

Integrated Pest Management Policy



CITY POLICY

POLICY NUMBER: C501

REFERENCE:

City Council 2004 02 24
City Council 2003 09 18-19
Public Hearing on Pesticides

ADOPTED BY:

City Council

SUPERSEDES:

New

PREPARED BY: Community Services Dept.

DATE: February 09, 2004

TITLE: Integrated Pest Management

Policy Statement: The City of Edmonton is committed to providing safe and healthy urban environments. Whereas controlling weeds and other pests is important for the enjoyment and sustainability of these environments, this policy limits pesticide use in the management of pests on City property. All forms of pest management activities on City property will follow the principles of Integrated Pest Management (IPM). As such, a variety of preventive and non-chemical pest management strategies are used or considered before using the least toxic approved pesticide. Approved pesticide applications will be used in circumstances where alternative practices or products have failed to manage the pest. Standards of practice for pesticide application on City property will continue to meet or exceed federal and provincial requirements.

The purpose of this policy is to minimize the use of pesticides on City property but where required, use them responsibly in the control of pests by:

Ensuring that Integrated Pest Management (IPM) principles are adhered to as follows:

The City use a system of expert identification of pests and natural enemies that may control them. This enables a knowledge-based approach to help assess a pest's impact on human or environmental health and subsequent pest management decisions.

The City use pest population monitoring methods and pest action thresholds e.g. a weed standard, that when reached is a key factor in the decision to conduct a management effort against a pest on city property.

The City use a range of management options for a pest problem based on the following prioritized list, emphasizing pest prevention and non-chemical alternatives.

- Prevention practices, such as selecting the proper planting site for a shade loving plant species.
- Biological controls, such as specific imported wasp parasites of a birch leaf miner pest that originates from

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Europe.

- Chemical controls, such as synthetic pesticide products.

The City use and promote best pest management practices by evaluating the relative merits of various pest management options.

The City use and promote sound pest prevention planning approaches on its property and in the acquisition of new lands. This includes the use of good Plant Health Care practices.

The City ensure that all programs involving pest management treatments on City lands or in City premises are reviewed annually to institute any possible improvements in accordance with the City's commitment to IPM.

And furthermore, in accordance with the responsible use of pesticides, the City ensures the following:

That citizens are informed of all pesticide applications on City property.

That chemically sensitive citizens are given an option of special protection from risk of pesticide exposure from an application on City property that is adjacent to their residence.

That herbicide-free areas of parkland will be provided. Registered day-cares and City playgrounds will be given an additional 30 metre herbicide-free buffer zone around them.

That when required, herbicide applications will be timed to avoid exposure to users of City school sports fields and picnic areas. Herbicide applications on school sports fields will be restricted to the months of July and August and will only occur in the fall after the September long weekend at City picnic sites.

That pesticide amounts used on City property will be reported annually.

That Integrated Pest Management (IPM) is adopted by all City departments and their agents either directly or indirectly involved in managing pest problems.

That the City will provide staff training and leadership in Integrated Pest Management.

That the City will promote IPM with other government agencies, municipalities, environmental groups and related industry associations in the region. Many pest problems extend far beyond the City's boundaries and require a co-operative, regional approach to their management.

DEFINITIONS:

Agents means employed staff or contractors working for the City of Edmonton.

Approved Pesticide means a pesticide registered with the Pest Management Regulatory Agency (PMRA) of Health Canada.

Biological Controls means other organisms that prey specifically on a pest.

Chemical Controls means pesticides that are chemical products.

City Playgrounds mean areas on City property with children's play apparatus.

City Property means land owned, occupied and maintained by the City of Edmonton.

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Cultural Practices means methods of care for optimal growth and a suitable environment for plant health.

Ecology means the study of an organism and its interaction with its environment.

Herbicide means a pesticide used for controlling undesirable plant life.

Herbicide-Free Buffer Zone means an area created with a certain linear distance perpendicular from a boundary within which herbicides will not be applied.

Integrated Pest Management (IPM) means a multi-disciplinary, ecological approach to the management of pests based first on prevention and when needed, a control (biological, cultural, physical or mechanical intervention), saving registered pesticide application as a last resort.

Pest means an organism that causes damage, is a nuisance or interferes with the health, environmental, functional or aesthetic objectives of mankind.

Pesticide means a substance that prevents, repels, alters or kills unwanted pests. Pesticides include insecticides used against insects, herbicides to control weeds, rodenticides for rodent control, fungicides for fungi and so on.

Pest Action Threshold means the number or density of a pest when management action should be taken.

Physical Controls means machine trimming of weeds, mechanical traps or other devices like weather stripping under a door to prevent access by a pest.

Plant Health Care means cultural practices designed to maximize the well being of turf or other desired vegetation and minimize the chance of infestation or damage by pests.

City of Edmonton Weed Control Standards

On September 18, 2003, City of Edmonton Council voted in support of the IPM approach to pesticide reduction. The direction given to Community Services Department was to develop an Integrated Pest Management (IPM) policy to reduce or eliminate the City's use of pesticide.

Item iii. Review existing weed thresholds (as outlined in the approved Broadleaf Weed Control Report)

Item iv. Review existing pesticide buffer zones policy

iii: Weed Control Standards
Community Services Department
Parkland Services

The Weed Control Standards will only apply to those broadleaf weeds not designated as noxious or restricted by provincial legislation or by the City of Edmonton Bylaw. The term weed control treatment includes any control measure that is deemed appropriate for the area in question and includes Cultural, Mechanical, Biological, and as a last resort Chemical, using the least toxic approved product.

Weeds designated as noxious or restricted by provincial legislation or by the City of Edmonton Bylaw will be controlled as required by legislation. The threshold for Noxious Weeds is zero.

Control method Definitions:

- **Cultural (preventative): Plant Health Care (PHC)**
These include Monitoring/Scheduling, Mowing, Fertilizing, Aerating, Top-dressing, Over-seeding, Irrigation, and De-thatching.
- **Mechanical / Manual:**
These include mowing, machine trimming and manual removal when possible.
- **Biological:**
Establishment of herbivore insects that selectively feed on a targeted noxious or invasive weed species.
- **Chemical:**
The use of registered herbicides to provide selective control of weeds.

City of Edmonton Weed Control Standards

Parkland Services land inventory definitions and standards for the purpose of this report are as follows.

➤ **Premier Parkland:**

These areas are considered Edmonton's premier fields and major parks. They receive the highest care of 18 cuts per season and generally have the most intensive usage.

The target for these areas is a high quality turf, which is considered aesthetically pleasing in highly visible sites. A high usage playing field with more than three weeds per square metre is considered an unsafe playing surface. When inspection shows that the turf quality as measured by the weed density has reached or exceeded the standards, a weed control treatment will be initiated.

Target: High quality turf

Action level: Average of 3 weeds per square metre

Action taken: Control treatment applying plant health care principles

➤ **School Grounds/Neighbourhood Parks**

These areas are generally school grounds and neighbourhood parks. They receive 12 cuts per season.

The target for these areas is a good quality of turf. When inspection shows that the turf quality as measured by weed density has reached or exceeded the standard, a weed control treatment will be initiated.

Target: Good quality turf

Action level: Average of 6 or more weeds per square metre.

Action taken: Control treatment applying plant health care principles

➤ **Roadways, Walkways and Utility Right of Ways**

These areas are generally roadways, walkways, right of ways and low growth areas; they would receive 7 to 10 cuts per season.

The target for these areas is a good quality ground cover. When inspection shows that the turf quality as measured by weed density has reached or exceeded the standard, a weed control treatment will be initiated.

Target: Good quality ground cover

Action level: Average of 10 or more weeds per square metre

Action taken: Control treatment applying plant health care principles

➤ **Undeveloped**

These areas are generally vacant lots, undeveloped parkland, annexed roadways and would receive 2 cuts per season.

The target for these areas is to have a good ground cover. When inspection shows that the turf quality as measured by weed density has reached or exceeded the standard, a weed control treatment will be initiated.

Target: Good quality ground cover

Action level: None

Action taken: Mechanical treatment will apply

iv. Review existing pesticide buffer zones policy:

A standard 30-metre pesticide buffer zone applies to all City owned playgrounds and registered daycare centres. Other buffer zones are detailed in specific pesticide exemption programs such as HERP and MAPP.

The City of Edmonton does not have an existing policy. Past practices included letters mailed to all schools and day care centers with a schedule that approximates the time the field crews will carry out the program. Nowhere in the letter does it spell out a specific buffer distance. It has been the Department's practice to administer a 30-metre buffer zone to all cities owned playgrounds and Day Care Centers.

Recommendation:

- Continue the 30-metre buffer zone to all City owned playgrounds and all Day Care Centers in the City of Edmonton.
- All correspondence will include the buffer zone distance.
- Buffer zones to be included in main body of IPM policy.

Pesticide Exemption Standards

There are three formal herbicide exemption programs available. These programs were developed to address the concerns of citizens sensitive to or otherwise opposed to the use of pesticides on nearby city property. The three programs are the Medical Alert Pesticide Program (MAPP), the Herbicide Exemption Request Program (HERP) and the Petition Program.

MEDICAL ALERT PESTICIDE PROGRAM

The Medical Alert Pesticide Program is for people who may be medically sensitive to pesticides. This program offers one and/or two options to registrants requiring special consideration:

1. Personal pre-notification beyond the regular signage program, of all Parkland Services' pesticide applications within 100 metres of their property.
2. Restriction of a pesticide application by Parkland Services within 30 metres of the registrant's property.

HERBICIDE EXEMPTION REQUEST PROGRAM

The Herbicide Exemption Request Program restricts herbicide treatment of City turf areas abutting residential property. Citizens have the option of maintaining this area themselves without the use of herbicides. This program offers two options to the registrant:

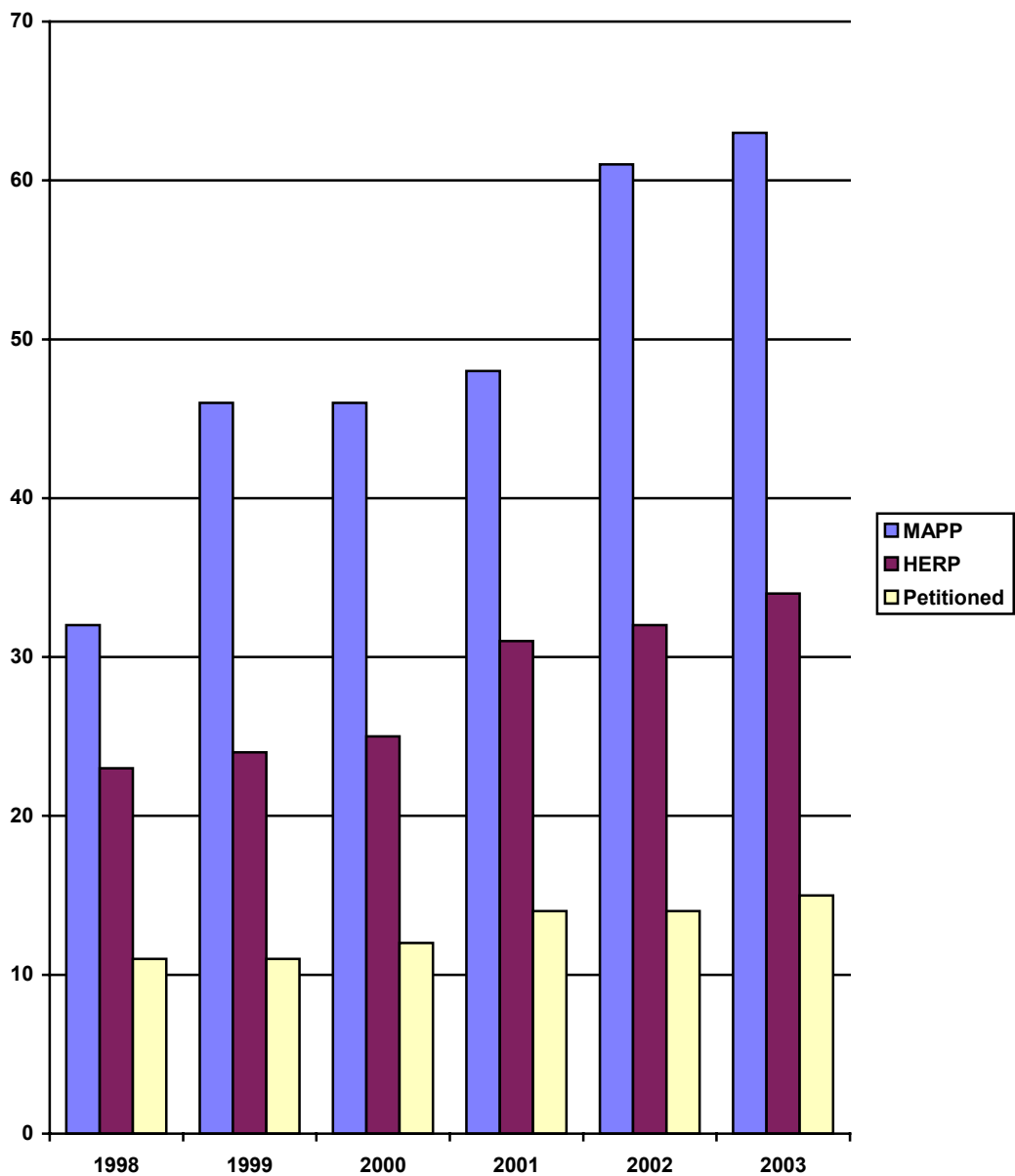
1. Discontinue chemical trimming along fence lines and obstacles on City property abutting registrant's property.
2. Discontinue broadleaf weed control within five metres of registrant's property abutting City property.

PETITION PROGRAM

The Petition Program allows citizens, who are opposed to herbicide use on neighboring parkland, the option of eliminating it from specific City turf inventories by petition. When 66% of residents living adjacent to or abutting a site sign a petition for the discontinuance of herbicide treatment, Parkland Services will not spray the area until a petition to reverse the first petition passes (again 66% approval).

Pesticide Exemption Standards

Program Registrants and Petitioned Sites 1998 to 2003



Herbicide Free Parkland Sites

Community Services Department has designated 45 parkland sites as “Herbicide Free” areas. These green spaces represent a cross section of all parkland inventories. Officially, these sites will become “Herbicide Free” in 2004 and will not receive any further herbicide applications until 2007. After this three-year period, Vegetation Management staff will assess each site and determine the status according to the condition. Sites with low broadleaf weed infestation (i.e. do not exceed our Weed Control standards) and manageable noxious weed infestation will remain “Herbicide Free” until the next assessment in 2010.

SOUTH DISTRICT “HERBICIDE FREE” SITES

Site	Address	Size
Emily Murphy Park	Emily Murphy Rd & 119st	4.198 Ha
Jackie Parker Park	50st & 44ave	18.350 Ha
Alex Thiel Park	108ave & 47st	1.517 Ha
Windsor Park	Windsor Rd & 116st	1.177 Ha
JA Werner Park	114st & 35ave	.323 Ha
WM Werner Park	114st & 36ave	.431 Ha
McIntyre Park	104st & 83ave	.222 Ha
Strathcona Park	104st & 85ave	.367 Ha
Garneau Park	110st & 83ave	.423 Ha
Kittlitz Park	29st & 36ave	.983 Ha
Lilliput Park	74ave & 97st	.117 Ha
Dr. Francis Crang Park	105st & 49ave	1.351 Ha
WC Tubby Park	97st & 88ave	.160 Ha
Neighborhood Park / Ravine Buffer	102ave & 68st	1.386
King Edward Park	80ave & 83st	.312 Ha
Silver Heights Park	95ave & 90st	1.038 Ha
Tipton Park	81ave & 106st	.995 Ha
Michaels Park	Millbourne Rd East & 76st	8.766 Ha
Garneau Elementary School	109st & 87ave	.754 Ha
Rutherford Elementary School	91 st & 86ave	2.014 Ha
Saskatchewan Drive (roadway)	Saskatchewan Dr Emily Murphy Rd-99st	1.734 Ha
Mill Creek Ravine (ravine greenbelt)	Low Level Interchange – Argyll Rd	14.549 Ha

Herbicide Free Parkland Sites

EAST DISTRICT "HERBICIDE FREE" SITES

Site	Address	Size
Lago Lindo School	173 Avenue – 95 Street	5.803 Ha
137 Avenue (roadway)	137 Avenue from 97 – 54 Street	9.287 Ha
Irene Parlby Park	Low Level Bridge – 105 Street	6.749 Ha
Beacon Heights Tot Lot	119 Avenue-35 Street	.161 Ha
Beechmount Tot Lot	124 Avenue-95 A Street	.194 Ha
Kinnaird Park	Jasper Avenue-77 Street	1.894 Ha
Hermitage Historical Site	129 Avenue-Claireview Road	1.372 Ha
Giovanni Caboto Park	108 A Avenue – 95 Street	1.935 Ha
Donald Ross School	102 Street – 97 Avenue	1.203 Ha
Diamond Park	101 Street – 98 Avenue	1.852 Ha
Virginia Park School	73 Street – 109 Avenue	4.018 Ha
Elm wood Comm League	75 Street – 125 Avenue	1.181 Ha
St. Faith Park	117 Avenue-92 Street	.017 Ha

WEST DISTRICT "HERBICIDE FREE" SITES

Site	Address	Size
Bruce Smith School	57 Avenue 180 Street	9.447 Ha
Valley View Dr. (ravine greenbelt)	89 to 83 Avenue - 136 to 142 Street	.883 Ha
Albert G Nickel Park / Tot lot	13539 139 Street	.461 Ha
Dunluce School	162 Avenue - 117 Street	7.13 Ha
Cumberland (future school site)	148 Avenue - 129 Street	5.183 Ha
Glenora School	135 Street Stony Plain Road	1.202Ha
Onion Park (dogs off leash site)	109 to 113 A Street - 127 to 129 Ave	12.78 Ha
Laurier Park	13221 - Bona Vista Rd.	8.756 Ha
137 Ave (roadway)	97 Street to St. Albert Trail	12.573 Ha
Primrose Park	188 Street - 82 Avenue	4.031 Ha