DATE:	May 8, 2012
то:	Board of Trustees
FROM:	Edgar Schmidt, Superintendent of Schools
SUBJECT:	Pesticide Use in the District (Trustee Request #178)
ORIGINATOR:	Brian J. Smith, Executive Director, Finance & Infrastructure
RESOURCE STAFF:	John Nicoll, Larry Schwenneker
REFERENCE:	February 28, 2012 Board Meeting (Trustee Colburn)

ISSUE

The following information was requested:

- 1. What practices are currently engaged in managing turf and other outdoor spaces on district school properties?
- 2. Can we categorize the different uses of pesticides on school property as either being essential (for health purposes) or non-essential (for cosmetic and aesthetic purposes)?
- 3. What alternatives are there for pesticide use that would be deemed non-essential?
- 4. What maintenance approaches have school boards taken in jurisdictions where pesticide bans have been implemented (or where school boards have developed their own pesticide policies)?
- 5. What would be the costs and implications associated with making the district pesticide free? How many district schools are currently pesticide free?

BACKGROUND

The following are key definitions for terms used throughout this report:

Herbicide-means a pesticide used for controlling undesirable plant life.

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.

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 (which would not be applied in any playground areas).

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.

1. What practices are currently engaged in managing turf and other outdoor spaces on district school properties?

Current district practice with regards to pesticide application on school ornamental grounds is in accordance with Health Canada and Alberta Government guidelines and regulations. The herbicide spray program is coordinated through Facilities Maintenance and employs the use of contractors with certified applicators, spraying that is limited to summer months and after community notification practices. A 30 metre "no spray" buffer is provided around playground apparatus belonging to either the City of Edmonton or Edmonton Public Schools. The City of Edmonton, through the Joint Use Agreement, maintains the playfields on district property to the same standards as the city owned playfields.

2. Can we categorize the different uses of pesticides on school property as either being essential (for health purposes) or non-essential (for cosmetic and aesthetic purposes)?

The turf areas maintained by the District are the ornamental lawns typically encompassing the front and sides of the school building. These are mainly maintained for cosmetic and aesthetic purposes with the exception of noxious weeds which require elimination treatment under provincial legislation.

3. What alternatives are there for pesticide use that would be deemed non-essential?

City communities may apply to have their green spaces, including school grounds, declared "herbicide free" if they meet specific City requirements. Edmonton Public Schools recognizes and honours community wishes and does not use herbicides on these designated lands.

4. What maintenance approaches have school boards taken in jurisdictions where pesticide bans have been implemented (or where school boards have developed their own pesticide policies)?

Other school boards have attempted to control weeds by improving the health of turf areas by judicious use of fertilizer, aeration, top dressing and increased lawn cutting.

5. What would be the costs and implications associated with making the district pesticide free? How many district schools are currently pesticide free?

Manual removal of weeds, whether nuisance or noxious, would be cost prohibitive. Manually removing the weeds could exceed any savings realized by eliminating the use of herbicides. The cost of the herbicide treatments in the summer of 2011 was approximately \$50,000. The District would be hard pressed to increase Plant Operations and Maintenance spending to maintain the aesthetic condition of turf areas, and the general appearance would deteriorate. The District would be limited to machine cutting the turf areas to control weeds. In extreme and rare situations, if an outbreak of noxious weeds were to occur and the District received an order under the weed control act, chemical control would be necessary on an exception basis.

Currently, there are 11 school grounds in the District that are designated as herbicide free.

CURRENT SITUATION

Weed control is required to ensure compliance with provincial and civic laws. The Government of Alberta regulates the spread of noxious weeds and prohibited noxious weeds through the Weed Control Act. Canada thistle is a common example of a noxious weed that must be controlled under the Weed Control Act as it provides an environmental threat to surrounding turf and gardens. Dandelions are considered a nuisance weed only and are not included in the act.

Edmonton Public Schools practices only apply to ornamental lawns. Playfields are maintained by the City of Edmonton under the Joint Use Agreement. The District prefers using an Integrated Pest Management Program with pesticides being used only as a last resort. Pesticides are applied by a licensed applicator.

KEY POINTS

- Provisions under the Weed Control Act and Regulations would still need to be adhered to with regard to the control of noxious weeds.
- Some municipalities with a herbicide ban have experienced challenges with weed outbreaks; however, more intensive plant health care practices and Integrated Pest Management can prove successful in pesticide free turf maintenance.
- A herbicide restriction can come with additional costs to manage weeds through plant health practices.
- Within the realm of Integrated Pest Management, a variety of other opportunities exist to reduce herbicide use in turf maintenance. Fertilizing shows potential to reduce weed infestation.
- To further reduce the use of herbicides the District could expand the list of 11 schools that are presently herbicide free and evaluate the results of making these sites herbicide free.

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