

INTEGRATED PEST MANAGEMENT PROGRAM

Date Issued: January 7, 2019

Mandated by: Administration

Current Revision: January 7, 2019

Cross Reference:

- Integrated Pest Management Program Procedure GEN-036-A

Next Review: January 30, 2021

Responsibility: Director, Public Works

1. PURPOSE

The City strives to minimize risk to human health and the environment by trying to maximize use of natural controls and minimize reliance on chemical controls, always considering environmental impacts. The City strives to safeguard waterways, ecological habitats and urban heritage. An IPM program is a decision making model for Pest management and is an important component in environmental stewardship of all public lands.

2. POLICY

- 2.1) The City will endeavor, as financial resources allow, to provide the community with aesthetically pleasing boulevards, parks and open spaces by controlling weeds and other Pests. All. As such, a variety of preventive and non-chemical Pest management strategies are considered before using the least toxic approved Pesticide.
- 2.2) All forms of Pest management activities on City property will follow the principles of IPM.
- 2.3) Approved Pesticides will be used where alternative practices/products have failed to manage the Pest.
- 2.4) The City understands that healthy vegetation successfully competes with weeds and disease and that Pesticide use can be reduced by increasing cultural practice to improve long-term vegetation health.

3. DEFINITIONS

- 3.1) *Approved Pesticide* – A Pesticide registered with the Pest Management Regulatory Agency (PMRA) of Health Canada.

- 3.2) *City* – The City of Fort Saskatchewan.
- 3.3) *IPM* – Integrated Pest Management. 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.
- 3.4) *Pests* – Any organism, including weeds, insects, diseases, rodents, etc., which by the location or size of its population, adversely interferes with the health, environmental, functional or economic goals of humans.
- 3.5) *Pesticide* – A substance that prevents, repels, alters or kills unwanted Pests. Pesticides include insecticides used against insects, herbicides to control weeds, rodenticides for rodent control and fungicides for fungi.

4. EXCEPTIONS

- 4.1) This Policy shall not apply to noxious weeds, as defined by the Alberta Weed Control Act.
- 4.2) This Policy shall apply to all municipal parks, highways and open spaces held by or under the jurisdiction of the municipality and including any land owned by the municipality, except lands leased to other parties.

5. GUIDING PRINCIPLES

- 5.1) An Administrative Procedure assigning labor, equipment and materials to the IPM Program may be created to support this Policy.
- 5.2) The Administrative Procedure shall be followed to ensure compliance with the IPM Program and shall include levels, thresholds and action responses.
- 5.3) The City will provide staff training and leadership in IPM.
- 5.4) The City, including all of its departments and contractors, shall comply with all laws, regulations, bylaws and policies that are related to weed and Pest management operations.

6. AUTHORITY / RESPONSIBILITY TO IMPLEMENT

The Director, Public Works is authorized to establish procedures for the implementation of this Policy which are consistent with the governing principles.



City Manager

INTEGRATED PEST MANAGEMENT PROGRAM

Date Issued: February 15, 2019

Responsibility: Director, Public Works

Current Revision: February 15, 2019

Cross Reference:

- Integrated Pest Management Program Policy GEN-036-A

1. PURPOSE

To provide a strategic framework for the management of pests. The framework will consist of the principles of an Integrated Pest Management (IPM) program and applications of the least toxic products, in accordance with provincial and federal regulations.

2. DEFINITIONS

- 2.1) *City* – The City of Fort Saskatchewan.
- 2.2) *IPM* – Integrated Pest Management. 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.
- 2.3) *Pests* – Any organism, including weeds, insects, diseases, rodents, etc., which by the location or size of its population, adversely interferes with the health, environmental, functional or economic goals of humans.
- 2.4) *Pesticide* – A substance that prevents, repels, alters or kills unwanted Pests. Pesticides include insecticides used against insects, herbicides to control weeds, rodenticides for rodent control and fungicides for fungi.

3. PROCEDURE

- 3.1) Installation - Notices of pesticide use should be constructed in the following manner:
 - a) Rectangular in shape.
 - b) Minimum of 25 cm x 30 cm.
 - c) Rain resistant.
 - d) Lettering in sufficient size and clarity to be easily read, together with a symbol of a cautionary hand, inside a symbol of a stop sign.

3.2) Notices should contain the following information:

- a) Date of application and recommended unprotected re-entry time.
- b) Description of area treated, name of pest and common name of pesticide.
- c) Other advice or precautions as appropriate.
- d) Name and telephone number of Service Licensee or responsible individual who applied the pesticides.

3.3) Intervals for pesticide notice posting:

- a) Where treatment area is greater than 0.8 hectares in size and the access is controlled by a fence or a gate, notices shall be posted on all major public entry points.
- b) Where access is not controlled by a fence or gate, notices shall be posted at intervals of no more than 15 m.
- c) Where treatment is less than 0.8 hectares in size, notices should be posted around the perimeter of the treatment area, with at least one sign on each side of the perimeter.
- d) Notices should be posted for a minimum of 48 hours after treatment.

3.4) All inventory for pesticide application shall be tracked. The amounts used will be reported annually.

3.5) Inspection shall include documenting the target pest, alternative methods that were implemented, type and quantity of pesticide used, site and area of application and verification that notification was made.

3.6) Service and Maintenance:

- a) Cultural (preventative) Plant Health Care (PHC) includes monitoring/scheduling, mowing, fertilizing, aerating, topdressing, over-seeding, irrigation and de-thatching.
- b) Mechanical/manual/physical controls include techniques such as hand pulling weeds or hand picking pests, line trimming, mowing or steaming weeds to prevent the spread of pests.
- c) Biological controls include establishment of herbivore insects that selectively feed on a targeted noxious or invasive weed species.
- d) Chemical controls include the use of registered pesticides to provide selective control of pests. All chemical controls are performed by a Certified Pesticide Applicator or Authorized Assistant.
- e) Broadleaf and noxious weed control measures will be taken when inspection shows that the turf quality, as measured by weed density, has reached or exceeded the standard.
- f) High profile/quality turf includes all turf at City buildings, along high-visibility boulevards and at designated sports fields (baseball diamonds, soccer pitches and football fields with

the exception of the Dow Centennial Diamonds). These are considered high quality turf areas and typically see the most usage. The tolerance for uneven and/or unhealthy turf is low, as these can pose hazards to users. The target for these areas is high quality and aesthetically pleasing turf and are maintained as such – frequent mowing, aeration, fertilizing, topdressing and over seeding, and in some areas, irrigation. The action level is an average of 3 weeds per square meter. The action taken is a control treatment according to the Integrated Pest Management Policy GEN-036-A.

- g) School grounds, playgrounds and daycare centers include all turf adjacent to schools, playgrounds and day care centers. These areas are considered good quality turf areas and typically see peak usage in the spring and summer months. A standard 30-metre pesticide-free zone applies to all City owned and maintained playgrounds and registered daycare centers. The target for these areas is good quality turf. The action level is an average of 6 weeks per square meter. The action taken is a control treatment according to the Integrated Pest Management Policy GEN-036-A.
- h) Parks and open spaces include all designated areas throughout City parks, open spaces and trail systems. Considered good-quality turf, as mowing is less frequent and no further cultural practices are performed. The target is good quality turf. The action level is an average of 6 weeds/square meter. The action taken is a control treatment according to the Integrated Pest Management Policy.
- i) Highway buffer, highway ditch and secondary roads and reserves include all areas along the highways and secondary roadways as well large-scale areas within the City, such as West River's Edge, the Dog Park and the amphitheater. These areas are considered good-quality ground cover. No maintenance besides mowing is completed. The target is good quality turf. The action level is an average of 10 weeds/ square meter. The action taken is a control treatment according to the Integrated Pest Management Policy.
- j) Landscaped and naturalized beds include over 900 landscaped and naturalized shrub beds which can feature various trees, shrubs and/or perennials and include a weed control barrier such as mulch, landscaping rocks in various sizes, lava rocks or other materials. The target is aesthetically pleasing beds that promote the health of the plants contained within the bed. The action level is the number of weeds in relation to the size of the bed. The action taken is a control treatment according to the Integrated Pest Management Policy.
- k) Hard landscaping includes all paved/hard landscaped areas within the City that directly relate to maintaining parks and other green spaces. Some examples include: 99th Avenue red brick Unistone, sidewalks, curbs, landscaped bed edging, fence lines and City parking lots and buildings. The target is aesthetically pleasing, weed free hardscapes. The action level is as required. The action taken is a control treatment according to the Integrated Pest Management Policy.
- l) Undeveloped areas include vacant lots, undeveloped parkland and annexed roadways. The target is good quality ground cover. The action level is as required. The action taken is a control treatment according to the Integrated Pest Management Policy.
- m) Restricted noxious weeds include all noxious weeds under the *Alberta Weed Control Act*. The target is restricted and noxious weed free. The action level is zero tolerance for noxious weeds. The action taken is a control treatment according to the Integrated Pest Management Policy.

- n) Pocket gophers/moles are characterized by fan-shaped mounds of soil, all in the same area. The actual animal is short bodied, with dark fur, tiny eyes, large front teeth and front claws. Impact is mainly aesthetic but mounds can do damage to mowing equipment, will suffocate underlying turf and provides perfect growing media for weeds. The underground burrow system can weaken the ground, causing equipment to leave ruts and holes which become hazards. The target is safe and level turf. The action level is an average of 3 mounds/square meter with new mounds appearing quickly. The action level is taken is a control treatment, according to Integrated Pest Management Policy. The area will be treated until all signs of activity are gone (mole trapped or no new mounds present). Treatment will be suspended over the course of the weekend, as area cannot be monitored and to prevent the loss of equipment or harm to the public. Chemical control is considered only if other, less toxic controls prove ineffective.
- o) Richardson's ground squirrel/gopher burrow systems are characterized by open holes and mounds. They are light yellowish-brown and are longer bodied than pocket gophers. Burrow holes can be tripping hazards, surface mounds can smother desirable vegetation and can ruin equipment. Underground burrow systems can weaken the soil, causing equipment to leave ruts and holes which become hazards. The target is safe and level turf. The action level is an average of 3 burrows/5 square meters, with constant activity in the area. The action taken is a control treatment according to Integrated Pest Management Policy. Areas are to be monitored and treated until no sign of pest activity remains. Chemical control is considered only if other, less toxic controls prove ineffective.

3.7) Responding to Service Requests:

- a) Action shall be taken on all internal and external service requests generated by the City's Fort Report Service Tracker software within two business days when possible. If action cannot be completed within this time frame, the person responsible to complete the action will contact the internal or external customer to advise them of the estimated time frame to take action.
- b) Actions may include a visual inspection of the tree, visual inspection of the disease/fungus/insect/pest, immediate corrective action(s) such as pruning and chipping and taking measurements (DBH).
- c) Acknowledgement of response action(s) will be given to all internal and external customers who request follow up contact. This may be done in person, over the phone or through e-mail.
- d) Response actions shall be documented in the Fort Report Service Tracker software, along with the name(s) of the person/people completing the service request.
- e) Completed service requests shall have their status updated to 'closed' in the Fort Report Service Tracker software as soon as the work is completed and the customer has been notified (if requested).

3.8) Records Management:

- a) The City will record all maintenance performed on its trees and review the effectiveness of the program annually.

- b) All pesticide applications shall be recorded in the Pesticide Application Binder.
- c) The Lead Hand (Turf) and the Foreman (Parks) shall review the effectiveness of the program annually using various methods including, but not limited to, staff surveys, completion reports, number of Fort Report Service Tracker requests and review of the annual expenditures.
- d) A presentation of the program effectiveness (Program Summary) shall be submitted to the Parks Manager for review.

4. LEGISLATION

4.1 The City will adhere to all pertinent legislation while providing maintenance to City trees.

4.2 Legislative context to include:

- a) Alberta Occupational Health & Safety Legislation
- b) Alberta Traffic Safety Act
- c) Alberta Environmental Protection and Enhancement Act
- d) Alberta Environmental Code of Practice for Pesticides
- e) Alberta Weed Control Act
- f) Pest Control Products Act (Federal)
- g) Alberta Agricultural Pests Act
- h) Alberta Wildlife Act

5. SUPPORTING DOCUMENTS

5.1 The City will adhere to all pertinent supporting documentation while providing service and maintenance to City owned and maintained infrastructure.

5.2 Supporting documents to include:

Supporting documents to include:

- a) City of Fort Saskatchewan Health and Safety Policy
- b) Job Hazard Assessments (JHAs)
- c) Safe Work Practices and Procedures (SWP&Ps)
- d) City of Fort Saskatchewan Engineering Standards
- e) Canadian Standards for Nursery Stock

- f) Development Agreement
- g) Final Acceptance Certificate
- h) Shrub Bed Sign Off Sheets
- i) Shrub Bed Inventory Maps
- j) Shrub Bed Design Drawings
- k) Photos

6. REFERENCES/LINKS

- Alberta Occupational Health and Safety Act, Regulation and Code - <http://work.alberta.ca/occupational-health-safety/ohs-act-regulation-and-code.html>
- Alberta Traffic Safety Act - <http://www.qp.alberta.ca/documents/Acts/t06.pdf>
- Alberta Environmental Protection and Enhancement Act - <http://www.qp.alberta.ca/documents/acts/e12.pdf>
- Alberta Environmental Code of Practice for Pesticides - <http://www.qp.alberta.ca/documents/codes/PESTICIDE.PDF>
- Alberta Weed Control Act - <http://www.qp.alberta.ca/documents/Acts/W05P1.pdf>
- Pest Control Products Act - <http://laws-lois.justice.gc.ca/PDF/P-9.pdf>
- Alberta Agricultural Pests Act - <http://www.qp.alberta.ca/documents/Acts/A08.pdf>
- Alberta Wildlife Act - <http://www.qp.alberta.ca/documents/Acts/W10.pdf>
- City of Fort Saskatchewan Health and Safety Policy - <http://www.foresask.ca/Home/ShowDocument?id=3673>
- Canadian Standards for Nursery Stock - http://www.canadanursery.com/Storage/47/5649_CSNS_-_8th_Edition_-_web.pdf
- City of Fort Saskatchewan Parkland Bylaw 1952 – <http://www.foresask.ca/city-government/bylaws/parkland>
- City of Fort Saskatchewan Community Standards Bylaw C16-12 - <http://www.foresask.ca/home/showdocument?id=3417>
- City of Fort Saskatchewan Traffic Bylaw C4-09 - <http://www.foresask.ca/home/showdocument?id=3427>