, and application.

5. Promote the use of non-hazardous or reduced risk alternatives that are protective of human and animal health and the environment.

3. DEFINITIONS

3.1 "Biological control"

This method uses biological technologies to manage unwanted pests. Examples of this type of control include, but would not be limited to, the use of pheromone traps for management of Indian meal moth in food storage/preparation areas, or beneficial insect release for control of certain types of weeds or invasive insects in landscapes.

3.2 "Contract"

A binding written agreement between two parties. Contracts entered into the pesticide realm are generally for goods or services

3.3 "Contractor"

A person, firm, corporation, or other entity, including a governmental entity, which enters into a contract with the City of Sammamish.

3.4 "Cultural control"

The practice of modifying the growing environment to reduce the prevalence of unwanted pests. Examples include irrigation practices, improved and reduced fertilization applications, proper mowing practices that include mulching, and regular aeration to improve the soil.

3.5 "Emergency"

A pest outbreak that poses an immediate threat to public health or significant economic or environmental damage.

3.6 "Environmental Stewardship"

The strategic approach to pest management in which the IPM practitioners find balance in preserving the natural integrity and health of the environment, promoting public safety and maintaining functional utilities while recommending or applying pest management methods. Environmental Stewardship philosophy helps to create awareness of Best Management Practices and their relationship to maintaining a healthy environment while conducting pest management activities.

3.7 "EPA"

The United States Environmental Protection Agency

3.8 "Exemption"

A process by which materials not on the approved materials list, can temporarily be used, but only after all alternatives have been reviewed, evaluated, and or implemented and only after the field

supervisor has completed a Pesticide Application Evaluation Worksheet and authorized the use of the pesticide for the specified purpose. Exemptions may be one-time or programmatic and the decision to approve an exemption will be based upon an evaluation of the failure or success of alternatives, and taking into consideration public health, environmental, and financial risks.

3.9 "IPM Committee"

An inter-departmental staff committee whose primary function is to administer the IPM program for the City of Sammamish. The IPM committee shall be knowledgeable about the principles of low risk IPM, safe application of pesticides, and alternatives to pesticide use. At least one member of the IPM committee shall possess a WSDA Pesticide Applicator License.

3.10 "Integrated Pest Management (IPM)"

A decision-making process for managing pests that uses monitoring to determine pest levels and tolerance thresholds and combines biological, cultural, physical, and chemical tools to minimize health, environmental, and financial risks. The method uses extensive knowledge about pests, such as infestation thresholds, life histories, environmental requirements, and natural enemies to compliment and facilitate biological and other natural control of pests.

3.11 "Landscapes"

Grounds that are actively managed such as parks, plantings, lawns around public buildings, right-of-ways, watersheds, and open space, etc., excluding large tracts of forestland.

3.12 "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 (e.g., around pipes and conduits) into buildings for insect and rodent management would also be mechanical methods.

3.13 "Pest"

An organism that damages or interferes with desirable plants in fields, landscapes, or wildlands, or damages homes or other structures. Pests also include organisms that impact human or animal health. Pests may transmit disease or may be just a nuisance. A pest can be a plant (weed), vertebrate (bird, rodent, or other mammal), invertebrate (insect, tick, mite, or snail), nematode, pathogen (bacteria, virus, or fungus) that causes disease, or other unwanted organism that may harm water quality, animal life, or other parts of the ecosystem.

3.14 "Pesticide"

Any substance, or mixture of substances, used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, which may be detrimental to vegetation, humans, animals or structures.

3.15 "Public Operator License"

The Annual license required by Washington State Department of Agriculture (WSDA) for employees of a government agency persons engaged in the business of applying pesticides to public or private property.

3.16 "Sensitive Area"

All lakes, rivers, playgrounds, dog parks, and trails, and associated 60-foot buffer areas as determined by red and yellow shaded areas on the Pesticide Reduction Priority Zone Map (Attachment A). Sensitive areas do not include overlapping roads or vegetated center road medians.

3.17 "WSDA"

Washington State Department of Agriculture. WSDA oversees all issues regarding the registration, licensing and enforcement of laws and regulations pertaining to pesticides.

4. POLICY

The City of Sammamish, in carrying out its pest management operations, shall focus on long-term prevention or suppression of pest problems with minimum negative impact on human health, non-target organisms, and the environment. To this end, preference shall be given to reasonably available non-pesticide alternatives when considering the use of pesticides on City property.

When feasible, City staff must employ non-chemical management tactics first. Chemicals are to be used in accordance with the Pesticide Application Evaluation Worksheet, inclusive of an evaluation checklist and site-specific plan detailing areas that are to be treated.

Pesticides are to be applied by, or under the supervision of, a licensed applicator that has been trained in application methods, IPM techniques, safety precautions, pest biology, proper use of personal protective equipment, appropriate storage and handling, environmental concerns, and employee rights regarding pesticide use.

A Pesticide Reduction Priority Map for Sammamish is provided and maintained by the City. The objectives of the pesticide reduction priority map are to identify concrete reduction goals (red and yellow zones) and communicate to the public the general level of pesticide hazard on a site-by-site basis through colored zone maps.

- "Red" areas with high exposure to people and pets and/or waterways should never be treated with any chemical, except in cases where the pest is deemed a threat to public health, safety, the environment, or to prevent economic damage (emergency or exception), and only after other alternatives have been evaluated and judged to be ineffective.
- "Yellow" areas with some exposure to people, animals, and waterways should only be treated with low-impact chemicals on the approved materials list (Attachment B).
- Remaining areas with low exposure may be treated with any chemical from the approved materials list (Attachment B).

In an emergency or under specific circumstances where there is a risk to public health or the environment, materials not on the approved materials list can temporarily be used, but only after reasonable alternatives have been reviewed, evaluated, and/or implemented, or as allowed through Special Local Needs (SLN) registrations provided by Washington State Department of Agriculture (WSDA). Exemptions may be one-time or programmatic, and the decision to use non-approved chemicals shall be based upon an evaluation of the failure or success of alternatives, and taking into

consideration public health, environmental, and financial risks. Exemption decisions may be made by the field supervisor and must be accompanied by an explanation provided as part of a completed Pesticide Application Evaluation Worksheet.

4.1 Pesticide Use

Pesticides will only be used in those authorized situations where other alternative methods have proven not to be effective or feasible (e.g., cannot be sustained due to budgetary or other constraints). The following general and specific practices shall be followed:

- When used, those pesticides with the least toxicity to humans and the environment shall be applied.
- Applications shall be performed by or under the supervision of a licensed applicator to avoid any hazard to any person or animal in the area or adjacent areas, and to avoid any property damage.
- Application(s) shall be made to time the treatment to pests most susceptible stage.
- Care shall be observed not to damage any non-target organisms. For instance, when applying a non-selective herbicide.
- Spraying shall be confined to target species and drift should be avoided.
- Applications shall be performed according to manufacturer's directions.
- No pesticides are to be applied in any designated playground areas unless conditions call for control of a hazardous or noxious pest. In this case, the area would be closed until reentry is deemed safe.
- No pesticides shall be sprayed when weather conditions are:
 - In excess of 10 mile per hour winds
 - Such that indications of temperature inversion are present
 - Damp or foggy
 - Rainy or such that rain is forecast within 48 hours
 - Extremely cold (below 40°) or hot (above 90°)

4.2 Pesticide Training

4.2.1 Pesticide Safety Training requirements

Any person applying pesticides must obtain Washington State pesticide application certification prior to the use of each pesticide, regardless of toxicity. Training must be updated annually. A record must be made of each employee applying pesticides, and evidence of training certified by the trainer/supervisor. Copies of the training record form will be kept by the employee and the City department and be available to local and State officials upon request.

Training must be performed by a licensed applicator and cover the following for each pesticide handled:

- Information on the pesticide label concerning human health effects
- Hazards of the pesticide, including acute and long-term effects
- Pesticide poisoning symptoms and routes pesticides can enter the body
- Emergency first aid and how to get emergency medical care
- Routine and emergency decontamination procedures
- Need for, limitations, use, and cleaning of personal protective equipment

(PPE)

- Prevention, recognition and first aid for heat-related illnesses
- Safe procedures for handling pesticides, including engineering controls and transportation of chemicals and equipment
- Environmental concerns, such as drift and runoff
- Warnings against taking pesticides home
- Regulatory requirements, including Material Safety Data Sheets (SDS) and Pesticide Safety Information Series (PSIS)
- Purpose and requirements of medical supervision, when applicable
- Location of hazard communication information
- Employee rights

4.2.2 City IPM Policy Training

All City staff applying or supervising the application of pesticides are required to attend an annual IPM training. The purpose of the City's IPM training is provide an overview of IPM policy and procedures and highlight emerging goals and issues related to pest control. This training will be developed by the City's IPM Committee for incorporation into the existing National Pollutant Discharge Elimination System (NPDES) Illicit Discharge Detection and Elimination (IDDE) training curriculum.

4.3 Personal Protective Equipment (PPE)

The City of Sammamish will provide personal protective clothing and equipment to City personnel engaged in the application of pesticides on City of Sammamish property as stated on the manufacturer's label. This will be in accordance with the City's safety program. Contractors are required to provide their own PPE.

4.4 Documents Required While Applying Pesticides

Any person applying a pesticide on City of Sammamish property must have in their possession the following documents:

- Pesticide label
- Pesticide SDS
- Medical Emergency Contact Information
- WA State proof of pesticide certification
- Special local needs (SLN) label if applicable

4.5 Complaints and Spills

In case of pesticide-related complaint or chemical spill, staff shall notify the City's Stormwater Technician and the appropriate supervisor. The Stormwater Technician shall coordinate and review related City communications and may elect to forward the complaint to the IPM Committee for further investigation.

Small spills of pesticides should be cleaned up immediately with absorbent material such as cat litter or FM 186-2. For major toxic pesticide spills, contact Public Works and request a spill response crew. Note the pesticide name, category, approximate amount, location and if it is threatening to enter the storm drain system (includes leaving the roadway and entering a ditch).

4.6 Posting of Application Sites

Small freestanding informational signs displaying the City's logo and phone number of responsible party (city staff or contractor) must be placed at each end of the area being treated. The signs must adhere to WSDA specifications, be placed no more than 300 feet apart and moved along as the material dries. This signage shall include appropriate pesticide awareness and shall not be removed from the site until pesticide spray has dried.

Where application sites overlap or include red High-Impact areas (as designated by the Pesticide Reduction Priority Zone Map) and a decision to apply chemicals has not been made, small freestanding markers must be placed to delineate the relevant boundary of each High-Impact area prior to chemical application.

4.7 Storage and Disposal

All pesticide storage locations must be posted according to WSDA specifications with visible warning notices legible from a distance of 30 feet from any direction. Any pesticide containers holding 1-gallon or less of concentrate and/or 3-gallon backpack sprayers with diluted pesticides may be transported outside of the vehicle cab in a manner that will prevent spillage onto the vehicle or off the vehicle.

Empty pesticide containers, other than bags, must be rinsed and drained into the spraying equipment on site by the user, at the time of use, using the triple rinse method. Rinse solution should be applied to the treated areas.

All pesticide nurse containers must be labeled with the following information:

- Name of pesticide
- Category of pesticide
- EPA registration number
- Active ingredient
- Entity (City of Sammamish)
- Expiration Date

4.8 Violation Documentation

All employees of the City of Sammamish who have been trained to apply pesticides may be required to do so as part of their regular duties. Those who possess a Public Operator License are subject to discipline by the Washington State Department of Agriculture if they violate regulations outlined in RCW 17.21.150. City employees will also be subjected to City of Sammamish personnel rules and regulations.

5. PROCEDURES

5.1 Evaluate the treatment site.

- 5.1.1 Monitor each pest ecosystem to determine pest population, size, occurrence, and natural enemy population, if present.
- 5.1.2 Identify decisions and practices that could affect pest populations as well as keeping records of such monitoring.
- 5.1.3 Set a threshold level, based on how much aesthetic or economic damage the site can tolerate from pests including impacts to the operation and maintenance of public utilities, fire hazards, traffic and pedestrian safety.

Determine appropriate pest treatments using the Approved Chemical List (Attachment B), in consideration of the level of exposure risk (e.g., red or yellow sensitive areas).

- 5.1.4 Develop a graphical display of the plan when possible (e.g., display site location on Pesticide Reduction Priority Map).

5.2 Consider the potential pest treatments and determine appropriate treatment during ongoing maintenance.

- 5.2.1 The field supervisor shall determine the most effective treatment time, based on pest biology and other variables, such as weather and local conditions. Staff may consult with the IPM Committee as needed and complete the optional Pesticide Application Evaluation Worksheet (Attachment C). If the field supervisor determines that an exemption to the approved materials list is necessary, the Pesticide Application Evaluation Worksheet must be completed and kept on file for later review by the IPM Committee or designee.
- 5.2.2 Cultural practices, including watering, mulching, waste management, and food storage must be taken into consideration by staff prior to applying any pesticide.
- 5.2.3 When possible, pest ecosystems must be modified by staff to reduce food and living space.
- 5.2.4 Staff should use physical or mechanical controls such as hand-weeding, traps, and barriers when feasible.
- 5.2.5 Staff should use biological controls, including introducing or enhancing pests' natural enemies.

5.3 Follow the pesticide application protocol.

- 5.3.1 Acquire the appropriate pesticide from a supervisor or designee on the morning of pesticide application (all pesticides are stored in a locked storage facility.)
- 5.3.2 Gather all personal protective equipment (PPE), documents, and signage required to complete the specific pesticide application and have all of these items in your possession during the application.
- 5.3.3 Display proper City of Sammamish signage at all public accesses upon arriving at the site, as well as any boundary markers to designate sensitive areas where chemical application is to be avoided.
- 5.3.4 Apply pesticide and do not leave site unattended until spray has dried.
- 5.3.5 Pick up signs after twenty-four hours or the designated restricted entry interval.
- 5.3.6 Document pesticide usage.

- 5.3.7 Complete the WSDA Pesticide Application Record Form during the time of application and make available to the IPM committee or designee upon request.
- 5.3.8 All City of Sammamish contractors subject to a contract signed after the effective date of this policy shall follow the pesticide application procedure defined in the Contractor Maintenance Contract.

6. RESPONSIBILITY

6.1 Department Heads, Managers and Supervisors

- 6.1.1 Department Heads and Managers shall ensure that departmental procedures, budget, and staffing decisions support implementation of the IPM Policy.
- 6.1.2 Supervisors overseeing pesticide applications shall provide training for field staff to meet the requirements of this IPM Policy.
- 6.1.3 Appropriate personnel will report as required to various commissions and the City Council regarding the department's implementation of the IPM Policy.

6.2 Integrated Pest Management Committee

The IPM Committee shall be responsible for:

- Coordinating efforts to adopt IPM techniques for the City of Sammamish.
- Communication with all staff on the goals and guidelines of the program.
- Providing training to Parks, Public Works and other City staff in the requirements of this IPM Policy as well as preparing individuals who handle pesticides in obtaining a Public Operator License. Assist with tracking pesticide use and ensuring that the information is available to the public and necessary government agencies.
- Coordinating with other public agencies that are practicing IPM programs.
- Serving as public information officer on IPM and pesticide related issues.
- Keep current on all Federal (EPA), State (WSDA) and local regulations and provide updates to department personnel.

ATTACHMENTS:

- A. Pesticide Reduction Priority Zone Map
- B. Approved Chemical List
- C. Pesticide Application Evaluation Worksheet

Pesticide Reduction Priority Zone Map



Web URL: [Pesticide Reduction Priority Zone Map](#)

Map Key:

- Red: Sensitive area - All lakes, rivers, playgrounds, dog parks, trails.
- Yellow: Sensitive area buffer, low-impact approved chemical only - 60-foot buffers around all lakes, rivers, playgrounds, and dog parks.
- No color: Low exposure, may be treated with any chemical from the approved materials list.

Approved Chemical List

CATEGORY 1: LOW-IMPACT & ORGANIC MATERIALS LIST

(May be used in yellow or non-shaded areas on the Pesticide Reduction Priority Zone Map)

Herbicide	GreenMatch O	Limonene/citrus oil				
Herbicide	Moss Melt*	Limonene/citrus oil				
Herbicide	Greenmatch EX	Lemongrass oil				
Herbicide	Matran 2	Clove oil				
Herbicide	Weed Zap	45% clove and 45% cinnamon Herbicide				
	Blackberry& Brush Block	20% Citric Acid				
Herbicide	All Down	Citric acid				
Herbicide	Bioganic	Acetic Acid, clove & thyme oil				
Herbicide	Bradfield	Acetic Acid 20%				
Herbicide	Burn Out*	Acetic Acid				
Herbicide	EcoExempt	Eugenol (Clove)				
Herbicide	Safer Weedkiller	Soap				
Herbicide	Scythe	57% pelargonic acid Herbicide				
	Worry Free Weed K	Citric Acid				
Insecticide	EcoExempt IC	Herb and Mineral Oils Insecticide	Victors	Poison	Free	Wasp
	Mint oil					
Insecticide	Dipel, Javallin	Bacillus thuringiensis (Bt.)				
Insecticide	Cinnamite	Cinnamaldehyde				
Insecticide	Roach Terminal	Oxypurinol, xanthine				
Insecticide	Avert	Abemectine				
Insecticide	Liquid Ant Bait	Disodium Octaborate Tetrahydrate				
Insecticide	Safer Insecticidal Soap	Soap				
Insecticide	M-Pede	Soap				
Molluscicide	Sluggo	Iron Phosphate				
Fungicide/ Insecticide	Stylet Oil	Petroleum oil				

* Historically used by the City

CATEGORY 2: MEDIUM-IMPACT MATERIALS LIST

(May be used in non-shaded areas on the Pesticide Reduction Priority Zone Map only)

Herbicide	Roundup	Glyphosate
Herbicide	Roundup Quik PRO*	Glyphosate
Herbicide	Roundup PROMAX	Glyphosate
Herbicide	Lesco Prosecutor*	Glyphosate
Herbicide	Quali-Pro Glyphosate Plus*	Glyphosate
Herbicide	AquaMaster	Glyphosate
Herbicide	Aqua Neat*	Glyphosate
Herbicide	Telar	Chlorsulfuron
Herbicide	Garlon	Triclopyr
Herbicide	Goaltender	Oxyfluorfen
Herbicide	Transline	Clopyralid
Herbicide	Direx	Diuron
Herbicide	Snapshot	Trifluralin
Herbicide	Milestone	Aminopyralid
Herbicide	Turflon	Triclopyr
Herbicide	Fusilade II	Fluazifob-P-butyl
Herbicide	Ornamec*	Fluazifob-P-butyl
Herbicide	Sedgehammer	Halosulfuron
Herbicide	Barricade	Prodiamine
Herbicide	Payload	Flumioxazin
Herbicide	Sure Guard*	Flumioxazin
Herbicide	Landmark	Sulfometuron
Insecticide	Zenith	Imidacloprid
Adjuvant	Cayuse Plus	Ammonium sulfate, alcohol ethoxylated phosphate ester
Adjuvant	R-11	Alkylphenol ethoxylate, butyl alcohol, dimethylpolysiloxane
Adjuvant	Lesco Tracker Max*	"Trade secret"
Adjuvant	Wilbur Ellis Soil Penetrant*	Ammonium alkyl ethel sulfate, alkyl aryl poluethoxylates

* Historically used by the City

CATEGORY 3: HIGH-IMPACT MATERIAL LIST

(May be used in non-shaded areas on the Pesticide Reduction Priority Zone Map only)

Herbicide	Weedar 64	2-4D amine
Herbicide	Candor*	2-4D amine
Herbicide	RedZone 2*	Isotcyl ester
Herbicide	Lesco*	Dimethylamine salt
Herbicide	Clarity	Dicamba
Fumigant	Sanafoam Rootavator	Metan Sodium

* Historically used by the City

APPLICATION CHECKLIST

Y / N 1. Will pesticide application occur completely within low-risk, non-shaded areas as defined by the City's Pesticide Reduction Priority Map? If 'NO', indicate the appropriate area and provide an explanation for why pest control is required:

Medium risk/sensitive area buffer (yellow) / High risk/ sensitive area (red).

Y / N 2. Have other methods of pest control been attempted? If yes, list methods:

Y / N 3. Has the economic feasibility of non-chemical methods of pest control (hand weeding, traps, introducing natural enemies, etc.) been considered? If yes, state conclusion:

/ 4. Are all proposed pesticides on the City's Approved Low-Impact Materials chemical list? (See Integrated Pest Management Policy, Attachment B). If "NO", indicate the appropriate list:
 Medium-Impact / High-Impact / Not Listed.

Description of proposed pesticides (include trade name(s), common name(s), and concentration of active ingredients):

